BLUSTRE/\/\/\→

Output 1   1 2 3 4   Output 2   1 2 3 4   Output 3   1 2 3 4   Output 4   1 2 3 4

IR   Power

▶ MX44AB
User Manual

BLUSTRE/\/\/\→

Thank you for purchasing this product.

For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Contents

Introduction

The MX44AB is a 4×4 HDMI Matrix enabling four HDMI sources to be independently routed to up to four HDTV displays. The MX44AB also supports 1080p Full HD up to 4K 30Hz plus all 3D formats and multichannel digital audio formats including Dolby® True HD and DTS-HD® Master Audio™ pass through. The audio breakout feature extracts the audio from each of the HDMI outputs and these signals are outputted through zone specific RCA (S/PDIF) and 3.5mm stereo L/R analogue outputs. (This feature only works with PCM inputs). The source specific IR routing feature enables multiple "like" sources to be controlled discretely by simply routing a specific zone IR input to the currently selected source IR output. Each source can be routed to any display using the front-panel push buttons, IR remote control and the RS-232 interface.

FEATURES:

- Supports resolutions up to 1080p@60HZ,48-bit deep color, 4k@30HZ

- Allows any source to be displayed on multiple displays at the same time

- Allows any HDMI display to view any HDMI source at any time

- Dolby TrueHD and DTS-HD master audio pass through HDMI output

- Advanced EDID management for rapid integration of sources and displays. See below table

- Extract audio from HDMI output via RCA (S/PDIF) and L/R analogue audio (From PCM audio on the HDMI feed).

- Multiple switching mode, push-in button, IR remote control and RS-232 control

- Easy installation with rack-mounting ears

- Full 3D pass- through.

- HDCP compliant

Front Panel
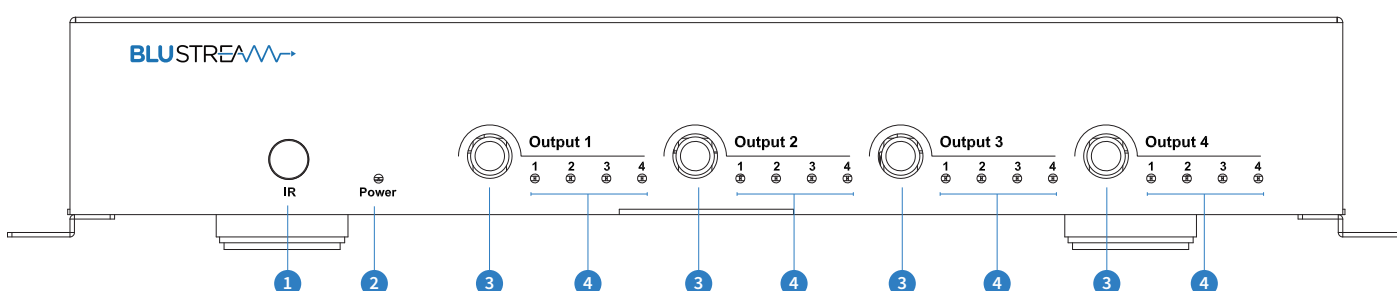
① IR receiver window – Receive the IR from the remote control of MX44AB.

② Power LED indicator – Indicate the power state of the matrix.

③ HDMI output selection button 1 to 4 – Press to select the desired source input for the marked output zone 1 to 4.

④ Input LED indicator – Indicates the selected source in the zone output.

