





INSTALLATION MANUAL

For more information: www.devancocanada.com or call toll free at 855-931-3334

SPECIFICATIONS >> CABLE REQUIREMENTS, DIMENSIONS AND CARTON INVENTORY

CABLE REQUIREMENTS

Outdoor installations require shielded cable. Non-shielded cable can be used for indoor installations ONLY.

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PROCESSOR BOARD	WIRE TYPE	RECOMMENDATIONS
From the power transformer at 120 Vac outlet	2 - Conductor Cable	Shielded Only - See Power Wire Table Below
From the door strike, maglock or gate operator	2 - Conductor Cable	See device specifications for wire size
From the strike power supply (if needed)	2 - Conductor Cable	See device specifications for wire size
From the Earth ground to processor board	12 AWG copper wire, PVC insulated or 12 AWG copper wire, uninsulated	Belden #9912 Belden #8011
Residence and Telco phone lines	24 AWG twisted pair telephone wire	Shielded - Belden #9502
From the processor board	24 AWG twisted pair telephone wire	Shielded - Belden #9502
Between processor boards on multiple entrance installation	24 AWG twisted pair telephone wire	Shielded - Belden #9502

POWER WIRE TABLE

DISTANCE	AC POWER WIRE SIZE
Under 30 feet	18 AWG
30 - 75 feet	18 AWG
75 - 150 feet	18 AWG
150 - 250 feet	16 AWG
250 - 500 feet	12 AWG

NOTE: Chamberlain is not responsible for conflicts between the information listed in the above table and the requirements of local building codes. The information is for suggested use only. Check local building codes before installation.

DIMENSIONS



Power Supply: 12 Vac 20 VA or 16 Vdc 2.5A



CARTON INVENTORY

Unit (unlocked) (1) Key (1) 12 Volt AC 20 VA Plug-In UL Listed Power Transformer (1) Manual (1)

INSTALLATION >> MOUNT THE BACK PANEL AND OVERVIEW OF THE PROCESSOR BOARD

MOUNT THE BACK PANEL

Choose the mounting location for the unit. Remove the back panel from the unit by pulling the top of the panel out of the unit. Mount the panel to a solid surface or post (hardware not provided) with the top of the panel up.

IMPORTANT NOTE: Both the back panel and TAC1 unit must be oriented and mounted in the upright position as shown at right and on the installation warning label. Failure to correctly mount the panel and unit may cause damage to the board during installation.



DESCRIPTION OF THE PROCESSOR BOARD



INSTALLATION >> OVERVIEW OF TELCO WIRING

Many phone companies have updated their color standards due to the use of Cat 5 cable for most phone line installs, and keep residential and business installs in line with each other. In the new standard, there is no green, red, black or yellow wires, they have been replaced by white/blue, blue/white, white/orange, and orange/white. If the wire is primarily orange with white stripes then that color is orange/white. Refer to the table below. The NID labels will most likely have the old coloring scheme on them, and most telephone wiring components you can purchase will still reflect the original colors.

Function	Old Color Standard	New Color Standard
Tip 1	Green	White/Blue
Ring 1	Red	Blue/White
Tip 2	Black	White/Orange
Ring 2	Yellow	Orange/White

NOTES:

- The voltmeter measurement between the Tip and Ring should be between 48 and 53 Vdc.
- Never run data wires and high voltage wires in the same conduit. The high voltage wires may interfere with the data wires and cause the system to malfunction.
- Reversed polarity will not damage the unit, however, some telephones will not function properly.

Typical Telco Overview With The Unit

Notes about wire connectors (terminal blocks):

- Wire connectors can be removed to simplify wiring.
- DO NOT overload wire connectors. Use ONLY one wire per hole.



Typical Telco Overview



NOTE: If the unit will be connected with an alarm system, you must connect the telephone line to the alarm system first in the series from the Telco box. If the units are not connected in this order, they will not operate properly.



