

INSTALLATION INSTRUCTIONS



GENERAL INFORMATION:

The No. 1026 Alarm Processing Center is a local alarm panel with the following features:

Basic Supervised Protection Zone for Normal and Fast Acting Perimeter and Interior Devices.

Entry/Exit Zone with 45 (or 30) Second Entry and Exit Delay Times. Supervised.

24 Hour Audible Emergency (Panic) Circuit.

LED Indication of Zone Status, A.C. Power and Alarm Memory (indicates alarm has taken place and bell has timed off).

Outputs for Bell(s) or Electronic Siren(s), Closure of Dry Contacts, and (Optional) Early Warning Horn.

Automatic Alarm Cut-off and Restore.

Bell and Battery Test Switch.

Includes Low Voltage Plug-in Transformer and Built-in Rechargeable Power Supply.

System Turned ON and OFF from any SPST Keyswitch (e.g.: Nos. 5073, 4073, 2174). Remote Station(s) may be used instead (see ACCESSORIES at end of these instructions).

The No. BC1026 is similar to the No. 1026 except it is housed in a larger cabinet that provides room for optional installation of a digital communicator (e.g.: No. WS669, WS670, 679 or 680) or other accessories.

INSTALLATION AND WIRING: See Figure 1

Do not connect the battery or plug-in transformer until all other wiring has been completed.

Use of twisted wiring is recommended for all runs, for greater immunity to unwanted induced voltage.

A WHITE jumper is provided at the top of the chassis. If this jumper is cut it will shorten the factory provided entry delay, exit delay and "bell" cut-off times as tabulated in Figure 1.

Terminals

Wiring Information

1,2,3,4

Basic Protection Zone (Double Loop): Run a pair of wires from terminals 1 and 2 to all protection points in this zone and return to terminals 4 and 3 respectively. Connect protection devices into the two loops as follows:

2,3

Normal Response Loop (Basic Protection Zone): Connect closed circuit contacts of normal acting devices (such as magnetic contacts, foil, etc.) in series with this loop. Maximum permissible resistance: 300 ohms.

