embedia

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USBIF-SSI

USB Scheduler/Sensor Interface

Package Contents

- 1 x USB Scheduler/Sensor Interface with the following removable component:
  - 1 x Pluggable 5-Position Terminal Block for Sensor Inputs
- 1 x 0.5m (1.6ft) Micro-A to Micro-B USB Cable

Overview

The USBIF-SSI provides 4 configurable schedules, 1 photodiode sun/brightness sensor input, and 1 pulse wind sensor input for a Solarai™ Group or Plus level motor control system, .
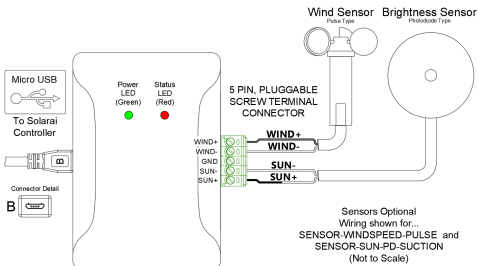
Before You Begin

You will need the following tools and accessories:

- Embedia Solarai™ Group or Plus Motor Controller
- Photodiode Sun/Brightness Sensor (Optional)
- Pulse Wind Sensor (Optional)
- Wire (16 AWG Max.) (Optional)
- Precision Screwdriver (Optional)
- Wire Stripper (Optional)

Mounting Details

The USBIF-SSI can be placed inside the same junction box as the Group or Plus Solarai™ motor controller that it is connected to or anywhere outside of the junction box as it is a low voltage DC device.

Wiring Details

The USB cable that is included has 2 types of connectors: Micro-A (rectangular-shaped) and Micro-B (trapezoidal-shaped). The micro-A connector connects to any Embedia Group or Plus motor controller that has a USB port and will not fit into the USB port of the USBIF-SSI. The Micro-B connector will fit into either USB port, but it must be connected to the USBIF-SSI for proper operation. The length of the included cable is selected based on typical usage but can be replaced with a cable of a different length. Various USB cable lengths are available for optional purchase. The USBIF-SSI should be located no further than 5m (15 ft) from the controller, which is the maximum cable length supported by USB.

| Embedia Motor Controller USB Port	Micro-A Connector	Micro-B Connector	USBIF-SSI USB Port
12345 Micro-AB	54321 Micro-A	54321 Micro-B	12345 Micro-B

Default Operation

Out-of-the-Box, the USBIF-SSI can be used to position all motors on the connected network to the fully retracted or fully extended position based on default sensor overrides that are set up at default thresholds when a photodiode sun/brightness sensor and/or pulse wind sensor is/are connected.

When sensors are connected: If brightness exceeds 45 kLux for 5 seconds, all motors will extend. If brightness drops below 45 kLux for 20 minutes, all motors will retract. If wind exceeds 12m/s for even a second, all motors will extend and lock out all other overrides for 20 minutes.

5 sec

20 min

1 sec 🔒 **20 min**
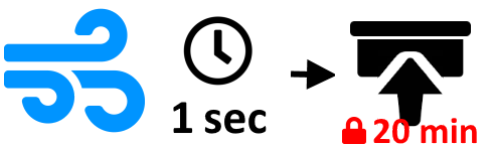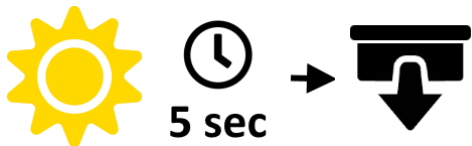
Add-on Reconfiguration

The USBIF-SSI can be reconfigured using the Embedia InSight App in conjunction with the USBIF-WiFi Add-on (sold separately) connected to one of the controllers on the network.

Sensor thresholds and timeouts can be reconfigured as well as what motors react to them. Schedules can also be added/modified/removed.

Embedia InSight App

Android	iOS
GET IT ON Google Play	Download on the App Store

LED Indicators

Indicator	Indication
Solid Green LED	USBIF-SSI is powered and is communicating with the controller it is connected to
Solid Red LED	Wind Lockout is in effect
Blinking Red LED	USBIF-SSI is waiting for or processing a firmware upgrade file

Technical Specifications

Parameter	Specification
Power and Communication	USB Micro B; 5Vdc Connect to a {{solarai}} Group or Plus motor controller using a USB Micro A to Micro B cable (5m/15ft max)
Low Voltage Inputs	1 x Photodiode Brightness Sensor Input; 1 x Pulse Wind Sensor Input; 16 AWG Max.
Dimensions	78.5mm (3.09") x 25.4mm (1.00") x 62.3mm (2.45")
Enclosure Options	Custom Flame-retardant ABS plastic enclosure