Rear Panel
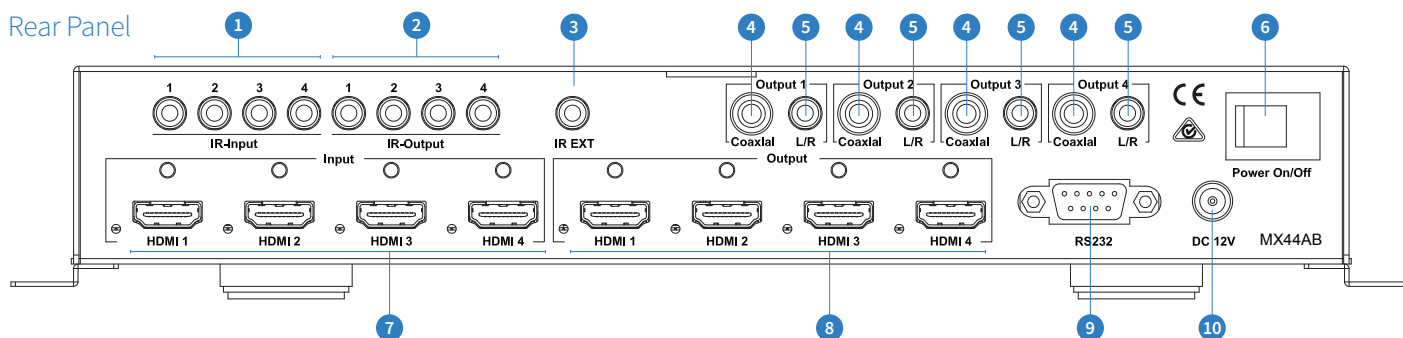
❶ IR inputs 1 to 4 – Zone specific 3.5mm stereo phone-jack IR inputs

❷ IR outputs 1 to 4 – Source specific 3.5mm IR jacks which provide routed IR from the zone IR inputs. Routing is determined by which source is selected in a zone.

❸ IR extension receiver input – 3.5mm stereo phone-jack enabling the use of an external IR sensor for control of the matrix.

❹ Coaxial output – RCA (S/PDIF) output from HDMI output (Zone specific)

❺ L/R output – 3.5mm stereo phone-jack, audio from HDMI output (Only supports stereo PCM digital audio feeds)

❻ Power switcher – Press to power matrix on/off

❼ HDMI inputs 1 to 4 – Connect HDMI sources

❽ HDMI outputs 1 to 4 – Output for displays, AVR etc.

❾ RS232 female port – RS232 connection enabling external third party setup and control of the matrix.

❿ Power port – Use included 12V/2A DC adaptor to power the matrix switcher.

Remote Control Description
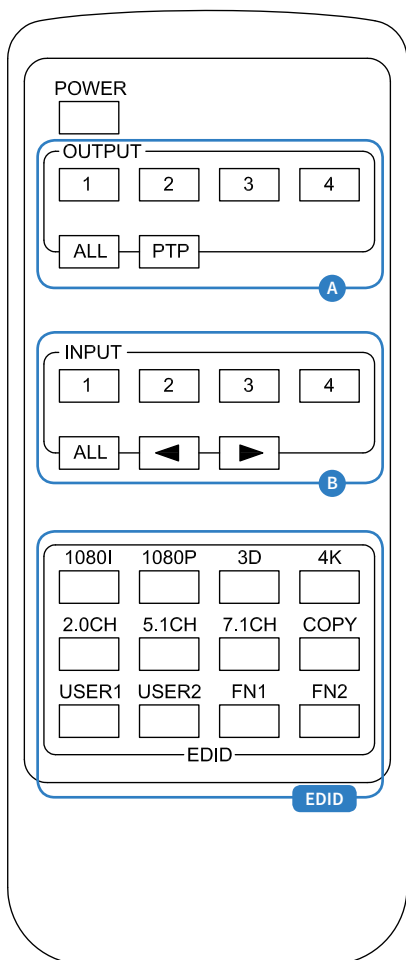
OUTPUT AND INPUT SELECTION

A Selects the zone OUTPUT you wish to change the source on (Numbers 1 - 4 correspond to the zone outputs 1 - 4)

B Selects the source INPUT you wish to change on the selected zone (Numbers 1 - 4 correspond to the source inputs 1 - 4)

EXAMPLE

To switch source 2 to zone 4 you would press 4 in the output section (A) followed by pressing 2 in the Input section (B).

ALL button: The all button selects all the inputs or outputs in its corresponding box. Example: (The "All" button in the Output box selects all the zones so all zones will change to what source input is selected next)

PTP: This button will align all the zone outputs with the like numbered source inputs. Example: Input 1 to output 1, input 2 to output 2, etc

EDID SET UP

The MX44AB provides a comprehensive range of EDID settings. Below are three ex-

amples of how to deploy the desired EDID setting when using the supplied remote.

