

# Pro.2

## 4x4 Seamless HDMI matrix & 2x2 Video Wall Controller

Model: HDMIMX4422

### Operating Instructions



### Dear Customer

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.

The Matrix offers solutions for digital entertainment center, HDTV retail and show site, HDTV, STB, DVD and projector factory, noise, space and security concerns, data center control, information distribution, conference room presentation, school and corporate training environments.

### Features

- Any one of the 4 sources to any one of the 4 displays.
- Seamless switching ensures no switching delay and pictures loss during transitions, the switching speed is less than 1 second.
- Support 2x2 video wall mode.
- Any one of the four outputs can be turned off independently.
- Each port support both HDMI and DVI inputs.
- Support high definition resolutions, including: 1080p@60Hz@36 b/pixels, 1080i, 720p and other standard video formats.
- With panel button, Remote Control, RS232 Control, IP Control to select the source.
- 1U rack design ,easy installment.
- DC 12V 3A power supply.
- Unit size:L438XW220XH44 mm.

### NOTICE

Our company reserves the right to make changes in the hardware, packaging and any accompanying documentation without prior written notice.

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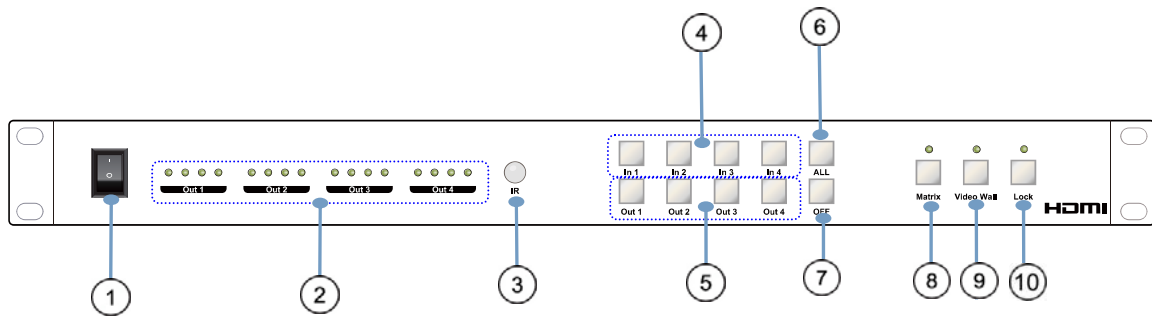
## SPECIFICATIONS

Operating Temperature Range	0 to +35°C (32 to +95°F)
Operating Humidity Range	5 to 90 % RH (no condensation)
Input Video Signal	0.5-1.0 volts p-p
Input DDC Signal	5 volts p-p (TTL)
Video Format Supported	DTV/HDTV: 1080P/1080i/720P/ 576P/480P/576i/480i
Audio Format Supported	LPCM
Input ports	4xHDMI(standard Type A connector)
Output ports	4xHDMI(standard Type A connector)
Matrix mode	4x4 Seamless switching
Video wall mode	2x2 video wall
Power consumption	24watts(Maximun)
Dimension (mm)	L438XW220XH44 mm
Weight	2800g

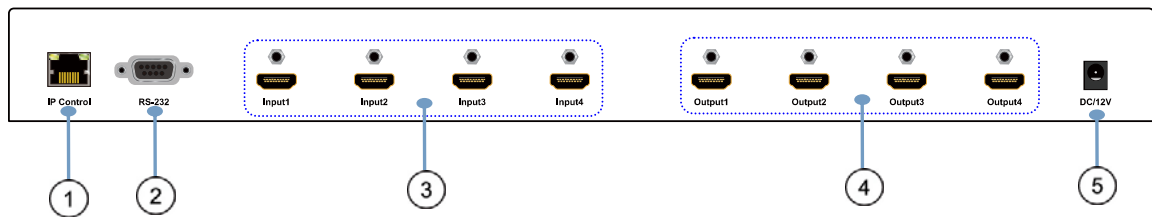
## PACKING CONTENTS

- 1). 4x4 Matrix x1
- 2). Remote Controller x1
- 3). CD ROM (user manual) x1
- 4). Power Adapter 12V3A x1
- 5). Mounting Ears x1
- 6). IR Cable x1

