



CMIR-44

4×4 Infrared Matrix



Operation Manual

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SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person to walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

REVISION HISTORY

VERSION NO.	DATE DD/MM/YY	SUMMARY OF CHANGE
V1	01/02/10	Preliminary Release
VR2	07/12/10	Adding IR Cable Distance
VR3	24/09/12	IR Frequency & Remote Control
VS1	24/04/13	Updated format/diagrams



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1. INTRODUCTION

The 4×4 Infrared Matrix is designed to control up to four sources from four display locations, using the original remote or universal remote controls. You can control DVD/Blu-ray players, satellite and set-top boxes. A true matrix design allows any of the four inputs to be routed to any (or all) of the IR outputs giving full independent source to screen (or screen to source) control.

With the added benefit of an IR master input and output, which can be used to control an HDMI matrix, this product will allow you to fully control your sources and displays. Simply place the IR extender near the display and put the IR blaster in a position so that all devices will receive the IR signal. So, if you are looking for a way to extend the control of IR, The 4 by 4 Infrared Matrix is a great choice.

2. APPLICATIONS

- Control multiple sources from different location
- Master System Control for a multi-room amplifier
- Additional IR control for HDMI Matrices

3. PACKAGE CONTENTS

- 4×4 Infrared Matrix
- Remote Controller (CR81-06F09) with Battery
- 5×IR Extender Cables
- 5×IR Blaster Cables
- 5V DC Power Adaptor
- Operation Manual

4. SYSTEM REQUIREMENTS

IR controlled devices such as HDTVs, Blu-ray Players, Set-top Boxes or HDMI Matrices.

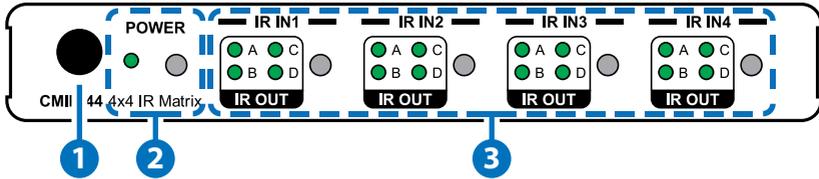
5. FEATURES

- Supports independent IR input and output selection and control
- Supports an IR frequency range of 30kHz~50kHz
- Use your existing remote controls or programmable/universal remote controls
- Supports IR remote control and on-panel control

Note: This device does not support the sending of audio/video signals, it only transmits and receives infra-red signals.

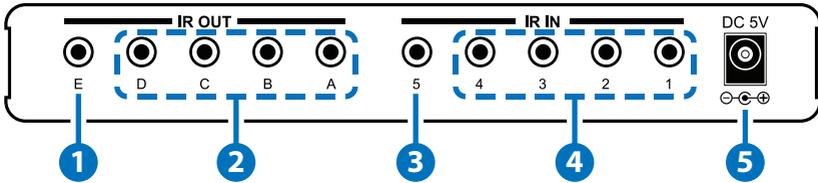
6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel



- 1 IR Sensor:** To control the IR Matrix.
- 2 POWER Button and LED:** Press to turn the unit ON or to put it into standby mode. When the system is on the LED will illuminate green, when in STANDBY mode the LED will illuminate in red.
- 3 IR IN 1/2/3/4 Buttons and IR OUT LEDs:** Press to select which output the IR signal will be routed to, the LED will then illuminate to indicate the selected output (A~D).

