Crestron **CNANT**High Performance Antenna

Operations & Installation Guide





This document was prepared and written by the Technical Documentation department at:



Crestron Electronics, Inc. 15 Volvo Drive Rockleigh, NJ 07647 1-888-CRESTRON

Contents

ligh Performance Antenna: CNANT	1
Description	
Functional Description	1
Physical Description	
Leading Specifications	
Setup	
Assembly	
Mounting	
Problem Solving	
Troubleshooting	
Further Inquiries	6
Return and Warranty Policies	
Merchandise Returns / Repair Service	7
CRESTRON Limited Warranty	7

High Performance Antenna: CNANT

Description

Functional Description

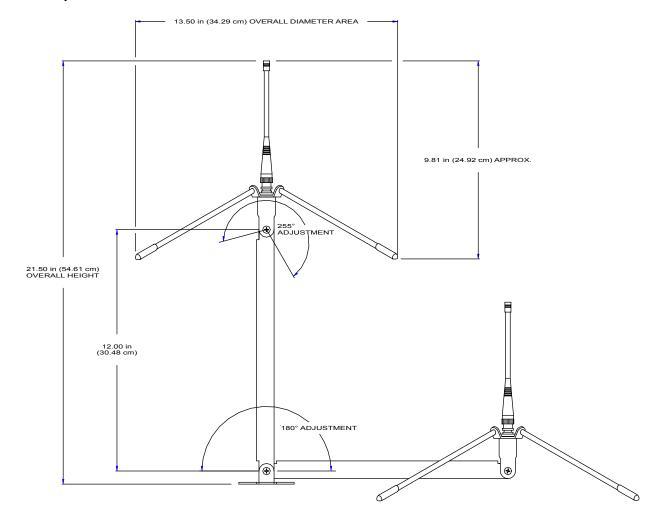
The CNANT is a high performance indoor ground plane (base) antenna designed to surpass the performance of the factory-supplied antenna provided with Crestron® receivers such as the CNRFGWA and ST-CP. There are distinct advantages to the CNANT. Its omni-directional radiation pattern and remote installation permits more gain and extends its communication range.

Factory supplied antennas mount directly on the receiver and typically, most receivers are mounted near the control system; usually in a metal rack within a closet. The metallic shield of the rack and closet may interfere with data transmission. The remote capability of the CNANT permits it to be mounted anywhere indoor within 15 feet (or up to 50 feet with longer cable, not supplied) of the receiver, thereby overcoming possible radio frequency blockage.

Physical Description

The CNANT is composed of multiple parts, which require assembly. The antenna holder assembly contains two female BNC connectors, which attach to the supplied antenna (active conductor) and 15 foot BNC cable. The assembly has four drilled holes for the placement of four aluminum radiator rods, which aid in grounding the antenna. The assembly is secured with two SEMS screws to the arm bracket, which in turn is secured with two SEMS screws to the base bracket. These fours SEMS screws permit the antenna to move freely 255° about the bracket arm and 180° about the base bracket. The base bracket has two feet with a total of four drilled holes for mounting screws (not supplied). A completely assembled CNANT is shown on the next page. Notice the range of motion.

CNANT Physical Views



Leading Specifications

The table below provides a summary of leading specifications for the CNANT. Dimensions and weights are approximations rounded to the nearest hundredth unit.

Leading Specifications of the CNANT

SPECIFICATION	DETAILS
Frequency Range	400 - 440 MHz
Gain (min)	Unity
Connector	2 BNC Female
Impedance	50 Ohms
Radiation Pattern	Omni-Directional
Dimensions (standing upright)	Height: 21.50 in (54.61 cm) Width: 13.50 in (34.29 cm)
	Depth: 13.50 in (34.29 cm)
Weight (without cable)	0.51 lbs. (0.23 kg)

Setup

Assembly

The CNANT is provided in several pieces: asssembly is required. Verify that all the pieces (in the quantities required) are on hand; refer to table below. Follow the assembly procedure that follows; refer to the exploded view on the next page. The only tool required is a Phillips tip screwdriver. Not all pieces may be used during the assembly procedure. Those pieces that are omitted are to be used during the mounting procedure.

