QU-16E

v1.3 HDMI 1 to 16 Distribution Amplifier

OPERATION MANUAL

Safety Precautions

Please read all instructions before attempting to unpack or 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 module openings or empty slots, as you may damage parts.
- Do not attach the power supply cabling to building surfaces.
- Do not allow anything to rest on the power cabling or allow it to be abused by persons walking on it.
- To protect the equipment from overheating, do not block the slots and openings in the module housing that provide ventilation.

Revision History

Version No	Date	Summary of Change
RDV1	***20101202***	Preliminary Release

Table of Contents

1. Introduction

The HDMI 1 by 16 splitter is capable of handling HDMI v1.3 and with support for Deep Color video and new lossless compressed digital audio. It also amplifies and equalized your signals offering unparalleled I/O of audio and video. With extra features like EDID and CEC, this splitter is able to handle all your HDMI splitting needs.

2. Applications

- Simultaneous display up to 16 displays
- Advertisement display
- Demonstration display
- Rally display

3. Package Contents

- HDMI 1 by 16 Splitter
- 5V / 6A Power Adaptor
- Operation Manual

4. System Requirements

Input source equipment such as PC or DVD player with connection cables and output HD monitor or LCD TV with HDMI cable.

5. Features

- Compliant with HDMI 1.3, HDCP 1.1 and DVI 1.0
- Deep Color Video up to 12bits, 1080p@(24/60)Hz
- One HDMI source connect up to sixteen HDMI display simultaneously
- HDCP keysets allows each output to work independently when connecting to a HDMI display
- Splits a HDMI source up to sixteen outputs without signal loss
- Supports DVI source and DVI display by using HDMI to/from DVI adaptor cable
- Supports LPCM 7.1Ch, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio transmission (32-192kHz Fs sample rate)
- Supports a wide range of PC and HDTV resolutions from VGA to UXGA and 480i to 1080p
- HDMI cable distance tested with 1080p/8bits resolution the I/O source can up run up to 15/15 meters. If 1080p/12bits the I/O source can run up to 15/10 meters.

Note: A. Cable tested with 24AWG using cables of another type may result in a different operating distance.

B. Cable distance test included the following: PS3 120G and 37" Samsung 12-bit LCD TV.

C. Figures provided in this manual are reference figures only, actual figures may depend on source and display use with cable specification.

- Supports EDID functionality. The unit will detect the first HDMI/DVI output source's EDID and record in the unit. If the first detected output source is empty it will pass to next source, until the first HDMI/DVI been detected. When user reconnect all the output sources or re-plug the power, the system will automatically recover the EDID.
- Support xvYCC
- Support CEC bypass

6. Specifications

TMDS Clock Frequency	2.25Gbps
Input Port	1 x HDMI,
Output Ports	16 x HDMI
EDID	STD/TV
HDMI Audio Format	PCM2/5.1/7.1, Dolby 5.1, DTS 5.1, DD+, D-TrueHD, DTS-HD
HDMI Cable In	1080p 8-bit (15M), 12-bit (15M)
HDMI Cable Out	1080p 8-bit (15M), 12-bit (10M)
IR Frequency	20~60KHz
Power Supply	5V / 6A DC (US/EU standards, CE/FCC/UL certified)
ESD Protection	Human body model: ± 8kV (air-gap discharge) ± 6kV (contact discharge)
Dimensions(mm)	436 (W) x 120 (D) x 49(H)
Weight(g)	2000
Chassis Material	Metal
Silkscreen Color	Black
Operating Temperature	0°C~40°C / 32°F~104°F
Storage Temperature	-20°C~60°C / -4°F~140°F
Power Consumption	20W
Relative Humidity	20 ~ 90% RH (non-condensing)

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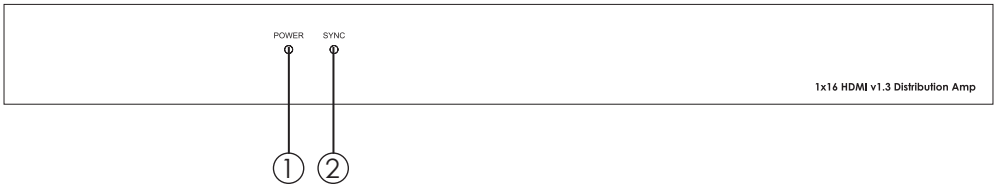
7. Operation Controls and Functions

