

No.1028 ALARM PROCESSING CENTER

GENERAL INFORMATION:

The No. 1028 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.

24 Hour Emergency (Panic) Circuit.

LED Indication of Zone Status and A.C. Power.

Outputs for Bell(s) or Electronic Siren(s) and Closure of Dry Contacts.

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; not included). Keyswitch may be mounted on cabinet, or remotely.

The No. BC1028 is similar to the No. 1028, except it is housed in a larger cabinet that provides room for optional installation of a No. WS669 or WS670 Digital Communicator Shielded Circuit Board.

INSTALLATION AND WIRING:

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

See Figure 1

Terminals

(1,2) Not shown or used on this panel.

3,4,5,6 Basic Protection Zone (Double Loop): Run a pair of wires from terminals 3 and 4 to all protective points in this zone and return to terminals 5 and 6 respectively. Connect protection devices into the two loops as follows:

4,5 Normal Response Loop: Connect closed circuit contacts of normal acting devices (such as magnetic contacts, foil, etc.) in series with this loop. Maximum permissible resistance: 300 ohms.

3,6 Fast Response Loop: Connect closed circuit contacts of fast acting devices (such as vibration contacts and photoelectric units without built-in delays) in series with this loop. Maximum permissible resistance: 300 ohms.

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

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).

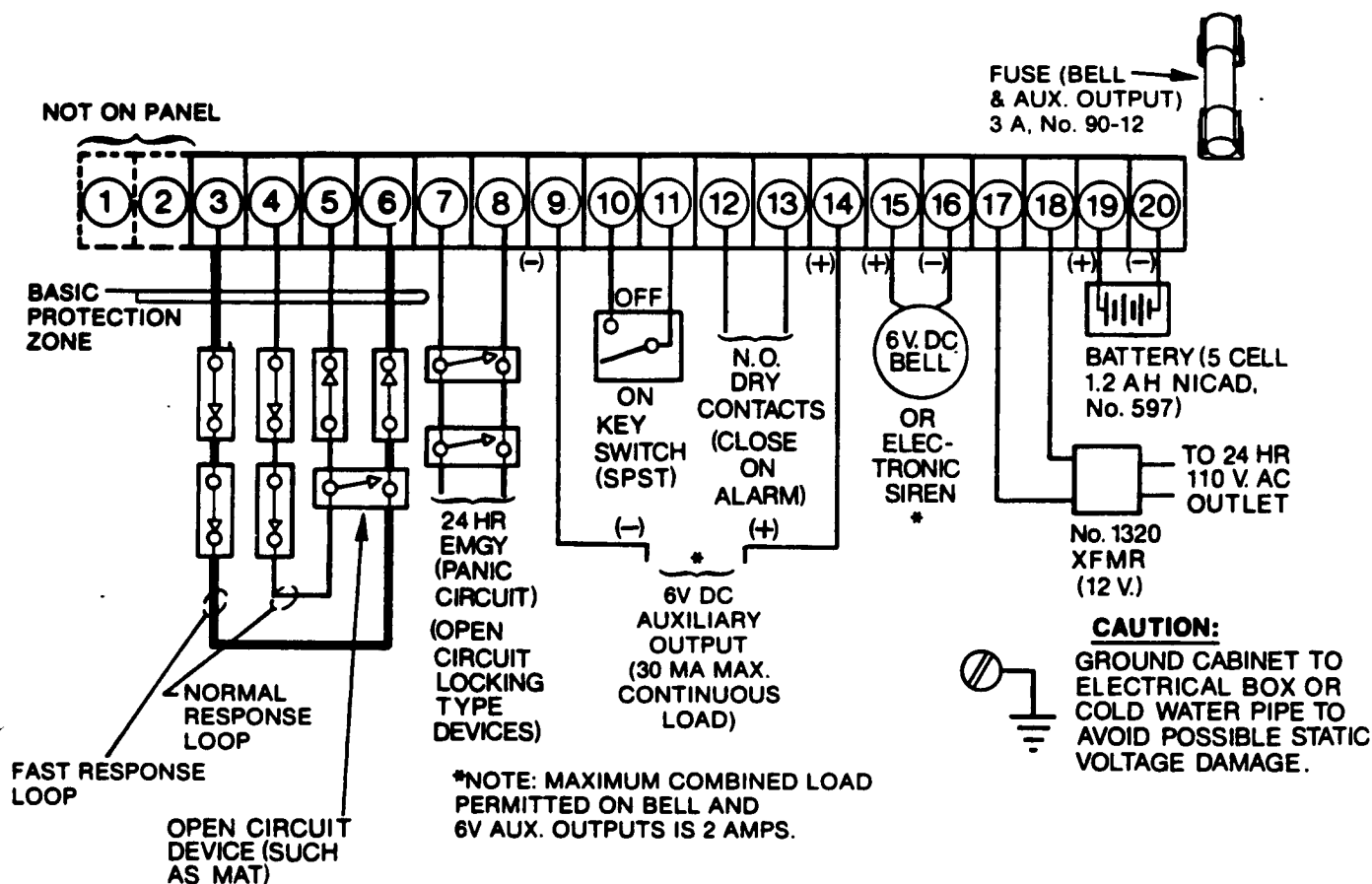


FIGURE 1: Field Connections

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 (+)

Auxiliary Output Power: 6 V.DC is available at all times across these terminals for supplying up to 30 ma continuously for powering auxiliary equipment. Upon alarm higher current may be drawn. This output plus load across "bell" terminals should not exceed 2 A during alarm.