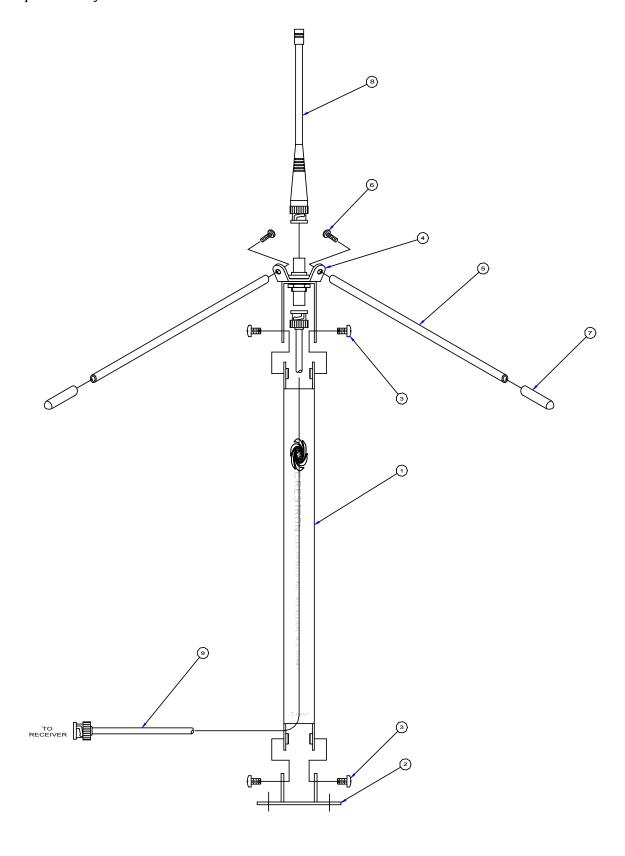
Items Shipped with CNANT

ITEM#	ITEM	PART NUMBER	QUANTITY
1	Arm	02432	1
2	Base Bracket	02431	1
3	Pan Phillips Head SEMS Screw	#10-32 x 0.312" LG	4
4	Antenna Holder Assembly	17354	1
5	Reflector Rod	02434	4
6	Pan Phillips Head Screw	#8-32 x 0.375" LG	4
7	Red Caps	15764	4
8	Flex Antenna	XPD31	1
9	15 Foot BNC Cable	15764	1

NOTE: Refer to the following exploded view of the CNANT when assembling and mounting the unit. This view provides item numbers to easily identify each part of the CNANT.

- 1. Secure arm (1) to base bracket (2) with two SEMS screws (3). Do not fully tighten.
- 2. Secure antenna holder assembly (4) to arm with two SEMS screws (3). Do not fully tighten.
- 3. Secure four reflector rods (5) to antenna holder assembly with four screws (6).
- 4. Cover ends of reflector rods (5) with four red caps (7); one red cap per rod
- 5. Attach male BNC connector from flex antenna (8) to female BNC connector from antenna holder assembly (4).

Exploded View of the CNANT



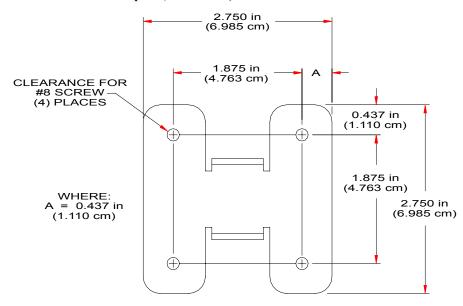
Mounting

Four mounting screws (#8, not supplied) are required to securely mount the CNANT to an indoor flat surface (2.75" (6.99 cm) square, minimum). Once mounted, the CNANT can be positioned in any orientation. Depending on the type of material to which the CNANT is mounted, a drill may be required to predrill holes.

NOTE: A 15-foot BNC cable (9) is supplied. If a longer cable is required, use cable type RG-58U. However, distances greater than 50 feet decrease the gain due to cable losses.

- Locate a flat surface suitable to mount the CNANT. The surface should be no more than 50 feet (in cable length) from the receiver. **Do not** mount CNANT inside a metal enclosure.
- 2. If necessary, predrill holes per the base bracket footprint.

