

No. 216 ADAPTER

for No. 215 Two Wire Digital Remote Stations with Panic

GENERAL INFORMATION:

The No. 216 Adapter and No. 215 Two Wire Digital Remote Station(s) with Panic Circuitry permit 4 digit coded pushbutton ON/OFF (Arm/Disarm) Control of Nos. 1024 and BCI026 Alarm Processing Centers and all combination burglar/fire controls in the Nos. 330R, 332R, 340R and 342R series.

No. 215's are for indoor use only. When used with a control without entry/exit delay (such as a No. 330R or 340R) a suitable outdoor remote station (such as No. 246, 246R or 5246) should be installed as well, to control entry/exit.

DESCRIPTION:

Only two wires are required to connect up to four No. 215 Remote Stations to the No. 216 Adapter. A twelve pushbutton keypad on each No. 215 enables the user to arm or disarm the control or initiate a panic alarm at any time. Status of the control's burglar alarm circuit(s) ("not ready for arming", "ready for arming", or "armed") is indicated by a single LED on each No. 215. An audible warning indicator is built into each No. 215 for use with those controls having entry/exit delay circuits.

If desired, momentary type normally open emergency (panic) switches (e.g.: No. 219) may be connected across the remote stations' two wire circuit instead of switches separately wired to the panel. (Unless the remote stations' panic alarm feature is not to be connected. See INSTALLATION AND WIRING Section.)

A "SILENT PANIC ALARM" connection option can be used, which utilizes the No. 216's panic circuitry to trip a digital communicator (e.g.: No. 669 or No. 670) or dialer (e.g.: No. 612). A silent alarm can then be transmitted to a remote location when the appropriate pair of buttons on a No. 215 Remote Station (or a panic switch connected across its two wire circuit) is pressed. The special connections required are incorporated in the INSTALLATION AND WIRING Section herein.

The No. 216 Adapter's housing is designed to clip into the cabinet of the alarm control with which it is used. It contains a PC board which includes: a) Leads for alarm control connections, b) "Digit Wires" and "Code Pins" for programming the 4 digit code, c) Jumpers for cutting, as required, and d) Terminals for "Panic Reset" and No. 215 connections.

No tamper switches are needed in the No. 215 Remote Station as the system is inherently secure. A full four digit code is required to disarm the system and that code cannot be determined at any remote station. A short or even momentary low resistance between the stations' two wire run at any time will initiate a panic alarm (unless the panic feature is not to be connected, as described later).

- Notes:
- A. Only No. 215 Remote Stations (up to 4) may be used with the No. 216 Adapter.
 - B. Other Remote stations (e.g.: Nos. 214, 218R, 246, 246R, 5246) and (where required) the No. 247 Adapter may be simultaneously, but independently, connected to controls in the Nos. 330R, 332R, 340R and 342R series. As many "other" remote stations may be used as would otherwise be allowable without the No. 216.

- C. When the No. 215 or other remote stations are used with a No. 1024 or BCI026 Alarm Processing Center, the keyswitch normally connected directly to the panel for ON/OFF control can NOT be used.

INSTALLATION AND WIRING(See Diagram 1)

Up to four No. 215 Remote Stations may be connected to the No. 216 in parallel, indoors on one or more two wire runs originating at the control (where the No. 216 will be located).

The wire size to be used for the entire length of a two wire run depends on the distance from the control to the farthest remote station on that particular run. Use the following tabulation to determine the wire size(s) needed for the proposed run(s).

<u>MAXIMUM DISTANCE TO FARTHEST REMOTE STATION</u>	<u>WIRE SIZE</u>	<u>SUGGESTED ADEMCO NO.</u>
100 feet	#22	289 or 286
200	#20	283
300	#18	284
500	#16	282

If a No. 1024 or BCI026 Alarm Processing Center is being used, the remote station used at opening time should be located so that the ALARM MEMORY LED on the alarm processing center can be viewed at opening time before the panel is disarmed (this LED will be lit if an alarm has taken place during the armed period).

