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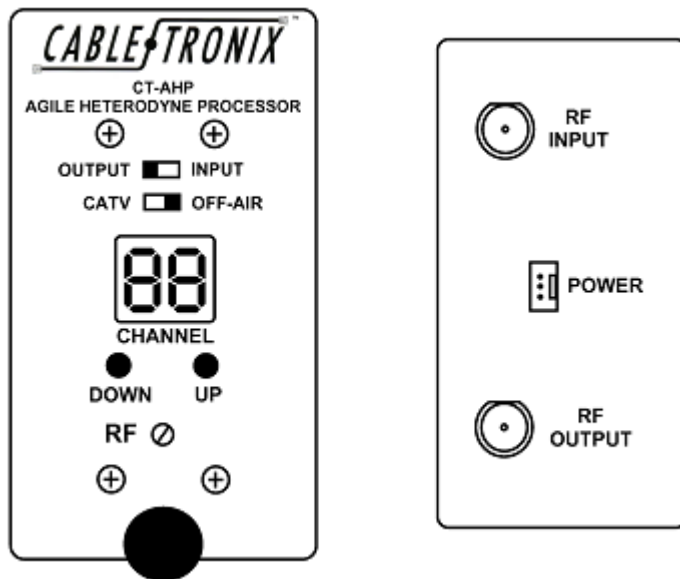
# CT-AHP Installation Manual

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## This Package Contains:

One CT-AHP Agile Heterodyne Processor  
One Installation Manual

## Product Diagram and Description:



## Hardware Connection:

1. The CT-AHP is designed for commercial headend systems and can be deployed in 19" racks with the Cabletronix CT-12 19" rack chassis and Cabletronix CTPS-12 power supply, or with 3<sup>rd</sup> party chassis and/or power supplies depending upon configuration. The CT-AHP will use 2 chassis slots; whereby six units will fit into a standard 12 slot rack chassis.
2. Be sure to use the power supply harness specific to a vendor's power supply. It is not good practice to mix vendor power supplies and wiring harnesses as such can lead to product failure. Many manufacturers' wiring harnesses are not interchangeable with other manufacturers' power supplies.
3. Connect Off-Air cable or cable signal to the CT-AHP's **RF-Input** connector on the back of the unit.
4. Connect the output Distribution cable to the CT-AHP's **RF-Output** connector on the back of the unit.
5. Connect the power supply harness to the CT-AHP's **5V/12V** connector on the back of the unit.

## Channel Selection:

1. Set the **Input/Output Switch** to **INPUT**.
2. Set the **CATV/Off-Air Switch** to **OFF-AIR** or **CATV** depending on the source of the input signal.

3. If a local Off-Air channel to be selected, put **CATV/Off-Air switch** to **Off-Air**. Use the **Up/Down Buttons** to select the desired Off Air channel.
4. If a CATV channel to be selected, put **CATV/Off-Air switch** to **CATV**. Again use the **Up/Down Buttons** to select the desired CATV channel.
5. Set the **Input/Output Switch** to **OUTPUT**.
6. Set the **CATV/Off-Air Switch** or **CATV** depending on the requirements of the output signal.
7. Select the desired output channel that is to be modulated on by using the **Up/Down Buttons**.

### Adjustment:

1. For testing purposes no more than 17dB from the **RF-Output** should be going to a monitor. Use an attenuator to reduce the signal level if testing with an RF input monitor.
2. Actual levels will depend upon design specifications associated with the headend and the distribution plant. The configuration of equipment and the proper setting of levels should be consistent with approved design specifications.
3. RF Output levels can be adjusted using the **RF Potentiometer** on the front of the CT-AHP.
4. Levels should be measured using a calibrated spectrum analyzer or signal level meter from the CT-AHP's **RF-Output** connector.

### Troubleshooting and Trouble Prevention Tips:

1. Ensure you are using quality cables with quality radial or compression F connectors.
2. Ensure the F connector's center conductor is making solid contact with the CT-AHP's **RF-Input / RF-Output** connectors.
3. Make sure the **Input/Output** and **CATV/Off-Air Switches** are set appropriately when assigning Off-Air channels to CATV channels. For Off-Air to CATV assignments the switches should be set as follows:

**Input/Output** set to INPUT  
**CATV/Off-Air** set to OFF-AIR

After selecting the Off-Air channel, then:

**Input/Output** set to OUTPUT  
**CATV/Off-Air** set to CATV

Make CATV channel selection using the UP/Down Buttons

4. If the CT-AHP is not receiving power make sure the power supply harness is firmly connected to both the power supply and the CT-AHP.
5. If the CT-AHP is receiving power but no signal, check to be sure the Off-Air cable is firmly connected to the CT-AHP's **RF-Input** connector. If still no picture, make sure the cable from the CT-AHP's **RF-Output** is good and has firm contact with the unit's connector. Always check the input signal level with a signal level meter to ensure a proper signal.
6. A snowy picture may indicate the need for more gain with a preamplifier. Make adjustments consistent

with design specs using appropriate test equipment and the CT-AHP's **RF Potentiometer**.

7. A picture with sparkle may indicate too much gain. Make adjustments consistent with design specs using appropriate test equipment and the CT-AHP's **RF Potentiometer**. If the input signal is over 10 dBmV use an attenuator to lower the signal level.
8. If several chassis are to be used in one cabinet and/or if the CT-AHPs are to be used in a relatively full cabinet, it is highly recommended the **CT-FANRK** 3-unit rack mountable fan be used.

Further troubleshooting assistance can be found on-line at [www.northamericacable.com](http://www.northamericacable.com) in addition to support from Cabletronix sales engineers at 1-610-429-1511.