

Model 826

DIGITAL CALL SYSTEM

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MT 124-014

Model 826 DIGITAL CALL SYSTEM

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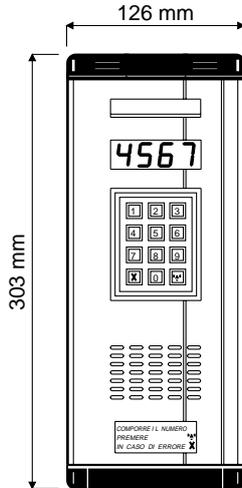
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Model 826 DIGITAL CALL SYSTEM



PERFORMANCE CHARACTERISTICS

The URMET DOMUS Model 826 Digital Call System connects entrance panels to apartment stations in large and medium size residential complexes.

The system can manage two different sets of codes: one for identifying doorphone and/or video doorphone apartment stations, and one for identifying special services. For both sets, codes from 1 to 9999 can be assigned.

Compared to conventional systems, the Digital Call System provides the following major advantages:

- Riser cable connections are made using only 5 wires for standard doorphone systems, or 7 wires plus coaxial cable for video doorphone systems. This streamlines installation and makes for significant savings in materials.
- Complex multi-entrance systems can be set up for automatic switching between entrance panels without the need for additional switching relays.
- Calls to apartment stations are made by entering a code from 1 to 9999 using the numeric keypad, thus ensuring complete privacy for residents. However, if residents wish their names to be indicated on the entrance panel, directory nameplates and/or an electronic directory with LCD display are available.
- The system can be readily adapted to use conventional Model 725 or Kombi series entrance panels instead of the standard Digital Call entrance module, simply by installing the appropriate digitizer.
- Special codes can be entered on the entrance module keypad to activate one or more special services, such as opening the entrance door, actuating one or more electric locks, opening electric gates, turning on stair lights, arming a security system, and so forth. Each special code consists of a maximum of four digits from 1 to 9999, and must always be preceded by a "0". This "0" has two functions: it distinguishes special codes from ordinary apartment station call codes, and prevents the code from being shown on the display while it is being entered, thus guaranteeing complete security.
- The system features inherent conversation privacy: only the apartment station that has received a call from the entrance panel can communicate with the visitor or hear the call. The conversation can be maintained for up to 10 minutes, or until another call is made. The system is designed so that electric locks can be activated from apartment stations at any time by pressing the switch hook on conventional buzzer doorphones, or by means of the special door lock release key provided on electronic call tone signaling doorphones. Alternatively, the system can be programmed so that only the apartment station which has received a call can activate the electric lock and thus open the door.

If no other calls are made, this apartment station can release the door lock only during the 10-minute maximum call period.

- Ring tone is automatically cut off after 5 seconds, thus providing protection against jammed call buttons, etc.
- Electric locks are actuated through momentary trigger type controls to ensure that they are not damaged if the door lock release button is jammed, held down for an extended period, etc.
- The system is protected against static and impulse type electromagnetic interference. It meets Level 3 requirements as per IEC 801-2 and 801-4.

BASIC CONFIGURATIONS

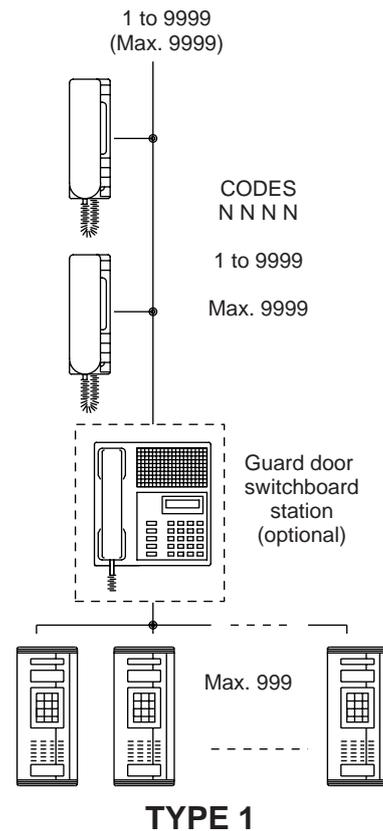
Systems with main entrance panels only

This type of system features:

- One or more main entrance panels.
- One guard door switchboard station (optional).
- Apartment stations.

Each apartment station must be assigned a unique numeric code (NNNN) between 1 and 9999.

All entrance panels and the guard door switchboard station (if provided) must be configured for installation **TYPE 1**.



TYPE 1

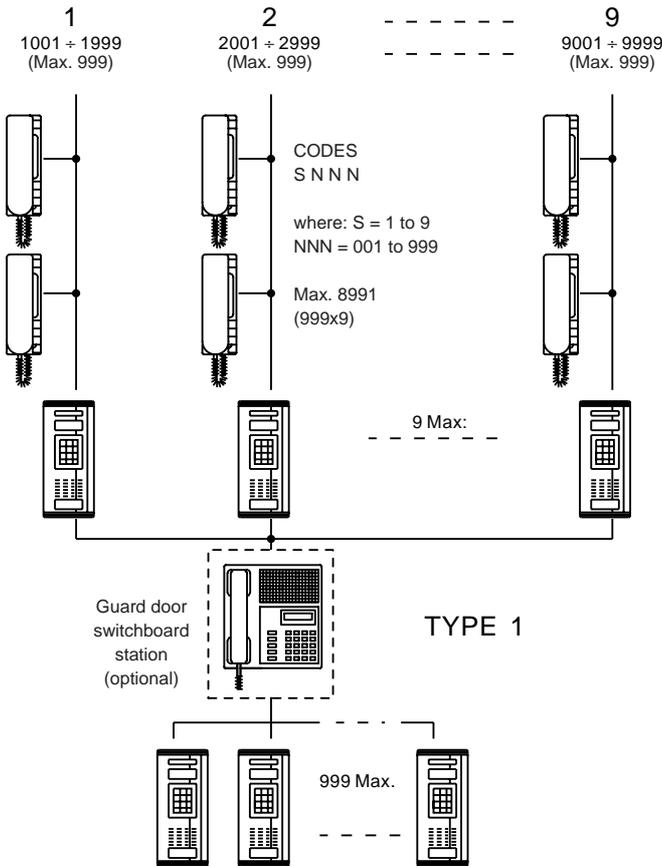
Systems with a maximum of 9 secondary entrance panels

This type of system features:

- One or more main entrance panels.
- One guard door switchboard station (optional).
- Up to 9 secondary entrance panels (i.e., one for each of nine internal staircases).
- Up to 9 groups of apartment stations.

Each apartment station must be assigned a unique numeric code in the format SNNN, where S is a number between 1 and 9 which identifies the secondary entrance panel associated with the apartment station concerned, and NNN is a number between 001 and 999 which positively identifies the apartment station in its group.

All main and secondary entrance panels and the guard door switchboard station (if provided) must be configured for installation **TYPE 1**.



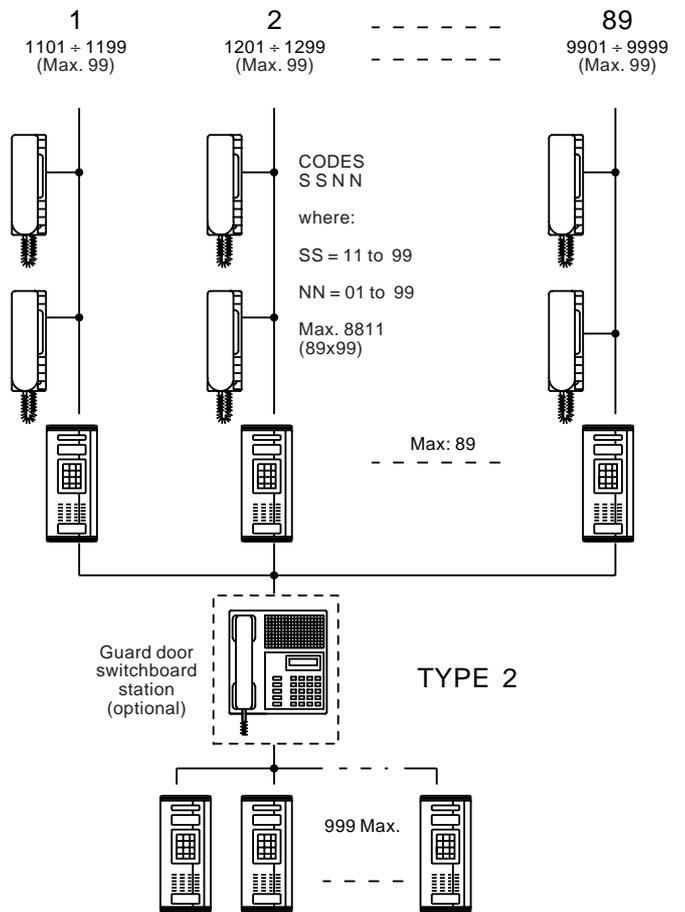
Systems with a maximum of 89 secondary entrance panels

This type of system features:

- One or more main entrance panels.
- One guard door switchboard station (optional).
- Up to 89 secondary entrance panels (i.e., one for each internal staircase or wing).
- Up to 89 groups of apartment stations.

Each apartment station must be assigned a unique numeric code in the format SSNN, where SS is a number between 11 and 99 (in reality, SS can also assume the values 1,2..10, but it is advisable not to use them so that all apartment stations can be coded with four digits) which identifies the secondary entrance panel associated with the apartment station concerned, and NN is a number between 01 and 99 which positively identifies the apartment station in its group.

All main and secondary entrance panels and the guard door switchboard station (if provided) must be configured for installation **TYPE 2**.

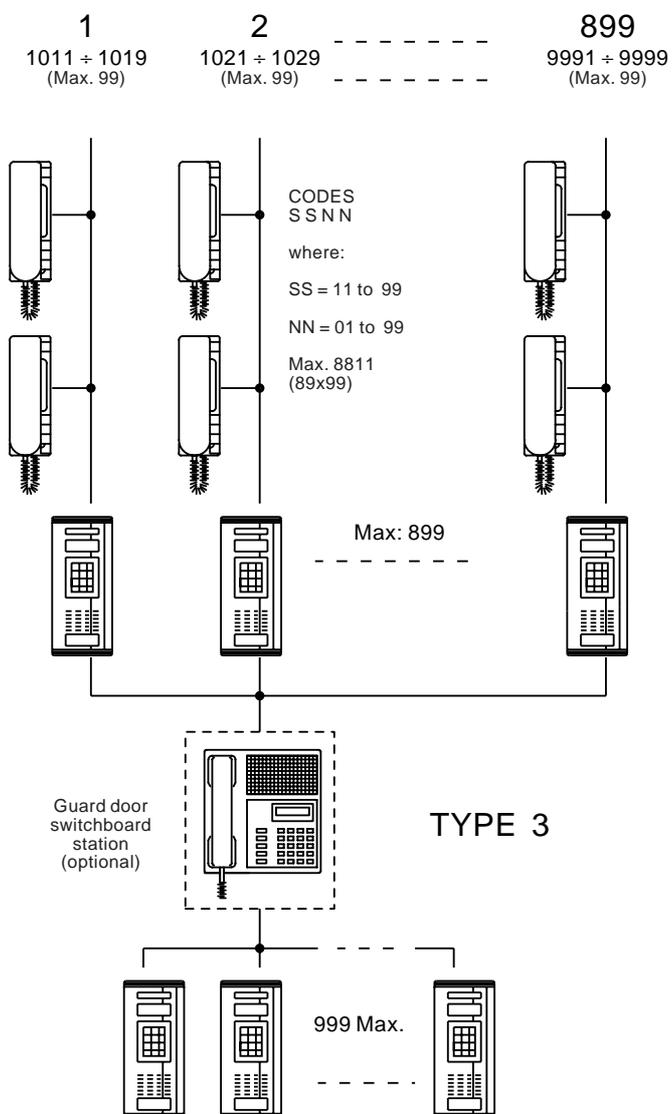


Systems with a (theoretical) maximum of 899 secondary entrance panels

This type of system features:

- One or more main entrance panels.
- One guard door switchboard station (optional).
- Up to 899 secondary entrance panels (i.e., one for each housing unit in a row of single-family units).
- Up to 899 groups of apartment stations.

Each apartment station must be assigned a unique numeric code in the format SSSN, where SSS is a number between 101 and 999 (in reality, SSS can also assume the values 1,2..100, but it is advisable not to use them so that all apartment stations can be coded with four digits) which identifies the secondary entrance panel associated with the apartment station concerned, and N is a number between 1 and 9 which positively identifies the apartment station in its group. All main and secondary entrance panels and the guard door switchboard station (if provided) must be configured for installation **TYPE 3** (see below).



SYSTEM DESIGN

Each system **must have** an appropriate URMET DOMUS **Installation Diagram**, which must be retained for system inspection and for future reference. The Installation diagram should be selected on the basis of the customer's specific needs and requirements, avoiding changes as work proceeds which could jeopardize installation quality. The installation diagrams enclosed with this manual cover the most frequently used types of system. For particularly complex systems or special requirements, contact the URMET DOMUS local agent or engineering consultant.

SYSTEM INSTALLATION

The system must be installed in accordance with accepted engineering practice. Consequently, it is necessary to comply with:

- Applicable CEI standards
- The surrounding electrical environment (i.e., sources of potential interference).
- System extension.

DEVICE LOCATION

Where one or more devices must be located in damp areas or sites where they could be exposed to the weather, it is essential that they be placed in sealed, watertight containers. Indoor devices should be installed in flush mounting back boxes separated from those used for telephone systems, electrical installations, TV antennas, etc.

DEVICE WIRING

Digital Call System devices are provided with removable terminal blocks to facilitate maintenance and troubleshooting. Terminal blocks are removed by pulling upwards.

The maximum conductor cross-section that can be accommodated in a single terminal block is as follows:

- 1 mm² for stranded core wire.
- 1.5 mm² for solid core wire.

Where conductors with larger cross-sections are used in the system, they must be spliced to conductors of appropriate size for connection to terminal blocks.

Wire must be stripped for a length of 5 to 6 mm using an adjustable professional-type wire stripper.

Where stranded core wires are used, it is essential that they be twisted to ensure that disconnecting terminal blocks will not cause wires to protrude, with the resulting risk of accidental short circuits across adjacent conductors. If solid core wires are used, devices must be secured by means of screws or wall plugs so that they cannot move and break conductors.

All conductors connected to a terminal block should be bound together with a tie wrap, as this makes for a neater appearance and sturdier wiring.

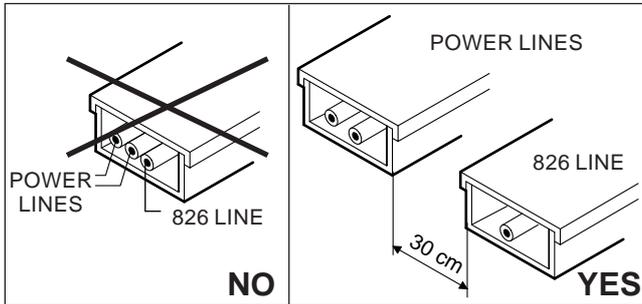
NEVER join several conductors under the same terminal clamp, even if their cross-sections are small. Cap or screw terminals must be used for this purpose.

IMMUNITY TO INTERFERENCE

The second-generation Digital Call System features a high level of intrinsic immunity to static and impulse type electromagnetic interference, and meets Level 3 requirements of IEC 801-2 and 801-4. However, several fundamental rules must be followed in order to improve interference insusceptibility.

- 1) Conductors for the riser cable and for doorphone branch lines must be routed at a minimum distance of 30 cm from all power lines

in the building. Here, power lines include 220 V mains lines, stair lighting lines, lightning conductor, low voltage lines for elevator alarm bells, etc.



2) Branch lines from decoder units to doorphones must not exceed 20 meters in length. Minimum line cross section is 0.5 mm².

LINE RESISTANCE LIMITS

Conductor cross-section must be such as to guarantee a resistance of less than 5 Ohm on **each** of the 5 conductors (+ 24, -24, D, 1, 2).

Requirements are thus as shown below:

Model 826 DIGITAL DOORPHONE SYSTEM						
MINIMUM CONDUCTOR CROSS-SECTIONS						
Distance	m	100	200	400	800	1200
Conductors S						
+24, -24	mm ²	0.5	0.75	1.50	2.50	4.00
D, 1, 2						

Model 826 DIGITAL DOORPHONE SYSTEM					
MINIMUM CONDUCTOR CROSS-SECTIONS					
Distance	m	50	100	200	300
Conductors S					
+24, -24	mm ²	0.35	0.50	1.75	1.50
D, 1, 2					
Conductors S					
R1, R2, +TC	mm ²	0.35	0.50	1.75	1.50
Coax cable	Up to 300 m, use standard coax cable 75 ohm				

Specified distances are those between any calling device and the associated decoder unit located farthest from it.

In video doorphone systems, coaxial cable is routed in series or using video splitters at each floor, as in conventional installations. Each video power supply unit can supply up to 15 video splitters. If a larger number is needed, additional power supply units **Ref. 789/2** must be installed (one for every 15 video splitters). On the last video doorphone on each riser cable, the coaxial cable must be provided with a 75 ohm resistance across terminals V5 and V4.

MAXIMUM NUMBER OF DEVICES

The maximum theoretical number of devices that can be connected in a system must under no circumstances exceed 400. Here, the term device is used to designate any item connected to data line D, including four-port decoders, entrance modules, power supply units, digitizers and so forth. Doorphones and video doorphones are not included in the total of 400 devices.

POWER SUPPLY UNITS

The power supply unit is sized for a typical system configuration, as it can only supply a certain number of devices. As indicated in the installation diagrams, complex systems may require additional power supply units. In such cases, each power supply unit's terminal + 24V must be connected separately: under no circumstances must the power supply units be connected together.

PARALLEL-CONNECTED EQUIPMENT

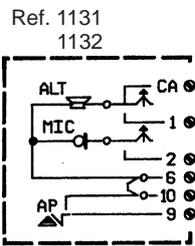
Output power from four-port decoder **Ref. 826/23** is sufficient for two parallel-connected doorphones. Doorphone with single-port decoder **Ref. 826/31** can be connected to another Model 1131 or 1132 doorphone.

SYSTEMS WITH GUARD DOOR SWITCHBOARD STATION

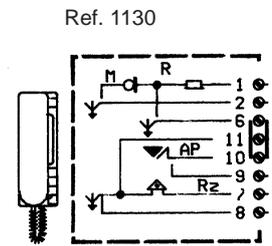
Conventional keyless buzzer doorphones **Ref. 1130, 1131** or **1132** must be used in systems with no guard door switchboard station, as door locks can be released by pressing the doorphone switch hook. In systems with a guard door switchboard station, single-key doorphones **Ref. 1130/1, 1131/1** or **1132/1** should be used. The key is used to call the switchboard, while door locks are actuated by means of the switch hook or door lock release key.

SYSTEMS WITHOUT GUARD DOOR SWITCHBOARD STATION

WITH ELECTRONIC CALL TONE SIGNALING WITH DOORPHONES

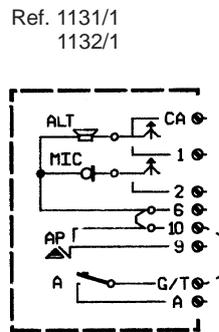


WITH ELECTRONIC CALL TONE SIGNALING WITH DOORPHONES

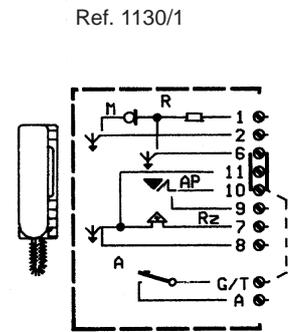


SYSTEMS WITH GUARD DOOR SWITCHBOARD STATION

WITH ELECTRONIC CALL TONE SIGNALING WITH DOORPHONES

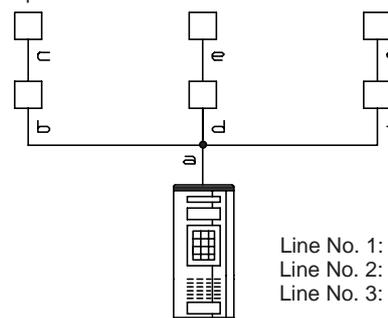


WITH ELECTRONIC CALL TONE SIGNALING WITH DOORPHONES



For complex systems with multiple riser cables, the distance between any calling device and the decoder unit located farthest from it on each riser cable must be considered. Each individual branch must have a resistance of less than 5 Ohm on each of the 5 conductors.

Example:



Line No. 1: a + b + c ≤ 5 Ohm
 Line No. 2: a + d + e ≤ 5 Ohm
 Line No. 3: a + f + g ≤ 5 Ohm

Branch lines from decoder units to doorphones must not exceed 20 meters in length. Minimum line cross section is 0.5 mm².

LINE CAPACITANCE LIMITS

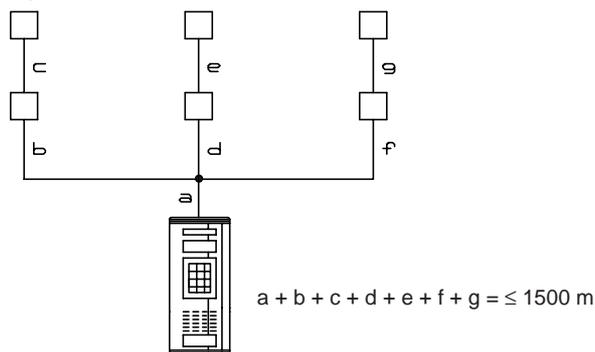
For purpose of line capacitance, maximum system extension must not exceed the following limits:

- Single riser cable systems: 1200 m
- Complex systems: 1500 m

For single riser cable systems, maximum system extension is defined as the distance between the calling device and the decoder unit located farthest from it.

For complex systems, maximum system extension is the total length of all line runs, excluding the branch lines from the decoder units to the apartment stations.

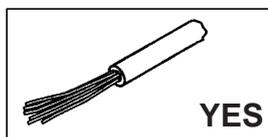
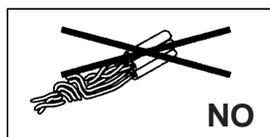
Example:



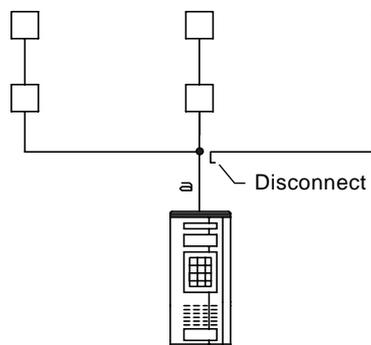
GENERAL REQUIREMENTS

The following rules must also be observed:

- 1) Do not connect several conductors in parallel in order to reach the required cross-section (e.g., multi-core telephone cable). A single, and preferably stranded-core, conductor of appropriate cross-section must be used.



- 2) In complex installations, do not leave open cable runs (i.e., with no decoders connected to the system backbone cable): each cable run must be connected to at least one powered device. If this is necessary to accommodate future expansion or for maintenance purposes, disconnect the open run from the backbone cable.



- 3) Never exceed the maximum limit of 400 devices (where the term device means any item connected to the data line).
- 4) NEVER connect power supply units in parallel.
- 5) Position power supply units in the vicinity of calling devices as indicated on the installation diagrams.
- 6) Never exceed the maximum number of devices that can be connected to a single power supply unit
- 7) ALL apartment station equipment in a system must be of the same type (i.e., either all electronic call tone signaling or all conventional buzzer type). Mixed configurations cannot be used.

- 8) Do not connect more than one apartment station for each decoder (with four-port decoders 826/23, a maximum of four apartment stations can be connected, i.e., one - and **only one** - for each branch). If several doorphones or video doorphones must be connected in parallel to the same branch, see the applicable URMET DOMUS installation diagrams.
- 9) All codes used in a system must be unique. Never assign two identical codes in order to make two apartment stations ring at the same time.

SYSTEM MAINTENANCE

Another import aspect to be considered when designing a system (and one which is often underestimated) is that of maintenance. Thus, future maintenance needs should be borne in mind at the outset in order to facilitate work should a problem arise.

The following measures are recommended:

- 1) Where possible, use different colored conductors for each signal, as indicated in the examples below.

Riser cables:

BLUE	=	1
GREEN	=	2
BLACK	=	-24
WHITE	=	D
RED	=	+ 24

Branch lines:

LIGHT BLUE	(BLUE)	=	1
LIGHT GREEN	(GREEN)	=	2
BLACK		=	6
ORANGE	(RED)	=	7/CA
PURPLE	(WHITE)	=	9
BROWN		=	C

If all of the colors suggested for branch lines are not available, use the same colors as in the riser cable (indicated in brackets), separating the conductors with tie wraps and marking them appropriately.

- 2) If wires cannot be identified by using different colors, mark them with tie wraps or other suitable means.
- 3) Always write down the codes programmed in the decoders on the labels provided for this purpose on the entrance module.
- 4) Where doorphones or other devices with single-port decoders are used (826/14, 1204/94), disconnectable junctions should be installed outside of the apartment so that work can be carried out on the riser cable even if the occupant is not at home. This applies to all devices which must be located on private premises.
- 5) In systems with several riser cables whose wiring is grouped together at the same point, mark each conductor with the codes for the riser cable of which it is a part (e.g., "conductor D, riser cable 1", "conductor D, riser cable 2", and so forth).

TYPES OF INSTALLATION

The URMET DOMUS Model 826 Digital Call System can be used in the following types of installation:

- Digital doorphone systems.
- Digital doorphone systems combined with video doorphone installations.
- Installations with a digital guard door switchboard station serving a doorphone and/or video doorphone system.

To facilitate installation work, always base the system to be set up on one of the four basic configurations described in the following paragraphs.

Regardless of the theoretical considerations expressed below, it should be borne in mind that there is a physical limit to the maximum number of devices that can be simultaneously connected in any system.

Specifically:

A MAXIMUM OF 400 DEVICES CAN BE CONNECTED IN A SYSTEM.

NOTE: Here, the term device is used to designate any item connected to the data line, and thus includes four-port decoders, entrance modules, power supply units, guard door switchboard station, digitizers and so forth. It does not include apartment station doorphones and video doorphones.

Thus, as doorphones and video doorphones are not included in the total:
THE MAXIMUM NUMBER OF SYSTEM USERS IS FAR ABOVE 400.

SYSTEM ACTIVATION

How activation is accomplished is fundamental to the installation's success. If the system includes several riser cables, each with its own secondary entrance module, proceed in successive steps as follows:

- Separate each riser cable so that it is independent of the others, disconnecting the **input** terminal blocks from the secondary entrance panels.
- Supply power, program, and check the operation of each riser cable in turn.
- **ONLY** at this point, connect the riser cables to each other and to the main entrance panels.
- Check the operation of the complete system.

Whether you are dealing with a single riser cable in a complex system, or must activate a simpler system, the following steps must be performed:

- Preliminary checks with system off
- Activation
- Programming
- System operation checks

PRELIMINARY CHECKS WITH SYSTEM OFF

Upon completing installation and **before** supplying power to the system, proceed as described below:

- 1) Check that there are no short circuits in the 5 riser cable wires.
- 2) Ensure that all entrance panels are correctly set up for the type of apartment station doorphones used (i.e., electronic call tone or conventional buzzer signaling types), checking that riser cable wire 1 is connected to speaker unit terminal "1A" for electronic doorphones or terminal "I" for conventional doorphones.
- 3) Check that the jumper on all decoders 826/23 and/or 826/14 is in position "E" for electronic call tone signaling doorphones or in position "R" for conventional buzzer doorphones.
- 4) If digitizers 826/16 or special services digitizers 826/54 are used, ensure that the jumpers are correctly positioned for the type of service to be performed (see the associated manual).
- 5) Check the connection on power supply units (826/25) with particular care: - input voltage must be that provided by mains (110/230/240 V AC).
 - System supply wires must be connected to terminals "+ 24" and "-24", taking care to ensure that polarity is correct.
 - Terminal "D" **must** be connected to the data line.

ACTIVATION

- 1) Before turning on voltage to the power supply unit, remove the fuse by pulling out the associate holder.
- 2) Check that the yellow system LED LI is off, confirming that the system is not energized from other sources.
- 3) Turn on mains voltage **WITHOUT** installing the fuse.
- 4) Install the fuse in the power supply unit: the power supply LED LA should turn red for approximately 5 seconds (re- initialization), and then turn green to indicate that the system is being supplied at 24V.
- 5) Check that these conditions are maintained for at least 1 minute (i.e., make sure that LED LA does **NOT** turn red again).

PROGRAMMING

- 1) Programming must be carried out first on the "calling" devices, or in other words on the entrance modules and guard door switchboard station. Always record all programming data on the memorandum label provided for this purpose. Remember that system installation TYPE (1 1 2 1 3) must be programmed on all calling devices, and must be the same on all of them (decoders do not need to be programmed for installation type).
- 2) Then proceed to program the decoders. Decoder programming can be carried out using one of the three methods illustrated in the decoder manual. Remember to write down the codes programmed in the decoders on the memorandum labels provided for this purpose.
- 3) Program the guard door switchboard station, if provided.
- 4) Any electronic directories in the system must be programmed last.

SYSTEM OPERATION CHECKS

Whether you are dealing with a single - and appropriately isolated - riser cable in a complex system, or must activate a simple system with only one riser cable, carry out the following checks in the order indicated.

NOTE: ALL PARTS OF THE SYSTEM MUST BE CHECKED, ensuring that ALL envisaged functions operate correctly.

For **ALL** apartment stations in the system:

- 1) Call the apartment station from the entrance module and check that the correct ringing tone is produced. For conventional type apartment station doorphones, check that the buzzer reed is correctly positioned to ensure that sound intensity is sufficient. If necessary, bend the reed to improve acoustic output.
- 2) Answer the call from the entrance module by lifting the apartment station handset and check that voice signals are sent and received.
- 3) Press the door lock release button and check that the electric lock connected to the entrance module from which the apartment station was called is actuated.
- 4) With the apartment station handset still off-hook, make a call to another apartment station from the entrance module. Check that the Call Over tone can be heard at the handset and that the voice connection is then cut off.
- 5) Hang up the apartment station handset.

NOTE: If it is not possible to gain access to the apartment station, operation *MUST* be checked by means of a test doorphone connected to the decoder terminal block for the apartment station involved.

For systems with multiple entrance modules on one or more riser cables, check that the same TYPE digit has been programmed on ALL entrance modules at the end of installation.

To do so, proceed as follows:

- Call an apartment station from any of the entrance panels in the system.
- Check that **NONE OF THE REMAINING** entrance panels generates an error warning.
- Repeat this procedure for **ALL** entrance panels in the system, in each case checking that no error warnings are generated at **ALL OF THE REMAINING** entrance panels (i.e., all entrance panels other than the one from which the call was made).

For systems with a guard door switchboard station, **DO NOT TURN ON** the switchboard station until all of the checks listed above have been completed.

ONLY at this point, turn on the guard door switchboard station, program it as dictated by system requirements, and then proceed as follows:

- 1) Check that **ALL** Call Switchboard keys on the apartment station doorphones in the system operate correctly, making a call to the switchboard station from each apartment station.
- 2) Check that there are no TYPE errors. If the TYPE check has already been carried out at all entrance panels, it will be sufficient to:
 - Call an apartment station from the guard door switchboard station and check that there are no TYPE errors at any entrance module.
 - Call an apartment station from any entrance module and check that there are no TYPE errors at the guard door switchboard station.

ELECTRONIC AND CONVENTIONAL APARTMENT STATION EQUIPMENT

The system is designed for use with electronic call tone signaling apartment station equipment. Specifically, this means that:

- Entrance modules 826/65 feature a speaker unit with connection on terminal "1A".
- Four-port decoders (826/23) and single-port doorphone decoders (826/14) are capable of controlling electronic ringers.
- The guard door switchboard station (826/18) is programmed internally for use with systems employing electronic call tone signaling apartment station equipment.

If conventional buzzer type apartment station equipment is to be used, the system must be adapted as follows:

- On entrance modules (826/11 and 826/55), disassemble the speaker unit and move the brown wire from terminal "1A" to terminal "1".
- On four-port decoders (826/23), move the selector switch from position "E" to position "R". On single-port doorphone decoders (826/14), move jumper PT1.
- On the guard door switchboard station (826/18), program the unit for use with conventional buzzer type systems by entering the digit 0 during programming step 5.

NOTE: ALL apartment station equipment in a system must be of the same type (i.e., either all electronic call tone signaling or all conventional buzzer type). Mixed configurations cannot be used.

MAXIMUM NUMBER OF DEVICES CONNECTED TO A SINGLE POWER SUPPLY UNIT

The power supply unit is sized for a typical system configuration consisting, for example, of the following:

- One entrance module 826/65 and fifteen to twenty four-port decoders (826/23);
- One entrance module 826/65 and twenty to twenty-five single-port doorphone decoders (826/14).

Complex systems can be set up using two or more power supply units, EACH OF WHICH SUPPLIES A SEPARATE GROUP OF DEVICES THROUGH OUTPUT TERMINAL +24.

WARNING
NEVER CONNECT TWO OR MORE POWER SUPPLY UNITS IN PARALLEL: ADHERE STRICTLY TO THE INSTALLATION DIAGRAMS.

ONLY FOR 826/23 - 826/31 - 826/34

Loads and consumption	826/65	826/58	826/23	826/31	826/18	826/34	Limits
Load Units	22	4	1.5	0.75	15	0.75	<80

Systems with a single power supply unit

Without guard door switchboard station

	826/65	826/58	826/23	826/31	826/18	826/34	TOTAL
1 main entrance panel, 1 riser cable, 4-port decoders	1	1	30	0	0		71
1 main entrance panel, 1 riser cable, single-port decoders	1	1	0	60	0		71
2 main entrance panels, 1 riser cable, 4-port decoders	2	2	15	0	0		74.5
2 main entrance panels, 1 riser cable, single-port decoders	2	2	0	30	0		74.5
1 main and 1 secondary entrance panel, 1 riser cable, 4-port decoders	2	2	15	0	0		74.5
1 main and 1 secondary entrance panel, 1 riser cable, single-port decoders	2	2	0	30	0		74.5

With guard door switchboard station

1 main entrance panel, 1 riser cable, 4-port decoders	1	1	20	0	1		71
1 main entrance panel, 1 riser cable, single-port decoders	1	1	0	40	1		71
2 main entrance panels, 1 riser cable, 4-port decoders	2	2	8	0	1		79
2 main entrance panels, 1 riser cable, single-port decoders	2	2	0	16	1		79
1 main and 1 secondary entrance panel, 1 riser cable, 4-port decoders	2	2	8	0	1		79
1 main and 1 secondary entrance panel, 1 riser cable, single-port decoders	2	2	0	16	1		79

Systems with multiple power supply units

1 main and 3 secondary entrance panels, with or without switchboard station Use one or more power supply units for the main entrance panels and switchboard station (if provided) and 1 power supply unit per riser cable. The same limits apply to main entrance panels and the switchboard station.

For example, in a system with one or more main entrance modules, a guard door switchboard station and one or more riser cables, each with its associated secondary entrance module, it will be necessary to use:

- One power supply unit for each pair of main entrance modules.
- A dedicated power supply unit for the guard door switchboard station.
- One power supply unit for each riser cable (one secondary entrance module and 20 four-port decoders).

The following rule of thumb can be used to calculate the maximum number of devices that can be connected to each power supply unit.

- 1) Each device can be classified according to its consumption in load units (LUs). One load unit is equivalent to the load of one single-port doorphone decoder 826/14.
- 2) The consumption in load units (LUs) of all devices in the system is listed below:

OUTDOOR STATION EQUIPMENT

• Entrance module Ref. 826/65:	22 LU
• Electronic directory Ref. 826/58:	4 LU
• Digitizer with integrated speaker unit Ref. 826/16 + speaker unit:	15 LU
• Additional digitizer Ref. 826/16:	3 LU

GUARD DOOR STATION EQUIPMENT

• Digital guard door switchboard station Ref. 826/18:	15 LU
---	--------------

DECODERS

• Four-port decoder Ref. 826/23:	1.5 LU
• Doorphone with single-port decoder Ref. 826/31:	0.75 LU
• Bracket with single-port decoder for Scout monitor Ref. 1204/94:	1 LU
• Bracket with single-port decoder for Sentry monitor Ref. 1704/94:	1 LU
• Bracket with single-port decoder for Winflat monitor Ref. 1202/94:	1 LU

EQUIPMENT FOR SPECIAL SERVICES

• Special services decoder unit Ref. 826/54:	3.5 LU
• Relay Ref. 1032/9:	3 LU

**MAXIMUM NUMBER OF APARTMENT STATIONS PER DECODER CHANNEL
TYPE SETTINGS AND ERROR WARNINGS - GENERAL LAYOUT DIAGRAMS**

MAXIMUM NUMBER OF APARTMENT STATIONS PER DECODER CHANNEL

Each four-port decoder (826/23) can be connected to a maximum of 4 apartment stations, one per branch.

NOTE: *Two doorphones or video doorphones of any type (with the exception of Explorer video doorphones) can be connected directly in parallel to each of the four branches. If several doorphones or video doorphones must be connected in parallel to the same branch, see the applicable URMET DOMUS installation diagrams.*

Single-port decoder (826/14) is designed for installation in the doorphone casing, while single-port decoders for the Scout monitor (1204/94) are installed on the associated bracket.

Where single-port decoders 826/14 and 1204/94 are used, it is not possible to connect two apartment station doorphones or video doorphones in parallel. Where this type of connection is required, a ring repeater relay with supplementary power supply or transformer must be installed.

NOTE: *ALL CODES USED IN A SYSTEM MUST BE UNIQUE. NEVER ASSIGN TWO IDENTICAL CODES IN ORDER TO MAKE TWO APARTMENT STATIONS RING AT THE SAME TIME.*

TYPE SETTINGS AND ERROR WARNINGS

In any given system, all entrance panels and the guard door switchboard station, if provided, must be programmed with THE SAME TYPE DIGIT.

If an entrance panel is programmed for a different installation TYPE than that used for the system as a whole, it will generate an error warning. Entrance modules and digitizers will generate an audible warning, while a visual warning will also be displayed at entrance modules. The audible warning consists of a continuous tone, while the visual warning will consist of one of the error messages detailed below:

- E 12 - Module configured for TYPE 1, system configured for TYPE 2
- E 13 - Module configured for TYPE 1, system configured for TYPE 3
- E 21 - Module configured for TYPE 2, system configured for TYPE 1
- E 23 - Module configured for TYPE 2, system configured for TYPE 3
- E 31 - Module configured for TYPE 3, system configured for TYPE 1
- E 32 - Module configured for TYPE 3, system configured for TYPE 2

The error warning will continue until one of the following events occurs:

- A key is pressed on the incorrectly configured entrance panel.
- The incorrectly configured entrance panel receives a message with TYPE identical to its own.
- The 30 minute time-out ends.

Following system installation, check that all entrance modules have been correctly programmed with the same TYPE digit. To do so, proceed as follows:

The error warning will continue until one of the following events occurs:

- A key is pressed on the incorrectly configured entrance panel.
- The incorrectly configured entrance panel receives a message with TYPE identical to its own.
- The 30 minute time-out ends.

Following system installation, check that all entrance modules have been correctly programmed with the same TYPE digit. To do so, proceed as follows:

- Call an apartment station from any of the entrance panels in the system.
- Check that NONE OF THE REMAINING entrance panels generates an error warning

- Repeat this procedure for ALL entrance panels in the system, in each case checking that no error warnings are generated at ALL OF THE REMAINING entrance panels (i.e., all entrance panels other than the one from which the call was made).

NOTE: *If a second-generation entrance panel is installed in a first-generation system, it must be programmed for TYPE 1.*

GENERAL LAYOUT DIAGRAMS

Before installing the system, it is necessary to determine which installation diagram is applicable. As an aid in selecting the correct diagram, a number of general layouts summarizing the possible configurations are provided on the following pages.

Once the desired system configuration has been identified, find the number of the diagram to be used for the doorphone or video doorphone system in question in the table.

Any diagrams which are not enclosed with this publication are available from our after-sales service.

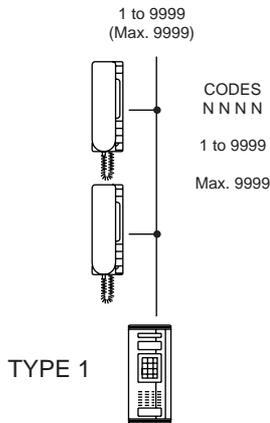
IMPORTANT:

In systems with or without a guard door switchboard stations and featuring multiple riser cables for apartment station connection, the main entrance can be equipped only with a digital entrance module. Conventional entrance panels adapted by installing a digitizer cannot be used.

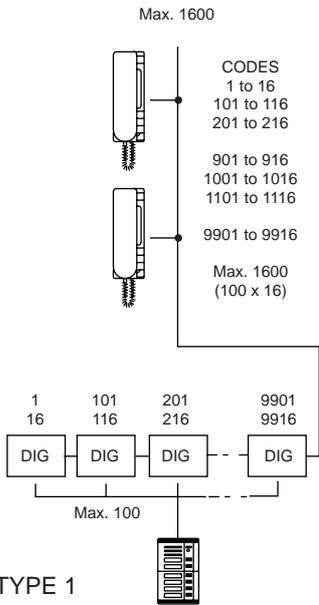
In systems with or without a guard door switchboard stations and featuring a single riser cable for apartment station connection, conventional entrance panels adapted by installing a digitizer can be used only if there are no more than two outdoor stations with automatic switching between them. If there are three or more such outdoor stations, use only digital entrance modules.

To facilitate installation work, however, it is recommended that digital entrance modules be used in all cases, employing conventional entrance panels with digitizers only where strictly necessary.

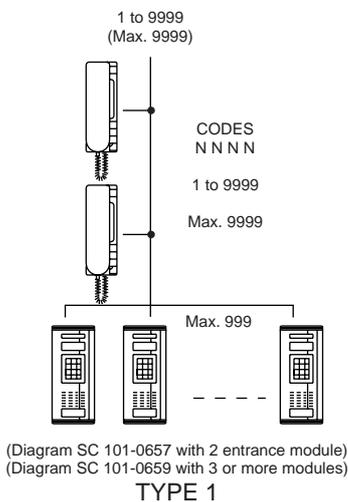
GENERAL LAYOUT DIAGRAMS FOR SINGLE RISER CABLE DOORPHONE SYSTEMS



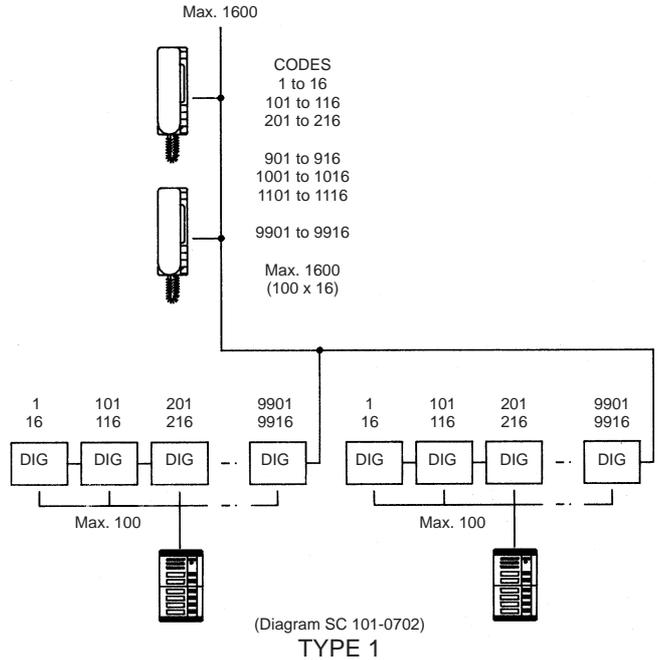
TYPE 1
(Diagram SC 101-0656)
(Diagram SC 101-0665, version with 2 groups and two power supply units)
(Diagram SC 101-0664, version with single-port decoders)



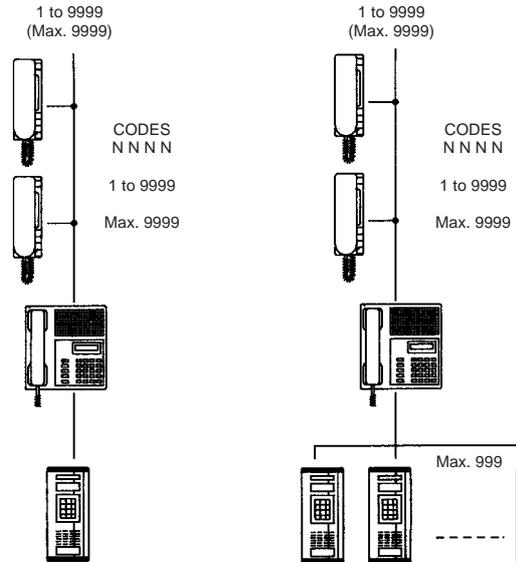
TYPE 1
(Diagram SC 101-0658)



(Diagram SC 101-0657 with 2 entrance module)
(Diagram SC 101-0659 with 3 or more modules)
TYPE 1



(Diagram SC 101-0702)
TYPE 1



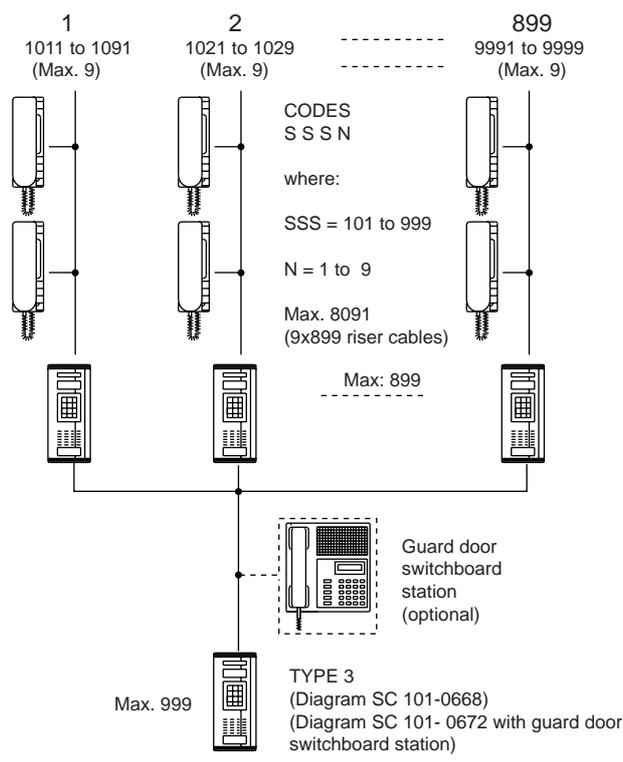
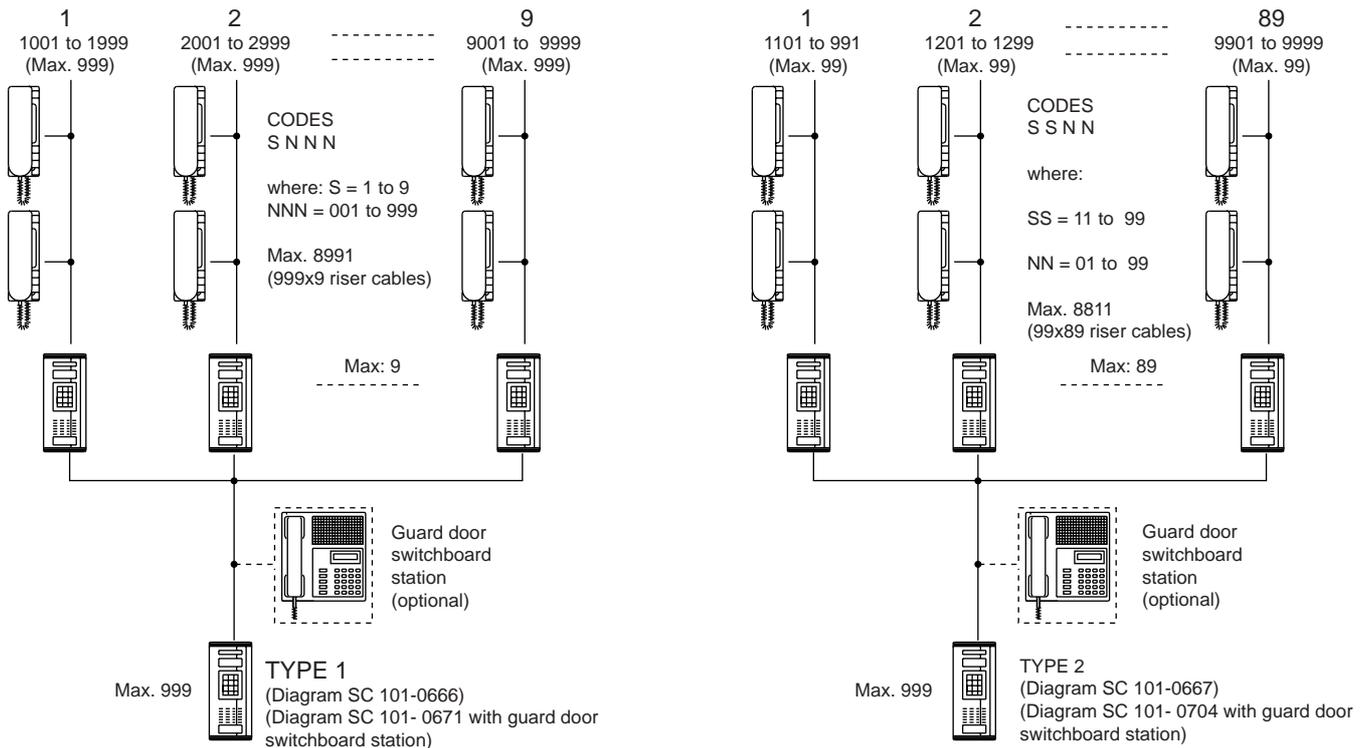
(Diagram SC 101-0660)
(Diagram SC 101-0662 with conventional entrance panel and digitizer)
(Diagram SC 101-0677 with single-port decoders)
TYPE 1