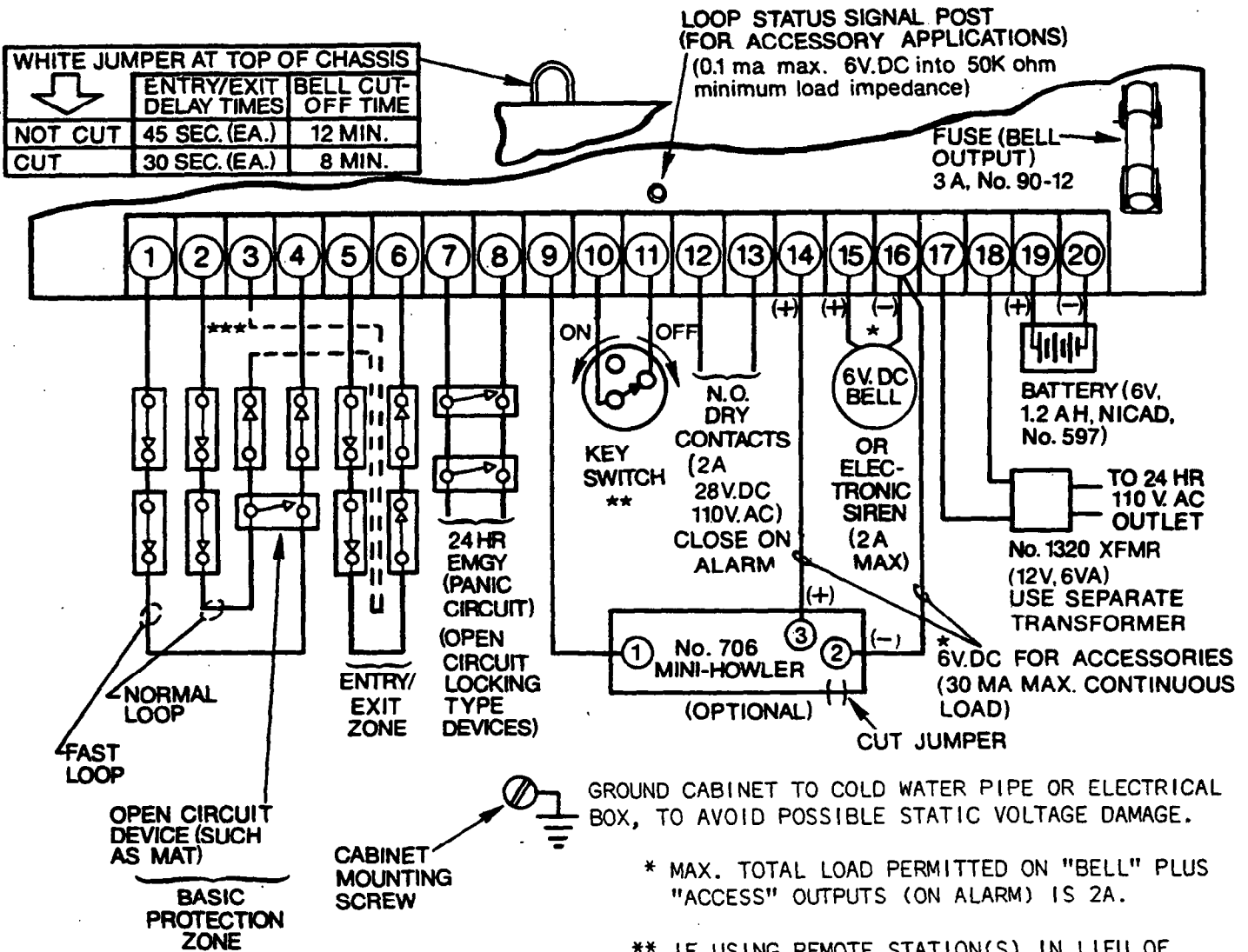


FIGURE 1: Field Connections

1,4

Fast Response Loop (Basic Protection Zone): Connect closed circuit contacts of fast acting devices [such as vibration contacts (e.g.: No. 11), glass protection devices (e.g.: Nos. 9, 9701) and photo-electric units without built-in delays] in series with this loop.

Maximum permissible resistance: 300 ohms. To lessen the chance of false alarms, the fast response loop should not contain exposed metallic contacts.

Notes: An open in either of these loops, or a short between loops will cause an immediate alarm when the system is ON.

- 1,4 (cont'd) Devices with open circuit contacts (such as mats) may be connected between these loops (or into the fast response loop with an Ademco No. 602 Mat Coupler).
- 5,6 Entry/Exit Zone: Connect closed circuit contacts on the entry/exit door as well as interior contacts or sensors located in the path between the exit door and the control in a series wiring loop across these terminals. Maximum permissible loop resistance: 300 ohms.
- This zone provides entry and exit times of 45 seconds each (30 seconds if the WHITE jumper is cut per Fig. 1).
- For additional security (against shorts) the Basic Protection Zone's normal response loop may be routed along with the entry/exit loop as shown in Figure 1. A short between these loops when the system is ON, will result in an alarm after the entry delay.
- 7,8 Emergency (Panic) Switches: Connect locking type open circuit emergency switches (such as Nos. 264, 266, 268 or 269) in parallel across these terminals.
- Operation of an emergency switch at any time (system OFF or ON will cause the alarm bell(s) to ring and the output contacts to close. Alarms activated from emergency switches do not cut off until the switches are reset.
- 9,14(+),16(-) No. 706 Mini-Howler (Optional): Connect as shown in Figure 1. The mini-howler will sound: 1) During the entry delay period. 2) In case of accidental closing with the entry/exit zone open. 3) If an alarm occurs in the entry/exit zone while the panel is ON. In this last case, the No. 706 will sound until the alarm bell cuts off or the entry/exit loop returns to normal (whichever occurs later). When sounding, the No. 706 draws 50 ma.
- 10,11 Keyswitch: Connect a single pole single throw keyswitch with key removable in "make" and "break" positions across these terminals (OFF Position: Contacts CLOSED, ON Position: Contacts OPEN). A knockout is provided on the cover of the cabinet for mounting. If this keyswitch is located remotely it should be kept within the protected area.
- Suggested keyswitches: No. 2174 (Flat Key), No. 4073 (Round Key), No. 5073 (Higher Security, Pick Resistant).
- The preferred method of remoting the keyswitch is with the use of remote station(s) showing system status which are used via adapters. See ACCESSORIES.
- 12,13 N.O. Dry Contacts: These contacts may be used to trip a digital communicator, telephone dialer or as desired. The contacts close on alarm (burglary or emergency) and open upon bell cut-off (burglary) or when emergency (panic) switches are manually reset. (The contacts do not close during bell test.) Rating: 2A, 28V. DC/110V. AC.
- 14(+), 16(-) 6V. DC For Accessories: Up to 30 ma continuous load can be connected to these terminals for items such as those described in ACCESSORIES. During alarm, up to 2 amperes total combined load may be supplied by these and the alarm bell terminals 15 and 16.

15(+), 16(-)

6V. DC Bells or Electronic Sirens having a combined total rating of 2 amperes (less any alarm load connected to term. 14 and 16) may be connected in parallel across these terminals. If electronic sirens are used, observe polarity.

