

10 Inch Touch Screen Kit

Turnkey solution for local touchscreen control of Avi-on lighting control systems

High-Resolution

10" capacitive-touch screen with a 1920x1200 resolution with true-black display filter for exceptional clarity

Customizable Interface

Design the screen layout, configure the controller through the RS-232 Interface, and configure to control third-party AV devices

Flexible Mounting Options

Ultra-thin bezel for elegant mounting in landscape or portrait, or optional stand for countertop convenience

Control Unit & RS-232 Interface

The full range of Avi-on two-way control commands is supported via the RS-232 interface

The Avi-on® 10" Touch Screen Kit provides a turnkey solution for touch-screen control of Avi-on lighting control systems. **The touch screen is fully customizable** to support any desired layout and is available with both wall-mount and tabletop mount kits (optional).

The screen communicates through a system controller and the Avi-on RS-232 Serial Interface. **The full range of two-way Avi-on control commands is supported through the RS-232 interface.** Available in Black or White.

PRODUCT OVERVIEW

Installation

Mount the touch screen on the wall or use a tabletop mount kit. Mount the controller in a suitable location with reliable access to the Avi-on network (near lighting controllers or power packs). Connect an Ethernet cable between the screen and the controller, and wire the RS-232 Interface to the controller. Apply power to the controller and provide 12 VDC to the RS-232 Interface.

Programming

Design the screen layout using the provided Windows-based software toolkit, and configure the controller interface to communicate through the RS-232 Interface (standard serial configuration).

Program the control commands using the Avi-on Serial Control Protocol documentation. Some advanced control actions may require additional programming of the Avi-on network. Programming services for lighting control applications are available from Avi-on.

Applications

Ideal for conference rooms, control rooms, stadium command centers, and any location requiring a locally communicating, customizable touch-screen interface.

The touch screen can also be configured (by others) to control a wide range of third-party AV devices.

ORDERING INFORMATION

Part Number	Description	Application	Color
AVI-RTI-IST10-B	10" Touch Screen	Wall or Table Control	Black
AVI-RTI-IST10-W	10" Touch Screen	Wall or Table Control	White
AVI-KIT-RTI-XP3	Touch Screen Control Unit and RS232 Interface	Touch Screen Controller	-
AVI-RTI-IST10-FMK	Wall Mount Kit	Wall Mount	-
AVI-RTI-IST10-STAND	Table Mount Kit (Includes Power Supply, or use PoE)	Table Mount	Silver

Project		Location/ Type	
---------	--	-------------------	--

SPECIFICATIONS

Touch Screen

Power:	(Power supply not included) +12 VDC, 2A, or PoE (802.3af)
Power Management:	Adjustable backlight / proximity sensor
Touchscreen Display:	High-brightness 24-bit color IPS LCD, WUXGA (1920 x 1200 pixels) with true-black display filter, Integrated high-resolution capacitive-touch screen
Display Size:	10" (254 mm) diagonal, 16:10 aspect ratio
Display Backlight:	LED backlit, 400 nit
Ethernet Port:	RJ45, 10/100/1000 Base-T
PoE Camera:	Color CMOS, 2 MP, 15–30 fps at 1920 x 1080
Microphone:	Built-in digital microphone array with mute button; hardware-based echo cancellation
Speakers:	Two (2), 8 Ω, 1 Watt, 100–20 kHz Communications
System Memory:	4 GB RAM, 64 GB ROM
Device Capability:	Total number of devices limited only by available memory
Macro Capability:	Total number of macros limited only by available memory
Operating Temperature:	+32°F to +122°F (0°C to +50°C)
Operating Humidity:	0.5% to 95% non-condensing
Mounting:	Wall-mount or aluminum table stand (available separately as a kit including power supply; not included)
Installation:	U.S. standard single or dual gang
Outer Bezel Dimension:	9.39" x 6.24" x 0.41"
(W x H x D)	(238.5 mm x 158.5 mm x 10.5 mm)
Wall Cut-Out Dimension:	4.765" x 4.5" (121.0 mm x 114.5 mm)
In Wall (Wall Box) Depth:	1.34" (34 mm); allow additional space for the RJ-45 connector
Weight:	14.1 oz (400 g)