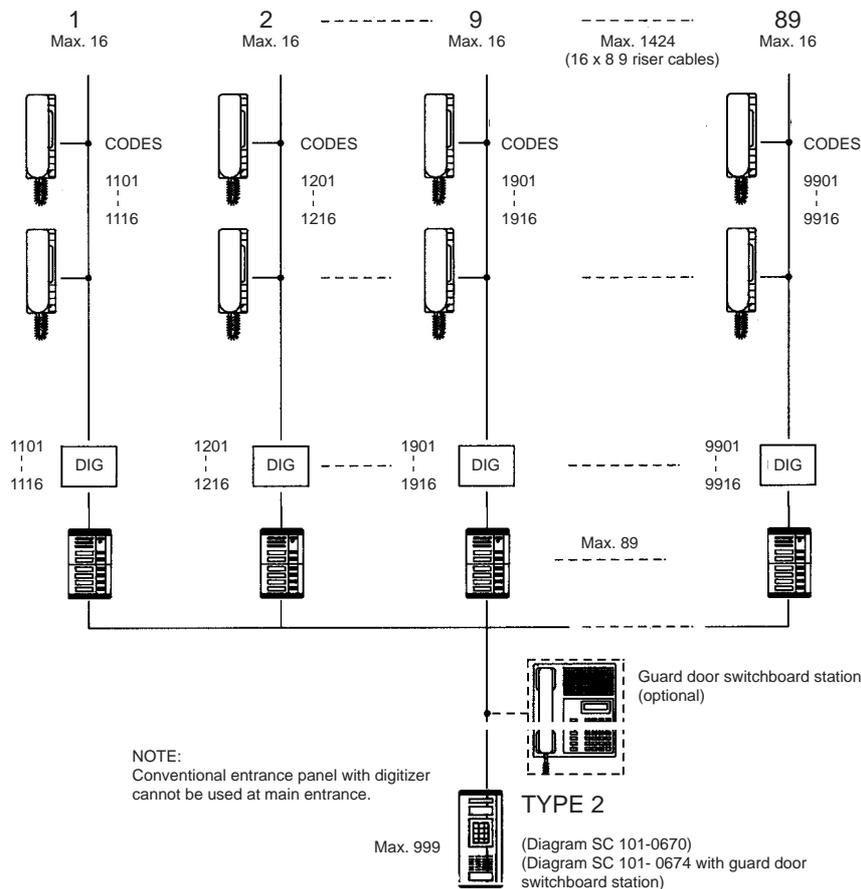
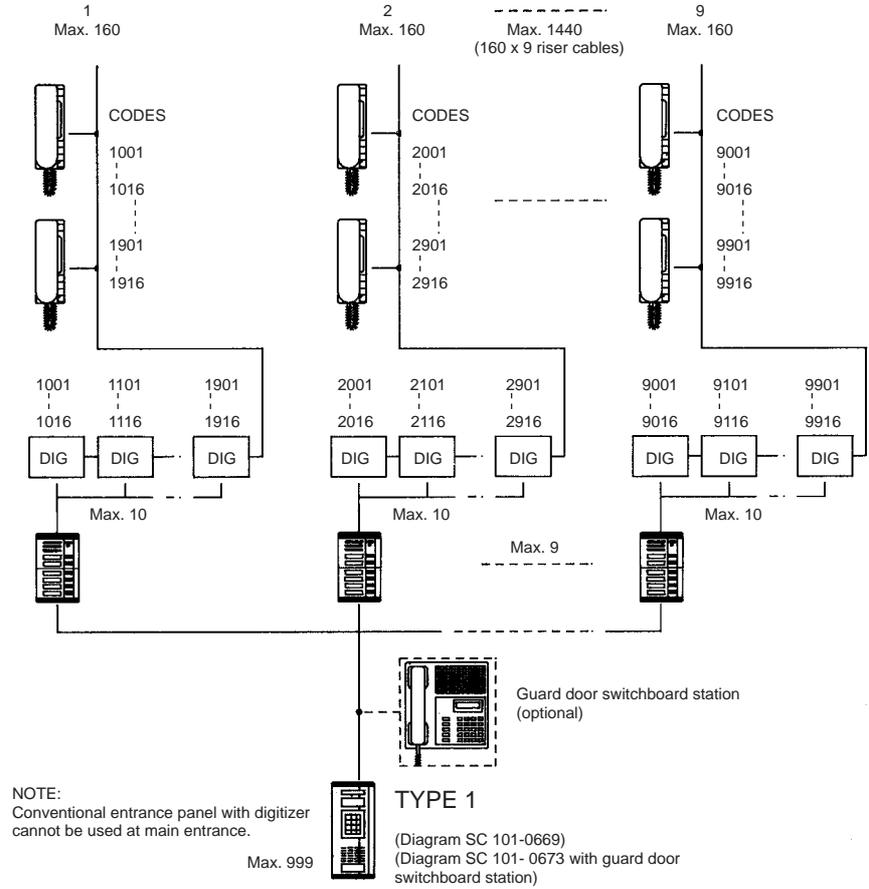
(Diagram SC 101-0661 with 2 modules)
(Diagram SC 101-0703 with conventional entrance panel and digitizer)
(Diagram SC 101-0663 with 3 or more modules not possible with conventional entrance panel and digitizer)
TYPE 1

Type	Without switchboard station	With switchboard station
One outdoor station		
- With digital entrance module	SC 101-0656	SC 101-0660
- With 2 groups and 2 power supply units	SC 101-0665	
- With single-port decoders	SC 101-0664	SC 101-0677
- With conventional entrance panel and digitizer	SC 101-0658	SC 101-0662
Two outdoor stations		
- With digital entrance modules	SC 101-0657	SC 101-0661
- With conventional entrance panels and digitizers	SC 101-0702	SC 101-0703
Three or more outdoor stations		
- Digital entrance modules only	SC 101-0659	SC 101-0663

GENERAL LAYOUT DIAGRAMS FOR MULTIPLE RISER CABLE DOORPHONE SYSTEMS

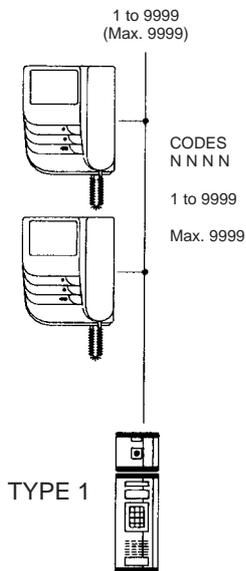
Type	Without switchboard station	With switchboard station
All digital entrance modules - With a maximum of 9 riser cables - With a maximum of 89 riser cables - With a maximum of 899 riser cables	SV 101-0666 SV 101-0667 SV 101-0668	SV 101-0671 SV 101-0704 SV 101-0672
Conventional entrance panels with digitizers at secondary entrances (digital entrance module must be used at main entrance) - With a maximum of 9 riser cables - With a maximum of 89 riser cables - With a maximum of 899 riser cables	SV 101-0669 SV 101-0670 Not possible	SV 101-0673 SV 101-0674 Non possible





GENERAL LAYOUT DIAGRAMS FOR SINGLE RISER CABLE VIDEO DOORPHONE SYSTEMS

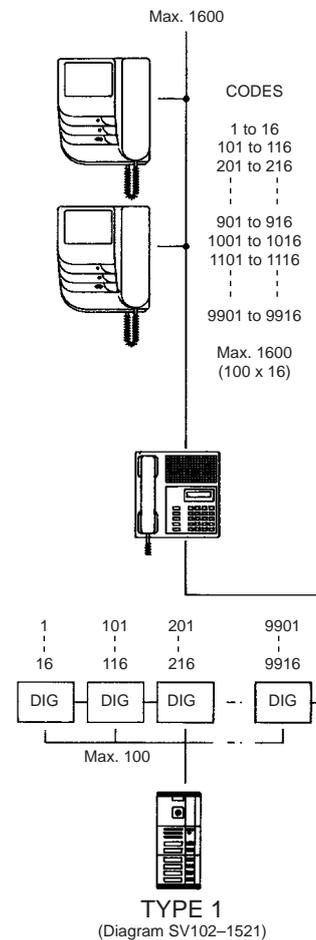
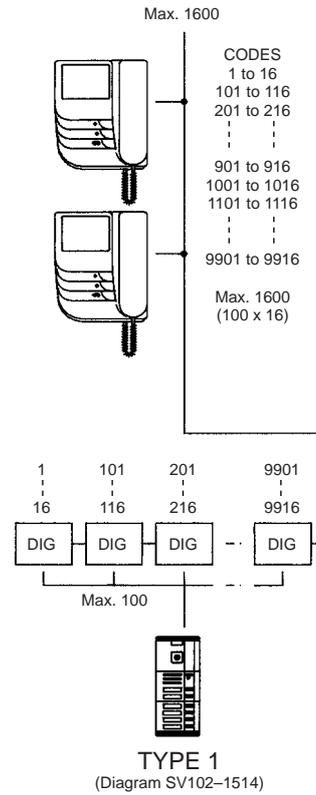
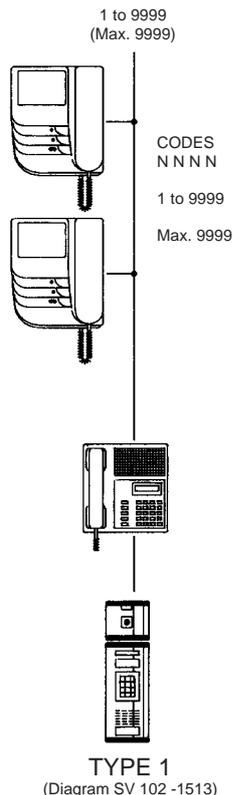
Type	Without switchboard station	With switchboard station
One outdoor station Digital entrance module - With four-port decoder - With single-port decoder bracket - With single-port decoder bracket 2 groups and 2 power supply units - With conventional entrance panel and digitizer	SV 102-1511 SV 102-1515 SV 102-1518	SV 102-1513
Two outdoor stations - With digital entrance modules - With conventional entrance panels and digitizers	SV 102-1512 SV 102-1519	SV 102-1521 SV 102-1523
Three or more outdoor stations - Digital entrance modules only	SV 102-1520	SV 102-1524

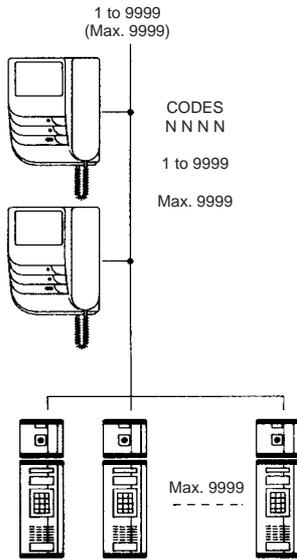


(Diagram SV 102 -1511 with four-port decoders)

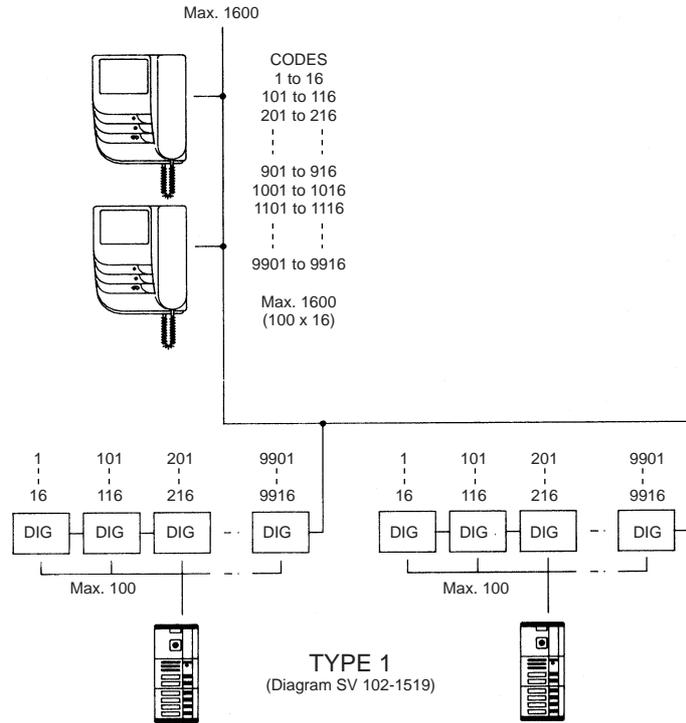
(Diagram SV 102 -1515 with single-port decoder bracket)

(Diagram SV 102-1518 with single-port decoder bracket 2 groups and 2 power supply units)

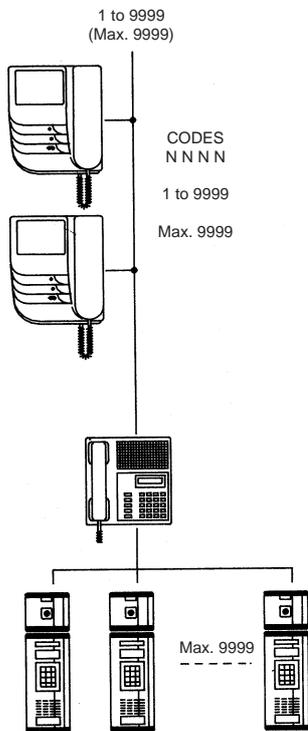




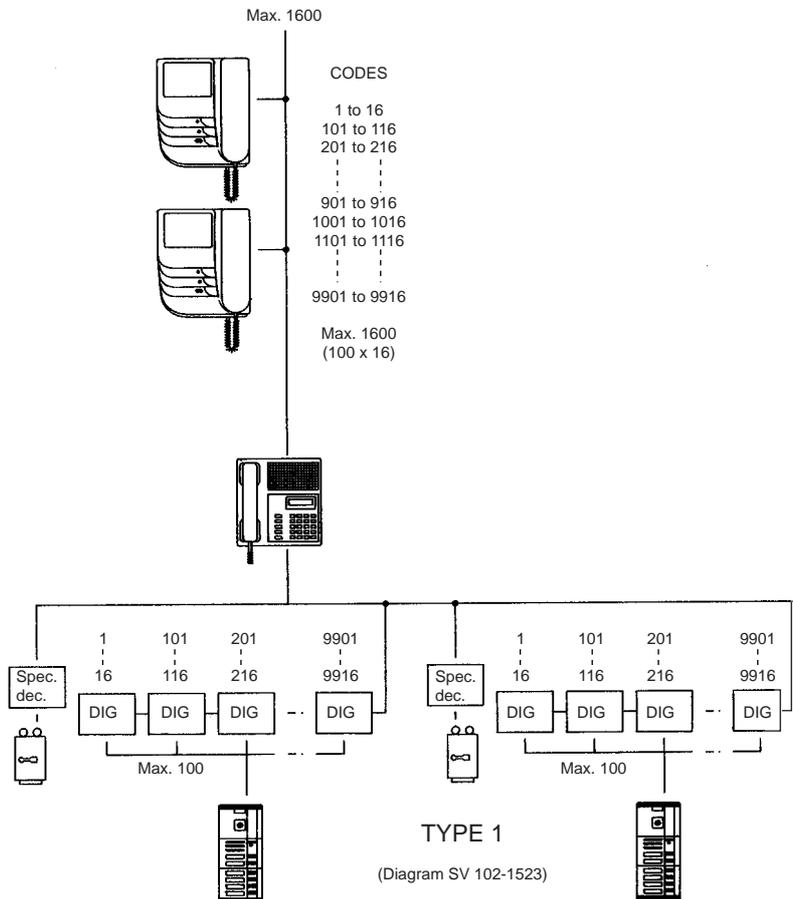
TYPE 1
(Diagram SV 102 -1512 with two entrance modules)
(Diagram SV 102 -1520 with three or more modules)



TYPE 1
(Diagram SV 102-1519)



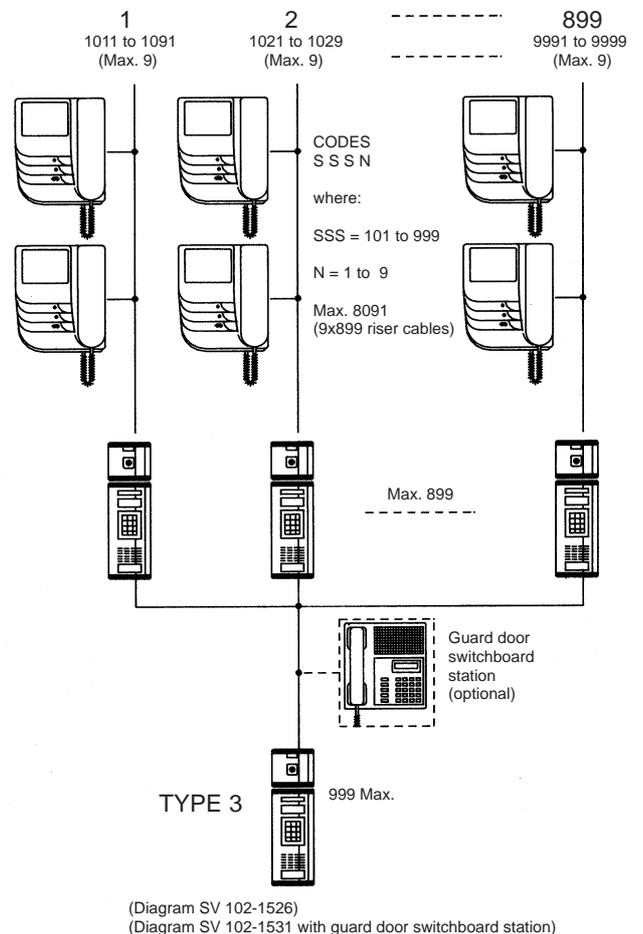
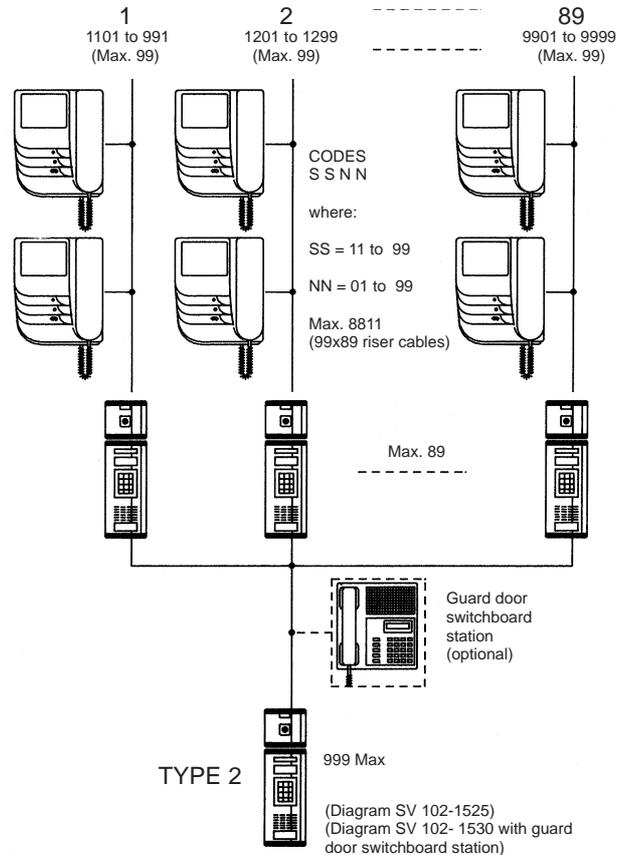
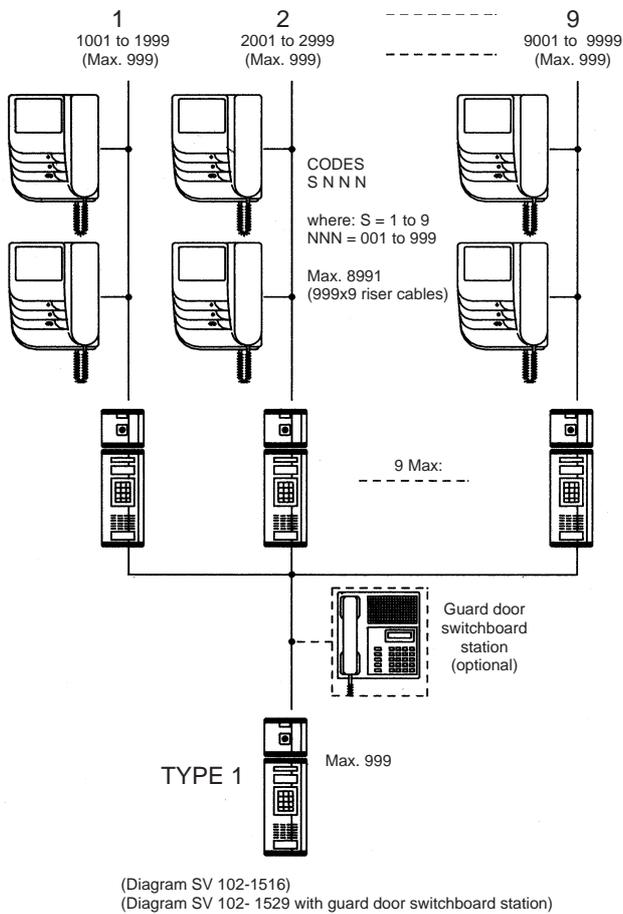
TYPE 1
(Diagram SV 102 -1522 with two entrance modules)
(Diagram SV 102 -1524 with three or more modules)

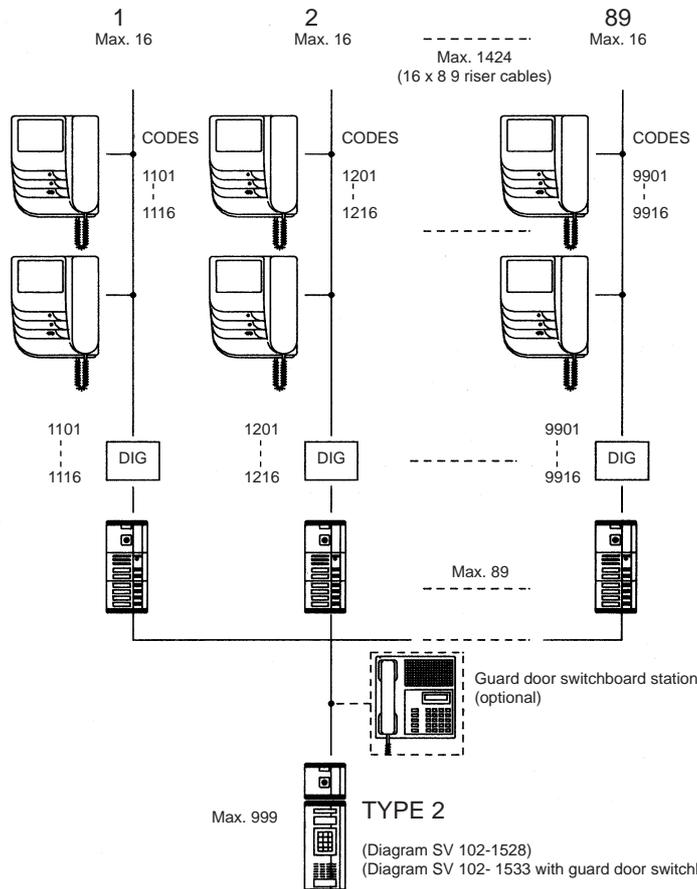
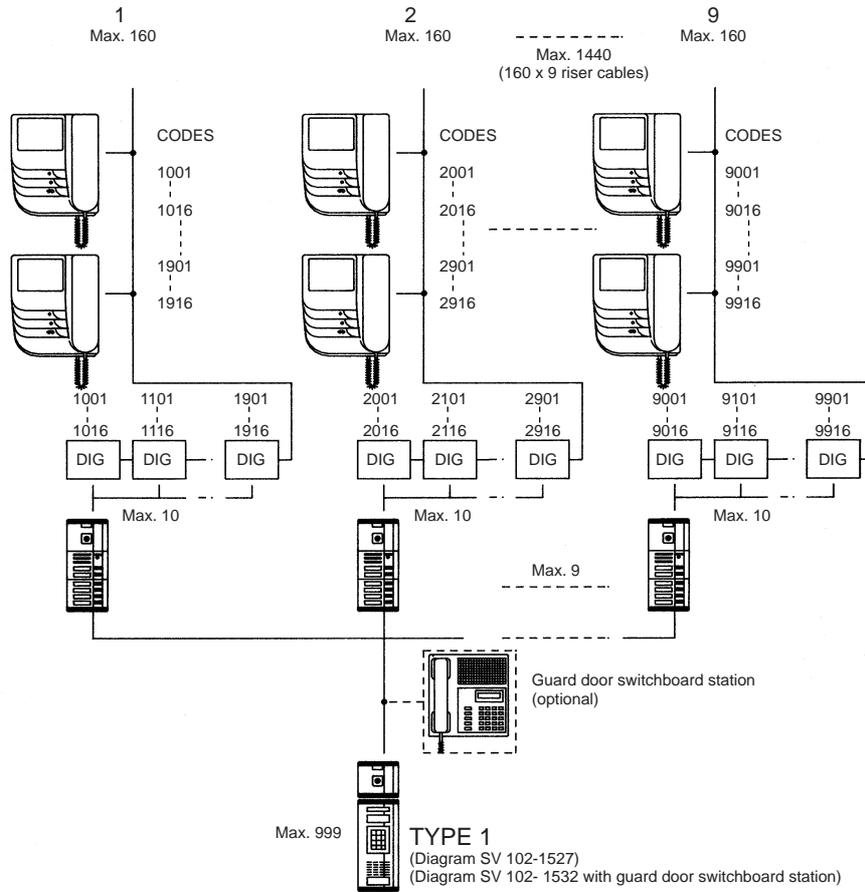


TYPE 1
(Diagram SV 102-1523)

GENERAL LAYOUT DIAGRAMS FOR MULTIPLE RISER CABLE VIDEO DOORPHONE SYSTEMS

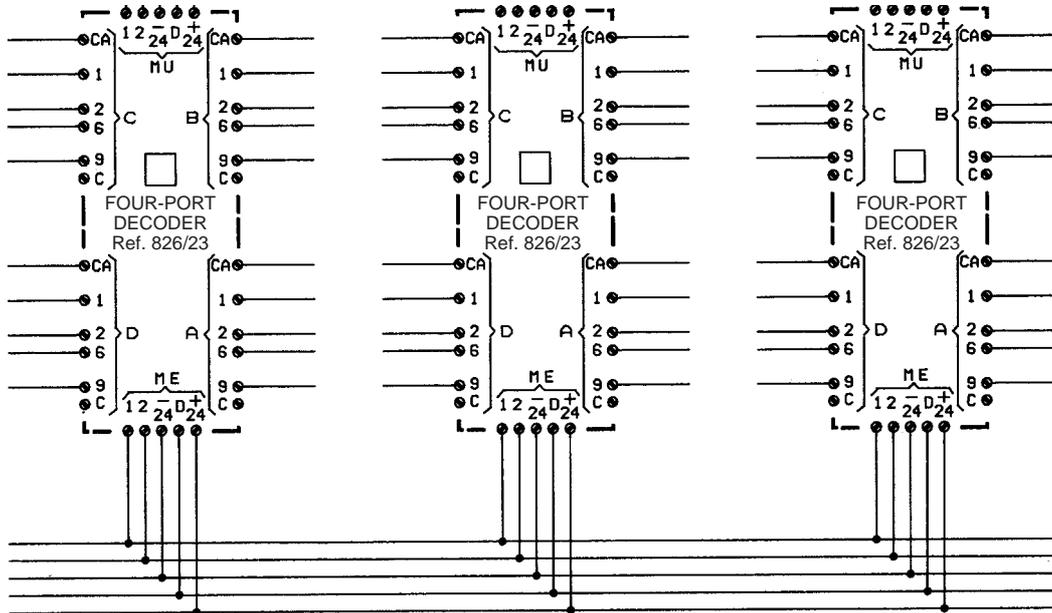
Type	Without switchboard station	With switchboard station
All digital entrance modules - With a maximum of 9 riser cables - With a maximum of 89 riser cables - With a maximum of 899 riser cables	SV 102-1516	SV 102-1529
	SV 102-1525	SV 102-1530
	SV 102-1526	SV 102-1531
Conventional entrance panels with digitizers at secondary entrances (digital entrance module must be used at main entrance)	SV 102-1527	SV 102-1532
	SV 102-1528	SV 102-1533
	Not possible	Not possible
	Not possible	Not possible





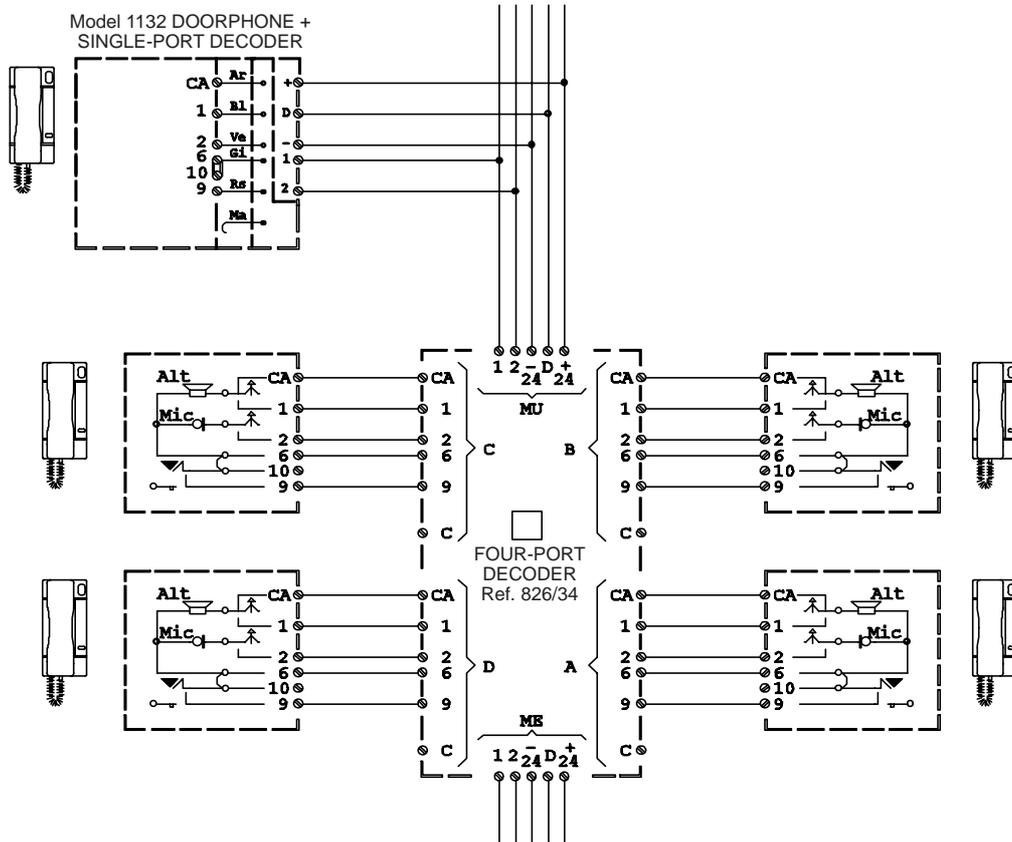
DECODER CONNECTIONS VIA INPUT TERMINALS

It is not indispensable to connect decoders Ref. 826/3 in series (via input and output terminals). They may also be branched directly off the riser cable using the input terminals.



SINGLE-PORT AND FOUR-PORT DECODERS ON THE SAME RISER CABLE

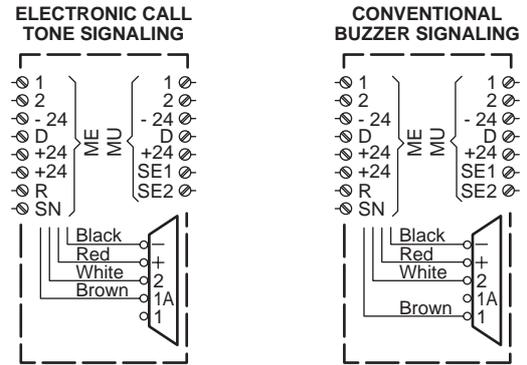
Both four-port and single-port decoders can be used in the same system.



USING ELECTRONIC CALL TONE SIGNALING AND CONVENTIONAL BUZZER DOORPHONES OR VIDEO DOORPHONES

All decoders and entrance modules are set up at the factory for connection to electronic call tone signaling doorphones and video doorphones. If conventional buzzer type doorphones and video doorphone are used, a number of jumper positions and connections must be changed. On four-port decoders, move the selector switch from position **E** to position **R**. On single-port decoders, move jumper PT1. On entrance module speaker units, move the conductor from terminal 1A to terminal 1. On doorphones and video doorphones, connect the ringer wire to terminal 7 rather than terminal CA. All apartment station equipment in a system must use the same type of signaling: mixed configurations cannot be used.

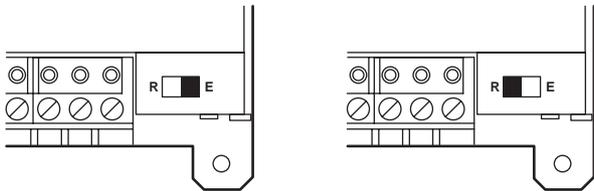
ENTRANCE MODULE SPEAKER UNIT CONNECTIONS



SELECTOR SWITCH POSITIONS FOR FOUR-PORT DECODER Ref. 826/23

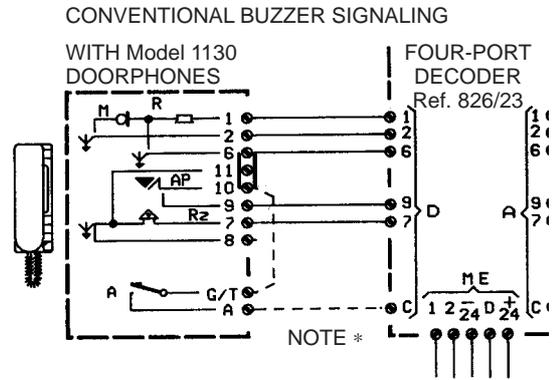
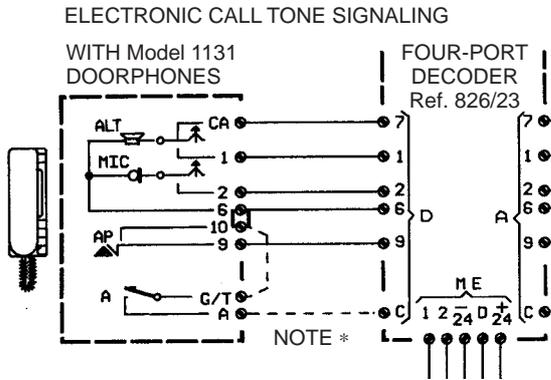
SELECTOR SWITCH POSITION FOR ELECTRONIC APARTMENT STATION EQUIPMENT (ELECTRONIC RINGER)

SELECTOR SWITCH POSITION FOR CONVENTIONAL APARTMENT STATION EQUIPMENT (BUZZER)



DOORPHONE RINGER WIRE CONNECTIONS

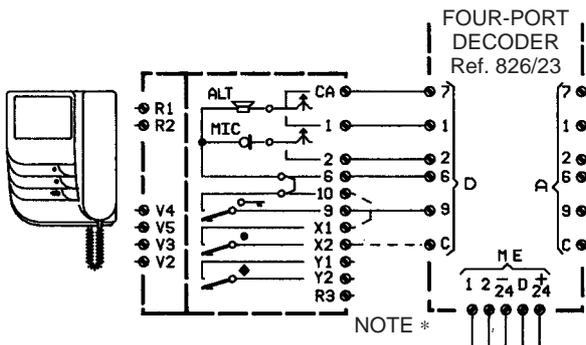
WITH FOUR-PORT DECODERS



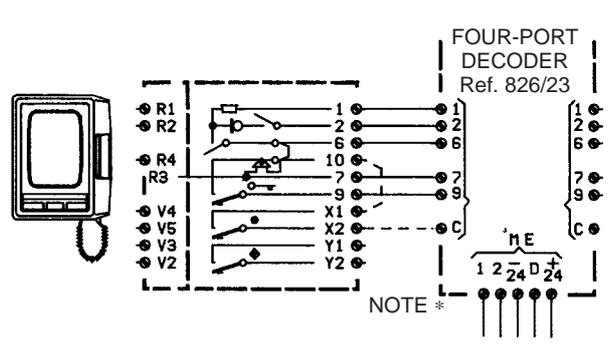
NOTE: Connection represented by dash line applies only to systems with guard door switchboard station. In this case, doorphones will be equipped with key A, which will be used to call the switchboard. Key AP will be used to release electric door locks.

VIDEO DOORPHONE RINGER WIRE CONNECTIONS

ELECTRONIC CALL TONE SIGNALING WITH SCOUT VIDEO DOORPHONE



CONVENTIONAL BUZZER SIGNALING WITH EXPLORER or RANGER VIDEO DOORPHONE



NOTE: Connection represented by dash line applies only to systems with guard door switchboard station.

SYSTEM EQUIPMENT

OUTDOOR STATION EQUIPMENT:

Entrance module with speaker unit on Kombi chassis	Ref. 826/65
Electronic directory for Kombi entrance module	Ref. 826/58
16-pushbutton digitizer	Ref. 826/16
Directory panel with 1-4-8 name inserts for kombi entrance panels	Ref. 825/550

GUARD DOOR STATION EQUIPMENT

Digital guard door switchboard station	Ref. 826/18
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DECODERS FOR DOORPHONE AND/OR VIDEO DOORPHONE APARTMENT STATIONS

Four-port decoder	Ref. 826/23
Single-port doorphone decoder	Ref. 826/14
Bracket with single-port decoder for winflat monitor	Ref. 1202/94
Bracket with single-port decoder for sentry monitor	Ref. 1704/94

EQUIPMENT FOR SPECIAL SERVICES AND FUNCTIONS

Special services decoder unit	Ref. 826/54
Relay for special video doorphone systems	Ref. 1032/9
Multi-purpose electric lock timer	Ref. 1032/81

POWER SUPPLY UNITS

38 VA - 110/230/240 V power supply unit	Ref. 826/25
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ACCESSORIES

Electronic directory programming keypad	Ref. 826/56
Illuminated hood for entrance module 826/11	Ref. 826/53
Programming cord	Ref. 826/104

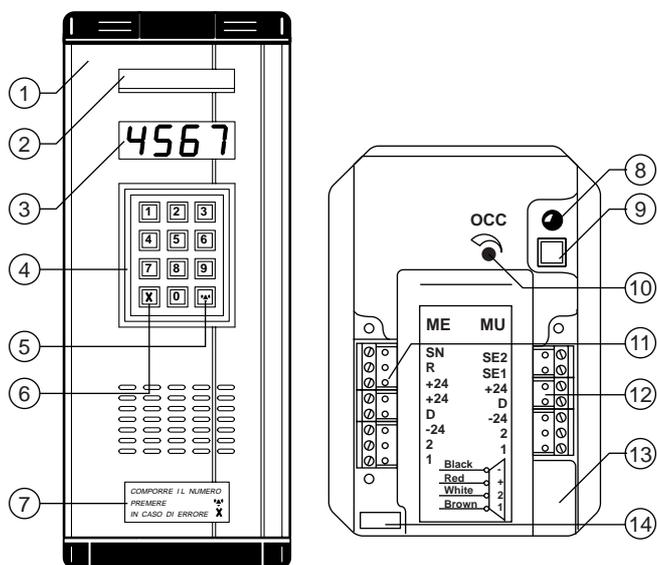
SPARE PARTS

Entrance module display unit	Ref. 826/101
Entrance module keypad unit	Ref. 826/102
Entrance module electronic unit	Ref. 826/20

APARTMENT STATION EQUIPMENT

Doorphone with single-port decoder	Ref. 826/31
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ENTRANCE MODULE ON KOMBI CHASSIS
Ref. 826/65



FEATURES

Entrance module on Kombi chassis consists of the following:

- Compact three-module Kombi series faceplate (2):.
- Hood with LED (3) for nighttime keypad lighting. LED segments are automatically deactivated in the event of failure.
- Four-digit red display (4) protected by transparent polycarbonate cover.
- Recessed all-metal numeric keypad (5) complete with call button (6) identified by the symbol and delete button (7).
- Scratchproof adhesive instruction label (8). Module is supplied together with labels in five different languages: select the appropriate label during installation.
- Electronic circuit with removable input terminal block (12) and output terminal block (13), electronic directory connector (15), programming pushbutton (10), LED (9) and jack (14).
- Incorporated speaker unit **Ref. 824/500**.

SPECIFICATIONS

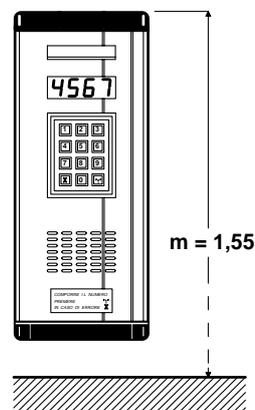
Operating voltage	24 V DC ± 10%
Stand-by current draw	25 mA ⁽¹⁾
Current draw with ringer active	250 mA ⁽²⁾
Current draw with voice signal active (with speaker unit)	150 mA ⁽³⁾
Service temperature range	-10 °C to 45 °C

- ⁽¹⁾ Entrance module in Kombi installation: 35 mA
- ⁽²⁾ Entrance module in Kombi installation: 260 mA
- ⁽³⁾ Entrance module in Kombi installation: 160 mA

INSTALLATION

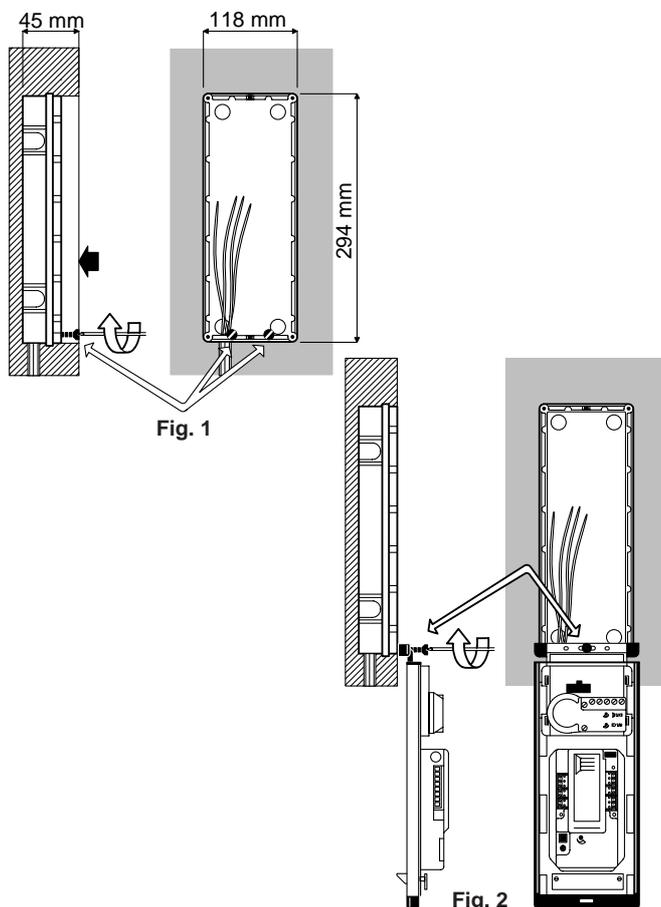
FLUSH MOUNTING VERSION

Modules with provision for speaker units should be installed in wall, positioning them flush with wall surface and at a height of approximately 1.55 m from floor.



The entrance module is supplied together with the associated flush mounting back box. It is recommended that the module be removed from the back box when the latter is installed in wall. To do so, lift the sliding cover to gain access to screw as shown in Figure 3. Remove the screw provided in the bottom end cap and take out the entire module chassis as shown in Figure 2.

The flush mounting back box must be installed level with the wall surface, and must not protrude. If the back box is set too far back in the wall, install the two screws in the holes provided on the bottom of the box and turn screws until their heads are flush with the wall surface. This will prevent the bottom end cap of the module chassis from being damaged during subsequent installation. See Figure 1.



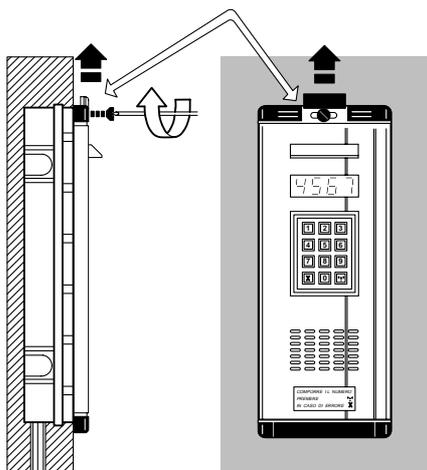


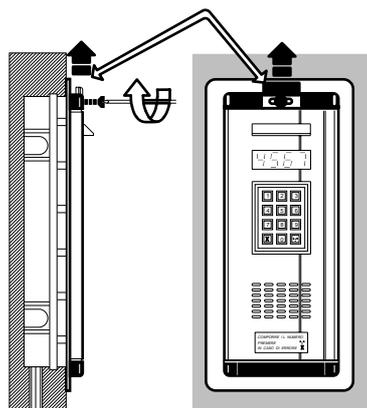
Fig. 3

INSTALLATION OF ACCESSORIES

FLUSH MOUNTING VERSION WITH PERIMETER FRAME Ref. 825/33

After installing the flush mounting back box in the wall, position the perimeter frame and secure by tightening screws on module chassis bottom end cap.

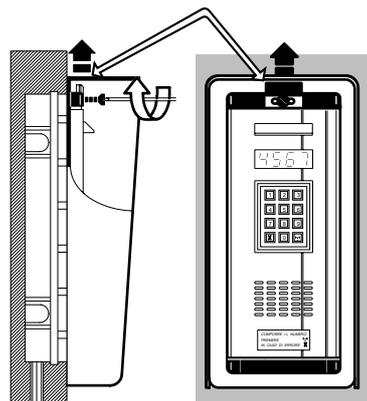
Tighten the screw retaining the chassis top end cap to secure to perimeter frame.



FLUSH MOUNTING VERSION WITH PROTECTIVE RAIN HOOD Ref. 825/43

After installing the flush mounting back box in the wall, position the protective rain hood and secure by tightening screws on module chassis bottom end cap. To prevent distortion and compensate for the thickness of the rain hood, install the two special screws at the bottom of the flush mounting back box and turn screws until the chassis end cap protrudes approximately 2 mm from wall surface.

Tighten the screw retaining the chassis top end cap to the flush mounting back box to secure the rain hood.



WALL SURFACE MOUNTING VERSION WITH HOODED HOUSING Ref. 825/53

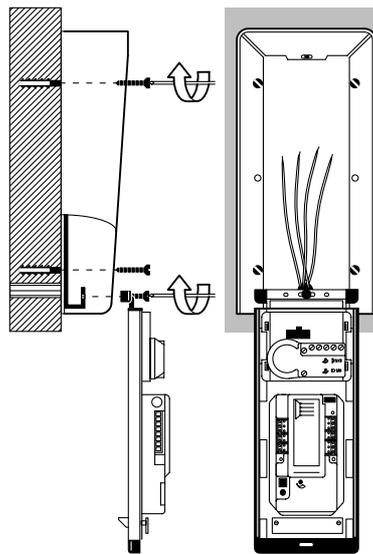
Entrance module housing is supplied together with frame and module chassis.

Secure the hood to the wall using three screws and the associated wall plugs.

Conductors must be routed through the opening provided at the bottom of the housing.

Install the frame between the housing and the module chassis and tighten screws on bottom end cap.

Swing the module upwards and secure the top end cap to the housing.



PROGRAMMING

Six parameters must be programmed in the entrance module. Consequently, the programming sequence is divided into six consecutive steps.

NOTICE:

To ensure that system maintenance can be efficiently performed, it is **ESSENTIAL** that the parameters programmed in the entrance module be written down on the memorandum label provided for this purpose.

INIZIO PROGRAMMAZIONE PROGRAMMING START		1° PASSO / 1ST STEP	2° PASSO / 2ND STEP	3° PASSO / 3RD STEP	4° PASSO / 4TH STEP	5° PASSO / 5TH STEP	6° PASSO / 6TH STEP				FINE PROGRAMMAZIONE PROGRAMMING END	INSERIMENTO CODICI SEGRETI DI APRIPORTA LOCK OPENING SECRET CODES INPUT		
Premere il tasto di programmazione. Il led si accende. Press the programming key. The Led will light up.		PREMERE PRESS	PREMERE PRESS	PREMERE PRESS	PREMERE PRESS	PREMERE PRESS	PREMERE PRESS	a	b	c	d	PREMERE PRESS	Il led si spegne Led off.	Premere 0 , pausa a , pausa b , pausa c , pausa d . 1° Codice segreto di apriporta 0001 + 9999 (0000 codice disabilitato) Premere 2° Codice segreto di apriporta 0001 + 9999 8° Codice segreto di apriporta 0001 + 9999 Premere Il display si spegne e il Modulo torna in stato di riposo: fine inserimento.
	TIPO POSTO DI CHIAMATA 0 = Principale 1 = Secondario 2 = Speciale	MODO D'IMPIANTO 1 = Modo 1 2 = Modo 2 3 = Modo 3	NUMERO POSTO DI CHIAMATA 0 + 999 se Principale 1 + 9 se Secondario in Modo 1 11 + 99 se Secondario in Modo 2 101 + 999 se Secondario in Modo 3	TEMPO OCCUPATO 1 = 10sec. 2 = 20 sec. 3 = 30sec. 4 = 40 sec.	SERVIZIO APRIPORTA 0 = Per aprire la serratura elettrica in ogni momento. 1 = Per aprire la serratura elettrica solo se chiamati.	CODICE DI ACCESSO PER MEMORIZZAZIONE CODICI DI APRIPORTA 0 0 0 0 Prestazione esclusa 0 0 0 1 Codice di accesso N. 0001 * * * * * * * * 9 9 9 9 Codice di accesso N. 9999								
SCRIVERE UNA SOLA CIFRA PER CASSELLA / IN CASO DI ERRORE PREMERE <input checked="" type="checkbox"/> E RICOMPARE LA CIFRA PRECEDENTEMENTE MEMORIZZATA														
	CALL MODULE TYPE 0 = Main entry 1 = Secondary	TYPE OF INSTALLATION 1 = Type 1 2 = Type 2 3 = Type 3	CALL MODULE NUMBER 0 + 999 if Main entry 1 + 9 if Secondary Entry Type 1 11 + 99 if Secondary Entry Type 2 101 + 999 if Secondary Entry Type 3	BUSY PERIOD 1 = 10sec. 2 = 20 sec. 3 = 30sec. 4 = 40 sec.	LOCK OPENING 0 = To open the electric lock at any time. 1 = To open the electric lock only when called.	ACCESS CODE TO STORE THE LOCK OPENING CODES 0 0 0 0 No lock opening 0 0 0 1 Access code N. 0001 * * * * * * * * 9 9 9 9 Access code N. 9999						Push 0 , pause a , pause b , pause c , pause d . 1st Lock opening secret code 0001 + 9999 (0000 code disabled) Push 2nd Lock opening secret code 0001 + 9999 8th Lock opening secret code 0001 + 9999 Premere Display off and call module ready to operate input over.		
1 DIGIT ONLY FOR EACH SQUARE / IN CASE OF FAILURE PUSH <input checked="" type="checkbox"/> AND THE DIGIT PREVIOUSLY STORED APPEARS AGAIN														

Proceed as follows.
Supply power to the entrance module.

Press the programming pushbutton (10) located on the rear of the entrance panel.

Programming LED (9) on the rear of the entrance panel will go on, and the digits regarding the first programming step will appear on display (4).

The digit in the left will be "1", and indicates that the current programming step is the first.

The flashing digit on the right indicates the setting programmed in memory for this step.

To confirm the programmed setting and go on to the next step, press the call button . If a mistake is made when entering settings, the error can be deleted by pressing the 'X' key. The former setting will return to the display.

STEP 1 - Type of entrance panel

- Enter "0" to configure the module as a main entrance panel, i.e., one from which calls can be made to all doorphone and/or video doorphone stations and special service codes can be entered.
- Enter "1" to configure the module as a secondary entrance panel, i.e., one from which calls can be made only to the doorphone and/or video doorphone stations in the module's own group, and special service codes can be entered.
- The digit "2" is not currently used. It is provided for future system enhancements.

Press the call button to go on to the second step.

STEP 2 - Installation type

Before proceeding to program the installation type, read the section headed: "TYPES OF INSTALLATION" and the associated "SYSTEM AND INSTALLATION REQUIREMENTS" with care, noting the differences between Types 1, 2 and 3.

- Enter "1" to configure the entrance module for installation Type 1, i.e., for a system with main entrance panels only (serving a maximum of 9999 apartment stations), or with a maximum of 9 secondary entrance panels, each serving up to 999 apartment stations).
- Enter "2" to configure the entrance module for installation Type 2, i.e., for a system with a maximum of 89 secondary entrance panels, each serving up to 99 apartment stations.

- Enter "3" to configure the entrance module for installation Type 3, i.e., for a system with a maximum of 899 secondary entrance panels, each serving up to 9 apartment stations.

Press the call button to go on to the third step.

STEP 3 - Entrance panel number

Whether configured as main or secondary, each entrance panel is identified by a number. However, the numbers that can be assigned to an entrance panel will depend on two factors:

- Whether it is a main or secondary entrance panel, and,
- if it is a secondary entrance panel, on the installation type
- If the module has been configured as a main entrance panel, a number from 0 to 999 can be assigned.
- If the module has been configured as a secondary entrance panel:
 - Enter a number between "1" and "9" for installation Type 1.
 - Enter a number between "1" and "99" for installation Type 2.
 - Enter a number between "1" and "999" for installation Type 3.

Press the call button to go on to the fourth step.

STEP 4 - Engaged time

This parameter is used in systems with two or more main entrance panels featuring automatic switching between them. In such situations, it is necessary to ensure that a conversation originating from an entrance panel will not be cut off for a certain minimum duration, which may be programmed from 10 to 40 seconds. During this programmed minimum duration, which is called the "engaged time", calls cannot be made from the other entrance panels, where an intermittent warning tone will be emitted to indicate that they cannot be used until the programmed engaged time has ended. Where possible, the entrance panel display will also show four flashing dashes.

Once the programmed engaged time has ended, an ongoing call will be interrupted immediately if a call is made from another entrance panel. The engaged time parameter is also used for secondary entrance panels. When a main entrance panel or guard door switchboard station makes a call to an apartment station which is physically connected to the riser cable associated with a given secondary entrance panel, it will not be possible to make calls from this panel for the entire programmed engaged time. Note, however, that a call made from a secondary entrance panel will not generate a busy indication at any other entrance panel, whether main or secondary.

- Enter "1" to program engaged time as 10 seconds.
- Enter "2" to program engaged time as 20 seconds.
- Enter "3" to program engaged time as 30 seconds.
- Enter "4" to program engaged time as 40 seconds.

