INSTALLER'S MANUAL

SIX ZONE COMBINATION FIRE AND BURGLAR CONTROL PANEL

CHALLENGER CP1000



SYSTEM DESCRIPTION

The CHALLENGER CP1000 is a combination fire and burglar control panel consisting of one open circuit fire loop, one 24 hour open circuit burglary loop, two closed circuit instant burglary loops and two closed circuit instant/delay loops. Both of the delay loops may be converted to instant mode by use of a remote or panel mounted instant/delay switch. In addition, one of the delay loops (zone 4) may be installer selected for either open or closed circuit operation.

The CP1000 has a 600mA auxiliary output to power smoke detectors, intrusion detectors and other auxiliary devices. The charging circuit can charge up to a 6AH 12Volt gel type battery.

Bell Outputs — Two bell outputs are provided, one for fire and one for burglary. Bell outputs are protected by a 3 Amp fuse. Bell current must be provided by the battery and has a fifteen minute auto shut off.

Inputs — All inputs have phase IV protection and auto reset. Once entrance and exit delays have expired, any violated zone will cause an alarm regardless of trip sequence. The phase IV feature is useful in detecting either stay behind intruders or intruders that have managed to bypass the perimeter.

Day/Night Features — The CP1000 is shipped from the factory configured for day operation. In this mode, the pre-entry output is activated when the panel is disarmed and zone 1 or zone 2 is violated. The panel must be armed and disarmed to deactivate the pre-entry output. Normal operation (night) may be restored by cutting the day jumper as shown in Figure I.

Test Switch — A test switch is provided for the user or installer to test the system. In the test mode, all entrance exit times are reduced to five seconds. The bell shut off and auto reset time is reduced to two seconds. This allows the system to be tested without disturbing the neighbors. The pre-entry output is activated in the test mode and is deactivated when restored to normal, and the unit is armed or disarmed.

Forced Arming Switch — The CP1000 has lockout on all burglary zones. If any burglary zone is violated, the panel can not be armed until all zones are restored and the ready output is activated, unless the violated zone is bypassed using a Digi-Key IIC or the forced arming switch is in the forced arming position. When the panel is forced armed, the ready light will flash and the pre-entry output will be activated. The pre-entry output will restore to normal when the exit time expires, but the ready output will flash until disarmed.

Courtesy Output — Terminal 13 has a courtesy output voltage that can be used to trigger a lamp driving carrier module such as the BSR BA-284 burglar alarm interface module, Radio Shack 49-526 or an equivalent. This output is activated during the exit delay and entrance delay period.

Adjusting Delays — Entrance and exit delays can be set from thirty to one-hundred seconds in ten second increments by cutting the appropriate jumpers as shown in Table I. Entrance and exit delays can be independently adjusted.

TABLE I

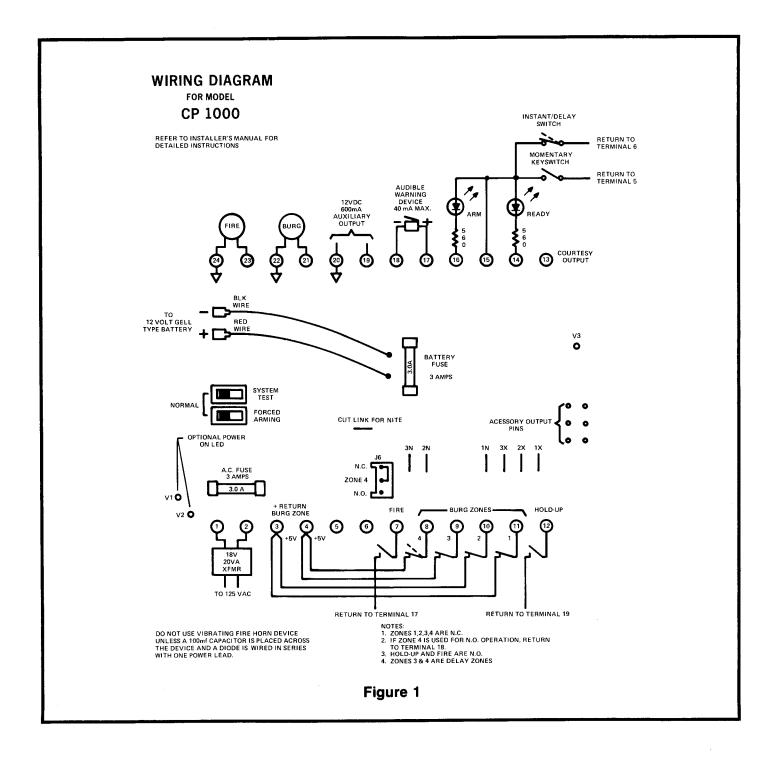
Time in Seconds	Cut jumpers for exit delay time			Cut jumpers for entrance delay time		
30	1X	2X	ЗХ	1N	2N	3N
40		2X	3X		2N	3N
50	1X		3X	1N		3N
60			3X			3N
70	1X	2X		1N	2N	
80		2X			2N	
90	1X			1N		
100		None			None	