INSTALLATION >> WIRING THE UNIT WITH A TELCO LINE AND WIRING THE UNIT WITHOUT A TELCO LINE

Never run data wires and high voltage wires in the same conduit. The high voltage wires may interfere with the data wires and cause the system to malfunction.

WIRING THE UNIT WITH A TELCO LINE



WIRING THE UNIT WITHOUT A TELCO LINE

The unit can be a stand alone system that allows communication between the unit and the resident's phones.

Ringer Equivalence Number (REN) = 5



INSTALLATION >> WIRING A GATE OPERATOR (NORMALLY OPEN) AND WIRING AN AUTO-CALL SENSOR

WIRING A GATE OPERATOR (NORMALLY OPEN)

The gate operator can be connected to Relay 1 or Relay 2. See the *Programming* section for information about configuring Relays 1 and 2.

Notes about wire connectors (terminal blocks):

- Wire connectors can be removed to simplify wiring.
- DO NOT overload wire connectors. Use ONLY one wire per hole.





WIRING AN AUTO-CALL SENSOR

The Auto-Call feature will enable the unit to contact the resident when a driveway sensor (or any device that provides a contact closure) is activated.



INSTALLATION >> WIRING A GATE OPERATOR (NORMALLY OPEN) A DOOR STRIKE LOCK (NORMALLY OPEN) AND WIRING A GATE OPERATOR (NORMALLY OPEN) & A MAGLOCK (NORMALLY CLOSED)

WIRING A GATE OPERATOR (NORMALLY OPEN) & A DOOR STRIKE LOCK (NORMALLY OPEN)

The door strike can be connected to Relay 1 or Relay 2. See the *Programming* section for information about configuring Relays 1 and 2.

Notes about wire connectors (terminal blocks):

- Wire connectors can be removed to simplify wiring.
- DO NOT overload wire connectors. Use ONLY one wire per hole.





WIRING A GATE OPERATOR (NORMALLY OPEN) & A MAGLOCK (NORMALLY CLOSED)

The maglock can be connected to Relay 1 or Relay 2. See the *Programming* section for information about configuring Relays 1 and 2.



NOTE: Install a 1N4001 diode or equivalent.

INSTALLATION >> WIRING A DOOR STRIKE LOCK (NORMALLY OPEN) AND WIRING A MAGLOCK (NORMALLY CLOSED)

WIRING A DOOR STRIKE LOCK (NORMALLY OPEN)

The door strike can be connected to Relay 1 or Relay 2. See the *Programming* section for information about configuring Relays 1 and 2.

Notes about wire connectors (terminal blocks):

- Wire connectors can be removed to simplify wiring.
- DO NOT overload wire connectors. Use ONLY one wire per hole.





WIRING A MAGLOCK (NORMALLY CLOSED)

The maglock can be connected to Relay 1 or Relay 2. See the *Programming* section for information about configuring Relays 1 and 2.



NOTE: For DC power install a 1N4001 diode or equivalent.

INSTALLATION >> EARTH GROUND ROD AND POWER WIRING

EARTH GROUND ROD

Ensure that the unit is grounded properly. The unit contains a number of static sensitive components that can be damaged by static discharge.

NOTES:

- Use a minimum of 12 gauge wire in most cases. The type and length of the earth ground rods vary by region. Contact the building inspector's office in the municipality where you plan to install the unit for correct grounding materials and installation procedures.
- Do not ground the unit to a pedestal post (gooseneck) if one is used.
- 1. Install the earth ground rod within 12 feet of the unit.
- 2. Attach a 12 AWG wire to the unit ground wire with a wing nut.

CAUTION

To AVOID damaging gas, power or other underground utility lines, contact underground utility locating companies BEFORE digging.



POWER WIRING

The 110 Vac outlet must be dedicated to the unit only. This outlet should be wired back to its own 10 Amp minimum circuit breaker. This will prevent two problems:

- Other equipment cannot introduce spikes, noise, surges, or dips into the power circuit.
- The system's operation will not be affected if any other equipment develops a short circuit across the power line.

