Fire Burglary Instruments, Inc.

50 Engineers Road, Hauppauge, New York 11788

model 1040 ®

INSTALLATION INSTRUCTIONS

(516) 582-6161 800-645-5430

LISTED TO UL 365 AND 609

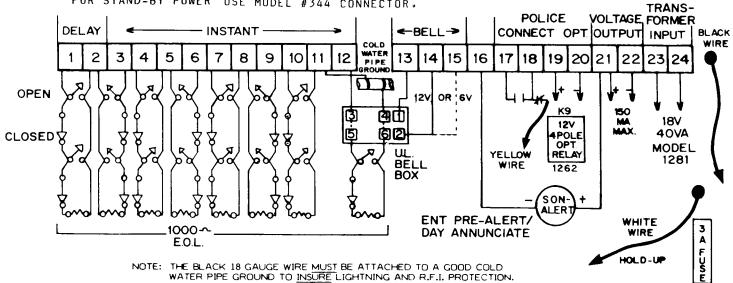
TERMINALS	DESCRIPTIONS
1 & 2 2 & 3 4 & 5 5 & 6 7 & 8 8 & 9 10 & 11 11 & 12	ZONE 1: Closed protective delay loop-use 1k EOL resistor supplied. NOTE B ZONE 2: Closed protective instant loop-use 1k EOL resistor supplied. NOTE B ZONE 3: Closed protective instant loop-use 1k EOL resistor supplied. NOTE B ZONE 4: Closed protective instant loop-use 1k EOL resistor supplied. NOTE B ZONE 5: Closed protective instant loop-use 1k EOL resistor supplied. NOTE B ZONE 6: Closed protective instant loop-use 1k EOL resistor supplied. NOTE B ZONE 7: Closed protective instant loop-use 1k EOL resistor supplied. NOTE B ZONE 8: Closed protective instant loop-use 1k EOL resistor supplied. NOTE B
13 ε 14	12 volt bell output: 13 (-), 14 (+). Note A: .750 AMP max. load.
13 & 15	6 volt bell output: 13 (-), 15 (+). Note A: .750 AMP max. load.
16 & 21	Sonalert output: 21 (+), 16 (-). Use model 515 or 872. To be used for early warning on entrance delay and day circuit annunciation when switches 1-8 are switched on. See Note D on page 2.
17, 18 & Yellow Wire	Form C contact output from police connect relay K9, (option 1262), 3A @ 30V (contact rating). 17-N.O., 18 Common, Yellow-N.C.
19 & 20	Police connect output: Active when 12V 4pole relay K9, (option 1262), is used. 19(+), 20(-). Max. load is 10mA.
21 & 22	12 volt constant output for powering external devices. 21(+), 22(-). 150mA max.
23 & 24	Transformer input 18V 40 VA, Model 1281. The 1040 has a regulated power supply with 1.5 AMP output. Use only with 24 hour power outlet.
Hanging Wires	RED: 12V battery (+). BLACK: 12 V battery (-).(12V 4 AH. Model 1240 (Note C)) WHITE: For silent hold-up, a locking button must be wired between the white wire and Terminal 22 when using optional police connect relay.

NOTE A: USE EITHER 6V OR 12V BELL, NOT BOTH, WIRED WITH 16 AWG WIRE.

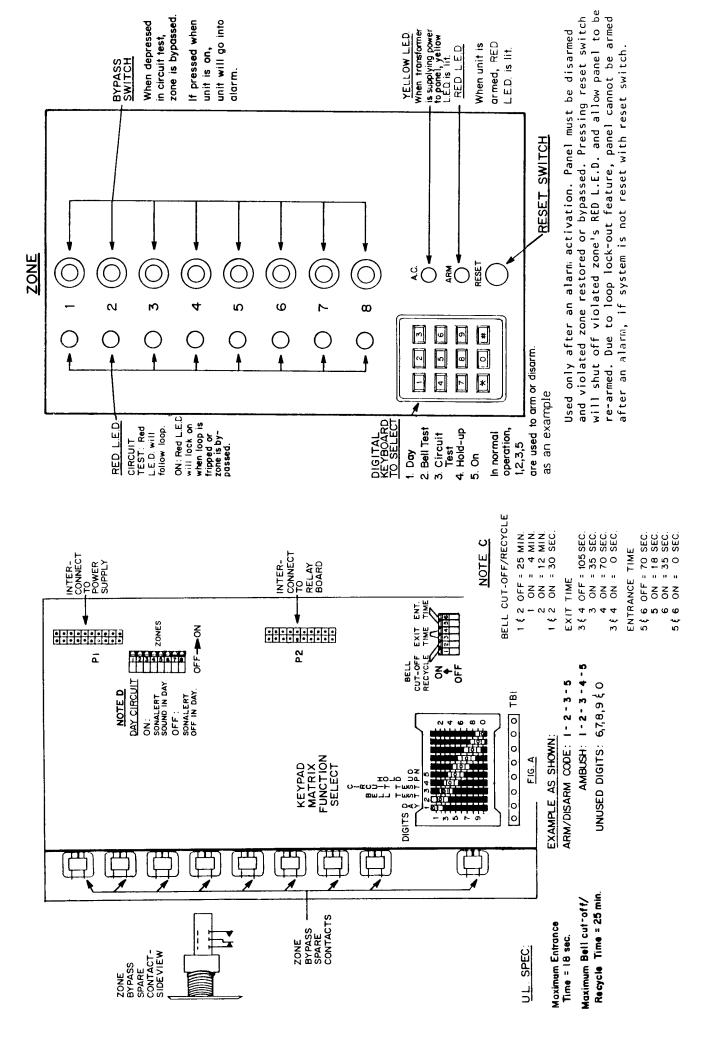
NOTE B: MAX. LOOP RESISTANCE: 400 OHMS: MINIMUM SHUNTING RESISTANCE ACROSS 1k E.O.L. RESISTOR WITHOUT TRIPPING LOOP: 3000 OHMS. ALL ZONES CAN BE USED WITH OPEN OR CLOSED DEVICES. DO NOT USE WIRE WITH A GAUGE HIGHER THAN NO. 22 AWG ON TERMINALS 1-12.

