INSTALLATION MANUAL
BALLAST CONTROLLER MODULE
6 Channels 0-10V
Model: RLY-6CH-0-10V

TiS
Automation Made Easy

ℹ️ PRODUCT INFORMATION

This module features six 0-10V output channels and is capable of controlling all types of 0-10V dimming ballast drivers.

PRODUCT SPECIFICATIONS

Output switching voltage	Number of channels	6
	Nominal voltage	0 – 230 V AC 50/60 Hz
	Max. switching Voltage	**440VAC / 125VDC**
	Analog Output	6 outputs 0-10V
Output switching current	Nominal current per channel	10A
	Maximum total channels load	60A
	Max switching current	16A Resistive
		8A Florescent
	Max Continues current	10A VAC
TIS Bus	Number of devices on 1 line	Max. 64
	Bus voltage	12-32 V DC
	Current consumption (Normal)	<30 mA / 24 V DC
	Current consumption (Peak)	<40 mA / 24 V DC
	Protection	Reverse Polarity Protection
Operating and display elements	Programming button/LED (PRG)	For assignment of the physical address
	1-6 buttons	Manually ON/OFF and Programming
Functions	Lighting control ON/OFF Dimming	6 channels controlled separately
	Curtain control	Can set 3 group of curtains (open/close) option
	Dimming	used with 0-10V output for dimming
	Scenes	6 different scenarios
Dimensions	Width × Length × Height	145mm × 75mm × 91mm
Housing	Materials	ABS fire proof
	Casing color	Black Gray
	Button color	Silver
	IP rating	IP 20

CE RoHS COMPLIANT PC ✓ FC

Read Instructions

We recommend that you read this Instruction Manual before installation.

Safety instructions

Electrical equipment should only be installed and fitted by electrically skilled persons.
Failure to observe the instructions may cause damage to the device and other hazards.
These instructions are an integral part of the product and must remain with the end customer.

Programming

This device can be tested and programmed manually. Advanced programming requires TIS Device Search software. Advanced software programming knowledge should be obtained in the advanced training courses.

Simple Installation

DIN Rail mount facilitates installation. Fixing points are provided for installation without the use of DIN rail.

Mounting Location

Install in a dry, well-ventilated location. Controllers may emit some mechanical noises. Consider this when deciding on a mounting location.
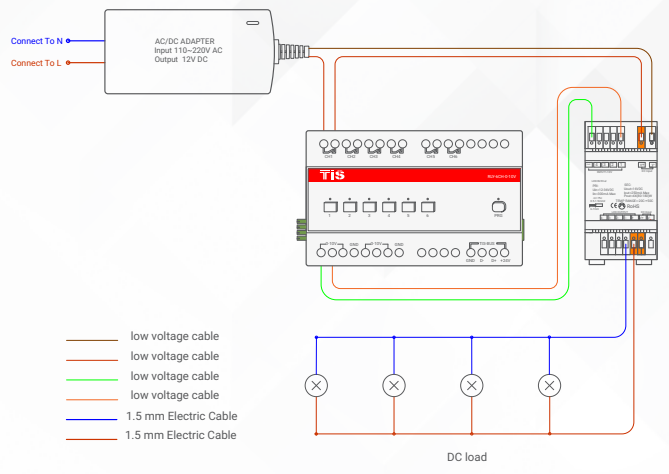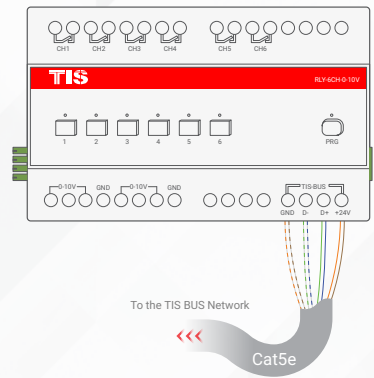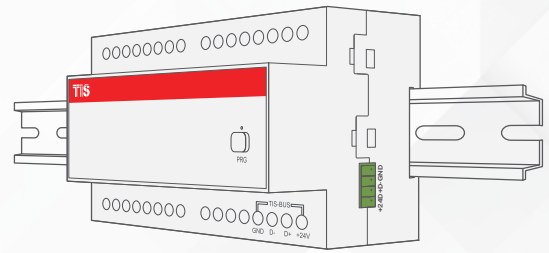
Data Cable

Use screened stranded RS485 data cable with four twisted pairs. Configure devices in a "Daisy Chain."
Do not cut or terminate live data cables.

Electrical Wires

The installer should adequately consider the total current consumption when selecting the wires.
Recommended wire size for load (light channels) and input wires is 2.5 -4 mm.

Warranty

We provide a warranty as required by law. A hologram warranty seal and product serial number are provided on each device. Please send the description of the defect with Product S/N to our dealer network.

⚙ INSTALLATION STEPS

1 » Turn off the main electrical source before installation.

⚠ **WARNING! HIGH VOLTAGE**

2 » Mount the device on a DIN Rail inside an approved enclosure. The device can also be installed without the use of DIN Rail by two mounting screw holes.

