RAPTORTRON · USER MANUAL · INFRARED DEVICE

IR REC

Installation, connection and safety instructions for the IR REC wired 4-channel infrared controller with 4 independent extension emitters.



User manual · English edition

01 Product overview



IR REC infrared controller.

Wired 4-channel infrared controller with 4 independent extension emitters.

ITEM	DETAIL
Model	IR REC
Category	Infrared device

02 Features

1. Wired multi-channel infrared controller, supplied with 4 independent extension IR emitters connected by wire.
2. Can learn commands and replace the original remote controls of air conditioners, smart TVs, projectors or multimedia equipment.
3. Built-in Raptortron Mesh core, allowing synchronised connection with the Raptortron smart home ecosystem.
4. Supports full remote control through the Raptortron app.
5. Supports detailed operating schedules, automatic trigger conditions and scenarios that link several devices.

03 Technical specifications

01 Design & dimensions

SPECIFICATION	VALUE
Housing colour	White
Housing material	Flame-retardant PC + ABS plastic
Dimensions	85mm x 50mm x 21mm

02 Infrared characteristics

SPECIFICATION	VALUE
IR data specification	50~1500 byte / 30 commands per channel, carrier frequency 38kHz
Extension IR emitter configuration	Separate IR emitters connected by wire. Cable length from the device to the emitter max 10m; distance from the emitter to the controlled device max 5m

03 Control interface

SPECIFICATION	VALUE
Control category	Multi-zone infrared signal emulation controller
Control interface	3 physical push buttons for adjustment and setup
Display	7-segment LED display built into the device

04 Power

SPECIFICATION	VALUE
Input voltage	12VDC ~ 24VDC - 1A
Standby power consumption	< 1W

05 Wireless connectivity

SPECIFICATION	VALUE
Wireless communication	Raptortron Mesh
Wireless range	100m open air / 30m indoor

06 Indicators & alerts

SPECIFICATION	VALUE
Status indicator	Status LED cluster
Audible alert	Buzzer

04 Installation guide

In the box

- Infrared controller
- USB power cable / adapter
- 3M adhesive pad / stand
- Quick guide & warranty card

Installation steps

1. **Choose the location.** Place the device in a central position with a direct line of sight to all the devices to be controlled by infrared.
2. **Connect the power.** Plug the USB cable into a 5V DC adapter or a USB port. The LED lights up to confirm that power is supplied.
3. **Wait for start-up.** Wait 10–15 seconds for the device to enter standby. The LED changes to slow blinking when it is ready to pair.
4. **Learn remote commands.** In the Raptortron app, select the target device and tap Learn command; point the original remote at the Raptortron device and press the corresponding key.

05 Connection guide

Preparation

- Raptortron smart switch
- 1 central hub with an Internet connection
- Raptortron app already connected to the central controller (make sure the phone and the central controller are on the same Internet network)

Download the Raptortron app for Android or iOS.

In the Raptortron app: auto learn

1. **Tap.** Open the Raptortron app, tap the "Menu" icon at the top of the screen, then select "Devices".
2. **Tap.** Tap the "Auto learn" icon.
3. **Tap.** When the "Auto learn" dialog appears, tick the "I have understood and agree" box, then tap **"OK"** to confirm.
4. The system starts a 60-second countdown to scan automatically and complete the device connection.

In the Raptortron app: manual learn

1. Open the "Menu" in the app, then go to "Devices".
2. **Press and hold.** Press and hold the icon of the device that you want to re-learn or replace.
3. In the list of options that appears, select "Manual learn".
4. **Tap.** When the "Manual learn" dialog appears, tap the "Learn" button. The dialog shows the Device code and the Serial number of the device.
5. The app counts down 60 seconds to finish synchronising and remembering the new device.

Teaching the device ID to the central controller

Do this on the device while the app is counting down.

1. **Press and hold.** Press and hold the **"Down"** button to enter the MENU, until the LED display shows "ID".
2. **Press.** Press **button 1** to teach the ID. Make sure the MCE is in ID-teaching mode.

Result

- **If successful:** the LED display shows "On" once the ID is set.
- **If it fails:** the error LED under the "ID" item blinks 5 times. To try again, press the Down button again, or press and hold the Down button while the display shows "On" to exit.

Important

- Auto learn fails if the number of devices exceeds the capacity limit of the central controller.
- In that case, see the Technical specifications of the central controller for the number of devices allowed, or switch to the manual learn method.

06 Safety notes

! Use only a power supply that matches the technical specifications in this document. Using the wrong power supply can damage the device and be dangerous.

! Do not open or repair the device while it is powered. All electrical wiring must be done by a qualified electrician.

! Keep the device in a dry place, away from direct water splashes (except models explicitly rated as water-resistant, IP xx).

! The product is covered by the official Raptortron warranty policy. Please keep your purchase invoice for the best support.

English edition translated in full from the manufacturer's original manual. Specifications are subject to change; current data: https://raptortron.com/product-ir-rec.html. Online version: https://raptortron.com/manuals/ir-rec/