ADEMCO INSTALLATION INSTRUCTIONS

ALERT II
5600 WIRELESS ALARM SYSTEM

These instructions are applicable only to a system utilizing a late production No. 5620 Receiver/Control (No. 5620-1, as denoted on the unit's Summary of Connections label).

References to the Receiver/Control as the "No. 5620" have been retained herein for brevity.

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Diagrams, Tables, Worksheets

I GENERAL INFORMATION:

The 5600 Wireless Alarm System is a sophisticated residential security system that provides burglary, fire and panic (police/emergency) protection. Alarm, status and control information is transmitted via Ultra High Frequency (UHF) radio transmission at 345 MHz to the receiver/control unit which contains an RF receiver and a microprocessor based control unit which recognizes alarms, status messages and control signals and produces the required response.

An installation may include the following:

Model	Description	Quantity
No. 5620-1	Receiver/Control	1
No. 5621	Security Console (wired)	1 (plus optional 2nd)
No. 5608	Remote Keypad/Transmitter	(Optional, no max.)
No. 5603 No. 5610 No. 5611 No. 5614 No. 5650	Door/Window Transmitter Door Transmitter (Slimline Design) Window Transmitter (Slimline Design) Entry/Exit Transmitter (Slimline Design) Passive Infrared Detector/Transmitter	29 (max.) if no smoke detectors used. 25 (max.) if max. number of smoke detectors used.
No. 5605	Smoke Detector Adapter/Transmitter	4 (max. total) as req'd
No. 591TX	Smoke Detector for use with No. 5605	1 per No. 5605
No. 5601 and/or No. 5606(future)	Emergency (Panic) Transmitter Dual Emergency (Panic) Transmitter	As req'd (no max.)

In addition, optionally, a digital communicator (e.g. No. 678), long range radio transmitter (e.g. No. 7621/7622), or Derived Channel Subscriber Terminal Unit (e.g. No. 698) may be used for remote notification of trouble and alarm conditions.

Note: Above does not include contacts, foil etc. that may be used with Nos. 5603, 5611 or 5614.

II SYSTEM FEATURES:

1. **Wireless Operation:** Burglary, fire and emergency status (contact open, contact closed, supervision check, low battery) is sent to the No. 5620 Receiver/Control via battery powered radio transmitters.

2. **House Identification:** The No. 5620 recognizes 1 of 32 available house identification numbers. Only transmitters set for and sending the number set in the No. 5620 are processed. This prevents transmitters in different residences from activating this receiver/control.

3. **Transmitter Identification:** Each burglary and fire transmitter sends a unique I.D. number to the No. 5620 Receiver/Control, which is displayed on the No. 5621 Security Console in case of supervision check, low battery, alarm or open contact. The No. 5620 can identify up to 29 different transmitters, as well as its No. 5608 Remote Keypad/Transmitter(s) and up to 2 emergency (panic) zones (for low battery and alarm) and a problem on its one wired zone.

4. **Supervised Burglary and Fire Zones:** No. 5620 expects a regular, automatic check-in message from each burglary and fire transmitter. If no messages are received from a particular transmitter during an installer-programmable monitored check-in Interval (24 hours is recommended), the No. 5621 annunciates a check-in TROUBLE message.

5. **Separate Entry/Exit, Interior, and Perimeter** burglary zones.

6. **Delayed burglary protection for entry/exit zone:** Entry time can be independent of exit time. INSTANT function allows entry delay to be eliminated for greater security when the user is in residence or away for an extended period.

7. **Low Battery Monitoring:** All transmitters automatically test their batteries at regular intervals and transmit a low battery condition when it occurs. At that time the battery will have approximately 30 days of life remaining, depending on usage.

8. **Fail Safe Arming:** Burglary protection may not be turned on if any burglary transmitter is reporting an open condition (which can be identified on the No. 5621's display). If fault cannot be cleared, the faulted transmitter(s) in that zone may be bypassed at the No. 5621.

9. **Master (Permanent) Access Code:** All keypad functions except Ready can be activated only after entering a 4 digit access code, which is securely maintained at the No. 5620 Receiver/Control.

10. **Temporary Access Code,** which can be changed from any keypad as often as desired for visitors, babysitters, etc..

