



INSTALLATION MANUAL



S16

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Regulatory Compliance Information

FCC Declaration of Conformity

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Radio and television interference

The equipment described in this manual has been designed to protect against Radio Frequency Interference (RFI). However, there are some instances where high powered radio signals or nearby RF-producing equipment (such as digital phones, RF communications equipment, etc.) could affect operations. If interference to your WiSPLICE device is suspected, relocate or turn off nearby electrical appliances before contacting Skyway Labs for assistance.

Important! Changes or modifications to this product not authorized by Skyway Labs could void the FCC compliance.

Important Safety Information

Warnings

IMPORTANT! READ THIS ENTIRE DOCUMENT BEFORE INSTALLING OR USING YOUR WiSPLICE DEVICE. FAILURE TO DO SO OR TO FOLLOW ANY OF THE INSTRUCTIONS AND WARNINGS IN THIS DOCUMENT CAN RESULT IN FIRE, ELECTRICAL SHOCK, SERIOUS INJURY OR DEATH. YOUR WiSPLICE DEVICE MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN, AND IN ACCORDANCE WITH LOCAL ELECTRICAL CODES AND ORDINANCES.

Do not install or use your WiSPLICE device near flammable, explosive, or combustible materials, chemicals, or vapors. Turn off input power at the circuit breaker before installing or maintaining your WiSPLICE device. Use your WiSPLICE device only within the specified operating parameters. Stop using and do not use your WiSPLICE device if it is defective, appears cracked, damaged, or fails to operate. Do not attempt to open, disassemble, repair, tamper with, or modify your WiSPLICE device. Your WiSPLICE device is not user serviceable. Contact Skyway Labs for any service or replacement.

Do not use your WiSPLICE device in wet locations, or connect other devices to your WiSPLICE device in wet locations. Do not insert foreign objects into any part of your WiSPLICE device.

WiSPLICE is not an Over-Current Protection Device or Circuit Breaker. Your WiSPLICE device must be installed on a branch circuit protected by an OCPD (circuit breaker) rated at no greater than the "Max OCPD or Breaker" listed in the specifications. Any conductors installed on the LOAD side of your WiSPLICE device must be sized appropriately for the OCPD rating.

WiSPLICE is not a Ground-Fault Interruptor (GFI). Applications requiring GFI protection must incorporate an approved GFI breaker or receptacle.

WiSPLICE is not an Arc-Fault Circuit Interruptor. Applications requiring AFCI protection must incorporate an approved AFCI device.

Cautions

Incorrect installation and use of your WiSPLICE device could damage it. Any resulting damage is excluded from the warranty. Do not operate your WiSPLICE device in temperatures outside its operating range of -20°C to +55°C).

Errors or Omissions

To communicate any inaccuracies or omissions in this manual, please send an email to: feedback@wisplICE.com.

Specifications

Model	S16
Voltage	110-240VAC LINE-NEUTRAL or LINE-LINE
Frequency	50-60Hz
Rated Loads	240VAC, 20A Resistive 120VAC, 20A Resistive 120VAC, 1/2HP Motor 120VAC, 3A Pilot Duty 120VAC, 12.5A Tungsten 120VAC, 5A E-Ballast 120VAC, 15A Receptacle
Max OCPD or Breaker	20 Amps
Dimensions	55mm x 40mm x 24 mm
Volume	45 cm ³ (2.75 in ³)
Mass	55 g
Operating Temperature	-20C – 55C
Storage Temperature	-40C – 70C
Agency Approvals	UL File E524862 UL 60730-1 CSA E60730-1

Product Description

WiSPLICE provides monitoring, management and billing functionality to any electrical outlet, circuit, fixture or appliance. S-series WiSPLICE models are designed to be used in fixed installations in an approved junction box or enclosure, placed in-line between the power source and load.

Features

Zero-infrastructure Billing and Access-control

WiSPLICE devices can be activated, monitored and managed without the need for wireless network infrastructure, purely through secure communication with the WiSPLICE app on an authenticated user's mobile device.

Cloud-based monitoring and management

Where WiFi internet connectivity is available, WiSPLICE devices can connect directly to the WiSPLICE cloud-based management platform and enable real-time remote monitoring and management features.

Flexible Management

The WiSPLICE cloud management platform and mobile app offers an extensive suite of options to provide a tailored solution for your application.

Versatile and Compact Form Factor

WiSPLICE S-Series devices are designed to be installed in existing enclosures and junction boxes. Where regulations permit and sufficient enclosure volume

exists, a WiSPLICE device can be installed in the same box as a receptacle or other fixture.

Easy Installation

WiSPLICE devices have only 3 terminals to connect -- LINE, LOAD, and Neutral.

Installation

General Considerations

WiSPLICE S-Series devices must be installed in an approved electrical enclosure. Ensure that box-fill requirements are met when planning your installation. If existing enclosures do not provide sufficient extra volume to safely accommodate the WiSPLICE device along with new and existing wiring, install a secondary junction box to house your WiSPLICE device. Alternatively, install an approved box extender to provide sufficient volume for the device. Consult your authority having jurisdiction for local code requirements.

