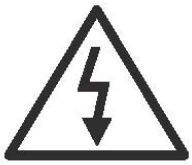
CABLETRONIX™

INSTALLATION MANUAL

CTA-25
Wall Mount UHF/VHF/FM
Distribution Amplifier

IMPORTANT INFORMATION



The lighting 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 CTA-25 Wall Mount VHF/UHF/FM Distribution Amplifier
One CTA-25 instruction manual

PRODUCT DESCRIPTION

The CTA-25 is a wall mount VHF/UHF/FM amplifier producing signals with extremely low distortion and harmonic content. The unit is capable of 12-channel operation from 54MHz to 890 MHz. The CTA-25's low-noise and low distortion specs allow it to be used in smaller broadband networks. Key features include: switchable FM trap, AC power indicator, low noise and continuous amplification from 54 to 890MHz.

SPECIFICATIONS

CTA-25

Wall Mount VHF/UHF/FM Distribution Amplifier Specifications (Typical)

RF	
1. Bandwidth	54-890 MHz
2. Gain	
54-300 MHz	25 dB
300-806 MHz	22 dB
890 MHz	18 dB
3. Noise Figure	
VHF	6 dB
UHF	7 dB
4. FM Trap	-25 dB @95 to 108 MHz
GENERAL	
1.Power Requirements	117 VAC, 60Hz, 4.5W
2.Operating Temperature	32 ˚F ~ 122 ˚F
3.Connectors	All "F" Type
MECHANICAL	
1.Dimensions	6.75" (W) x 3" (H) x 1.63" (D)
2.Weight	1lb

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

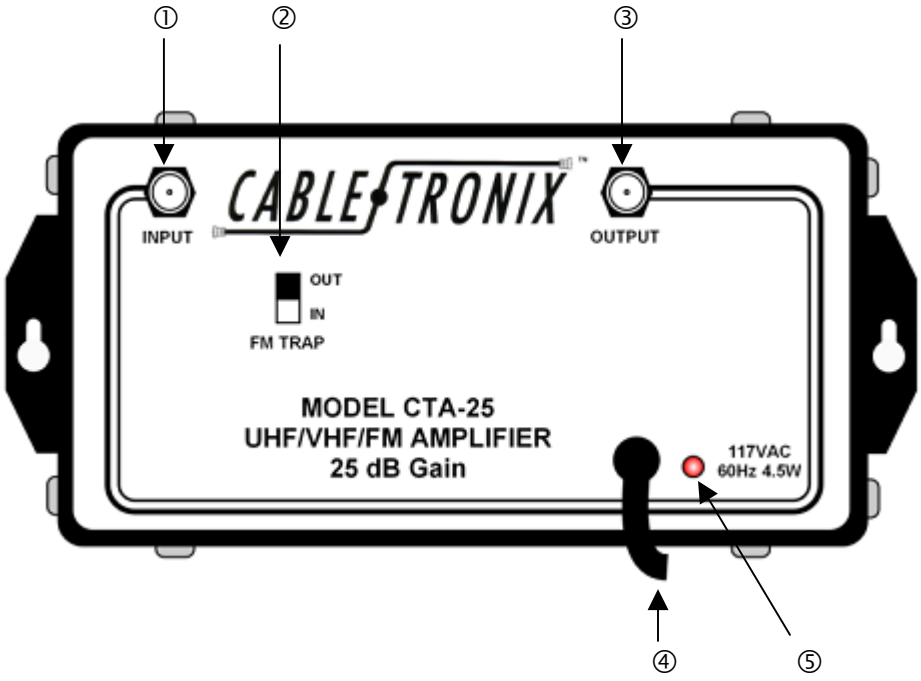
Each unit is shipped with all equipment assembled, and factory tested.

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**	Input RF signal
2	**FM Trap**	Remove FM channels from 95 to 108 MHz
3	**Output**	Amplified RF signal available for output
4	**Power Cable**	For connection to a 117 VAC, 60Hz outlet
5	**AC Power Indicator**	LED indicating amplifier is powered

4. HARDWARE CONNECTIONS

a. Mount the CTA-25 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 CTA-25's Input port.

c. Connect a 75ohm coaxial cable with F-connectors from the CTA-25's Output port to the RF distribution network.

d. Connect the CTA-25 to an appropriate power source capable of powering this device. Be certain that power source is capable of handling the load if the CTA-25 and other equipment are being powered by it.

5. ADJUSTMENT

The chart below shows the proper operation levels for the CTA-25. Note the listed performance criteria are for specific numbers of channels, and must be de-rated accordingly when inserting additional channels. However, the amplifier's gain does not change. Therefore, as the number of channels increases from seven (7) channels, the input level and the output level must be reduced. Exceeding the input levels listed below will product intermodulation and picture distortion.

Number Of Channels	Maximum Level Input (dB)	Maximum Level Output (dB)
7 channels total (VHF, Mid, Super)	22 dBmV	47 dBmV
4 UHF	18 dBmV	40 dBmV
12 channels total (VHF, Mid, Super)	15 dBmV	40 dBmV
7 UHF	9 dBmV	31 dBmV

Connect an RF spectrum analyzer or signal level meter to the CTA-25's Input and Output ports. Measure input and output levels. Attenuators may be needed to reduce the input output levels consistent with the above specifications.

Use the FM Trap switch to attenuate FM signals from 95 to 108 MHz. When the FM Trap switch is set to "IN" all signals are amplified by the CTA-25. When the FM Trap switch is set to "OUT" signals from 95 to 108 MHz are attenuated up to –25 dB.

8. TROUBLESHOOTING

a. Ensure you are using quality multiple shielded cables with quality radial or compression F-connectors.

b. Ensure the F-connector's center conductor is making solid contact with the CTA-25's Input and Output ports, and the appropriate RF source and RF distribution network connectors.

c. When taking measurements it is always best to use an RF spectrum analyzer or quality signal level meter. Level measurements should be taken from the CTA-25's Input and Output ports.

d. 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.