

1

AVK-70X-U1/AVK-70X-S1

CAT 5 Mini VGA Extender Kit

Installation and Operation Manual

Introduction

Thank you choosing this CAT5 Mini VGA Extender Kit!

When used with the Mini CAT5 VGA Extender allows you to send a VGA signal at a distance: up to 100 meters (330 feet) for AVK-70X-U1 Kit or 60 meters (180 feet) for AVK-70X-S1 Kit.

3

Twist density.

UTP cable pairs have different twist densities (twist pitches), which can be seen by stripping off about 10 cm (4 in.) of insulation. Wire colors vary by manufacturer, do not depend on colors to guess twist densities; strip a section and inspect.



The ABCD picture shows typical UTP cable, with pairs A and C having high pitch twist, and B and D having low. Most cables have two high density pairs; some have three. Assign high density twists by priority to pin pairs 1-2, 7-8, and 4-5; assign low density twists to pin pairs, by priority, 3-6 and 4-5. Failure to assign correct twist densities may result in image jitter.

Packing List

- 1 ea. AV-702X-U1 or -S1 Direct-plug Transmitter
- 1 ea. AV-701X-S1 Receiver
- 1 ea. DC 5V Power Adapter
- 1 ea. Small Phillips Screwdriver
- 1 ea. This Installation and Operation Manual

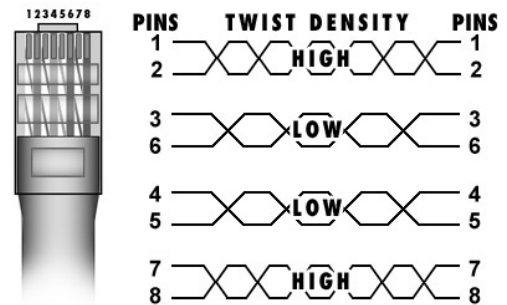
If anything is missing or damaged, please contact your dealer.

2

Specifications

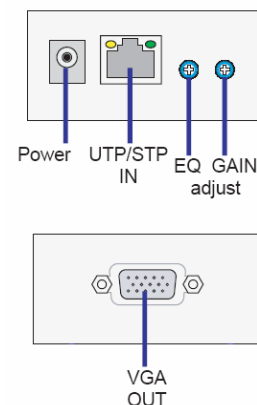
- UTP maximum cable length:
AVK-70X-U1: 100 meters (330 feet)
AVK-70X-S1: 60 meters (180 feet)
- UTP Cable type: CAT5/CAT5e/CAT6
- UTP connector standard: EIA/TIA
- Video resolution: max. 1920 x 1200 @ 60Hz depending on cable quality and VGA signal
- Power supply:
External 5 VDC power adapter

Pins and pairing. Make sure the UTP cable pin assignments are correct: straight through pin-to-pin, with pairing as follows.



4

AV-701X-S1 Receiver



Installation

1. Connect CAT5/5e/6 cable to the AV-701X-S1 Receiver UTP/STP IN connector. Connect the monitor to the VGA out connector.
2. Connect the AV-702X-U1/S1 Direct-plug Transmitter unit to the PC VGA port, the USB connector to a convenient USB port for AV-702X-U1.
3. Connect a length of CAT5 (or CAT5e or CAT6) UTP cable, not exceeding the maximum permitted

5 length, between AV-701X-S1 IN port and the Transmitter unit UTP/STP OUT port.

4. Plug in the power adapter and connect it to AV-701X-S1 Power connector. Go to Image Tuning.

Image Tuning

During original installation, or any time the length of the CAT5/5e/6 UTP cable is changed, do the following:

Adjust EQ and Gain. While displaying a remote screen on the monitor, insert the small Phillips screwdriver (supplied) into the left hole (closer to the mouse/KB connectors) of BE-630x. While looking at the VGA monitor, rotate gently till the best EQ setting (think image focus) is achieved. Then insert the screwdriver into the right hole (closer to Power LED), and rotate gently till the



6 best Gain setting (think brightness) is achieved. The Receiver retains the adjustments.

Trouble Shooting

Problem: No video

- 1) Make sure all cables and connectors are securely plugged into their appropriate ports.
- 2) Make sure that the monitor supports the PC transmitted resolution and refresh rates.
- 3) Make sure the CAT5 cable pin assignments are correct.

Problem: Image jitter

- 1) With particular attention to twist density (q.v., above), check twisted pairs assignments.