

4 Inch Touch Screen Kit



The **Avi-on® 4" Touch Screen Kit** delivers a fully integrated, turnkey solution for local touchscreen control of Avi-on lighting control systems. The high-resolution display is fully customizable, enabling intuitive, application-specific layouts. Communication is managed through a system controller and an RS-232 serial interface, **providing access to the full set of two-way Avi-on control commands.**

This in-wall control solution combines a 4" capacitive touchscreen, **five configurable buttons**, and an onboard control processor—eliminating the need for a separate controller. Buttons can be custom engraved using RTI's Laser Shark service for clear identification and a clean, professional appearance.

PRODUCT OVERVIEW

Installation

Mount the touchscreen in a standard single-gang wall box. Connect the RS-232 serial interface to the system controller. Supply 12 VDC power to the serial interface. After power-up, the touchscreen is ready for configuration.

Programming

Use the provided Windows software toolkit to design the screen layout and configure the RS-232 interface.

Implement control commands according to the Avi-on control

command documentation. Certain commands may require additional programming within the Avi-on network.

Programming services (lighting controls only) are available from Avi-on.

Applications

Suitable for conference rooms, control rooms, stadium control centers, and other locations requiring a locally communicating, customizable touchscreen interface.

The touchscreen may also be programmed (by others) to control third-party AV devices.

ORDERING INFORMATION

Part Number	Description	Application	Color
AVI-RTI-KX4	4" Touch Screen with Processor (integrated) and RS232 Interface	Touch Screen	White
AVI-RTI-BZBKX4BL	Black Bezel	Wall Mount	Black

Project	Location/Type
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SPECIFICATIONS

Touch Screen

Power:	+12V to +16V DC (power supply not included)
Power Management:	Adjustable backlight and proximity sensor
Touchscreen Display:	High-brightness color TFT LCD, WVGA (480 × 800 pixels), 16.7M colors Integrated high-resolution capacitive touchscreen
Display Size:	4" (97.2 mm) diagonal
Backlight:	LED, 200 nit
Ethernet Port RJ45:	10/100/1000 Base-T
PoE Camera:	Color CMOS, 2 MP, 15–30 fps at 1920 × 1080
Microphone:	Silicon MEMS
Speakers:	One (1), 8 Ω, 1 Watt
System Memory:	128 MB Flash (non-volatile)
Macro Capability:	Total number of macros limited only by available memory
Programming:	USB
Operating Temperature:	+32°F to +122°F (0°C to +50°C)
Operating Humidity:	0.5% to 95% non-condensing
Mounting:	Wall-mount
Weight:	8.9 oz (252 g)
Installation:	US standard single- or dual-gang
Outer Bezel Dimension:	4.352 in (110.5 mm) × 1.265 in (32.1 mm)
Wall Cut-Out Dimension:	2.942 in (74.7 mm) × 5.192 in (131.8 mm)
In Wall (Wall Box):	1.265 in (32.1 mm); with mounting wings: 1.624 in (41.2 mm)

NOTE: Additional room may be required depending on connections.

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 × 1.43 in × 0.75 in (58.2 mm × 36.4 mm × 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+)

ADDITIONAL IMAGES



**4" Touch Screen with Processor (integrated)
and RS232 Interface**
AVI-RTI-KX4



Black Bezel
AVI-RTI-BZBKX4BL

WIRING DIAGRAMS

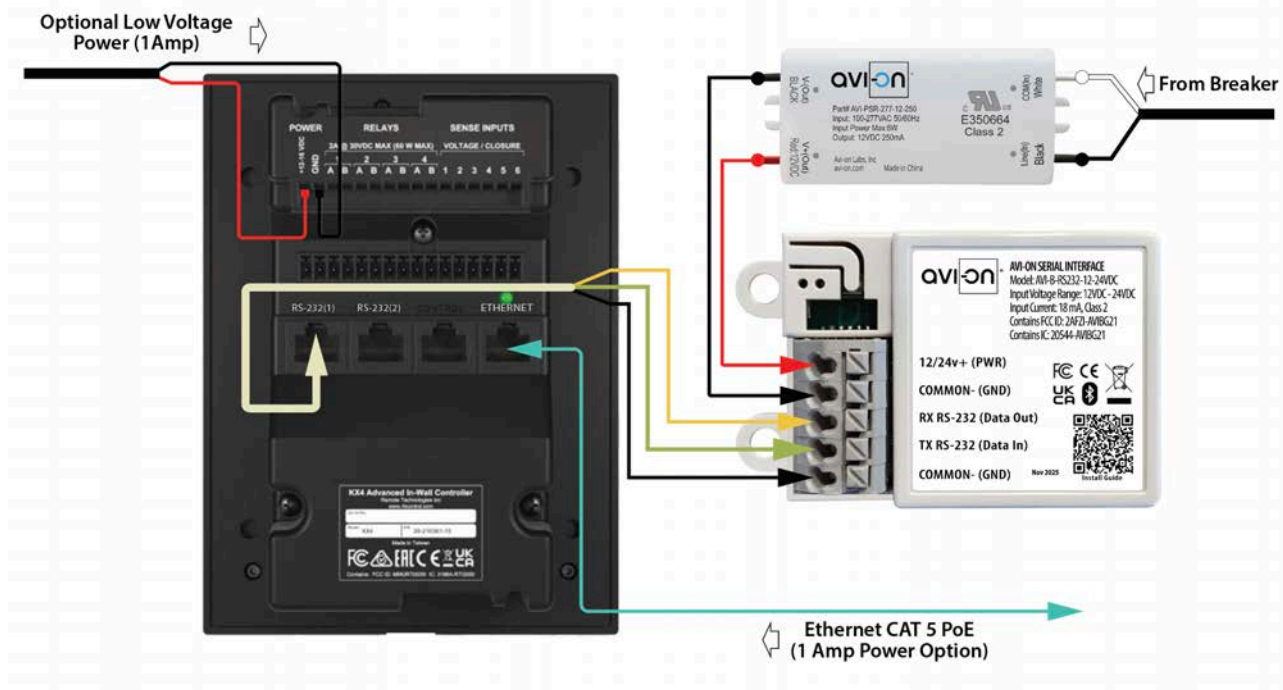


Figure 1. Wiring Diagram

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