Note: Except during an emergency (panic) alarm, cut-off occurs after approximately 12 minutes (8 minutes if the WHITE jumper is cut per Fig. 1). The Alarm Memory LED remains lit until the panel is disarmed. If the protective circuits are then normal, the unit will report any subsequent alarm condition.

17,18

Power Input, 12V. AC: Turn the keyswitch to its OFF position and connect these terminals to the output terminals of the No. 1320 Transformer. Do not plug in the transformer yet.

LOOP STATUS
SIGNAL POST

Used with remote (arming/disarming) station accessories (minimum recommended load resistance: 50K ohms).

GROUND

Ground the cabinet to a cold water pipe or electrical box.

19(+),20(-)

Standby Battery: After all other wiring is completed, and with the keyswitch OFF (closed), connect the battery to these terminals when ready to proceed with TESTING AND CHECKOUT.

CAUTION: OBSERVE POLARITY! First connect (+) battery to terminal 19. Next connect (-) battery to terminal 20. DO NOT LET THE BATTERY LEADS TOUCH OTHER TERMINALS.

Note: In the BC1026, the battery may be placed above the chassis, or taped to the cabinet with double sided tape (e.g.: No. 440)

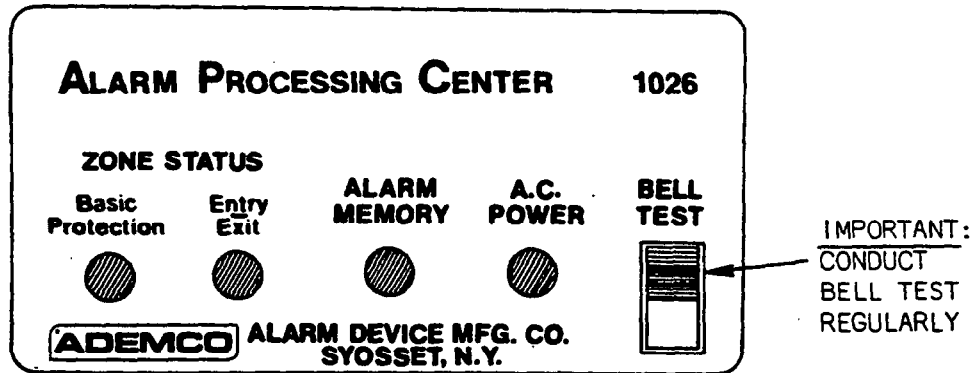


FIGURE 2: Indicators

TESTING AND CHECKOUT:

Perform these tests after the wiring and connections described in the previous section have been completed.

The keyswitch should still be OFF and the standby battery must be connected.

1. Plug the transformer into a 110 V. AC outlet that is ON 24 hours a day. The A.C. Power LED should light. CAUTION: DO NOT OPERATE ANY OTHER EQUIPMENT SIMULTANEOUSLY FROM THIS TRANSFORMER. DAMAGE TO THE TRANSFORMER AND/OR EQUIPMENT OR IMPROPER SYSTEM OPERATION COULD RESULT.

2. Observe the Zone Status LED's. Neither will be lit if the protective loops are properly wired and all contacts are properly set.
3. When both Zone Status LED's are out, do the following and observe the appropriate LED light in each case:
 - a. Open the fast response loop momentarily. The Basic Zone LED should light while the loop is open.
 - b. Open the normal response loop momentarily. The Basic Zone LED should light again.
 - c. Open the entry/exit loop momentarily. The Entry/Exit Zone LED should light.
 - d. Short the fast and normal loops momentarily. The Basic Zone LED should light momentarily.
 - e. Short the normal and entry/exit loops momentarily. The Entry/Exit LED should light momentarily.
4. Test the Bell(s) and Standby Battery by depressing the Bell Test Switch momentarily. The bell(s) should ring while the switch is depressed. Any devices connected to the dry contacts will not be activated.

Note: The battery may not be fully charged. If this test is tried with a low battery, there will not be enough power to ring the bell. Let the unit charge (transformer plugged in) for at least one half hour if the battery is low.

5. Test the Emergency (Panic) Circuit by momentarily shorting terminals 7 and 8 or tripping an emergency switch. The bell(s) should ring only as long as the short remains and any devices connected to the dry contacts will be activated.
6. Turn the system ON and simulate leaving the premises by following the procedure given in the OPERATION section.

Note: If an alarm is tripped during testing, the bell(s) can be silenced by turning the keyswitch to OFF.