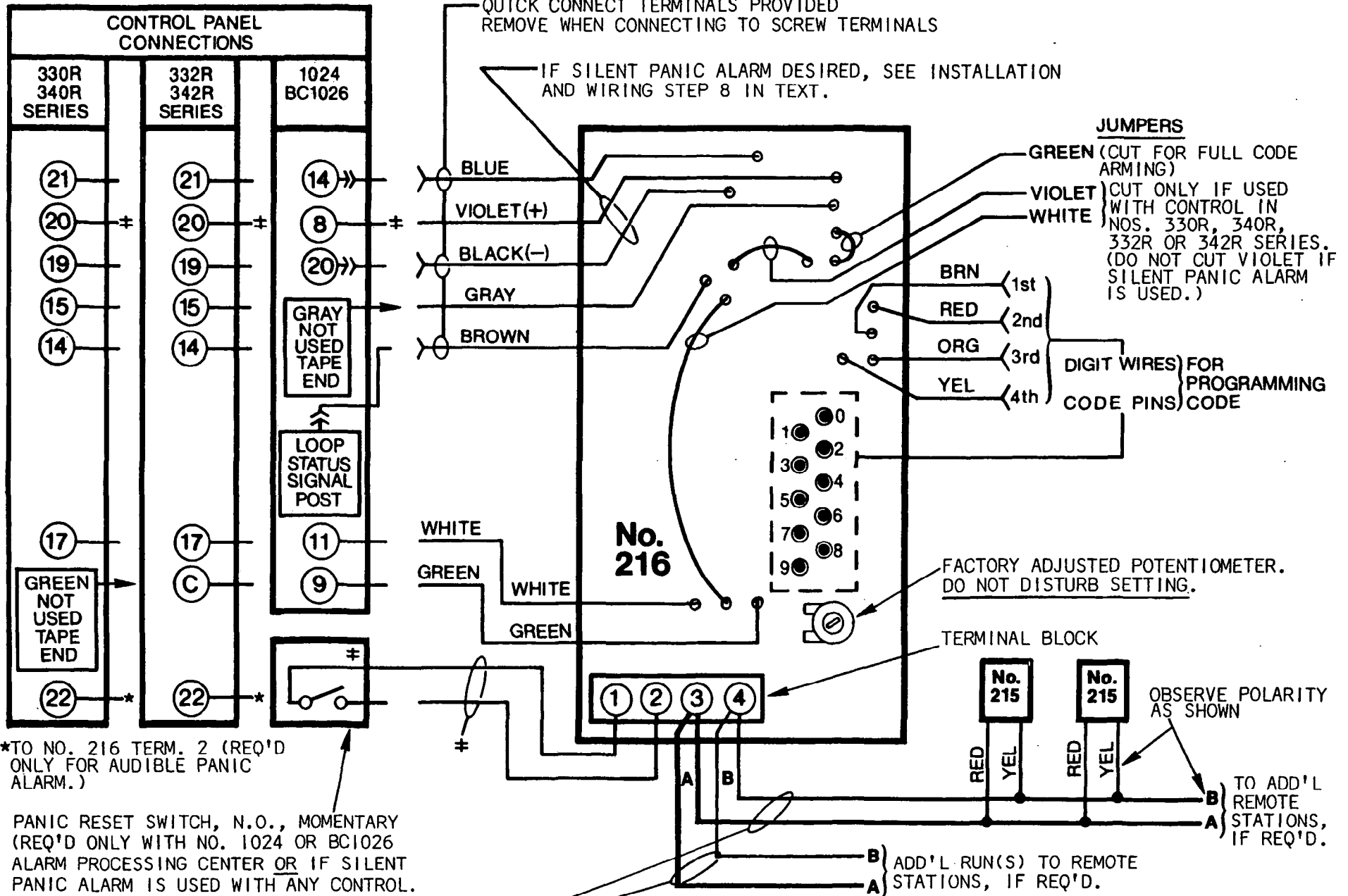
An emergency (panic) alarm can be triggered at any No. 215 Remote Station by momentarily pressing its buttons marked # and * simultaneously.

