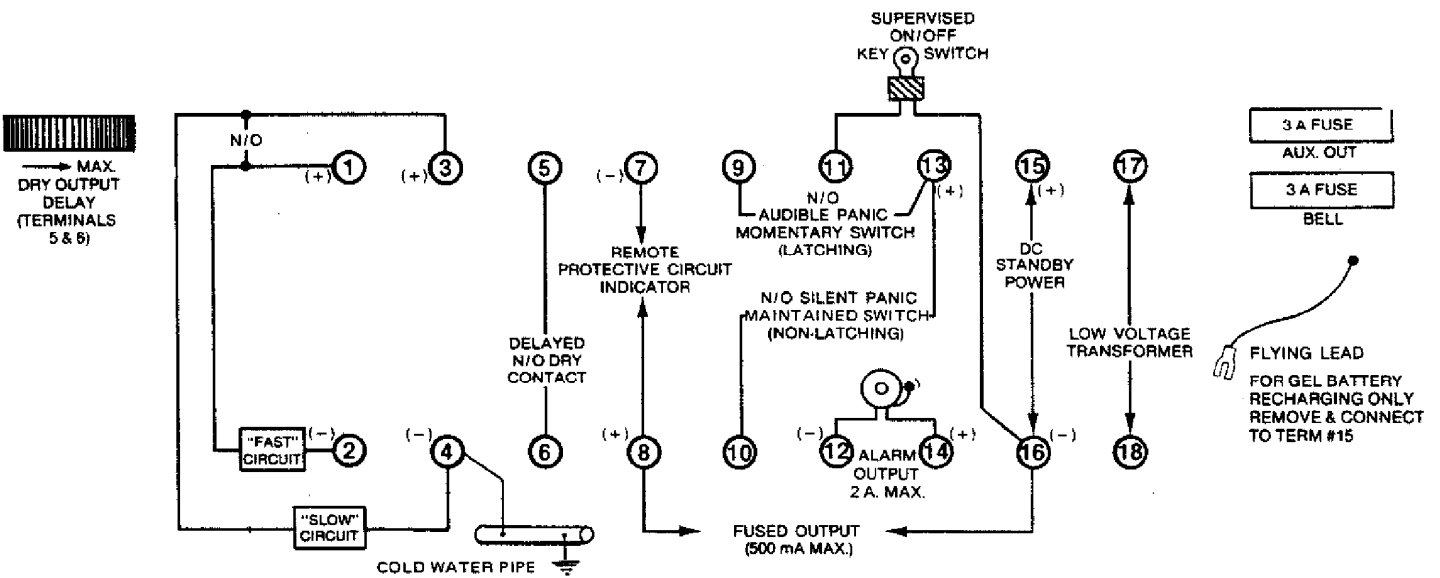


# **CCI-1 Alarm Control Center Installation Instructions**

**For 6 Volt Models [CCI-1-6] and 12 Volt Models [CCI-1-12]**



6 DiTOMAS COURT, COPIAGUE, NEW YORK 11726 / PHONE (516) 842-9400, Toll Free (800) 645-5248 / TWX: 510-227-9854



ALL WIRING SHOULD BE COMPLETED BEFORE STANDBY OR AC POWER SOURCES ARE CONNECTED TO THE PANEL

#### Terminals 1 (+) & 2 (-) – Protective Circuit (Fast Circuit)

This circuit reacts fast enough to sense the brief openings of switches, such as vibrators or window break detectors (glass guards). It will also sense openings of longer durations.

The circuit connected to these terminals is only for normally closed switch devices, which are to be wired in series. A total circuit resistance of 300 ohms should not be exceeded.

#### Terminals 3 (+) & 4 (-) – Protective Circuit (Slow Circuit)

This circuit has a slightly slower response time and is used with switches that remain open for longer periods (foil, magnetic switches, pull-aparts, etc.), or in areas of potential swingers.

The circuit connected to these terminals is only for normally closed switch devices, which are to be wired in series. A total circuit resistance of 300 ohms should not be exceeded.

#### Normally Open Input

A connection between the fast and slow protective circuits will trigger an alarm. This acts as a warning of a short between the two circuits and can be used as a separate normally open protective circuit. Use only normally open switches, such as floor switch mats, wired in parallel.

