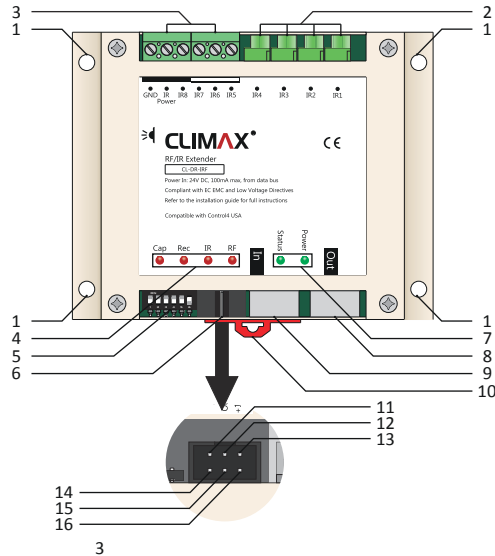## PART DESCRIPTION

1. Screw holes
2. IR Output 3.5 mm jack socket
3. IR Output rising-cage Connectors
4. RF/IR Status LEDs
5. Address/mode selector switch
6. Auxiliary Connector
7. Status LEDs
8. RS-485 jack
9. RS-232 & RS-485 jack
10. Rail mounting clips
11. Antenna2 (433MHz)
12. Antenna1 (315MHz)
13. GND
14. RF input (capture)
15. Custom RF output
16. +12V (100mA)

3

RF/IR Extender (CL-DR-IRF)

Product Specification	Input Voltage		8V-24V DC
	Input Current		100mA (for 24V DC)
	I/O Connections	C-Bus	2 X RJ45
		RS-232 (Direct Mode)	1 X RJ45
		Output	8 X IR channel (4 X rising-cage 5mm screw terminals & 4 X 3.5 mm jack socket)
			3 X RF Output (1 X 315 MHz - 1 X 433 MHz - 1 X for custom modules)
		Intput	1 X IR input
			3 X RF input (1 X 315 MHz - 1 X 433 MHz - 1 X for custom modules)

1

PART DESCRIPTION

Change Module Address

The module address can be set from 0 to 31 by means of a dip switch called "address/mode selector switch". Before changing module address and module mode the main power must be disconnected. The address must be defined in binary. For instance to set address "21", the dip switch must be as below:

⚠ **Never set the address "0" and "1" as "0" is not valid in C-Bus protocol and "1" is always dedicated for GatewayPro module.**

⚠ **Check all C-Bus module addresses to avoid repetitive address allocation.**

Switching between Direct Mode and Network Mode

To set the module in direct mode slip button #7 to "up" position or slide it "down" to set the module in network mode.
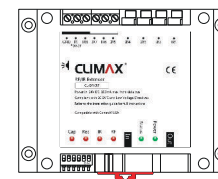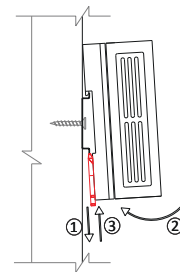

4

MOUNTING

Rail Mounting

RF/IR Extender is designed to be installed on a standard 35 mm wide DIN rail (EN 50022, BS 5584).

Hook the module from the top, pull down the rail mounting clips, push the module to the rail and release the rail mounting clips.
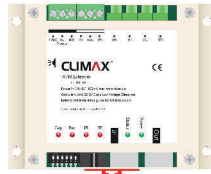

Screw Mounting

Screw the module to any surface through 4 corner screw holes.

2

WIRING 1

⚠️ *Before wiring the device, always unplug the main power.*

Follow this wiring for direct or network use of modules.