## PANEL DESCRIPTIONS



- ① Power on/off.
- ② These LED indicates the status of each output selection.
- ③ IR receive window.
- ④ Input button IN1~4: choose the desired input port from ports 1~4.
- ⑤ Output button OUT1~4: choose the desired output port from ports 1~4.
- ⑥ ALL: Press this button to set all the outputs to display with the same input. First press the “ALL” button then press an input number to confirm the selection.
- ⑦ OFF button: first press “OFF”, then press the corresponding output number or “ALL” to turn off and turn on the video output.
- ⑧ Matrix mode key and led: the machine will work in matrix mode.
- ⑨ Video Wall mode key and led: the machine will work in video wall mode
- ⑩ Lock button: lock and unlock the function of all the keys, the led will turn red when lock enabled.

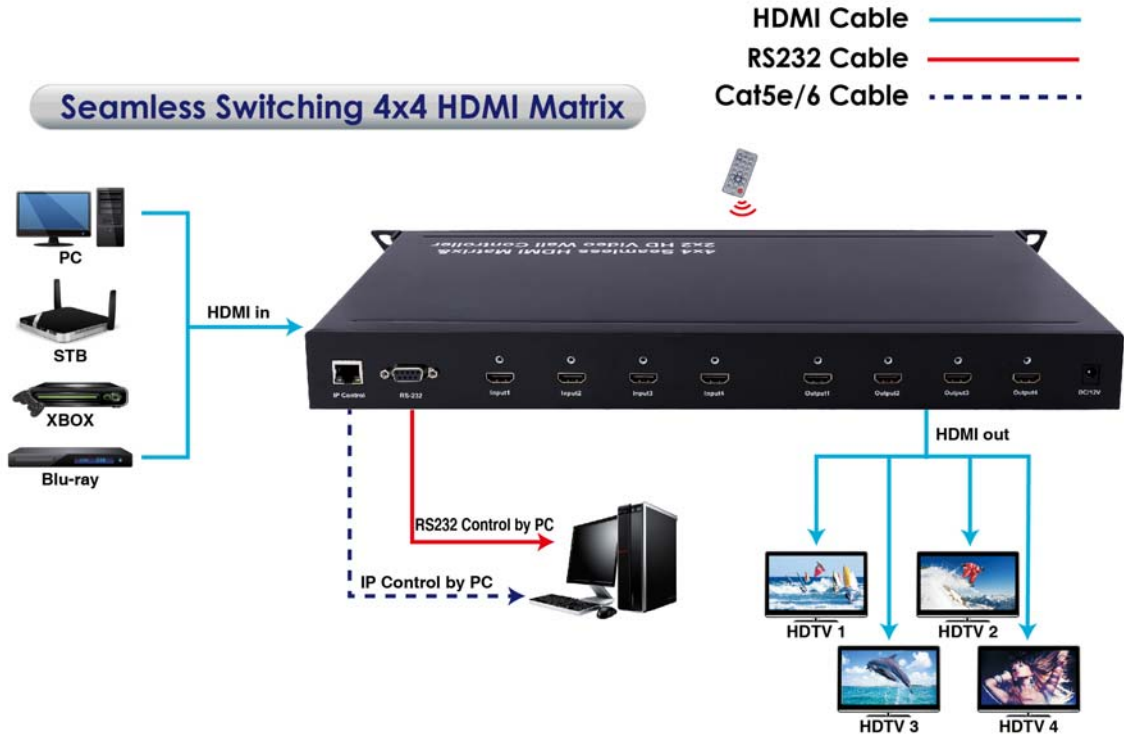


- ① LAN port.
- ② RS232 port.
- ③ HDMI input port.
- ④ HDMI output port.
- ⑤ Power input: 12V 3A

## CONNECTING AND OPERATING

1. Connect source devices to input ports of the matrix
2. Connect HDMI output port to TV or other HDMI sink devices.
3. Optional: connect RS232 cable from PC RS232 port .
4. Optional: connect an Ethernet cable from the TCP/IP port on the matrix to a local area network.
5. Connect 12V/3A POWER supply to DC power socket.
6. Power on the matrix ,HDMI sources and displays.

