LUTRON

Installation Instructions Please Read Before Installing

Ten Volt Module Kit HW-TVMKIT-120 HW-TVMKIT-230 CSP-TVMKIT-120 CSP-TVMKIT-230

The TVM Kit contains the parts required to install TVMs (not included). Load types such as 0-10 V, DALI broadcast, PWM, and Tridonic DSI_{TM} can be controlled by the TVM module with the addition of a module interface or a circuit selector. Customers can mount the TVM Kit in their own enclosure or add it to an existing Lutron enclosure. A TVM Kit will allow the addition of 1-12 TVMs, which can control 1-24 circuits of the above load types.

Kit Contents





Stops

Power Supply





Addressing Harness



HW-TVMKIT-120 CSP-TVMKIT-120 Transformer p/n: 163-198 nput: 120 V 🐱 50/60 Hz 40 W Output: 24 V~ 16 A NEC_® Class 2/IEC PELV

Low-Voltage Barrier and Mounting Hardware

HW-TVMKIT-230, CSP-TVMKIT-230 Transformer p/n: 163-227 Input: 220-240 V~ 50 Hz 40 W Output: 24 V~ 1.6 A NEC_® Class 2/IEC PELV

TVM Kit Installation



WARNING: Locate and lock supply breaker (MCB) in the OFF position before proceeding. Failure to turn power off before working in the panel can result in serious personal injury or death.

1. Remove existing low-voltage barrier in panel by loosening each screw.



- 2. Mount new low-voltage barrier into the panel as shown in Figure 1. NOTE: New barrier consists of 2 pieces.
- 3. Mount the DIN Rail into the panel as shown in Figure 1.
- 4. Mount the power supply transformer into the panel as shown in Figure 1. The power supply is mounted in the space where the topmost module is usually installed. This is module number 8 for HomeWorks_® 8 module panels, module number 5 for HomeWorks_® 5 module panels, or module number 1 in commercial panels.
- 5. Connect transformer wire labeled "Live" to the Hot/Live terminal block for the topmost module. Connect transformer wire labeled "Neutral" to one of the Neutral terminal blocks for the topmost module (see Figure 1).

Figure 1 - Kit Installation





Figure 2 - ISO Wiring



- 6. Connect the first addressing harness plug labeled "ISO" into the bottom of the ISO as shown in Figure 2. **NOTE:** Each plug must be connected in the proper order.
- 7. Connect the low-voltage leads from the power supply to the ISO terminals A and C as shown in Figure 2. The output power is 24 V \sim , so there is no polarity.
- 8. Connect the included ground wire to the ISO terminal F as shown in Figure 2.
- 9. Connect the last connector on the RPM harness labeled "ISO TVM" to the top of the ISO as shown in Figure 2.
- 9. Snap one of the end stops into the left side of the DIN rail, then snap the ISO unit into the DIN rail and slide left against the end stop.
- 10. Using the supplied screw, connect the ground wire's ring lug to a convenient hole near the left end of the DIN Rail
- 11. Install TVMs.

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Ten Volt Module GRX-TVM2 12 V=== 100 m/

Ten Volt Modules (TVMs) are designed to be installed with a TVM Kit to dim various load types such as 0-10 V. DALI broadcast, PWM, and Tridonic DSI_{TM}. Each TVM has two outputs.

TVMs can work in conjunction with

-4U) in the panel to switch the ballast/driver. The TVM has the

Remote Power Modules (RPM-4A or

ability to sink or source current up to

50 mA per circuit, or the equivalent



TVM Installation

of 20 ballasts*.

- 1. Attach the addressing harness to the bottom of the corresponding TVM. The first TVM uses the connector labeled "TVM 1" (first connector after "ISO"). Repeat for additional TVM(s).
- 2. Snap the TVM unit(s) into the DIN rail. Snap an endstop into the DIN rail and slide left against the last TVM.



3. Connect low-voltage signal wires from ballast/driver circuits to the "+" and "-" terminals located on the top of the TVMs. Be sure to observe proper polarity. Terminals "A" and "C" are output 1 and terminals "D" and "F" are output 2.



- Please verify ballast/driver manufacturer specifications, as products may vary.
- Some ballasts/drivers require a permanent Hot/Live connection while others must be switched off in conjunction with the TVM. Consult ballast/driver manufacturer instructions for details

Mapping of TVM to RPM Outputs

TVM #	TVM Output #	RPM #	RPM Output #
TVM 1	1	RPM 1	1
	2		2
TVM 2	1		3
	2		4
TVM 3	1	RPM 2	1
	2		2
TVM 4	1		3
	2		4
TVM 5	1	RPM 3	1
	2		2
TVM 6	1		3
	2		4
TVM 7	1	RPM 4	1
	2		2
TVM 8	1		3
	2		4
TVM 9	1	RPM 5	1
	2		2
TVM 10	1		3
	2		4
TVM 11	1	RPM 6	1
	2		2
TVM 12	1		3
	2		4



Final Panel Configuration



Warranty: For Warranty information, please see the enclosed Warranty, or visit

This product may be covered under the following U.S. patent: 6,188,181; and corresponding foreign

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