#### Terminal 4 – Earth Ground

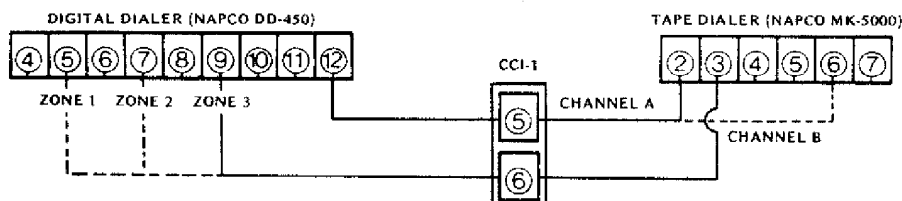
Run two insulated wires of at least 16 gauge from this terminal to: 1) the nearest screw supporting the PC board. The wire is connected between the screw head and the PC board, and 2) A cold water pipe. Do not use a gas pipe or the building's AC ground. The wire must be clamped or soldered to a clean spot on the pipe.

#### Terminals 5 & 6 – Delayed Normally Open Dry Contact

By adjusting the control to the left of the terminal strips, a delay of zero through approximately 30 seconds is available. This presets the amount of time, after an alarm condition is triggered on either protective circuit, before the internal contact closes. These contacts can be closed by:

1. A break in the protective circuit.
2. A dry closure of the audible panic circuit (terminals 9 & 13).
3. A dry closure of the silent panic circuit (terminals 10 & 13), which will give an *immediate* response regardless of delay setting.

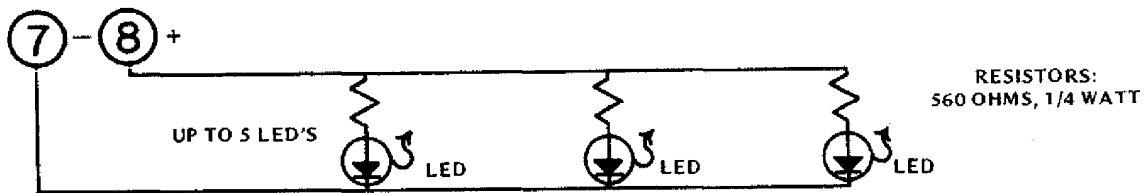
These terminals can be used to trip a tape dialer or digital communicator, as shown below:



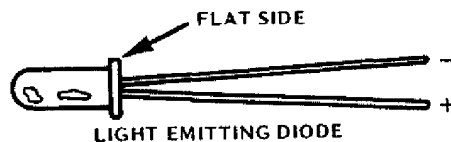
### Terminals 7 (-) & 8 (+) – Remote “Protective Circuit” Indicator Output

Up to 5 LED's, an incandescent lamp that does not exceed 80 mA, or a Sonalert (Napco's SNP-428) warning device can be wired between these terminals. These indicators are used to monitor the condition of both protective circuits and fuses. A voltage is present at these terminals as long as both circuits are closed, and both fuses are in place and functional.

Wire in the LED's as shown below, using a 560 ohm, 1/4 watt resistor for each LED.



To wire an LED, polarity must be observed. Most LED's have a flat side on their rims which indicates that the nearest lead is negative (-).



### Terminals 8 (+) & 16 (-) – Continuous DC Output

A constant source of filtered, unregulated DC voltage, at 500 mA maximum, is available across these terminals. For 6 volt models, voltage may vary between 6-10 VDC. For 12 volt models, voltage may vary from 12-18 VDC

This output is fused by a 3 ampere fuse, located to the right of the terminals strip. Voltage is momentarily interrupted when the “Bell/Battery Test” switch is pushed.

### Terminals 9 & 13 – Audible Panic Circuit (Normally Open Input; Latching)

Normally open, momentary switches are wired in parallel across these terminals. When a switch is closed, the panel will affect a permanent latching. The panel will remain this way until it has been reset.

When the panic switch is closed:

1. A voltage will occur across the alarm output, terminals 12 & 14.
2. A dry closure will occur across terminals 5 & 6. Any delay that has been preset for these terminals will be in effect when the panic circuit is tripped.

### Terminals 10 & 13 – Silent Panic Circuit (Normally Open; Non-Latching)

Normally open, maintained switches can be wired across these terminals in parallel.

When the circuit is closed, an immediate (regardless of delay time previously set) dry contact closure will occur across terminals 5 & 6. This can be used to trip a tape dialer or digital communicator.