A. **Fix EDID to an INPUT or ALL inpus:** Press the desired video resolution button (1080I / 1080P / 3D / 4K), then select the desired audio format (2.0CH / 5.1CH / 7.1CH), then select the source input you want this EDID information allocated to by pressing the INPUT 1 – 4 or the ALL button

B. **Copy EDID of OUTPUT-X to an INPUT or ALL:** Press the COPY button then select the OUTPUT you wish to copy the EDID information from, then select the source input you want to copy this EDID to by selecting the INPUT 1-4 or the ALL button.

C. **User defined EDID to an INPUT or ALL inputs:** Press USER1 / USER2 button then select the source you wish to assign this EDID to by selecting INPUT 1-4 or the ALL button

NOTE: The button press sequence should be finished in 5 seconds, otherwise the operation is discarded.

Specifications

Video Input Connectors: 4x HDMI Type A, 19-pin, female, locking

Video Output Connectors: 4x HDMI Type A, 19-pin, female, locking

Audio Output Connectors: 4x RCA (SPDIF), 4xL/R

RS-232 serial port: DB-9, female

IR Input ports: 5x 3.5mm stereo jack

IR Output ports: 4x 3.5mm mono jack

Rack-Mountable: Rack ears included

Dimensions (W x H x D): 428mm x 114mm x 43mm, without feet

Shipping Weight: 1.0kg

Operating Temperature: 32°F to 104°F (0°C to 40°C)

Storage Temperature : -4°F to 140°F (-20°C to 60°C)

Power Supply: 12V/2A DC

RS232 Pin Assignment

MT0404-A40		REMOTE CONTROL CONSOLE	
PIN	Assignment	PIN	Assignment
1	NC	1	NC
2	Tx	2	Rx
3	Rx	3	Tx
4	NC	4	NC
5	GND	5	GND
6	NC	6	NC
7	NC	7	NC
8	NC	8	NC
9	NC	9	NC

Baud Rate: 57600 bps

Data Bit: 8-bit

Parity: None

Stop Bit: 1-bit

Flow Control: None

EDID Control

EDID (Extended Display Identification Data) is a data structure that is used between a display and source. This data is used by the source to find out what audio and video resolutions are supported by the display then from this information the source will determine what the best audio and video resolutions are to be outputted.

While the objective of EDID is to make connecting a digital display to a source a simple plug and play procedure issues do arise when multiple displays or video matrix switching is introduced because of the increased number of variables.

By pre-determining the video resolution and audio format of the source and display device we can remove some of the EDID hand shaking process thus making switching quicker and more reliable. Instructions on these setting can be found on the right