It is advisable to program all entrance panels in the system for the same engaged time.

Press the call button  to go on to the fifth step.

STEP 5 - Electric lock management

Enter "0" to configure UNRESTRICTED DOOR LOCK RELEASE:

- If the module is configured as a main entrance panel, the electric door lock connected to it will be released **at any time** that the door lock release button is pressed at **any** apartment station.
- If the module is configured as a secondary entrance panel, the electric door lock connected to it will be released **at any time** that the door lock release button is pressed at **any** apartment station **connected to its riser cable**.

Enter "1" to configure DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE. This means that the electric door lock connected to the entrance module will be released **only** when the door lock release button is pressed at an apartment station **that has been called from the entrance module in question**. In this case, the door lock can be released for a period at least equal to the programmed engaged time but not exceeding 10 minutes.

The criterion selected for electric lock management is essential to correct system operation.

STRICTLY ADHERE TO THE INSTRUCTIONS BELOW: CONFIGURATIONS OTHER THAN THOSE DESCRIBED CANNOT BE USED.

- In installations with a single main entrance panel and no secondary entrance panels, the entrance module may be configured either for UNRESTRICTED DOOR LOCK RELEASE or for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE.
- In installations with two or more main entrance panels with automatic switching between them, it is **essential** that all entrance modules be configured for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE.
- In installations with at least one secondary entrance panel, it is **essential** that the main entrance panel or panels be programmed for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE. The secondary entrance panel(s) can be programmed either for UNRESTRICTED DOOR LOCK RELEASE or for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE. In the first case, pressing the apartment station door lock release button in response to a call from a main entrance panel will release the lock connected to the main entrance panel from which the call was made, **as well as** the lock connected to the secondary entrance panel associated with the apartment station concerned. In the second case, pressing the apartment station door lock release button in response to a call from a main entrance panel will release only the lock connected to the main entrance panel from which the call was made: a second call will have to be made from the secondary entrance panel before the lock connected to it can be released.

Press the call button  to go on to the fifth step.

STEP 6 - Password

Door locks can also be released by entering a special code via the entrance module keypad. Up to eight such codes can be stored in the entrance module's memory. These codes are NOT stored in memory during this programming step, as this can be accomplished at any time by using the keypad. It is thus not necessary to open the entrance module for this purpose. However, a password must be used to access the door lock release code programming procedure, thus ensuring that only the installer or other authorized persons can change the door lock release codes. The sixth programming step is used to store this password in memory.

The password consists of four digits:

- Numbers between "0001" and "9999" can be assigned.
- Entering the number "0000" as the password will automatically disable the feature: it will not be possible to use door lock release codes or enter new ones.

Press the call button  to exit from the programming procedure. The LED located at the rear of the entrance module will go off.

DOOR LOCK RELEASE CODE ENTRY

Once the entrance module has been closed in the flush mounting back box, door lock release codes can be entered in its memory. Codes can be entered only if the password established during programming step 6 is known.

To access the procedure, carry out the following operations:

• Password recognition

Press the "0" key twice: the display will go black and the numeric keypad will be disabled for 4 seconds. At the end of this period, the entrance module will beep to indicate that the first digit in the password can now be entered.

The first digit must be entered within 4 seconds of the beep. If it is not, the entrance module will return to stand-by status.

After the first digit has been entered, a dash will be shown on the display: this is because password digits are not displayed for security reasons.

The keypad will again be disabled for 4 seconds. The entrance module will then beep to indicate that second digit in the password can be entered (again, the digit must be entered within 4 seconds of the beep).

Continue with the same procedure until all four digits in the password have been entered.

• Code entry

Once all four digits in the password have been entered and recognized by the entrance module, the display will show the first door lock release code in memory. If the entrance module does not recognize the password, it will return to stand-by status.

- Enter the desired code, which may consist of any digit between "0001" and "9999".
- To delete the code, overwrite it as "0000".

Press the call button  to go on to the second door lock release code. If a mistake is made in entering the code, press the "X" key to delete the error and return the former code to the display.

To read existing codes and confirm them without change, press the call button  again.

After entering the eighth door lock release code, press the call button . The entrance module will store all entered codes in memory, returning to stand-by status after a few seconds. The module is now ready for normal operation.

Example: Password entered during step 6 of the programming procedure: 5 2 9 4.

Proceed as follows:

Enter "00" and wait 4 seconds for the beep.

Enter "5" and wait 4 seconds for the beep.

Enter "2" and wait 4 seconds for the beep.

Enter "9" and wait 4 seconds for the beep.

Enter "4". The password is now complete.

The display will show the:

First door lock release code ("0000"): change or confirm.

Press ▲.

The second door lock release code "0000" will then appear: change or confirm.

Press ▲.

The third door lock release code "0000" will appear: change or confirm.

Press ▲.

"

"

The eighth door lock release code "0000" will appear: change or confirm.

Press ▲.

The entrance module will store the codes in memory and return to normal operation.

It is recommended that only one person in the building (i.e., the building manager or concierge) know the password, and that all door lock release code programming operations be carried out only by this person.

NOTE: *Though door lock release codes cannot be transmitted over the data line, they are in all other respects identical to special service codes. If special services decoders are installed in the system, they must thus be programmed with codes differing from all door lock release codes.*

BUSY SIGNAL VOLUME ADJUSTMENT

The entrance module generates a busy signal when a call is in progress from another entrance module or guard door switchboard station. Volume of this signal can be adjusted by means of trimmer (11) located at the rear of the entrance module.

SPEAKER AND MICROPHONE VOLUME ADJUSTMENT FOR SPEAKER UNIT Ref. 5150/500 or Ref. 824/500

See instructions enclosed with speaker unit.

NOTICE: The speaker unit is intended for use with electronic call tone signaling doorphones and monitors. If conventional buzzer type apartment station equipment is used, disassemble the speaker unit, disconnect the brown wire from terminal 1A and connect it to terminal 1.

REPLACING AN OLD ENTRANCE MODEL WITH A SECOND-GENERATION MODULE

- STEP 1: – Enter 0 if configured as main entrance panel.
 – Enter 1 if configured as secondary entrance panel.
- STEP 2: – Enter 1.
- STEP 3: – Enter 000 if configured as main entrance panel
 – Enter 1 if configured as secondary entrance panel No. 1.
 – Enter 2 if configured as secondary entrance panel No. 2.
 – Enter 9 if configured as secondary entrance panel No. 9.
- STEP 4: See instructions.
- STEP 5: See instructions.
- STEP 6: See instructions.

First-generation systems can operate only with conventional type apartment station equipment. Consequently, the speaker unit must be disassembled and the brown wire disconnected from terminal 1A and connected to terminal 1.

OPERATION

The number entered on the entrance module keypad is shown on the display. An acoustic signal is generated each time a key is depressed.

When the call button ▲ is pressed, the ringer at the called apartment station will be activated for the entire period that the call button is held down. A protection feature will interrupt ringing if the call button is held down for more than 5 seconds.

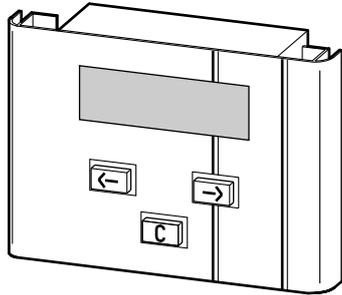
If an error is made when entering the code, pressing the delete button "X" will cancel the number shown on the display.

Call codes can consist of a maximum of four digits, and may not begin with zero. They are always shown on the display.

In addition, special codes are used for electric door lock actuation or for other special services. These codes begin with zero and are not shown on the display. After the zero is entered, the display will thus show a line of dashes instead of the other digits: "_____". As for call codes, special codes must be followed by pressing the ▲ button.

ELECTRONIC DIRECTORY Ref. 826/58

The electronic directory is an optional Digital Call System module.



It can be connected to the entrance module to expand the latter's capabilities. With the electronic directory:

- Residents who so desire can have their names indicated at the entrance panel.
- Visitors can thus select these residents' names from the directory,
- Call the selected name.

Privacy of the remaining residents continues to be safeguarded by the entrance module.

The electronic directory can contain up to 400 names, each consisting of a maximum of 16 characters.

The directory can be programmed so that selecting different names will cause the same doorphone to ring (e.g., in cases where a single apartment is occupied by several residents).

Any of five different languages can be selected for the display messages shown during normal operation and programming: English, Italian, French, German and Spanish.

Electronic directory Ref. 826/58 employs compact single-module Kombi series componentry, and is provided with the following:

- Metal name scroll keys (4) and call button (5).
- Alphanumeric liquid crystal display (2) featuring two lines with 16 characters each. The wide viewing angle display employs green LED backlighting and is protected by a transparent polycarbonate cover.
- Entrance module connector (7) and cable.
- Programming keypad connector (6).

SPECIFICATIONS

Operating voltage:	24 V DC ± 10%
Current draw:	100 mA
Service temperature range:	-5 °C to 45 °C

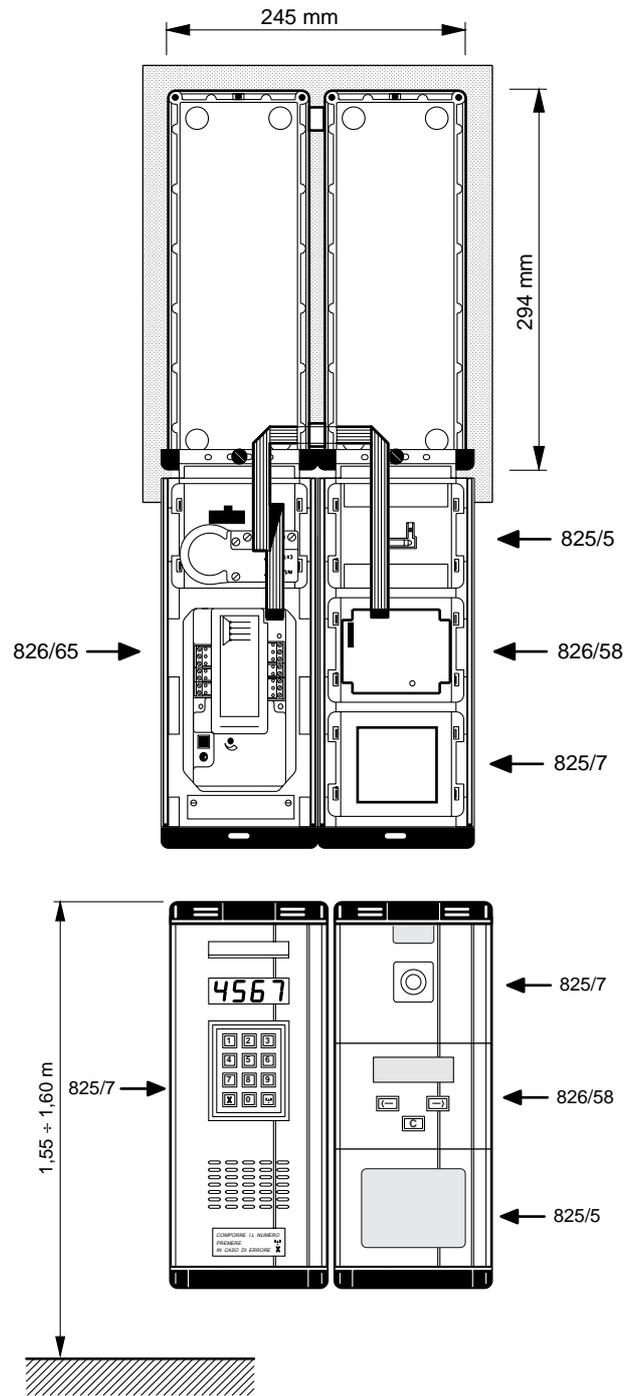
INSTALLATION

The electronic directory must be connected to the associated entrance module by means of the flat cable supplied together with the unit.

INSTALLATION WITH ENTRANCE MODULE 826/65

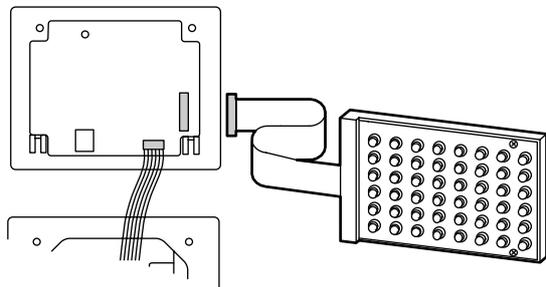
To ensure optimal display visibility, it is recommended that the electronic directory be installed as the uppermost module or, where a CCD door camera unit is installed, in the module immediately below the camera. Height from ground should be between 1.55 meters and 1.60 meters in all cases.

INSTALLATION WITH ENTRANCE MODULE 826/65



PROGRAMMING

Residents' names are programmed using a 48-key alphanumeric keypad (Ref. 826/56) connected to the electronic directory by means of the associated connector.



Connecting the alphanumeric programming connector.

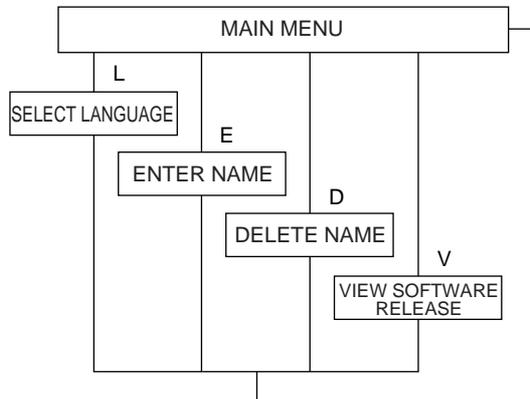
The programming procedure is activated automatically when the keypad connector is plugged in, and the main menu will appear on the display:

E = Enter
D = Delete

The four following operations can be performed at this point:

- Select language.
- Enter ONE name.
- Delete ONE name.
- View software release.

Upon completion of any of these operations, the main menu will return to the display. This approach is illustrated in the chart below:



After programming is complete, disconnect the alphanumeric keypad. The following message will appear on the display for a couple of seconds:

**KEYPAD
DISCONNECTED**

The directory will then return to normal operation.

NOTE: The following message may appear on the display several times in the programming steps used to enter ONE name or delete ONE name:

**PLEASE
WAIT ...**

In such cases, do not press any keys until the message disappears from the display.

SELECTING LANGUAGE

From the main menu, press "L" (or "S" in the German version) SEVERAL TIMES until the desired language appears on the display (ITALIANO - ENGLISH - DEUTSCH). Then press the enter key (↵) to confirm: the language will change and the main menu will automatically return to the display.

NOTICE:

To abandon the language selection procedure at any time and return to the main menu, press the call button "C" ON THE DIRECTORY.

ENTERING A NAME

To enter a new name, press <E>. A blank display will appear:



Enter the name, which may consist of a maximum of 16 characters, if necessary using the "sp" key to enter spaces and the backspace key (←) to make corrections. After entering the name, CONFIRM by pressing the enter key (↵).

The code (number) assigned to the name must now be entered. The following prompt will appear:

JOHN SMITH
Number:

Enter the code, which may consist of a maximum of four digits, using the number keys. If necessary, use the backspace key (←) to make corrections.

After entering the code, CONFIRM by pressing the enter key (↵).

NOTICE:

To abandon the name entry procedure at any time and return to the main menu, press the call button "C" ON THE DIRECTORY. When the display is blank, the procedure can also be abandoned by pressing the enter key (↵). Note that the same code can be assigned to several different names (e.g., in cases where several people with different surnames occupy a single apartment). During the entry procedure, however, the system will check that this is INTENTIONAL rather than ACCIDENTAL. Thus, the following message will appear if an attempt is made to enter a code which is identical to one that has already been stored in memory:

Number already exists
Continue? (Y/N)

Press "Y" (or "J" in the German version) to confirm that two names are to be assigned the same code, or "N" if the same code was assigned by mistake. In the latter case, the system will prompt you to enter the code again.

WARNING: TWO IDENTICAL NAMES CANNOT BE ENTERED. If an attempt is made to enter a name which is already in memory, an error message will appear.

NOTE: To return to the name entry step from the code entry step, press the backspace key (←) when the number field on the display is clear.

DELETING A NAME

To delete a name, press "D" (or "A" in the German version).

The following prompt will appear on the display:

FIND NAME
with ← or →

Using the ← or → keys ON THE DIRECTORY, scroll through the names to find the entry to be deleted. Each name is displayed together with the numeric code associated with it. Once the name has been found, press (↵) to delete it. The following message will appear:

CONFIRM ?
Y = yes N = no

Press "Y" (or "J" in the German version) to confirm deletion or "N" to retain the name.

NOTICE:

To abandon the name deletion procedure at any time and return to the main menu, press the call button "C" ON THE DIRECTORY.

NOTE: *If none of the three keys on the directory is pressed within 2 seconds of selecting a name, the following prompt will scroll across the display:*
"To delete, press ←".

NOTE: *If an attempt is made to enter more names than the maximum permitted by the system (400), the following error message will appear:*

**MEMORY
FULL**

NOTE: *If an attempt is made to delete names from a directory whose memory contains no names, the following error message will appear:*

**MEMORY
EMPTY**

ENGLISH

**MEMORY
EMPTY**

GERMAN

**SPEICHER
LEER**

VIEWING THE SOFTWARE RELEASE

Press "V" to view the number of the software release. Both the number and the date of the software release will appear on the display for approximately three seconds. Example:

Rel. 3.0 06/04/91

The main menu will automatically return to the display.

OPERATION

If no names have been stored in the directory memory, the following message will be shown on the display:

**NOT
OPERATIVE**

In this case, program the directory using the procedure described in the previous paragraph.

Once the directory has been programmed, the display will show the following prompt:

**Select name
with ← or →**

Select the name to be called using the ← and → keys. Then press the call button "C" to call the selected name. The following message will appear:

**CALL
SENT**

When the call button is released (or after 0.5 seconds if the button was pressed very briefly), the selected name will return to the display, remaining for approximately 15 seconds. During this period, the visitor can press the call button "C" again to activate the ringer at the apartment station a second time. If none of the three keys on the directory is pressed within 15 seconds, the selection prompt will automatically return to the display:

**Select name
with ← or →**

NOTE: *If none of the three keys on the directory is pressed within 2 seconds of selecting a name, the following prompt will scroll across the display:*

"Press C if OK"

This message will continue for approximately fifteen seconds, after which the selection prompt will return to the display:

**Select name
with ← or →**

ADVANCED FUNCTIONS

The directory provides a number of advanced functions which enable an experienced operator to carry out system testing and adjustment operations. These functions are described below.

THESE FUNCTIONS SHOULD BE USED ONLY WHERE STRICTLY NECESSARY. READ THE INSTRUCTIONS CAREFULLY.

ERASING ALL NAMES

The ability to erase ALL names in the directory quickly can be useful in a number of situations, e.g., when the directory must be moved to another building and reprogrammed with new names.

To erase all names from memory, open the main menu and hold down keys "Z" and "O" SIMULTANEOUSLY for at least 3 seconds.

The display will show the following prompt:

**Erase all?
Y = yes N = no**

Press "Y" to abort the operation and return to the main menu, or press "Y" to start the deletion procedure. While deletion is in progress, the display will show the following message:

**WAIT
XX %**

Here, "XX" represents a number which will increase progressively to indicate the percentage of the deletion operation that has been completed (deletion may take over a minute).

When all names have been deleted, the main menu will automatically return to the display.

DISPLAY TEST

From the main menu, press keys "D" and "T" (Display Test) simultaneously for at least 3 seconds. The display will show the following message for approximately one second:

> DISPLAY TEST <

A display pattern will then appear:

```
.....  
.....  
.....  
.....  
.....
```

This pattern is used to check that all display characters operate correctly. Examine the pattern carefully. To return to the main menu, press any key on the programming keypad, or press the call button "C" on the directory.

ERROR MESSAGES

Error messages may appear on the display in the event of directory malfunction. Being able to interpret these messages correctly can be extremely useful in pinpointing the cause of the problem.

IF AN ERROR MESSAGE IS SHOWN ON THE DISPLAY, TAKE CAREFUL NOTE AND INFORM THE NEAREST SERVICE CENTER OF ITS EXACT CONTENTS.

ERRORS DURING INITIALIZATION

The first time a directory with a new EEPROM is turned on, the program will test the memory to check that it operates correctly. As the EEPROM is new, the program uses English as the default language, even if the directory must later be set up for another operating language. All messages displayed at this stage will thus be in English. The first message to appear will be:

INITIALIZING...
zz %

This message indicates that the EEPROM test is in progress. The number "xx" will increase progressively to indicate the percentage of the test that has been completed.

The following message will appear if the EEPROM is missing or is incorrectly installed:

ERROR!
EEPROM MISSING

If a read/write discrepancy is detected (i.e., because of an EEPROM defect), the display will show:

ERROR!
A: xxxx W: yy R: zz

Here, "xxxx" is the address (in hexadecimal format), "yy" is the written data (in hexadecimal format) and "zz" is the read data (in hexadecimal format).

ERRORS WHEN DELETING ALL DATA

Error messages may also appear when deleting all names from the memory (see above). If the EEPROM is missing or is incorrectly installed, the display will show:

ERROR!
EEPROM MISSING

If a read/write discrepancy is detected (i.e., because of an EEPROM defect), the display will show:

ERROR!
I: xxxx W: yy R: zz

Here, "xxxx" is the address (in hexadecimal format), "yy" is the written data (in hexadecimal format) and "zz" is the read data (in hexadecimal format).

DISPLAY CONTRAST ADJUSTMENT

Display contrast can be adjusted by means of a potentiometer located at the rear of the directory and accessible from the exterior. Display contrast is set to an optimal level during URMET DOMUS inspection. For certain installations, however, small corrections may be necessary.

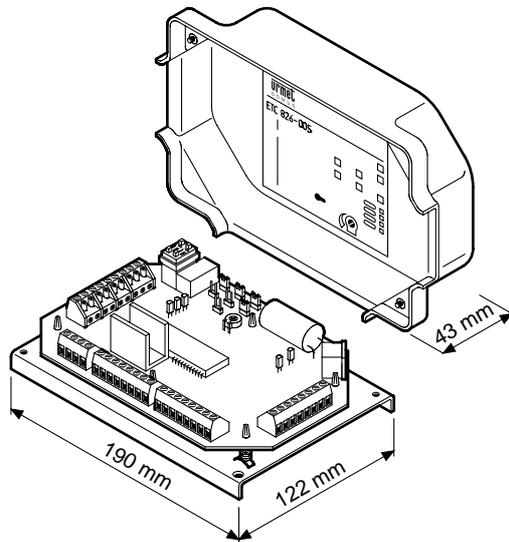
826

16-PUSHBUTTON DIGITIZER Ref. 826/16

SPECIFICATIONS



16-PUSHBUTTON DIGITIZER Ref. 826/16



This device is used to adapt conventional Model 625 and Kombi series entrance panels so that they are compatible with the Digital Call System. The digitizer can handle up to 16 entrance panel pushbuttons (i.e., call keys). If a larger number of pushbuttons is needed, several digitizers must be installed and connected.

Though its characteristics are similar to those of the entrance module (826/11 and 826/55), the digitizer is not capable of providing the same performance features.

Specifically:

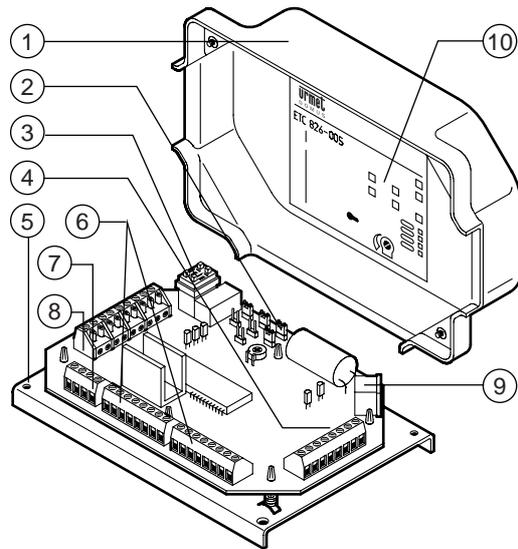
- The digitizer is not equipped with a display, and thus cannot provide visual information.
- Doors cannot be opened by entering door lock release codes
- The digitizer's apartment station addressing logic is rigid and limited.

Clearly, the digitizer should be used **ONLY** in those systems for which it is designed. In particular, using the digitizer is advantageous in the following situations:

- a) During renovation of systems with a single main outdoor station (i.e., where the entrance panel has already been installed), one guard door switchboard station and no secondary entrance panels.
- b) During renovation of systems with two main outdoor stations featuring automatic switching between them (and where the entrance panels have already been installed) and no secondary entrance panels. If the system is equipped with a guard door switchboard station, it will be necessary to install two special services decoder units and two relays for lock management, and to programming the switchboard station appropriately (see the switchboard station instruction manual).
- c) For use as a **Secondary** entrance panel in systems where there are no more than 16 apartment stations for each secondary entrance panel (this will cut overall costs) In this type of system, **entrance modules (rather than digitizers) must be used at the main outdoor stations.**

It is advisable not to use the digitizer in systems other than those described above without first consulting the URMET DOMUS Engineering Service.

The digitizer consists of the following:



- Oxide-resistant chassis, 166 x 106 mm (5).
- Electronic circuit board with removable input terminal block (8), output terminal block (4), entrance panel connection terminal block (6), speaker unit connection terminal block (7), programming socket (9), selector switches (3) and jumpers (2).
- Shock-resistant plastic cover (1)
- Overall dimensions: l 190 x h 122 x d 43 mm.

SPECIFICATIONS

Operating voltage:	24 V DC \pm 10%
Stand-by current draw:	15 mA
Current draw during ringing:	30 mA
Current draw with voice signal active (with speaker unit):	145 mA
Service temperature range:	-10 °C to 45 °C

EXPANDABILITY

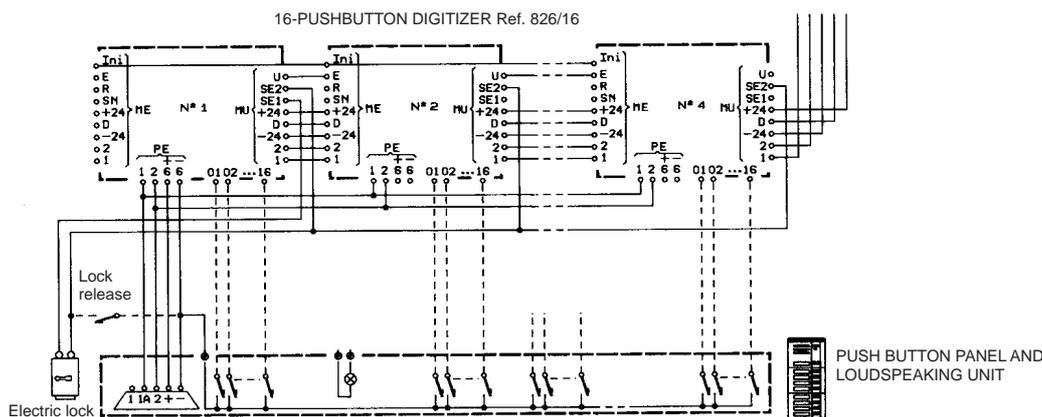
Where the digitizer is used during renovation of systems with up to two main outdoor stations, the existing entrance panels may have more than 16 call keys. In such cases, additional digitizers can be installed side by side and connected to handle further apartment stations in multiples of 16 (32, 48, 64 ...).

To do so, digitizers must be connected as shown in the figure below. Note that terminals "U" and "E" on adjacent digitizers are connected in loop-through configuration, and that all terminals "INI" are connected in parallel. **Strictly adhere** to this connection configuration to ensure that digitizers and the system will operate correctly.

This type of connection is possible if the digitizer is used in a secondary entrance panel, but **only in installation TYPE 1** and only if there are no more than 10 apartment stations per entrance panel. However, it is not recommended for the following reason:

- Using a digitizer is not economical if more than 16 call keys must be managed: it is better to use an entrance module.

Sixteen consecutive call codes can be stored in the digitizer memory. The code which will be sent when a call key is pressed will thus be between "MC01" and "MC16", where "M" is the digit set by means of the first selector switch and "C" is the digit set by means of the second selector switch. Selector switches must be positioned in accordance with the system's installation TYPE.



CONFIGURATION

Prior to installation, the digitizer must be configured for the type of service to be performed. Configuration settings are established by means of the selector switches and jumpers located on the upper left of the electronic circuit board.

NOTICE
To ensure that system maintenance can be efficiently performed, it is **ESSENTIAL** that the memorandum label be filled out at the time the digitizer is configured for service.

Turn off power supply to the digitizer and proceed as follows:

STEP 1 - Type of entrance panel (Jumper PT3: M/S)

- Install the jumper to configure the digitizer for use at a main entrance panel.
- Remove the jumper to configure the digitizer for use at a main entrance panel.

STEP 2 - Installation type (Jumper PT1: 1/2)

- Move jumper to position 1 to configure the digitizer for installation Type 1.
- Move jumper to position 2 to configure the digitizer for installation Type 2.

NOTE: Digitizers cannot be used with installation Type 3.

MEMORANDUM LABEL

CODICI / CODES	M	Migliaia / Thousands / Milliers	M	<input type="checkbox"/>				
	C	Centinaia / Hundreds / Centaines	C	<input type="checkbox"/>				
PREDISPOSIZIONI / ARRANGEMENTS	PT1	Impostazione modo di impianto Selection of the system Sélection type d'installation	1	<input type="checkbox"/>	2	<input type="checkbox"/>		
	PT2	Tempo occupato Call module "busy" period Temps module d'appel occupé	10"	<input type="checkbox"/>	20"	<input type="checkbox"/>	40"	<input type="checkbox"/>
	PT3	Identificazione posto chiamata Call module identification Identification du module d'appel	P / S	P	<input type="checkbox"/>	S	<input type="checkbox"/>	
	PT4	Servizio apriporta Lock opening Ouverture serrure		Libera / At any time / A tout moment	<input type="checkbox"/>	Solo se chiamati / Only when called / Seulement si appelés	<input type="checkbox"/>	
	P1	Regolazione segnale acustico Acoustic level adjustment Réglage niveau acoustique	MAX		MIN	<input type="checkbox"/>	<input type="checkbox"/>	

STEP 3 - Entrance panel number (Selector switches "M" and "C")

The selector switches (3), designated "M" and "C" perform a dual function:

- They establish a correspondence between the call key depressed at the entrance panel and the code which the digitizer transmits as a result. By contrast with systems featuring entrance modules, where the keypad can be used to transmit any call code, the digitizer can only transmit 16 call codes, i.e., one per call key. For the sake of convenience, these codes are consecutive. Thus, selector switches "M" and "C" are used to establish the first ("MC01") of these sixteen codes, which will consequently be between "MC01" and "MC16"
- They are used to assign an identification number to the digitizer. This number will be as follows:
- "MCO" in systems where the digitizer is used at a main entrance panel.
- "M" in TYPE 1 systems where the digitizer is used at a secondary entrance panel.
- "MC" in TYPE 2 systems where the digitizer is used at a secondary entrance panel.

Code numbers assigned via the two selector switches will depend on two factors:

- Whether the digitizer is configured for use at a main or secondary entrance panel;
- If it is configured for a secondary entrance panel, on the installation type.

Code numbers to be assigned to digitizers for each type of application are shown on the installation diagrams.

STEP 4 - Engaged time (Jumper PT2: 10"/20"/40")

This parameter is used in systems with two or more main entrance panels featuring automatic switching between them. In such situations, it is necessary to ensure that a conversation originating from an entrance panel will not be cut off for a certain minimum duration, which may be programmed from 10 to 40 seconds. During this programmed minimum duration, which is called the "engaged time", calls cannot be made from the other entrance panels, where an intermittent warning tone will be emitted to indicate that they cannot be used until the programmed engaged time has ended.

Once the programmed engaged time has ended, an ongoing call will be interrupted immediately if a call is made from another entrance panel. The engaged time parameter is also used for secondary entrance panels. When a main entrance panel or guard door switchboard station makes a call to an apartment station which is physically connected to the riser cable associated with a given secondary entrance panel, it will not be possible to make calls from this panel for the entire programmed engaged time.

- Move the jumper to 10" to establish an engaged time of 10 seconds
- Move the jumper to 20" to establish an engaged time of 20 seconds.
- Move the jumper to 40" to establish an engaged time of 40 seconds.

It is advisable to configure all entrance panels in the system for the same engaged time.

STEP 5 - Electric lock management (Jumper PT4)

- Position the jumper to configure UNRESTRICTED DOOR LOCK RELEASE:
- If the digitizer is configured for use at a main entrance panel, the electric door lock connected to it will be released **at any time** that the door lock release button is pressed at **any** apartment station.
- If the digitizer is configured for use at a secondary entrance panel, the electric door lock connected to it will be released **at any time** that the door lock release button is pressed at **any** apartment station **connected to its riser cable**.
- Remove the jumper to configure DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE. This means that the electric door lock connected to the digitizer module will be released **only** when the door lock release button is pressed at an apartment station **that has been called from the entrance panel with the digitizer in question**. In this case, the door lock can be released for a period at least equal to the programmed engaged time but not exceeding 10 minutes.

The criterion selected for electric lock management is essential to correct system operation.

STRICTLY ADHERE TO THE INSTRUCTIONS BELOW: CONFIGURATIONS OTHER THAN THOSE DESCRIBED CANNOT BE USED.

- In installations with a single main entrance panel and no secondary entrance panels, the digitizer may be configured either for UNRESTRICTED DOOR LOCK RELEASE or for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE.
- In type b) installations with two or more main entrance panels with automatic switching between them, it is **essential** that all digitizers be configured for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE.
- In type c) installations where digitizers are used at secondary entrance panels, it is essential that the main entrance panel or panels be programmed for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE.

The secondary entrance panel(s) can be programmed either for UNRESTRICTED DOOR LOCK RELEASE or for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE.

In the first case, pressing the apartment station door lock release

button in response to a call from a main entrance panel will release the lock connected to the main entrance panel from which the call was made, **as well as** the lock connected to the secondary entrance panel associated with the apartment station concerned. In the second case, pressing the apartment station door lock release button in response to a call from a main entrance panel will release **only** the lock connected to the main entrance panel with digitizer from which the call was made: a second call will have to be made from the secondary entrance panel before the lock connected to it can be released.

STEP 6 - Password

This step is not used. Direct door lock release via special codes is not possible in systems equipped with digitizers.

BUSY SIGNAL VOLUME ADJUSTMENT

The digitizer generates a busy signal when a call is in progress from another digitizer, entrance module or guard door switchboard station. Volume of this signal can be adjusted by means of the trimmer located adjacent to the jumpers.

NOTE: *In situations a) or b) as described above, where multiple digitizers are connected directly to each other for system expansion, all trimmers must be set to the same volume.*

SPEAKER AND MICROPHONE VOLUME ADJUSTMENT FOR SPEAKER UNIT

Adjust speaker and microphone volume for the entrance panel speaker unit associated with the digitizer as directed in the instruction sheet.

NOTICE:

The speaker unit must be set up to operate with electronic call tone signaling doorphones and monitors (terminal 1A) or with conventional buzzer type apartment station equipment (terminal 1).

REPLACING AN OLD DIGITIZER

- STEP 1: – Install jumper PT3 P/S if digitizer is configured for use at a main entrance panel
– Remove the jumper if digitizer is configured for use at a secondary entrance panel.
- STEP 2: – Install jumper PT1 in position 1.
- STEP 3: – See instructions, noting that first-generation systems cannot be used with configuration c), TYPE 2.
- STEP 4: See instructions.
- STEP 5: See instructions.
- STEP 6: See instructions.

Systems with earlier-model digitizers can operate only with conventional type apartment station equipment. Terminal 1 on speaker unit must thus be connected rather than terminal 1 A.

OPERATION

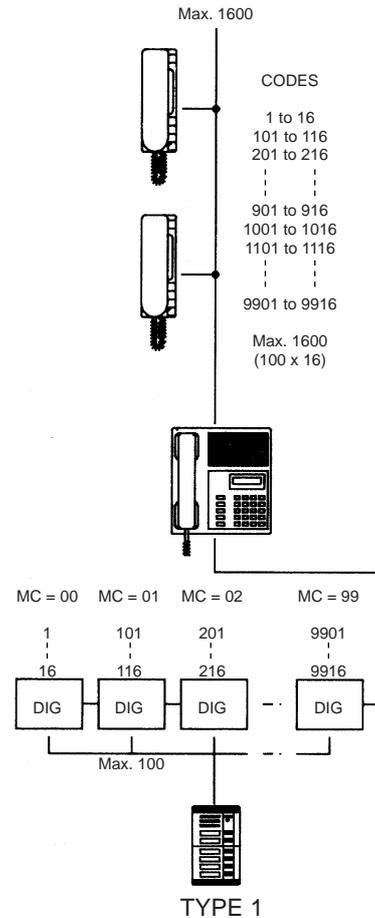
An acoustic signal is generated each time a call key on the entrance panel is depressed.

When a key on the entrance panel connected to the digitizer is actuated, the ringer at the called apartment station will be activated for the entire period that the key is held down. A protection feature will interrupt ringing if the key is held down for more than 5 seconds).

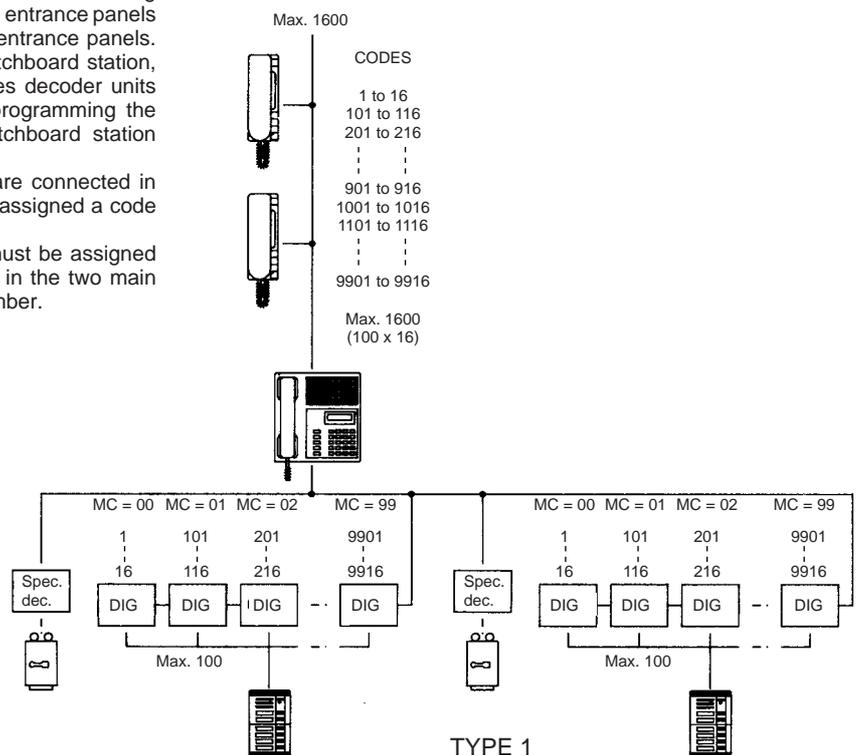
EXAMPLES OF CODE ASSIGNMENTS FOR DIFFERENT TYPES OF SYSTEM

Code assignments are illustrated below for the four different situations in which digitizers can be used:

- a) Renovation of systems with a single main outdoor station (i.e., where the entrance panel has already been installed), one guard door switchboard station and no secondary entrance panels. The digitizer (or digitizers, if multiple digitizers are connected in order to handle more than 16 call keys) must be assigned a code "MC" between 00 and 99. All digitizers must be assigned **different** numbers.



- b) Renovation of systems with two main outdoor stations featuring automatic switching between them (and where the entrance panels have already been installed) and no secondary entrance panels. If the system is equipped with a guard door switchboard station, it will be necessary to install two special services decoder units and two relays for lock management, and to programming the switchboard station appropriately (see the switchboard station instruction manual). The digitizer (or digitizers, if multiple digitizers are connected in order to handle more than 16 call keys) must be assigned a code "MC" between 00 and 99. All digitizers in the same main entrance panel must be assigned **different** numbers. The corresponding digitizers in the two main entrance panels must be assigned **the same** number.



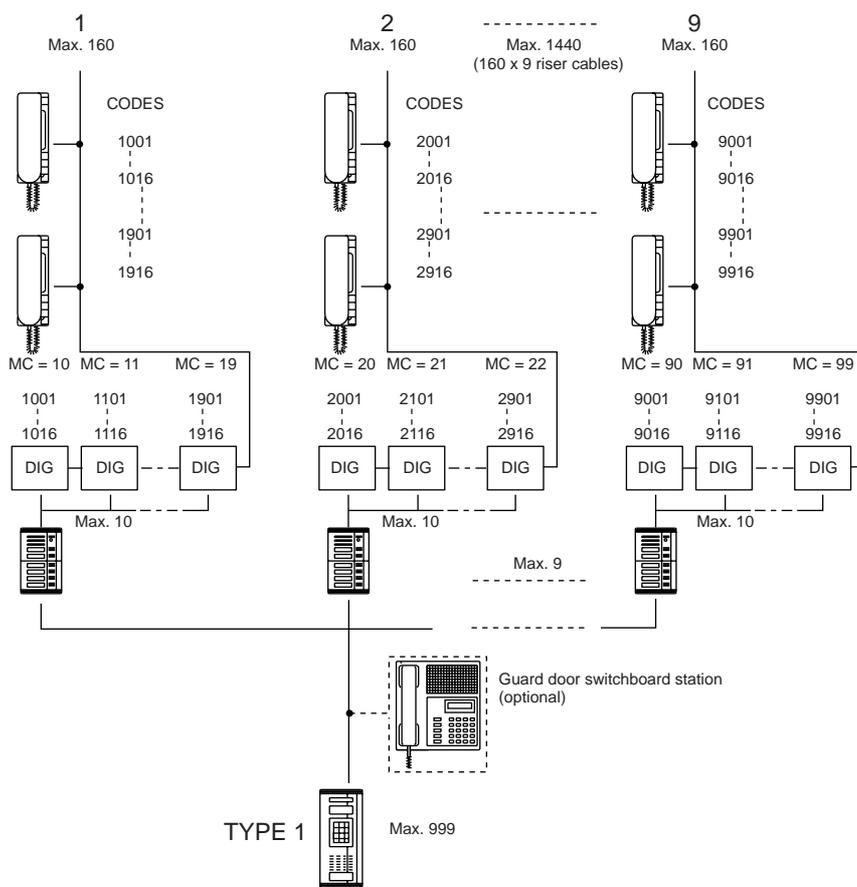
EXAMPLES OF CODE ASSIGNMENTS FOR DIFFERENT TYPES OF SYSTEM

c) Digitizers used as a **Secondary** entrance panel, particularly in systems where there are no more than 16 apartment stations for each secondary entrance panel (this will cut overall costs) In this type of system, entrance modules (rather than digitizers) must be used at the main outdoor stations. Programming will depend on installation Type as follows.

TYPE 1: The 9 digitizers can be programmed with the following codes:

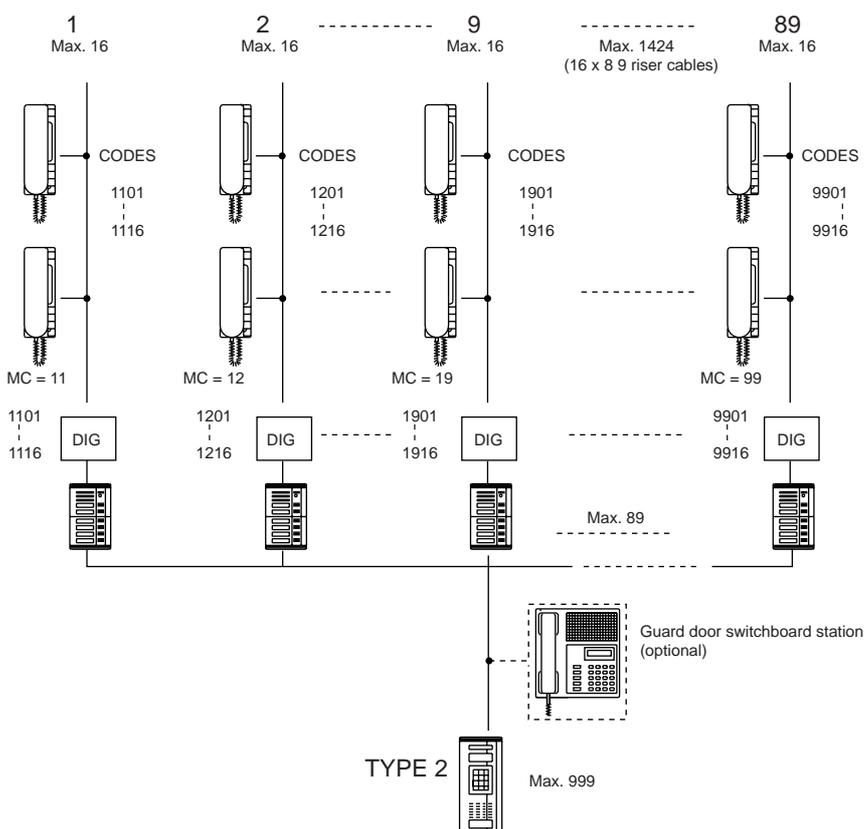
10, 20, 30, 40, 50, 60, 70, 80, 90.

If multiple digitizers are to be used for each secondary entrance panel (up to 10), strictly adhere to the requirements shown in the figure. Remember, however, that it is more economical to use entrance modules in such cases.



TYPE 2: The 89 digitizers can be programmed with codes from 11 to 99 (codes from 01 to 10 can also be assigned, but it is advisable not to use them so that all apartment stations can be coded with four digits).

The figures provide a pictorial representation of all four situations. Note that in situations a) and b), the theoretical maximum number of apartment stations that can be connected is $100 \times 16 = 1600$. In situation c), the maximum numbers are $9 \times 10 = 1440$ for installation Type 1 and $89 \times 16 = 1424$ for installation Type 2.



CLIP INSTALLATION FOR RETENTION TO DIN RAIL

- Back off screws A (Figure 1) and take off cover. Release spacers B and remove the electronic circuit board from base (Figure 2).
- Insert screws C and the associated washers D in the holes provided on base. Install spacer E and fully tighten screws C, taking care to position tab G on clips F so that it faces removable terminal blocks H (Figure 1).
- Install the device on DIN rail 1 as shown in Figure 3. Should it be necessary to remove the device from the rail, rotate in the direction indicated by arrow L (Figure 3).

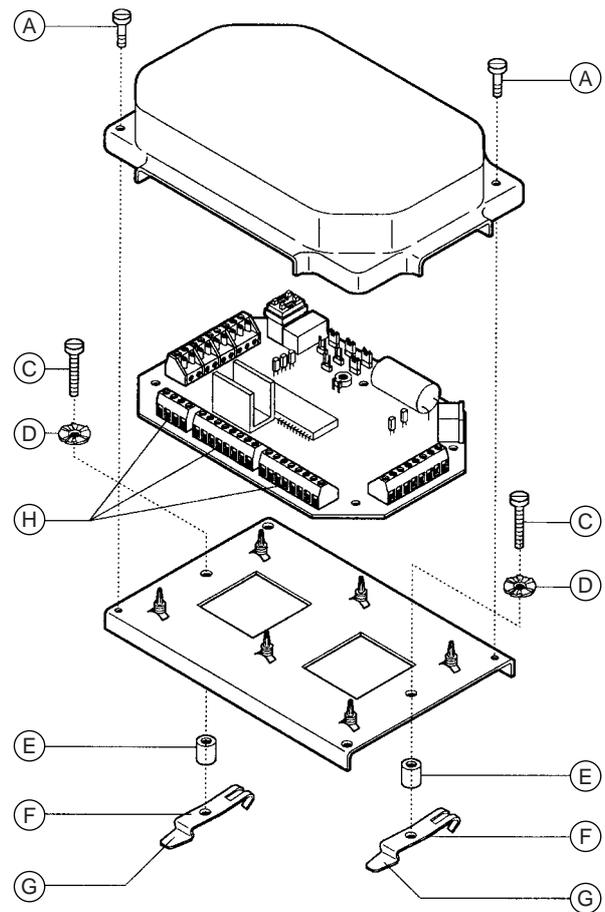


Fig. 1

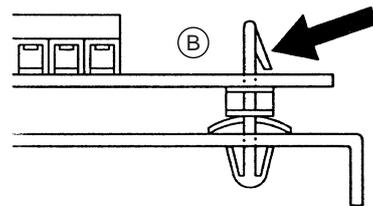


Fig. 2

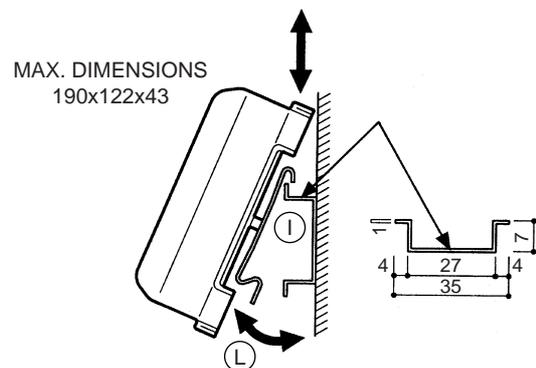


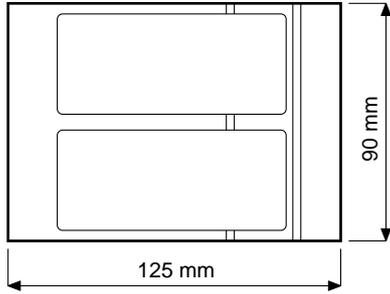
Fig. 3

DIRECTORY PANEL WITH 1-4-8 NAME INSERTS Ref. 825/550 FOR KOMBI ENTRANCE PANELS

826

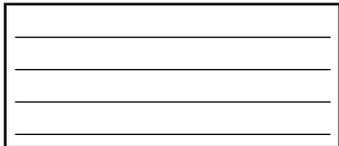
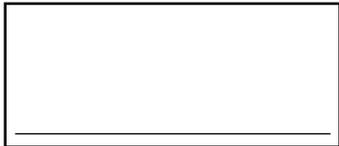


DIRECTORY PANEL WITH 1-4-8 NAME INSERTS Ref. 825/550 FOR KOMBI ENTRANCE PANELS



Directory panel Ref. 826/550 consists of a single Kombi series module. Panel is backlit and provided with two nameplates for name card inserts. The unit is supplied together with six name card inserts as follows:

- Two inserts with space for 1 name.
- Two inserts with space for 4 names.
- Two inserts with space for 8 names



Backlighting bulbs must be supplied at 12V AC from a separate transformer. Transformer Ref. 9000/230 is recommended.

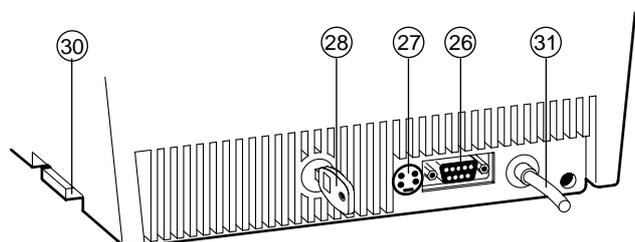
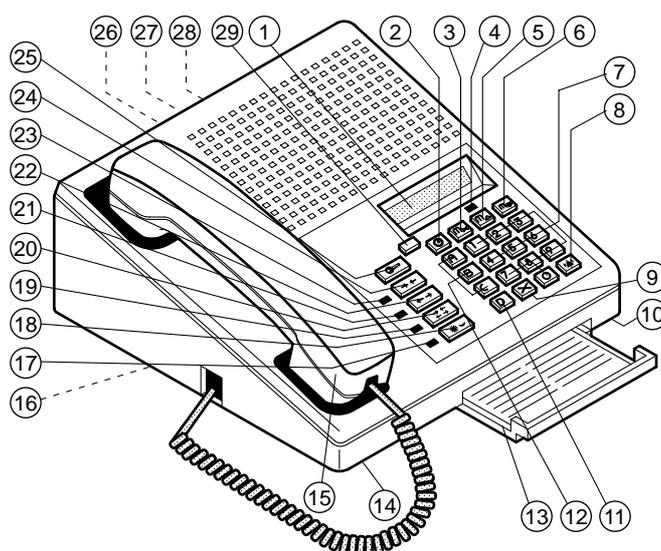
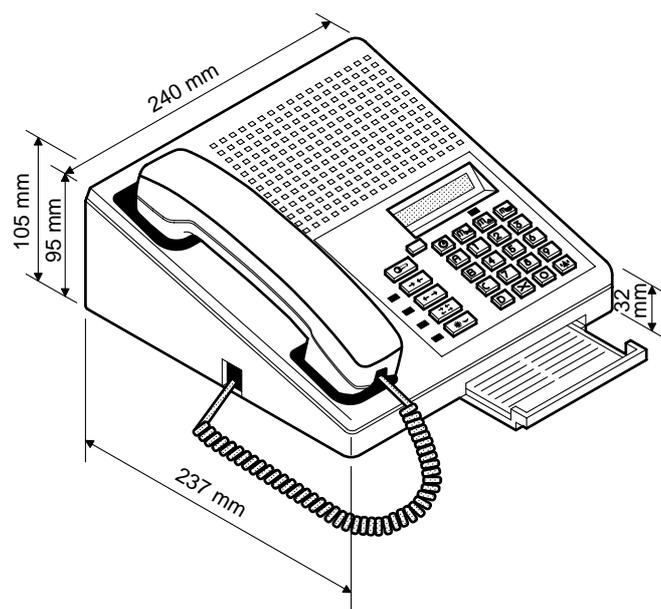
DIGITAL GUARD DOOR SWITCHBOARD STATION Ref. 826/18

FEATURES

The digital guard door switchboard station **Ref. 826/18** can be used in all Digital Call System installations for:

- Making and receiving calls to and from apartment stations, with provision for storing any unanswered calls in memory.
- Concierge service, in which the switchboard station intercepts calls from main entrance panels to apartment stations.