### Terminals 11 & 16 – Key Switch

An On/Off, maintained key switch (one only) can be wired across these terminals. In the closed position, both protective circuits are disarmed.

The switch can be mounted on the cabinet by first removing the knock-out. A printed ring, with an adhesive backing, is included to designate the On and Off positions.

### Terminals 12 (-) & 14 (+) – Alarm Output

A maximum of 2 amps, at 6 VDC [Model CCI-1-6] or 12 VDC [Model CCI-1-12] is available across these terminals for the purpose of powering a bell or siren.

This output is fused by a 3 ampere fuse which is located to the right of the terminal strip.

### Power Output Considerations:

Maximum available amperage of this panel is 2 amps. This is shared by the:

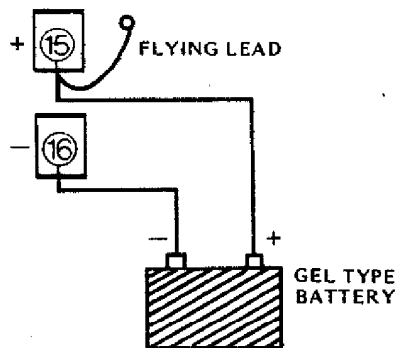
Continuous DC Output	500 mA (maximum)
Remote Stations (80 mA/lamp, giving 160 mA max.)	160 mA (maximum)
Remote LED Indicators	80 mA (maximum)

This leaves 1.26 amperes to drive the alarms, if all of the above are used to their absolute limits.

### Terminals 15 (+) & 16 (-) – Standby Power Input

- The CCI-1-6 uses either a 6 VDC dry cell or a rechargeable gel type battery (Napco RBAT-2) for standby power.
- The CCI-1-12 uses either a 12 VDC dry cell or a rechargeable gel type battery (Napco RBAT-1) for standby power.

When using a rechargeable battery with either model, the flying lead at the right of the terminal strip should be attached to terminal 15 as shown below.



*NOTE: The flying lead must never be allowed to touch any terminal other than its retaining (when not in use) or recharging terminals.*

### Terminals 17 & 18 – AC Power Input

The included Napco TRF-6 (for Model CCI-1-6) or TRF-4 (for Model CCI-1-12) is wired to these terminals. The transformer should be plugged into an outlet that provides a 24 hour source of power that cannot be accidentally shut off.

## PC BOARD FEATURES

### Auxiliary Output Fuse

This 3 AG, 3 amp normal blow fuse is used to protect the voltage output across terminals 8 & 16.

When the fuse is removed, or faulty, the power to these terminals is cut and the green "Protective Circuit" LED will not light, thus providing a supervised fuse.

### Bell Output Fuse

This 3 AG, 3 amp normal blow fuse is used to protect the voltage output across terminals 12 & 14.

When the fuse is removed, or faulty, the power to these terminals is cut and the green "Protective Circuit" LED will not light, thus providing a supervised fuse.

### Gel Type Battery Recharging

The spade lug of the flying lead is attached to terminal 15 only if a gel type rechargeable battery is being used for standby power. When a dry cell battery is used, the lead is left connected to its retaining terminal.

### Dry Output Delay

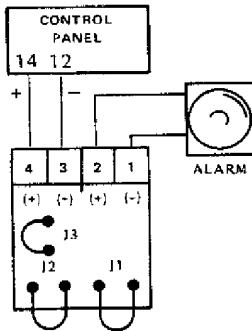
This adjustable control, located to the left of the terminal strip, is used to set the amount of delay desired (0 to 30 seconds) before the normally open dry contacts of terminals 5 & 6 close after an alarm condition has been triggered.

Rotating the control to the right increases delay time. Rotating it all the way to the left will give an instant response to the contact.

## ACCESSORY INSTALLATIONS

### M-215 Alarm Cut-Off Module

This module adds a cut-off timer feature to both 6 and 12 volt CCI-1's. By cutting the jumpers of the module, either 6 or 12 volt operation can be obtained, along with 5, 14, 20, or 30 minute cut-off times.