[DIP]=0000: HDMI 1080p@60Hz, Audio 2CH PCM

[DIP]=0001: HDMI 1080p@60Hz, Audio 5.1CH PCM/DTS/DOLBY

[DIP]=0010: HDMI 1080p@60Hz, Audio 7.1CH PCM/DTS/DOLBY/HD

[DIP]=0011: HDMI 1080i@60Hz, Audio 2CH PCM

[DIP]=0100: HDMI 1080i@60Hz, Audio 5.1CH PCM/DTS/DOLBY

[DIP]=0101: HDMI 1080i@60Hz, Audio 7.1CH PCM/DTS/DOLBY/HD

[DIP]=0110: HDMI 1080p@60Hz/3D, Audio 2CH PCM

[DIP]=0111: HDMI 1080p@60Hz/3D, Audio 5.1CH PCM/DTS/DOLBY

[DIP]=1000: HDMI 1080p@60Hz/3D, Audio 7.1CH PCM/DTS/DOLBY/HD
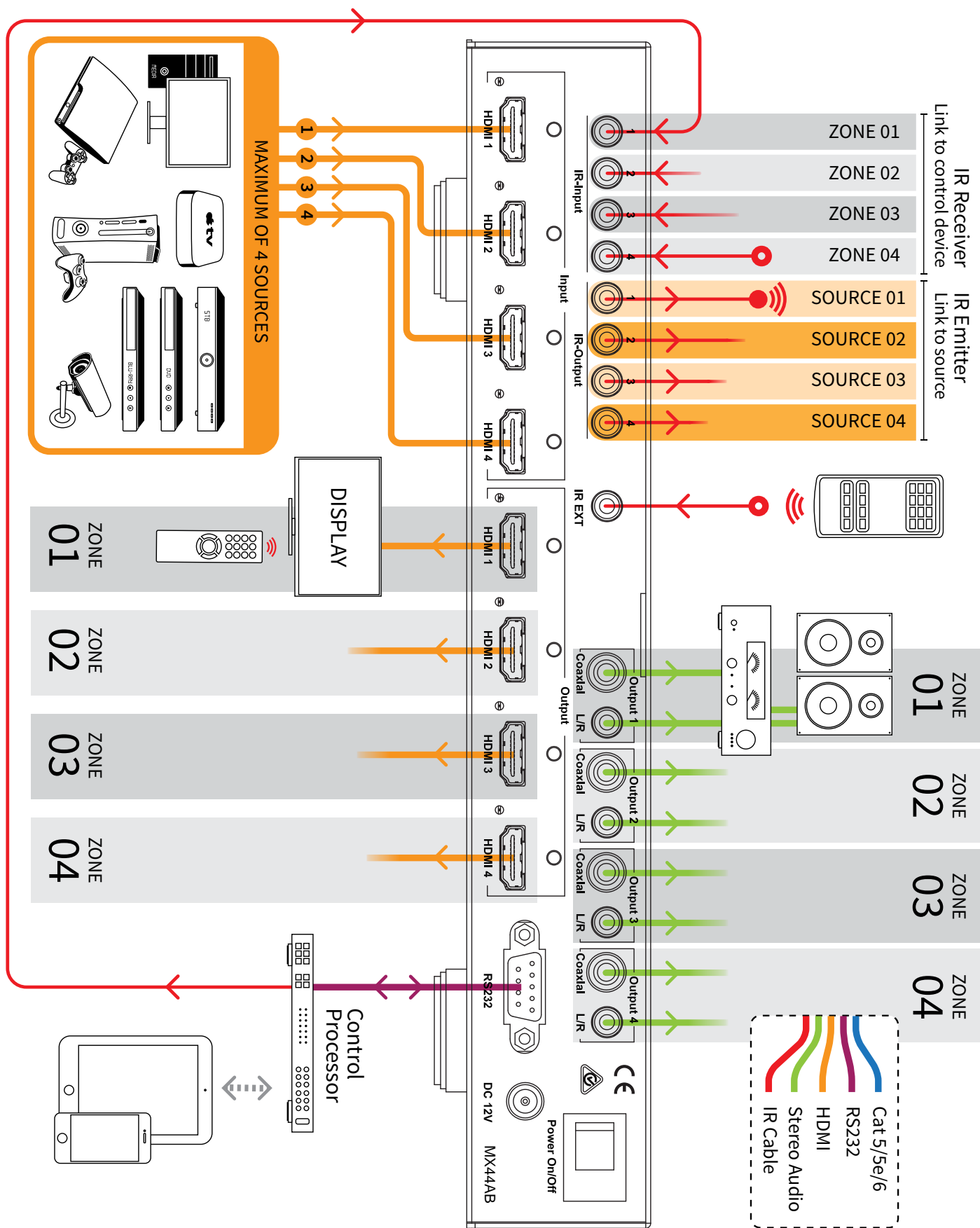
[DIP]=1001: HDMI 4K2K, Audio 2CH PCM

