



# CDB-5

RS-232 Level Shift Board



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 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
VR0	10/07/13	Preliminary release
VS1	28/10/13	Updated text/diagrams

## CONTENTS

<b>1. Introduction</b> .....	<b>1</b>
<b>2. Applications</b> .....	<b>1</b>
<b>3. Package Contents</b> .....	<b>1</b>
<b>4. System Requirements</b> .....	<b>1</b>
<b>5. Features</b> .....	<b>1</b>
<b>6. Operation Controls and Functions</b> .....	<b>2</b>
6.1 Front Panel .....	2
6.2 Rear Panel.....	2
6.3 RS-232 Protocols .....	3
<b>7. Connection Diagram</b> .....	<b>4</b>
<b>8. Specifications</b> .....	<b>5</b>



## 1. INTRODUCTION

This bespoke RS-232 Level Shift Board is designed to adjust control commands between PCs and control devices, including TV Wall systems. The PC protocol is converted so that it is readable by the control device to ensure it executes the exact command action.

## 2. APPLICATIONS

- TV wall control for CVW-11HS and CVW-42AK2 series

## 3. PACKAGE CONTENTS

- 1×RS-232 Level Shift Board
- 1×Standard USB A to Mini-B Cable
- Operation Manual

## 4. SYSTEM REQUIREMENTS

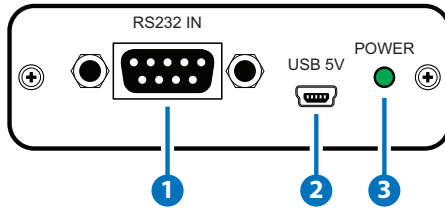
Source equipment such as a PC/Notebook and output to TV wall system.

## 5. FEATURES

- Baud Rate testing
- RS-232 command configuration

## 6. OPERATION CONTROLS AND FUNCTIONS

### 6.1 Front Panel



#### 1 RS232 IN

Connect to a PC/laptop or any RS-232 command system with a D-Sub 9-pin male null cable to send RS-232 commands to the control device.

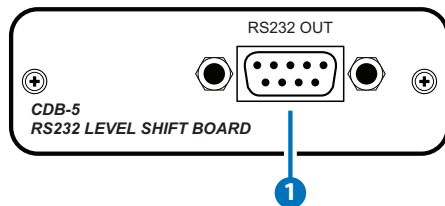
#### 2 USB 5V

Connect the USB cable (included in the package) to a PC/laptop or any USB supported power adaptor to supply power to the device.

#### 3 POWER

This LED will illuminate when the device is connected to an active power supply.

### 6.2 Rear Panel



#### 1 RS232 OUT

Connect to the RS-232 equipped device to be controlled with a D-Sub 9pin female null cable.

### 6.3 RS-232 Protocols

CDB-5 IN		CDB-5 OUT	
PIN	Definition	PIN	Definition
1	NC	1	NC
2	TxD	2	RxD
3	RxD	3	TxD
4	NC	4	NC
5	GND	5	GND
6	NC	6	NC
7	Connect to Pin 8	7	Connect to Pin 8
8	Connect to Pin 7	8	Connect to Pin 7
9	NC	9	NC

Baud Rate: 110bps~921600bps

Data Bit: 8 bits

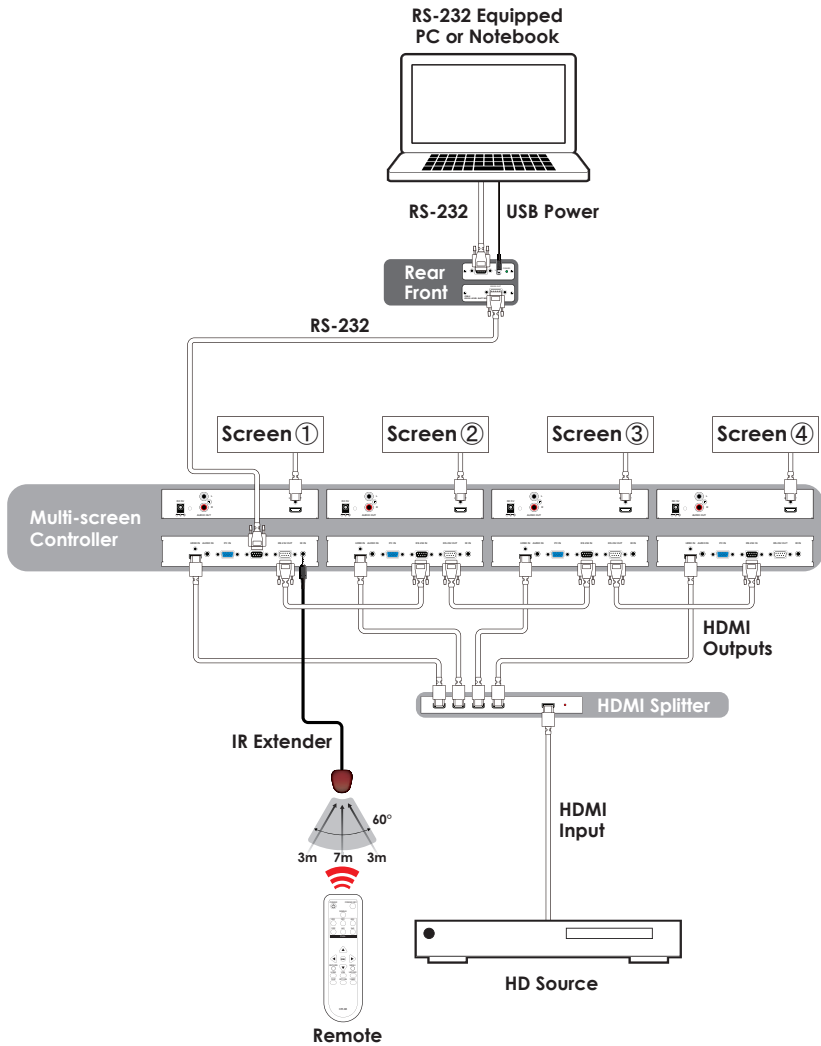
Parity: None

Flow Control: None

Stop Bit: 1



## 7. CONNECTION DIAGRAM





## 8. SPECIFICATIONS

<b>Baud Rate</b>	110bps~921, 600bps
<b>Input Port</b>	D-Sub 9-pin (Female)
<b>Output Port</b>	D-Sub 9-pin (Male)
<b>ESD Protection</b>	Human body model: ±8kV (air-gap discharge) ±4kV (contact discharge)
<b>Power Supply</b>	USB bus power or USB to DC power supply
<b>Dimensions</b>	71mm (W)×81.5mm (D)×23mm(H)
<b>Weight</b>	110g
<b>Chassis Material</b>	Aluminum
<b>Silkscreen Color</b>	Black
<b>Operating Temperature</b>	Operating from 0 °C ~ 40 °C
<b>Storage Temperature</b>	-20 °C ~ 60 °C / -4 °F ~ 140 °F
<b>Relative Humidity</b>	20 ~ 90 % RH (non-condensing)
<b>Power Consumption</b>	2.5W (Max.)





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