

# APPLICATION

## SITUATION

You need to add TV outlets for local broadcast or cable TV High definition signals. Data modem service is also needed to each TV outlet.

## SOLUTION

Models CA14R-T and CA24R-T boost broadcast or cable TV signals while passing cable modem signals. Model CA14R provides 14 dB gain and the CA24R provides 24 dB gain.

## RELATED CONSIDERATIONS

Model LA141xR amplifier should be used when both CATV or local broadcast signals share the coax with 950 to 3500 MHz DBS signals.

**Use optional model HRFPI with the power supply to line power the amplifiers via the output connector. DC does NOT pass to input.**

## FEATURES

- *Off-Air Compatibility:* . . . . . ATSC (digital), NTSC (analog)
- *CATV Compatibility:* . . . . . 110 Channel & Data Modem
- *Wide Frequency:* . . . . . CATV, VHF & UHF
- *Flexible powering:* . . . . . Coax or Power Transformer
- *Indoor / Outdoor.* . . . . . sealed die-cast aluminum case

## APPLICATION NOTES

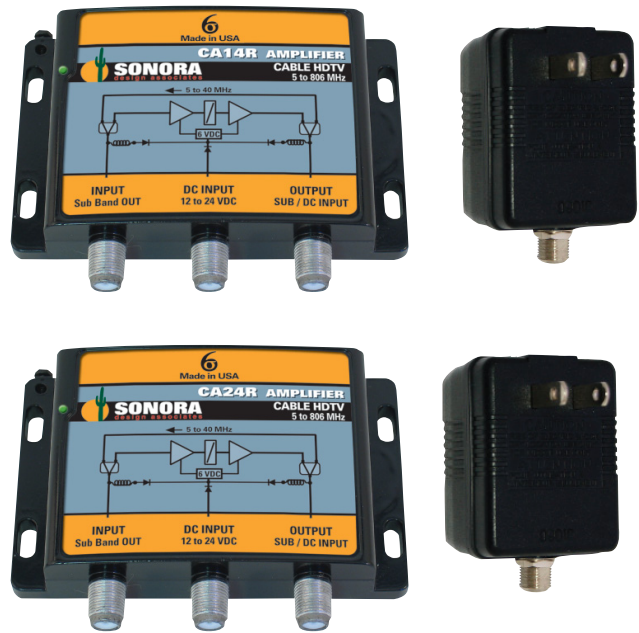
Models CA24R-T and CA14R-T increase the CATV or off-air signal level while allowing cable modem low frequency signals to return to the signal provider.

Model CA14R-T increases the typical 10 dBmV CATV signal to compensate for adding an 8-way splitter to an existing installation.

The output level after the amplifier and 8-way splitter is now stronger than the signal arriving from the cable company.

