



KD-CATHD

HDMI CAT5/5e/6 Extender

Operating Instructions



KD-CATHD **Tx**

KD-CATHD **Rx**

KD-CATHD is a master box that includes one (1) KD-CATHDTx Transmitter Balun and one (1) KD-CATHDRx Receiver Balun. KD-CATHD is capable of sending 1080P/60 to distances of up to 150 ft., and lower resolutions up to 280 ft.

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Quick Set Up Guide

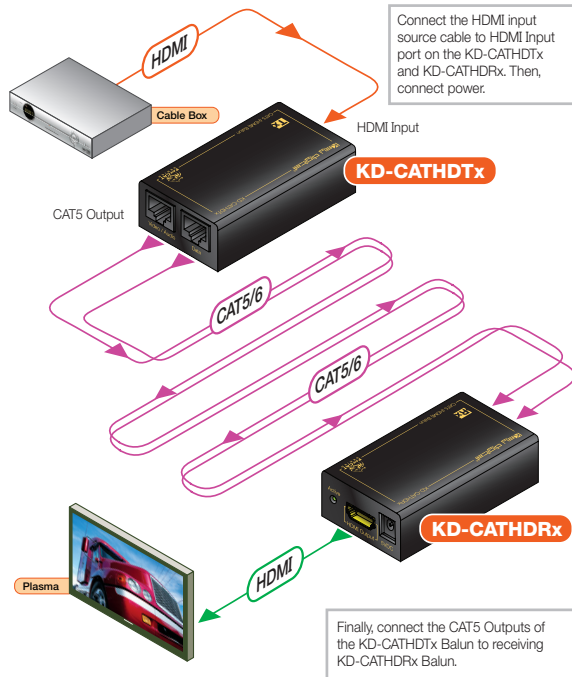


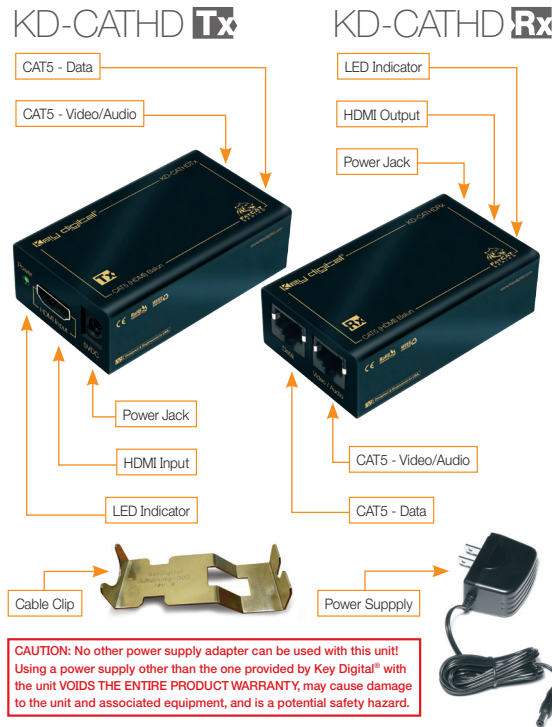
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Please read all instructions to insure safe operation of the product.

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Installation Instructions

Find a safe and convenient location for the KD-CATHD unit.

- Before permanently securing the unit or final installation of cabling behind walls or ceilings, test for proper operation of the unit and the cables in your system.

CAT5/5e/6 Cabling

- KD-CATHD Baluns will work with CAT5, CAT5e, or CAT6 cabling. It is recommended that shielded (STP) CAT6 cabling be used for optimum performance in hostile electrical environments. *Not recommended for use with Shielded CAT5 & Shielded CAT5e cabling.*

Connections

- Plug in the HDMI source cable to the "HDMI Input" port of the KD-CATHDTx.
- Connect first CAT5/5e/6 cable to the "Video/Audio" output port of the KD-CATHDTx and to the "Video/Audio" input port on the KD-CATHDRx.
- Connect second CAT5/5e/6 cable to the "Data" output port of the KD-CATHDTx and to the "Data" input port on the KD-CATHDRx.
- Plug in the HDMI output cable to the "HDMI Output" port of the KD-CATHDRx.
- Plug in power supply in both units.

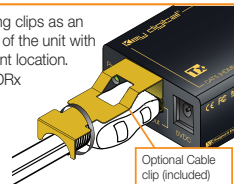
Power

- KD-CATHDRx and KD-CATHDTx units must be powered.
- Plug in the supplied power adapter into the power input jack on the unit. You should see the "Power" LED illuminate

Mounting the KD-CATHD units

The KD-CATHD is shipped with convenient mounting clips as an installation option. Once you have verified operation of the unit with your cables, secure the mounting clip to a convenient location. Carefully secure mounting clips onto the KD-CATHDRx or KD-CATHDTx chassis by fastening screws until mounting clips are fixed firmly against the units.

An optional cable clip (included) enables a method for securing HDMI cables to the mounting bracket of the KD-CATHD units.



DVI applications for the KD-CATHD

The KD-CATHD can also be used to extend DVI video cable runs.

For these applications, use DVI to HDMI (Key Digital model number KD-MFHDMI or KD-FMHDMI) adapters.

→ For DVI signals that do not carry HDCP, you may send video using a single CAT5/5e/6 cable that is input in the “Data” port of you KD-CATHD devices.