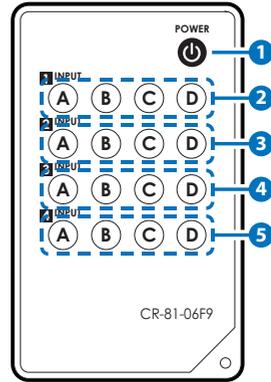
6.2 Rear Panel



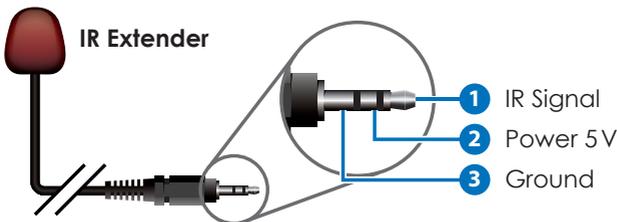
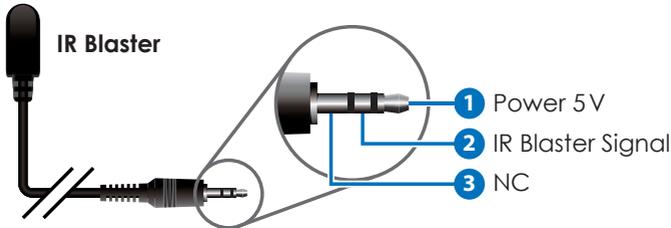
- 1 IR OUT E (ALL):** Connect one of the IR Blasters (included in the package) to this IR output. Place the IR Blaster in direct line-of-sight of the equipment to be controlled. It will transmit all signals received from IR IN 1~4.
- 2 IR OUT A/B/C/D:** Connect the remaining IR Blasters to the IR outputs (A-D). Place the IR Blaster in direct line-of-sight of the equipment to be controlled. It will transmit the signal as selected on the front panel.
- 3 IR IN 5 (ALL):** Connect one of the IR Extenders (included in the package) to this IR input. Ensure that remote being used is within the direct line-of-sight of the IR Extender. It will transmit the IR signal received to IR out A~D and IR ALL OUT.
- 4 IR IN 1/2/3/4:** Connect the remaining IR Extenders to the IR outputs (A-D). Ensure that the remote being used is within the direct line-of-sight of the IR Extender. It will transmit the IR signal to the selected IR OUT output (from A~D) and IR OUT ALL.
- 5 DC 5V:** Connect the 5V DC power supply to the unit and connect the adaptor to an AC outlet.

6.3 Remote Control

- 1 POWER:** Press this button to turn the unit ON or to put the unit into standby.
- 2 INPUT 1:** Assigns the IR OUT output (A~D) for IR Input 1: Press A, B, C or D to route the required IR input to that output.
- 3 INPUT 2:** Assigns the IR OUT output (A~D) for IR Input 2: Press A, B, C or D to route the required IR input to that output.
- 4 INPUT 3:** Assigns the IR OUT output (A~D) for IR Input 3: Press A, B, C or D to route the required IR input to that output.
- 5 INPUT 4:** Assigns the IR OUT output (A~D) for IR Input 4: Press A, B, C or D to route the required IR input to that output.



