# KRAMER





# **RC-208 Quick Start Guide**

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This guide helps you install and use your RC-208 for the first time.

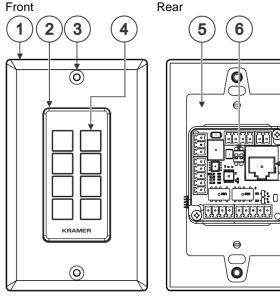
Go to www.kramerav.com/downloads/RC-208 to download the latest user manual and check if firmware upgrades are available.

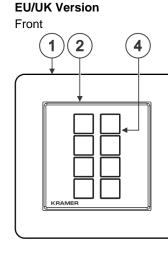
# Step 1: Check what's in the box

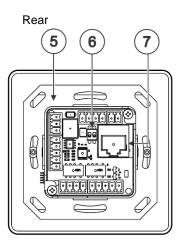
- RC-208 Ethernet and K-NET Control Keypad
- $\mathbf{\nabla}$ 1 Set of button label sheets
- ☑ 1 Power adapter and cord

- ✓ 1 Button-cap remover (tweezers)  $\mathbf{\mathbf{V}}$ 1 Quick start guide
- Installation accessories
- $\mathbf{\mathbf{N}}$ Frame (or frame set) and faceplate  $\mathbf{\mathbf{V}}$ 8 Button caps
- Step 2: Get to know your RC-208

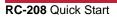








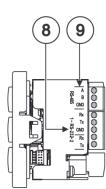
#	Feature	Function			
1	Designed 1 Gang Wall Frame	For fixing the <b>RC-208</b> to the wall. DECORA <sup>™</sup> design frames are included in US-D models.			
2	Button Faceplate	Covers the button area after inserting the button labels.			
3	Mounting Screw Holes	For securing the frame to the wall (US version only).			
4	Configurable RGB Backlit Buttons (8)	Configured to control the room and A/V devices. Remove button covers to insert button labels (included).			
5	Mounting Bracket	For fixing the frame to the in-wall box.			
6	DIP-Switches	For K-NET: The last physical device on a K-NET bus must be terminated. For RS-485: The first and the last units on the RS-485 line should be terminated. Other units should remain unterminated.			
			DIP-switch 1 (to the left)	DIP-switch 2 (to the right)	
			K-NET Line Termination	RS-485 Line Termination	
		Slide down (ON)	For line termination.	For RS-485 line termination.	
		Slide up (OFF, default)	To leave bus unterminated.	To leave RS-485 line unterminated.	
7	Ethernet RJ-45 Connector	Connect to an Ethernet LAN for control, firmware upgrade and for uploading the configuration.			

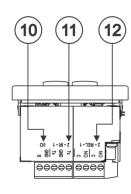


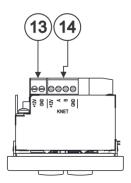


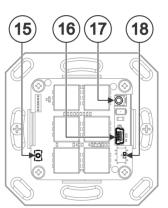


P/N: 2900-301089QS









Side View

Lower View

Top View

Front Panel, Behind Frame

#	Feature	Function	
8	RS-232 3-pin Terminal Block Connectors (Rx, Tx, GND)	Connect to RS-232 controlled devices (1 and 2, with common GND).	
9	RS-485 3-pin Terminal Block Connector	Connect to the RS-485 terminal block connector on another device or PC.	
10	I/O 2-pinTerminal Block Connector (GPIO, GND)	Connect to a sensor or device to be controlled, for example, a motion sensor. This port may be configured as a digital input, digital output, or analog input.	
11	IR 2-pin Terminal Block Connectors (Tx, GND)	Connect to an IR emitter cable (1 and 2, with common GND).	
12	REL 2-pinTerminal Block Connectors	Connect to a device to be controlled by relay. For example, a motorized projection-screen (1 and 2).	
13	12V Power Supply 2-pin Terminal Block Connector (+12V, GND)	Connect to a power supply: Connect GND to GND and 12V to 12V.	
14	KNET 4-pin Terminal Block Connector	Connect the GND pin to the Ground connection; pin B (-) and pin A (+) are for RS-485, and the +12V pin is for powering the connected unit.	
15	Factory Reset Button	Press while connecting the power and then release to reset the device to its default parameters.	
		To access this button, you need to remove the Button Faceplate.	
16	Mini USB Type B Port	Connect to your PC for firmware upgrade or for uploading the configuration. To access the USB port, you need to remove the Button Faceplate.	
17	IR Sensor	For learning commands from an IR remote control transmitter.	
18	Programing DIP-switch	For internal use.	

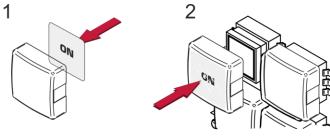
# Step 3: Configure RC-208

To configure RC-208 buttons via K-Config:

- Configure RC-208 (go to www.kramerav.com/product/RC-208).
- Connect RC-208 to a PC via the Ethernet or connect via the mini USB port.
- Sync the configuration to RC-208.

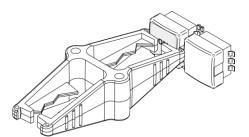
#### To insert a button label for the first time:

- 1. Cut out the appropriate button label from the button label sheets and place a label inside the button cover in the correct orientation (ledges are sideways).
- 2. Cover with the button cap in the correct orientation (with ledges sideways).