11. **Ambush digit** entered in place of last access code digit causes a silent police alarm message to be sent to a central station (optional) while the requested keypad function is normally executed (e.g. disarming).

12. **Installation Options in PROM:** Master access code, ambush digit, entry time, exit time, burglary siren/bell delay and cutoff times, house I.D., AC loss warning delay, wired zone programming, "lights on" option selections, interior zone instant/delayed response selection, burglary transmitter zone assignments and supervision check period are PROM programmed.

13. **Communicator (Dialer) triggers** for the fire, burglary (with a special "by zone" option) and panic alarms, for loss of check-in signal, for low battery, and for receiver/control AC power loss.

14. **Built-in Siren Driver** with different sounds for burglary/audible emergency (rapid or slow hi-lo) and for fire/auxiliary (interrupted rapid hi-lo).

15. **Timer Speed Up** feature for installation test purposes.

16. **Snap-Out Terminal Strip** for all external connections to facilitate printed circuit board replacement, if necessary.

17. **One Wired Zone** on No. 5620 for convenient protection of opening(s) nearby that may not warrant a radio transmitter or for interface of non-wireless sensors (e.g. Inertia Crossbar System for perimeter protection).

18. **Keypad Timeout:** If more than 2 seconds elapse after a key stroke, the access code and function must be reentered.

19. **AC Loss Trouble Indication** provided when AC power is off for more than a PROM programmed interval.

III DESCRIPTION OF SYSTEM COMPONENTS:

A. No. 5620 Receiver/Control: (See Diagram 1)

The No. 5620 monitors all transmitters, wired sensors, keypads, and consoles and generates appropriate output signals. It provides three supervised zones of burglary protection (entry/exit, perimeter and interior), a supervised 24 hour fire zone, a 24hr auxiliary/gas alarm zone and two 24hr panic zones (police and emergency).

A built-in siren driver is provided for connection of external alarm siren speaker(s). Alternatively, an alarm bell can be connected to the unit's alarm relay contacts.

There are no switches inside the No. 5620's cabinet for use during normal operation; however, 3 posts (located on the left side of the unit's large printed circuit board) are provided for test and installation aid purposes. If the upper post is shorted to the middle one (SUPERVISION TEST posts), all of the unit's timing intervals are divided by a factor of 60 (exclusive of AC power loss timing, which becomes instant). That is, all of the "hour" intervals become "minute" and all of the "minute" intervals become "second" (see Section VII starting on Page 26) If the lower post is shorted to the middle one (RESET posts) the system's microprocessor is reset.

The No. 5620 also contains three system fuses and a connector for an optional digital communicator (e.g. No. 678) which may be installed in the unit's cabinet*. The PROM that contains the system configuration is installed in a plug-in socket on the No. 5620's printed circuit board.

***NOTE:** For optimum protection against electrostatic transients (e.g. lightning, static discharge), the communicator should be mounted in the same cabinet as the receiver/control.

B. No. 5621 Security Console: (See Diagram 2)

The No. 5621 provides all system status indications and permits all system control functions. The No. 5621's keypad is used to turn the burglary protection on and off. This protection may be turned on (armed) with or without entry delay and/or interior zone protection. During the off (disarmed) state, the CHIME mode that provides audible and visual perimeter annunciation, may be turned on and off. Problem sensors that are preventing burglary system arming may be bypassed. A temporary access code may be assigned and a user TEST mode may be activated. In addition the fire, police, emergency and auxiliary* alarms may be manually activated at the No. 5621. A built-in speaker provides audible alarm, check-in signal loss, AC loss, low battery and annunciation functions and a 2 digit numeric display gives transmitter identifications. TROUBLE indication denotes loss of check-in (failure of the No.5620 Receiver/Control to receive periodic check-in signals from the burglary and fire transmitters).

***NOTE**: "Auxiliary" will activate an alarm (or no alarm if so programmed) and an "all lights on" output.

A second No. 5621 may optionally be connected in parallel with the first with a separate wiring run from the receiver/control to the console. DO NOT "DAISY CHAIN WIRE" CONSOLES ON ONE FOUR WIRE RUN.

1. **FIRE, POLICE, EMERGENCY and AUXILIARY indicators:** Light when the corresponding alarms are triggered. If the Silent Police Alarm has been selected (see Section V;A;21 on Page 14), the POLICE indicator on the No. 5621 is never illuminated. Turn off these indicators (and external sounder) by entering the access code followed by OFF.