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 No. 1028 for panel mounting.

Suggested keyswitches: No. 2174 (Flat Key), No. 4073 (Round Key), No. 5073 (Higher Security, Pick Resistant).

CAUTION: The keyswitch may be located remotely (for instance in lieu of a shunt switch at the entry/exit door) provided the ZONE STATUS LED can be seen when the system is turned ON. Otherwise, chances of causing a false alarm by closing with protection not properly set are increased.

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.)

15 (+), 16 (-)

6 V.DC Bells or Electronic Sirens having a combined total rating of 2 amperes (less any auxiliary load connected to terminals 9 and 14) 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 15 minutes. After cut-off, the system will re-arm if the protective circuit has returned to normal. A new alarm will occur if there is a subsequent disturbance.

17,18

Power Input, 12 V.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.

Ground

Ground the Cabinet to an electrical box or cold water pipe.

19 (+), 20 (-)

Standby Battery: After all other wiring is completed, and with the keyswitch OFF, connect the battery to these terminals. Observe polarity.

Caution: Do not let the battery leads touch other terminals.

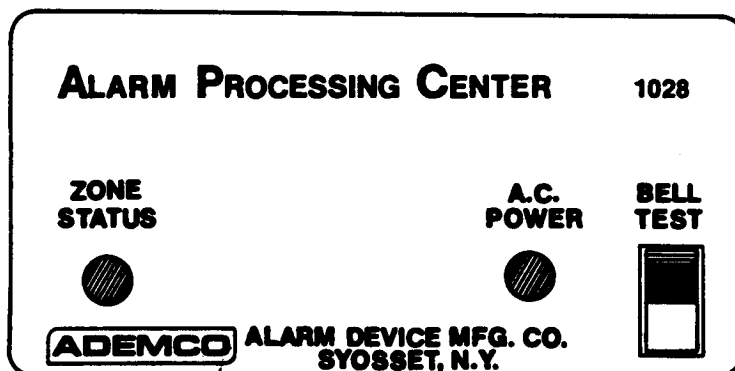


FIGURE 2: Indicators

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.

1. Plug the transformer into a 115 V. AC outlet that is ON 24 hours a day.
The AC POWER LED should light.
2. Observe the ZONE STATUS LED: It will not be lit if the protective circuit is properly wired and all contacts are properly set.
3. When the ZONE STATUS LED is out, do the following and observe the LED light in each case while the disturbance is present:
 - a. Open the fast response loop momentarily.
 - b. Open the normal response loop momentarily.
 - c. Short the fast and normal loops 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.

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.
6. Turn the system ON by following the procedure given in the OPERATION section.
7. Turn the system OFF by following the procedure given in the OPERATION section.

OPERATION:

When Turning System ON:

1. AC POWER LED should be lit at all times. If out, AC failure to unit is indicated.
2. ZONE STATUS LED should be off. If lit, protective circuit is not set properly.

CAUTION: If the ZONE STATUS LED is lit, turning the keyswitch ON will cause an alarm immediately.
3. Depress BELL TEST Switch to test bell and standby battery.
4. a. If ON/OFF keyswitch is on No. 1028's Cabinet or elsewhere within premises:
Turn keyswitch ON to arm system and leave via entry/exit door provided with shunt lock.

b. If ON/OFF keyswitch is used on entry/exit door in lieu of shunt lock:
Leave via entry/exit door and turn keyswitch ON to arm system.

To Turn System OFF:

- I. a. If ON/OFF keyswitch is within protected premises: Enter via (shunt lock equipped) entry/exit door and turn ON/OFF keyswitch OFF.
- b. If ON/OFF keyswitch is on entry/exit door: Turn keyswitch OFF before entering.

Note: The ZONE STATUS LED on the No. 1028 will go on and off as the protective loops open and close during normal operation of doors, windows, etc., while the system is OFF.

SPECIFICATIONS:

	<u>No. 1028</u>	<u>No. BC1028</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)	
	*6 V.DC Auxiliary Output: 30 ma maximum continuous	
	Output Relay Contacts: SPST, 3 A Rating	
	Standby: 5 cell NiCad Rechargeable Battery, 1.2 A.H., 60 hours Standby (Ademco No. 597)	

*Maximum combined Bell and Auxiliary Circuit capacity is 2 A.