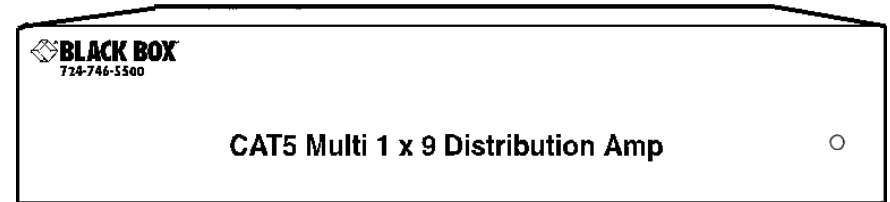




## CAT5 Multi Video System

### 1 x 9 Video Distribution Amp



**FEDERAL COMMUNICATIONS COMMISSION  
AND  
INDUSTRY CANADA  
RADIO FREQUENCY INTERFERENCE STATEMENTS**

This equipment generates, uses, and can radiate radio-frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be necessary to correct the interference.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

*This digital apparatus does not exceed the Class A limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.*

*Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le*

*Règlement sur le brouillage radioélectrique publié par Industrie Canada.*

**EUROPEAN UNION DECLARATION OF CONFORMITY**

The manufacturer declares that this product meets the requirements of EU Directive 89/336/EEC.



**NORMAS OFICIALES MEXICANAS (NOM)  
ELECTRICAL SAFETY STATEMENT  
INSTRUCCIONES DE SEGURIDAD**

1. Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.
2. Las instrucciones de seguridad y operación deberán ser guardadas para referencia futura.
3. Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.
4. Todas las instrucciones de operación y uso deben ser seguidas.
5. El aparato eléctrico no deberá ser usado cerca del agua—por ejemplo, cerca de la tina de baño, lavabo, sótano mojado o cerca de una alberca, etc..
6. El aparato eléctrico debe ser usado únicamente con carritos o pedestales que sean recomendados por el fabricante.
7. El aparato eléctrico debe ser montado a la pared o al techo sólo como sea recomendado por el fabricante.
8. Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá a lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.
9. El aparato eléctrico debe ser situado de tal manera que su posición no interfiera su uso. La colocación del aparato eléctrico sobre una cama, sofá, alfombra o superficie similar puede bloquea la ventilación, no se debe colocar en libreros o gabinetes que impidan el flujo de aire por los orificios de ventilación.
10. El equipo eléctrico deber ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u otros aparatos (incluyendo amplificadores) que producen calor.
11. El aparato eléctrico deberá ser conectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.

12. Precaución debe ser tomada de tal manera que la tierra física y la polarización del equipo no sea eliminada.
13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.
14. El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.
15. En caso de existir, una antena externa deberá ser localizada lejos de las líneas de energía.
16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.
17. Cuidado debe ser tomado de tal manera que objetos líquidos no sean derramados sobre la cubierta u orificios de ventilación.
18. Servicio por personal calificado deberá ser provisto cuando:
  - A: El cable de poder o el contacto ha sido dañado; u
  - B: Objetos han caído o líquido ha sido derramado dentro del aparato; o
  - C: El aparato ha sido expuesto a la lluvia; o
  - D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o
  - E: El aparato ha sido tirado o su cubierta ha sido dañada.

**TRADEMARKS USED IN THIS MANUAL**

*Any trademarks mentioned in this manual are acknowledged to be the property of the trademark owners.*

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# 1. Specifications

- Cable Required:** Between transmitter and receiver(s): Category 5 shielded or unshielded twisted pair (STP or UTP)
- Compliance:** CE; FCC Class A, IC Class/classe A
- Video Support:** Transparent to users—transmitter/receiver dependent.
- Resolution and Refresh Rate:** 2048 x 1536 @ 70 Hz, SD and HDTV formats (480i, 480p, 525p, 720p, 1080i, 1080p) — transmitter/receiver dependent
- Transmission:** Transparent to users (automatic, no delay)
- Maximum Distance:** Total end to end, from source device to farthest destination device, over good CAT5 cable (assuming source outputs signal at normal strength) receiver dependent:  
Up to 1500 ft. ( 457m) all resolutions
- Connectors:** AC1050A: (1) RJ-45 input, (9) RJ-45 output;  
(1) rear-mounted 5-pin DIN F power inlet
- Temperature Tolerance:** Operating: 32 to 104°F (0 to 40°C);  
Storage: -4 to +140°F (-20 to +60°C)
- Humidity Tolerance:** Up to 80% noncondensing
- Enclosure:** Steel
- Power:** From utility-power (mains) outlet to power inlet, through detachable external power supply: Input: 100 to 250 VAC @ 50 or 60 Hz (autosensing);  
Output: +5 VDC;  
Consumption: 12 watts maximum
- Size:** 1.75"H x 8.1"W x 6.5"D (4.5 x 20.6 x 16.5 cm);
- Weight:** 2.3 lb. (1.0 kg);

# 2. Introduction

## 2.1 Overview

The CAT5 Multi Video System extends video signals over ordinary Category 5 cable. All models use a transmitter-to-receiver setup.

This manual covers the CAT5 Multi Video System 1x9 Distribution Amp. A CAT5 Multi Video System transmitter unit as well as CAT5 Multi Video System receiver units are required for operation. Please contact technical support for help.

## WARNING

**This equipment is not intended for, nor does it support, distribution through an Ethernet network. Do not connect these devices to any sort of networking or telecommunications equipment!**

## 2.2 Package Contents

You should have received the following when ordering a CAT5 Multi Video System receiver:

- The 1x9 Video Distribution Amp.
- A ground wire.
- External power supply (100–250 VAC, 50–60 Hz, autosensing) with cord.
- This manual.

