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Version 1.0 October 2009

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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

<table>
<thead>
<tr>
<th>VERSION NO.</th>
<th>DATE DD/MM/YY</th>
<th>SUMMARY OF CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDV1</td>
<td>10/12/13</td>
<td>Preliminary Release</td>
</tr>
</tbody>
</table>
1. INTRODUCTION
The Coaxial and Optical Switcher/Distributor allows 4 coaxial and 4 optical audio input selections to be select and distribute to 10 coaxial and 10 optical outputs.
Supporting sampling rate up to 192kHz and audio signal up to 5.1CH, this simple and easy tool can assist you with maximum audio expansion and distribution.

2. APPLICATIONS
• Home sound system
• Conference and meeting room audio system sharing
• Show Room sound system
• Public audio system
• Announcing system

3. PACKAGE CONTENTS
• Coaxial and Optical Switcher/Distributor
• Remote Control CR-137
• 5V/2.6A DC Power Adaptor
• Operation Manual

4. SYSTEM REQUIREMENTS
Input source equipment such as Blu-ray/DVD/PS3 player or Set-Top-Box and output with active speakers or sound systems.

5. FEATURES
• Supports 4 Coaxial and 4 Optical inputs and 10 Coaxial and 10 Optical outputs
• Supports LPCM 2CH audio signal
• Supports sampling rate up to 192kHz
• Supports Dolby and DTS audio signal bypass
• Low power consumption
6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel

1. **IR Window:** Receive IR signal from the included Remote Control.

2. **POWER Button:** Press this button to turn ON or set the device to standby mode.

3. **POWER LED:** This LED will illuminate in Green when the device is turned ON and in Red when in standby mode.

4. **COAXIAL & OPTICAL LED 1~4:** These LEDs will illuminate according to the input selection.

5. **INPUT Button:** Press this button to select input Coaxial and Optional from 1~4.

6.2 Rear Panel

1. **RS-232:** Connect from a PC/Laptop device with RS-232 tool to send RS-232 command to control the device.

2. **IR IN:** Connect with IR Receiver included in the package for IR signal receiving from the remote control.

3. **COAXIAL & OPTICAL IN:** Connect from source equipment such as DVD, Blu-ray, PS3 or etc. with audio signal.

4. **COAXIAL & OPTICAL OUT:** Connect to active speakers or audio equipment for audio distribution.

5. **5V DC:** Connect with power supply from the AC wall outlet.
6.3 RS-232 Protocols

<table>
<thead>
<tr>
<th>DCT-31</th>
<th>Remote Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIN</td>
<td>Assignment</td>
</tr>
<tr>
<td>1</td>
<td>NC</td>
</tr>
<tr>
<td>2</td>
<td>Tx</td>
</tr>
<tr>
<td>3</td>
<td>Rx</td>
</tr>
<tr>
<td>4</td>
<td>NC</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
</tr>
<tr>
<td>6</td>
<td>NC</td>
</tr>
<tr>
<td>7</td>
<td>NC</td>
</tr>
<tr>
<td>8</td>
<td>NC</td>
</tr>
<tr>
<td>9</td>
<td>NC</td>
</tr>
</tbody>
</table>

Baud Rate: 115200bps
Data bit: 8 bits
Parity: None
Flow Control: None
Stop Bit: 1

6.4 RS-232 & Telnet Commands

<table>
<thead>
<tr>
<th>Command</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER OFF/ON</td>
<td>Set Power Status</td>
</tr>
<tr>
<td>INPUT COAX 1~4</td>
<td>Choose a Coaxial input</td>
</tr>
<tr>
<td>INPUT OPTICAL 1~4</td>
<td>Choose an Optical input</td>
</tr>
<tr>
<td>STATUS</td>
<td>Show Current Information</td>
</tr>
<tr>
<td>?/H/HELP</td>
<td>Show all commands</td>
</tr>
</tbody>
</table>

All the RS-232 command will be not executed unless followed with a carriage return and all commands are case-sensitive.
7. CONNECTION DIAGRAM

- DVD / PS3 / Blu-ray Player
- Active Speakers
- Amplifier with Active Speakers
- PC / Laptop
- DVD or Blu-ray Player
- Amplifier with Active Speakers
- Active Speakers
8. SPECIFICATIONS

Input port: 4 x Coaxial, 4 x Optical, 1 x IR
Output port: 10 x Coaxial, 10 x Optical
Sampling Rate: 32~192kHz
IR Frequency: 30~50kHz
Output Level:
THD+N
SNR
Crosstalk
ESD Protection: Human body model:
±8kV (air-gap discharge)
±4kV (contact discharge)
Power Supply: 5VDC/2.6A (US/EU standards, CE/FCC/UL certified)
Dimensions: 436mm (W) x 120mm (D) x 44mm (H)/Jacks Excluded
436mm (W) x 127mm (D) x 48mm (H)/Jacks Included
Weight: 1596 g
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)
Audio Sampling Rate: Up to 192 kHz

<table>
<thead>
<tr>
<th>Coaxial/Optical Input (Up to 192kHz)</th>
<th>Coaxial output</th>
<th>Optical output</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPCM 2CH</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Dolby Digital 2<del>5.1CH/DTS 2</del>5.1CH</td>
<td>V</td>
<td>V</td>
</tr>
</tbody>
</table>
## 9. ACRONYMS

<table>
<thead>
<tr>
<th>ACRONYM</th>
<th>COMPLETE TERM</th>
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<tbody>
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