From:
Control4 home controller (direct mode) or
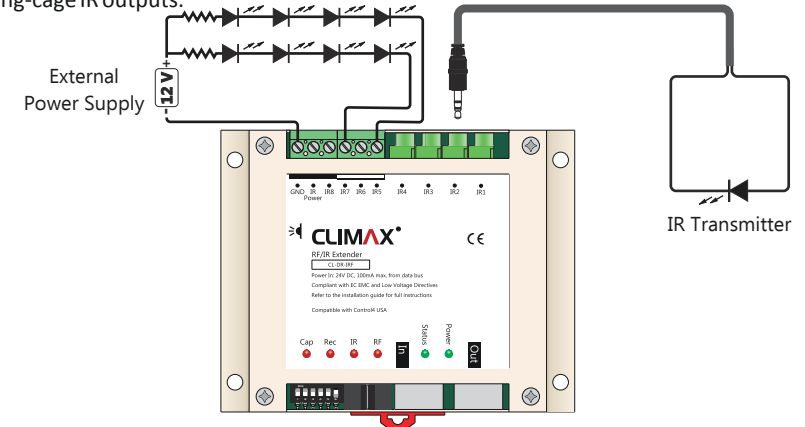*previous module (network mode)*

From: Main Power 8V-24V DC (direct mode)
To: Next Module (network mode)

⚠️ **Use the terminator socket for the last module in C-Bus network.**

WIRING 2

Follow the diagram below to connect one infrared transmitter to the rising cage IR outputs.

IR Transmitter

GND IR IR8 IR7 IR6 IR5   IR4 IR3 IR2 IR1
Power

RF/IR Extender
CL-DR-IRF
Power In: 24V DC, 100mA max, from data bus
Compliant with EC EMC and Low Voltage Directives
Refer to the installation guide for full instructions

Compatible with Control4 USA

Cap Rec IR RF   Status Power   In   Out

WIRING 3

Follow this diagram to connect external power supply and more than one infrared transmitter to the rising-cage IR outputs.
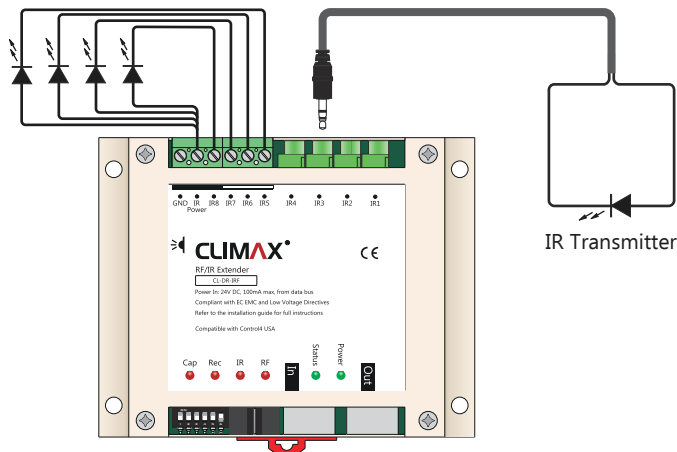
External Power Supply 12 V

IR Transmitter

GND IR IR8 IR7 IR6 IR5   IR4 IR3 IR2 IR1
Power

RF/IR Extender
CL-DR-IRF
Power In: 24V DC, 100mA max, from data bus
Compliant with EC EMC and Low Voltage Directives
Refer to the installation guide for full instructions

Compatible with Control4 USA

Cap Rec IR RF   Status Power   In   Out

⚠️ **The maximum voltage for power supply is 24V. (400mA per channel)**

SETUP & PROGRAMMING

Module's LEDs

🟢 *Power:* When the module is connected to main power, "Power LED" will flash smoothly.

🟢 *Status:* When the module is connected to C-Bus network and receives valid data packets, "Status LED" flashes quickly. "Status LED" is "off" when the module doesn't receive any data. In direct mode, "Status LED" will flash once when the module receives a valid data packet from Home Controller.

When the module is receiving invalid data packet ,"Status LED" will remain "on" for 5 seconds.

👆 In some cases, when a new module is added to C-Bus network, "Status LED" might remain "on" for 5 seconds. This situation must not be considered as an error.

🔴 *RF:* This LED flashes when the module is transmitting RF signal.

🔴 *IR:* This LED flashes when the module is transmitting IR signal.

🔴 *Rec:* This LED flashes when the module is receiving signal to capture IR or RF codes.

🔴 *Cap:* This LED flashes when the module captures IR or RF code.