Control Processor

Power Supply:	+12 VDC, 1A, or PoE (802.3af)
Multi-Purpose Output Port:	(Port 1) One custom 3.5 mm, 4-conductor jack. Designed for RTI modules as well as industry-standard IR emitters.
IR Output Ports:	(Ports 2 & 3) Two 3.5 mm jacks: Compatible with industry-standard IR emitters.
IR Output Drive:	100 mA maximum (per port, adjustable) Infrared
Frequency Transmission Range:	15 kHz – 460 kHz
RS-232 Port:	One, bi-directional
RJ45 Ethernet Port:	One 10/100Base-T with Power-over-Ethernet (Class 3)
Relays:	Two, 5 Amps @ 30 VDC or 12 V / 100 mA
Trigger Sense Inputs:	Two, 3–24 VDC, Off/Low voltage condition must not exceed 1 VDC
USB Ports:	One
Mounting:	Wall-mount or free-standing
Operating Temperature:	+32°F to +122°F (0°C to +50°C)
Operating Humidity:	0.5% to 95% non-condensing
Dimensions (W x H x D):	7.0" x 3.0" x 1.0" (177 mm x 76 mm x 25 mm)
Weight:	6.4 oz (100 g)

RS-232 Serial Interface

Input Voltage:	12–24 VDC
Power Consumption:	17 mA
CC Input:	12–24 VDC non-powered contact closure detection (momentary)
Direct Connect Input:	Compatible with all Avi-on Direct Connect™ Motion/Daylight Sensors
Size:	2.30 in x 1.43 in x 0.75 in (58.2 mm x 36.4 mm x 19 mm)
Mounting:	Removable mounting tabs
Weight:	0.45 oz (16 g)
Terminal Blocks:	22–16 AWG wires
Operating Temperature:	–22°F to +158°F (–30°C to +70°C)
Storage Temperature:	–40°F to +185°F (–40°C to +85°C)
Humidity Rating:	95% non-condensing
Radio Frequency:	2.4 GHz
Wireless Standard:	BLE 5.3 with Mesh
Point-to-Point Range*:	80 ft with obstructions; 350 ft unobstructed
Security:	AES 128-bit encryption for device-to-device communication AES 256-bit encryption for device-to-cloud communication
Warranty:	5 years; 10 years optional
Regulatory:	FCC ID: 2AFZI-AVIBG21 IC ID: 20544-AVIBG21 BQB: DID: D063032 CE: EN IEC 61000-6-1:2019, EN IEC 61000-6-3:2021

*When communicating through the mesh, range is essentially unlimited (5000ft+)

Wall Mount

Dimensions:	12.80" x 9.45" x 1.73" (W x H x D) 325.1 mm x 240 mm x 44 mm
Shipping Dimensions:	13.77" x 10.6" x 2.16" (W x H x D) 350 mm x 270 mm x 55 mm
Weight:	0.7 kg (1.54 lbs)
Material:	Moisture-resistant MDF (compliant with TSCA Title VI)
Installation:	To be installed in ½" drywall

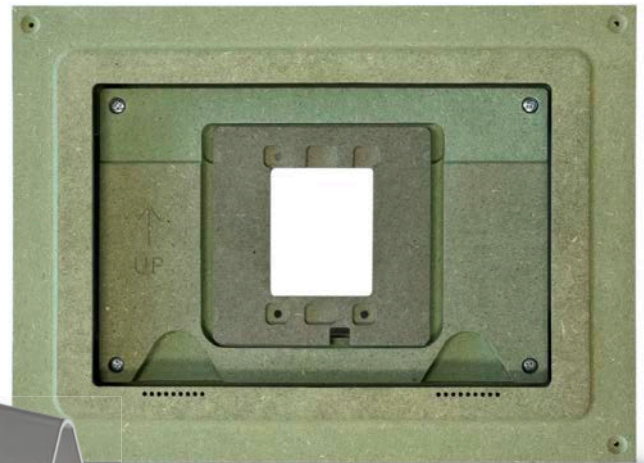
Table Mount

Color:	Silver anodized aluminum, black rubber feet
Dimensions (H x L x W):	5.25" (133.4 mm) x 5.25" (133.4 mm)
Front height:	5.27" (144.8 mm)
Rear height:	2.75" (69.9 mm)
Weight:	7.05 oz (200 g)
Included in the Box:	IST stand, mounting screws (4 + 2 spare), 12 VDC / 2A power supply