Note: If this feature is not desired because of the possibility that unwanted alarms may be triggered by unauthorized persons, the No. 216's VIOLET lead may be left disconnected from the control unit during installation. See Step 8 in the following procedure.

1. Locate the No. 215 Remote Station(s) and run the two wire circuit(s) between them and the control as described above. Connect the remote station RED and YELLOW leads across the "A" and "B" leads respectively, as shown in Diagram 1. Connections to the No. 216 Adapter (to be installed within the control) will be made later.
2. If desired, connect any number of momentary type N.O. emergency (panic) switches (e.g.: No. 219) across the two wire run(s) to the remote station(s).

Note: If the No. 215 Remote Stations' panic alarm feature is not to be connected (as described earlier) emergency (panic) switches may only be connected on separate wiring to the control panel, in the standard manner.

3. Remove the cover from the No. 216 adapter and program its PC board as follows:
 - a. Select a four digit "disarming" code. The code may consist of any 4 different digits from 0 to 9 (e.g.: 2 1 5 8). Codes containing repeated digits (such as: 4 3 3 7 or 6 5 4 6) cannot be used.



*TO NO. 216 TERM. 2 (REQ'D ONLY FOR AUDIBLE PANIC ALARM.)

PANIC RESET SWITCH, N.O., MOMENTARY (REQ'D ONLY WITH NO. 1024 OR BC1026 ALARM PROCESSING CENTER OR IF SILENT PANIC ALARM IS USED WITH ANY CONTROL. WIRE SIZE TO REMOTE STATIONS DEPENDS ON DISTANCE TO FARTHEST STATION (SEE TABULATION IN TEXT). EMERGENCY (PANIC) SWITCHES (N.O., MOMENTARY), IF USED, MAY BE CONNECTED IN PARALLEL ACROSS THESE LEADS.

Diagram 1: FIELD CONNECTIONS ≠ OMIT IF NO PANIC ALARM IS DESIRED FROM NO. 215's.

MAXIMUM TOTAL OF 4 NO. 215's MAY BE USED WITH EACH NO. 216.

- b. Place the four "digit wires" on the appropriate "code pins". The BROWN "digit wire" should be placed on the "code pin" corresponding to the first digit in the selected code (e.g.: Pin 2, if 2 1 5 8 is the selected code). Similarly, the RED, ORANGE and YELLOW wires should be placed on the pins corresponding to the 2nd, 3rd and 4th digits respectively. All four "digit wires" must be connected for proper operation.
- c. Full four digit ARMING may be desired as well. The system normally will arm upon the pressing of only the first digit of the programmed four digit code at a No. 215 Remote Station. (This is particularly useful if the system will normally be armed by personnel not authorized to have knowledge of the full four digit code.)

If, however, full four digit ARMING is desired, cut and remove the 2" GREEN jumper from the No. 216's circuit board. The system will then require the full four digit code to be pressed before arming takes place.

- d. If a control in the No. 330R to 342R series is being used, cut the 4" WHITE and 2" VIOLET jumpers on the PC board. (Caution: Do not cut the VIOLET jumper if a SILENT PANIC ALARM is to be connected.)

If a No. 1024 or BCI026 Alarm Processing Center is used, the WHITE and VIOLET jumper should never be cut.

- e. DO NOT DISTURB THE FACTORY ADJUSTED POTENTIOMETER ON THE NO. 216's PC BOARD.
4. Disconnect the control's battery and AC power.
5. Connect the remote station wiring to terminals 3 and 4 of the No. 216, observing the "polarity" shown in the diagram. Allow enough slack to reach the final position the No. 216 will occupy in the control.

Note: The cover of the No. 216 is provided with a mounting lip which can be slipped over the edge of the control cabinet, (during Step 7) without interfering with the closing of the cabinet's cover.

IF THE NO 215's PANIC ALARM FEATURE IS NOT TO BE CONNECTED (AS DESCRIBED EARLIER IN THIS SECTION) SKIP THE FOLLOWING STEP 6, AND PROCEED TO STEP 7.

