



INSTALLATION MANUAL

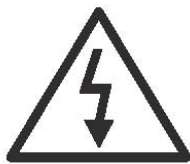
CTHDA-1P

CTHDA-2P

CTHDA-1A

1 GHz Multi-Media Drop Amplifier

IMPORTANT INFORMATION



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. DO NOT OPEN THE CABINET, REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

PACKAGE CONTENTS

This package contains:

- One CTHDA-1P, CTHDA-2P, or CTHDA-1A Drop Amplifier
- One CTHDA power supply
- One CTHDA installation manual

PRODUCT DESCRIPTION

The CTHDA-1P, CTHDA-2P, and CTHDA-1A are wall mounted 1GHz multi-media drop amplifiers for use in CATV systems that require two way multi-media networking. These are low noise amplifiers with high isolation between ports, 6KV surge protection on all ports, electrostatic discharge protection, and zinc die cast housing to prevent RFI. The CTHDA amplifiers can be remotely powered over coax, line powered through an RF port, or externally powered through a "power-in" port.

SPECIFICATIONS

CTHDA

Wall Mount 1 GHz Drop Amplifier Specifications (Typical)

	CTHDA-1P	CTHDA-2P	CTHDA-1A
Number of Input Ports	1	1	1
Number of Output Ports	1	2	1
Forward Path	54-1,000 MHz	54-1,000 MHz	54-1,000 MHz
Reverse Path	5-42 MHz	5-42 MHz	5-42 MHz
Forward Gain	13.5dB	10dB	14dB
Reverse Gain (Loss)	-1.6dB	-5dB	10dB
Isolation (out-out)	NA	18dB minimum	NA
Noise Figure	3dB Typical, 4dB Max	3dB Typical, 4dB Max	3dB Typical, 4dB Max
Return Loss (In-out)	18dB Typical	18dB Typical	18dB Typical
Power Supply Voltage	12-16V, 200mA	12-16V, 200mA	12VDC, 300mA
Surge Protection (All ports)	6KV	6KV	6KV
Connections	F Type Female	F Type Female	F Type Female
Impedance	75 Ohms	75 Ohms	75 Ohms
Operating Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

– INSTALLATION AND OPERATION

NOTE TO SYSTEM INSTALLER

System installer must adhere to Article 820-40 of the NEC that provides guidelines for proper grounding and specifies that the cable ground shall be connected to *the grounding system of the building*, as close to the point of cable entry as practical.

1. UNPACKING and HANDLING

Each unit is shipped with all equipment assembled, and factory tested.

Ensure that all accessories are removed from the container before discarding packing material

2. MECHANICAL INSPECTION

Inspect the front and rear of the equipment for shipping damage. Make sure the equipment is clean, and no connectors are broken, damaged, or loose. If equipment appears to be damaged or defective please contact us at 1-610-429-1511 for assistance.

3. PRODUCT DIAGRAM



- | | | |
|---|-----------------|--|
| 1 | Input | Coaxial RF input from CATV or satellite drop |
| 2 | Power In | Direct power input from power supply for local powering |
| 3 | Power In | Power input when using the RF distribution network as power source |
| 3 | RF Out | Connection to the RF distribution network for remote powering |

4. HARDWARE CONNECTIONS

- a. Mount the CTHDA securely onto a wall or equipment rack using screws or bolts through the mounting tabs.
- b. Connect a 75ohm coaxial cable with F-connectors from the RF source output (e.g., CATV or satellite antenna) to CTHDA's RF In port.
- c. Connect a 75ohm coaxial cable with F-connectors from the CTHDA's Output port to the RF distribution network.
- d. The CTHDA may be powered in one of two ways:
 1. If the AC power outlet is near where the CTHDA is to be mounted:
 - Take an appropriate length of RG-6 coaxial cable and install quality male F type connectors on each end
 - Connect one end of the RG-6 coaxial cable to the CTHDA's Power In port (②) and the other end to the included power supply
 - Connect the power supply to the AC power outlet
 2. If the CTHDA must be powered remotely due to an unavailable local AC power outlet it is possible to power the amplifier using the RF distribution network:
 - Install a two-way power passing splitter (e.g., Cabletronix HSU-2PP) in the RF distribution network near an AC power outlet.
 - Connect the coax from the splitter's power passing port to the CTHDA's Power In/RF Out port (③)
 - Connect the splitter's non-power passing port to the TV or video/entertainment device
 - Connect the splitter to the included power supply
 - Connect the power supply to an AC power outlet

5. TROUBLESHOOTING

- a. Ensure you are using quality multiple shielded cables with quality radial or compression F-connectors.
- b. Ensure the F-connectors' center conductors are making solid contact with the CTHDA's Input and Output ports and power ports.
- c. Further troubleshooting assistance can be found on-line at www.northamericancable.com and www.cabletronix.com in addition to support from Cabletronix sales engineers at 1-610-429-1511.