The digital guard door switchboard station **Ref. 826/18** is produced in a single tabletop mounting version whose modern functional styling makes it suitable for use in any surroundings.

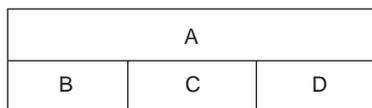


COMPONENTS

- 1) ALPHANUMERIC LCD DISPLAY (two 16-character lines)
- 2) CLOCK KEY
- 3) QUEUE CODE DELETE KEY
- 4) QUEUE MEMORY LED
- 5) QUEUE SCROLL KEY
- 6) CALL FROM QUEUE KEY
- 7) NUMERIC KEYPAD WITH KEYS "0" THROUGH "9"
- 8) APARTMENT STATION CALL BUTTON
- 9) ERROR CORRECTION KEY
- 10) TOP CASING RETAINING SCREW
- 11) SECONDARY ENTRANCE DOOR LOCK RELEASE KEY (D)
- 12) PROGRAMMABLE FUNCTION KEYS (A, B, C)
- 13) DIRECTORY DRAWER
- 14) TOP CASING RETAINING SCREW
- 15) HANDSET
- 16) RINGER TONE CONTROL
- 17) GREEN LED (ON WITH SWITCHBOARD STATION IN DAY SERVICE)
- 18) DAY/NIGHT SERVICE BUTTON
- 19) RED LED (ON DURING DIRECT VOICE CALLS BETWEEN ENTRANCE PANEL AND APARTMENT STATION)
- 20) ENTRANCE PANEL/APARTMENT STATION CALL KEY
- 21) YELLOW LED (ON DURING VOICE CALLS BETWEEN SWITCHBOARD AND ENTRANCE PANEL)
- 22) SWITCHBOARD/ENTRANCE PANEL CALL KEY
- 23) YELLOW LED (ON DURING VOICE CALLS BETWEEN SWITCHBOARD AND APARTMENT STATION)
- 24) SWITCHBOARD/APARTMENT STATION CALL KEY
- 25) MAIN ENTRANCE DOOR LOCK RELEASE KEY
- 26) 9-PIN RS232C SERIAL PORT
- 27) 4-WAY MINI-DIN SOCKET
- 28) KEY-OPERATED SWITCH
- 29) VOICE LINE ENGAGED LED
- 30) RINGER VOLUME CONTROL
- 31) POWER CABLE

DESCRIPTION OF COMPONENTS

DISPLAY The guard door switchboard station is provided with an alphanumeric liquid crystal display (1) featuring two lines with 16 characters each.



The 32 alphanumeric characters are generally divided into four dedicated display zones as follows:

Zone A

This zone is normally used to display the total number of calls stored in queue memory (from [11 to [99] or [xx] to indicate that the memory is full). In "NIGHT" service, this zone is used to display the time in hh:mm:ss format.

Zone B

This 5-character zone is normally used to display the codes of answered calls which have been stored in queue memory. The call which was received first is identified by an asterisk "*".

Zone C

Displays information regarding the device from which a call has been received.

The following information may be shown:

- 1 to 9999, i. e., the code identifying the apartment station making the call.
- <nnn>, indicating a call from the main entrance panel identified by the number <nnn>

Zone D

This zone displays the codes entered by the switchboard attendant in order to perform a particular function.

Codes may be as follows:

- 1 to 9999, i. e., apartment station call codes.
- 1 to 9999, i. e., special service codes.

Special service codes must be preceded by pressing the "0" key.

- 1 to 999, i. e., door lock release codes.

KEYPAD

The rubber keypad features number keys used to enter apartment station call codes, special codes and door lock release codes. It also provides several function keys whose operation will be described in detail in the following paragraphs.

DIRECTORY DRAWER

The switchboard station is provided with a retractable directory (13) which can be used to write down resident's doorphone call codes, special service codes and door lock release codes. To open the drawer, press the front edge.

RINGER

The guard door switchboard station is provided with an electronic warble tone ringer. Volume can be adjusted by means of a lever (30) located on the right hand side of the unit. In addition, the ringing tone can be changed to ensure that it can be readily distinguished from the tone produced by other devices by adjusting the trimmer (16) on the base of the switchboard station with a screwdriver.

DECODER PROGRAMMING FUNCTION

The digital guard door switchboard station can be used to program four-port decoders (826/13), special services decoder units (826/54) and SCOUT monitor single-port decoder brackets (1204/94).

These devices are programmed by connecting programming cord Ref.826/104 to the 4-way mini-DIN socket (27) located at the rear of the guard door switchboard station.

INSTALLATION

The digital guard door switchboard station is provided with a wiring block for input and output line connections.

Check that the key-operated ON/OFF switch is in "OFF" position (key vertical) and that all LEDs are off.

Remove the wiring block cover and connect terminals ME and MU as described on the instruction sheet (MR 826/21) applied to the rear of the wiring block cover.

NOTE : *Strictly adhere to the applicable installation diagram. For second-generation systems, the switchboard station must be provided with its own dedicated power supply unit Ref. 826/15.*

Then perform the configuration cycle described in the following paragraph.

Check that the speaker and microphone volumes set at the factory are acceptable. If they are not, remove the two screws on the bottom of the switchboard station (10 and 14) and proceed to adjust speaker and microphone volume as described below. Adjustment procedure will differ according to whether concierge service has or has not been enabled during configuration.

Switchboard station configured only for calls to and from apartment stations (Direct communication)

- Adjust speaker and microphone volumes at entrance panels by means of the trimmers provided on speaker units Ref. 5150/500 or 824/500.
- Call the switchboard station from a main entrance panel by entering the code assigned to the switchboard station during configuration. Then turn the switchboard station trimmer marked TM3 until the volume received from the entrance panel is acceptable.
- Call any apartment station from the switchboard station. Then adjust switchboard station trimmer TM2 until the volume received at the apartment station is acceptable.

Switchboard station configured for concierge service (intercepting calls from entrance panels in DAY mode)

- Put the switchboard station in NIGHT service in order to disable concierge service.
- Adjust speaker and microphone volumes at entrance panels by means of the trimmers provided on speaker units Ref. 5150/500 or 824/500.
- Switch to DAY service.
- Call any apartment station from a main entrance panel: this call will be intercepted by the switchboard station. Then turn the switchboard station trimmer marked TM3 until the volume received from the entrance panel is acceptable.
- Call any apartment station from the switchboard station. Then adjust switchboard station trimmer TM2 until the volume received at the apartment station is acceptable.

If the switchboard station is to be connected with a serial printer, it will be necessary to procure a PC serial connecting cable with a 9-pin female connector on switchboard station side and a 25-pin male connector on printer side. Plug the 9-pin female connector into the associated serial port (26) on the rear of the switchboard station. Plug the 25-pin male connector on the opposite end of the cable into the printer.

PRINTER CONNECTION

The switchboard station is provided with an RS232-C serial port for connection to a serial printer.

Information concerning the following events can be printed once the printer has been correctly connected to the switchboard station and turned on:

- Call from apartment station queued.
- Call made from switchboard station to apartment station.
- Call deleted from queue by attendant.

Each such message terminates with the carriage return character. After every 64 messages, the switchboard station will send a new page command to the printer.

During printer configuration, the AUTO LINE FEED parameter must be set to "ON".

"Call Queued" message

Each time a call code is stored in the queue memory, the switchboard station sends the following information to the printer (in the example below, date, time and apartment station code are purely indicative):

07/08/91 16:30:18 1244 -> SWITCHBOARD [QUEUE]

"Call from Switchboard Station" message

Each the switchboard attendant calls an apartment station using the call button (8) or the Call from Queue key (6), the switchboard station sends the following information to the printer:

07/08/91 16:30:18 SWITCHBOARD — >1244
[CALL]

Only one message will be sent to the printer if consecutive calls are made to the same apartment station.

"Call Deleted from Queue" message

When the attendant deletes a call from the queue memory, the switchboard station sends the following information to the printer:

07/08191 16:30:18 1244 [DEL]

RECOMMENDED SERIAL PRINTER

After extensive laboratory testing URMET DOMUS recommends the following printer.:

KODAK DICONIX 180si

The Diconix 180si is an extremely quiet portable ink-jet printer. Provided with a serial interface, it can operate with **continuous format paper with page lengths of 11 or 12 inches**. It can also operate with single A4 sheets, but this format cannot be used with the switchboard station. In addition, the printer is easily configured.

Printer preparation consists of installing the printhead cartridge with incorporated ink reservoir and the blotter pad which keeps the printhead clean. For these operations, see the paragraphs headed "Installing the blotter pad" and "Installing the printhead cartridge" on pages 9, 10 and 11 of the user's manual supplied with the printer. No special maintenance procedures are required for the printer. When print becomes faint, replace the printhead cartridge. Cartridge printing capacity is around 500 pages.

The printer is portable (weigh 1.3 kg) and is provided with five NiCd batteries which ensure that it can continue to operate in the event of a power outage (for battery installation, see the user's manual).

Printer preparation is completed by installing continuous format paper. Page length may be 11" or 12".

NOTICE:
THE PRINTER IS NORMALLY SUPPLIED WITHOUT THE CONNECTING CABLE. WHEN ORDERING, SPECIFY A SERIAL PRINTER CABLE WITH ONE FEMALE DB9 CONNECTOR AND ONE MALE DB25 CONNECTOR.

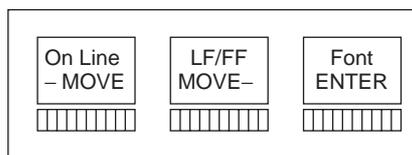
Printer configuration

To access the programming cycle, turn on the printer and hold down the "ON LINE" key. The unit will print out the current configuration settings and provide menus for selecting the desired options.

Note: *The following configuration applies to switchboard stations starting from release 1.2 of June 18, 1992.*

Printer Set-Up Parameters

- Current Printer Setting
- (1) Emulation = EPSON FX-85
 - (2) Page Length = **11 Inches**
 - (3) Perforation Skip = On
 - (4) Character Set = USA
 - (5) Character Default = Set I
 - (6) Carriage Return = CR + LF
 - (7) Line Feed = LF + CR
 - (8) Graphic Print Dir = Unidirectional
 - (9) LF/Graphic/Pitch Mode = Normal
 - (10) Protocol = RDY/BUSY
 - (11) Parity = None
 - (12) Data Length = 8 bit
 - (13) Baud Rates (Stop Bits) = 2400 (1)



Use the following key functions to change printer settings:

- * On-Line key will move selection position to the left.
- * LF/FF key will mode selection position to the right.
- * Font key will enter selection. Emphasized choices in menus = current settings.

Exit 1) 2) 3) 4) 5) 6) 7) 8) 9) 10) 11) 12) 13)

The printhead can be moved to the parameter to be changed using the On-Line and LF/FF keys. For example, to change page length from 11 to 12 inches, position the printhead in column 2) and then press ENTER (Font).

The following printout will be produced:

```
* Page Length *
11 Inches  12 Inches      A4 Size

Select "12 Inches"
```

Exit 1) 2) 3) 4) 5) 6) 7) 8) 9) 10) 11) 12) 13)

Move printhead to "Exit" and press ENTER.

New Printer Setting

- (1) Emulation = EPSON FX-85
- (2) Page Length = **12 Inches**
- (3) Perforation Skip = On
- (4) Character Set = USA
- (5) Character Default = Set I
- (6) Carriage Return = CR + LF
- (7) Line Feed = LF + CR
- (8) Graphic Print Dir = Unidirectional
- (9) LF/Graphic/Pitch Mode = Normal
- (10) Protocol = RDY/BUSY
- (11) Parity = None
- (12) Data Length = 8 bit
- (13) Baud Rates (Stop Bits) = 2400 (1)

Save changes? YES NO Changes another

Reset to defaults

Select "YES" and press ENTER

** Just Saved **

The printer configuration cycle ends with this printout.

INSTALLATION

Switchboard stations prior to release 1.2 of June 18, 1992

- Use only 12" page length continuous format paper.
- Set "Perforation Skip = On".
- To ensure correct page skip during paper feed, realign the page on the printer.

Where possible, however, it is advisable to update software to release 1.2

Switchboard stations starting from release 1.2 of June 18, 1992

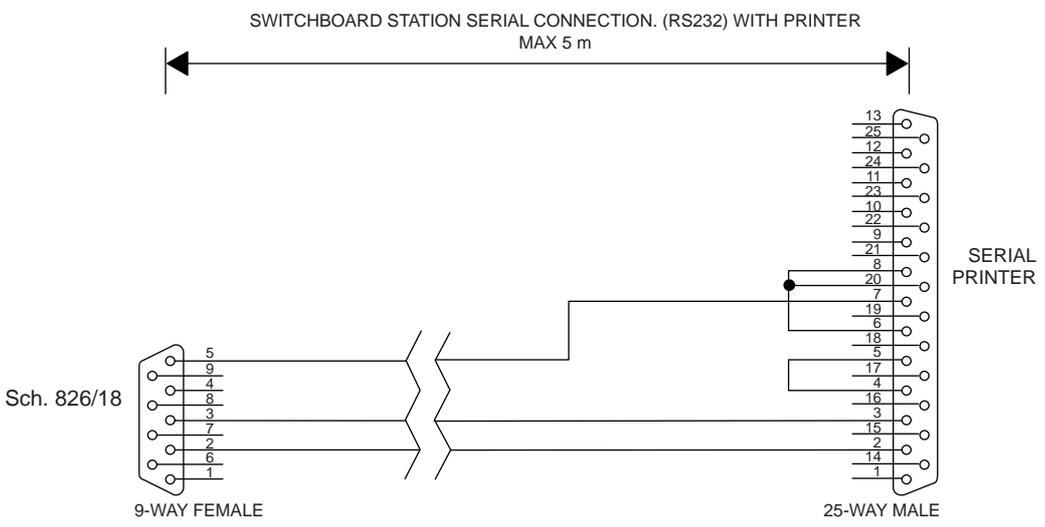
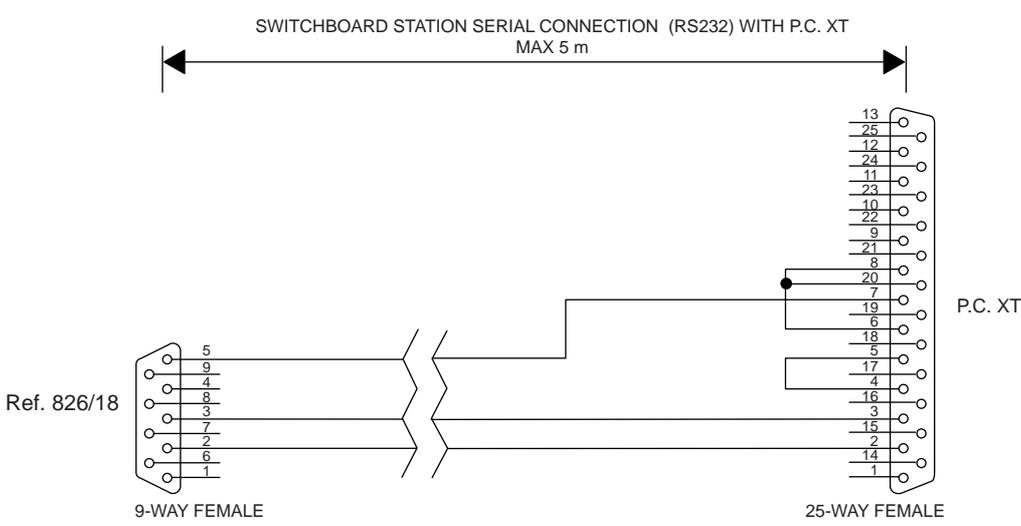
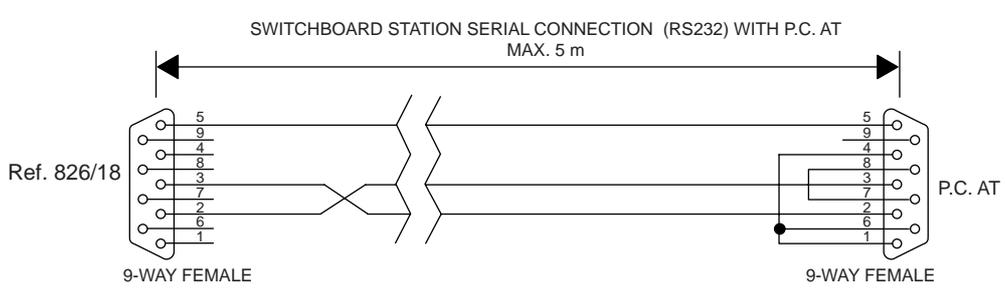
- Use 112 or 12" page length continuous format paper.
- Set "Perforation Skip = On".
- To ensure correct page skip during paper feed, realign the page on the printer.

To check the software release installed on the switchboard station, simply turn on the switchboard station and hold down the DAY/NIGHT button for approximately 5 seconds.

If the KODAK distributor cannot supply the correct connecting cable, contact any reputable computer equipment dealer.

Cable connector pin-out is shown below (cable features a DB9 female connector on switchboard station side and a DB25 male connector on printer side).

DB9	DB25
2	2
3	3
5	7
	4-5 (Connected together)
	6-8-20 (Connected together)

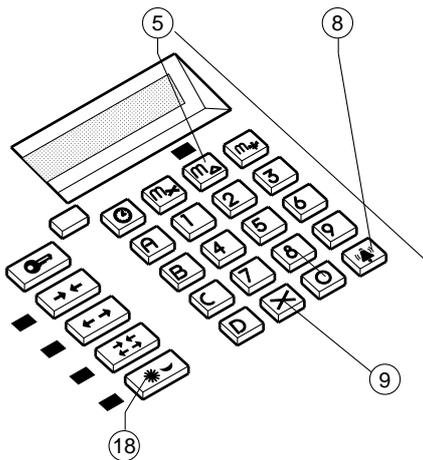


CONFIGURATION

To operate correctly, the digital guard door switchboard station must be appropriately configured at the time of installation. Configuration programming consists of assigning numeric parameters to all operating variables.

When it leaves the factory after inspection, the switchboard station is configured as follows:

Step	Default configuration
1	0
2	1 (2 nd generation, installation type 1)
3	0 (Main)
4	0 (Serial line disabled)
4a	- CONFIGURATION NOT REQUIRED
5	1 (Electronic call tone signaling doorphone)
6	0 (Concierge service enabled)
6a	- CONFIGURATION NOT REQUIRED
7	0 (Key A disabled)
7a	- CONFIGURATION NOT REQUIRED
8	0 (Key B disabled)
8a	- CONFIGURATION NOT REQUIRED
9	0 (Key C disabled)
9a	- CONFIGURATION NOT REQUIRED
10	0 (Key D disabled)



To change one or more configuration parameters, activate the configuration cycle bearing the following points in mind:

- Parameters must be entered only by means of the number keys.
- After selecting each parameter (with the exception of language in Step 1), press the call button (8) to confirm selection.
- The system will check all entered data, rejecting any data which are not congruent.
- Any errors made in entering parameters can be corrected with the delete key (9) before confirming entries.

The default configuration will return to the display.

- To return to the beginning of the programming procedure at any time, press scroll key (5)
- Write down the parameters configured during each programming step on the label provided for this purpose. Label is located under the name card in the directory drawer (13).

It is strongly recommended that configuration data be recorded on the label, as it may be needed at a later date if the data memory must be replaced as a result of malfunction or for servicing.

To activate the configuration cycle:

- Supply power to the switchboard station, hold down the DAY/NIGHT button (18) and press the call button (8) twice in succession within 3 seconds.

At the end of this operation, the first menu will appear on the display. This menu is used to select operating language.

STEP 1 - Language

With the configuration cycle active, the following message will appear on the switchboard station display:

ITALIA = 0 FRANC = 1
ENGL = 2 DEUTSCH = 3

- Press the number key associated with the desired language as indicated on the display

STEP 2 - Installation type

The display will show:

PROGRAMMING
TYPE: 1

Perform one of the following operations:

- Press number key "0" if the switchboard station is to be installed in a first-generation system.
- If the switchboard station is to be installed in a second-generation system, press number key "1" to select installation type 1 (up to 9 riser cables serving 999 apartment stations each), number key "2" to select type 2 (up to 89 riser cables serving 99 apartment stations each), or number key "3" for type 3 (up to 899 riser cables serving 9 apartment stations each).

After selecting installation type, or if the default configuration is correct for the system in question, press the call button (8) to go on to the next configuration step.

STEP 3 - Main/secondary switchboard station

The display will show:

0 = MAIN
1 = SECONDARY : 0

Select "0" in all cases. The option "1" can only be used in special applications. Press the call button (8) to go on to the next configuration step.

STEP 4 - RS 232-C serial line enabling

The display will show:

SERIAL LINE
0 = OFF, 1 = ON : 0

The digital switchboard station is equipped with an asynchronous RS 232-C interface with the following characteristics:

Data format

Start bit : 1
Word : 8 bits
Parity bit : None
Stop bit : 1

Speed

2400 bit/sec

Connector (26)

9-pin male D connector

To enable serial communication with a printer or personal computer, select "ON" by pressing number key "1" followed by the call button (8).

826

DIGITAL GUARD DOOR SWITCHBOARD STATION Ref. 826/18



CONFIGURATION

STEP 4A - Printer/PC output

This programming step is required only if the serial line was enabled by selecting 1 in the previous step. The display will show:

SERIAL LINE
0 = PRINTER 1 = PC : 0

Press number key "0" to address information to a printer, or number key "1" to address information to a personal computer. PC connection should be used only when diagnostic checks must be carried out on the system. For further information, contact the URMET DOMUS Engineering Service.

STEP 5 - Doorphone type

DOORPHONE TYPE
0 = STD. 1 = ELECT : 0

The switchboard station can operate with standard electromechanical buzzer type doorphones or with electronic call tone signaling doorphones. Enter "0" to select buzzer type doorphones or "1" to select electronic doorphones. For further information about doorphone models, consult the URMET DOMUS Engineering Service. Press the call button (8) to go on to the next configuration step.

STEP 6 - Concierge service

The display will show the following prompt:

INTERCEPT CALLS?
0 : YES 1 = NO : 0

Enter "0" to enable the switchboard station to perform concierge service and intercept all calls from entrance panels when operating in DAY mode. Enter "1" to configure the system so that calls originating from main entrance panels are never intercepted by the switchboard station.

In the latter case, the system requires that a code be entered which enables the switchboard station to answer calls regardless of whether it is in DAY or NIGHT service.

For further details, see the section headed "TYPES OF SERVICE".

Press the call button (8) to go on to the next configuration step.

STEP 6A - Switchboard station code

This step is required only if "1" was selected in the previous step. The display will show:

INTERCEPT CALLS.
CODE:

Assign a call code between 0000 and 9999 to the switchboard station. The switchboard station will answer calls made to this code regardless of whether it is in DAY or NIGHT service.

NOTE: *The call code assigned to the switchboard station must differ from all other call codes used in the system.*

This option is particularly useful when the switchboard station is installed in an apartment and must operate as an ordinary doorphone for calls originating from entrance panels, as well as being able to make and receive calls to and from apartment stations.

Press the call button (8) to go on to the next configuration step.

STEP 7 - Function key "A" enabling

FUNCTION KEY [A]
0 = OFF, 1 = ON :

Press number key "1" to enable function key to activate a special service. Press the call button (8) to go on to the next configuration step.

STEP 7A - Assigning a special code to function key "A"

FUNCTION KEY [A]
CODE :

A special code must be assigned to function key "A" only if the key was enabled by selecting "1" in the previous step.

Assign a special code between 0 and 9999 to the function key and press the call button (8) to confirm. Any errors made in entering codes can be corrected with the delete key (9).

STEP 8 - Function key "B" enabling

Proceed as for step 7.

STEP 8A - Assigning a special code to function key "B"

Proceed as for step 7A.

STEP 9 - Function key "C" enabling

Proceed as for step 7.

STEP 9A - Assigning a special code to function key "C"

Proceed as for step 7A.

STEP 10 - Function key "D" enabling (secondary entrance door lock release)

Step 10 is required only if the switchboard station has been configured as a second-generation device by entering 1, 2 or 3 at step 2.

The display will show:

FUNCTION KEY [D]
0 = OFF, 1 = ON

In digital doorphone systems with secondary entrance panels, function key D is used to release secondary entrance door locks (see operating instructions).

If the key must be enabled for this use, press number key 1 and confirm with the call button (8).

The configuration cycle concludes upon completing step 10 (or step 9 for first-generation systems). The switchboard station reinitializes and is ready for normal operation. Check that the switchboard station operates correctly as configured.

SYSTEM SOFTWARE RELEASE

To view the number and date of the software installed in the switchboard station, simply turn on the station and hold down the DAY/ NIGHT button.

After approximately 6 seconds, the display will show the desired information.

Example:

—— TEST ——
Rel 1.0 03/29/91

The example above applies to the first release. If the switchboard station is provided with the release 1.1, the display will show:

—— TEST ——
Rel. 1. 1 04/28/92

The second release makes it possible to set up systems with two guard door switchboard stations featuring automatic switching between them (see installation diagrams SC101-0413 and SV102-0574).

For release 1.2, the display will show:

—— TEST ——
Rel. 1.2 06/18/92

Changes introduced in this release are as follows:

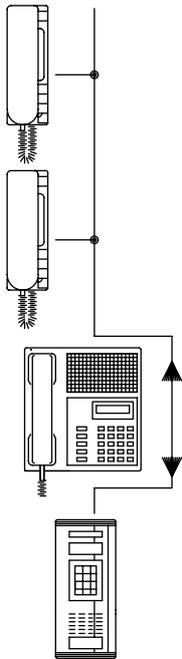
- a) Ring duration is increased. When the call button is pressed, the buzzer or ringer will be activated for approximately 1 seconds (5 times longer than with earlier releases).
- b) Printer paper length.
Continuous format printer paper can be used with page lengths of 11 or 12 inches (280 and 305 mm respectively).

TYPES OF SERVICE

The guard door switchboard station's operating mode depends on how it is configured at the time of installation and on its current status. Switchboard station operating modes are described in detail in the following examples.

SWITCHBOARD STATION OFF

When the switchboard station is turned off by means of the key located at the rear of the unit, it is completely inactive. It can neither make or receive calls, and behaves to all intents and purposes as if it were not present in the system. Calls originating from the entrance module are sent directly to the apartment stations.



SWITCHBOARD STATION ON

When the switchboard station is turned on by means of the key located at the rear of the unit, it can be set up to operate in either DAY or NIGHT service.

DAY SERVICE

In this operating condition, the switchboard station can be programmed either to intercept all calls from entrance panels to apartment stations, or to send them directly to the apartment stations, i.e., establishing direct communication between the entrance panel and the called apartment station.

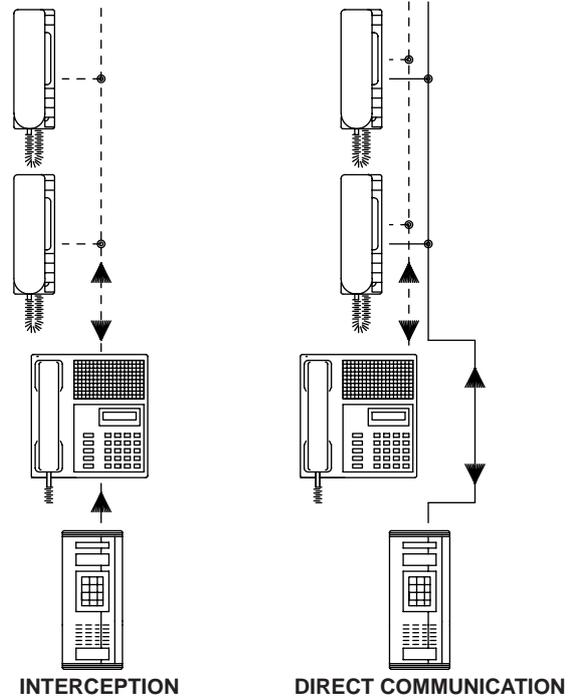
In both cases, the switchboard station can make and receive calls to and from apartment stations at any time. If the switchboard station is programmed to intercept calls, it will perform concierge service or in other words will intercept all calls made from any main entrance panel to an apartment station.

When the switchboard station is programmed for direct communication, it will ignore calls made from main entrance panels to apartment stations so that direct communication between the two is established. In this situation, the switchboard station can be assigned its own call code between 1 and 9999: if a call is made to this code from a main

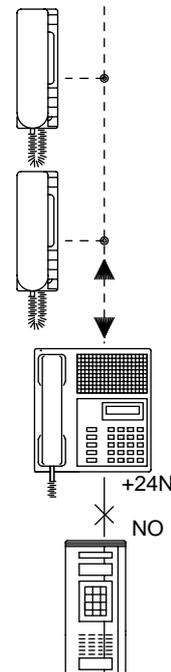
entrance panel, the switchboard station will operate as if it were an ordinary apartment station.

NOTE: The call code assigned to the guard door switchboard station must differ from all other call codes used in the system.

The DAY/NIGHT service button has no effect in these two operating modes, except to activate and deactivate the time display. For this reason, it is advisable to work with the switchboard station in "NIGHT" service.



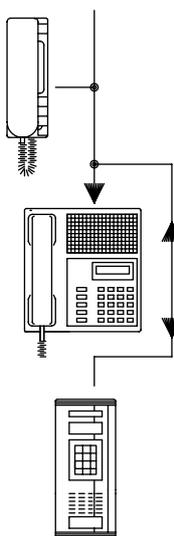
In addition to these two operating modes, the switchboard station can be turned off completely during the day and disconnected from the entrance module. In order to do so, entrance module terminal + 24 must be connected to switchboard station terminal + 24N at the time of installation, rather than to power supply unit terminal + 24. During the day, the entrance module will thus be disabled and completely inactive. This operating mode can be used in apartment buildings where the entrance door remains open all day, as visitors to the building are screened by the concierge. For load reasons, this third operating mode can be set up for a maximum of two entrance modules.



NIGHT SERVICE

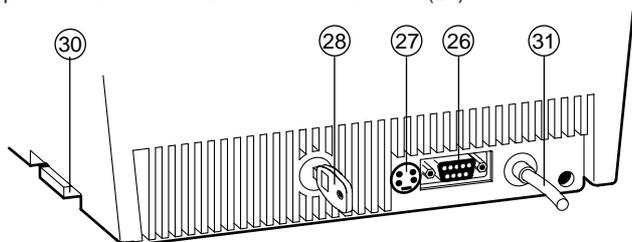
In this operating condition, concierge service is disabled and calls made from the entrance panels are sent directly to the apartment stations.

The switchboard station will normally receive calls from the apartment stations. If desired, the switchboard attendant can take these calls. However, they will be interrupted if a call is made to an apartment station from the entrance module, as the line will be passed to the module and apartment station concerned.



OPERATING INSTRUCTIONS ACTIVATION AND DEACTIVATION

The switchboard station is turned on and off by means of a key-operated switch located at the rear of the unit (28).



ACTIVATION

Turn the key 90 degrees counterclockwise (viewing the switchboard station from the front) until it is positioned horizontally and wait for the service status LED to go on. The key can be removed with power supplied to the switchboard station.

Notice: The switchboard station will automatically return to the service mode it was in when last turned off.

When the switchboard station is supplied with power and DAY service mode is activated by pressing button (18) (or when the switchboard station automatically returns to DAY service after a power outage), the display will show the following message:



This indicates that the system is ready for service. This message will disappear from the display when any of the following events occurs:

- A call is received.
- Any key is pressed.
- The handset is picked up.

DEACTIVATION

To turn off the switchboard station, reverse the operation used to turn it on, i.e., turn the key 90 degrees clockwise until it is positioned vertically.

The key can also be removed in this position.

CALLS TO/FROM APARTMENT STATIONS

The switchboard station can make and receive calls to and from apartment stations.

CALLS FROM APARTMENT STATIONS

The switchboard station handles calls originating from apartment stations (doorphones, etc.) independently of its service mode (DAY/NIGHT). The switchboard station will store the calling user's code in memory if the attendant is engaged in a call with another apartment station or entrance panel, or when the attendant is free but does not pick up the handset within 10 seconds (see below). When the call is received, the ringer will be activated for approximately 1 second even if the switchboard station line is busy and the code of the apartment station which made the call will appear on the alphanumeric display as shown in the following example:



When the handset (15) is picked up, the system will be ready for communication between the apartment station and the attendant (LED 23 on).

The apartment station code will be cleared from the display when the switchboard attendant hangs up the handset at the end of the call.

CALLS TO APARTMENT STATIONS

To call an apartment station, the switchboard attendant must dial the apartment station code using the numeric keys (7). If incorrect codes are entered, they can be deleted by pressing key (9).

To call the apartment station identified by code 3471, for example, press keys "3", "4", "7", "1" in sequence.

The display will show:



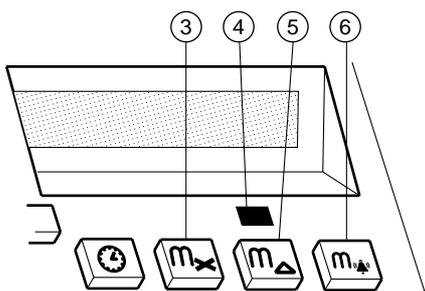
Then press the call button (8).

NOTE: The switchboard station will beep when the call button is pressed. The ringer or buzzer at the apartment station will be activated for the same duration as the beep. To activate the ringer or buzzer for a longer period, PRESS THE CALL BUTTON SEVERAL TIMES.

CALL STORAGE IN MEMORY

Calls from apartment stations will be automatically queued, i.e. stored in switchboard station memory, if the attendant is engaged in a call with another apartment station or entrance panel, or when the attendant is free but does not pick up the handset within 10 seconds. The internal apartment station call memory is maintained even with power off. The switchboard station can store up to 100 apartment station call codes.

The keypad is provided with three dedicated keys (3, 5, 6) for managing queued calls. These keys are red for immediate identification.



Stored call codes are displayed at the lower left of the alphanumeric display (zone B), along with the total number of stored calls (from [1] to [99], or [xx] to indicate that the memory is full):



Calls from apartment stations are handled independently of whether the concierge service is active, and whether the switchboard station is in DAY or NIGHT service. Procedures are as follows:

- The call will be stored immediately if the switchboard station is engaged in a call with other apartment stations or entrance panels.
- The call will be stored after 10 seconds if:
 - The switchboard station is free,
 - The switchboard station attendant does not pick up the handset within this period;
 - The code of the called apartment station has not been stored already.

The switchboard station will generate an audible signal to inform the resident at the apartment station that the call has been queued.

Queue memory status is indicated by LED (4), which provides the following information:

- No calls in memory (LED off).
- From 1 to 99 calls in memory (LED flashing).



NOTE: In this example, the number "15" in square brackets indicates the total number of calls stored in the queue memory.

- 100 calls in memory (memory full = LED on)



In the latter case, it is advisable to clear the memory using the delete key or call button, as any calls arriving after the hundredth cannot be stored.

QUEUED CALLS

The first call which was received is identified by an asterisk : " * " .



As further calls are queued, only the total number of calls in memory will change on the display. Thus, if the switchboard station queues two more calls from the apartment stations identified by codes 2570 and 3680, the display will show:



VIEWING CODES IN MEMORY

Codes for queued calls can be viewed using the memory scroll key (5). To continue with the previous example, pressing the key once will thus change the display as follows:



Pressing the key several times will cause the display to scroll through all queued call codes until it returns to the first (1244*).

After selecting the code as described above, the switchboard attendant can perform any of the operations indicated below:

- **Calling a queued apartment station**
To call a queued apartment station, press the Call from Queue key (6). Each time the key is pressed, a call will be made to the selected apartment station. If the apartment station answers, the call will be automatically deleted from the queue memory.
- **Deleting a call from queue memory**
The switchboard attendant can delete calls stored in the queue memory one at a time until the memory is empty and LED (4) goes off. If call code 1244 is to be deleted, for example, the display will show:



When key (3) is pressed, the following message will appear on the display:



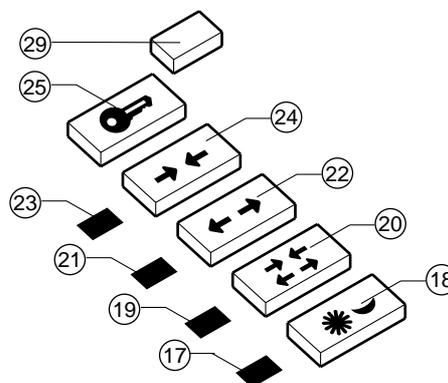
Confirm that code 1244 is to be deleted by pressing key (3) again. If the key is not pressed within 3 seconds, the entire operation will be ignored. The display will show:



This indicates that there are still two calls in the queue memory, and the oldest is from apartment station 2570.

CONCIERGE SERVICE WITH ENTRANCE PANEL CALL INTERCEPTION DURING THE DAY

When the switchboard station is configured for this operating mode at the time of installation, it can provide concierge service as well as make and receive calls to and from apartment stations. When the switchboard station is in "DAY" mode (LED 17 on), it performs concierge service or in other words intercepts all calls made from any main entrance panel to an apartment station. Conversely, when the switchboard station is in "NIGHT" mode (LED 17 off), concierge service is disabled, and calls from the main entrance panel will be sent directly to the apartment stations.



To change between DAY and NIGHT service, hold down button (18) for at least 3 seconds. The switchboard station will generate an audible signal for the entire period that the button is held down.

When the switchboard station is in "DAY" service and receives a call from a main entrance panel, the ringer will be activated and zone C of the display will show "<nnn>", where "nnn" is a number from "000" to "999" identifying the entrance panel concerned.

When the handset is picked up, the switchboard station automatically connects the voice line with the main entrance panel. The switchboard attendant speaks to the caller and, upon learning the name of the desired resident, enters the corresponding code on the keypad and presses the call button (8). If the called apartment station answers, the attendant can put the entrance panel in direct communication with the apartment station by pressing key (20).

Example:

- a) A call is received from a main entrance panel:

<nnn>

The door can be opened by means of door lock release key (25) in the following cases:

- Directly, for as long as the entrance panel number < nnn > remains on the display.
 - Indirectly, by entering the number of the entrance panel at any time and pressing the door lock release key (25).
- b) The switchboard attendant picks up the handset.
 c) The switchboard station connects the voice line with the entrance panel < nnn > (LED 21 on, LEDs 19 and 23 off).
 d) The attendant asks the visitor to indicate the desired resident.
 e) The attendant enters the code corresponding to the desired apartment station (e.g., 1578) and then presses the call button (8) one or more times.
 f) The switchboard station automatically connects the voice line with the apartment station (LED 23 on, LEDs 19 and 21 off), and when the resident at the apartment station picks up the doorphone handset to answer the call, LED 29 goes on.
 g) Finally, the switchboard attendant presses key (20) to connect the entrance panel with the apartment station (LEDs 21 and 23 off, LED 19 on).
 h) LED 29 will go on to indicate that a call is in progress between the entrance panel and the apartment station. The display will show:

nnn → 1578

Notice: From this moment onwards, the switchboard attendant can only open the entrance door by entering the number of the entrance panel (nnn) and then pressing the door lock release key (25) (see below).

- i) When the doorphone handset is hung up at the end of the call, LED 29 goes off and the information "nnn → 1578" is cleared from the display after approximately 4 seconds.

When the switchboard station is engaged in a call with an apartment station and receives another call from an entrance panel, the attendant can switch the voice line to the entrance panel by pressing key (22). The attendant can then switch the voice line back to the apartment station (if it has not hung up in the meantime) by pressing key (24).

When the switchboard station is engaged in a call with an entrance panel and receives a call from an apartment station, the number of the apartment station will appear on the display. In this case, the switchboard attendant can call the apartment station by pressing the Call from Queue key (6). After talking to the apartment station, the attendant can return to the entrance panel call by pressing key (22).

When an apartment station is engaged in a call with an entrance panel, the switchboard attendant can press key (22) to talk to the visitor at the entrance panel without being heard by the apartment station, or press key (24) to talk to the resident at the apartment station without being heard at the entrance panel.

To restore direct communication between the entrance panel and the apartment station, the switchboard attendant can then press key (20).

DOOR LOCK RELEASE FUNCTIONS

The digital guard door switchboard station can release locks at any door associated with a main or secondary entrance panel **at any time**. This feature is called "PRIORITY DOOR LOCK RELEASE".

Main entrance door lock release

Main entrance door locks can be released under the following two conditions:

Following a call from a main entrance panel

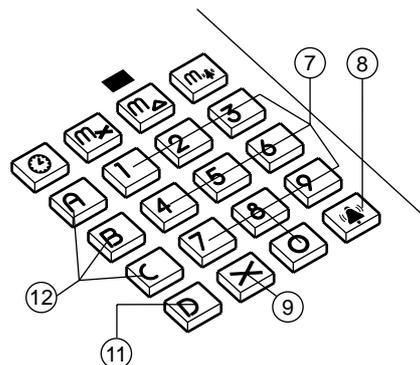
For as long as the entrance panel number < nnn > remains on the display, the door can be opened simply by pressing the main entrance door lock release key (25).

At any other time

To open door, enter the main entrance panel number (001 - 999) and press the main entrance door lock release key (25). In the specific case of a main entrance panel identified by the number <000>, simply ensure that display zone "D" is empty (e.g., clearing the display by means of key (9)) and press the main entrance door lock release key (25).

Secondary entrance door lock release

NOTE: The switchboard station will perform the operations described below only if the secondary door lock release key "D" (11) was activated during switchboard station configuration.



The procedure used by the switchboard attendant will depend on the system's installation TYPE as follows (see "System and Installation Requirements").

TYPE 1 - Enter the secondary entrance panel number (1 to 9) and press key "D" (11).

TYPE 2 - Enter the secondary entrance panel number (1 to 99) and press key "D" (11).

TYPE 3 - Enter the secondary entrance panel number (1 to 999) and press key "D" (11).

Door lock release in special systems

Special systems are those having the following characteristics:

- No more than two main entrance panels, **all of which are conventional panels adapted by installing a digitizer Ref. 826/16**.
- One digital guard door switchboard station.
- No secondary entrance panels.

This type of system, which is often used in renovating older installations, is covered by diagram SC 101-0347. In this case, main entrance door locks CANNOT and MUST NOT be released as described above. Door locks can be released ONLY by using keys A, B, C programmed to control two or three special services decoder units (**Ref. 826/54**) associated with the corresponding entrance doors.

The reason for this is as follows:

If the main entrances are equipped with call modules, they can be identified by means of different numbers (e.g., Entrance 1, 2 or 3) stored in memory during programming step 3. In this way, switchboard station key A, B or C can be programmed at step 7, 8 or 9 with the

number of the main entrance. It will thus be possible to release the main entrance door locks individually simply by pressing key A, B or C. If, conversely, the entrances are equipped with conventional entrance panels and digitizers, this is not possible because the entrance panel number cannot be programmed in the digitizer, and the switchboard station would release the two or three door locks at the same time, as they are all connected in parallel. Consequently, two or three special services decoder units must be programmed for key A, B or C functions. The decoders must be configured with relays operating in monostable, direct drive mode, i.e., jumpers PT1 e PT2 must be installed. Jumper PT3 has no effect in this configuration, and can be positioned as desired.

SPECIAL SERVICE CODES

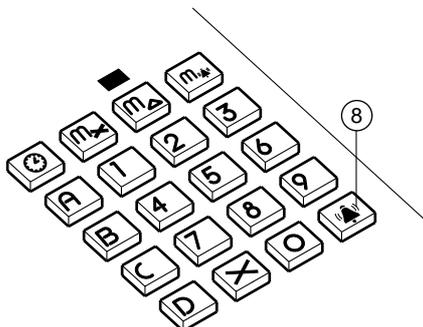
Actuator control

The digital switchboard station can manage electric actuators using special services decoder units Ref. 826/54.

For example, stair lights can be turned on or off by entering a special code assigned to the stair light actuator. Special codes must be preceded by pressing number key '0' and followed by pressing the call button (8).

Thus, to activate the service associated with code 1356, press number keys 0, 1, 3, 5, 6 in succession and then press the call button (8).

This procedure can be simplified by programming the switchboard station function keys A, B and C. A maximum of three frequently used special services can be activated in this way. Each time a function key is pressed, the switchboard station will automatically dial and transmit the code assigned to the key. For details of function key programming, see the section covering switchboard station configuration.



SENSOR MONITORING

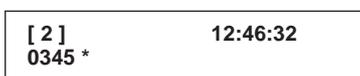
The switchboard station can be connected to a special services decoder unit (Ref. 826/54) in order to display the status of a sensor (see the appropriate section of this manual for further details).

Say, for example, that the switchboard station is operating in NIGHT service and the queue memory contains two calls, the first of which was from the apartment station identified by the code 345. The display will show:



The switchboard attendant can monitor garage light status by entering the code assigned to the special services decoder unit used for this purpose (e.g., one connected to a photodetector) and put through the call.

After this operation, the switchboard display will indicate one of the following conditions:



Here, "ON" means that the lights are on, while "OFF" indicates that they are off.

The "ON" and "OFF" messages will be displayed for approximately 5 seconds, and will then be cleared.

Combined actuator control and feedback monitoring

The two capabilities described above can be combined in order to:

- Control an actuator, and
- Receive feedback confirming that the desired actuator status has been achieved.

In this way, for example, the switchboard attendant can turn on the stair lights and check that they are on by means of the switchboard station display, where the word "ON" will appear for 5 seconds.

For further details, see the instruction manual covering the special services decoder unit (Ref. 826154) and the recommended installation diagrams.

SPECIAL FUNCTIONS - CLOCK/DATE DISPLAY

Clock display

The current time is shown on the display only when the switchboard station is operating in NIGHT service.



Time format:

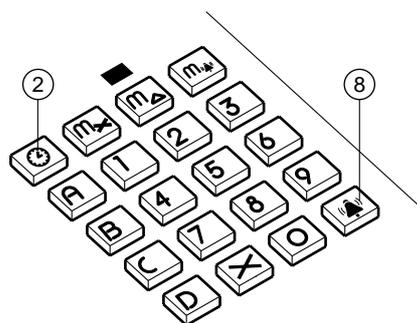
- hh = Hour (00 to 23)
- mm = Minutes (00 to 59)
- SS = Seconds (00 to 59)

Date display

When the switchboard station is operating in NIGHT service (and only under these conditions), the current date can be viewed by pressing the clock key (2). The date will be shown in mm/dd/yy format for approximately 3 seconds, after which the current time will return to the display.

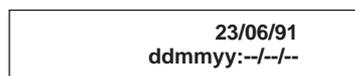
Date format:

- mm = Month (01 to 12)
- gg = Day (01 to 31)
- yy = Year (00 to 99)



Date/time adjustment

The date and time setting procedure is activated by pressing key (2) twice in succession with the switchboard station operating in either DAY or NIGHT service. If the switchboard exchange is in NIGHT mode, the display will show:



Enter the digits for the current month, day and year and confirm by pressing the call button (8).

To enter the date "December 1, 1991", for example, press keys "1 2 0 1 9 1" in sequence.

23/06/91
..... : 01/12/91

Then press the call button (8). The display will now show:

23/06/91
(hh:mm)—:—

Enter the digits for the current time (hour and minutes) and confirm by pressing the call button (8).

To enter the time 12:45, for example, press keys "1", "2", "3", "4", "5" in sequence, followed by the call button (8).

KEYPAD LOCK ACTIVATION/DEACTIVATION

Keypad operations can be locked when the switchboard station remains unattended. To lock the keypad, hold down the DAY/NIGHT service button (18) and the main entrance door lock release key (25) simultaneously until the audible signal generated by the ringer stops (approximately 3 seconds).

In lock conditions, the switchboard station will refuse all commands for the keypad, including DAY/NIGHT service changeover. However, the audible feedback signal will still be produced when keys are pressed.

To deactivate the keypad lock, repeat the operation described above.

NOTE: *When the keypad lock feature is used, it is also advisable to remove the ON/OFF key from the switchboard station, as turning the switchboard station off and back on will automatically deactivate the keypad lock so that the unit is no longer protected from unauthorized or inadvertent operation.*

USE IN 1st GENERATION SYSTEMS

The second-generation digital guard door switchboard station can be used to replace the earlier version (Ref. 82618). In such cases, enter 0 when configuring installation type.

Differences with respect to the configuration described above are as follows:

- When a call is received from a main entrance panel, the display will show:

<EXT>

- The switchboard station does not indicate when the voice line is engaged (LED 29 remains off at all times).
- The switchboard attendant must delete queued calls from memory manually by pressing key (3) twice (see the paragraph headed "Queued Calls").
- The switchboard station generates an intermittent audible signal to inform the resident at the apartment station that his or her call has been queued.

FEATURES

Even if configured to replace the previous version, the switchboard station provides the following performance features:

- Concierge service can be enabled or disabled at the time of configuration.
- Queue memory.
- Function keys A B and C can be programmed for special services.
- Four operating languages.

- Clock/date display - keypad lock - RS232 serial line management - software release display.

Door lock release procedures are compatible with those implemented by the earlier model. Specifically, for systems which include both main and secondary entrance panels, the "PRIORITY DOOR LOCK RELEASE" feature whereby a door can be opened **at any time** is restricted to **secondary** entrance panels (from 1 to 9).

Main entrance door lock release

Main entrance door locks can be released under the following two conditions:

Following a call from a main entrance panel

For a period at least equal to the programmed engaged time but not exceeding 10 minutes, the door can be opened simply by pressing the main entrance door lock release key (25).

At any other time, but ONLY in systems with

- a single main entrance panel configured for UNRESTRICTED DOOR LOCK RELEASE and
- no secondary entrance panels

Main entrance door can be opened by clearing display zone "D" by means of key (9) and pressing the main entrance door lock release key (25).

Secondary entrance door lock release

In systems with secondary entrance panels, the associated door can be opened at any time (PRIORITY DOOR LOCK RELEASE feature) simply by entering the number of the secondary entrance panel (1 - 9) on the keypad and pressing the door lock release key (25).

TYPE ERROR WARNINGS

As explained in detail in the section headed "System and Installation Requirements", all equipment in any given system must be programmed for the same installation TYPE.

If the switchboard station intercepts a call from an entrance panel configured for an installation type other than that for which the switchboard station is programmed, it will alert the attendant by extending the typical two-tone ringing cadence with a beep lasting approximately two seconds. At the same time, and if the call originates from a main entrance panel, the display will show:

< >

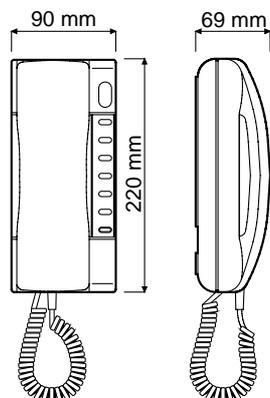
If the call originates from a secondary entrance panel, the display will show:

[. . . .]

In both cases, either the switchboard station or the entrance panel is incorrectly configured for the system's installation type.

If the configuration error has been made at the switchboard station, check and if necessary correct the switchboard station configuration parameters, with particular attention to the digit entered for installation type in step 2.