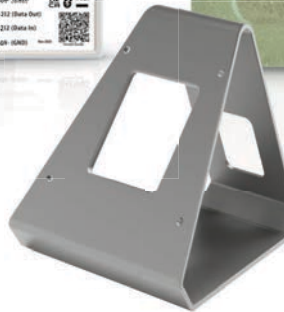
ADDITIONAL IMAGES



**Integrated Central Processor +
Serial Interface**
AVI-KIT-RTI-XP3



Flush Mount Kit
AVI-RTI-IST10-FMK



Stand Kit
AVI-RTI-IST10-STAND

WIRING

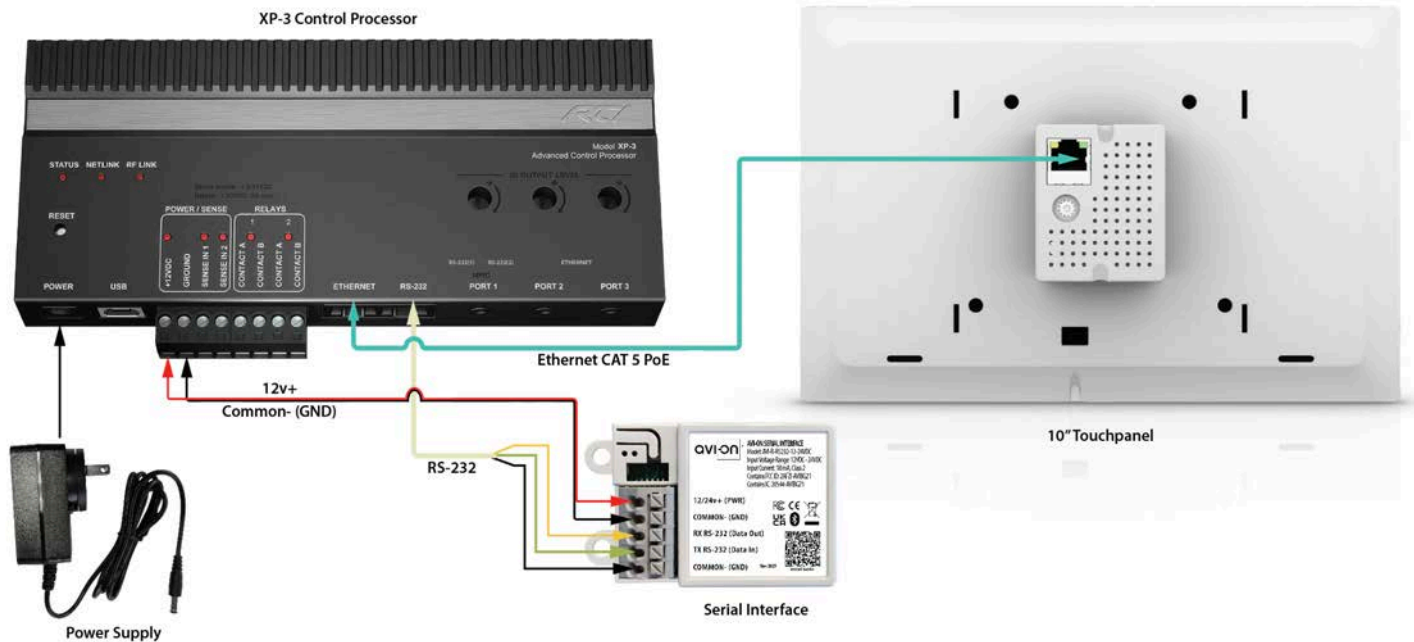


Figure 1. Wiring

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE. The information contained herein is believed to be reliable. Avi-on makes no warranty, representation or guarantee regarding the information contained herein, the suitability of the products for any particular purpose, or the continuing production of any product. Avi-on assumes no responsibility or liability whatsoever for the use of the information contained herein. The information contained herein, or any use of such information does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other intellectual property rights, whether with regard to such information itself or anything described by such information.

