

LC-01 4-channel LED Light Dimmer and Controller

It is not just an individual working unit to turn On/Off Switch to DC12-48V LED Light 0-100% dimmer, but also a great media to join a smart system via RS485 Modbus-RTU comm. port. It means, no matter for simple group LED lights dimming/control or for complicated smart system control, LC-01 is the best choice in market.

Features:

- Easy Installation and set up, saving electricity bill
- Cost-effective, low maintenance cost, long working life of LED and environment protection
- PWM dimming technology
- Independent working unit, On/Off Switch turns to LED light dimmer (0-100% 6sec.)
- Wired and Remote Control compatible
- Any DC LED Light workable, no flicking concern good for eyes
- LED light direct drive, no power consumption loss
- Single power supply source, more design protection
- Powerful current load, 4 channels total Output Power Max. 768W@48V, each channel 4A max .
- Wide Working Voltage 12~48V design
- WatchDog function supported



Function:

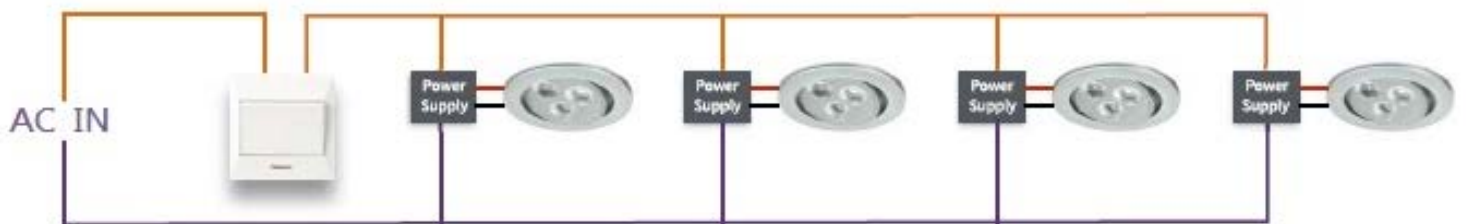
- 4-channel designed LED Light Dimmer and Controller is using PWM dimming technology to direct drive LED Lights, 1~5% dimming no flicking concern
- Each channel max load current 4A (4 channels total Output Power 768W@48V), with protection design against overload, short circuit and surges
- Independent working unit, able to extend working units in series (Max. 190pcs) for more channels dimming and control
- LED Lights Smart Control System: LC-01 Controller + On/Off Switch + HMI Touch Panel + smart Control Server/Gateway
- For Small or Medium system: 1pc HMI Touch Panel + numbers of On/Off Switches + LC-01 Controllers (Max. 10pcs suggested)
- Isolate RS 485 and ModBus-RTU communication protocol able to connect with HMI TFT touch panel or smart control system like System Chart 4 to dim lighting range from fully off "0" to full-on "1000" for different lighting mode and environment change setting
- 4-channel isolate multi-function Digital Input able to work with existing or general Power on/Off switch for light On/Off and 0-100% brightness dimming and to connect sensor for On-Off, detain or group dimming setting
- Wide working voltage 12-48V DC, to ensure stable and continued electricity supply for LED lights to extend the working life of LED lights, industrial power supply working source is recommended
- Extend ports for remote control or sensor for smart control system
- Easy Installation and set up, Cost-effective, low maintenance cost, long working life of LED and environment protection

Specification

Output Channel	4 Channels			
Load Current	Each Channel 4A			
Each Channel Output Power	48W@12VDC	96W@24VDC	144W@36VDC	192W@48VDC
Total Output Power	192W	384W	576W	768W
Dim Type	PWM			
PWM Frequency	16KHz			
Communication Interface	RS485 Modbus-RTU, 1.5KVDC Isolate, 16KV ESD			
Communication Speed	4,800/9,600/19,200/38,400/57,600/115,200bps, 8.N.1			
Extend Port	3.3V UART, 5V Output			
Digital Input	4-CH Isolate Dry Contact			
Outlet Protection	Overload, Short Circuit, Surges Suppression			
LED Indicate	Power On / Communication			
Input Voltage	12-48V DC, Inverting Input Protection			
Power Consumption	Working: 4W (Max), Standby: 1.6W			
Working Temperature	0~45°C			
Dimension	118 (L) x 83 (W) x 29 (T) mm			
Weight	310g			