DOORPHONE WITH SINGLE-PORT DECODER
Ref. 826/31



Ref. 826/31
Doorphone with single-port decoder and one key.

Doorphone with single-port decoder Ref. 826/31 features Scaitel styling. Characteristics are similar to those of a standard electronic call tone signaling doorphone with single-port decoder.

SPECIFICATIONS

Operating voltage:	24 V DC ±10%
Stand-by current draw:	9 mA max
Current draw with ringer active:	60 mA
Current draw with voice signal active:	9 mA max
Standard consumption in Load Units (LU):	1 LU

INSTALLATION

Installation procedures for doorphone Ref. 826/31 are identical to those for a standard Model 1132 doorphone (equipped with a Call Switchboard key).
Doorphone Ref. 826/31 is provided with a dedicated terminal block for parallel connection to an electronic call tone signaling doorphone.

PROGRAMMING

For inspection purposes, each doorphone with single-port decoder produced by URMET DOMUS is programmed with the call code 9999.

Programmed apartment station call codes are numbers between 1 and 9999. Code format will depend the system's installation TYPE as follows.

- In TYPE 1 systems without secondary entrance panels, format will be: "NNNN"
- In TYPE 1 systems with secondary entrance panels, format will be: "SNNN"
- In TYPE 2 systems, format will be: "SSNN"
- In TYPE 3 systems, format will be: "SSSN"

For further information, see the description of installation types provided in the section headed "System and Installation Requirements".

Once the programming method has been selected as illustrated in the appropriate section, proceed as follows:

- 1) Press the programming pushbutton (3): LED (4) will go on.
- 2) Using the keypad on the calling device (i.e., an entrance module or guard door switchboard station), enter the code for the apartment station and press the call button "...". If a digitizer is used, press the call key for this apartment station. LED (4) will flash and then remain on.

NOTICE

To ensure that system maintenance can be efficiently performed, it is **ESSENTIAL** to write down the codes programmed in the decoder on the self-adhesive memorandum label provided for this purpose and apply the label inside the doorphone.

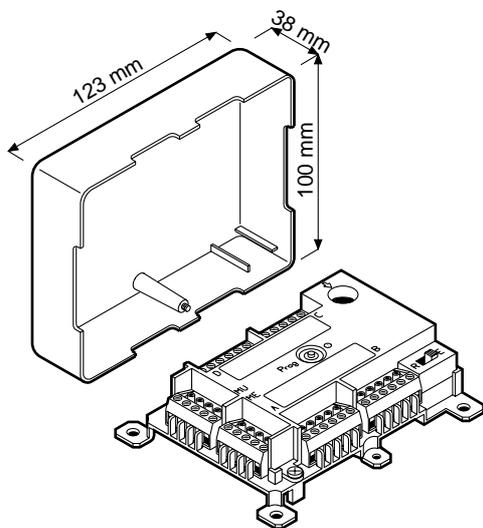
PROGRAMMING METHODS

Doorphones with single-port decoder can be programmed in two ways:

- 1) Directly on the system after connecting and supplying the latter, using either an outdoor station (entrance module or digitizer) or a guard door switchboard station.
This operation must be carried out by two people who communicate either by cellular phone or by using the system's outdoor and indoor stations. One person will use the outdoor station or switchboard station, while the other works at the decoders. After programming each decoder, calls can be made from an outdoor station to check that all functions operate correctly.
- 2) At the workshop prior to installation, using an outdoor station (or the switchboard station) and the power supply unit. In this way, all decoders can be programmed at the same time, and subsequently installed in the appropriate locations.

After programming all doorphones with single-port decoder, carry out a final check by turning off power supply units for at least 5 seconds. Then turn power supply units back on and send calls to check the programmed codes.

FOUR-PORT DECODER Ref. 826/23

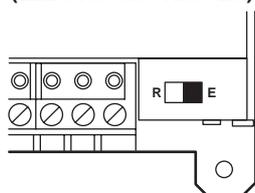


PRELIMINARY SETTINGS

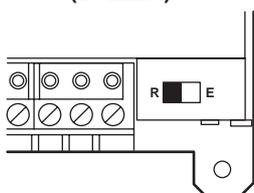
The four-port decoder is set up at the factory for connection to electronic call tone signaling apartment station equipment. If conventional buzzer type apartment station equipment is to be used, the selector switch must be moved as shown below at the time of installation, and before the four-port decoder is supplied with power.

NOTE: All apartment station equipment in a system must be of the same type (i.e., either all electronic call tone signaling or all conventional buzzer type).

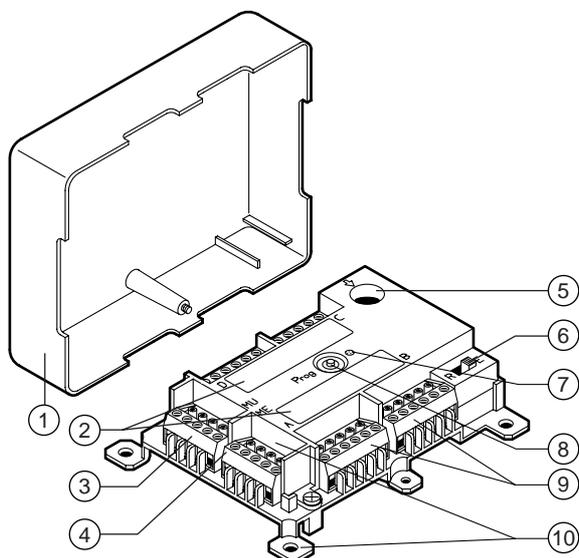
SELECTOR SWITCH POSITION FOR ELECTRONIC APARTMENT STATION EQUIPMENT (ELECTRONIC RINGER)



SELECTOR SWITCH POSITION FOR CONVENTIONAL APARTMENT STATION EQUIPMENT (BUZZER)



The four-port decoder consists of the following:



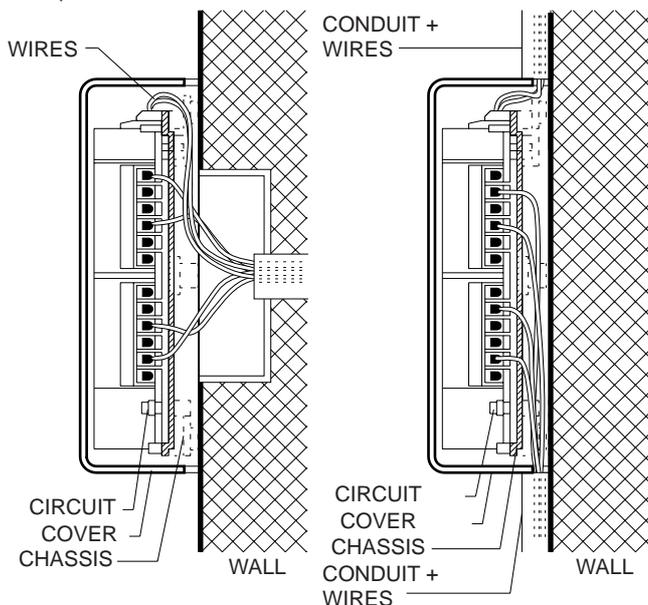
- Base and shock-resistant white plastic cover (10).
- Electronic circuit board with removable input terminal block (4), output terminal block (3) and apartment station connection terminal block (9), electronic ringer/buzzer selector switch (6), programming pushbutton (8), LED (7) and jack (5), and decoder data and code label (2).
- Shock-resistant plastic cover (1).
- Overall dimensions: l 123 x h 100 x d 38 mm.

SPECIFICATIONS

Operating voltage:	24 V DC ± 10%
Stand-by current draw:	14 mA
Current draw with buzzer active:	350 mA
Current draw with electronic ringer active:	160 mA
Current draw with voice signal active:	14 mA
Service temperature range:	-10°C to 45 °C

INSTALLATION

Four-port decoders Ref. 826/23 must be installed as shown below.



The four-port decoder must be connected:

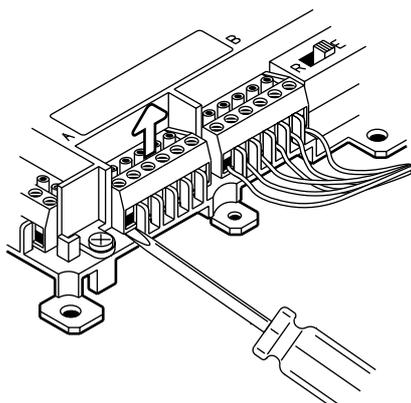
- To the system riser cable on one side, and
- To the apartment stations (4 max.) on the other side.

When making four-port decoder connections to apartment stations, the following rules must be observed:

- Use cable with a cross-section over 0.50 mm².
- NEVER connect several conductors in parallel in order to reach the required cross-section (e.g., multi-core telephone cable). A single, and preferably stranded-core, conductor of appropriate cross-section must be used.
- Branch lines from decoder units to doorphones must not exceed 20 meters in length
- The six connected wires must be routed at a suitable distance from power lines (over 30 cm, where possible).

All terminal blocks are removable to facilitate maintenance operations and are provided with fins to separate conductors. Terminal blocks are removed upwards. If necessary, a screwdriver may be used as shown.

WARNING: Removing the protective plastic cover from the electronic circuit board will automatically void product warranty.



Each of the four branch lines can be connected to up to two apartment station units in parallel as shown in the table below.

	2 doorphones 1 ring repeater relay	1 doorphone 1 video doorphone 1 ring repeater relay	2 video doorphones 1 ring repeate relay
Model 1131 doorphones Scout video doorphones Ring repeater relay Ref. 788/11	YES	YES	YES
Model 1130 doorphones Ranger video doorphones Ring repeater relay Ref. 788/11	YES	YES	YES
Model 1130 doorphones Explorer video doorphones Ring repeater relay Ref. 788/11	YES	YES	NO

See the applicable installation diagrams for connections.

PROGRAMMING

For inspection purposes, each four-port decoder produced by URMET DOMUS is programmed with the four call codes 9996, 9997, 9998 and 9999.

The apartment station call codes programmed in a decoder are numbers between 1 and 9999. Code format will depend the system's installation TYPE as follows.

- In TYPE 1 systems without secondary entrance panels, format will be: "NNNN"
- In TYPE 1 systems with secondary entrance panels, format will be: "SNNN"
- In TYPE 2 systems, format will be: "SSNN"
- In TYPE 3 systems, format will be: "SSSN"

IMPORTANT

In systems with secondary entrance panels, the four stored codes must all have the same prefix: S for TYPE 1, SS for TYPE 2 and SSS for TYPE 3.

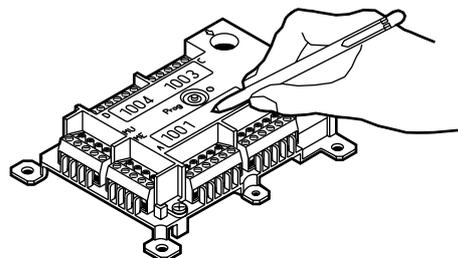
Once the programming method has been selected as illustrated in the appropriate section, proceed as follows:

- 1) Press the programming pushbutton (8): LED (7) will go on.
- 2) Using the keypad on the calling device (i.e., an entrance module or guard door switchboard station), enter the code for the apartment station connected via terminal A) and press the call button . If a digitizer is used, press the call key for this apartment station. LED (7) will flash and then remain on.
- 3) Subsequently enter the codes for the 21st, 31st and 41st apartment stations as directed in step 2. After the 41st code is entered, LED (7) will flash for a few moments and then go off.

If fewer than four numbers are to be stored in memory, press the programming pushbutton after entering the first, second or third number, as applicable.

NOTICE

To ensure that system maintenance can be efficiently performed, it is **ESSENTIAL** that the codes programmed in each four-port decoder be written down on the memorandum label (2) provided inside the decoder cover.



DECODER PROGRAMMING METHODS

Decoders can be programmed in three ways:

- 1) Directly on the system after connecting and supplying the latter, using either an outdoor station (entrance module or digitizer) or a guard door switchboard station.
This operation must be carried out by two people who communicate either by cellular phone or by using the system's outdoor and indoor stations. One person will use the outdoor station or switchboard station, while the other works at the decoders. After programming each decoder, calls can be made from an outdoor station to check that all functions operate correctly.
- 2) Directly on the system as above, but disconnecting the entrance module and connecting it directly to the various four-port decoders using an appropriate programming cord (Ref. 826/104). With this method, programming can be carried out by a single person. In this case, checks on correct operation will obviously have to be performed afterwards.
- 3) At the workshop prior to installation, using an outdoor station (or the switchboard station) and the power supply unit. In this way, all decoders can be programmed at the same time, and subsequently installed in the appropriate locations.

After programming all decoders, carry out a final check by turning off power supply units for at least 5 seconds. Then turn power supply units back on and send calls to check the programmed codes.

OPERATION

The four-port decoder must be programmed with the codes assigned to the apartment stations associated with it. These codes are resident on an EEPROM memory which guarantees that they are retained even with power off.

During operation, the code emitted by a calling device (i.e., an entrance module, digitizer or guard door switchboard station) is recognized by the decoder, which causes the associated apartment station doorphone to ring for the entire period that the call button is held down, and activates the voice channel. The conversation can last up to ten minutes if no calls are made to another user.

After this 10 minute period, or if the call is interrupted by a call to another user, the decoder sends a brief intermittent tone to the connected apartment station to inform the user that the call has been interrupted. The doorphone apartment station and/or video doorphone apartment station is provided with two special keys which can be used to send "Door Lock Release" and "Call Switchboard" (optional) command signals. Only one door lock release signal is needed, even if the system includes several outdoor stations, each with an electric lock: actuating the door lock release key will open the electric lock only at the outdoor station from which the call was made.

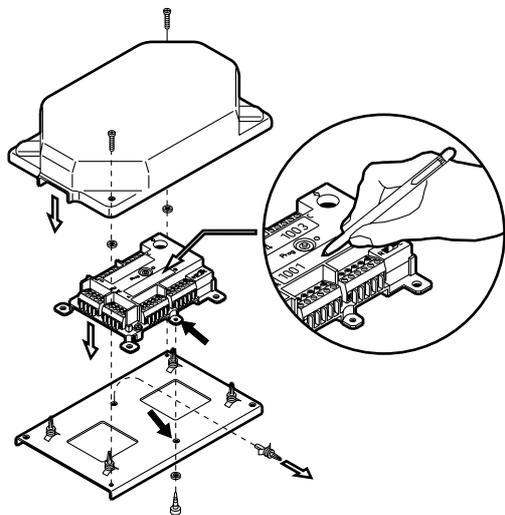
826

FOUR-PORT DECODER Ref. 826/23



REPLACING A DECODER Ref. 826/3 WITH A DECODER Ref. 826/23
 REPLACING A DECODER Ref. 826/13 WITH A DECODER Ref. 826/23

REPLACING A DECODER Ref. 826/3 WITH A DECODER Ref. 826/23



- Remove the central plastic spacer from the old decoder chassis.
- Place the new decoder 826/23 on the chassis as illustrated and insert a 2.9 x 9.5 mm self-tapping screw for plastics with associated washer through the hole. Tighten the screw as indicated by the arrows.
- Write down the codes programmed in the decoder on the label provided for this purpose.
- Install the old decoder cover on the new decoder and start the screws. Do not tighten fully.
- Move the selector switch at lower right to position R to set the decoder for use with buzzer type doorphones (see the instruction manual).

REPLACING A DECODER Ref. 826/13 WITH A DECODER Ref. 826/23

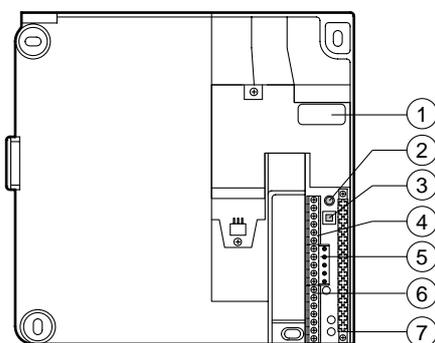
Mechanical componentry of decoders 826/23 is compatible with that of the previous model 826/13 units.

Move the selector switch at lower right to position "E" for use with electronic call tone signaling doorphones, or to position "R" for use with conventional buzzer type doorphones (see the instruction manual).

NOTICE: For both types of doorphone, bear the following points in mind:

- 1) Wires must be connected to terminal MU in the same order as on terminal ME (1 2 -24 D + 24).
- 2) If buzzers do not operate correctly after replacing the decoder, the apartment station equipment is no longer suitable for further service because of excessive wear and must be replaced.
- 3) The 24 V buzzer Ref. 826/108 cannot be used with this decoder. If connected doorphones are equipped with this buzzer, it must be disabled and the standard buzzer used.

**BRACKET WITH SINGLE-PORT DECODER
Ref. 1202/94 FOR WINFLAT MONITOR**



The Winflat monitor bracket with single-port decoder consists of the following:

- Electronic speaker control circuit with programming pushbutton (3) and LED (2).
- Code label (1).
- Fixed terminal blocks for connection to video section (6) and to an additional apartment station (4), removable input terminal block (5) used when the Winflat monitor is installed in digital systems
- Winflat monitor connector (7).

SPECIFICATIONS

Digital section	
Operating voltage:	24 V DC ± 10%
Stand-by current draw:	9 mA
Current draw with speaker active:	75 mA
Current draw with voice signal active:	9 mA
Consumption in Load Units (LU):	1 LU
Service temperature range:	-5 to 45 °C

PROGRAMMING

For inspection purposes, each Winflat monitor bracket with digital decoder produced by URMET DOMUS is programmed with the call code 9999.

The apartment station must be programmed with a code between 1 and 9999. Code format will depend the system's installation TYPE as follows.

- In TYPE 1 systems without secondary entrance panels, format will be: "NNNN"
- In TYPE 1 systems with secondary entrance panels, format will be: "SNNN"
- In TYPE 2 systems, format will be: "SSNN"
- In TYPE 3 systems, format will be: "SSSN"

For further information, see the description of installation TYPES provided in the Digital Call System Manual.

Once the programming method has been selected as illustrated above, proceed as follows:

- 1) Press the programming pushbutton (3): LED (2) will go on.
- 2) Using the keypad on the calling device (i.e., an entrance module or guard door switchboard station) enter the code for the apartment station and press the call button. If a digitizer is used, press the call key for the apartment station. LED (2) will flash and then remain on.

NOTICE

To ensure that system maintenance can be efficiently performed, it is **ESSENTIAL** that the codes programmed in each four-port decoder be written down on the memorandum label (1) provided for this purpose.

DECODER PROGRAMMING METHODS

Decoders can be programmed in two ways:

- 1) Directly on the system after connecting and supplying the latter, using either an outdoor station (entrance module or digitizer) or a guard door switchboard station. This operation must be carried out by two people who communicate either by cellular phone or by using the system's outdoor and indoor stations. One person will use the outdoor station or switchboard station, while the other works at the decoders. After programming each decoder, calls can be made from an outdoor station to check that all functions operate correctly.
- 2) At the workshop prior to installation, using an outdoor station (or the switchboard station) and the power supply unit. In this way, all decoders can be programmed at the same time, and subsequently installed in the appropriate locations.

After programming all decoders, carry out a final check by turning off power supply units for at least 5 seconds. Then turn power supply units back on and send calls to check the programmed codes.

OPERATION

The Winflat monitor bracket with single-port decoder must be programmed with the code assigned to the apartment station in which it is installed.

The code is resident on an EEPROM memory which guarantees that it is retained even with power off.

During operation, the code emitted by a calling device (i.e., an entrance module, digitizer or guard door switchboard station) is recognized by the decoder, which causes the associated apartment station doorphone to ring for the entire period that the call button is held down, and activates the voice channel. The conversation can last up to ten minutes if no calls are made to another user.

After this 10 minute period, or if the call is interrupted by a call to another user, the decoder sends a brief intermittent tone to the connected apartment station to inform the user that the call has been interrupted.

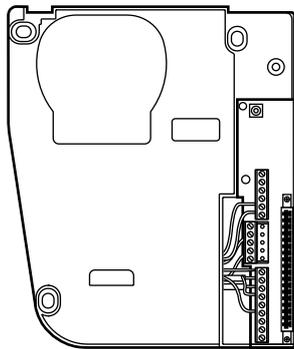
The doorphone apartment station and/or video doorphone apartment station is provided with two special keys which can be used to send "Door Lock Release" and "Call Switchboard" (optional) command signals.

Only one door lock release signal is needed, even if the system includes several outdoor stations, each with an electric lock: actuating the door lock release key will open the electric lock only at the outdoor station from which the call was made. The door lock release key on the monitor is identified by a "key" symbol.

The Call Switchboard command signal can be used only on systems provided with a guard door switchboard station. This function is performed by pressing the "circle" key on the monitor.

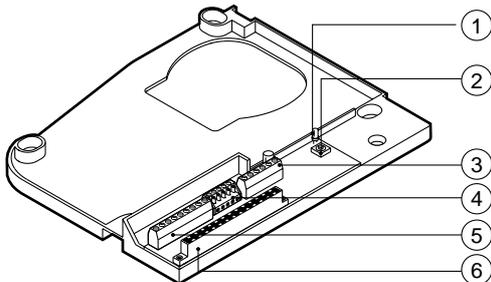
The monitor is also provided with a third key identified by a "diamond" symbol for additional functions. The associated terminals Y1 and Y2 are located on the video section terminal block (6).

BRACKET WITH SINGLE-PORT DECODER FOR SENTRY MONITOR Ref. 1704/94



Features of the Sentry monitor bracket with single-port decoder are as follows:

- Electronic speaker control circuit with programming pushbutton (2) and LED (1).
- Fixed terminal blocks for connection to video section (5) and to an additional apartment station (3), removable input terminal block (4) used when the Sentry monitor is installed in digital systems.
- Sentry monitor connector (6).

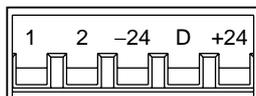


SPECIFICATIONS

Operating voltage:	24 V DC ± 10%
Stand-by current draw:	9 mA
Current draw with speaker active:	60 mA
Current draw with voice signal active:	9 mA
Service temperature range:	-10 °C to 45 °C

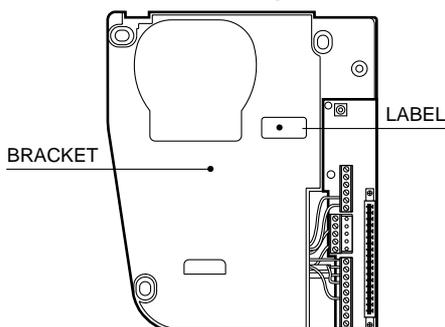
NOTICE

If the bracket is replaced on Scout Model 1204 systems, terminal block "ME" must be wired as shown.



INSTALLATION

Bracket connections are shown in the figure.



PROGRAMMING

For inspection purposes, each Sentry monitor bracket with single-port decoder produced by URMET DOMUS is programmed with the call code 9999.

The apartment station must be programmed with a code between 1 and 9999. Code format will depend the system's installation TYPE as follows:

- In TYPE 1 systems without secondary entrance panels, format will be: "NNNN"
- In TYPE 1 systems with secondary entrance panels, format will be: "SNNN"
- In TYPE 2 systems, format will be: "SSNN"
- In TYPE 3 systems, format will be: "SSSN"

Once the programming method has been selected as illustrated above, proceed as follows:

- 1) Press the programming pushbutton (2): LED (1) will go on.
- 2) Using the keypad on the calling device (i.e., an entrance module or guard door switchboard station) enter the code for the apartment station and press the call button. If a digitizer is used, press the call key for the apartment station. LED (1) will flash and then remain on.

NOTICE

To ensure that system maintenance can be efficiently performed, it is **ESSENTIAL** to write down the code programmed in the decoder on the self-adhesive memorandum label provided for this purpose and apply the label to the bracket.

DECODER PROGRAMMING METHODS

Decoders can be programmed in three ways:

- 1) Directly on the system after connecting and supplying the latter, using either an outdoor station (entrance module or digitizer) or a guard door switchboard station. This operation must be carried out by two people who communicate either by cellular phone or by using the system's outdoor and indoor stations. One person will use the outdoor station or switchboard station, while the other works at the decoders. After programming each decoder, calls can be made from an outdoor station to check that all functions operate correctly.
- 2) Directly on the system as above, but disconnecting the entrance module and connecting it directly to the various decoders using an appropriate programming cord (Ref. 826/104). With this method, programming can be carried out by a single person. In this case, checks on correct operation will obviously have to be performed afterwards.

NOTE: This method cannot be used for the Sentry monitor bracket with decoder, as the unit is too small to accommodate the programming cord socket.

- 3) At the workshop prior to installation, using an outdoor station (or the switchboard station) and the power supply unit. In this way, all decoders can be programmed at the same time, and subsequently installed in the appropriate locations.

After programming all decoders, carry out a final check by turning off power supply units for at least 5 seconds. Then turn power supply units back on and send calls to check the programmed codes.

OPERATION

The Sentry monitor bracket with single-port decoder must be programmed with the code assigned to the apartment station in which it is installed.

The code is resident on an EEPROM memory which guarantees that it is retained even with power off.

During operation, the code emitted by a calling device (i.e., an entrance module, digitizer or guard door switchboard station) is recognized by the decoder, which causes the associated apartment station doorphone to ring for the entire period that the call button is held down, and activates the voice channel. The conversation can last up to ten minutes if no calls are made to another user.

After this 10 minute period, or if the call is interrupted by a call to another user, the decoder sends a brief intermittent tone to the connected apartment station to inform the user that the call has been interrupted.

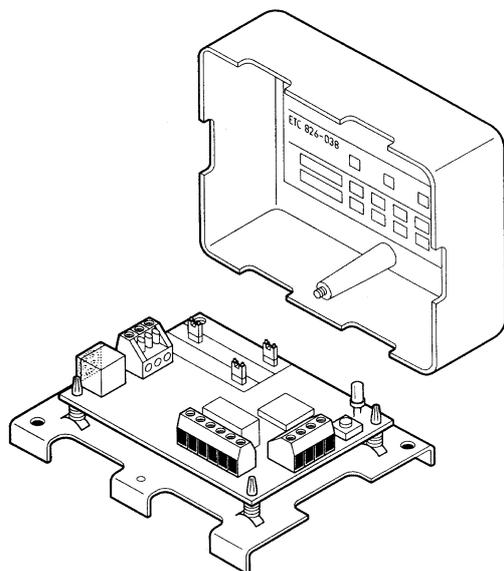
The doorphone apartment station and/or video doorphone apartment station is provided with two special keys:

-  Door Lock Release
-  Call Switchboard (optional)

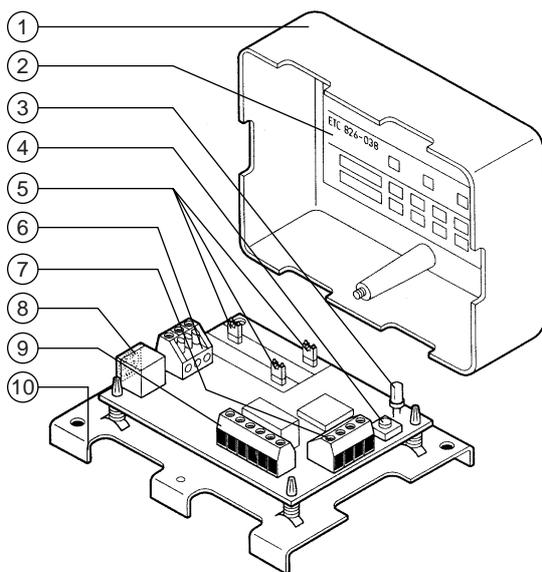
The door lock release key will open the electric lock connected to the entrance module.

Actuating the apartment station door lock release key will open only the electric lock at the entrance module with which a call is in progress.

SPECIAL SERVICES DECODER UNIT Ref. 826/54



The special services decoder unit consists of the following:



- Oxide-resistant chassis (10), 116 x 95 mm.
- Electronic circuit board with removable input terminal block (6), output terminal block (7), fixed terminal block with relay poles (9), switching relay, selector switches (5) and programming pushbutton (4), LED (3) and jack (8).
- Shock-resistant plastic cover (1).
- Overall dimensions: l 123 x h 100 x d 38 mm.

SPECIFICATIONS

Operating voltage:	24 V DC \pm 10%
Stand-by current draw:	14 mA
Current draw with relay energized:	35 mA
Service temperature range:	-10 °C to 45 °C
Maximum relay switching capacity with purely resistive load:	DC= 30W AC= 50 VA
Maximum switching voltage rating	DC= 24V AC= 24V
Maximum switching current rating	DC= 1.25A AC= 1.25A

CONFIGURATION

Prior to installation, the special services decoder unit must be configured for the type of service to be performed. Configuration settings are established by means of the jumpers located on the upper left of the electronic circuit board.

NOTICE: To ensure that system maintenance can be efficiently performed, it is **ESSENTIAL** that the memorandum label (2) be filled out at the time the special services decoder unit is programmed and configured for service.



Promemoria codici e predisposizioni per Sch. 826/54
Code and function memorandum of Ref. 826/54
Mémoire des codes et des fonctions de la Réf. 826/54

ETC 826-038

Predisposizioni
Functions
Fonctions

PT1 PT2 PT3

Codici di attivazione / Operation codes / Codes de fonctionnement

A

B

Turn off power supply to the decoder unit and proceed as follows:

Jumper PT1: CODE RECOGNITION - Specific / Generic

In Direct Drive, the jumper must always be installed.
In Indirect Drive, install the jumper to configure the unit for Specific operation, or remove the jumper to configure the unit for Generic operation as explained in the previous paragraph.

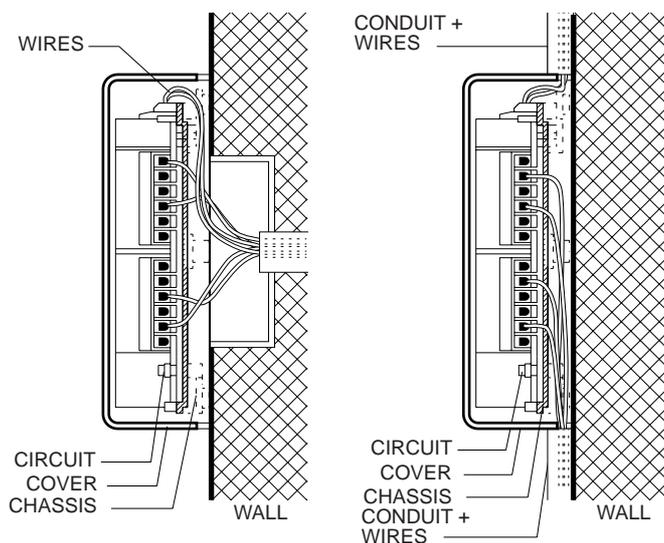
Jumper PT2: RELAY OPERATING MODE Monostable / Bistable

- Install the jumper to configure the relay to operate in monostable mode: both the 1st and 2nd codes will activate the relay for a momentary trigger action (300 ms minimum).
- Remove the jumper to configure the relay to operate in bistable mode: the 1st code will energize the relay and the 2nd code will de-energize it. In the event of a power failure, the relay will remain in the position it was in when power supply was discontinued.

Jumper PT3 - STATUS MONITORING Disabled / Enabled

In Direct Drive, remove the jumper to enable the status monitoring function for terminal "L" (as described above) or install the jumper to disable the function.
In Indirect Drive, jumper position is immaterial.

INSTALLATION



PROGRAMMING

For inspection purposes, each special services decoder unit produced by URMET DOMUS is programmed in Direct Drive mode with special service codes.

How programming is performed will depend on whether Direct Drive or Indirect Drive has been selected:

DIRECT DRIVE

Programming must be performed with the aid of an entrance panel or guard door switchboard station. Any of the usual programming methods may be used. Once the programming methods has been selected, proceed as follows:

- 1) Press the programming pushbutton (4): LED (3) will go on.
- 2) Using the keypad on the calling device (i.e., the entrance module or guard door switchboard station), enter the first special service code, observing the following rules:
 - **The special service code must be preceded by a "0". Consequently, format must be: "ONNNN"**
 - Do not use special service codes **which have already been used as door lock release codes at any entrance module in the system.**
 - Be careful when pressing keys, as digits are not shown on the display as they are entered.

Then press the call button . LED (3) will flash and then remain on.
- 3) Enter the second special service code using the same procedure described for step 2.
After the code is entered, LED (3) will flash for a few moments and then go off.
It is advisable to store **both** special service codes in memory. The two codes must be different.

INDIRECT DRIVE

Programming is performed by simulating the event that activates the relay (with reference to the sixth line in the table on the previous page, for example, the event consists of pressing the door lock release key at any doorphone in the system).

The programming procedure is as follows:

- 1) Press the programming pushbutton (4): LED (3) will go on.
- 2) Simulate the event that activates the relay. LED (3) will flash and then remain on.
- 3) Simulate the second event (which may be an activation event like the first if the relay operates in monostable mode, or a de-energization event if the relay operates in bistable mode). LED (3) will flash for a few moments and then go off.

NOTICE

To ensure that system maintenance can be efficiently performed, it is ESSENTIAL that the memorandum label (2) be filled out at the time the special services decoder unit is programmed.

OPERATION

Performance of the second-generation special services decoder unit has been significantly enhanced.

The special services decoder unit contains a monostable or bistable relay that can be driven in two different ways:

- Directly (as on the first-generation unit) after entering one or two special codes consisting of the numbers 1 through 9999 and preceded by a "0" on the entrance module or guard door switchboard station keypad.
- Indirectly, when another event occurs. Examples of such events include a call to an apartment station, a door lock release command from the switchboard station, a call to the switchboard station, etc.

The unit can be used for a wide variety of purposes: opening electric gates, turning on stair lights, arming a security system, etc.

For these functions to be correctly performed, however, the device's operating mechanism must be thoroughly understood.

The special services decoder unit memory contains two special codes (see below for programming procedure). When the decoder unit receives a code which matches one of the two codes in its memory, it actuates the poles of a double-pole relay.

This relay has two operating modes:

- In monostable mode, the relay is energized for a minimum of 300 ms whenever either of the two programmed codes is sent to the device.
- In bistable mode, the relay is energized when the first code is sent, and de-energized when the second code is sent. In the event of a power failure, the relay will remain in the position it was in when power supply was discontinued.

Whether the relay operates in direct or indirect drive mode will depend on the codes stored in memory. This will be described in detail below.

DIRECT DRIVE

In this drive mode:

- PT1: Must be in (Specific).
- PT2: Selects relay operating mode:
In → monostable
Out → bistable.
- PT3: See below.

Drive commands can be sent to the special services decoder unit by entering one of the two special codes consisting of any number between 1 and 9999 from the keypad of any entrance module or from the guard door switchboard station.

NOTE: *When entering the special code, remember that the code per se must always be preceded by a "0".*

With Direct Drive mode, jumper PT3 can be installed to add a further capability, i.e., that of monitoring the status of special decoder unit terminal "L". This terminal can be connected to any ground contact ("-24"). Whenever a special code is transmitted to the decoder unit, the status assumed by terminal "L" will be read and sent to the device which transmitted the code.

Specifically:

- If contact "L" is open, the word "OFF" will be displayed.
- If contact "L" is closed to ground ("-24"), the word "ON" will be displayed.

In addition to displaying this information, the entrance module will generate an audible signal. This signal, which will be repeated **three times**, will differ according to contact status: for OFF status, the signal consists of one short tone and one long tone (similar to an ordinary telephone dial tone), while for ON status, the signal will consist of a single short tone repeated three times (similar to a telephone busy signal).

Terminal "L" can be connected to **any** contact whose status is to be monitored.

The **specific** case in which the contact is in turn driven by the special services decoder unit's relay can be used to provide a feedback function. Here, transmitting a special code **first** activates the relay, and **then** the status of terminal "L" is read and returned to the device which transmitted the code. In the monostable operating mode, the status of terminal "L" is read after relay energization ends and a minimum of 600 ms after it began.

In the bistable operating mode, the status of terminal "L" is read a minimum of 300 ms after the relay changes state.

To ensure that the feedback function operates correctly, contact switching must in all cases take place **BEFORE** the status of terminal "L" is read. Consequently, the delays introduced by any devices installed between the relay and the contact must be less than 600 ms for the monostable operating mode, or 300 ms for the bistable operating mode.

INDIRECT DRIVE

In this drive mode:

- PT1: See below.
- PT2: Selects relay operating mode:
In → monostable
Out → bistable
- PT3: Not used.

In this drive mode, the special services decoder unit's relay is actuated at the same time that another event occurs. The table below summarizes possible cases and the required position for jumper PT1 (in = Specific, out = Generic).

Take, for example, the sixth line of the table. In this case, the decoder unit relay will be actuated, e.g., in order to turn on the stair lights, whenever the door lock release key at a "generic" apartment station is pressed following a call. In the case contemplated in the fifth line, on the other hand, the relay will be actuated ONLY when the door lock release key is pressed at the specific apartment station identified by code "NNNN", and not when the key is pressed at other apartment stations.

EVENT	FROM:	TO:	PT1
Call	Entrance Panel or Switchboard Station	Specific Apartment Station	in
Call	Entrance Panel or Switchboard Station	Generic Apartment Station	—
Call	Specific Apartment Station	Switchboard Station	in
Call	Generic Apartment Station	Switchboard Station	—
Door lock release	Specific Apartment Station	Any Entrance Panel	in
Door lock release	Generic Apartment Station	Any Entrance Panel	—
Door lock release	Switchboard Station	Specific Entrance Panel	in
Door lock release	Switchboard Station	Generic Entrance Panel	—

SPECIAL SERVICES DECODER UNIT APPLICATION DIAGRAMS

A) ACTUATING SPECIAL SERVICES VIA A MOMENTARY TRIGGER ACTION

(Turning on stair lights, opening electric gates, etc.)

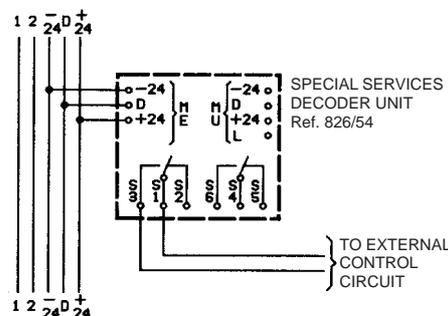
Description:

This application is used in cases where momentary closing of a contact is sufficient to actuate a given service.

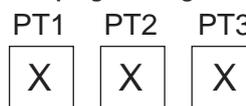
In a timer-controlled stair lighting system, for instance, the special services decoder unit contact can be connected in parallel with a pushbutton in order to turn on the lights when a code is entered at the keypad of any entrance module or the guard door switchboard station.

The special services decoder unit operates with two codes. In this case, then, the lights can be turned on by entering either the first code or the second (lights will be turned off by the timer).

Connection:



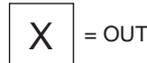
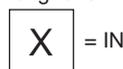
Jumper settings and programming:



Program the 2 special service codes, carefully following the instructions provided in the section headed "Programming - Direct Drive", steps 1, 2 and 3.

Thus, when one of the two codes (preceded by a zero) is entered via the entrance panel or switchboard station keypad and the call button is pressed to transmit the code, the relay will be energized for approximately 300 ms, switching the pole contacts and actuating the associated service.

The display will show the word "OFF" and the entrance module will generate an audible signal consisting of one short tone and one long tone. This signal will be repeated three times.



B) ACTUATING SPECIAL SERVICES VIA A MOMENTARY TRIGGER ACTION WITH ACTUATION FEEDBACK

(Turning on stair lights, opening electric gates, etc.)

Description:

This application is similar to the one described above, except that a feedback signal confirming that the service has been actuated is received at the device (i.e., the entrance module or guard door switchboard station) where the special service code was entered.

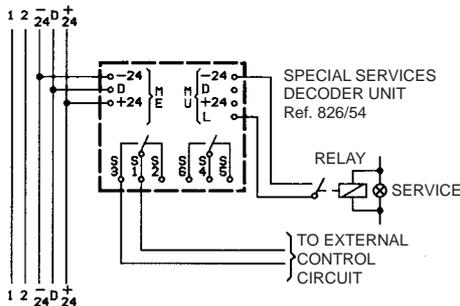
For example, an electric driveway gate can be opened by entering the special service code on the keypad of the entrance module near the driveway, where the display will show the word "ON" to

confirm that the gate is opening. In the event of gate malfunction, the word "OFF" will appear on the display. No message will be shown if an incorrect code is entered. In addition to the "ON" and "OFF" messages, the entrance module speaker unit will generate two distinctive audible signals.

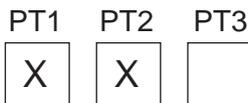
For "OFF" status, the signal consists of one short tone and one long tone, while for "ON" status the signal will consist of a single short tone repeated three times.

The special services decoder unit operates with two codes. In this case, then, the gate can be opened by entering either the first code or the second (the gate will be closed automatically by its electronic control unit).

Connection:



Jumper settings and programming:



Program the 2 special service codes, carefully following the instructions provided in the section headed "Programming - Direct Drive", steps 1, 2 and 3.

C) ACTUATING SPECIAL SERVICES VIA AN ON-OFF COMMAND

(Turning stair lights on and off, opening and closing electric gates, arming and disarming security systems, etc.).

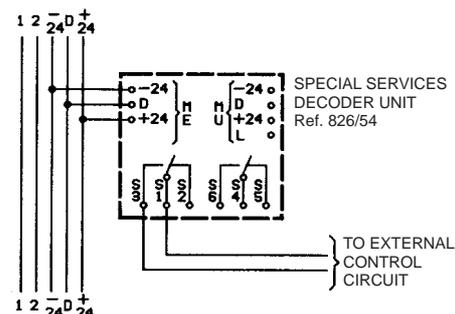
Description:

This application is used in cases where a actuating a given service calls for closing a contact so that it assumes steady-state make status.

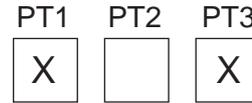
For example, stair lights can be turned on and off by entering the two associated codes on the keypad of any entrance module or at the guard door switchboard station.

The special services decoder unit operates with two codes. In this case, the first code will turn on the lights, and the second will turn them off.

Connection:



Jumper settings and programming:



Program the 2 special service codes, carefully following the instructions provided in the section headed "Programming - Direct Drive", steps 1, 2 and 3.

Thus, the special services decoder unit relay is energized when the first code is entered via the entrance panel or switchboard station keypad and the call button ▲ is pressed. The relay will be de-energized only when the second code is transmitted.

When either of the codes is transmitted, the display will show the word "OFF" and the entrance module will generate an audible signal consisting of one short tone and one long tone. This signal will be repeated three times.

D) ACTUATING SPECIAL SERVICES VIA AN ON-OFF COMMAND WITH ACTUATION FEEDBACK

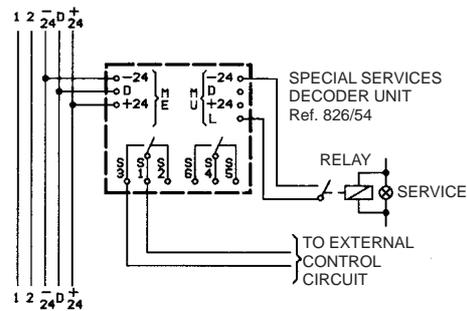
(Turning stair lights on and off, opening and closing electric gates, arming and disarming security systems, etc.).

Description:

This application is similar to the one described above, except that a feedback signal confirming that the service has been actuated is received at the device (i.e., the entrance module or guard door switchboard station) where the special service code was entered. Thus, this application differs from the previous one in that the display at the entrance module or switchboard station will show the word "ON" to confirm that the lights have been turned on as a result of entering the first code. When the second code is transmitted to turn off the lights, the word "OFF" will appear on the display.

No message will be shown if an incorrect code is entered. In addition to the "ON" and "OFF" messages, the entrance module speaker unit will generate two distinctive audible signals.

Connection:



Jumper settings and programming:



Program the 2 special service codes, carefully following the instructions provided in the section headed "Programming - Direct Drive", steps 1, 2 and 3.

Thus, the special services decoder unit relay is energized when the first code is entered via the entrance panel or switchboard station keypad and the call button ▲ is pressed, switching the pole contacts and actuating the associated service. The desired light will go on, simultaneously energizing the parallel relay, whose contact will close terminal L to ground.

The display will show the word "ON" to confirm that the service has been actuated and the entrance module will generate an audible signal consisting of a single short tone repeated three times. To deactivate the service, enter the second code on the keypad and press the call button ▲: the special services decoder unit will be de-energized and the service will return to inactive status. The light

will go off, thus breaking the parallel relay circuit and opening the associated contact.

The display will show the word "OFF" and the entrance module will generate an audible signal consisting of one short tone and one long tone. This signal will be repeated three times.

E) MONITORING THE STATUS OF A DEVICE

(checking whether parts are energized, lights are on, a gate or door is open or closed, a security system is armed or disarmed, etc.).

Description:

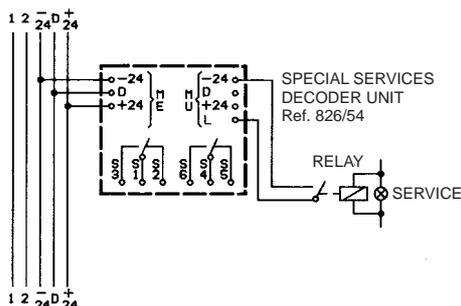
This application is used in cases where it is only necessary to check the status of a device, querying it by entering a code at an entrance module or the guard door switchboard station.

For this purpose, the device to be monitored must be provided with a "clean" contact to which the special services decoder unit can be connected. The status of this contact (i.e., open or closed) must correspond to a specific condition.

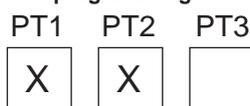
For example, to check whether the lights in a certain area are on, they must be connected in parallel to a relay, which will close its contact when the lights are on and open it when they are off. Similarly, if a door's open/closed status is to be monitored, it will be necessary to install a switch such as those used in security systems.

The special services decoder unit operates with two codes. In this case, then, the device can be queried by entering either the first code or the second.

Connection:



Jumper settings and programming:



Program the 2 special service codes, carefully following the instructions provided in the section headed "Programming - Direct Drive", steps 1, 2 and 3.

Thus, when one of the two codes (preceded by a zero) is entered via the keypad and the call button is pressed to transmit the code, the word "ON" will appear on the display if the contact is closed and the entrance module will generate an audible signal consisting of one short tone and one long tone. This signal will be repeated three times.

F) ACTUATING SPECIAL SERVICES VIA A MOMENTARY TRIGGER ACTION

(Turning on stair lights, opening electric gates, etc.).

Description:

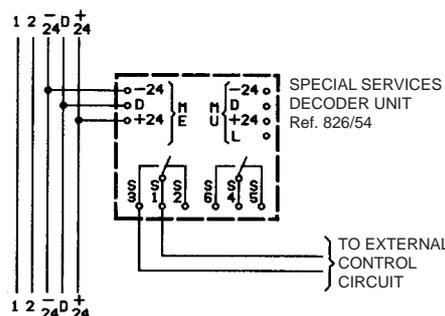
This application is possible only in systems with no guard door switchboard station.

It is used in cases where it is necessary to actuate a given service which is shared by the entire system from any apartment station by pressing the Call Switchboard key.

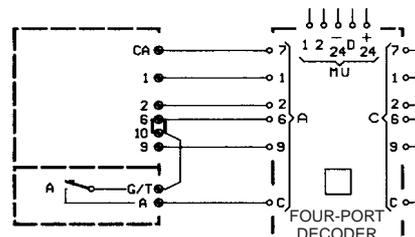
For example, the service can consist of opening an electric driveway gate which is shared by all residents.

In this case, the special services decoder unit relay will be momentarily energized when any resident presses key A.

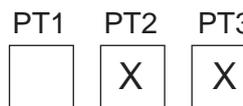
Connection:



The apartment station key must be connected to terminal C on the four-port decoder:



Jumper settings and programming:



Program the 2 special service codes, carefully following the instructions provided in the section headed "Programming - Indirect Drive", steps 1, 2 and 3.

During programming, the first code must be simulated by pressing key A on any doorphone, while the second code must be simulated by pressing key A on another doorphone (not the same doorphone).

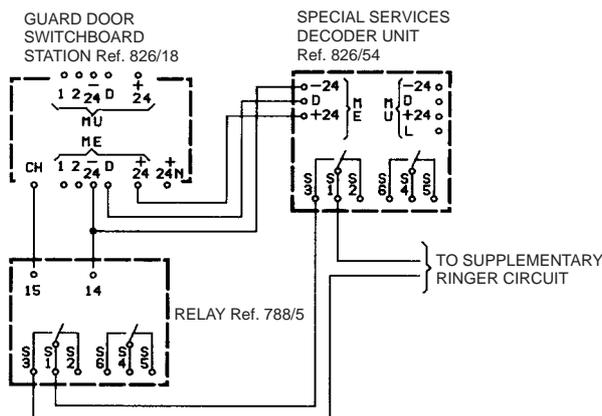
G) ACTUATING A SUPPLEMENTARY GUARD DOOR SWITCHBOARD STATION RINGER

Description:

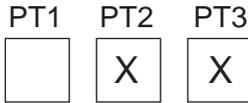
This application is used when the guard door switchboard station is equipped with a supplementary ringer which can be heard outside, or when the switchboard station is provided with LEDs or the like to indicate whether a call originates from an outdoor or indoor station. The supplementary ringer can be actuated in three ways:

- 1) To ring only for calls originating from main entrance panels.
- 2) To ring only for calls originating from apartment stations.
- 3) To ring for all calls.

Connection for case 1):



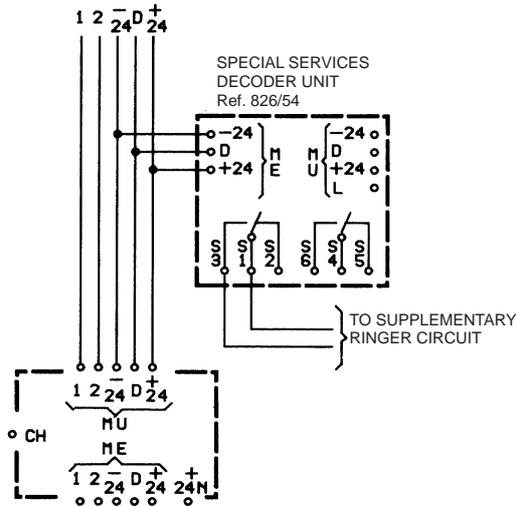
Jumper settings and programming:



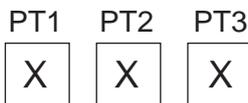
Program the 2 special service codes, carefully following the instructions provided in the section headed "Programming - Indirect Drive", steps 1, 2 and 3.

Programming must be performed by making two calls (thus transmitting the first and second codes) to two different apartment stations from any main entrance panel.

Connection for case 2):



Jumper settings and programming:

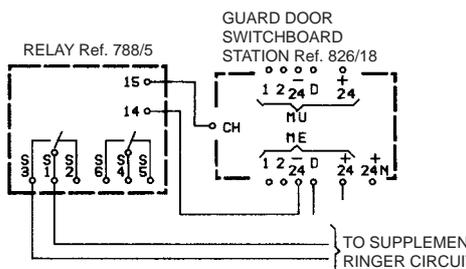


Program the 2 special service codes, carefully following the instructions provided in the section headed "Programming - Indirect Drive", steps 1, 2 and 3.

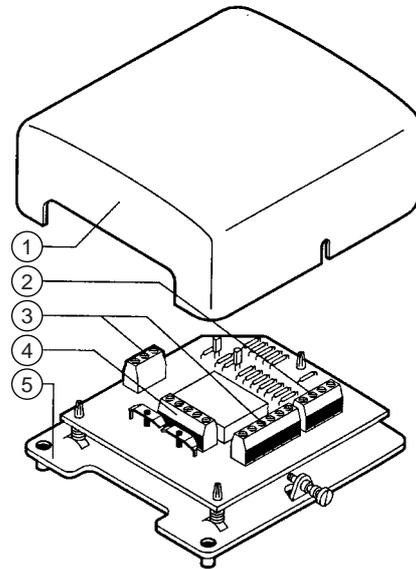
During programming, the first code must be simulated by pressing key A on any doorphone, while the second code must be simulated by pressing key A on another doorphone (*not* the same doorphone).

Connection for case 3):

NOTE: Special services decoder unit 826/54 is not used in this case.



RELAY FOR SPECIAL VIDEO DOORPHONE SYSTEMS Ref. 1032/9



Relay Ref. 1032/9 can be used in special Scaibus System installations with 12 V DC power supply, or in second-generation Model 826 Digital Call System installations with 24 V DC power supply.