7. Simulate entering the premises and turn the system OFF by following the procedure given in the OPERATION section.

OPERATION

Note: The Zone Status LED's on the No. 1026 will go on and off as the protective loops open and close during normal operation of doors, windows, etc., while the system is OFF.

When Turning System ON:

1. A.C. Power LED should be lit at all times. If out, A.C. failure to unit is indicated.
2. Zone Status LED's should be off. If lit, protective loop is not set properly.

CAUTION: If either Zone Status LED is lit, turning the keyswitch ON will cause an alarm immediately in the case of the Basic Protective Zone or after 90 seconds (exit plus entry delay time) for the Entry/Exit Zone (60 seconds if the WHITE jumper has been cut). In the latter case, the No. 706 Mini-Howler (if installed) will sound a warning immediately that an alarm can be avoided if the keyswitch is returned to OFF before 90 (60) seconds have expired.

3. Depress BELL TEST Switch to test bell, standby battery and power supply.

IMPORTANT: For continual assurance that bell, battery and power supply are in proper working order, regular performance of BELL TEST is advised. This is particularly important when remote arm/disarm keyswitches without LED's are used.

4. Turn Keyswitch ON to arm system. Leave via entry/exit door within 45 (30) seconds.

When Turning System OFF:

1. Enter only through entry/exit door. If a No. 706 Mini-Howler has been installed it will sound during the entry delay period.
2. Note if Alarm Memory LED on panel is lit (it will be if an alarm has taken place).
3. Turn Keyswitch OFF before end of entry delay period.

ACCESSORIES:

Important: Accessories may be used, provided they do not result in a total 6V. DC continuous auxiliary load of more than 30 ma (except as noted below) being drawn from the panel. Total current on ALARM (including alarm sounding device) should not exceed 2 amperes.

Instead of using a keyswitch to control the panel, up to 4 remote stations (e.g.: Nos. 214, 246, 246R or 5246) may be used via a No. 244 Remote Station Adapter (each remote station shows system status via a single LED). Current Draw, No. 244 with 1 remote station: 11.5 ma (each add'l remote station: 9.5 ma). Up to 40 ma permissible in this case.

Alternatively, the following are available for coded pushbutton control of the No. BC1026:

No. 215 Two Wire Digital Remote Station with Panic Circuitry (up to 4 can be used via a No. 216 Adapter). Current Draw, No. 216 with 1 No. 215: 11.1 ma (each add'l No. 215: 9.1 ma.) Up to 38.4 ma permissible in this case.

No. 227 Single Button Digital Remote Station (up to 5 can be used, via a No. 228 Adapter). Current Draw, No. 228 with 1 No. 227: 14 ma (each add'l No. 227: 6 ma). Up to 38 ma permissible in this case.

No. 5241 Self-contained Digital Remote Station with Panic Circuitry (single unit only can be used). Current Draw: 12 ma.

Other available accessories include:

No. 1035 Day Zone Adapter: Permits the addition of a "day" or "24 hour" zone to the control with day sounder annunciation of disturbances. Current Draw: 6 ma.

No. 1034 Zone Expansion Center: Permits additional protection zones to be added to the control by expanding a single protection zone to 4 zones (including a "day" zone option on 2 of the zones). Current Draw: 20 ma.

No. 688 Opening/Closing Switching Module: Interfaces between the control and a digital communicator to signal the communicator to send opening and closing messages as the control is disarmed and armed. Current Draw: 2 ma with high impedance constant load.

Complete information accompanies the above accessories.

SPECIFICATIONS:

	<u>No. 1026</u>	<u>No. BC1026</u>
Physical:	Width: 8" (20.3 cm)	8" (20.3 cm)
	Height: 8" (20.3 cm)	15" (38.1 cm)
	Depth: 2" (5.1 cm)	3" (7.6 cm)
Electrical:	Voltage: 12 V. AC (from No. 1320 Plug-in Transformer)	
	Current (per Loop): 4 ma	
	Maximum Resistance (per Loop): 300 ohms	
	Bell Circuit Output: 2 A maximum at 6 V. DC (3 A Fuse, No. 90-12)	
	Output Relay Contacts: SPST, Rating: 2 A at 28 V. DC, 110 V. AC	
Standby: 6 volt NiCad Rechargeable Battery, 1.2 A.H. (Ademco No. 597) Up to 60 hrs. standby, dependent upon continuous load supplied to accessories.		

TO THE INSTALLER

Regular maintenance by the installer and frequent testing by the user is vital to continuous satisfactory operation of any alarm system.

The installer should assume the responsibility of developing and offering a regular maintenance program to the user as well as acquainting the user with the proper operation and limitations of the alarm system and its component parts. Recommendations must be included for a specific program of frequent testing to insure the system's proper operation at all times.