Wiring Chart

General Wiring:

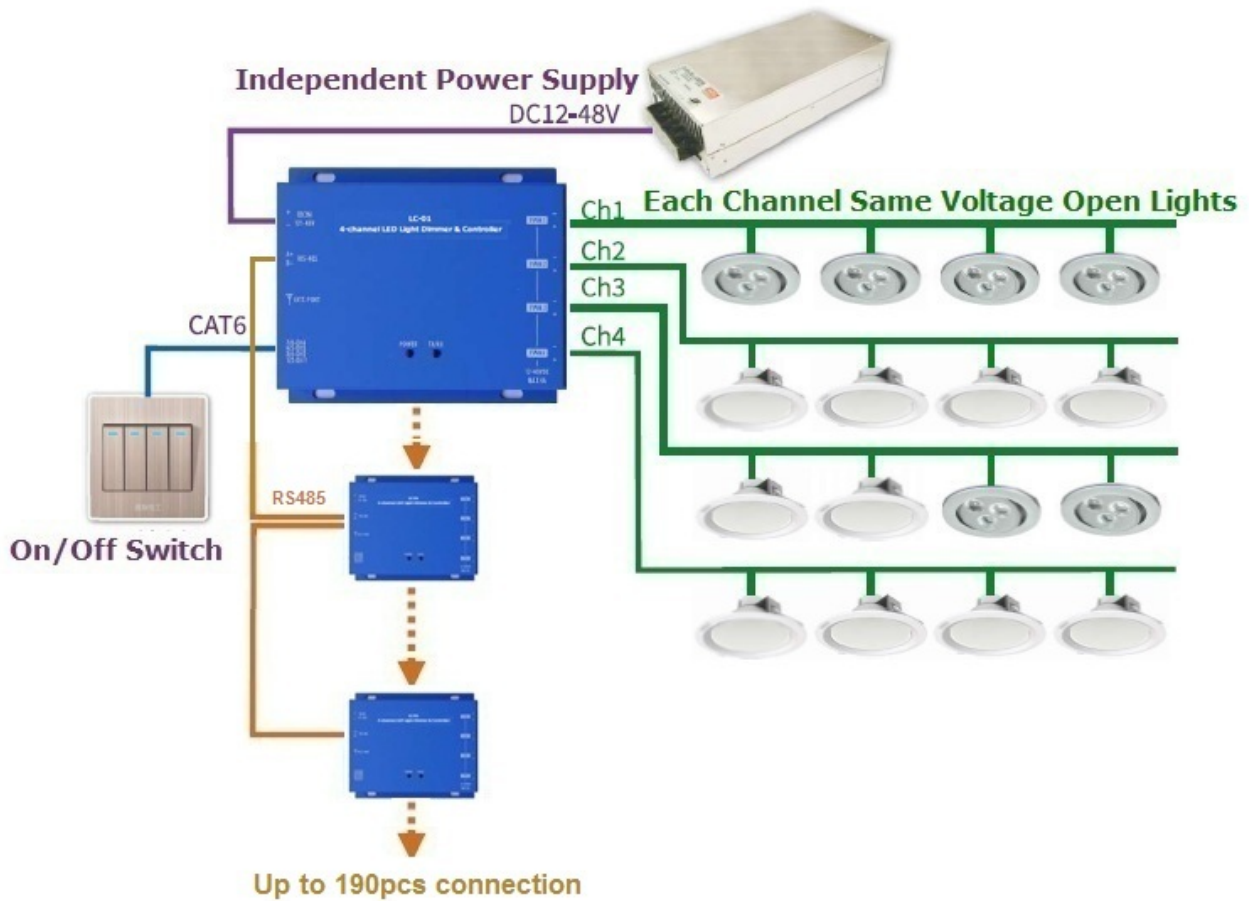


Improved Wiring:



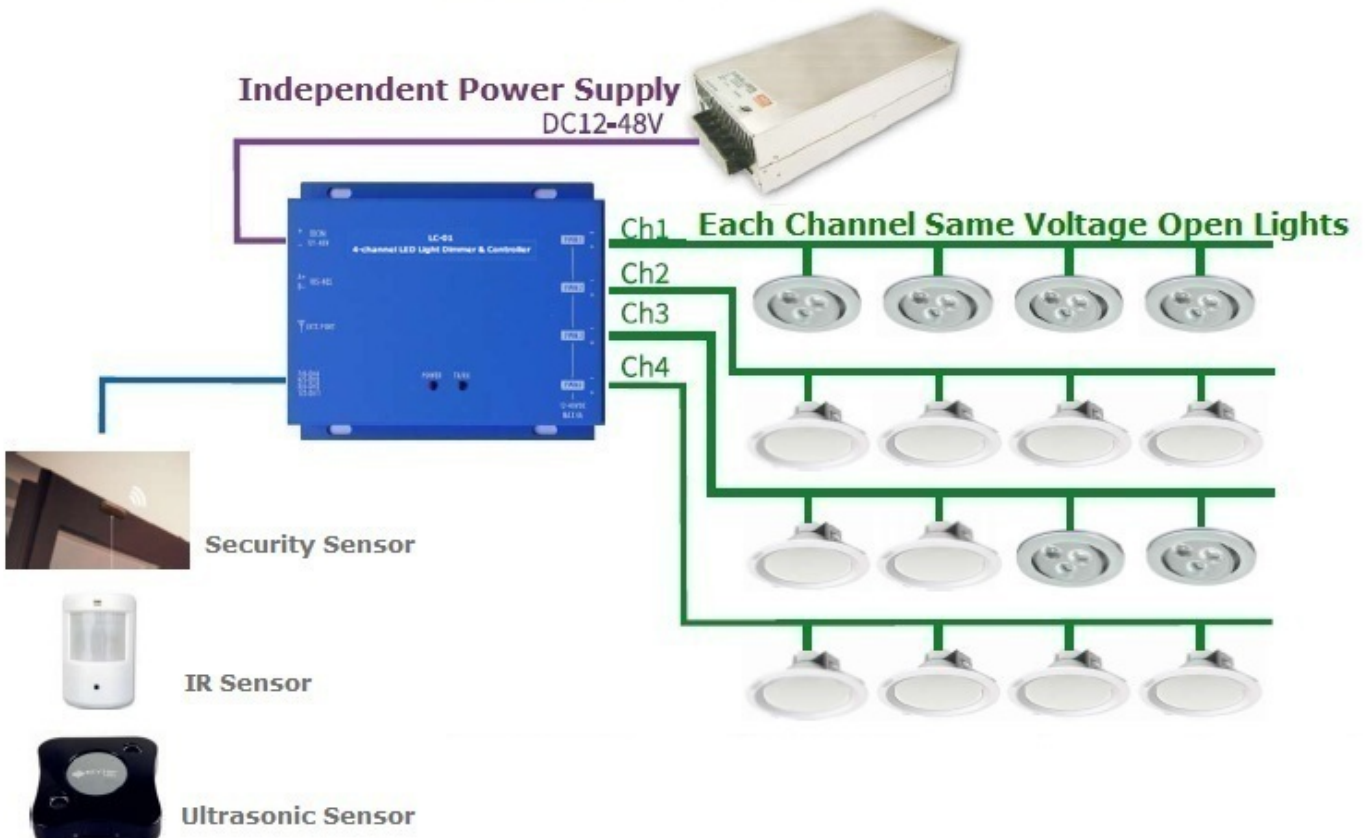
System Chart - 1

LC-01 Controller + Existing On/Off Switch System



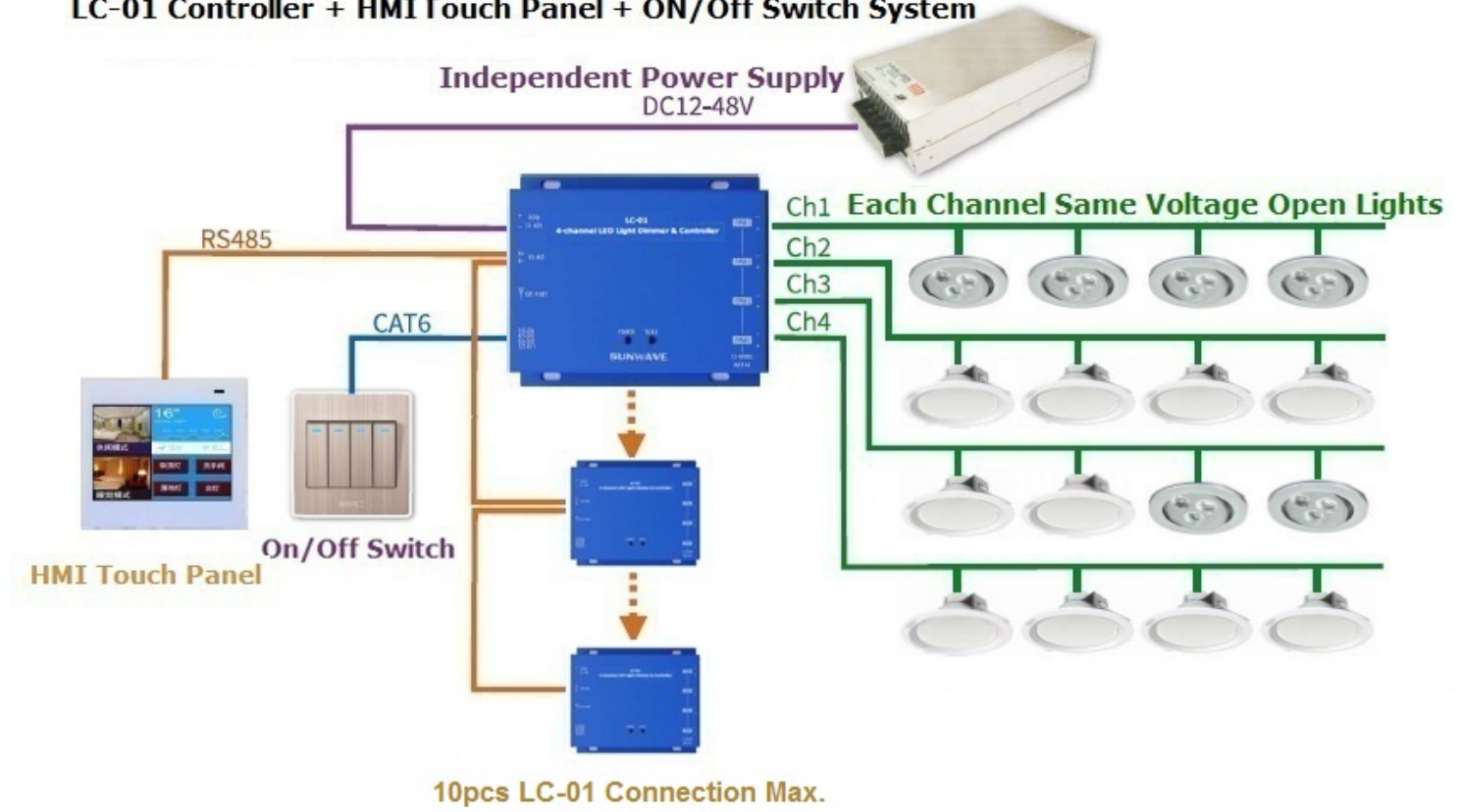
System Chart - 2

LC-01 Controller + Sensor System



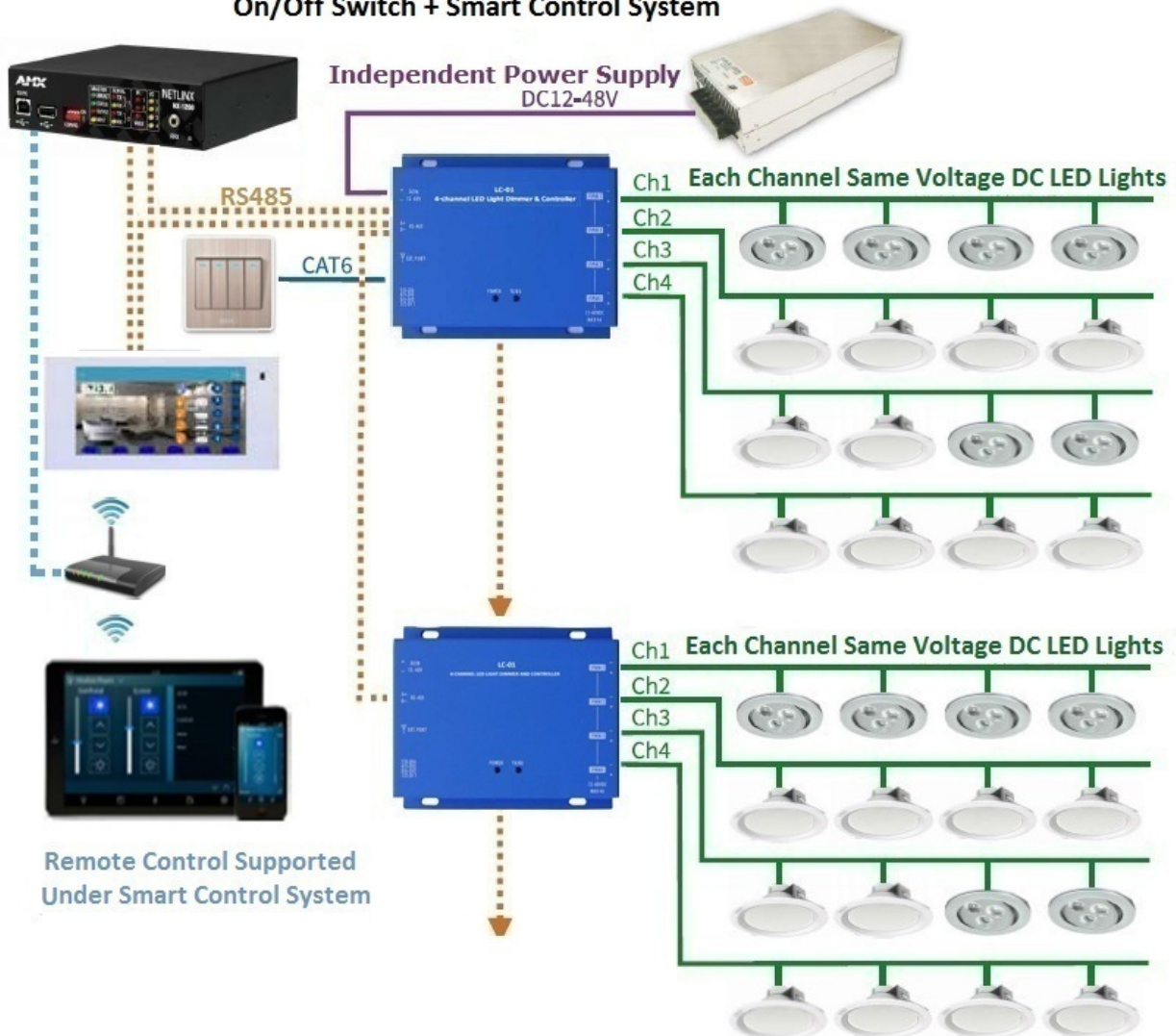
System Chart - 3

LC-01 Controller + HMI Touch Panel + ON/Off Switch System

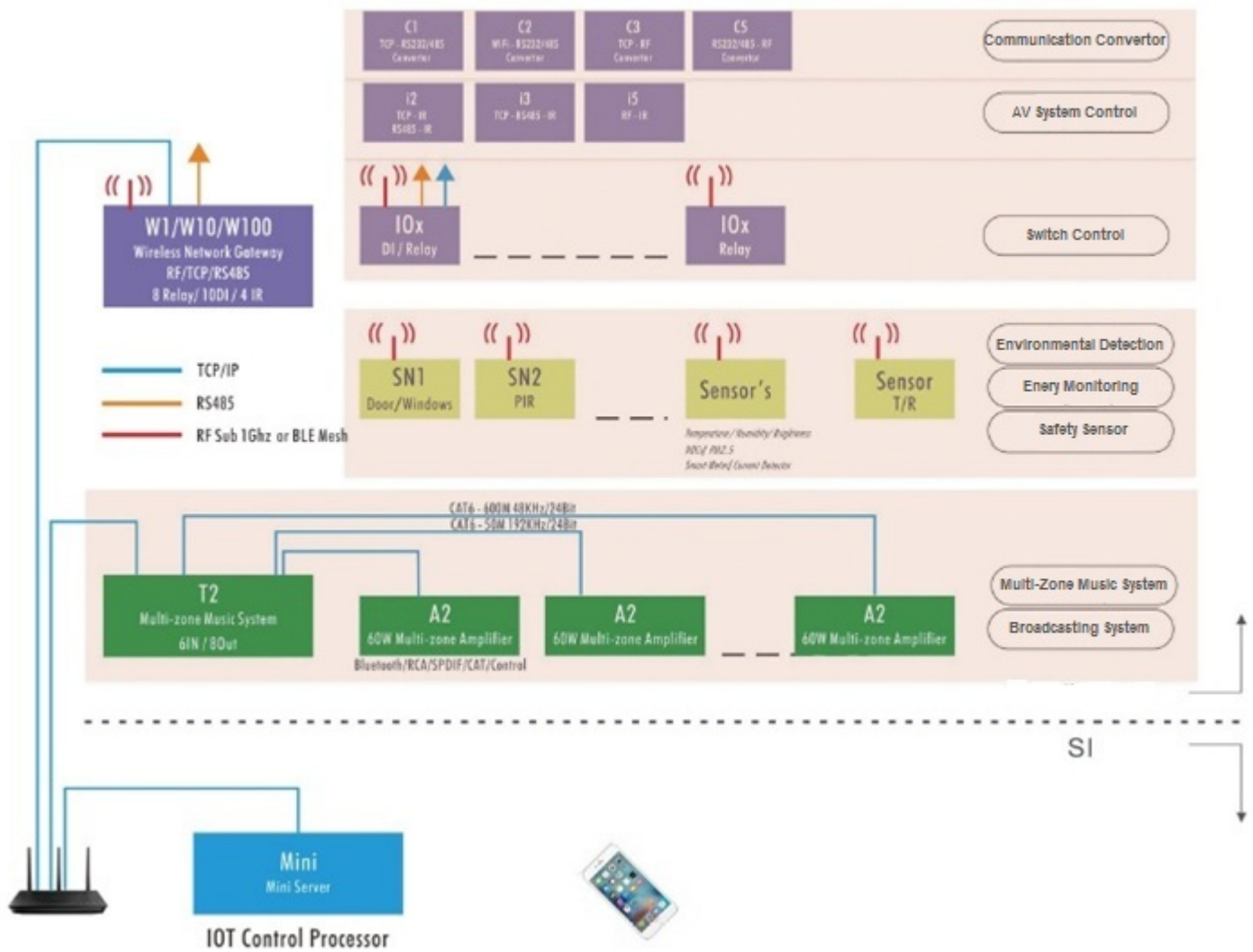