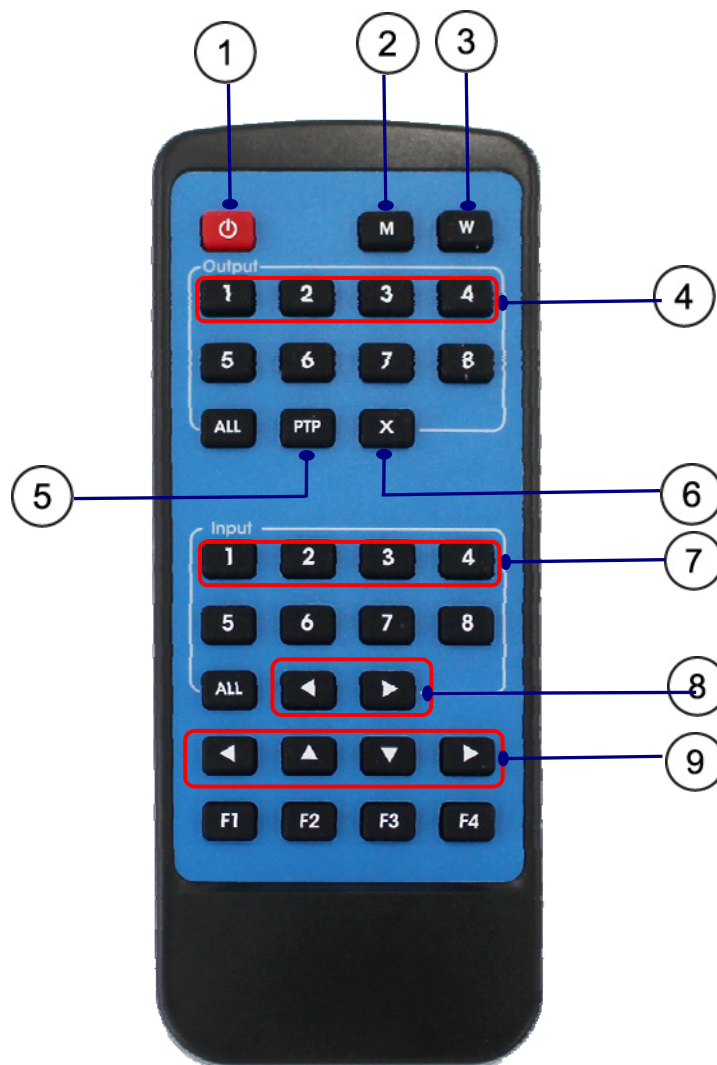
## Typical Application



## Diagram of 2x2 Video Wall Displaying



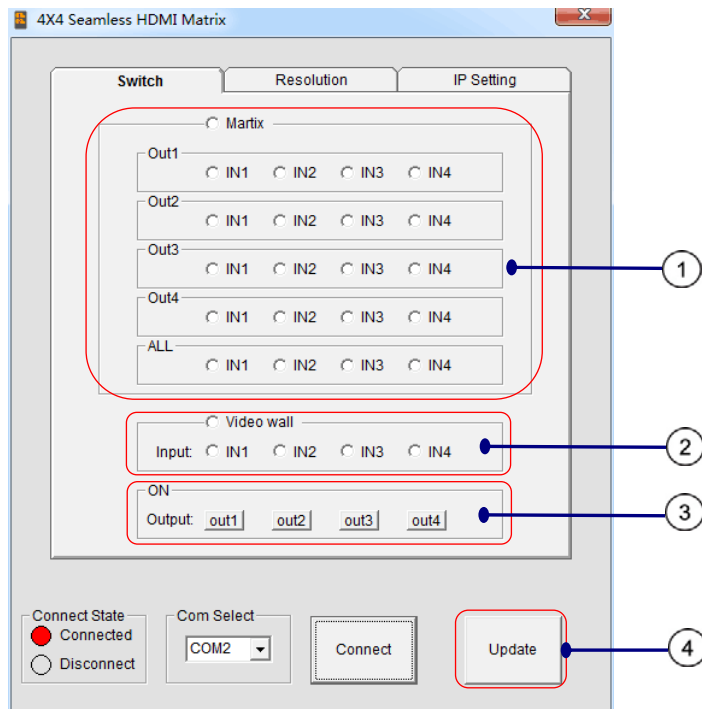
## 1. Control via remote



- ① Power on/off.
- ② Matrix mode button.
- ③ Video wall mode button.
- ④ Output button: Output 1/Output 2/Output 3/ Output 4.
- ⑤ PTP button:
  - Output 1 display input 1,
  - Output 2 display input 2,
  - Output 3 display input 3,
  - Output 4 display input 4.
- ⑥ Click “X” to close the output port.
  - For example, click “X” and “output 1” to close output 1, Click “X” and “All” to close all the outputs.
- ⑦ Input button: Input 1/Input 2/Input 3/Input 4.
- ⑧ Select the input sources under video wall mode.
- ⑨ Border setting under video wall mode.