Connect the transformer into a 110 Vac outlet after all connections have been made, any other type of outlet will cause damage to the system.

POWER WIRE TABLE

DISTANCE	AC POWER WIRE SIZE
Under 30 feet	18 AWG
30 - 75 feet	18 AWG
75 - 150 feet	18 AWG
150 - 250 feet	16 AWG
250 - 500 feet	12 AWG





Dedicated 10 Amp Minimum Circuit Breaker



NOTE: Chamberlain is not responsible for conflicts between the information listed in the above table and the requirements of local building codes. The information is for suggested use only. Check local building codes before installation.

INSTALLATION >> PLUG THE TRANSFORMER INTO THE OUTLET, MOUNT THE UNIT AND SET THE UNIT MASTER CODE

PLUG THE TRANSFORMER INTO THE OUTLET

Plug the transformer into the 110 Vac outlet.



MOUNT THE UNIT

- 1. Slide the bottom of the unit onto the back panel.
- 2. Gently press the top of the unit onto the back panel.
- 3. Lock the unit with the key.

IMPORTANT NOTE: Failure to correctly mount the unit to the back panel may cause damage to the board.



NOTE: DO NOT push the top of the unit onto the back panel before the bottom of the unit is in place.

SET THE UNIT MASTER CODE



on the unit's keypad.

Enter 4 digit Master Code. Example: 1234.



Write down the Master Code and store in a secure location.

NOTE: The star (*) button acts as a cancel command that will end any call, programming or access code key sequence.



TEST GATE/DOOR RELAYS

TEST RELAY 1

Enter 4 digit Master Code + 1 (Key). The "1" Key indicates the Relay to be triggered.



NOTE: Relay 1 status indicator LED will illuminate (Blue) to show activity when triggered.

TEST RELAY 2

Enter 4 digit Master Code + 2 (Key). The "2" Key indicates the Relay to be triggered.



NOTE: Relay 2 status indicator LED will illuminate (Blue) to show activity when triggered.

TEST THE TELEPHONE CONNECTIONS

- 1. Place a telephone call from the resident's telephone to verify it is operating properly, then hang up the phone.
- 2. Press the "Call" key on the unit's keypad. The telephone in the residence should ring.

NOTE: After the "Call" Button is pressed, the "Status" LED on the processor board will blink during transmission.

3. To test Relay 1 have someone answer the telephone and enter "*9" (Star + 9). The TAC1 will disconnect the call as soon as the relay is activated. To test Relay 2 have someone answer the telephone and enter "*5" (Star + 5). The TAC1 will disconnect the call as soon as the relay is activated.



LIMITED WARRANTY

The Chamberlain Group, Inc. ("Seller") warrants to the first purchaser of this product, for the structure in which this product is originally installed, that it is free from defect in materials and/or workmanship for a period of one year from the date of purchase.

The proper operation of this product is dependent on your compliance with the instructions regarding installation, operation, maintenance and testing. Failure to comply strictly with those instructions will void this limited warranty in its entirety.

If, during the limited warranty period, this product appears to contain a defect covered by this limited warranty, call 1-800-528-2806 before dismantling this product. Then send this product, pre-paid and insured, to our service center for warranty replacement. Products returned to Seller for warranty replacement, which upon receipt by Seller are confirmed to be defective and covered by this limited warranty, will be replaced (at Seller's sole option) at no cost to you and returned pre-paid. Defective parts will be replaced with new or factory-rebuilt parts at Seller's sole option.

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Some states do not allow the exclusion or limitation of consequential, incidental or special damages, so the above limitation or exclusion may not apply to you. This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



NOTICE: To comply with FCC and or Industry Canada rules (IC), adjustment or modifications of this receiver and/or transmitter are prohibited, except for changing the code setting or replacing the battery. THERE ARE NO OTHER USER SERVICEABLE PARTS. Tested to Comply with FCC Standards FOR HOME OR OFFICE USE. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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