6. Connect Panic Reset wiring between the No. 216 and the control (or separate reset switch) as indicated in Diagram 1.

Note: If a No. 1024 or BCI026 Alarm Processing Center is being used, (or if SILENT PANIC ALARM is being used) a N.O. momentary contact switch for Panic Reset must be provided. The knockout provided in the cover of the No. 1024 or BCI026 may be used for mounting the switch, or it may be located remotely [suggested keyswitches: No. 2174-70 (flat key), No. 4073-70 (round key), No. 5073-70 (higher security, pick resistant)....or simply a No. 8064 Pushbutton may be used].

7. Replace the cover of the No. 216 (dress all wires through the opening at one end of the cover) and install the unit inside the control cabinet by slipping its mounting lip over the edge of the cabinet.
8. Connect the No. 216's remaining leads to the control as indicated in Diagram 1.

Notes: If the No. 215 Remote Station's panic alarm feature is not to be connected (as described earlier in this section) do not connect the No. 216's VIOLET wire.

If SILENT PANIC ALARM is desired, do not connect the VIOLET (+) lead to the control. Instead, connect the VIOLET (+) lead and the control terminal to which the BLACK (-) lead is connected, to the 6V. DC triggering points of a digital communicator or dialer. Observe polarity!

*If audible warning is undesirable at the No. 215 Remote Station(s), do not connect the No. 216's GREEN wire.

*If any one No. 215 is to be silenced while others are not, connect the No. 216's GREEN wire as shown in the diagram, but cut the thin ORANGE lead to the sounder in the No. 215 that is to be silenced.

*Applicable only when a control with entry/exit delay is used.

9. Reconnect the control's battery and A.C. power.

TESTING AND OPERATION:

Each remote station's LED will indicate the system's status as follows:

<u>LED INDICATOR</u>	<u>STATUS</u>
Off	*Disarmed, Protective Circuit(s) Open (Not Ready for Arming)
**Flashing	Disarmed, Protective Circuit(s) Closed (Ready for Arming)
On Steadily	Armed (Ready for Alarm or Disarming)

*On Alarm Processing Center, Zone LED's will be lit for specific zone(s) not ready for arming.

**The No. 1024 Alarm Processing Center features automatic zone shunting and may be armed even though one or both of its basic protection zones (not the delay zone) has a fault, and the remote station LED is not flashing.

1. Arm and disarm the system at each remote station and check the response of each station's LED indicator:

a. Make sure all protective circuits are closed and system is ready for arming (remote station LED should be flashing).

b. Arm the system by entering the first digit of the 4 digit code at the remote station. Enter all four digits if "four digit arming" has been selected. (The remote station LED should light steadily.)

If a basic protection circuit (without entry/exit delay) is disturbed, an alarm will sound immediately.

If an entry/exit delay circuit is disturbed, the remote station's audible indicator will sound during the "entry delay" period.

c. Disarm the system by entering the entire 4 digit code at the remote station. (The Station's LED should go off or start flashing.)

2. Trigger panic alarms as follows:

Note: This assumes that the No. 216's VIOLET wire has not been left disconnected, to eliminate this feature, as described previously.

- a. On a No. 215 Remote Station, momentarily press the buttons marked # and * simultaneously. The panic alarm will sound (or a silent alarm will be sent) and continue until the reset switch (included in the Nos. 330R, 332R, 340R, and 342R Controls...separately provided as described herein for the Nos. 1024 and BC1026 Alarm Processing Centers or for SILENT PANIC ALARM) is operated. Repeat for each additional No. 215 Remote Station.
- b. If additional panic switches have been connected across the remote station wiring, test them as well.

SPECIFICATIONS:

	No. 216	No. 215
<u>Physical:</u> Width:	3-3/4" (9.5 cm)	2-7/8" (7.3 cm)
Height:	6-7/8" (17.5 cm)	4-5/8" (11.7 cm)
Depth:	1" (2.5 cm)	1" (2.5 cm)

Electrical: No. 216 is powered with 6V. DC from control instrument
(See GENERAL INFORMATION for controls that may be used).

Up to 4 No. 215's may be connected to one No. 216.

Current Drain per No. 216: 38 ma (with 4 No. 215's
connected) at 6V. DC (LED's lit steadily)