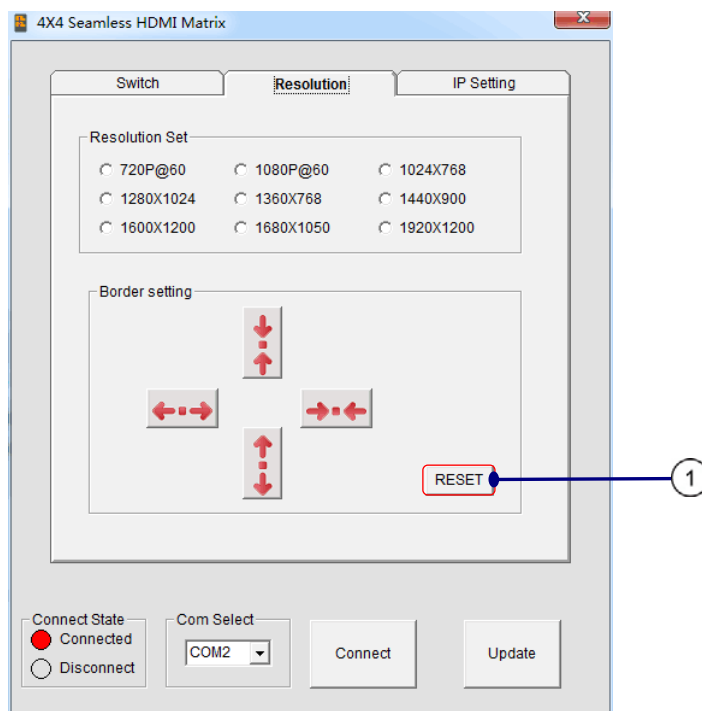
## 2. Control via RS232

### 1) Switch setting







- ① Matrix mode: select the input port for output 1~4.
- ② Video wall mode: all the four output will show the different part of the same input source.
- ③ ON: Factory defaults setting is all output is on, the button is green. Click "out1, out2, out3, out4", it will turn off, the button will turn red.
- ④ Update: update the working status of the matrix.

### 2).Resolution and border setting



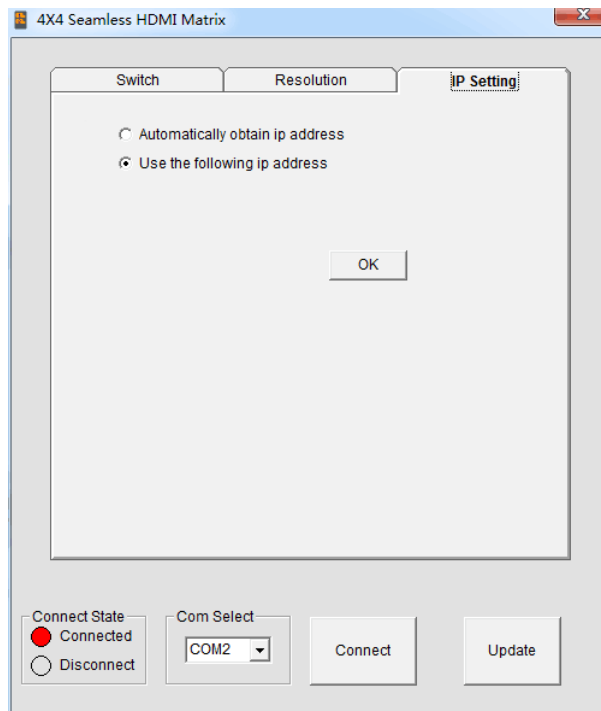
Border setting is only effective when working in video wall mode.

① Reset: Click “RESET” to reset to default border setting.

-  the border line will decrease in vertical direction
-  the border line will increase in vertical direction
-  the border line will decrease in horizontal direction
-  the border line will increase in horizontal direction

### 3) IP setting

Click OK button to set IP address for LAN control (for example: 192.168.1.111).