TIME OUT REQUIRED	CUT JUMPER(S)
30 min.	not cut
20 min.	J1 (black)
14 min.	J2 (red)
5 min.	J1, J2

**IMPORTANT:** Jumper 'J3' must be cut for 12 volt operation.

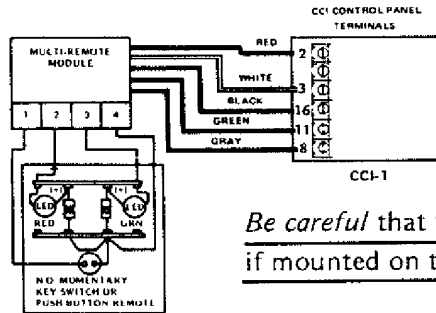
### Multi-Remote Stations

The CCI-1-6 (6 volt panel) uses the M-274 Multi-Remote Module. The CCI-1-12 (12 volt panel) uses the M-275 Multi-Remote Module.

Both Multi-Remote Modules can add up to 5 Napco BFC-208/208B Remote Stations, or any number of incandescent remote stations, provided that the total current draw from each set of protective circuit status lamps (green) and each set of arm/disarm lamps (red) does not exceed 80 mA, respectively.

NOTE: Wiring of more than one remote must be done in parallel.

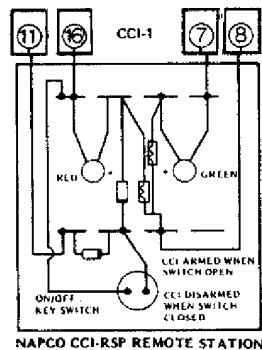
NAPCO BFC-208/208B  
REMOTE STATION



*Be careful that the maintained On/Off key switch, if mounted on the panel cabinet, is disconnected.*

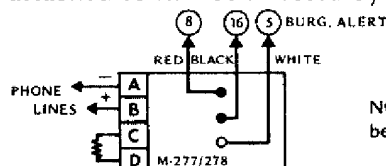
### Single Remote Station

When only one remote station is needed, a Napco CCI-RSP Remote Station is used. This provides a green LED which lights when both protective circuits are closed, a red LED which lights when the panel is armed, and a maintained key switch (switch not included) which arms the panel in the open position.

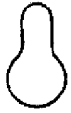


### Line Reversal Module

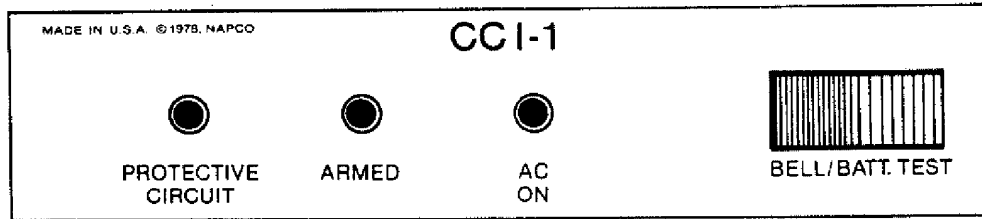
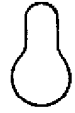
A Napco M-277 (6 volt) or M-278 (12 volt) Line Reversal Module can be used with the CCI-1 for monitoring by "leased line" central stations. Upon an alarm condition, the module reverses the normal voltage on the leased lines attached to it. Not effected by the "BELL BATT. TEST" switch.



NOTE: A jumper is needed between terminals 6 & 8



### EXTERIOR FRONT PANEL



#### Protective Circuit LED (Green)

This LED will light only when both protective circuits are complete, and both fuses are in place and functional.

#### Armed LED (Red)

This LED will light once the panel is turned on to a ready condition.

#### AC On LED (Yellow)

This LED will light when power from the included transformer is present at terminals 17 & 18.

#### Bell/Battery Test Switch

This is a momentary rocker switch which, when pressed, sends current from the standby power source to the alarm. If the alarm sounds weak, or does not sound at all, either the standby power or alarm are suspect.

Pressing this switch momentarily interrupts the voltage to the "Continuous DC Output", terminals 8 & 16.

### SPECIFICATIONS

	CCI-1-6	CCI-1-12
Operating Voltage	6 volts	12 volts
Current Draw at Idle	30 mA	60 mA
Standby Time (gel type battery)	130 hours	65 hours
Auxiliary Output	6-10 VDC, 500 mA	12-18 VDC, 500 mA
Dimensions	10¼" H. x 8½" W. x 3½" D.	
Weight	8 pounds	



**NOTE:** The cabinet mounting hole template found on this page is to be used for the proper positioning of the mounting screws.



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