For best wireless performance and range, use a plastic enclosure. WiSPLICE can work in a metal enclosure, but will need to be located within 12 metres of a WiFi access point if WiFi connectivity is required. For a Zero-infrastructure installation, locate the WiSPLICE device within 4 metres of where users are likely to operate it with their mobile device.

WiFi range issues can be resolved by installing a WiFi range extender or a WiSPLICE mobile network adapter near your WiSPLICE installation.

Before You Start

Download and install the WiSPLICE mobile app prior to installing. Use the app to create an account for managing your WiSPLICE devices. Ensure that your mobile device has internet connectivity at the installation location.

Register your WiSPLICE device

In the WiSPLICE mobile app, under the Account Settings menu, choose “Add New WiSPLICE Device”. Scan the QR code on the WiSPLICE product label. Configure the device settings to suit your application. All settings can be changed at any time. Tap “Done” when complete.

Disconnect Power

Ensure that all branch circuits within the enclosure that you will install your WiSPLICE device into have been de-energized by turning OFF the circuit breakers that feed them. Use a non-contact voltage tester to verify that the circuits are disconnected.

Prepare the Enclosure

DISCONNECT POWER TO ALL CIRCUITS WITHIN THE INSTALLATION ENCLOSURE. USE A NON-CONTACT VOLTAGE TESTER TO VERIFY.

Your WiSPLICE device is intended to be installed in-line between the source branch circuit and the load to be managed.

Locate and disconnect the LINE from the LOAD conductor

Inside the enclosure, locate the branch circuit (LINE) conductor that feeds the receptacle, fixture, or other load that is to be managed by your WiSPLICE device.

Disconnect the LINE conductor from the LOAD power entry conductor or terminal.

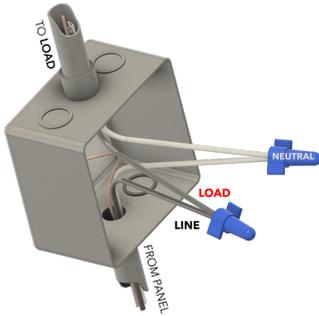


Figure 1 - Existing LINE-NEUTRAL Load

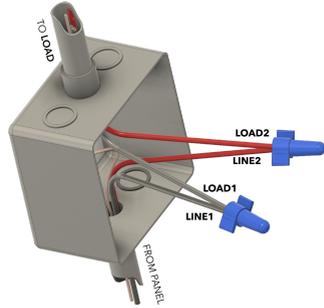


Figure 2 - Existing LINE-LINE Load

If the load is a split-phase device (240V or 208V), you will find two LINE conductors feeding the load. You will only need to disconnect one of them.

Connect the conductors to the WiSPLICE device

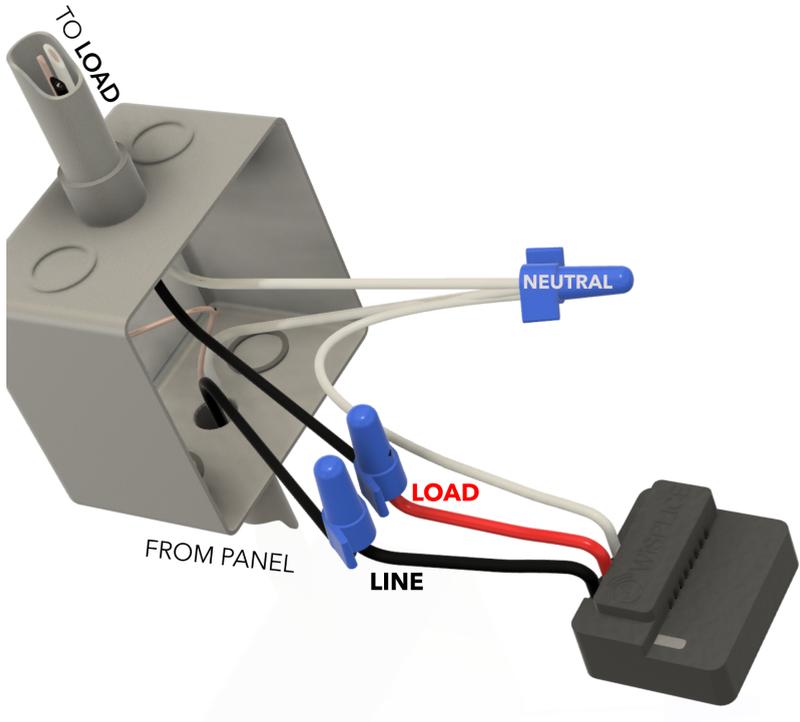
LINE and LOAD conductors

S16

WiSPLICE S16 is equipped with three wire leads.

1. Strip 20mm of insulation from each conductor.
2. Connect the BLACK (LINE) conductor to the branch circuit (LINE) conductor (identified above).
3. Secure with an approved wire connector.
4. Connect the RED (LOAD) conductor to the conductor that feeds the load.