## 2.3 Equipment You May Also Need

- CAT5 cable.

## 2.4 Compatible Cabling

CAT5 cabling for the CAT5 Multi Video System must be pinned to the TIA-EIA T568B wiring specification. We also highly recommend that all CAT5 cables be pre-terminated and tested. Cables terminated on-site or in an existing infrastructure should be tested before use to ensure compliance with the TIA-EIA T568B specification. Using incorrectly terminated CAT5 cables can damage the CAT5 Multi Video System.

# 3. Setup and Installation

## 3.1 Cabling Considerations

- We recommend mounting and connecting all cabling to the CAT5 Multi Video System components before applying power.
- Makes sure that the CAT5 cable you intend to use has been tested to comply with the TIA/EIA 568B wiring specification.

## 3.2 Making the Connections

### 3.2.1 CONNECTIONS AND SETUP IN GENERAL

1. Connect the RJ-45 cable from a CAT5 Multi Video System transmitter unit or other 1x9 Video Distribution Amp into the port labeled UTP IN.
2. Connect RJ-45 cables from CAT5 Multi Video System receiver units into the ports labeled OUTPUTS.
3. The port labeled UTP THRU may be used to cascade to other 1x9 Video Distribution Amps or can be used with a CAT5 Multi Video System receiver.
4. Connect the power supply to the unit.
5. Connect the included ground cable to the rear gold thumbscrew and the other end to a suitable earth ground. The grounding is required in instances where LCD monitors are used that do not provide a ground via the DC power adapter. Failure to connect the ground cable may result in loss of video signals.

### 3.2.2 CONNECTIONS ON THE 1x9 VIDEO DISTRIBUTION AMP (AC1050A)

The CAT5 Multi Video System 1x9 Distribution Amp utilizes industry standard CAT5 cabling to connect a CAT5 Multi Video System transmitter and receivers. Additional 1x9 Distribution Amps may be cascaded via the UTP THRU output or any other output if necessary.

Figure 3-1 shows the 1x9 Distribution Amp connections.

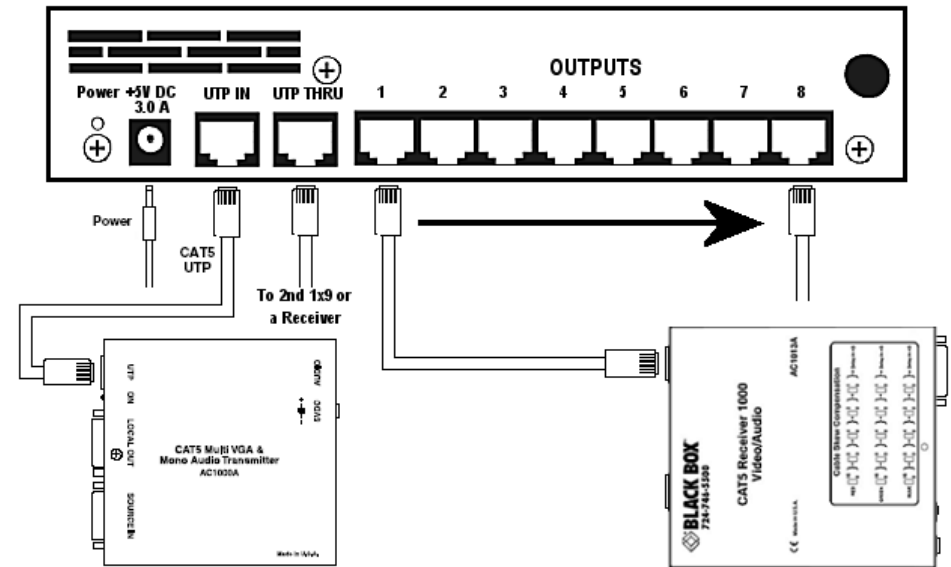


Figure 3-1. Transmitter connections on the AC1050A.

## 4. Troubleshooting

### 4.1. Common Problems

In most cases, nearly every issue with the CAT5 Multi Video System can be resolved by checking the CAT5 termination and making sure that it's pinned to the TIA/EIA 568B wiring specification. However, there may be other problems that cause the system to not perform as it's designed. Below are solutions to the most common installation errors.

- Problem:** No video signal at the receiver.
- Solution:**
- Check that all units are powered.
  - Make sure the CAT5 cable is terminated correctly per the TIA/EIA 568B wiring specification.
  - Check Receiver cable compensation switches/knob adjustments
  - Is the display device powered on and functioning?

### 4.2 Calling Black Box

If you determine that your CAT5 Multi Video System is malfunctioning, do not attempt to alter or repair it. It contains no user-serviceable parts. Contact Black Box at 724-746-5500. Before you do, make a record of the history of the problem. We will be able to provide more efficient and accurate assistance if you have a complete description, including:

- the nature and duration of the problem.
- when the problem occurs.
- the components involved in the problem.
- any particular application that, when used, appears to create the problem or make it worse.

### 4.3 Shipping and Packaging

If you need to transport or ship your CAT5 Multi Video System:

- Package it carefully. We recommend that you use the original container.
- If you are shipping the CAT5 Multi Video System for repair, make sure you include everything that came in the original package. Before you ship, contact Black Box to get a Return Authorization (RA) number.

## Appendix A. Cabling Pinouts

Table A-3. T568B CAT5 pinout