The relay consists of the following:

- Shock-proof plastic wall mounting cover (1).
- Circuit with four-pole switching relay and connection terminal blocks (2,3,4)
- Base (5).

SPECIFICATIONS

Operating voltage:	12V DC +/- 10%
	24 V DC +/- 10%
Stand-by current draw:	4 mA
Current draw with relay energized:	27 ma
Service temperature range:	-10°C to 45°C
Maximum switching voltage rating:	24 V DC
Maximum switching current rating:	2A DC

Dimensions in mm:

Width	79
Height	87
Thickness	43

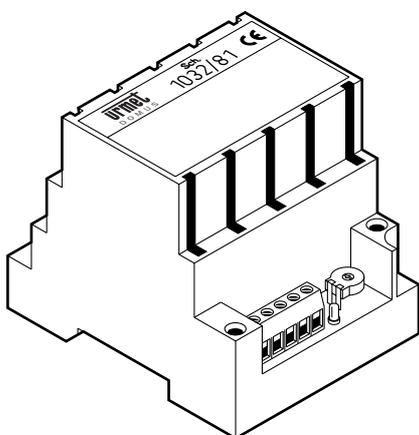
OPERATION

Relay is energized when terminals Ra and Rb are closed to ground (-12V or -24V) at the same time.

There are four independent relay poles.

Pole V features provision for switching a video system coaxial cable.

MULTI-PURPOSE ELECTRIC LOCK TIMER
Ref. 1032/81



FEATURES

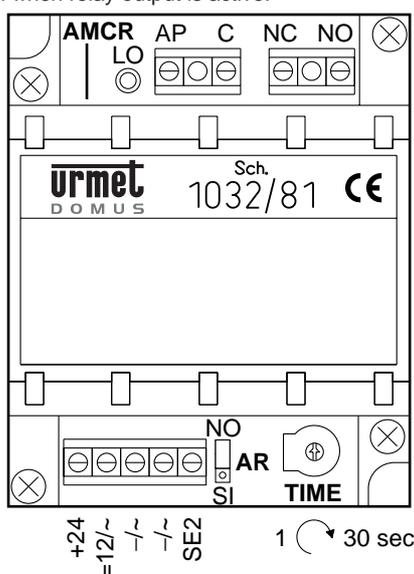
Timer 1032/81 is used to control electric locks in SCAIBUS system installations or second-generation Model 826 Digital Call System installations. It is interfaced with the corresponding entrance module in order to control the following types of electric lock:

- Direct activation via capacitive discharge.
- Activation via capacitive discharge and 150 mA holding current.
- Electric security locks.

DIAGNOSTICS LED

The timer is provided with a LED to diagnostics during installation, two jumpers used for timer configuration, and a trimmer used to set relay output actuation time.

- LED LI:** On when input SE2 is active.
- LED LO:** On when relay output is active.



JUMPERS AND CONFIGURATIONS

- AR:** Recycle enabling.
- AMCR:** Relay common ground enabling.
- TIME:** Output relay de-energizing delay trimmer. For maximum delay, turn trimmer clockwise.

Note: When operating with jumper AR in "NO" position, the timer will activate relay output upon receiving a command via input "SE2" only for the time set by means of the trimmer, regardless of whether or not the input signal persists.
When operating with jumper AR in "YES" position, the timer will activate relay output at least for the time set by means of the trimmer: if input "SE2" signal persists beyond this time, the output will continue to remain active.

TERMINAL DESIGNATIONS

- +24 :** Power supply input, 22 to 27 V DC
- +12/~ :** Power supply input, 10 to 15 V DC or 10 to 15 V AC
- /~ :** Power supply common
- /~ :** Power supply common
- SE2 :** Timer control input; power supply common
- AP :** Door lock release output
- NO :** Normally open contact
- NC :** Normally closed contact
- C :** Common to both contacts; normally connected to power supply common

SPECIFICATIONS

Power supply voltage at +24:	22 to 27 V DC
Power supply voltage at +12/~:	10 to 15 V DC/AC
Direct current output from AP:	125 to 170 mA
Consumption in load units (LU):	20 LU
Timer range:	1 to 30 sec ± 20%
Service temperature range:	-10 to 45°C
Maximum resistive load switching capacity:	10 A with 24 V DC / 10 A with 120 V AC
Maximum switching voltage:	40 V AC / 110 V DC
Maximum resistive switching capacity:	1400 VA with 240 V AC / 300 W with 110 V DC
Minimum applicable load:	10 mA with 5 V DC
Maximum current draw at 12 V DC:	200 mA

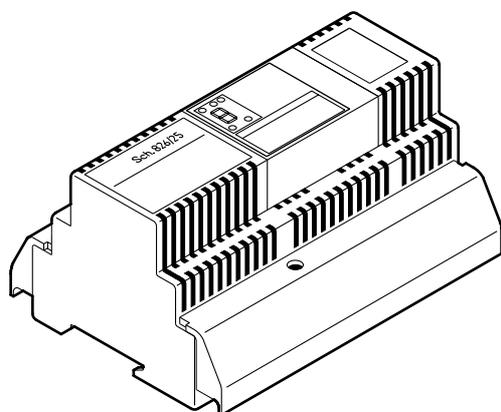
Dimensions

Length:	72 mm (four 18 mm modules)
Width:	90 mm
Height:	75 mm

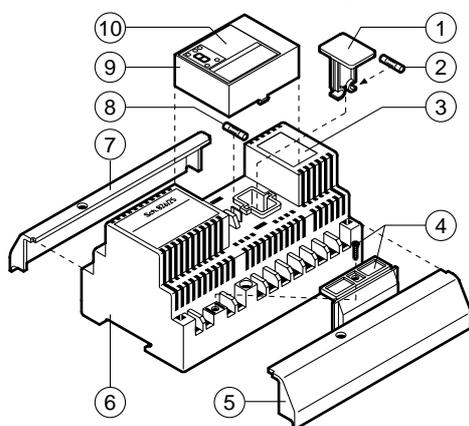
INSTALLATION

The timer can be installed on a DIN rail, or can be wall mounted using screws and wall plugs (not provided with the unit).

POWER SUPPLY UNIT FOR INSTALLATION ON DIN RAIL Ref. 826/25



The power supply unit consists of the following:



- Holder (1) with fuse (2).
- Transparent cover for display and LED (3).
- Plastic mains terminal guard (4).
- Mains inlet and data line terminal block cover (5) and output terminal block cover (7).
- Self-extinguishing plastic container designed for installation on DIN 46277 rail or wall mounting with screws and wall plugs (6).
- Spare fuse (8).
- Transparent fuse cover (9).
- Error code label (10).

SPECIFICATIONS

Power supply:	110/230/240 ±10%
Output voltage:	24V DC + 5% / -10%
Output current rating:	0.7A max.
Fuse:	1.6A, time delay
Service temperature range:	-10 °C to 45 °C
Overall dimensions:	l 162 x h 118 x d 75 mm

The power supply unit can be installed on a DIN 46277 rail, or can be wall mounted using screws and wall plugs. The power supply unit's 162 mm length corresponds to nine 18 mm modules as per DIN 43880.

OPERATION

The power supply unit is sized for a typical system configuration consisting, for example, of the following:

- One entrance module 826/11 or 826/55 and fifteen to twenty four-port decoders (826/23), or
- One entrance module 826/11 or 826/55 and twenty to twenty-five single-port doorphone decoders (826/14).

Complex systems can be set up using two or more power supply units, EACH OF WHICH SUPPLIES A SEPARATE GROUP OF DEVICES THROUGH OUTPUT TERMINAL +24.

WARNING

NEVER CONNECT TWO OR MORE POWER SUPPLY UNITS IN PARALLEL: ADHERE STRICTLY TO THE INSTALLATION DIAGRAMS.

For example, in a system with one or more main entrance modules, a guard door switchboard station and one or more riser cables, each with its associated secondary entrance module, it will be necessary to use:

- One power supply unit for each pair of main entrance modules.
- A dedicated power supply unit for the guard door switchboard station.
- One power supply unit for each riser cable (one secondary entrance module and 20 four-port decoders).

The following rule of thumb can be used to calculate the maximum number of devices that can be connected to each power supply unit.

- 1) Each device can be classified according to its consumption in load units (LUs). One load unit is equivalent to the load of one single-port doorphone decoder 826/14.
- 2) The consumption in load units (LUs) of all devices in the system is listed below:

Entrance module Ref. 826/65:	22 LU
Digitizer with speaker unit Ref. 826/16 + speaker unit:	15 LU
Digitizer without speaker unit Ref. 826/16:	3 LU
Guard door switchboard station Ref. 826/18:	20 LU
Four-port decoder Ref. 826/23:	1.5 LU
Single-port doorphone decoder Ref. 826/14:	1 LU
Bracket with single-port decoder for Scout monitor Ref. 1204/94:	1 LU
Special services decoder unit Ref. 826/54:	3.5 LU
Relay Ref. 1032/9:	3 LU

- 3) Each power supply unit can be connected to a maximum of 55 Load Units.

Example: 1 entrance module (25 LU) + 20 four-port decoders (20 x 1.5 = 30) → 25 + 30 = 55 ≤ 55 OK

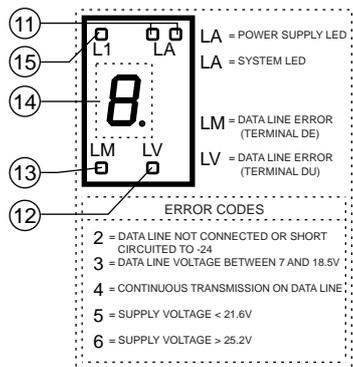
or: 2 Entrance modules (2 x 25 = 50) → 50 ≤ 55 OK

or: 1 Digitizer (15) and 16 single-port decoders (16 x 1 = 16) → 15 + 16 = 31 ≤ 55 OK

POWER SUPPLY UNIT DISPLAY AND LEDS

The power supply unit is provided with a display and 5 LEDs which provide information for the installer.

- (11) Two power supply LEDs (LA), 1 red and 1 green.
- (12) One red downstream LED (LV).
- (13) One red upstream LED (LM)
- (14) Seven-segment red display.
- (15) One yellow system LED (LI).



The pair of red and green LEDs designated LA (11) provide the following information:

- Both off: There is no output voltage. This may be caused by a mains power outage, fuse cut-in, failure or malfunction.
- Green LED on: Normal operation.
- Both LEDs cycle on and off, with the red LED on for approximately 5 seconds, followed by green LED activation for approximately 30 seconds: There is a problem on the **downstream** data line (terminal "DU") as a result of a type 2, 3, or 4 error, or supply voltage is below 18.5 V DC (see below).

NOTE: When the power supply unit is supplied from mains, red LED LA will go on. After approximately 5 seconds, it will go off and the green LED will go on. This is normal, and should not be confused with the on/off cycling described above.

System LED LI (15), can be used to check that system wiring has been correctly installed. To do so, proceed as follows:

- Remove the fuse so that LED LA goes off.
- Watch yellow LED LI: if it goes on, another power supply unit has been connected in parallel with the unit being examined. Check and correct wiring.

Red downstream LED LV (12) will go on to indicate that the type of fault shown on the display has been detected on the downstream data line (terminal "DU") and that the output data line (terminal "DU") is not connected to the input data line (terminal "DE").

Red upstream LED LM (13) will go on to indicate that the type of fault shown on the display has been detected on the upstream data line (terminal "DE") and that the output data line (terminal "DU") is not connected to the input data line (terminal "DE").

The display (14) is used to indicate the error codes for problems detected on the data line.

The following error codes can be displayed:

Code	Description
2	Indicates that data line voltage is between 0 and 7 V DC, for example because of a short circuit across the data line and "-24".
3	Indicates that data line voltage is between 7 and 18.5 V DC: below the minimum threshold required for normal operation.
4	Indicates that the data line is engaged in continuous transmission.
5	Indicates that supply voltage is below 21.6 V DC (24 V DC -10%). NOTE: If supply voltage is below 18.5 V, the power supply unit will discontinue power output for 5 seconds out of every 30 in addition to displaying error code 5.
6	Indicates that supply voltage is above 25.2 V DC (24 V DC + 5%).

ERROR CODE MEMORY

The decimal point on the display will flash to indicate that one or more error codes have been stored in memory.

This may occur in the following situations:

- **During normal operation** (no error codes will be shown on the display).
 In this case, the power supply unit has detected a temporary problem. In other words, the cause which generated the error has ceased in the meantime.
- **When an error code is shown on the display.**
 Further errors codes in addition to that shown on the display have been stored in memory. These codes may be the same as that on the display, or may differ.

To view codes in memory, **short circuit conductor pads "M" and "-24" for at least 2 seconds.**

This operation produces the following effects:

- The decimal point will go off.
- The display will show all codes in memory in succession, at intervals of approximately 2 seconds
- For type 2, 3 and 4 errors, LED LM or LV will go on to indicate whether the problem is located on the upstream or downstream line.

After showing all errors in memory, the display will return to its previous condition and the decimal point will resume flashing.

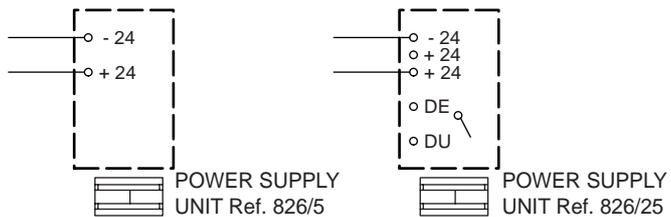
NOTE: To delete error codes from memory, remove and then reinstall the fuse.

USE IN 1ST GENERATION SYSTEMS

The power supply unit is provided with a second output terminal designated "+ 24SP" which can be used **ONLY** when power supply unit 826/25 is installed in a first-generation system in order to replace an 826/5 unit.

In first-generation systems, two or more power supply units can be connected in parallel by using terminal "+ 24SP".

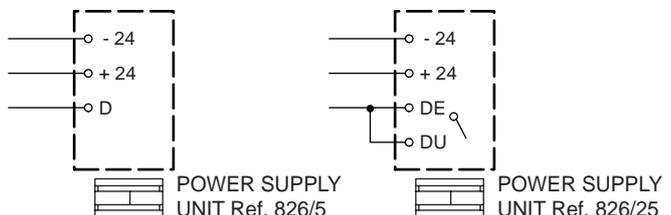
In this case, the data line must not be connected to terminals "DE" and "DU", while conductor +24 must be connected to terminal + 24SP. Under these conditions, LEDs LA and LI should be disregarded, as they do not provide meaningful information.



USE IN 2ND GENERATION SYSTEMS TO REPLACE A POWER SUPPLY UNIT Ref. 826/15

If power supply unit 826/25 is used to replace power supply unit 826/15, connect the data line to terminal "DE" and make a jumper connection between terminals "DE" and "DU".

In such cases, type 2, 3 or 4 errors detected on the data line will cause both LEDs LM and LV to go on.



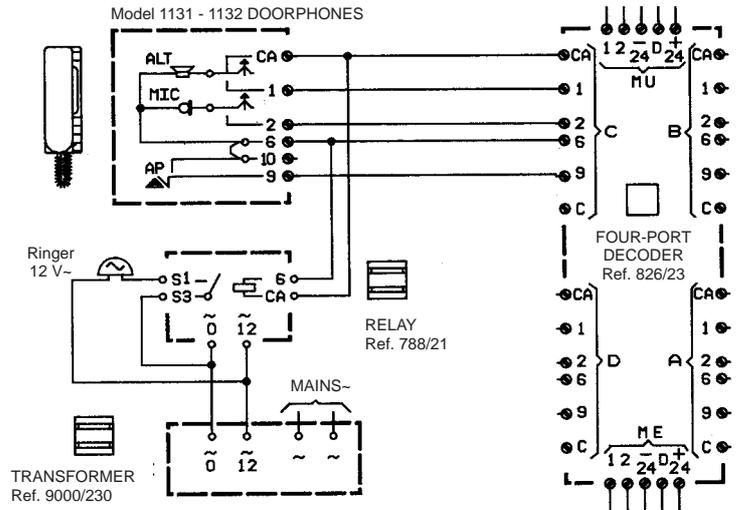
PARALLEL CONNECTIONS

**RING REPEATER RELAY CONNECTION
PARALLEL CONNECTION BETWEEN 2 Model 1131 DOORPHONES OR 2
Model 1130 DOORPHONES**



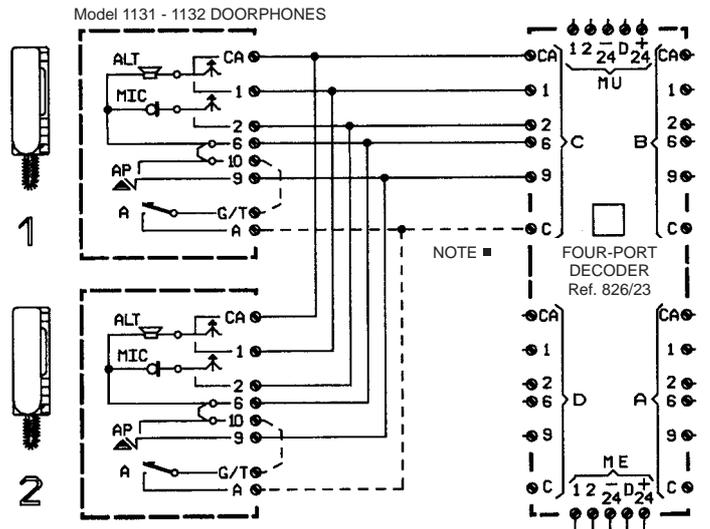
ONE RING REPEATER RELAY CONNECTED
IN PARALLEL WITH Model 1131 or Model
1132 DOORPHONE TO CONTROL A
SUPPLEMENTARY RINGER

DIAGRAM SC101-0712



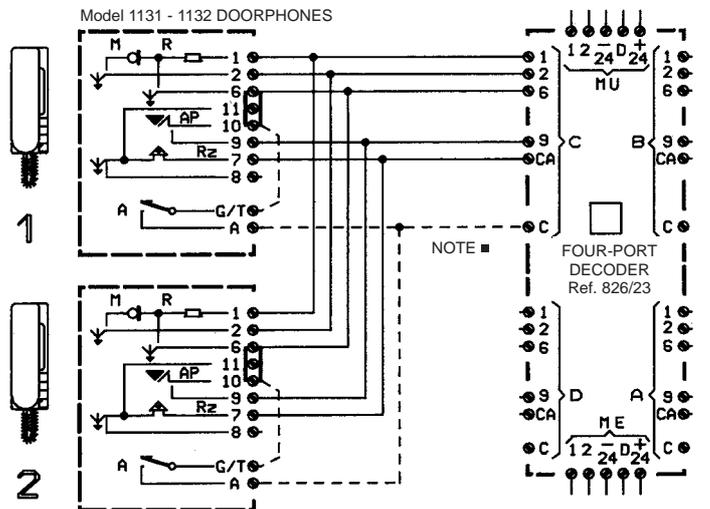
PARALLEL CONNECTION BETWEEN 2
Model 1131 / 1132 DOORPHONES

DIAGRAM SC101-0707



PARALLEL CONNECTION BETWEEN
2 Model 1130 DOORPHONES

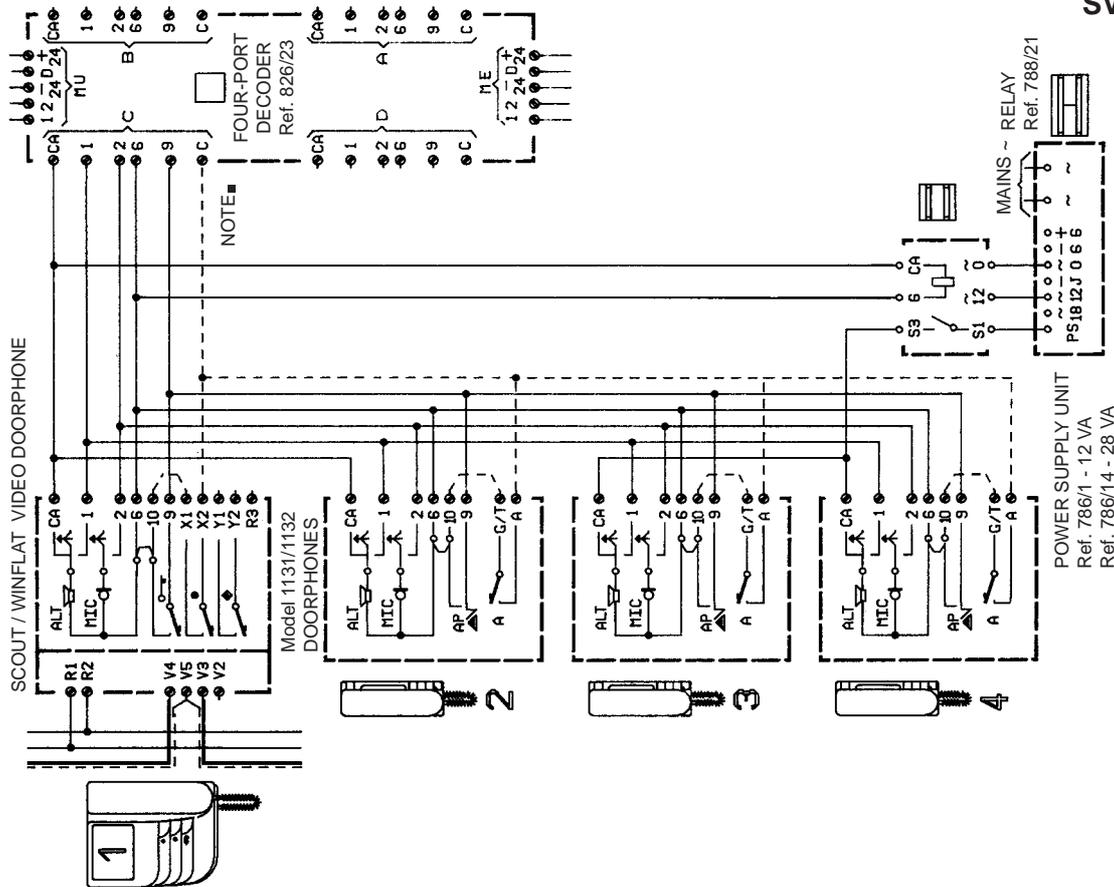
DIAGRAM SC101-0708



NOTE ■: Connection represented by dash line applies only to systems with guard door switchboard station. In this case, doorphones will be equipped with key A.

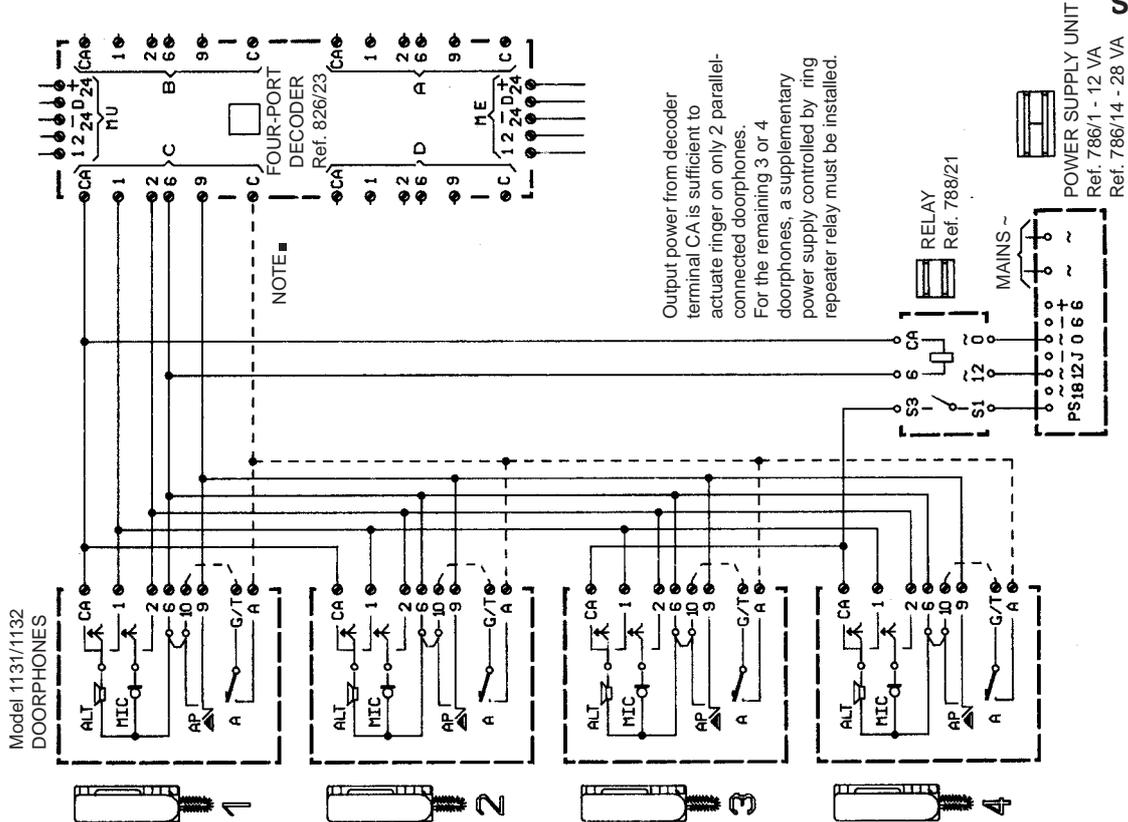
PARALLEL CONNECTION BETWEEN 1 SCOUT / WINFLAT VIDEO DOORPHONE AND 3 MODEL 1131 / 1132 DOORPHONES

SV102-1563



PARALLEL CONNECTION BETWEEN 4 MODEL 1131 / 1132 DOORPHONES

SC101-0709



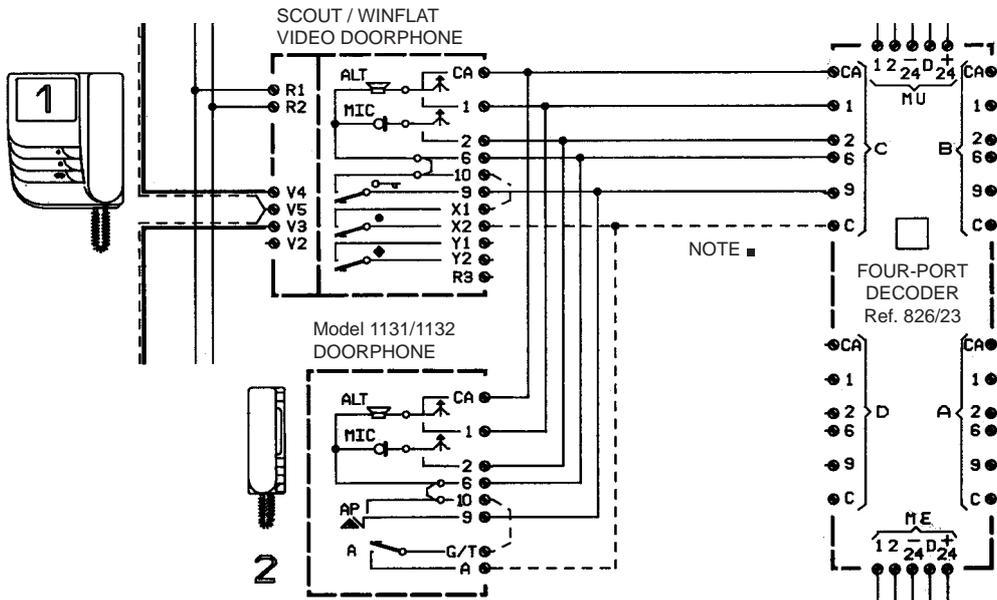
NOTE ■: Connection represented by dash line applies only to systems with guard door switchboard station. In this case, doorphones will be equipped with key A.

PARALLEL CONNECTION BETWEEN 1 SCOUT VIDEO DOORPHONE AND 1 Model 1131 DOORPHONE
 PARALLEL CONNECTION BETWEEN 2 SCOUT VIDEO DOORPHONES



PARALLEL CONNECTION BETWEEN 1 SCOUT / WINFLAT VIDEO DOORPHONE AND 1 MODEL 1131 / 1132 DOORPHONE

SV102-1538

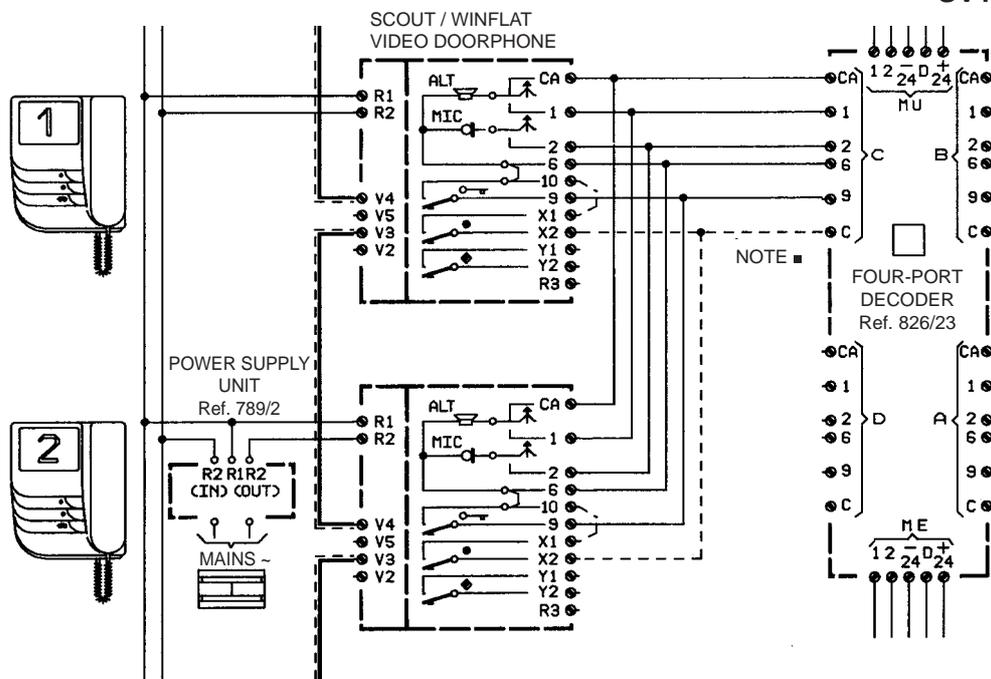


NOTE ■ Connection represented by dash line applies only to systems with guard door switchboard station. In this case, doorphones will be equipped with key A.

PARALLEL CONNECTION BETWEEN 2 SCOUT / WINFLAT VIDEO DOORPHONES

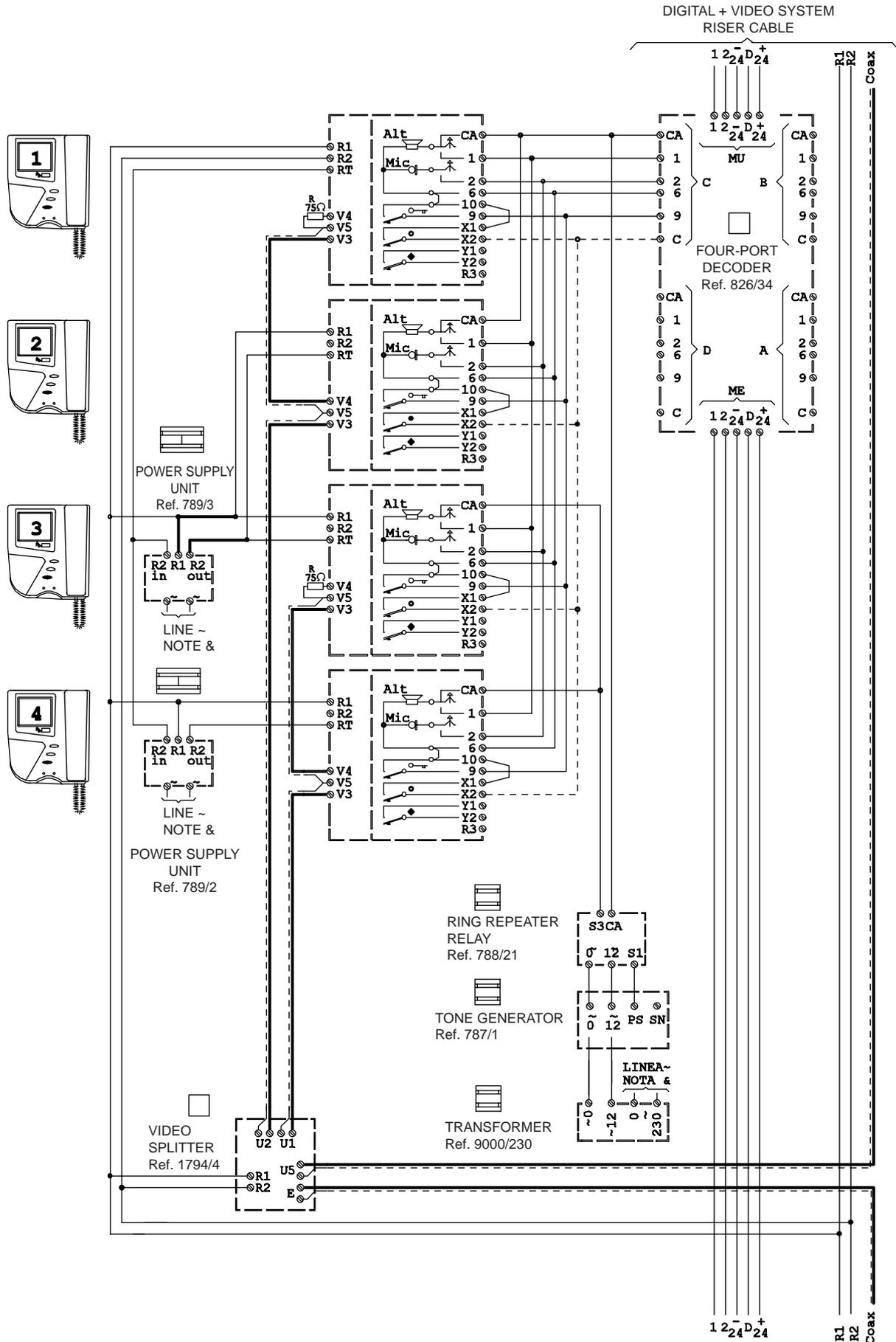
SV102-1539

The second video doorphone must be supplied by supplementary power supply unit Ref. 789/2.



NOTE ■ Connection represented by dash line applies only to systems with guard door switchboard station.

SC124-0003A

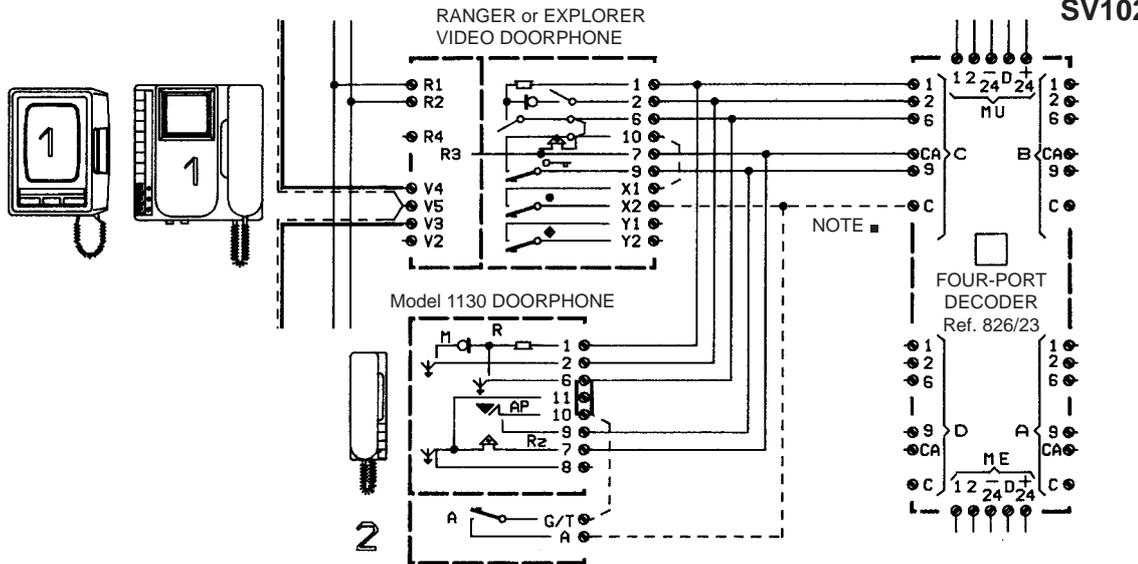


PARALLEL CONNECTION BETWEEN 1 EXPLORER OR RANGER VIDEO DOORPHONE AND 1 Model 1130 DOORPHONE
 PARALLEL CONNECTION BETWEEN 2 RANGER VIDEO DOORPHONES
 PARALLEL CONNECTION BETWEEN 2 EXPLORER VIDEO DOORPHONES



PARALLEL CONNECTION BETWEEN 1 EXPLORER OR RANGER VIDEO DOORPHONE AND 1 Model 1130 DOORPHONE

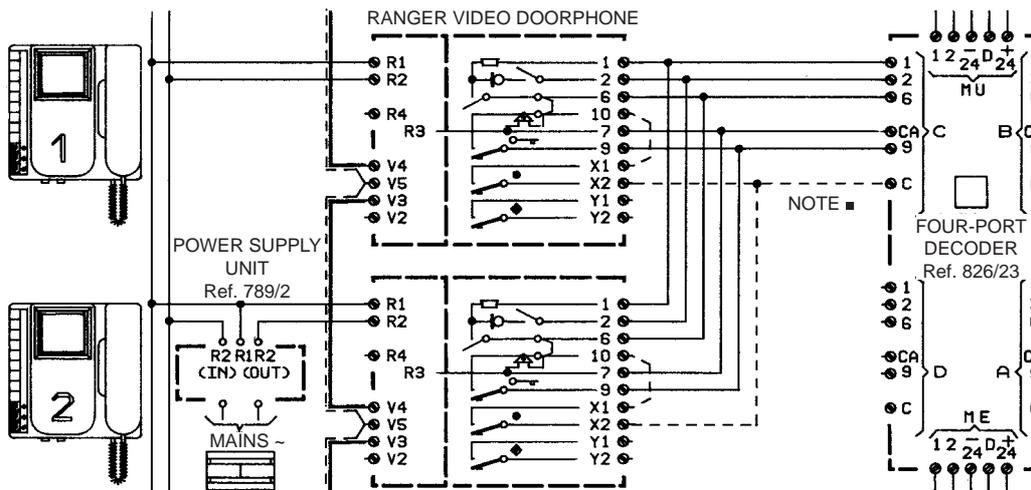
SV102-1540



PARALLEL CONNECTION BETWEEN 2 RANGER VIDEO DOORPHONES

SV102-1561

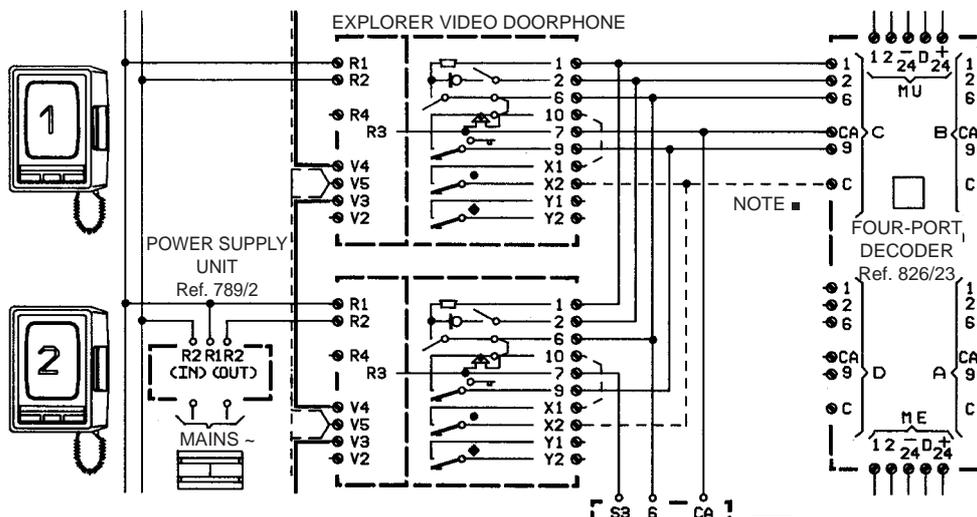
The second video doorphone must be supplied by supplementary power supply unit Ref. 789/2.



PARALLEL CONNECTION BETWEEN 2 EXPLORER VIDEO DOORPHONES

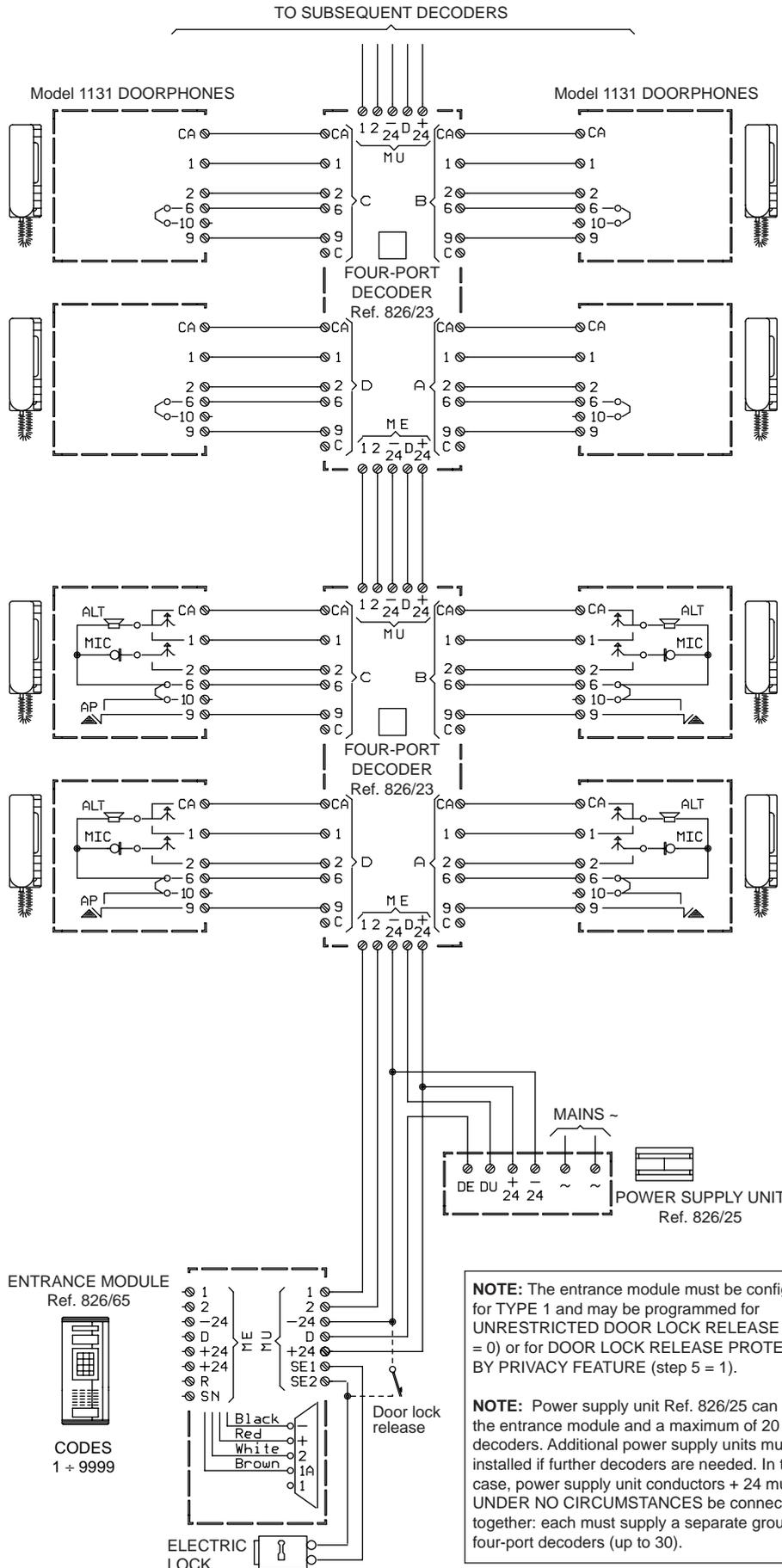
SV102-1562

The second video doorphone must be supplied by supplementary power supply unit Ref. 789/2.



NOTE ■: Connection represented by dash line applies only to systems with guard door switchboard station.

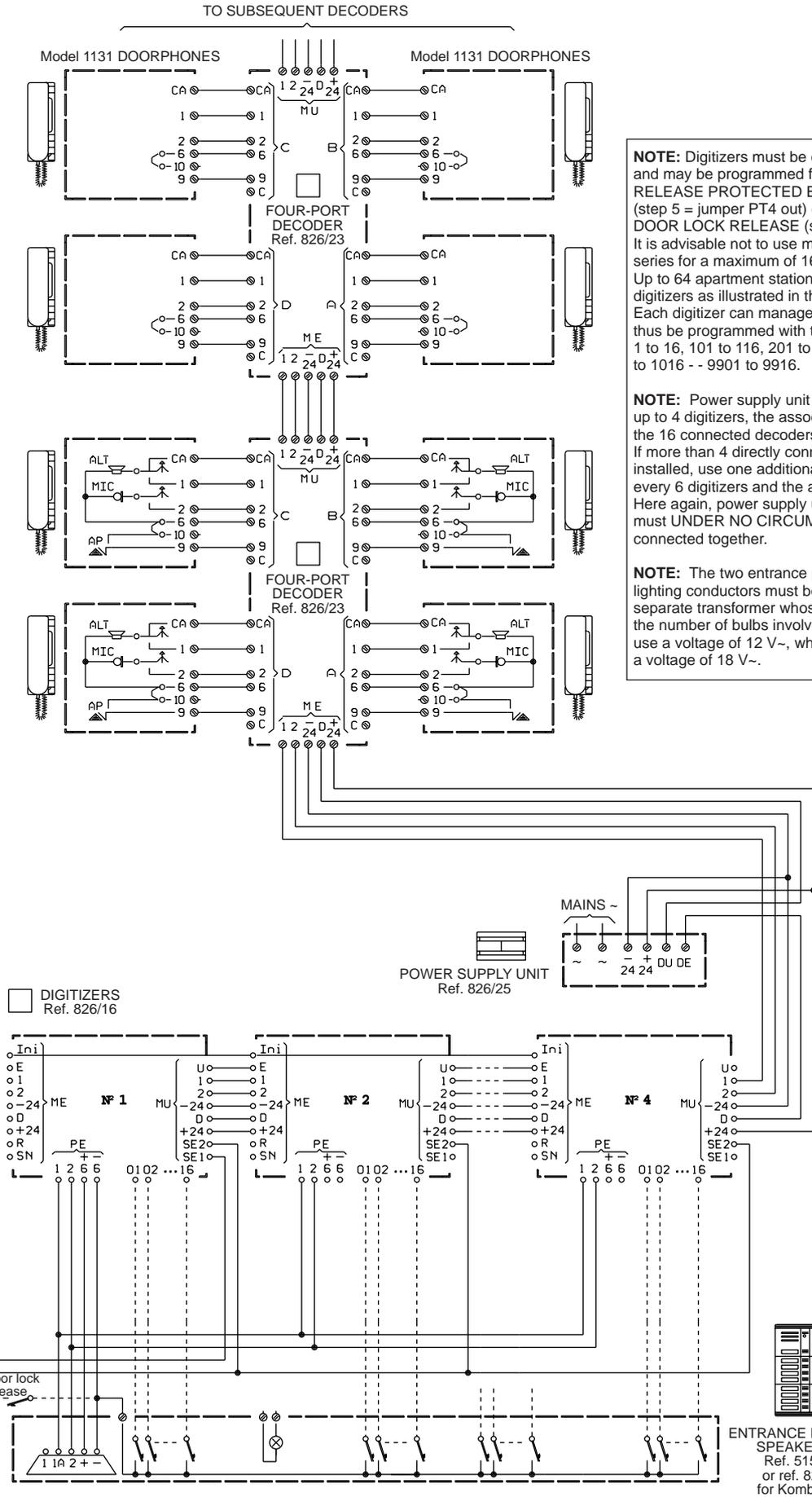
DOORPHONE SYSTEMS



NOTE: The entrance module must be configured for TYPE 1 and may be programmed for UNRESTRICTED DOOR LOCK RELEASE (step 5 = 0) or for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE (step 5 = 1).

NOTE: Power supply unit Ref. 826/25 can supply the entrance module and a maximum of 20 decoders. Additional power supply units must be installed if further decoders are needed. In this case, power supply unit conductors + 24 must UNDER NO CIRCUMSTANCES be connected together: each must supply a separate group of four-port decoders (up to 30).

SC101-0658

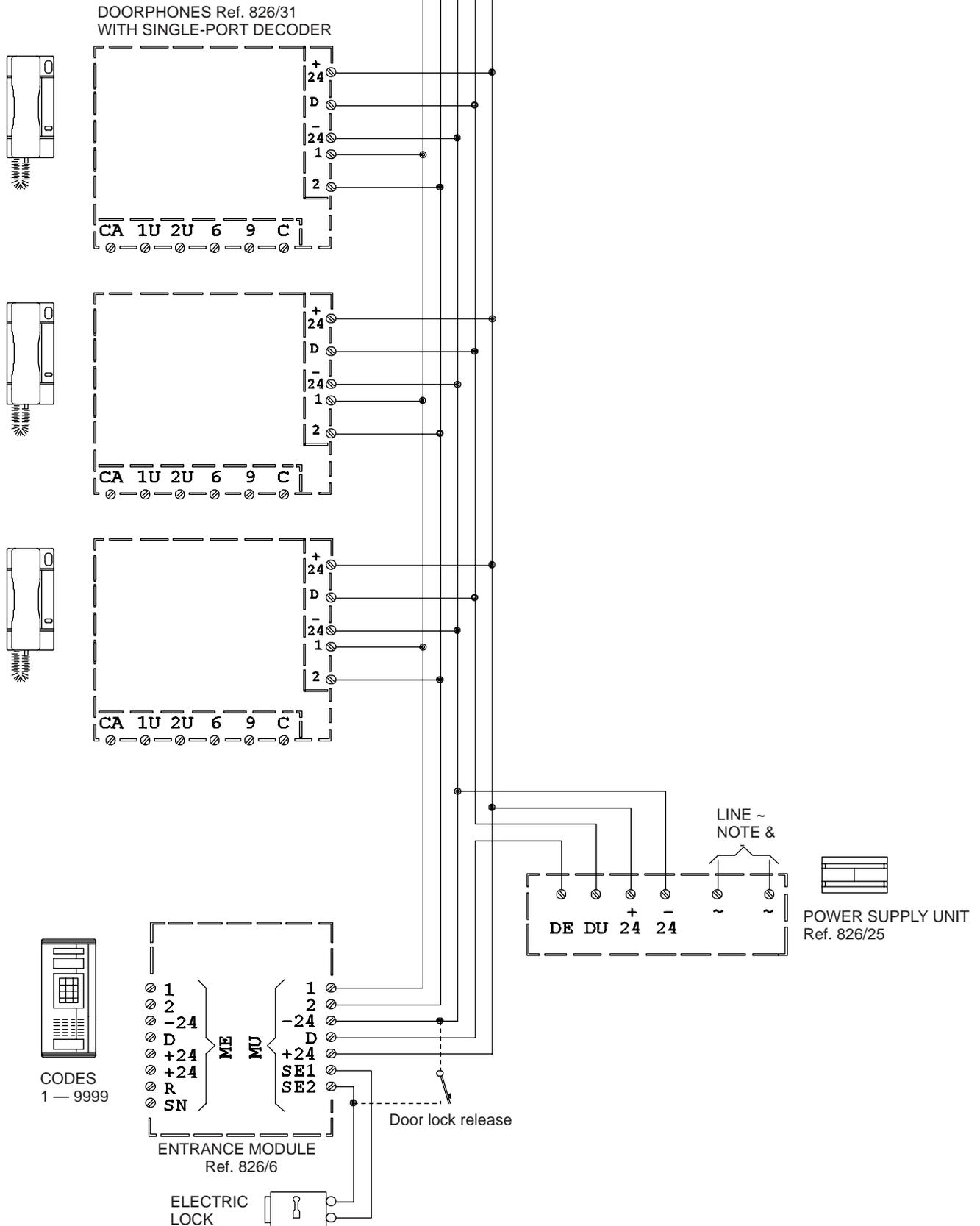


NOTE: Digitizers must be configured for TYPE 1 and may be programmed for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE (step 5 = jumper PT4 out) or UNRESTRICTED DOOR LOCK RELEASE (step 5 = jumper PT4 in). It is advisable not to use more than 10 digitizers in series for a maximum of 160 doorphones. Up to 64 apartment stations can be served with 4 digitizers as illustrated in the diagram. Each digitizer can manage 16 doorphones and can thus be programmed with the following codes: 1 to 16, 101 to 116, 201 to 216 - - 901 to 916, 1001 to 1016 - - 9901 to 9916.