5. Secure with an approved wire connector.



Reference conductor

LINE-NEUTRAL Loads (120V in North America / 230V elsewhere)

The WHITE REFERENCE conductor on your WiSPLICE device must be connected to the NEUTRAL conductor(s) in your enclosure. Multiple WHITE neutral conductors are typically spliced in a single wire connector. Remove the wire connector and connect the WHITE reference to the others. Secure with the wire connector.

LINE-LINE Loads (208/240V in North America)

The WHITE REFERENCE conductor on your WiSPLICE device must be connected to the second LINE conductor(s) in your enclosure. Splice the WHITE REFERENCE conductor to the second LINE conductor and secure with a wire connector.

Complete the installation

Place the WiSPLICE device in the enclosure

Carefully place the WiSPLICE box in the enclosure, neatly folding any excess wire into the enclosure. Do not apply excess force. If you experience difficulty fitting the WiSPLICE device into the enclosure:

- Use a larger enclosure
- Add an extension ring to the enclosure
- Install the WiSPLICE device in a separate enclosure

Secure the enclosure with an approved cover plate

Configure and test the WiSPLICE device

Restore power to the branch circuit

Activate the appropriate breaker.

Launch the WiSPLICE mobile App

Tap the "User Settings" icon and select "Manage My Devices". If you successfully registered the device using its QR code prior to installation, it should appear under the heading "Newly Installed". You can now select the device and configure it as desired.

Suggested Applications

WiSPLICE is versatile. There are many ways to use it and many features to suit your application. Here are a few of the most common:

Electrical Outlet in a Multi-Tenant Parking Facility

Manage and bill for the use of common-property electrical outlets, especially for charging Electric Vehicles.

Device Location	In outlet junction box, or, In dedicated enclosure beside outlet
Access Mode	User-Controlled: For cases where multiple users could be using the outlet. Each user activates their session using the WiSPLICE app and pays using prepaid funds from their account. Recommended settings: Auto Close on Idle -- Ends the session automatically after negligible current is detected for 1 minute.
Billing Mode	Consumption: Charge users by amount of energy consumed in kWh. May not be permitted in some jurisdictions. Duration: Charge for use of the service per hour. Optional Settings: Step Pricing -- Allows users to select one of three different maximum current levels with pricing scaled accordingly. Public Access: Allows non-registered users to activate and pre-pay for usage using a credit card, Google Pay or Apple Pay. Access is via web app loaded by scanning a QR code posted near the outlet. [WiFi REQUIRED]

Public Recreation Amenity

Examples: Tennis Court / Track / Park Lighting, Outdoor heat lamps, Street Vendors, Food Trucks

Device Location	In lighting control enclosure, branch circuit junction box, or in dedicated enclosure
Access Mode	User-Controlled: Each user activates their session using the WiSPLICE app and pays using prepaid funds from their account. Recommended settings: Auto Close on Idle -- Ends the session automatically after negligible current is detected for 1 minute. Scheduled Operation: Specify daily opening and closing times for the service and disallow use at night. Time Limit: Prevent excessive use.
Billing Mode	Duration: Charge for use of the service per hour. Public Access: Allows non-registered users to activate and pre-pay for usage using credit card, Google Pay or Apple Pay. Access is via web app loaded by scanning a QR code posted near the outlet. [WiFi REQUIRED]

Shared Amenities in Residential Buildings

Examples: Car Wash / Vacuum Stations, Laundry Machines, Saunas, Patio Heating

Device Location	In outlet junction box, control enclosure, branch circuit junction box, or in dedicated enclosure
Access Mode	User-Controlled: Each user activates their session using the WiSPLICE app and pays using prepaid funds from their

	<p>account.</p> <p>Recommended settings: Auto Close on Idle -- Ends the session automatically after negligible current is detected for 1 minute.</p> <p>Scheduled Operation: Specify daily opening and closing times for the service and disallow use at night.</p> <p>Time Limit: Prevent excessive use.</p>
Billing Mode	<p>Duration: Charge for use of the service per hour or minute.</p> <p>Public Access: Allows non-registered users to activate and pre-pay for usage using credit card, Google Pay or Apple Pay. Access is via web app loaded by scanning a QR code posted near the outlet. [WiFi REQUIRED]</p>

Tenant Equipment on Common Property

Examples: HVAC, EV Charging, Vending Machines

Device Location	In outlet junction box, control enclosure, branch circuit junction box, or in dedicated enclosure
Access Mode	<p>Fixed: All usage is billed to a single user in a monthly invoice.</p> <p>Consumption: Charge users by amount of energy consumed in kWh. May not be permitted in some jurisdictions.</p> <p>Optional settings:</p> <p>Scheduled Operation: Specify daily opening and closing times for the service and disallow use at night.</p>
Billing Mode	<p>Duration: Bill for use of the service per hour or minute.</p> <p>Recommended Setting: Pause when Idle. Bill the user only for time when significant current flow is detected. Provides a more accurate reflection of the value delivered to the user.</p> <p>Consumption: Charge users by amount of energy consumed in</p>

	kWh. May not be permitted in some jurisdictions.
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