

# Installation Instructions

CBR-2AC  
CBR-2DC

# CARRIERBAND

## Power

The Repeater is powered from an AC or DC power source depending on the option chosen.

- AC power input range is from 85 to 240 Volts, 47 to 63 Hertz. The power cord connection to the Repeater is a standard IEC 320 plug. Different types of power cords can be used to adapt to various power sources.
- DC power input range is from 18 to 36 Volts DC. It is important to note that the CBR-2DC is considered to have a permanent connection to the power supply. In order to comply with CSA and UL regulations a readily accessible disconnect device is required between the power connections on the Repeater and its power source. This shall be provided during the installation of the unit in a manner to comply with local regulations. The power supply output should be rated from 18 to 36 Volts DC, 20A maximum. The power wiring should also be protected from electrical surge.



## WARNING

For both AC and DC powered Repeaters, users are warned not to disconnect power while the power circuit is alive unless the installation location is known to be non-hazardous.

**Note:** This equipment is suitable for use in Class I, Division 2, Groups A, B, C, D or non-hazardous locations only.

## Grounding

Both F-connectors are grounded to the Repeater's case to reduce RFI emissions.

- On AC powered Repeaters the case is connected to the mains ground and to the ground stud.
- On DC powered Repeaters the case is connected to the ground terminal and ground stud.
- Attach a ground wire from the ground stud to the grounding facilities provided in the building. Use a grounding wire that has a current carrying capacity equal or greater than that of the drop cable outer conductor.

## Front Panel Connectors

**Test:** F-type (Normally not connected. See manual for information.)

**A:** F-type (connected to an IEEE-802.4 tap drop port).

**B:** ST-type front panel fiber-optic connectors.

## Installation

The Repeater is connected to segments of the Carrierband network like any other station through a drop cable and a tap. The following should be considered when installing a Repeater:

- The Repeater should be installed in accordance with the hazardous area control drawing on the last page of these installation instructions.
- Place the Repeater where its indicator lights can be seen. This will help identify and isolate network problems if they occur.
- While the Repeater is fully enclosed, it is not waterproof. Install the Repeater in a dry place.
- The Repeater operates at temperatures between -20 and +65 degrees Centigrade (-4 to 150 degrees F). However, do not install the Repeater in places where it will be heated by other equipment or where there is no airflow.

For guidance about installing the Carrierband segment of the network, see Relcom's Carrierband Network Handbook.

For guidance about the fiber-optic segment of the network, see Relcom's Guide to Industrial Fiber Optics.

The above handbooks are available on the Relcom website: [www.relcominc.com/carrier-band/index.htm](http://www.relcominc.com/carrier-band/index.htm)

## Front View of Repeater



19" rack mounting kits for Repeaters are available:  
CBR-A0050A Single  
CBR-A0060A Double

# Installation Instructions

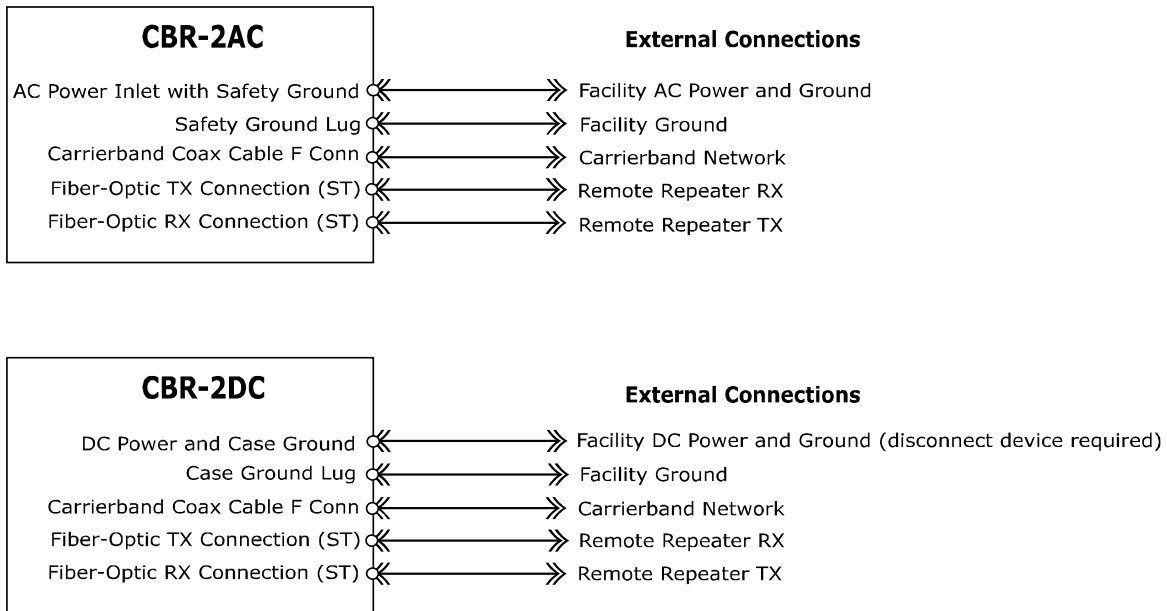
CBR-2AC  
CBR-2DC

# CARRIERBAND

## HAZARDOUS (CLASSIFIED) LOCATION

Class I, Division 2, Groups A, B, C, D

$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq 65^{\circ}\text{C}$



**WARNING:**  
**EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS.**



Installation should be done in accordance with this drawing

Part Numbers:  
CBR-2AC, CBR-2DC

Installation must be in accordance with the National Electrical Code  
(NFPA 70, Article 504), ANSI/ISA-RP12.6

 <b>Relcom Inc.</b> INDUSTRIAL LAN   WIRING COMPONENTS AND TESTERS 2221 Yew Street, Forest Grove, Oregon 97116 USA	
Title: CONTROL DRAWING for CBR-2AC and CBR-2DC Class I, Division 2 Hazardous Locations	
Approved By: Rob Treadway	Date: 10-30-06
Drawing Number: 501-501	Rev.: A