### 4) Control command format

If user want to write his own control software, below are data format and baud rate setting.

Com port setting:

Baud Rate:	9600 bps
Data bits:	8 bits
Parity:	None
Stop bits:	1 bit
Flow control:	None

## 5) RS232 command

send (hex)					feedback (hex)					description
length	start	index	parameters	END						
0x05	0x55	0x19	0x00	0x77	0x73	0x31	0x30	0x0D	0x0A	OUTPUT1->INPUT1
			0x01	0x77		0x31	0x31			OUTPUT1->INPUT2
			0x02	0x77		0x31	0x32			OUTPUT1->INPUT3
			0x03	0x77		0x31	0x33			OUTPUT1->INPUT4
			0x10	0x77		0x32	0x30			OUTPUT2->INPUT1
			0x11	0x77		0x32	0x31			OUTPUT2->INPUT2
			0x12	0x77		0x32	0x32			OUTPUT2->INPUT3
			0x13	0x77		0x32	0x33			OUTPUT2->INPUT4
			0x20	0x77		0x33	0x30			OUTPUT3->INPUT1
			0x21	0x77		0x33	0x31			OUTPUT3->INPUT2
			0x22	0x77		0x33	0x32			OUTPUT3->INPUT3
			0x23	0x77		0x33	0x33			OUTPUT3->INPUT4
			0x30	0x77		0x34	0x30			OUTPUT4->INPUT1
			0x31	0x77		0x34	0x31			OUTPUT4->INPUT2
			0x32	0x77		0x34	0x32			OUTPUT4->INPUT3
			0x33	0x77		0x34	0x33			OUTPUT4->INPUT4
0x05	0x55	0x02	0x00~0x03	0x77						power on/off output video
0x05	0x55	0x21	0x00~0x01	0x77	0x4D	0x44	0x30~0x3	0x0D	0x0A	0:matrix mode 1:video wall mode
0x05	0x55	0x23	0x00~0x03	0x77	0x4D	0x50	0x30~0x3	0x0D	0x0A	select input port when working in video wall mode
0x05	0x55	0x22	0x00~0x08	0x77	0x82	0x83	0x30~0x3	0x0D	0x0A	Resolution setting: 0:720P; 1:1080P; 2:1024X768; 3:1280X1024 4:1360X768 5:1440X900 6:1600X1200 7:1680X1050 8:1920X1200
0x04	0x55	0x02		0x77						status

## 6) Web password reset

The command length is 4 bytes.

rpw+ '↵'

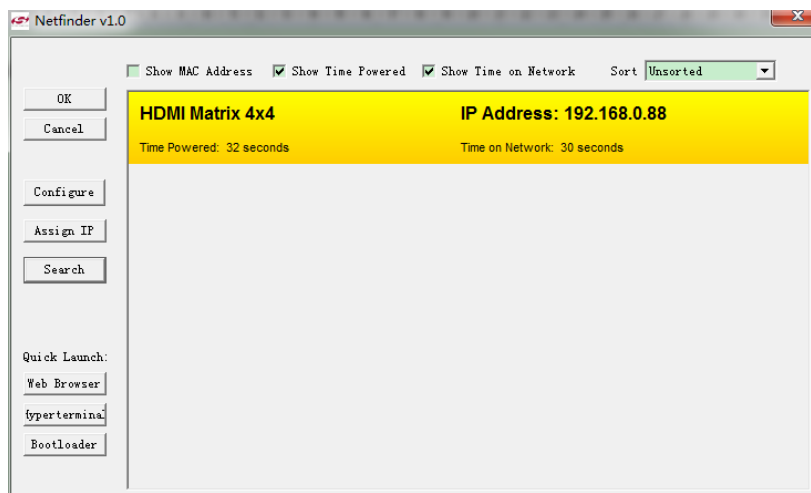
"rpw" is the key word , '↵' is carriage return.

When you send the Web password reset command to the matrix, if succeed, it will feedback "rpw", and the web password will be set as "0000000000".