CNANT Base Bracket Footprint (Bottom View)



- 3. Secure base bracket (2) to flat surface with four #8 screws (not supplied).
- 4. Thread the male BNC cable (9) through the arm (1) and connect to the antenna holder assembly (4).
- 5. If necessary, secure the BNC cable (9) to the arm (1) with two wire clips. The wire clips can are affixed to the bracket's underside.
- 6. Connect other male BNC connector end of cable (9) to receiver.
- 7. Tighten four SEMS screws (3) to fix CNANT in a desired orientation.

Problem Solving

Troubleshooting

The table that follows this paragraph provides corrective action for possible trouble situations. If further assistance is required, please contact a Crestron customer service representative.

CNANT Troubleshooting

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Receiver not	CNANT is not properly located	Relocate CNANT to a suitable
communicating	(i.e., inside or near a metal	location
with transmitter.	enclosure) or assembled.	Verify all BNC connections.

Further Inquiries

If you cannot locate specific information or have questions after reviewing this guide, please take advantage of Crestron's award winning customer service team by calling the Crestron corporate headquarters at 1-888-CRESTRON [1-888-273-7876]. For assistance in your local time zone, refer to the Crestron website (www.crestron.com) for a listing of Crestron worldwide offices.

You can also log onto the online help section of the Crestron website (www.crestron.com) to ask questions about Crestron products. First-time users will need to establish a user account to fully benefit from all available features.

Return and Warranty Policies

Merchandise Returns / Repair Service

- 1. No merchandise may be returned for credit, exchange, or service without prior authorization from CRESTRON. To obtain warranty service for CRESTRON products, contact the factory and request an RMA (Return Merchandise Authorization) number. Enclose a note specifying the nature of the problem, name and phone number of contact person, RMA number, and return address.
- 2. Products may be returned for credit, exchange, or service with a CRESTRON Return Merchandise Authorization (RMA) number. Authorized returns must be shipped freight prepaid to CRESTRON, 6 Volvo Drive, Rockleigh, N.J., or its authorized subsidiaries, with RMA number clearly marked on the outside of all cartons. Shipments arriving freight collect or without an RMA number shall be subject to refusal. CRESTRON reserves the right in its sole and absolute discretion to charge a 15% restocking fee, plus shipping costs, on any products returned with an RMA.
- 3. Return freight charges following repair of items under warranty shall be paid by CRESTRON, shipping by standard ground carrier. In the event repairs are found to be non-warranty, return freight costs shall be paid by the purchaser.

CRESTRON Limited Warranty

CRESTRON ELECTRONICS, Inc. warrants its products to be free from manufacturing defects in materials and workmanship under normal use for a period of three (3) years from the date of purchase from CRESTRON, with the following exceptions: disk drives and any other moving or rotating mechanical parts, pan/tilt heads and power supplies are covered for a period of one (1) year; touchscreen display and overlay components are covered for 90 days; batteries and incandescent lamps are not covered.

This warranty extends to products purchased directly from CRESTRON or an authorized CRESTRON dealer. Purchasers should inquire of the dealer regarding the nature and extent of the dealer's warranty, if any.

CRESTRON shall not be liable to honor the terms of this warranty if the product has been used in any application other than that for which it was intended, or if it has been subjected to misuse, accidental damage, modification, or improper installation procedures. Furthermore, this warranty does not cover any product that has had the serial number altered, defaced, or removed.

This warranty shall be the sole and exclusive remedy to the original purchaser. In no event shall CRESTRON be liable for incidental or consequential damages of any kind (property or economic damages inclusive) arising from the sale or use of this equipment. CRESTRON is not liable for any claim made by a third party or made by the purchaser for a third party.

CRESTRON shall, at its option, repair or replace any product found defective, without charge for parts or labor. Repaired or replaced equipment and parts supplied under this warranty shall be covered only by the unexpired portion of the warranty.

Except as expressly set forth in this warranty, CRESTRON makes no other warranties, expressed or implied, nor authorizes any other party to offer any warranty, including any implied warranties of merchantability or fitness for a particular purpose. Any implied warranties that may be imposed by law are limited to the terms of this limited warranty. This warranty statement supercedes all previous warranties.

Trademark Information

All brand names, product names, and trademarks are the sole property of their respective owners. Windows is a registered trademark of Microsoft Corporation. Windows95/98/Me/XP and WindowsNT/2000 are trademarks of Microsoft Corporation.