#### To replace a label:

- 1. Using the supplied tweezers, grip the button via the left and right ledges and remove the button cap.
- 2. Replace the label and cover the button with the button cap.

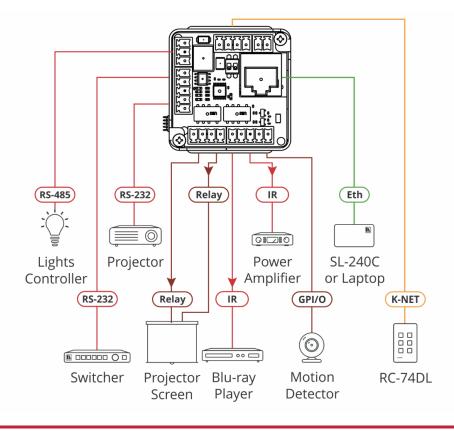




You do not have to detach the faceplate to remove a button.

### Step 4: Connect the inputs and outputs

Always switch OFF the power on each device before connecting it to your **RC-208**. For best results, we recommend that you always use Kramer high-performance cables to connect AV equipment to **RC-208**.

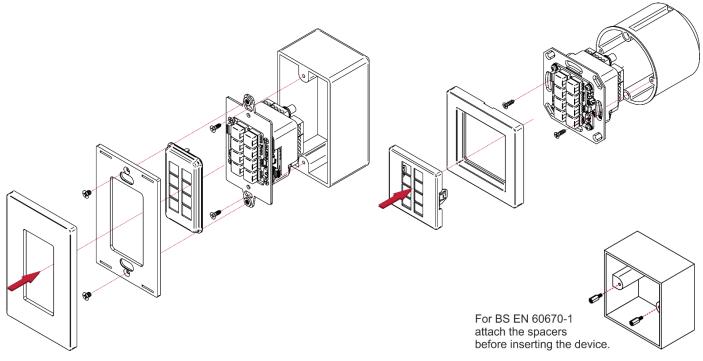


#### Step 5: Install RC-208

After connecting the ports, insert the device into the in-wall box and connect the parts as shown in the illustrations below:

**EU/UK Version** 

**US-D** Version



We recommend that you use any of the following standard 1 Gang in-wall junction boxes:

- US-D: 1 Gang US electrical junction boxes.
- EU: 1 Gang in-wall junction box, with a cut-hole diameter of 86mm and depth that can fit in both the device and the connected cables (DIN 49073).
- UK: 1 Gang in-wall junction box, 75x75mm (W, H) and depth that can fit in both the device and the connected cables (BS 4662 or BS EN 60670-1 used with supplied spacers and screws).

# Step 6: Connect the power

Connect the 12V DC power adapter to the RC-208 and plug the adapter into the mains.

Safety Instructions



Caution: There are no operator serviceable parts inside the unit.

Warning: Disconnect the power and unplug the unit from the wall before installing.

See <u>www.KramerAV.com</u> for updated safety information.

# Step 7: Operate RC-208

Operate **RC-208** via the front panel buttons, as a room controller keypad configured via **K-Config** or as a control interface keypad by using Kramer Control.

## **Technical Specifications**

Inputs	1 IR Sensor	For IR learning	
Outputs	2 IR	On 3-pin terminal block connectors	
Ports	2 RS-232	On 5-pin terminal block connectors	
	1 RS-485	On a 3-pin terminal block connector	
	1 K-NET	On a 4-pin terminal block connector	
	2 Relays	On 2-pin terminal block connectors (30V DC, 1A max)	
	1 GPI/O	On a 2-pin terminal block connector	
	1 Mini USB	On a female mini USB-B connector for configuration and firmware upgrade	
	1 Ethernet	On an RJ-45 female connector for device configuration, control and firmware upgrade	
Default IP Settings	DHCP Enabled	To connect to the <b>RC-208</b> on first installation, you need to identify the IP address that has been automatically assigned to the <b>RC-208</b>	
Power	Consumption	12V DC, 760mA	
	Source	12V DC, 2A with open DC head	
Environmental Conditions	Operating Temperature	0° to +40°C (32° to 104°F)	
	Storage Temperature	-40° to +70°C (-40° to 158°F)	
	Humidity	10% to 90%, RHL non-condensing	
Regulatory Compliance	Safety	CE	
	Environmental	RoHs, WEEE	
Enclosure	Size	1 Gang wall plate	
	Cooling	Convection ventilation	
General	Net Dimensions (W, D, H)	US-D: 7.9cm x 4.7cm x 12.4cm (3.1" x 1.9" x 4.9) EU: 8cm x 4.7cm x 8cm (3.1" x 1.9" x 3.1) UK: 8.6cm x 4.7cm x 8.6cm (3.4" x 1.9" x 3.4")	
	Shipping Dimensions (W, D, H)	23.2cm x 13.6cm x 10cm (9.1" x 5.4" x 3.9")	
	Net Weight	0.11kg (0.24lbs)	
	Shipping Weight	0.38kg (0.84lbs) approx.	
Accessories	Included	Special tweezers for removing button caps 1 Power adapter, 1 power cord, installation accessories US-D version: 2 US Frame sets and faceplates (1 in black and 1 in white) European version: 1 EU white frame, 1 UK white frame 1 EU/UK white faceplate	
	Optional	For optimum range and performance use the recommended USB, Ethernet, serial and IR Kramer cables available at www.kramerav.com/product/RC-208	

Specifications are subject to change without notice at <u>www.kramerav.com</u>

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