## 3. IP Control

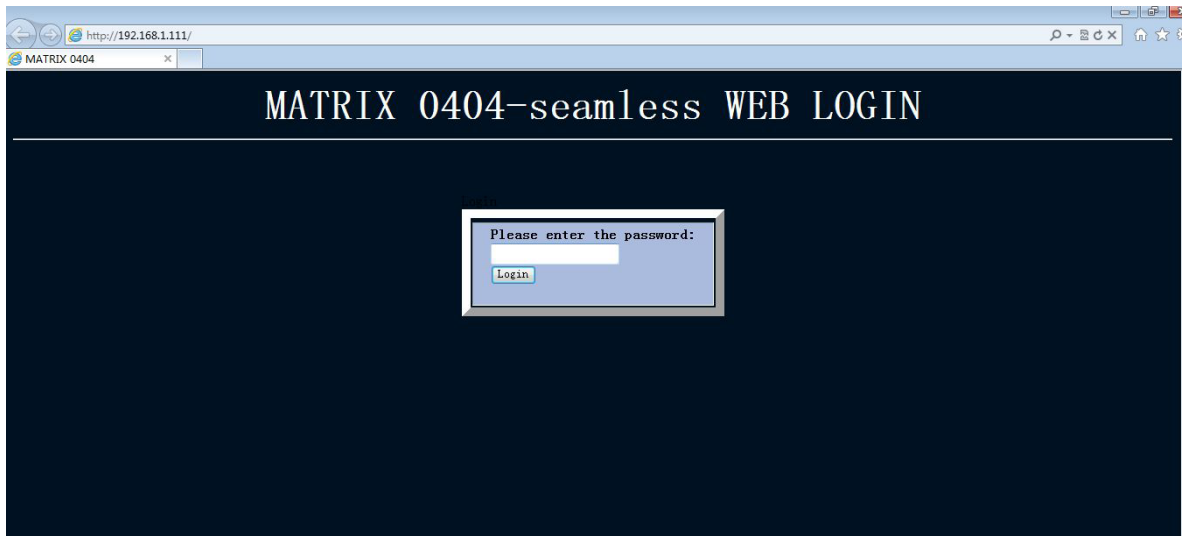
**Note:** Use the RJ45 cable to connect with PC, or use RJ45 cable to connect to the Ethernet router.

1) Double click Netfinder.exe. Click "Search" button to get the device's IP address.





2).Click “Web Browser” button. A web browser will be shown. The default password is "0000000000", input the password and login. The device controller page will be displayed.





## CUSTOMER CARE CENTRE

**12**  
MONTH  
WARRANTY

- 1 THIS PRODUCT IS WARRANTED FOR 12 MONTHS FROM THE DATE OF PURCHASE.**  
Subject to the conditions of this warranty, the Customer Care Centre will perform necessary service on the product without charge for parts, or labour if, in the opinion of the manufacturer/ manufacturer's agent, the product is found to be faulty within the warranty period.
- 2** This warranty only applies if the product has been installed and used in accordance with the manufacturer's recommendations (as noted in the operating instructions) under normal use and reasonable care. The warranty covers normal domestic use only and does not cover damage, malfunction or failure resulting from use of incorrect voltage, accident, misuse, neglect, build-up of dirt or dust, abuse, mis-adjustment of customer controls, mains supply problems, thunderstorm activity, infestation by insects or vermin, tampering or repair by unauthorised persons (including unauthorised alterations), exposure to abnormally corrosive conditions or any foreign object or matter having entered the product.
- 3** If warranty service is required you should:
  - Telephone the Customer Care Centre on 1300 662 946
  - Provide a copy of your purchase receipt that shows retailer's identity and date of purchase.
  - Send or bring the product to your Customer Care Centre.  
Please note that freight to and/or from your Customer Care Centre must be arranged by you.
- 4** The warranties hereby conferred do not extend to any costs associated with the delivery, handling, freighting or transportation of the product or any part thereof or replacement of and do not extend to any damage or loss occurring during, or associated with transit.

**THIS WARRANTY CARD AND THE PURCHASE DOCKET  
(OR SIMILAR PROOF OF PURCHASE)  
SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES**

**TROUBLE SHOOTING HELP LINE  
1300 662 946**

Customer Care Centre  
562 Spencer Street, West Melbourne  
VICTORIA 3003

**Pro.2**  
Providing AV Solutions

This advice does not limit, override or later your guaranteed rights under the Australian Consumer Law, including remedies for any failure of the Consumer Guarantees, which may include repair or replacement or it a Major Failure (as defined under the Australian Consumer Law) a replacement or refund. These guaranteed rights cannot be varied by Pro.2 or retailers of its products and have no set time limit.