6.4 IR Cable Pin Definitions



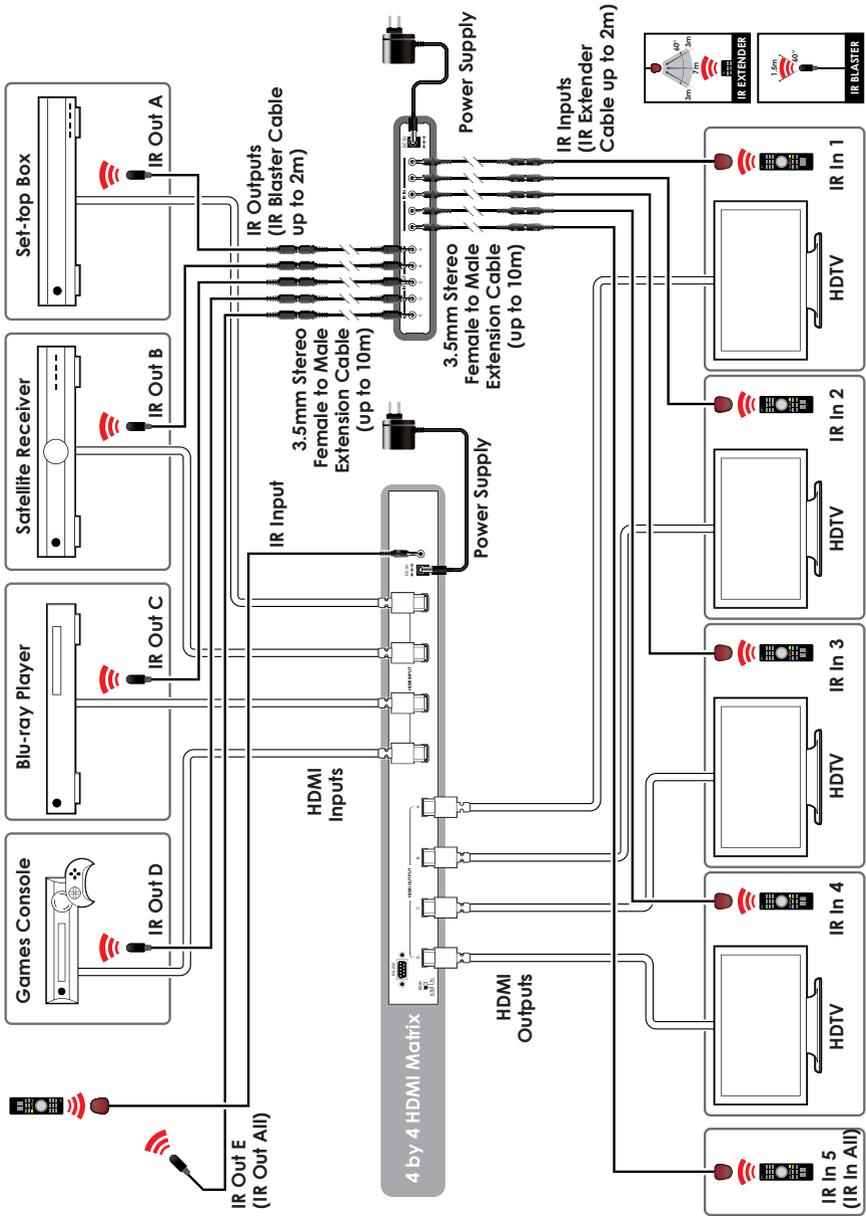
Note: Both the IR Extender and Blaster support a frequency of 30~50 kHz.

6.5 IR Function Chart

	IR OUT A	IR OUT B	IR OUT C	IR OUT D	IR OUT E
IR IN 1	⊙	⊙	⊙	⊙	▲
IR IN 2	⊙	⊙	⊙	⊙	▲
IR IN 3	⊙	⊙	⊙	⊙	▲
IR IN 4	⊙	⊙	⊙	⊙	▲
IR IN 5	△	△	△	△	△ ▲
IR Sensor	X				

⊙	IR input can be assigned to an IR output.
X	Accepts only the IR signal from the remote control included in the package.
△	You do not have to select IR input as this device can receive IR signals from all IR Extenders with a frequency between 30~50 kHz.
▲	You do not have to select IR input as this device can transmit IR signals to all sources with a frequency between 30~50 kHz.

7. CONNECTION DIAGRAM



8. SPECIFICATIONS

IR Frequency	30~50 kHz
Input Ports	4×Independent IR Blaster 1×All IR Blaster Control
Output Ports	4×Independent IR Extender 1×All IR Extender Control
Power Supply	5V/1 A DC (US/EU standards, CE/FCC/UL certified)
ESD Protection	Human body model: ±8 kV (air-gap discharge) ±4 kV (contact discharge)
Dimensions	180 mm (W)×124 mm (D)×25 mm (H)
Weight	450 g
Chassis Material	Aluminum
Color	Silver
Operating Temperature	0 °C~40 °C / 32 °F ~ 104 °F
Storage temperature	-20 °C~60 °C / -4 °F ~ 140 °F
Relative Humidity	20~90 % RH (non-condensing)
Power Consumption	0.86 W

9. ACRONYMS

ACRONYM	COMPLETE TERM
HDMI	High Definition Multimedia Interface
IR	Infrared



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