Troubleshooting

Most issues with the KD-CATHD setup will involve resolution and distance performance. If you experience problems (no image, video artifacts, picture dropout, noise) here are a few things to try.

1. Use the shortest possible HDMI and CAT5/5e/6 cables between devices.
2. Lower the output resolution of the image source.
3. Use Key Digital® HDMI cables.
4. Re-terminate CAT5 cabling.

Other possible problems can result from custom made CAT5 cables. CAT5 cables must be terminated in accordance with TIA/EIA-568-A or TIA/EIA-568-B pin-pair assignments.

Supported Resolutions

Common Video Resolutions

Resolution	Common Name	Distance
720x480 (split into 2 fields)	480i	280'
720x480	480p	280'
1280x720	720p	280'
1980x1080 (split into 2 fields)	1080i	280'
1920x1080	1080p/24	280'
1920x1080	1080p/60	150'

Common Computer Resolutions

Resolution	Common Name	Distance
800x600	SVGA	280'
1024x768	XGA	280'
1280x768	WXGA	280'
1280x1024	SXGA	280'
1366x768	WXGA+	280'
1440x1080	SXGA+	180'
1600x1200	UXGA	150'

Technical Specifications



KD-CATHD Tx

KD-CATHD Rx

Connectors:

- One HDMI connector labeled "HDMI Input" (KD-CATHDTx) / "HDMI Output" (KD-CATHDRx)
- Two CAT5 output connectors labeled "Data" and "Video/Audio"
 - Standard RJ45 Jack using TIA/EIA-568-A or TIA/EIA-568-B pin/pair assignments

Power:

- External AC-DC power supply included (5 Volt DC @ 1 Amp, 110-240 VAC, 50-60 Hz)

Mechanical:

- No Fan Noise
- Weight < 1Lb
- Black Metal Enclosure
- HDMI bracket and a cable tie (2 per box)
- 4 L-brackets with screws per unit (8 per box)

Resolutions Supported:

- All resolutions up to 1080p/60Hz

Dimensions:

- HxWxL = 25 mm x 50 mm x 84 mm
- HxWxL = 1 in x 2 in x 2.5 in



Important Product Warnings:

1. Connect CAT5 cables before providing power to the unit.
2. Test for proper operation before securing unit behind walls or in hard to access spaces.
3. If installing the KD-CATHD into wall or mounting bracket into sheet-rock, provide proper screw support with bolts or sheet-rock anchors.



Safety Instructions.

Please be sure to follow these instructions for safe operation of your unit.

1. Read and follow all instructions.
2. Heed all warnings.
3. Do not use this device near water.
4. Clean only with dry cloth.
5. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
6. Only use attachments/accessories specified by the manufacturer.
7. Refer all servicing to qualified service personnel. Servicing is required when the device has been damaged in any way including:
 - Damage to the power supply or power plug
 - Liquid spills on the device
 - Objects fallen into the device
 - Exposure to rain or moisture



How to Contact Key Digital®

System Design Group (SDG)

For system design questions please contact us at:

→ Phone: **914-667-9700**

→ E-mail: sdg@keydigital.com

Key Digital Trainings

For questions about Key Digital Trainings please contact us at:

→ Phone: **914-667-9700**

→ E-mail: training@keydigital.com

Customer Support

For customer support questions please contact us at:

→ Phone: **914-667-9700**

→ E-mail: customersupport@keydigital.com

Technical Support

For technical questions about using Key Digital® products, please contact us at:

→ Phone: **914-667-9700**

→ E-mail: tech@keydigital.com

Marketing and Public Relations:

For marketing and public relations information, please contact us at:

→ Phone: **914-667-9700**

→ E-mail: marketing@keydigital.com

Shipping

For shipping questions please contact us at:

→ Phone: **914-667-9700**

→ E-mail: shipping@keydigital.com

Accounting:

For accounting questions please contact us at:

→ Phone: **914-667-9700**

→ E-mail: accounting@keydigital.com

Repairs and Warranty Service

Should your product require warranty service or repair, please obtain a Key Digital® Return Material Authorization (RMA) number by contacting us at:

→ Phone: **914-667-9700**

→ E-mail: rma@keydigital.com

Feedback

Please email any comments/questions about the manual to:

→ E-mail: customersupport@keydigital.com

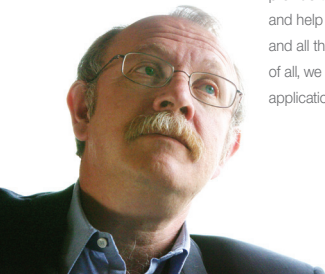
Warranty

All Key Digital® products are built to high manufacturing standards and should provide years of trouble-free operation. They are backed by a limited two-year parts and labor warranty.



The Experts in Digital Video Technology and Solutions™

Key Digital®, led by digital video pioneer Mike Tsinberg, develops and manufactures high quality, cutting-edge technology solutions for virtually all applications where high quality video imaging is important. Key Digital® is at the forefront of the video industry for Home Theater Retailers, Custom Installers, System Integrators, Broadcasters, Manufacturers, and Consumers. We provide total video system solutions because we know and help drive the technology, the industry, the business, and all the latest up-and-coming standards. But most of all, we know exactly what you need for your unique application - the right solution.



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