

# 7 Inch Countertop Touch Screen Kit

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

## High-Resolution

High-brightness WVGA LCD with integrated multi-touch capacitive touch screen

## Adjustable Mounting

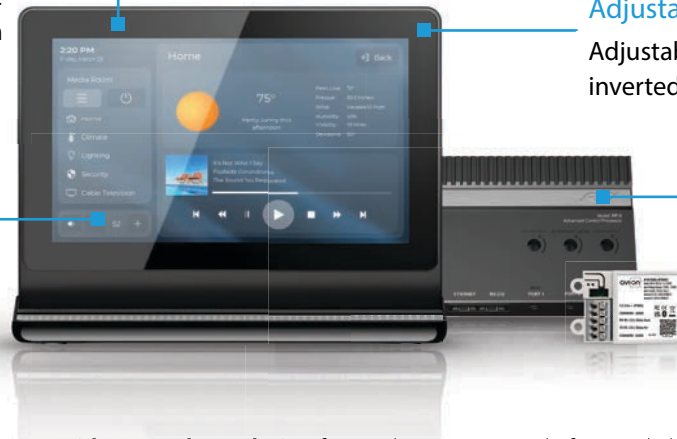
Adjustable countertop tilt, or mount inverted under a cabinet

## Customizable Interface

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

## 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® 7" Tabletop 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. Includes a pre-integrated tabletop mounting base.

Communication to the Avi-on network is achieved 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.

## PRODUCT OVERVIEW

### Installation

Place the unit on the table and connect a PoE Ethernet cable to the controller. Mount the controller in a suitable location with reliable access to the Avi-on mesh network (near lighting controllers or power packs). Connect an Ethernet cable between the touch screen and the controller, and wire the RS-232 Interface to the controller. Apply power to the controller and provide 12VDC 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 configuration on 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-CX7	7" Touch Screen	Under-Cabinet or Counter Control	Black
AVI-KIT-RTI-XP3	Touch Screen Control Unit and RS232 Interface	Touch Screen Controller	-

Project		Location/ Type	
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## SPECIFICATIONS

### Touch Screen

<b>Power:</b>	(Power supply not included) +12 VDC, 2A, or PoE (802.3af)
<b>Power Management:</b>	Adjustable backlight / proximity sensor
<b>Touchscreen Display:</b>	High-brightness color IPS LCD, FWWGA (854 × 480 pixels) with true-black display filter, Integrated high-resolution capacitive-touch screen
<b>Display Size:</b>	8" (203 mm) diagonal, 16:10 aspect ratio
<b>Display Backlight:</b>	LED backlit, 400 nit
<b>Ethernet Port:</b>	RJ45, 10/100/1000 Base-T
<b>System Memory:</b>	256 MB Flash (non-volatile) memory
<b>Macro Capability:</b>	Total number of macros limited only by available memory
<b>Operating Temperature:</b>	+32°F to +122°F (0°C to +50°C)
<b>Operating Humidity:</b>	0.5% to 95% non-condensing
<b>Mounting:</b>	Tabletop, or screws through mounting bracket (included)
<b>Installation:</b>	U.S. standard single or dual gang
<b>Dimensions:</b>	7.5" × 7.3" × 6.25" (W × H × D) (190 mm × 185 mm × 159 mm)
<b>Weight:</b>	2.0 lbs (907 g)

### Control Processor

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

### RS-232 Serial Interface

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

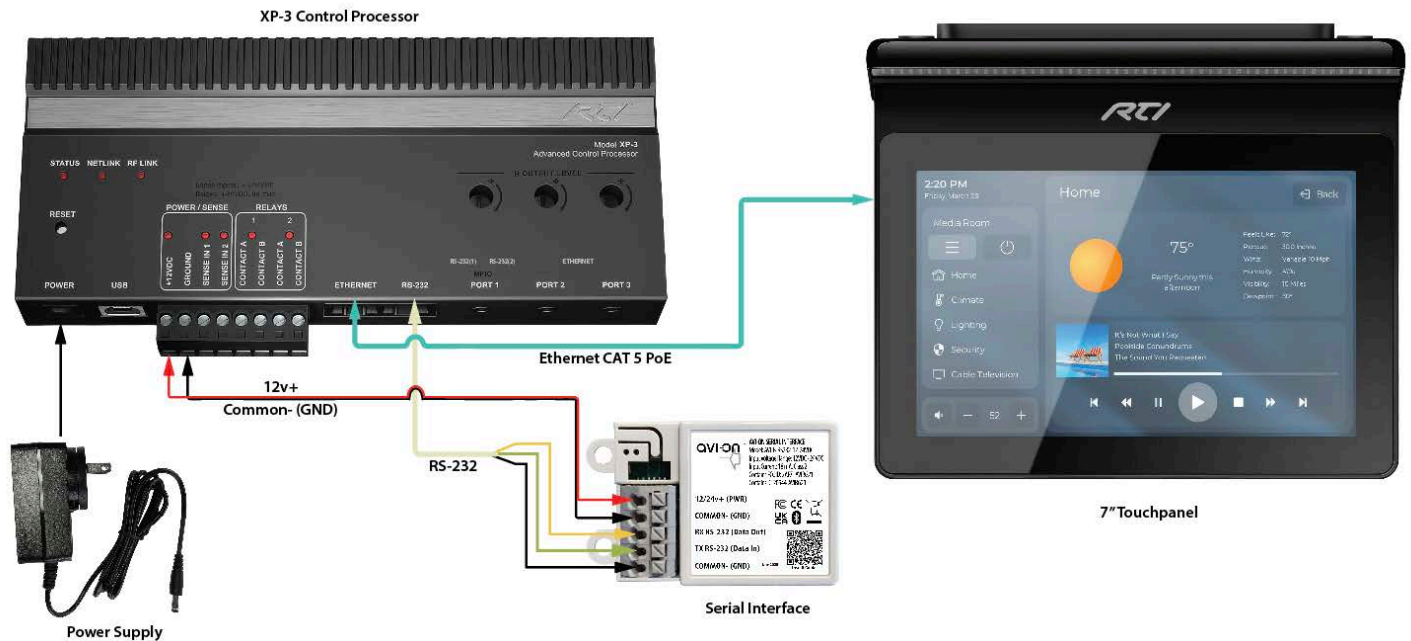
## ADDITIONAL IMAGES



**Countertop vs Under-Cabinet Mounting**  
AVI-RTI-CX7

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

## WIRING



**Figure 1. Wiring**

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