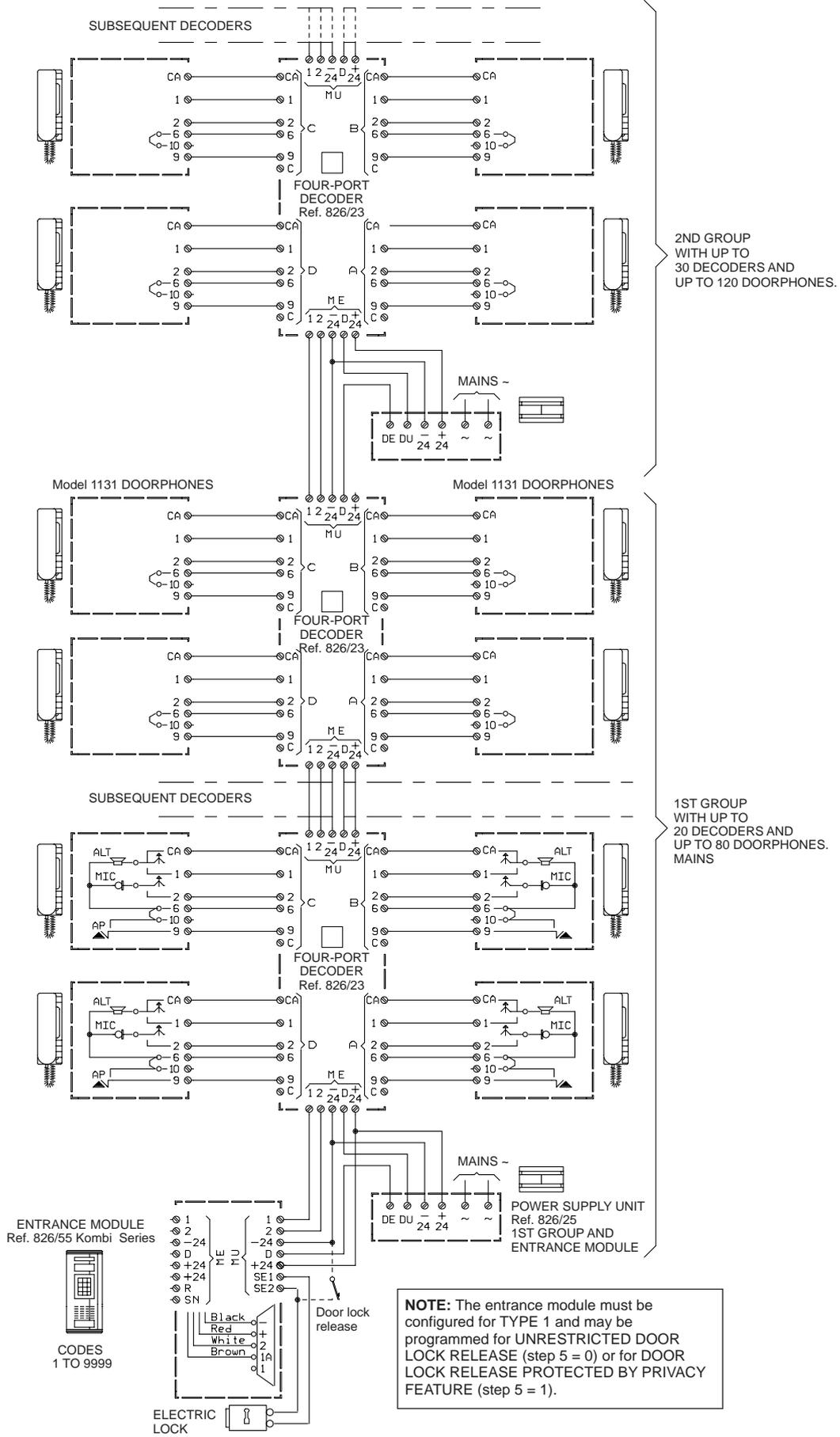
NOTE: Power supply unit Ref. 826/25 can supply up to 4 digitizers, the associated speaker unit, and the 16 connected decoders. If more than 4 directly connected digitizers are installed, use one additional power supply unit for every 6 digitizers and the associated 24 decoders. Here again, power supply unit conductors + 24 must UNDER NO CIRCUMSTANCES be connected together.

NOTE: The two entrance panel pushbutton lighting conductors must be provided with a separate transformer whose power is sufficient for the number of bulbs involved. With 14/15 V bulbs, use a voltage of 12 V~, while with 24 V bulbs, use a voltage of 18 V~.

TO SUBSEQUENT DOORPHONES AND DECODERS

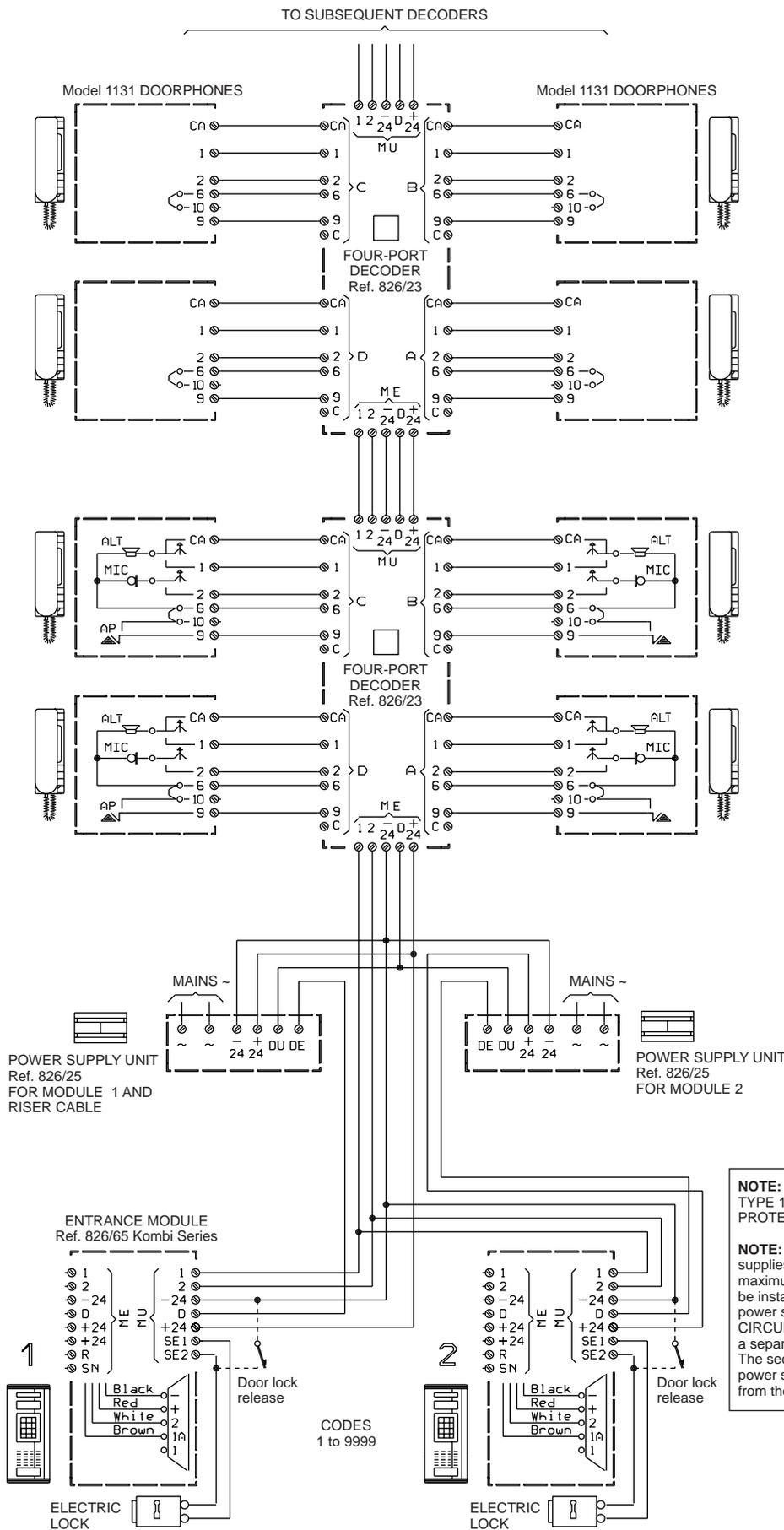


SC101-0665



DOORPHONES ON A SINGLE RISER CABLE CONNECTED TO 2 ENTRANCE MODULES FOUR-PORT DECODERS AT EACH FLOOR

SC101-0657



NOTE: The two entrance modules must be configured for TYPE 1 and must be programmed for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE (step 5 = 1).

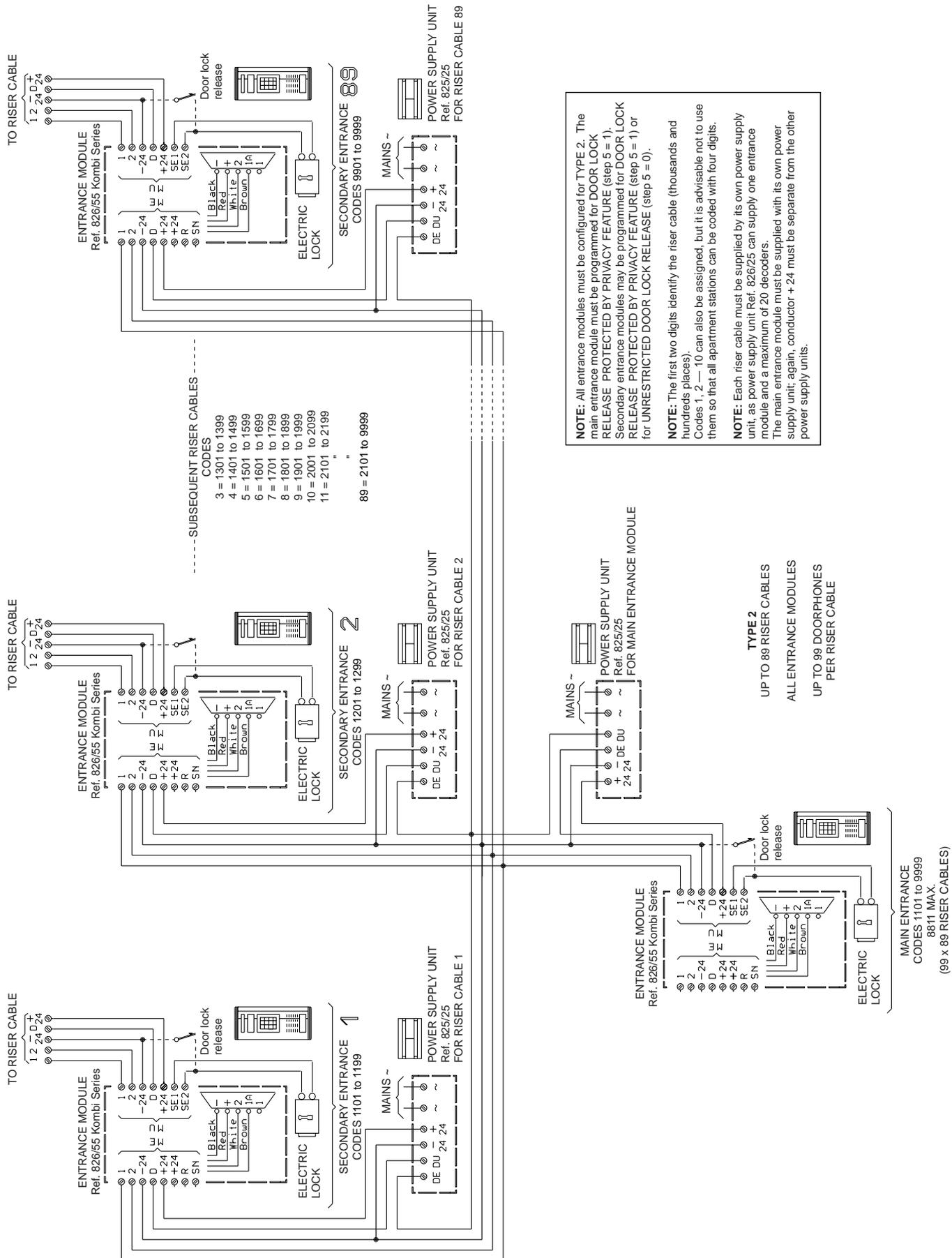
NOTE: Several power supply units are required. One unit supplies one entrance module and the riser cable with a maximum of 20 decoders. Additional power supply units must be installed if further decoders are needed. In this case, power supply unit conductors + 24 must UNDER NO CIRCUMSTANCES be connected together: each must supply a separate group of four-port decoders (up to 30). The second entrance module must be supplied with its own power supply unit; again, conductor + 24 must be separate from the other power supply units.

DOORPHONES ON UP TO 89 RISER CABLES CONNECTED TO 1 MAIN ENTRANCE MODULE



Each riser cable is connected to 1 secondary entrance module.
 Each riser cable can have up to 99 apartment stations. Modules configured for TYPE 2.

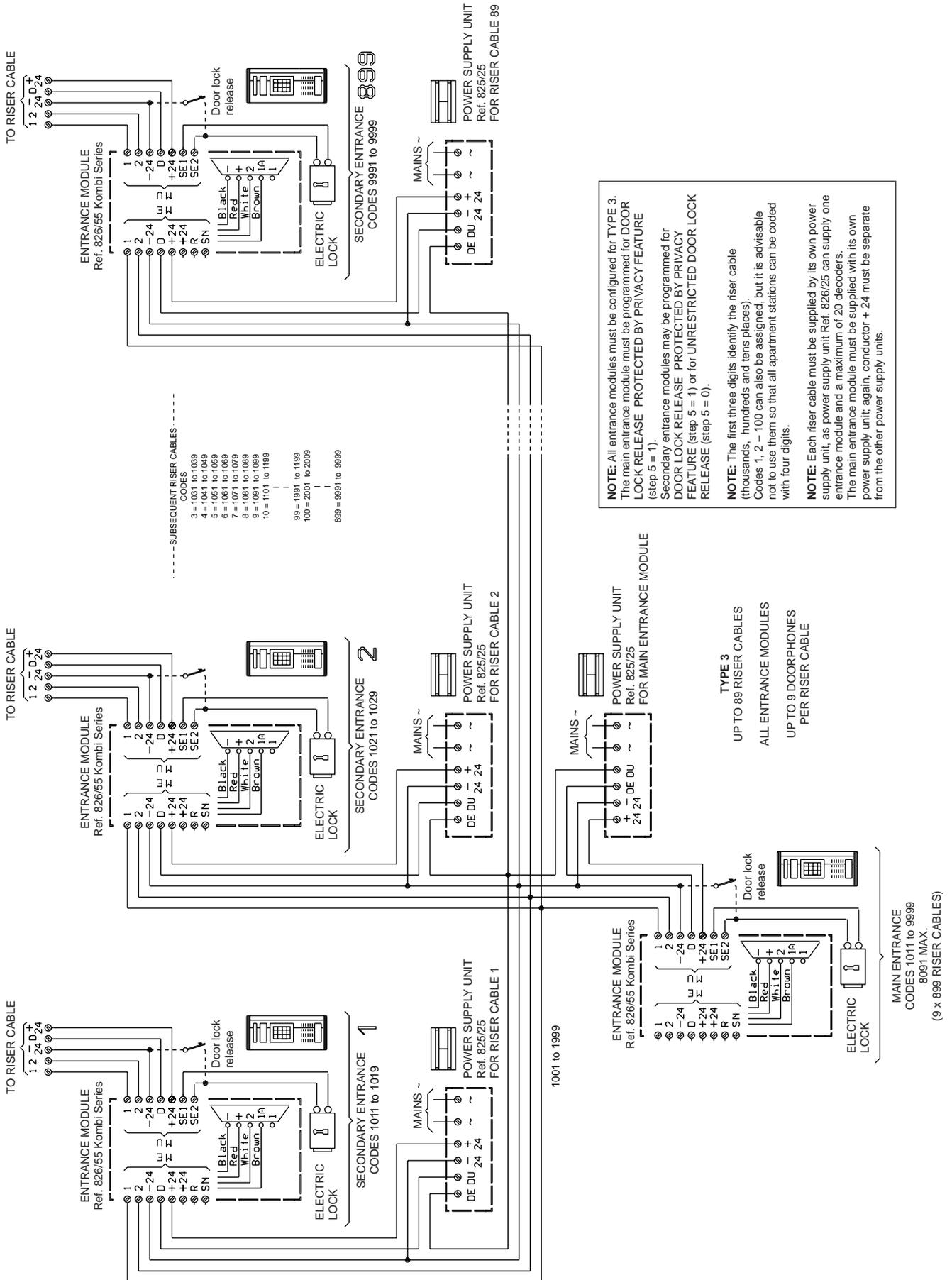
SC101-0667



Each riser cable is connected to 1 main entrance module.

Each riser cable can have up to 9 apartment stations. Modules configured for TYPE 3.

SC101-0668



NOTE: All entrance modules must be configured for TYPE 3. The main entrance module must be programmed for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE (step 5 = 1).

Secondary entrance modules may be programmed for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE (step 5 = 1) or for UNRESTRICTED DOOR LOCK RELEASE (step 5 = 0).

NOTE: The first three digits identify the riser cable (thousands, hundreds and tens places). Codes 1, 2 - 100 can also be assigned, but it is advisable not to use them so that all apartment stations can be coded with four digits.

NOTE: Each riser cable must be supplied by its own power supply unit, as power supply unit Ref. 826/25 can supply one entrance module and a maximum of 20 decoders. The main entrance module must be supplied with its own power supply unit; again, conductor + 24 must be separate from the other power supply units.

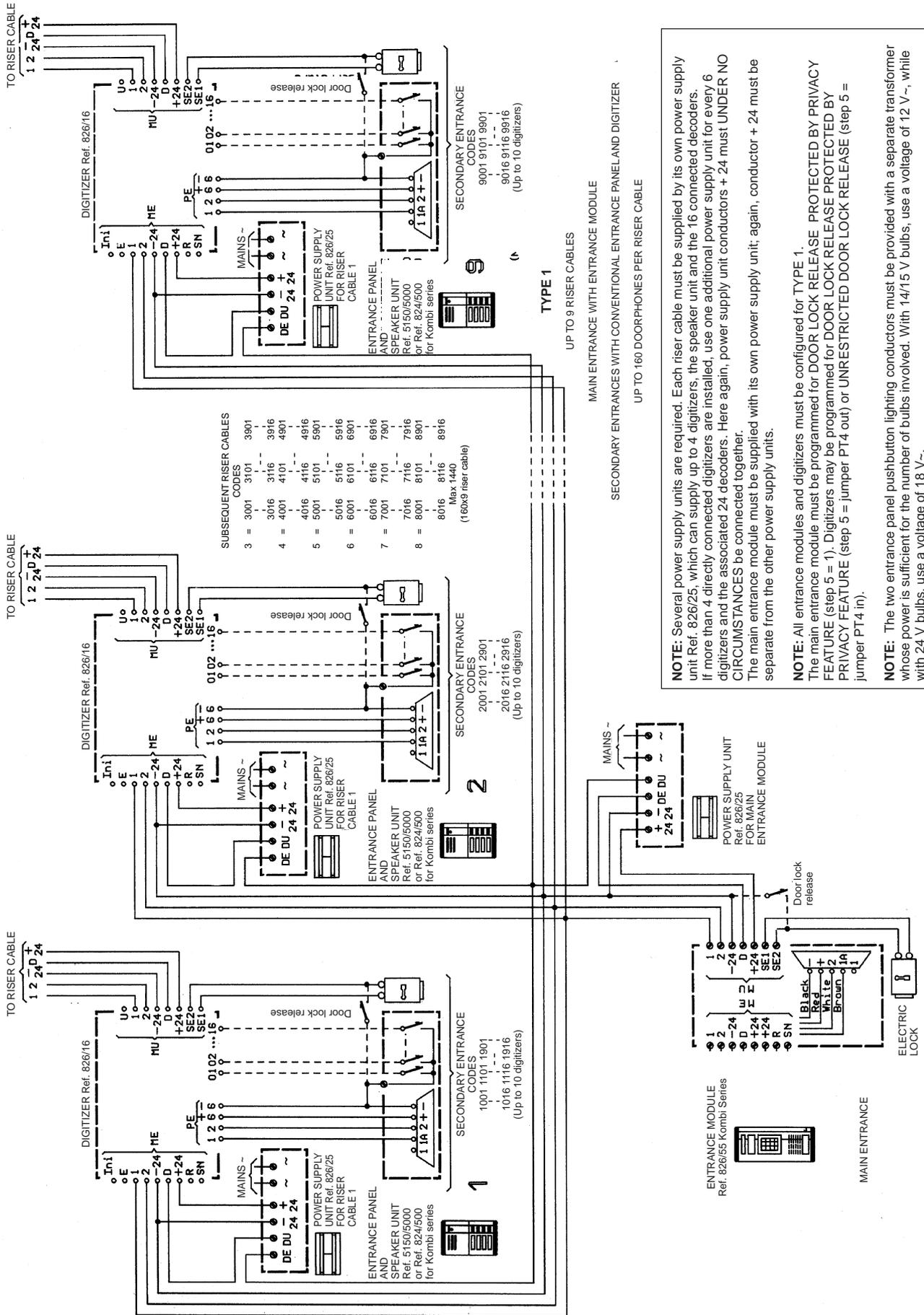
DOORPHONES ON UP TO 9 RISER CABLES CONNECTED TO 1 MAIN ENTRANCE MODULE

Each riser cable is connected to 1 secondary outdoor station equipped with conventional entrance panel and digitizers.

Each riser cable can have up to 160 apartment stations. Modules and digitizers configured for TYPE 1.



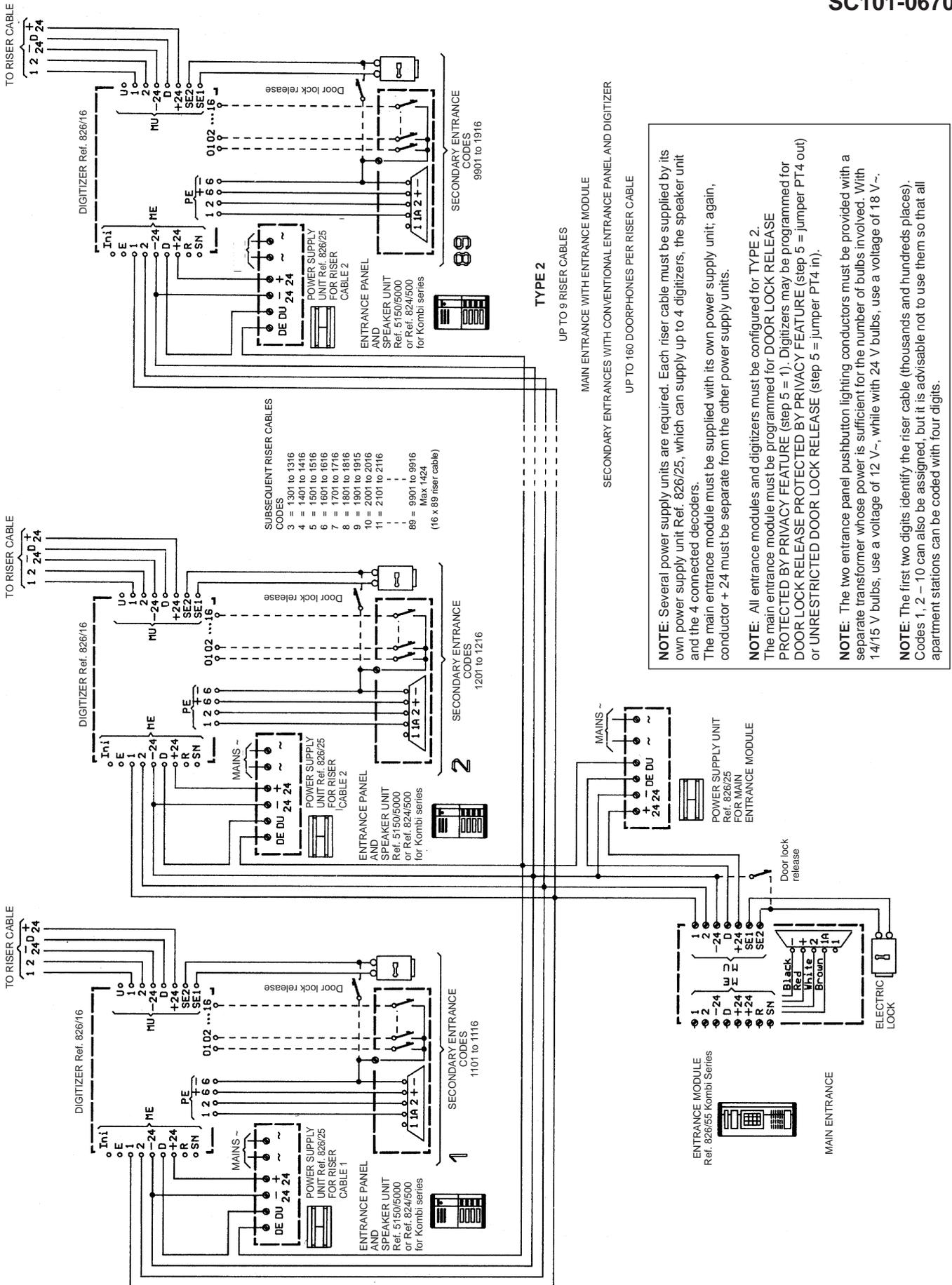
SC101-0669



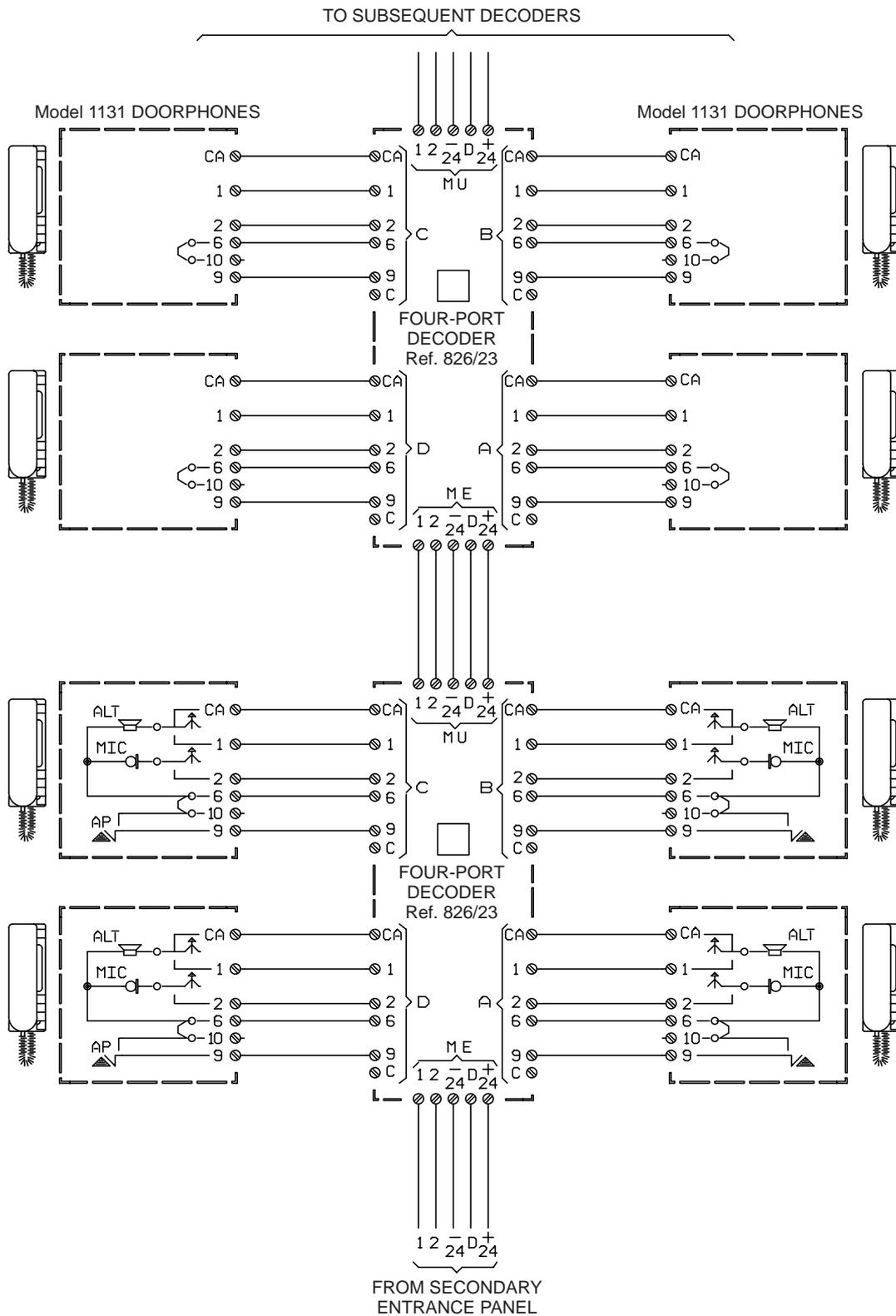
DOORPHONES ON UP TO 89 RISER CABLES CONNECTED TO 1 MAIN ENTRANCE MODULE

Each riser cable is connected to 1 secondary outdoor station equipped with conventional entrance panel and digitizers.

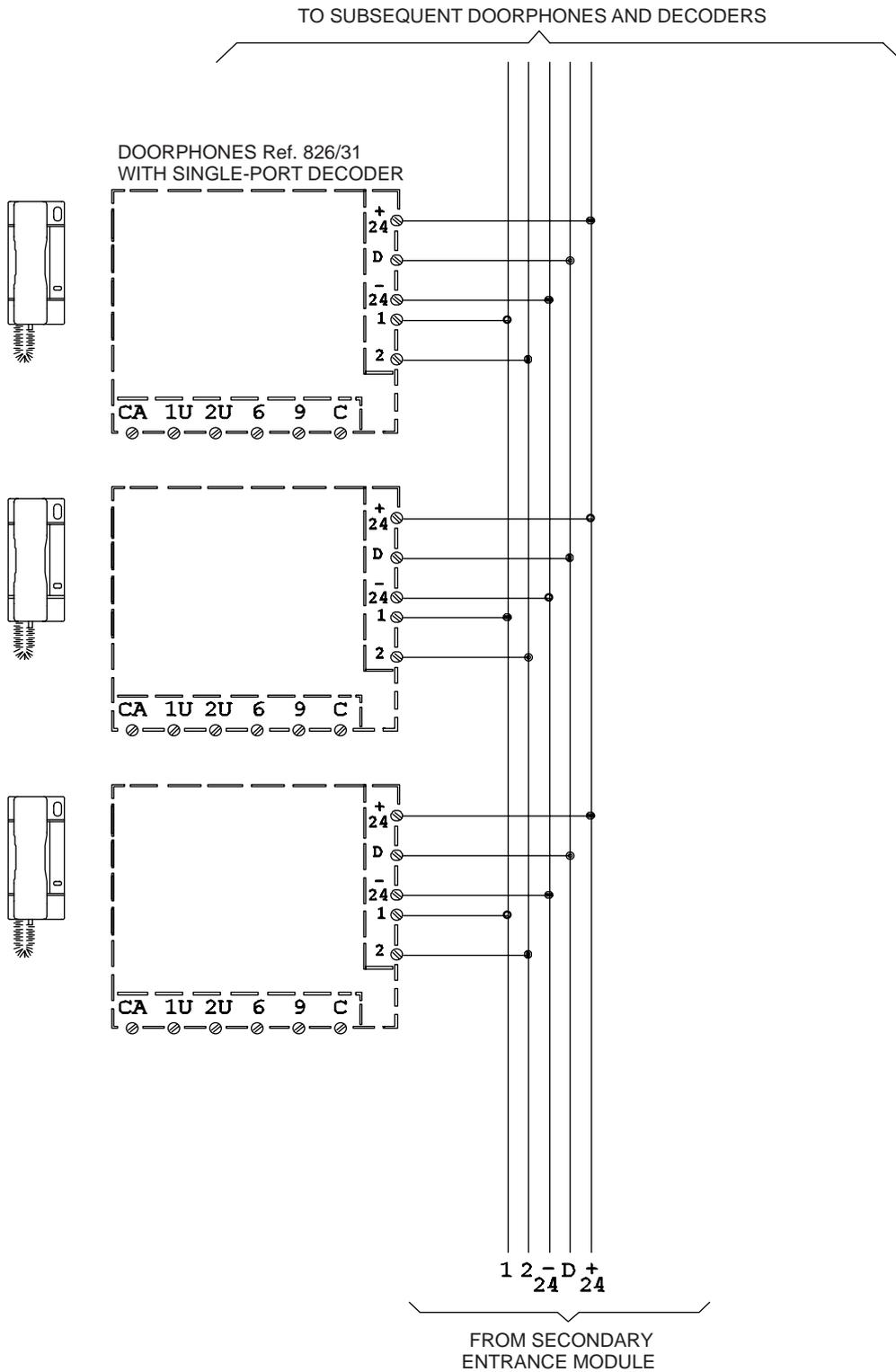
Each riser cable can have up to 10 apartment stations. Modules and digitizers configured for TYPE 2.



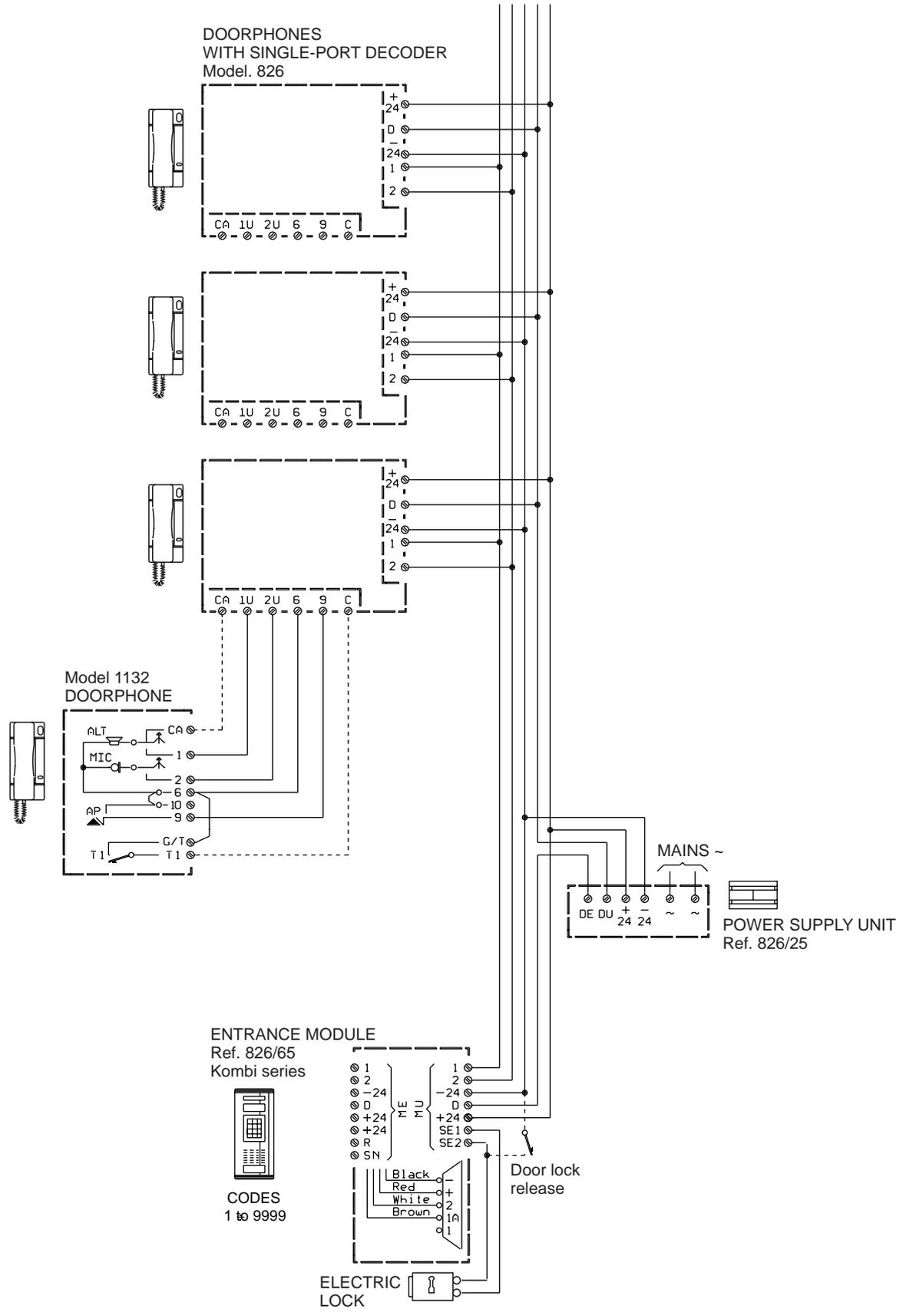
For diagrams SC101-0666, SC101-0667, SC101-0668, SC101-0669, SC101-0670



For diagrams SC101-0666, SC101-0667, SC101-0668, SC101-0669, SC101-0670



TO SUBSEQUENT DOORPHONES WITH DECODERS

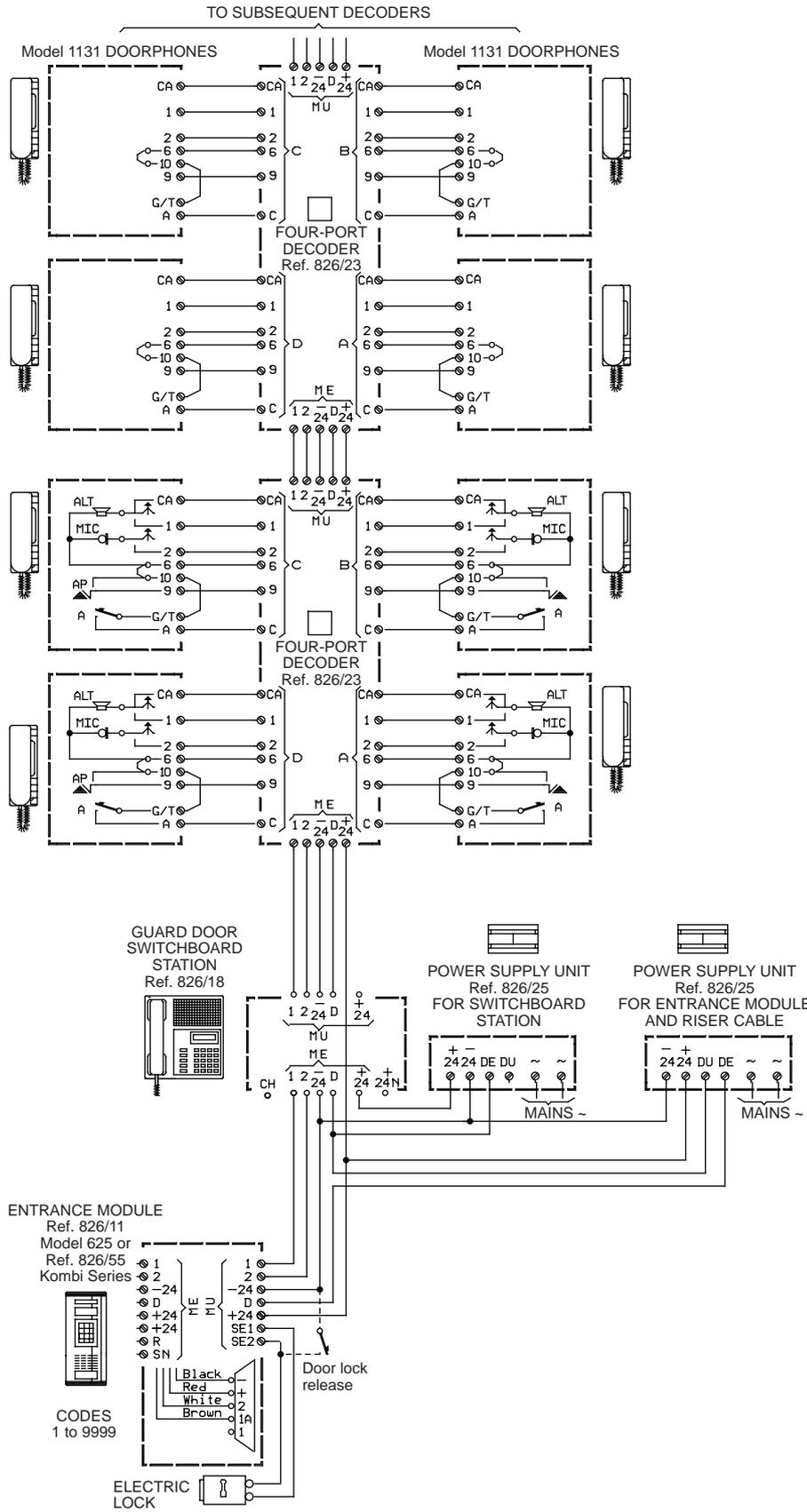


DOORPHONE SYSTEMS WITH GUARD DOOR SWITCHBOARD STATION

**DOORPHONES CONNECTED TO 1 DIGITAL GUARD DOOR SWITCHBOARD STATION
WITH PROVISION FOR NIGHT SERVICE AND 1 ENTRANCE MODULE.
FOUR-PORT DECODERS AT EACH FLOOR**



SC101-0660



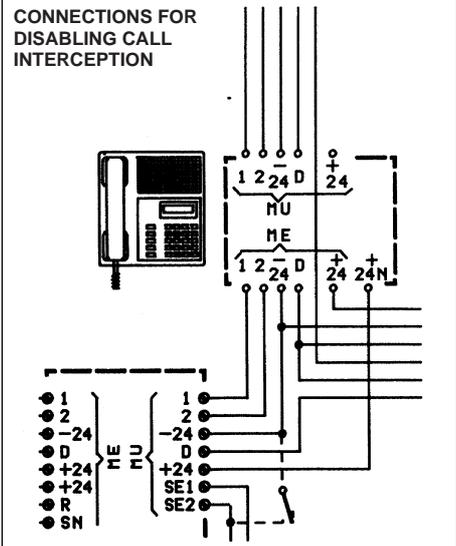
The guard door switchboard station must be configured for TYPE 1.
The entrance module may be programmed for UNRESTRICTED DOOR LOCK RELEASE (step 5 = 0) or for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE (step 5 = 1).

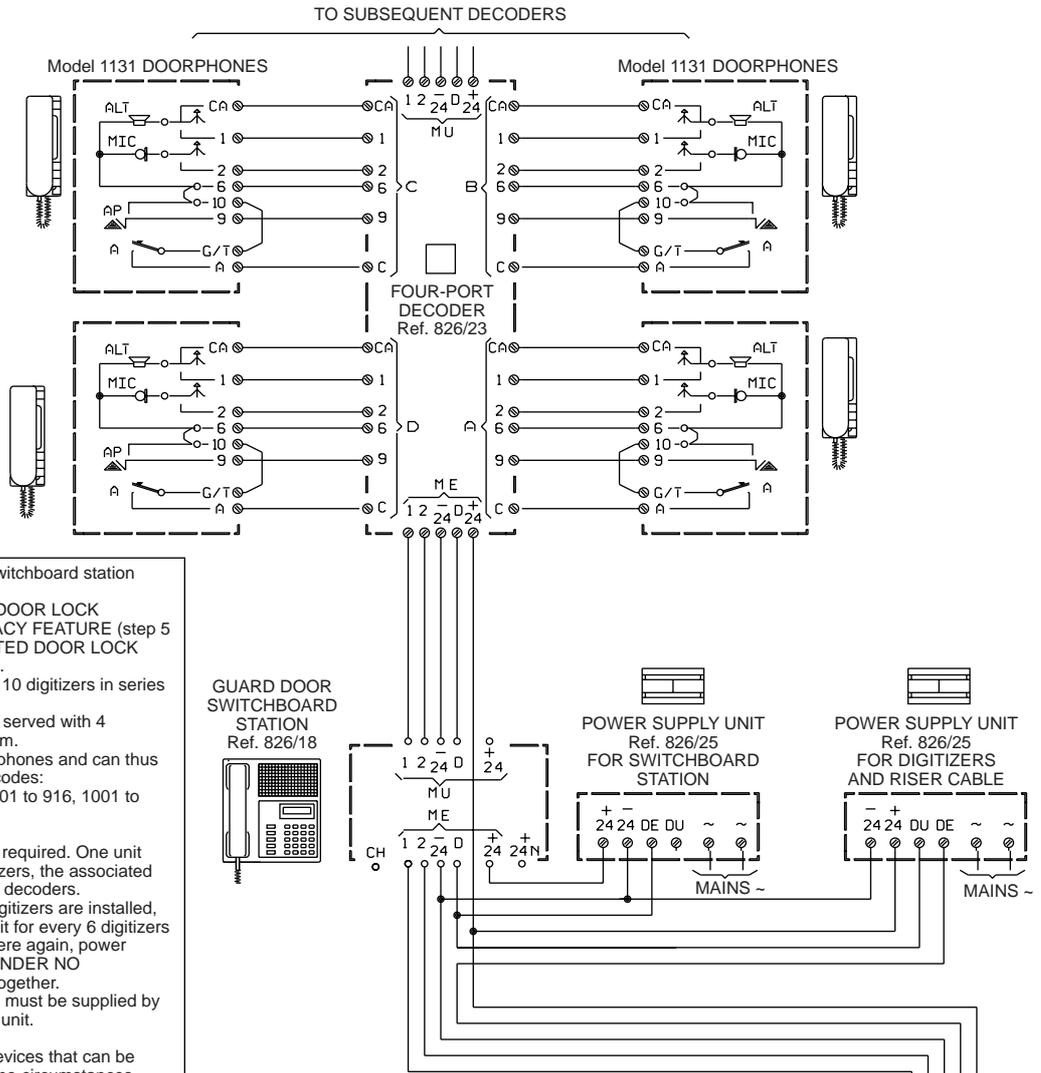
NOTE: Two power supply units are required. One unit supplies one entrance module and a maximum of 20 decoders. Additional power supply units must be installed if further decoders are needed. In this case, power supply unit conductors + 24 must UNDER NO CIRCUMSTANCES be connected together: each must supply a separate group of four-port decoders (up to 30).

The guard door switchboard station must be supplied by means of the other power supply unit.

NOTE: In Day service, the guard door switchboard station intercepts all calls from the entrance module. To disable call interception, connect terminal + 24 from the entrance module to switchboard station terminal +24N instead of power supply unit terminal +24. Under these conditions, the entrance module is fully disabled (entrance door open at all times). The switchboard station can also be programmed for direct communication between entrance module and apartment stations: in this case, all calls from entrance modules will be sent directly to apartment stations in both Day and Night service.

CONNECTIONS FOR DISABLING CALL INTERCEPTION

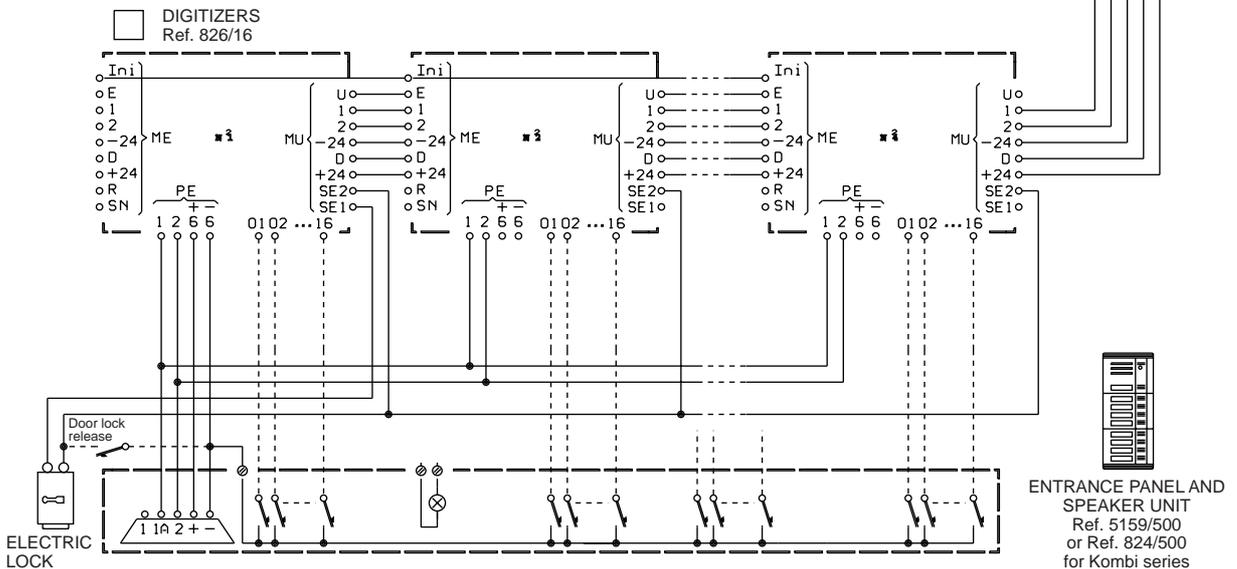




NOTE: Digitizers and guard door switchboard station must be configured for TYPE 1. Digitizers may be programmed for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE (step 5 = jumper PT4 out) or UNRESTRICTED DOOR LOCK RELEASE (step 5 = jumper PT4 in). It is advisable not to use more than 10 digitizers in series for a maximum of 160 doorphones. Up to 64 apartment stations can be served with 4 digitizers as illustrated in the diagram. Each digitizer can manage 16 doorphones and can thus be programmed with the following codes: 1 to 16, 101 to 116, 201 to 216 -- 901 to 916, 1001 to 1016 -- 9901 to 9916.

NOTE: Two power supply units are required. One unit can supply up to 4 digitizers, the associated speaker unit, and the 16 connected decoders. If more than 4 directly connected digitizers are installed, use one additional power supply unit for every 6 digitizers and the associated 24 decoders. Here again, power supply unit conductors + 24 must UNDER NO CIRCUMSTANCES be connected together. The guard door switchboard station must be supplied by means of the second power supply unit.

NOTE: The maximum number of devices that can be connected in a system must under no circumstances exceed 400. Here, the term device is used to designate any item connected to data line D, including four-port decoders, entrance modules, power supply units, guard door switchboard station, digitizers and so forth. Doorphones and video doorphones are not included in the total of 400 devices.



DOORPHONES ON MULTIPLE RISER CABLES CONNECTED TO 1 DIGITAL GUARD DOOR SWITCHBOARD STATION WITH PROVISION FOR NIGHT SERVICE AND 1 MAIN ENTRANCE MODULE



Each riser cable is connected to a secondary entrance module.

Systems can have up to 9, up to 89 or up to 899 riser cables, configured for TYPE 1, 2 or 3.

UP TO 899 RISER CABLES TYPE 3

UP TO 9 DOORPHONES PER RISER CABLE

Diagram SC101-0672

NOTE: All entrance modules and guard door switchboard station must be configured for TYPE 3.

NOTE: The first three digits identify the riser cable (thousands, hundreds and tens places).

1	2
CODES 1011 to 1019	CODES 1021 to 1029

----- SUBSEQUENT RISER CABLES -----

CODES
3 = 1031 to 1039
4 = 1041 to 1049
5 = 1051 to 1059
6 = 1061 to 1069
7 = 1071 to 1079
8 = 1081 to 1089
9 = 1091 to 1099
10 = 1101 to 1109
⋮
⋮
⋮
99 = 1991 to 1199
100 = 2001 to 2009
⋮
⋮
899 = 9991 to 9999

899
CODES 9991 to 9999

UP TO 89 RISER CABLES TYPE 2

UP TO 99 DOORPHONES PER RISER CABLE

Diagram SC101-0704

NOTE: All entrance modules and guard door switchboard station must be configured for TYPE 2.

NOTE: The first two digits identify the riser cable (thousands and hundreds places).