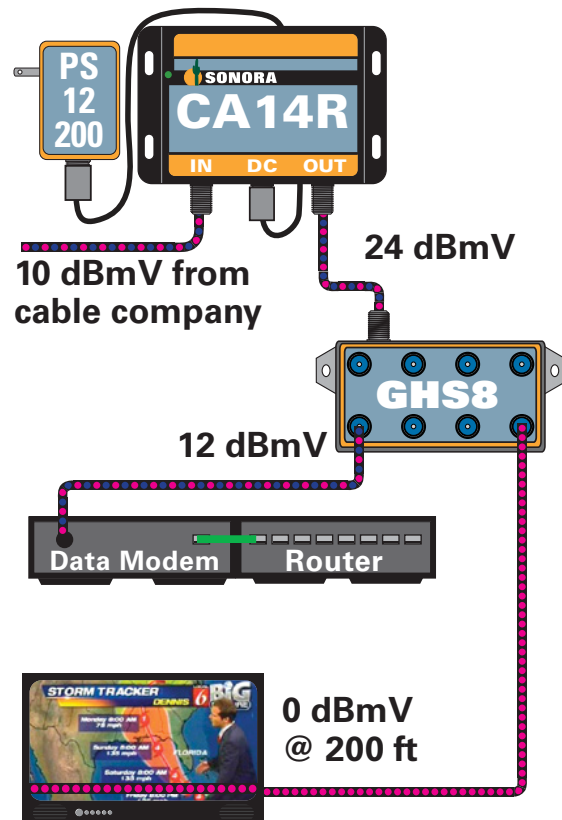
# AMPLIFIERS

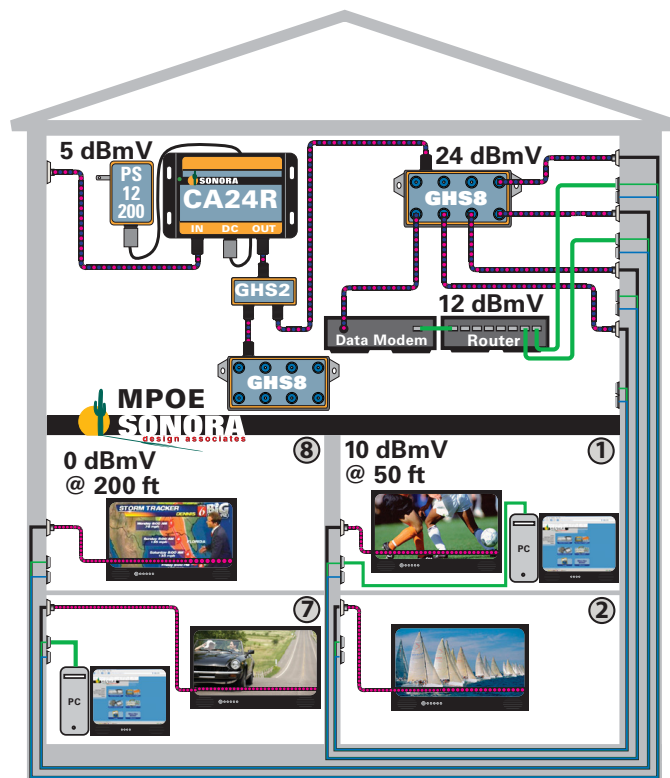
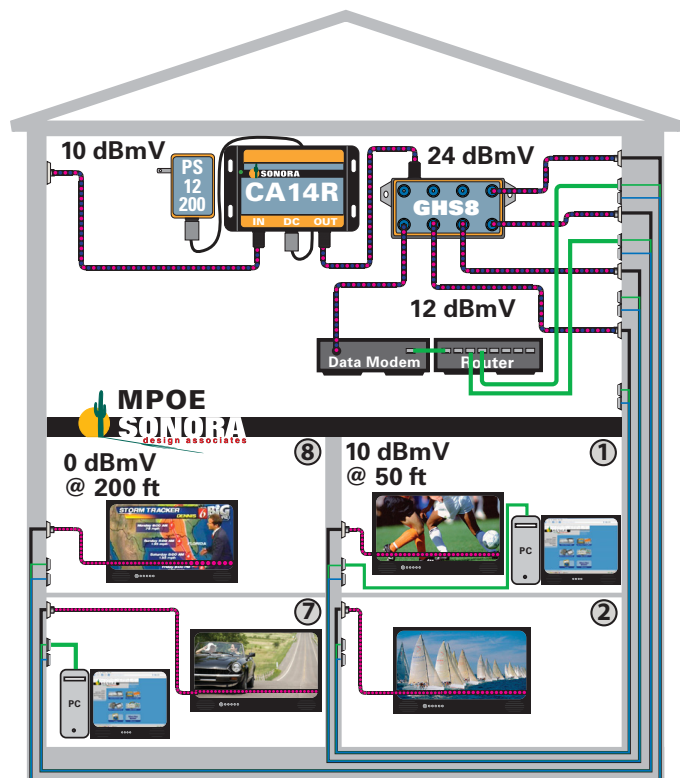
CA14R-T & CA24R-T



## DESCRIPTION

Indoor / Outdoor 50 to 1000 MHz amplifiers with passive 15 to 40 MHz sub-band return.





Cable TV providers deliver a signal level sufficient to drive up to (4) televisions. Many homes have more than (4) outlets and often have rooms several hundred feet from the cable entry point.

Models CA14R-T and CA24R-T increase the forward signal level by 14 dB and 24 dB respectively. Cable modems may also be used in some homes. The amplifiers pass the return band cable modem signals.

## SPECIFICATIONS

Specifications..... Typical .....QC Limit

### Gain

15 to 40 MHz.....	-2 dB.....	-3 dB
CA14R 54 to 1000 MHz.....	15 dB.....	12 dB
CA24R 54 to 1000 MHz.....	25 dB.....	22 dB

Maximum Output .....CTB -60 dB ..... CSO -60 dB

8 channels.....	+45 dBmV
16 channels.....	+42 dBmV

### Pass band Flatness

Any 6 MHz band.....	0.1 dB.....	0.2 dB
54 to 1000 MHz.....	±1 dB.....	±2 dB

### Return Loss

Input Return Loss.....	15 dB.....	11 dB
Output Return Loss.....	15 dB.....	11 dB

Noise Figure..... 4 dB.....5 dB

### Power Specifications

Voltage.....	12 to 24 VDC
Current.....	150 mA

### Mechanical Specifications .....

Dimensions.....	4" x 3.5" x 7/8"
Weight.....	1 lb (0.45 kg)
Master Carton (15 units).....	18" x 12" x 6"
Master Carton Weight.....	17 lb. (7.7 kg)

### Environmental Specifications

Operating Environment:.....	Indoor/Outdoor
Ambient Temperature.....	-30° C to +70° C