System Chart - 4

LC-01 Controller + HMI Touch Panel + On/Off Switch + Smart Control System



IOT System Chart



Compatible Smart Servers, Gateways, Central Controllers



AV3



RMC3



NX3200



NX1200



EA-5



EA-1



XP-8s



XP-3

LED Lighting Control Devices Requirement (Basic)

* Single Area, 4 Channels Control

Item / Control	LC-01	TRIAC	1-10V	DALI
Power Supply	1	0	1	1
Environment Change Controller	-	-	-	-
UI Controller	1	1	1	1
Driver/Controller/ECG/Ballast		4	4	4
On/Off Botton	Push Botton	4 x Knob	4 x Knob	4 x DALI MCU
Total Devices	2	5	6	6

LED Lighting Control System Devices Requirement

* 4 Area, 16 Channels Control

Item / Control	LC-01	TRIAC	1-10V	DALI
Power Supply	4	0	4	4
Environment Change Controller	0	1	1	0
Touch Panel	1	1	1	1
UI Controller	4	4	4	1
Driver/Controller/ECG/Ballast		16	16	16
On/Off Botton	16 x Push Botton	16 x Knob	16 x Knob	4 x DALI MCU
Total Devices	9	22	26	26

Packing:

Model	Packing	Unit Pack (cm) (2pcs)	Q'ty(pcs)/ inner	Q'ty(pcs)/ Carton	N.W.(kg)	G.W.(kg)	Meas.(cm)	cuft
LC-01	box	30*23*35	10	20	9	12	49*33*39	2.3