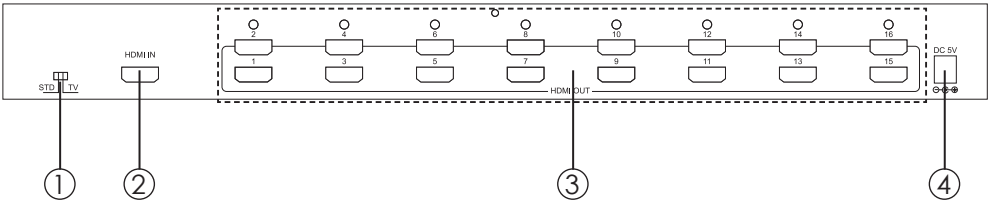
7.1 Front Panel



① Power LED: The red LED will illuminate when the power is connected with AC wall outlet.

② SYNC: The LED will illuminate in green when both the source and the display are sync together. This LED will also blink once while the power is turned on.

7.2 Rear Panel



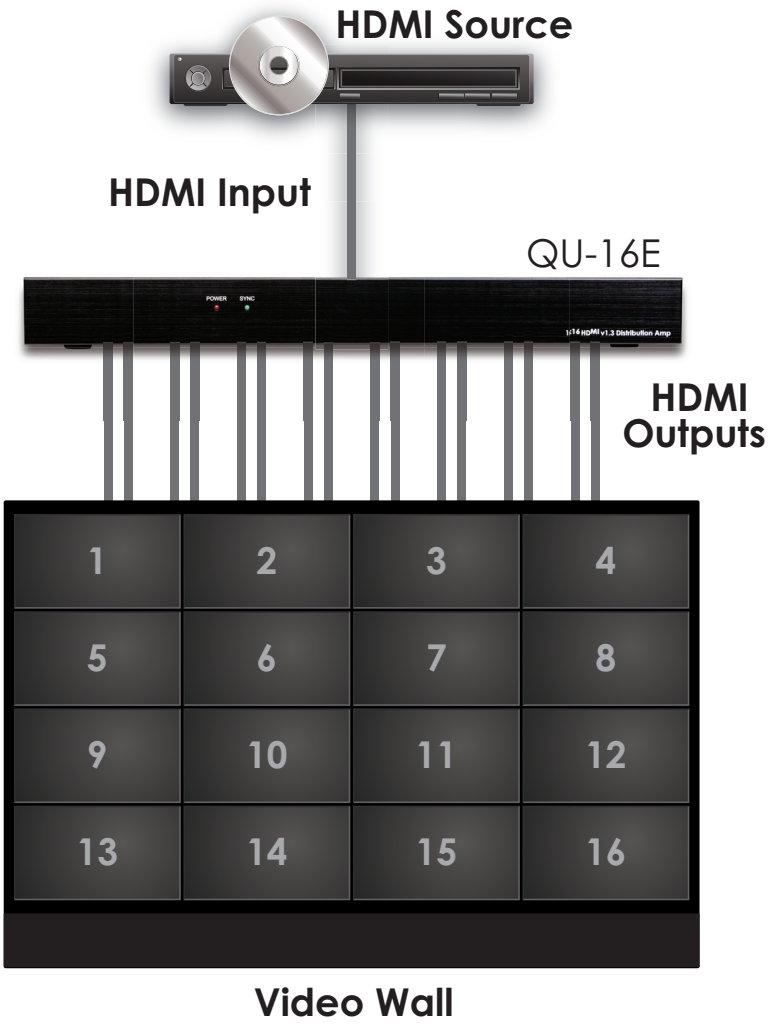
① EDID Switch STD/TV: This switch allows user to select the function of EDID from TV or from the built-in EDID of the device. By switching the dip switch to TV will allow the source to send out the signal according to 1st HDMI output's EDID and by switching it to STD will allow the source to send out the signal according to the set EDID recorded in the device. The default setting is on TV, leave it as it is when the display is properly playing. .

w. HDMI IN: This slot is to connect with input source equipment such as DVD/Blue-Ray player with HDMI cable for video and audio input signal.

e . HDMI Out 1~16: Thess slots are to connect with LCD TV or HD monitor for both video and audio display simultaneously with HDMI cables.

r . DC 5V: This slot is where you plug the 5V DC power supply into the unit and connect the adaptor to an AC wall outlet.

8. Connection and Installation



Acronyms

A

Acronym	Complete Term
DVI	Digital Visual Interface
EDID	Extended Display Identification Data
HDCP	High-bandwidth Digital content protection
HDMI	High-Definition Multimedia Interface
STD	Standard

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