3 » Connect RS485 data cable to the TIS-BUS port as per the connection diagram. No need to loop the TIS-bus cable if 2 DIN Rail modules are connected together from the side bus train terminal.
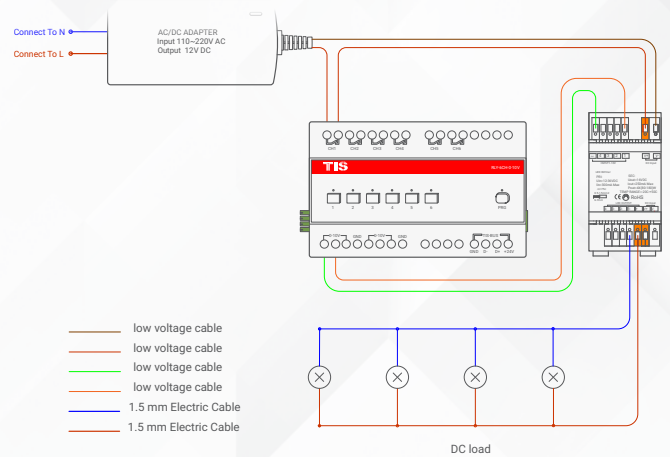

To the TIS BUS Network

Cat5e

4 » Connect the load (Driver Power) electrical wires to outputs 1-6. Each channel can control up to 10A loads. The installer should make sure not to overload the device and module channels.
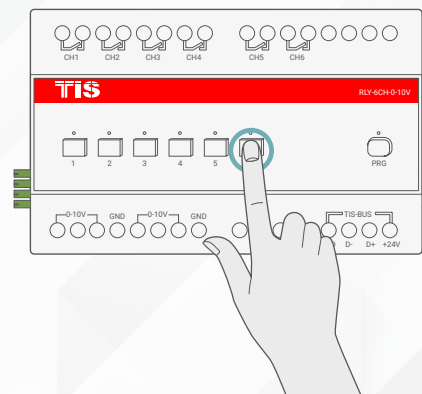

Connect To N
Connect To L

AC/DC ADAPTER
Input 110~220V AC
Output 12V DC

low voltage cable
low voltage cable
low voltage cable
low voltage cable
1.5 mm Electric Cable
1.5 mm Electric Cable

DC load

⚙ INSTALLATION STEPS

5 » Connect 0-10V outputs for each channel to 0-10V drivers' inputs.

Connect To N
Connect To L
AC/DC ADAPTER
Input 110~220V AC
Output 12V DC

low voltage cable
low voltage cable
low voltage cable
low voltage cable
1.5 mm Electric Cable
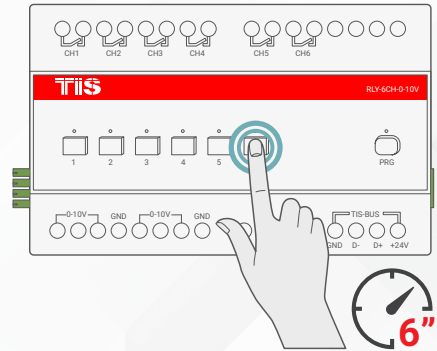1.5 mm Electric Cable

DC load

6 » Turn on the power source, and then test the loads by short pressing on the device's local override buttons 1-8.
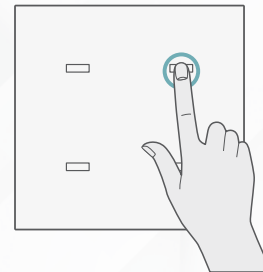
PAIRING (MANUAL PROGRAMMING)

You can pair the light channels with any wall panels. To do so, follow these steps:

1 ≫ Press on any buttons 1-6 for 6 seconds so that the LED indicator of that button starts blinking.

2 ≫ Short press on any wall lights buttons on the Luna, Mars, Terre or others panels.

3 ≫ Test the button on the panel by short pressing for ON/OFF and Long Press to dim.

🧰 TROUBLESHOOTING

?	**PRG Button Blinks Red Color Rapidly**	**Reason:** The Module address conflicts with other device in TIS network, you need to press and hold the PRG button for 6 seconds so the module can get new address
?	**Device PRG LED is not Blinking; Device not Powered**	**Reason:** Device is not powered on; no TIS-BUS 24V supply connected to the device.
?	**Device Button LED ON but lights not ON**	**Reason 1:** Lights' neutral wire not connected **Reason 2:** Channel protection delay time is enabled in software.
?	**Wall Panels can't Pair with the Device**	**Reason 1:** TIS-BUS connection has a problem; check the wires and make sure there's not a short in the connection. **Reason 2:** Manual programming function disabled in the device (default is enabled).
?	**Wall Panels can't Control the Device Channels**	**Reason 1:** TIS-BUS connection has a problem; check the wires and make sure there's not a short in the connection. **Reason 2:** Programming address is wrong.