INSTALLATION INTRUCTIONS CHALLENGER CP1000

Installing the Challenger in the following sequence should minimize blown fuses, flaired tempers and black smoke!

- 1. Make sure battery and transformer are not connected.
- 2. Wire input zones as shown in wiring diagram Figure I or inside of panel.
- **3.** Connect loop status, arming status, momentary keyswitch and instant/delay switch, audible warning device. All accessories except bells or sirens.
- 4. Make sure link in J6 jumper (Figure 1 or inner cover wiring diagram) is in proper position for zone 4 wiring. Link is shown for normally closed (closed circuit wiring). For normally open (open circuit operation) move link. Make sure loop is returned to terminal 18.
- 5. If delay zones are to be used as instant only, connect jumper between terminal 15 and terminal 6. If delays are to be used, cut appropriate X (exit delay jumpers) and N (entrance delay jumpers) as shown in Table I example. Entrance delay is to be 30 seconds and exit delay is to be 40 seconds. Cut 1X, 2X and 3X for exit delay and 2N 3N for entrance delay.
- 6. Cut jumper if night operation is required.
- 7. Check all wiring connections before plugging in transformer (no battery).

- **8.** When transformer is plugged in, arming lamp should be on. If all loops are secure, ready LED should be on.
- **9.** Panel should arm and disarm with keyswitch or keypad activation.
- 10. Move system test switch to test position. Audible warning device should go on instantly. All loops may now be tested independently. Violate each loop separately. Arming lamp will flash on alarm. Entrance/exit delays if used are shortened to 5 seconds. Reset panel after each zone test. If all loops test properly, connect bells with panel disarmed. Leave test arm switch in test position.
- 11. Connect rechargeable gell type battery. Make sure polarity is correct or bell fuse will blow.
- 12. Test system as in step 10. No need to reset panel after each zone test. Bell will shut off in two seconds and next zone can be tested.
- 13. Move test switch to normal position. Audible warning device will change sound until panel is armed or disarmed.
- 14. Arm system and check entrance and exit delay channels. If day mode is selected, check that violation of zones 1 and 2 cause the audible device to sound when violated with the panel disarmed. The system is now ready.



SPECIFICATIONS

Power Requirements: 125 Vac, 18V 20VA transformer provided. 12 volt gel type rechargeable battery not supplied

Bell Outputs: Burglary and Fire Outputs, 12 Vdc, total current not to exceed 3.0 Amps

Transient and Lightning Protection:

Power Input Protection: 3 MOV's for transversal and longitudinal primary power surge protection, plus two back-up fast

acting zener's.

Loop Input Protection: Each input is protected by a printed circuit spark gap and one megohm surge current limiting resistor.

Zone Response Time: 300 mSec.

Maximum Loop Resistance: Do not exceed 300 ohms

Dimensions: $12"H \times 10"W \times 2-5/8"D$

Shipping Weight: 7 lbs.

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