[DIP]=1010: HDMI 4K2K, Audio 5.1CH PCM/DTS/DOLBY

[DIP]=1011: HDMI 4K2K, Audio 7.1CH PCM/DTS/DOLBY/HD

[DIP]=1100: DVI 1280x1024@60Hz, Audio None

[DIP]=1101: DVI 1920x1080@60Hz, Audio None

[DIP]=1110: DVI 1920x1200@60Hz, Audio None
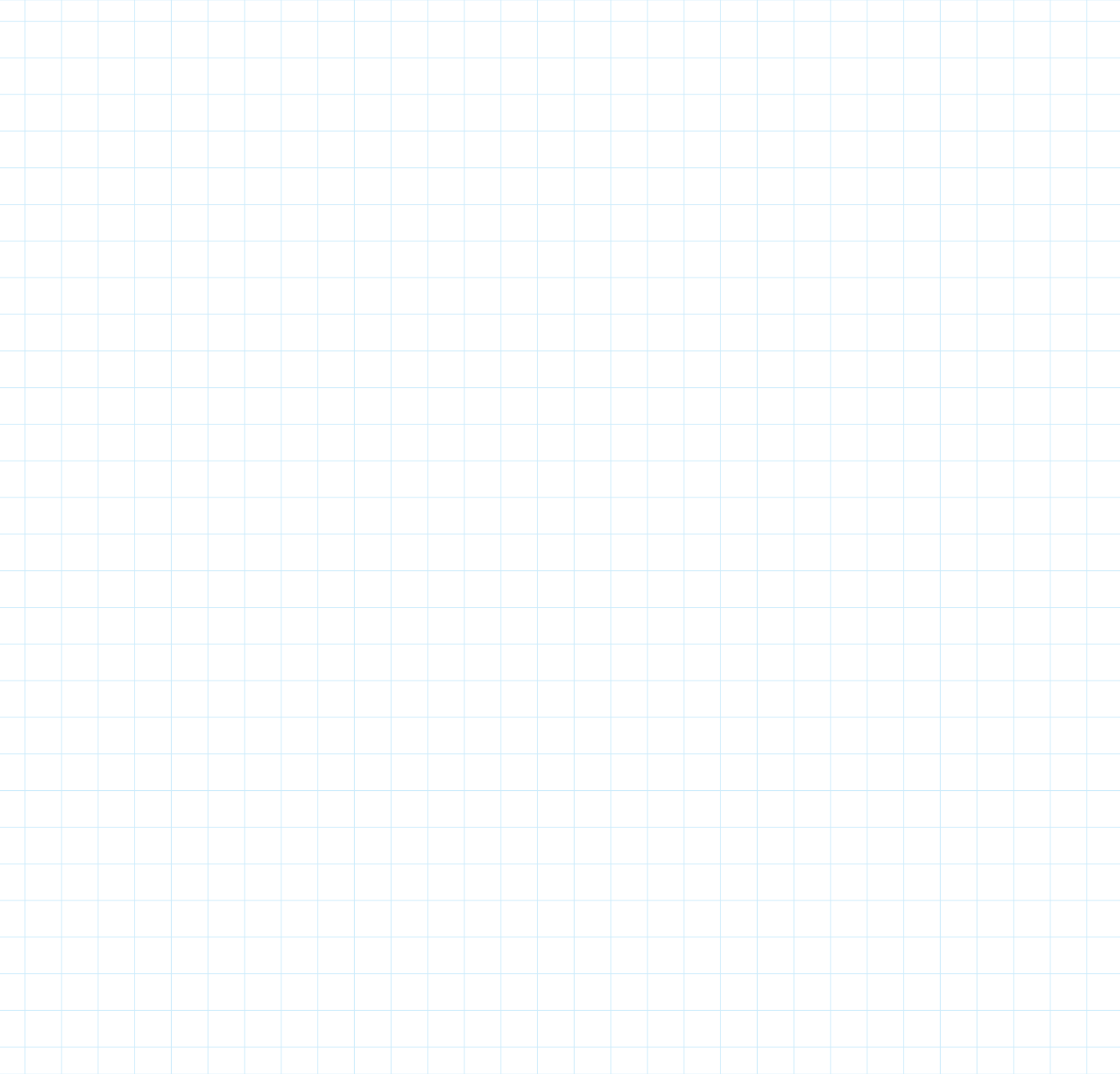
CONNECTION DIAGRAM

Package Contents:

- 1x MX44AB
- 1x 12V/2A DC power supply
- 1x Remote control
- 4x IR Transmitter
- 5x IR Receiver
- 1x mounting kit
- 1x user manual

Maintenance

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzene to clean this unit.

NOTES

BLUSTREAM

www.blustream.co.uk / www.blustream.com.au