

DVI to HDMI Extender Set over Single CAT5 - Mini

User's Guide



Models

DVI-C5-HDM-SET



HDMI

**HD
ready
1080p**

**WUXGA
1920x1200**

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Section 1: Getting Started

1.1 Important Safeguards

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
 - Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
 - Repair or attempted repair by anyone not authorized by us.
 - Any damage of the product due to shipment.
 - Removal or installation of the product.
 - Causes external to the product, such as electric power fluctuation or failure.
 - Use of supplies or parts not meeting our specifications.
 - Normal wear and tear.
 - Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

1.2 Safety Instructions

The Avenview DVI to HDMI Extender over Single CAT5, DVI-C5-HDM-SET has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipment, the DVI-C5-HDM-SET should be used with care. Read the following safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Do not dismantle the housing or modify the module.
- Dismantling the housing or modifying the module may result in electrical shock or burn.
- Refer all servicing to qualified service personnel.
- Do not attempt to service this product yourself as opening or removing housing may expose you to dangerous voltage or other hazards
- Keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Have the module checked by a qualified service engineer before using it again.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

1.3 Regulatory Notices Federal Communications Commission (FCC)

This equipment has been tested and found to comply with Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment.

1.4 Introduction

The Avenview DVI to HDMI Mini Extender over Single CAT 5 (DVI-C5-HDM-SET) extends the DVI to HDMI transmission distance up to 40m (130ft) under HD resolution 720p or 1080i. With DVI-C5-HDM-SET, users can transmit high quality digital video of PC applications through one cost effective CAT-5/5e to the remote HDMI display or projector, instead of using short and expensive DVI-HDMI cables. With embedded EDID inside the extender, your PC will continue to send the digital video even when the HDMI display is not connected.

The DVI-C5-HDM-SET of Transmitter (DVI-C5-HDM-S) and Receiver (DVI-C5-HDM-R). The transmitter is connected to your PC DVI output and the receiving is connected to the HDMI display or projector. While successfully connected, the two LED lights on each RJ-45 connector will blink. The transmission distance between the transmitting and receiving units can be up to 40m (130ft) under HD (720p/1080i) or 25m (80ft) under Full HD (1080p). With compact size and requiring no power, DVI-C5-HDM-SET is the most cost effective choice for bringing your impressive digital video to the remote HDTV.

- DVI 1.1 & HDMI 1.2a compliant
- Handy DVI-D to RJ-45 and HDMI to RJ-45 adapters with programmable EDID feature
- Extend the transmission length up to 40m (130ft) under HD (720p or 1080i) or 25m (80ft) under Full HD (1080p)
- No power required
- Compact size, direct plug-in
- Pure unaltered uncompressed 7.1ch digital HDMI over LAN cable transmission

1.5 Package Contents

Before you start the installation of the converter, please check the package contents.

- | | |
|-----------------------------|-----|
| - DVI-C5-HDM-S | x 1 |
| - DVI-C5-HDM-R | x 1 |
| - Power Adapter (+5VDC, 4A) | x 1 |
| - User's Manual | x 1 |

1.6 Before Installation

- Put the product in an even and stable location. If the product falls down or drops, it may cause an injury or malfunction.
- Don't place the product in too high temperature (over 50°C), too low temperature (under 0°C) or high humidity.
- Use the DC power adapter with correct specifications. If inappropriate power supply is used then it may cause a fire.
- Do not twist or pull by force ends of the optical cable. It can cause malfunction.



1.7 Installation

To setup Avenview DVI-C5-HDM-SET follow these steps for connecting to a device:

1. Connect Transmitter (DVI-C5-HDM-S) to DVI video source
2. Connect Receiver (DVI-C5-HDM-R) to your remote HDMI Display
3. Ensure that CAT5 / CAT6 cables are connect securely
4. Turn on DVI video source and Display.

1.8 General Troubleshooting

| Problem | Possible Solution |
|-----------------------|--|
| No Image | <ul style="list-style-type: none">• Check if connection to the source and the display are correct.• Ensure that display device supports 480p, 720p and 1080p resolution |
| Screen Defects Appear | <ul style="list-style-type: none">• This product supports up to 1080p (1920x1200) resolution.• Check the DVI and HDMI connection |

Section 2: Specifications

| Item | Description | |
|--------------------------------|---|-------------------------|
| Unit | DVI-C5-HDM-S (Transmitter) | DVI-C5-HDM-R (Receiver) |
| HDMI Compliance | 1.2a | |
| DVI Compliance | DVI 1.1 | |
| Video Bandwidth | 165 MHz (Single Link), 4.95Gbps | |
| Video Support | 480i / 480p / 720p / 1080i / 1080p60 | |
| Resolution and Distance | Full HD: (1080p) ~ 25meter (80feet) (CAT5e) / 30meter (100feet) (CAT6) HD: (720p/1080i) ~ 40meter (130feet) (CAT5e) / 45meter (150feet) (CAT6) | |
| Audio Support | No Audio for DVI Signal | |
| Input TMDS Signal | 1.2 Volts (peak-to-peak) | |
| Input DDC Signal | 5 Volts (peak-to-peak, TTL) | |
| Input | 1 x DVI | 1 x RJ45 |
| Output | 1 x RJ45 | 1 x HDMI |
| HDMI Connector | Type A (19-pin Female) | |
| DVI Connector | DVI-I (29-pin Male, Digital Only) | |
| Dimensions (L x W x H) | 2" x 1.6" x 0.9" | 1.8" x 1" x 0.9" |
| Power Supply | None | |
| Power Consumption | 0.5Watt (max) | |
| <i>Environmental</i> | | |
| Operation | 0° to 40°C (32 ~ 104°F) | |
| Storage | -20°C ~ 60°C (-4 ~ 140°F) | |
| Humidity | 20 ~ 90% RH (no condensation) | |

Notice

1. *If the DVI or HDMI device requires the EDID information, please use EDID Reader/Writer to retrieve and provide DVI/HDMI EDID information.*
2. *All HDMI over CAT5 transmission distances are measured using Belden 1583A CAT5e 125MHz LAN cable and ASTRODESIGN Video Signal Generator VG-859C.3*
3. *The transmission length is largely affected by the type of LAN cables, the type of HDMI sources, and the type of HDMI display. The testing result shows solid LAN cables (usually in bulk cable 300m or 1000ft form) can transmit a lot longer signals than stranded LAN cables (usually in patch cord form). Shielded STP cables are better suit than unshielded UTP cables. A solid UTP CAT5e cable shows longer transmission length than stranded STP CAT6 cable. For long extension users, solid LAN cables are your only choice.*
4. *EIA/TIA-568-B termination (T568B) for LAN cables is recommended for better performance.*
5. *To reduce the interference among the unshielded twisted pairs of wires in LAN cable, you can use shielded LAN cables to improve EMI problems, which is worsen in long transmission.*
6. *Because the quality of the LAN cables has the major effects in how long transmission distance will be made and how good is the received display, the actual transmission length is subject to your LAN cables. For resolution greater than 1080i or 1280x1024, a CAT6 cable is recommended.*
7. *If your HDMI display has multiple HDMI inputs, it is found that the first HDMI input [HDMI input #1] generally can produce better transmission performance among all HDMI inputs.*



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