1	2
CODES 1101 to 1199	CODES 1201 to 1299

----- SUBSEQUENT RISER CABLES -----

CODES
3 = 1301 to 1339
4 = 1401 to 1449
5 = 1501 to 1559
6 = 1601 to 1669
7 = 1701 to 1779
8 = 1801 to 1889
9 = 1901 to 1999
10 = 2001 to 2009
11 = 2101 to 2109
⋮
⋮
89 = 9901 to 9999

89
CODES 9901 to 9999

UP TO 9 RISER CABLES TYPE 1

UP TO 999 DOORPHONES PER RISER CABLE

Diagram SC101-0671

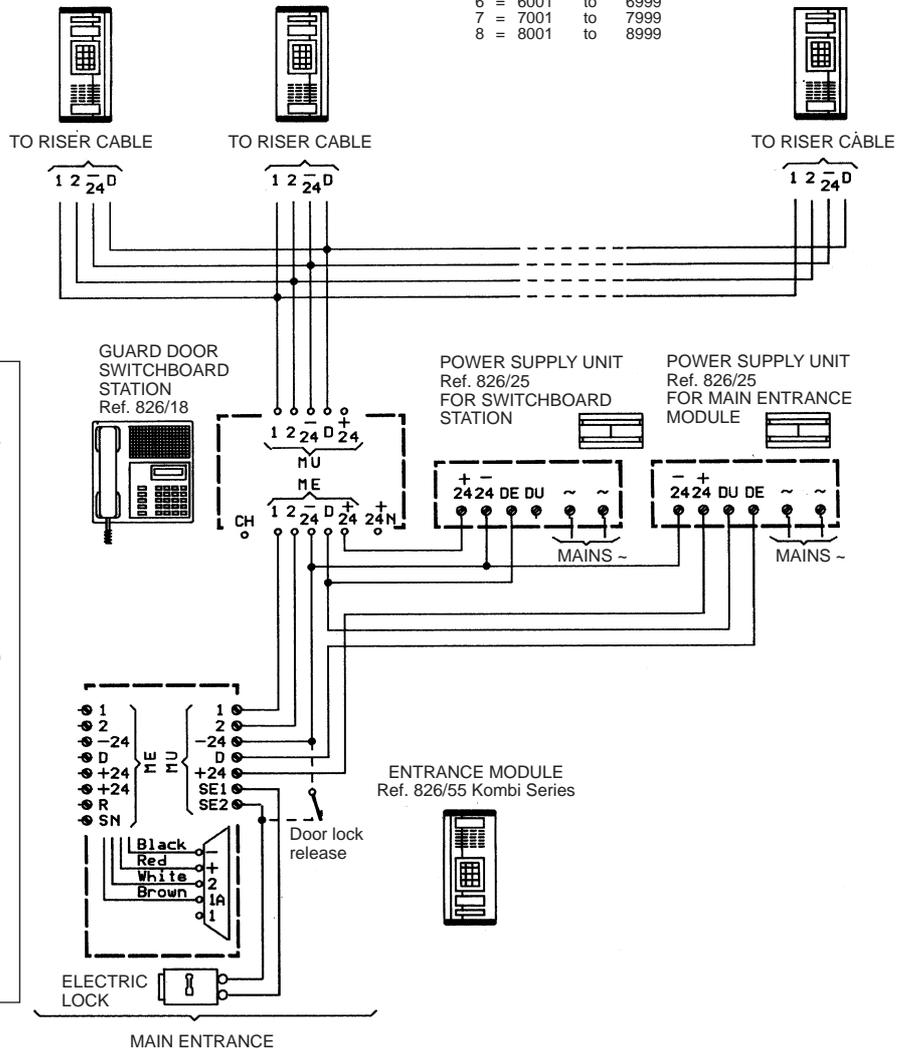
NOTE: All entrance modules and guard door switchboard station must be configured for TYPE 1.

1	2
CODES 1001 to 1999	CODES 2001 to 2999

----- SUBSEQUENT RISER CABLES -----

CODES
3 = 3001 to 3999
4 = 4001 to 4999
5 = 5001 to 5999
6 = 6001 to 6999
7 = 7001 to 7999
8 = 8001 to 8999

9
CODES 9001 to 9999



NOTE: The main entrance module must be programmed for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE (step 5 = 1). Secondary entrance modules may be programmed for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE (step 5 = 1) or for UNRESTRICTED DOOR LOCK RELEASE (step 5 = 0).

NOTE: Each riser cable must be supplied by its own power supply unit, as power supply unit Ref. 826/25 can supply one entrance module and a maximum of 20 decoders. Additional power supply units must be installed if further decoders are needed. In this case, power supply unit conductors + 24 must UNDER NO CIRCUMSTANCES be connected together: each must supply a separate group of four-port decoders (up to 30). The main entrance module and the guard door switchboard station must each be supplied with its own power supply unit; again, conductor + 24 must be separate from the other power supply units. If an electronic directory is installed on the main entrance module, it can be supplied by the same power supply unit. Any electronic directories installed on secondary entrance panels can be supplied by the same power supply unit as the riser cable, taking care not to exceed the maximum permissible consumption (in this case, up to 12 decoders can be used).

DOORPHONES ON MULTIPLE RISER CABLES CONNECTED TO 1 DIGITAL GUARD DOOR SWITCHBOARD STATION WITH PROVISION FOR NIGHT SERVICE AND 1 MAIN ENTRANCE MODULE

Each riser cable is connected to a secondary outdoor station equipped with conventional entrance panel and digitizers. – Systems can have up to 9 or up to 89 riser cables, configured for TYPE 1 or 2.

UP TO 89 RISER CABLES TYPE 2

UP TO 16 DOORPHONES FOR RISER CABLE

Diagram SC101-0674

1

CODES
1101 to 1116

2

CODES
1216 to 1216

----- SUBSEQUENT RISER CABLES -----

CODES
3 = 1301 to 1316
4 = 1401 to 1416
5 = 1501 to 1516
6 = 1601 to 1616
7 = 1701 to 1716
8 = 1801 to 1816
9 = 1901 to 1916
10 = 2001 to 2016
11 = 2101 to 2116

89 = 9901 to 9916

Max 1424
(16 x 89 riser cables)

89

CODES
9901 to 9916

NOTE: The main entrance module, digitizers and guard door switchboard station must be configured for TYPE 2.

NOTE: The first two digits identify the riser cable (thousands and hundreds places).

UP TO 9 RISER CABLES TYPE 1

UP TO 160 DOORPHONES FOR RISER CABLE

Diagram SC101-0673

1

CODES
1001 1101 1901
1016 1116 1916
Up to 10 digitizers

2

CODES
2001 2101 2901
2016 2116 2916
Up to 10 digitizers

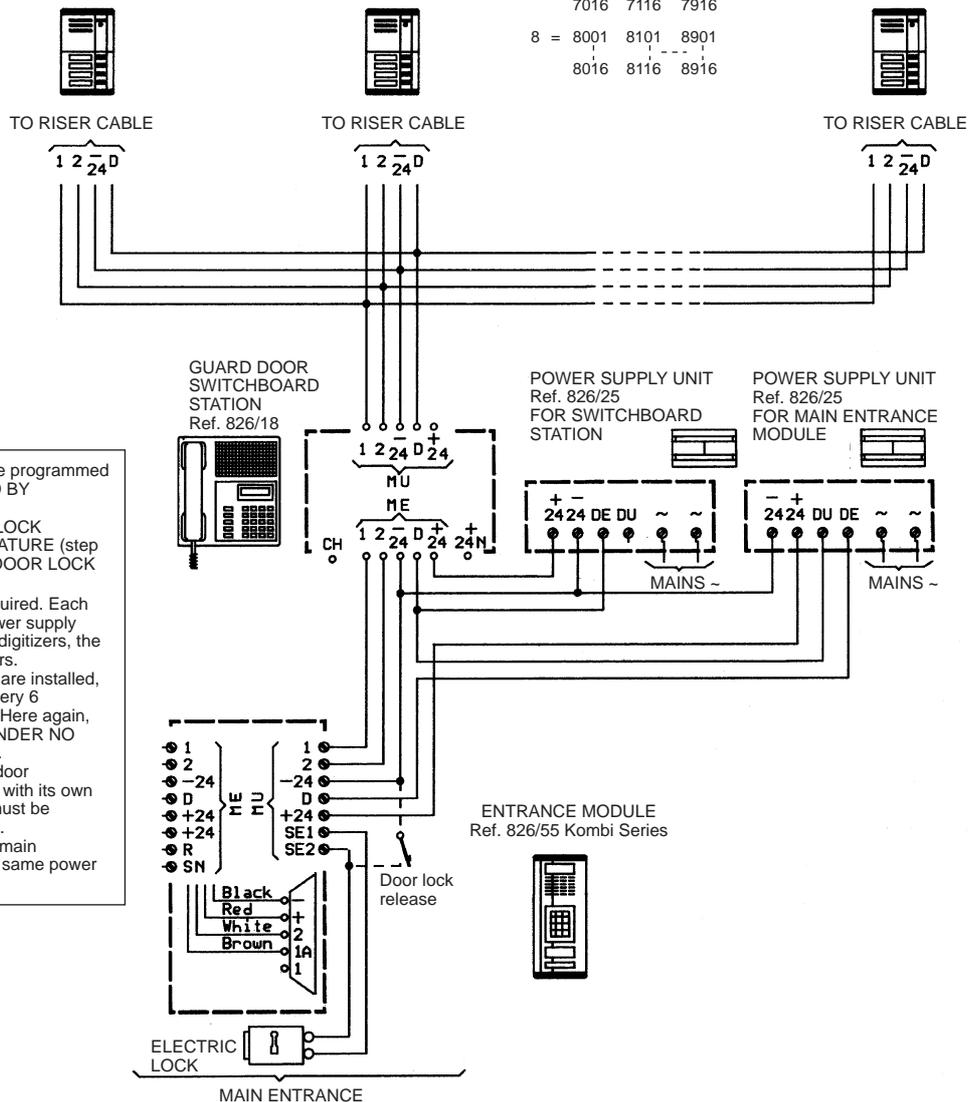
----- SUBSEQUENT RISER CABLES -----

CODES
3 = 3001 3101 3901
3016 3116 3916
4 = 4001 4101 4901
4016 4116 4916
5 = 5001 5101 5901
5016 5116 5916
6 = 6001 6101 6901
6016 6116 6916
7 = 7001 7101 7901
7016 7116 7916
8 = 8001 8101 8901
8016 8116 8916

9

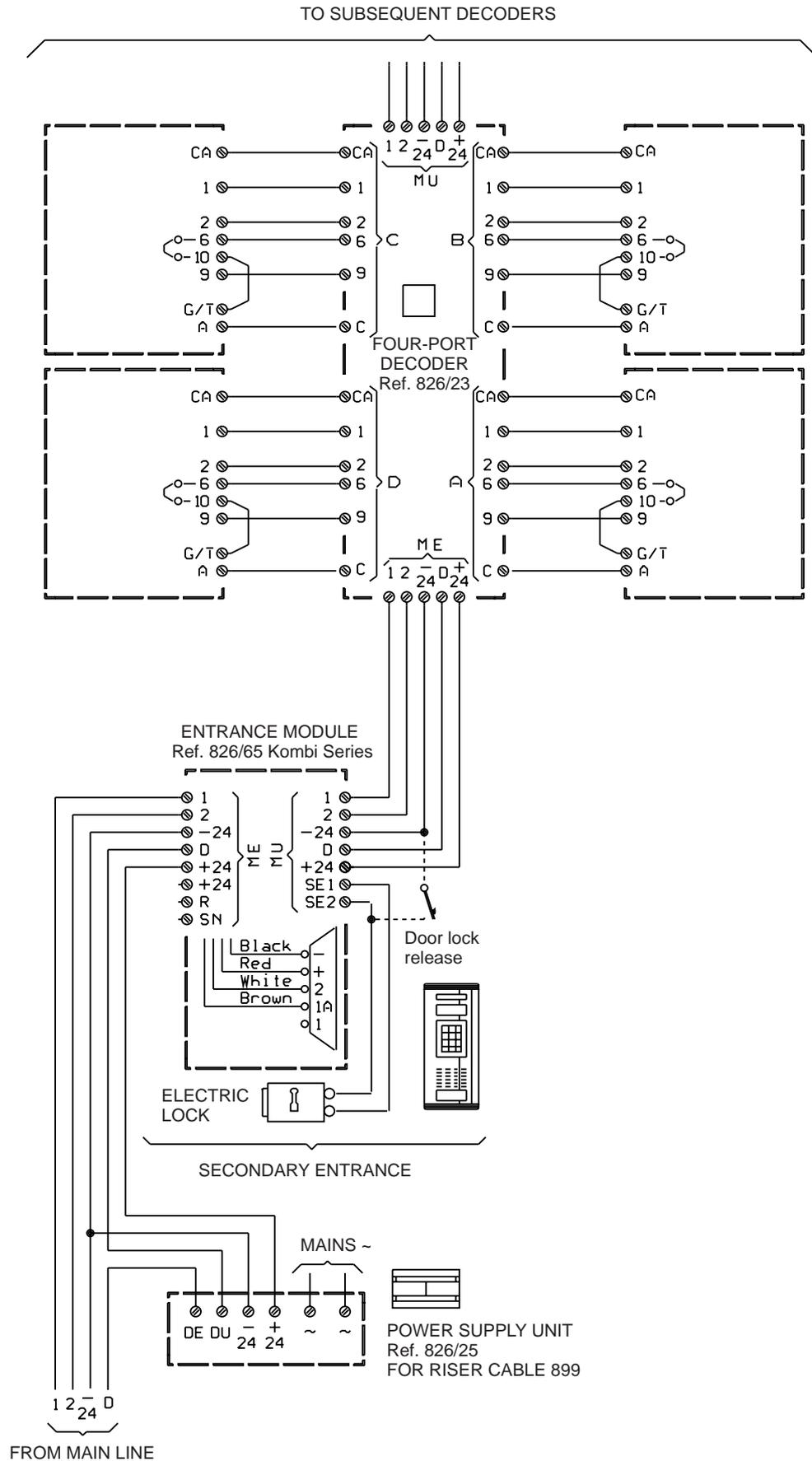
CODES
9001 9101 9901
9016 9116 9916
Up to 10 digitizers

NOTE: The main entrance module, digitizers and guard door switchboard station must be configured for TYPE 1.

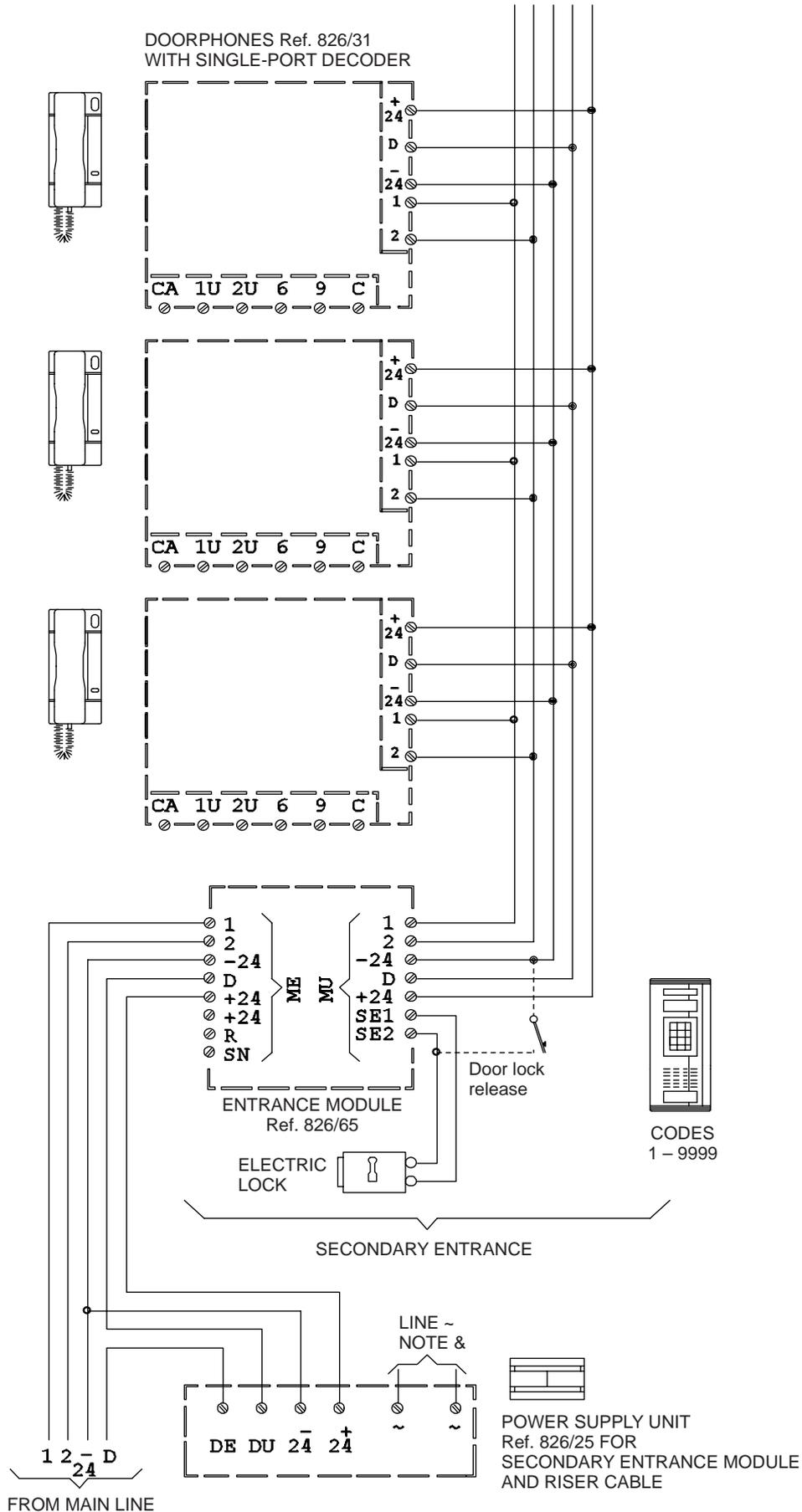


NOTE: The main entrance module must be programmed for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE (step 5 = 1). Digitizers may be programmed for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE (step 5 = jumper PT4 out) or UNRESTRICTED DOOR LOCK RELEASE (step 5 = jumper PT4 in).
NOTE: Several power supply units are required. Each riser cable must be supplied by its own power supply unit Ref. 826/25, which can supply up to 4 digitizers, the speaker unit and the 16 connected decoders. If more than 4 directly connected digitizers are installed, use one additional power supply unit for every 6 digitizers and the associated 24 decoders. Here again, power supply unit conductors + 24 must UNDER NO CIRCUMSTANCES be connected together. The main entrance module and the guard door switchboard station must each be supplied with its own power supply unit; again, conductor + 24 must be separate from the other power supply units. If an electronic directory is installed on the main entrance module, it can be supplied by the same power supply unit.

For diagrams SC101-0671, SC101-0704, SC101-0672.



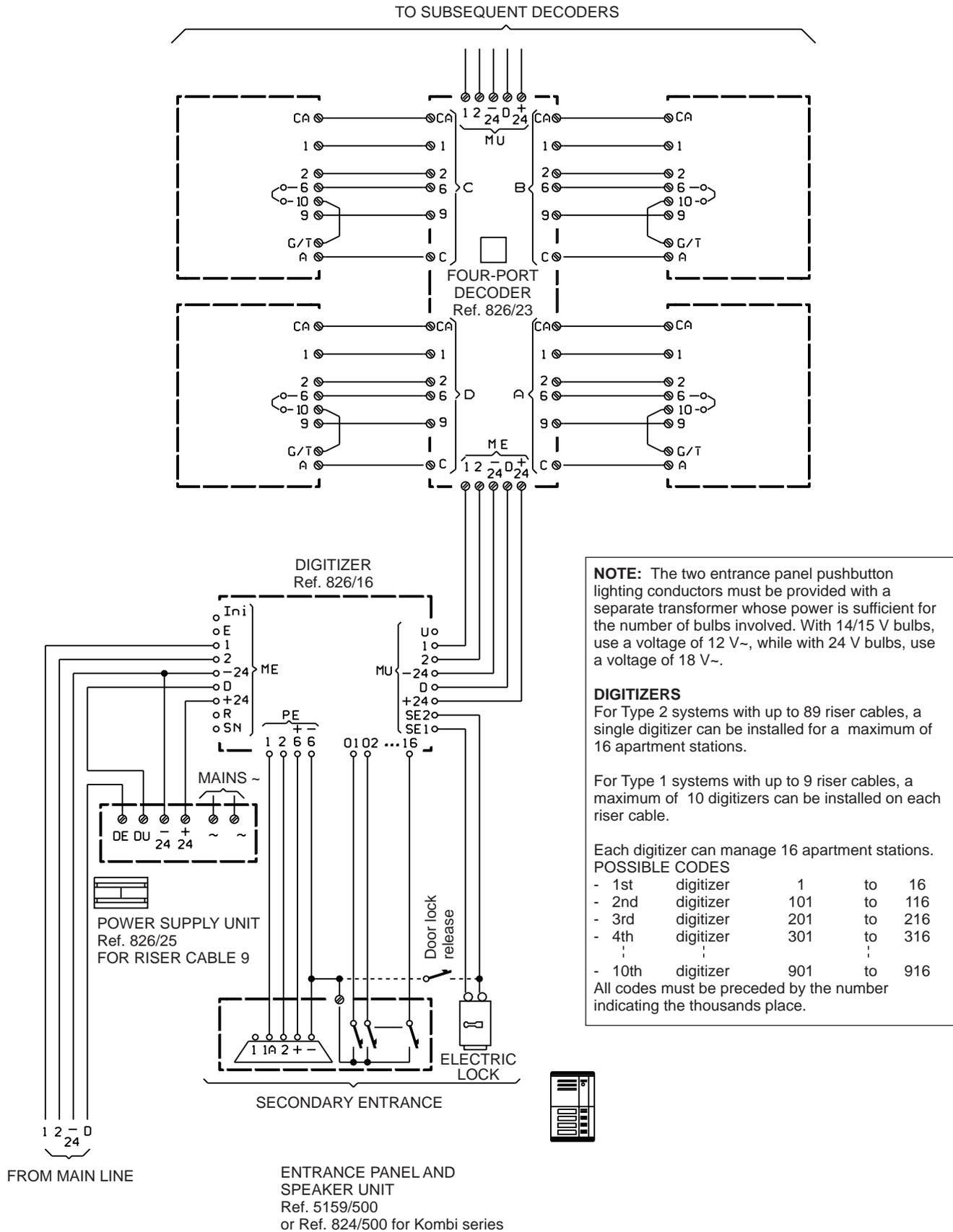
For diagrams SC101-0671, SC101-0704, SC101-0672



**DOORPHONE CONNECTIONS WITH SECONDARY OUTDOOR STATION
EQUIPPED WITH CONVENTIONAL
ENTRANCE PANEL AND DIGITIZERS
FOUR-PORT DECODERS Ref. 826/23 AT EACH FLOOR**



For diagrams SC101-0673, SC101-0674



NOTE: The two entrance panel pushbutton lighting conductors must be provided with a separate transformer whose power is sufficient for the number of bulbs involved. With 14/15 V bulbs, use a voltage of 12 V~, while with 24 V bulbs, use a voltage of 18 V~.

DIGITIZERS
For Type 2 systems with up to 89 riser cables, a single digitizer can be installed for a maximum of 16 apartment stations.

For Type 1 systems with up to 9 riser cables, a maximum of 10 digitizers can be installed on each riser cable.

Each digitizer can manage 16 apartment stations.

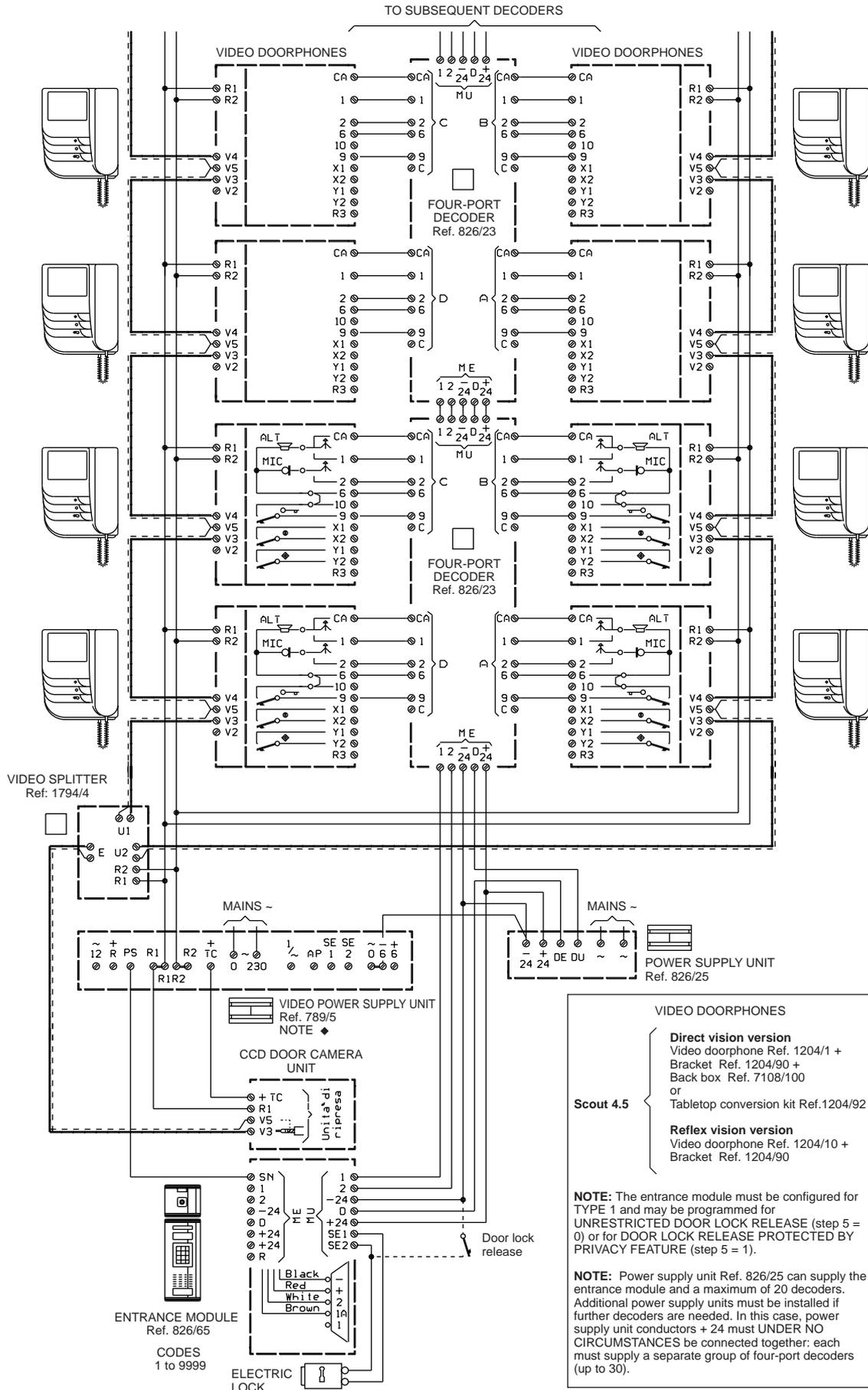
POSSIBLE CODES

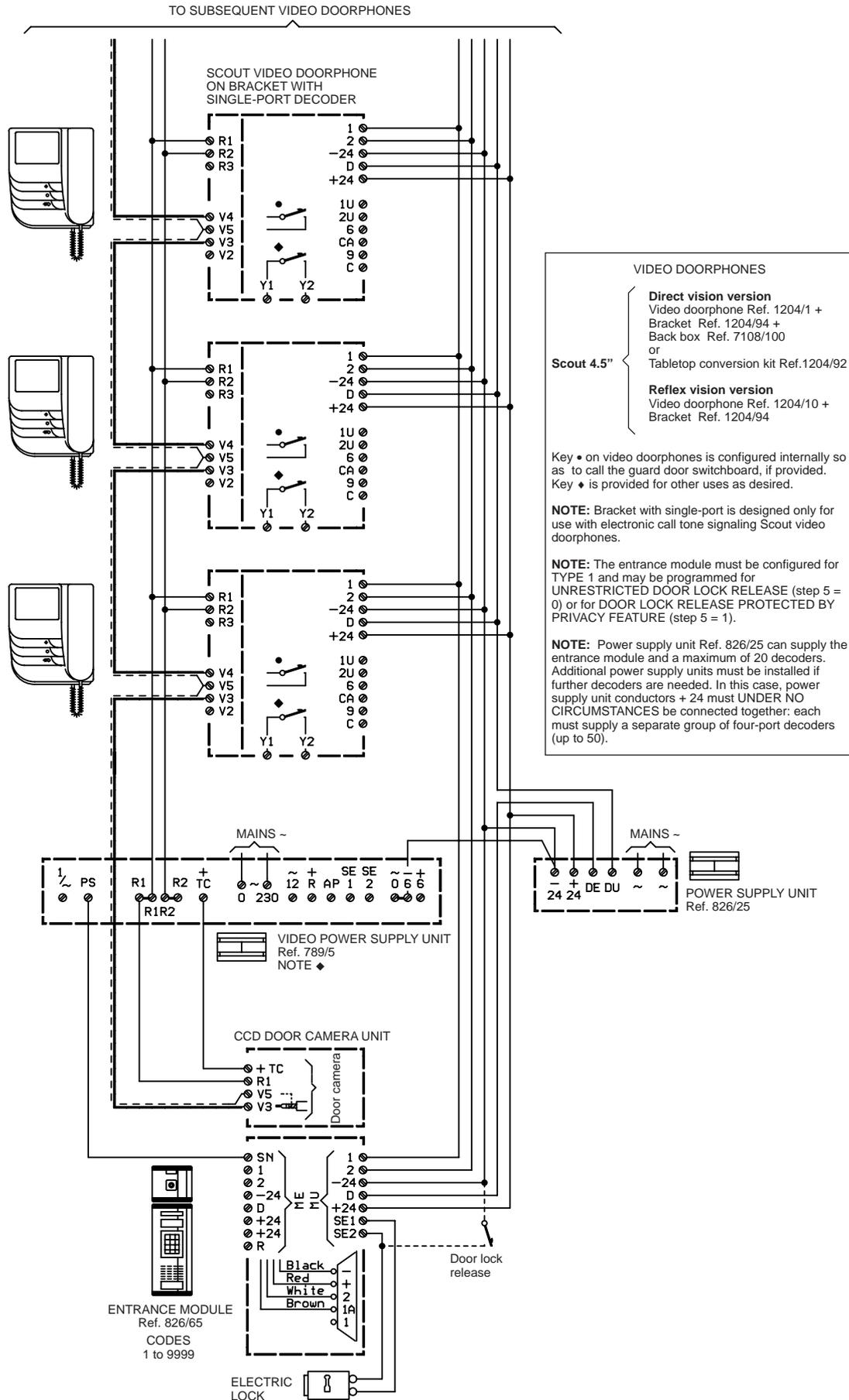
- 1st digitizer	1	to	16
- 2nd digitizer	101	to	116
- 3rd digitizer	201	to	216
- 4th digitizer	301	to	316
⋮	⋮	⋮	⋮
- 10th digitizer	901	to	916

All codes must be preceded by the number indicating the thousands place.



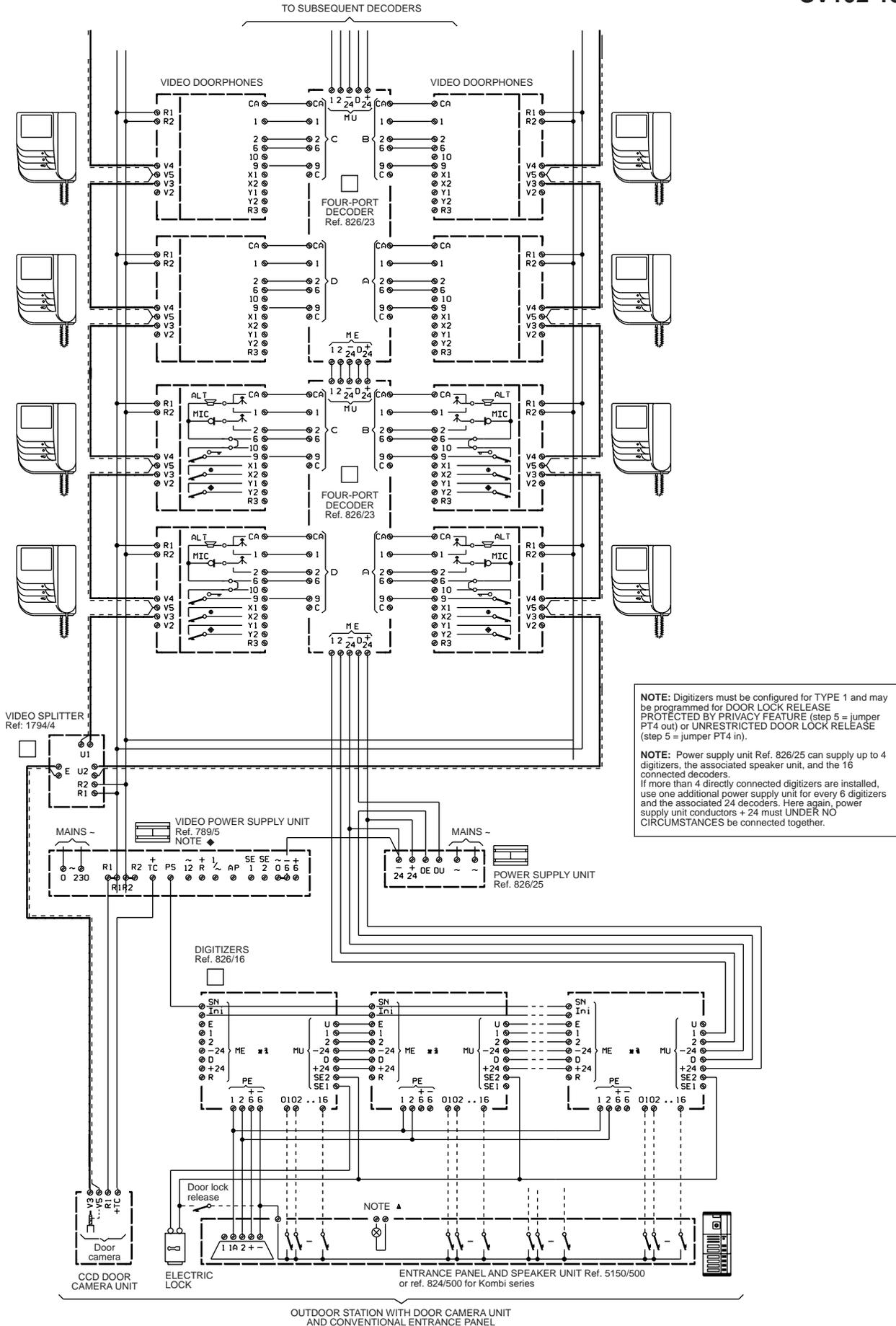
VIDEO DOORPHONE SYSTEMS



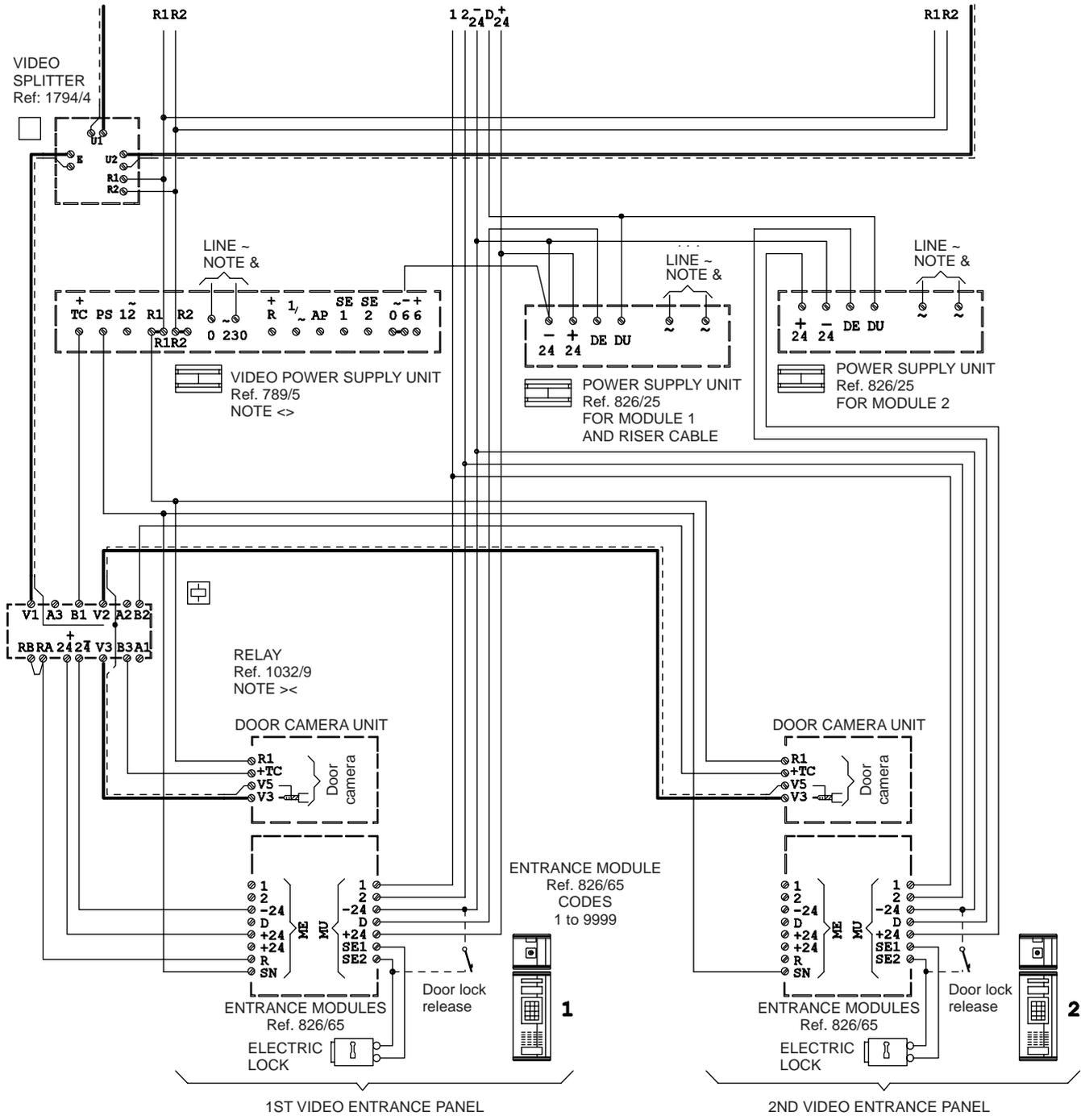


VIDEO DOORPHONES CONNECTED TO 1 VIDEO OUTDOOR STATION
EQUIPPED WITH CONVENTIONAL ENTRANCE PANEL AND DIGITIZERS
FOUR-PORT DECODERS AT EACH FLOOR

SV102-1514A



TO VIDEO DOORPHONE RISER CABLE
TO SUBSEQUENT DECODERS

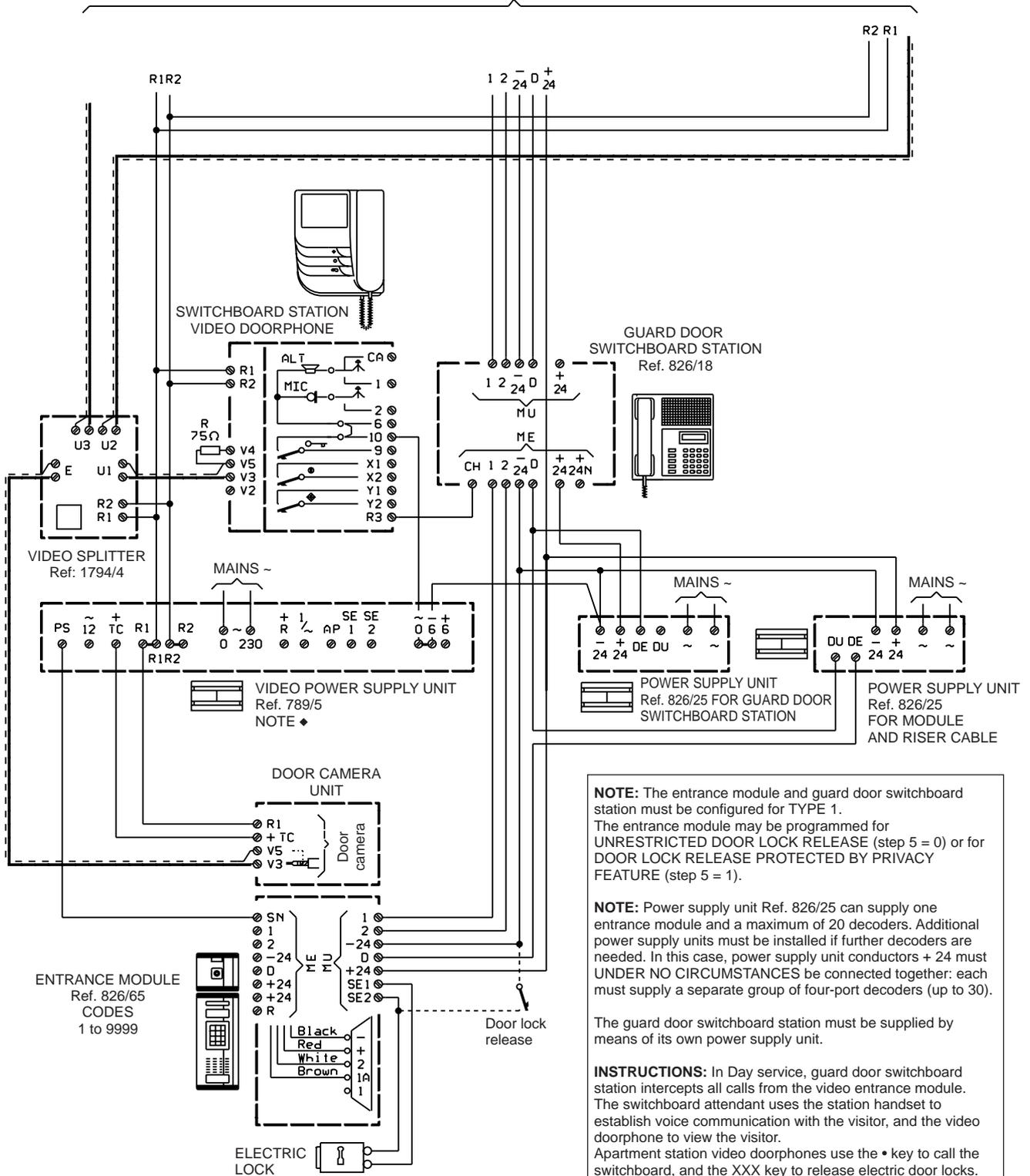


VIDEO DOORPHONES CONNECTED TO 1 GUARD DOOR SWITCHBOARD STATION WITH PROVISION FOR NIGHT SERVICE AND 1 VIDEO ENTRANCE MODULE
 GUARD DOOR SWITCHBOARD STATION VIDEO DOORPHONE INTERCEPTS OUTSIDE CALLS IN DAY SERVICE



SV102-1513B

TO VIDEO DOORPHONE RISER CABLE
 TO SUBSEQUENT DECODERS



NOTE: The entrance module and guard door switchboard station must be configured for TYPE 1. The entrance module may be programmed for UNRESTRICTED DOOR LOCK RELEASE (step 5 = 0) or for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE (step 5 = 1).

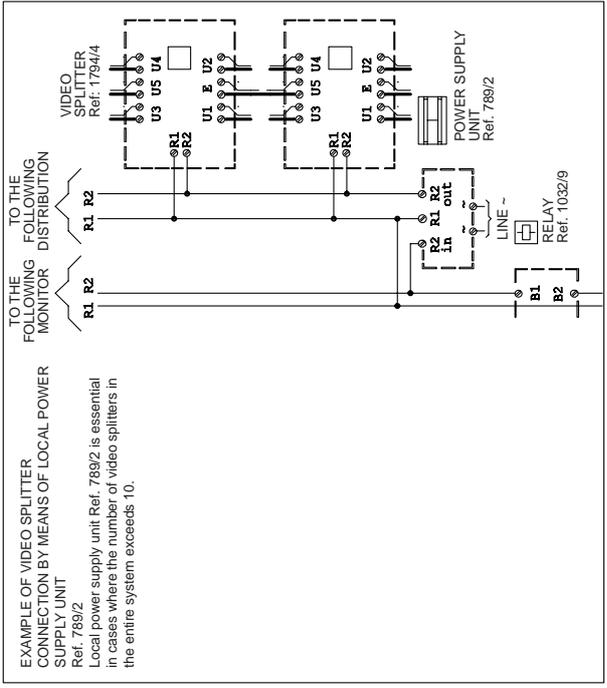
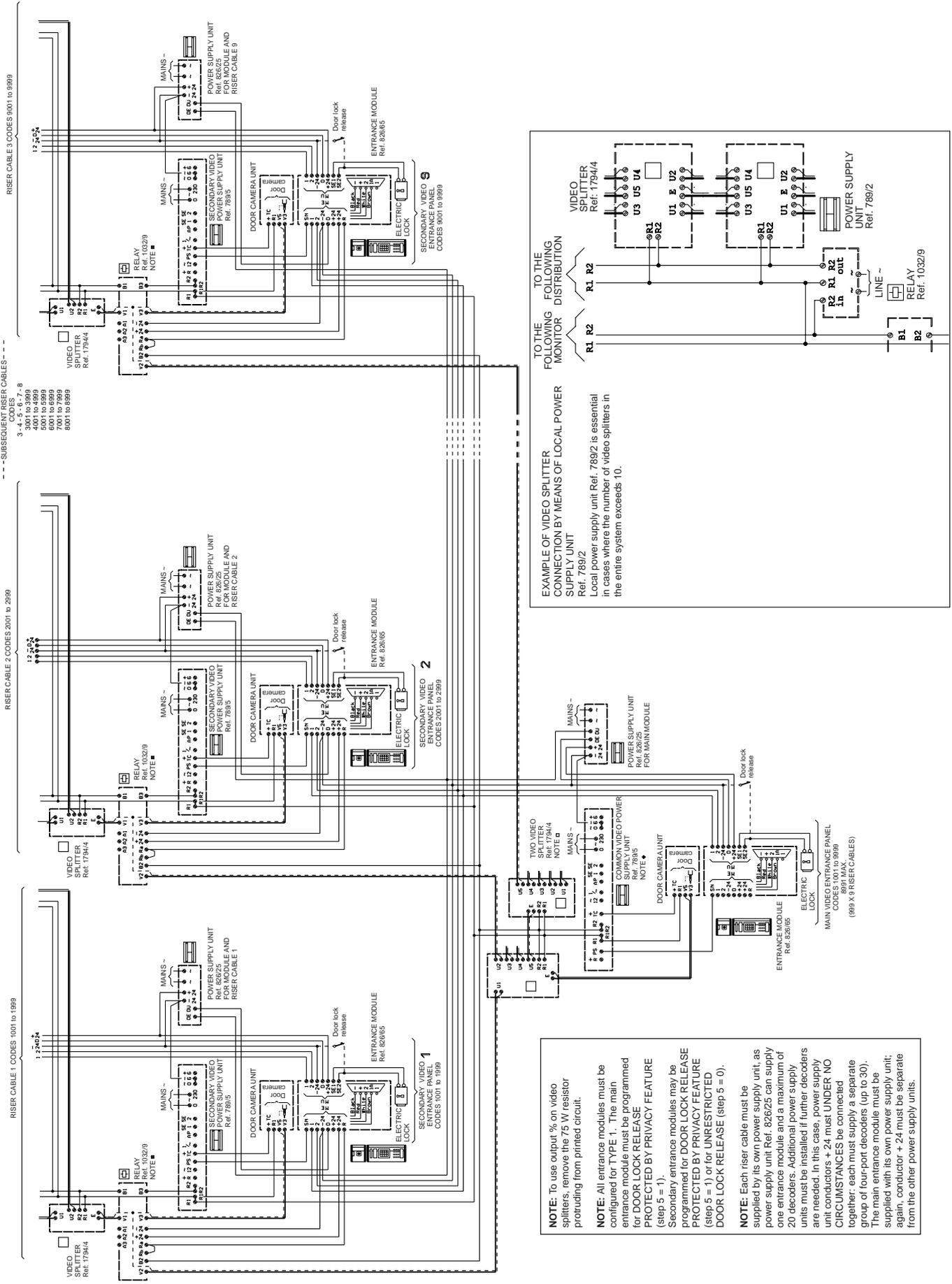
NOTE: Power supply unit Ref. 826/25 can supply one entrance module and a maximum of 20 decoders. Additional power supply units must be installed if further decoders are needed. In this case, power supply unit conductors + 24 must UNDER NO CIRCUMSTANCES be connected together: each must supply a separate group of four-port decoders (up to 30).

The guard door switchboard station must be supplied by means of its own power supply unit.

INSTRUCTIONS: In Day service, guard door switchboard station intercepts all calls from the video entrance module. The switchboard attendant uses the station handset to establish voice communication with the visitor, and the video doorphone to view the visitor. Apartment station video doorphones use the • key to call the switchboard, and the XXX key to release electric door locks. To disable call interception, connect entrance module terminal + 24 to switchboard station terminal +24N instead of riser cable power supply unit terminal +24. Under these conditions, calls from the entrance module will not cause the guard door switchboard station to ring during Day service (entrance door open at all times). For systems of this kind, no video doorphone is installed at the guard door station.

Each riser cable is connected to a secondary video entrance module.
Each riser cable can have up to 999 apartment stations. Modules configured for TYPE 1.

SV102-1516A



EXAMPLE OF VIDEO SPLITTER CONNECTION BY MEANS OF LOCAL POWER SUPPLY UNIT
Ref. 789/2
Local power supply unit Ref. 789/2 is essential in cases where the number of video splitters in the entire system exceeds 10.

NOTE: To use output % on video splitters, remove the 75 W resistor protruding from printed circuit.
NOTE: All entrance modules must be configured for TYPE 1. The main entrance module must be programmed for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE (step 5 = 1).
Secondary entrance modules may be programmed for DOOR LOCK RELEASE PROTECTED BY PRIVACY FEATURE (step 5 = 1) or for UNRESTRICTED DOOR LOCK RELEASE (step 5 = 0).
NOTE: Each riser cable must be supplied by its own power supply unit, as one entrance module and a maximum of 20 decoders. Additional power supply units must be installed if further decoders are needed. In this case, power supply unit conductors + 24 must UNDER NO CIRCUMSTANCES be connected together: each must supply a separate group of four-port decoders (up to 30). The main entrance module must be supplied with its own power supply unit; again, conductor + 24 must be separate from the other power supply units.



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CERTIFICAZIONE ITALIANA DEI SISTEMI QUALITÀ AZIENDALI
ITALIAN CERTIFICATION OF COMPANY QUALITY SYSTEMS



CERTIFICATO n. **9110.URMD**
CERTIFICATE No

SI CERTIFICA CHE IL SISTEMA QUALITÀ DI
WE HEREBY CERTIFY THAT THE QUALITY SYSTEM OPERATED BY

URMET DOMUS S.p.A.

UNITÀ OPERATIVE
OPERATIVE UNITS

Via Bologna, 188/c - 10154 TORINO

È CONFORME ALLA NORMA
IS IN COMPLIANCE WITH THE STANDARD

UNI EN ISO 9001

PER I SEGUENTI TIPI DI PRODOTTI - PROCESSI - SERVIZI
CONCERNING THE FOLLOWING KINDS OF PRODUCTS - PROCESSES - SERVICES

**Progettazione, sviluppo e produzione di sistemi di
citofonia, videocitofonia, sicurezza e telefonia**
*Design, development and production of door entryphone systems,
video door entryphone systems,
security systems and telephone systems*

IL PRESENTE CERTIFICATO È SOGGETTO AL RISPETTO DEL REGOLAMENTO
PER LA CERTIFICAZIONE DEI SISTEMI QUALITÀ DELLE AZIENDE
THE USE AND THE VALIDITY OF THIS CERTIFICATE SHALL SATISFY THE REQUIREMENTS
OF THE RULES FOR THE CERTIFICATION OF COMPANY QUALITY SYSTEMS

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Due to continuous product improvement all specifications, colours and sizes are subject to change without notice.

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