NOTE C: WHEN USED AS A LOCAL ALARM TWO 4 A.H. BATTERIES CONNECTED IN PARALLEL ARE REQUIRED.

FOR STAND-BY POWER USE MODEL #344 CONNECTOR.



Installation of equipment and wiring methods shall be accomplished in accordance with the National Electrical code and ANSI/NFPA NO. 70



OPERATION, TESTING, AND MAINTENANCE PROCEDURE

OPERATION

- Select four digit code to be used. No number may be used more than once.
 DO NOT USE * OR #.
- 2. The code should be set on the matrix as shown in Fig. A. Use any pointed object, such as a pen, to move the slide switches on the matrix to the desired positions. The code will be set on the 5 columns from the extreme left, with that column being the first digit.
- 3. If ambush is desired, any digit not already used may be set in the 4th column from the left.
- 4. The unused columns and rows must be set with the unused digits. No number may be used twice.
- 5. The normal arm/disarm code is as follows:
 1st, 2nd, 3rd, and 5th digits. The ambush code is: 1st, 2nd, 3rd, 4th, and 5th digits. The 4th digit will activate the police connect relay K9 (option 1262).
 The 5th digit will arm or disarm the panel.
- 6. Secure all loops with 1k E.O.L. resistor.
- 7. Bypass switches in out position (orange not showing on front of switch), for zones being used. All others should be in bypass position, (orange showing on front of switch.
- 8. Connect bell, sonalert, etc. to panel.
- 9. Connect transformer and battery to panel.
- 10. Press first digit, then second digit (bell should ring); third digit (all L.E.D.'s should be out), then fifth digit (red L.E.D. should come on); unit is now armed.
- 11. If any zone is now violated, the red L.E.D. should come on and bell should ring for the desired time set with bell cut-off/recycle switches. See NOTE C on page 2.
- 12. To shut off L.E.D. and sonalert after bell has shut down: restore violated zone, disarm unit, then press reset button. Unit can now be armed.
- 13. Unit will not arm if loop is open.
- 14. Exit/entrance time can be set by using switches on main board. See NOTE C on page 2.
- 15. Day Circuit: See NOTE D on page 2.
- 16. Connect cover tamper switch in series with an unbypassed zone loop.

Testing:

- 17. A/C pilot light (Yellow L.E.D.) should be on at all times; if it is out; a.) check 3 amp fuse on 1040 panel, b.) check output of model 1281 transformer, c.) check output of A/C receptacle. Do not connect to a receptacle controlled by a switch.
- 18. Testing of the system is normally performed (in both the A.C. on and stand-by battery modes) each time the panel is armed. This includes checking the bell and all L.E.D. operations as described in the operation.
- 19. In order to test the battery operation, it will be necessary to interrupt A/C power to the panel and then run the system tests described in 18 above. It is recommended that this test be accomplished at least twice a year.

Maintenance:

- 20. Battery: The model 1230 rechargeable solid-gel (12V, 4AH) battery does not require any regular maintenance. Under normal conditions it should last for 3 years. Should replacement be necessary, only an exact replacement should be used. Your installing company has these in stock.
- 21. Fuse and L.E.D.: Only exact replacements should be used; consult your installing company.
- 22. False alarms or impaired operations can occur for various reasons. Chief among these would be: Excessive loss of A/C power which would deplete the stand-by battery, excessive external electromagnetic interference, lightning strikes, poor external (loop) connections, intermittent contact in external devices (swingers) and incorrect operation of the panel.