2. **AWAY and HOME Indicators** (Red): Never both lit at the same time. The AWAY indicator is lit while the burglary protection, including the Interior Zone, is on. The HOME indicator is lit while the burglary protection, not including the Interior Zone, is on. Either indicator is turned off by entering the access code followed by OFF.

3. **TEST Indicator** (Amber): Lit while the TEST feature is turned on (see Section IV;14,15 on Page 11). TEST feature may be turned on only when burglary protection is off. A single beep will occur once every 30 seconds as a reminder that the system is in the TEST mode.

4. **BYPASS Indicator** (Amber): Lit while burglary protection is on with one or more faulted transmitters bypassed. May be turned on with the burglary protection. Always turns off when the burglary protection is turned off.

5. **INSTANT Indicator** (Amber): Lit while the burglary protection is on with no entry delay. May be turned on with the burglary protection. Always turns off when burglary protection is turned off.

6. **READY Indicator** (Green): Lit when all burglary sensors/transmitters have reported closed loop status (no faults). May be lit only while burglary protection is off.

7. **POWER Indicator** (Green): Lit when AC power is on and out when AC power is off. If AC power remains off for more than PROM programmed interval, this indicator will remain out even if AC power is restored. Then, this indicator can be lit only by entering the access code followed by OFF.

8. **TRANSMITTER IDENTIFICATION Display:** Two digit numeric display located on the right hand side of the No. 5621. When more than one number must be displayed, they are shown sequentially, repetitively. Each number is displayed, for approximately 2 seconds. Located just below this window are 3 back-lit messages which indicate the reason for the display (see 9, 10, 11, below). When the burglary protection is off, transmitter numbers identifying open sensors may be displayed. In this case, none of the 3 messages will be lit.

9. **BURGLRY (so-abbreviated) Message:** Lit when a burglary alarm has been triggered. TRANSMITTER IDENTIFICATION display indicates which transmitter(s) caused the alarm. A "00" indication denotes a wired loop disturbance. Extinguished (and external sounder silenced) by turning off burglary protection (enter access code followed by OFF) and then <u>again</u> entering access code followed by OFF to clear memory (and silence rapidly beeping No. 5621).

10. **TROUBLE Message:** If the burglary protection is off (or at <u>any</u> time, if so-programmed), and no other alarms have occurred, the TROUBLE message will light to indicate a loss of check-in problem and the TRANSMITTER IDENTIFICATION display will indicate which transmitter failed to report. The TROUBLE and BATTERY messages may be both lit, indicating that the transmitter battery is too weak for reliable transmission.

    <u>To check the condition of the identified transmitter</u>, force a transmission by opening and closing the transmitter's loop (or otherwise activating the transmitter), and enter the access code followed by OFF. If the TROUBLE message turns off, the transmitter is all right and the cause of the TROUBLE message has disappeared. If the same transmitter keeps reporting TROUBLE messages, it may become necessary to relocate the transmitter to improve its transmission path or to replace the transmitter if it is at fault.

11. **BATTERY Message:** If the burglary protection is off (or at <u>any</u> time, if so-programmed), and no other alarms have occurred, the BATTERY message will light to indicate a weak transmitter battery. The TRANSMITTER IDENTIFICATION display indicates which transmitter(s) need new batteries (or that at least one panic transmitter needs a new battery, if more than one panic transmitter is used with the system). A "00" indication accompanied by a lit BATTERY message indicates low battery in a No. 5608 Remote Keypad/ Transmitter.

    When a low BATTERY message appears, approximately 30 days of battery life remains, but see <u>Section X,</u> starting on Page 32 for replacement recommendations.

To turn off the BATTERY message, replace the weak battery, force a transmission by opening and closing the loop (or otherwise activating the transmitter), then enter the access code followed by depression of the OFF function key. This is done while the burglary protection is off. To restore the LOW BATTERY output trigger, turn burglary protection on and off as described in Section IV; 6 and 7, page 9.

Note: Occasionally, even though a fresh battery has been inserted, the BATTERY message will remain lit after the above procedure. If this occurs, remove the battery in question, inspect the battery clips and reshape them, if necessary, to ensure good contact. Reinsert the battery after two or three seconds and repeat the "turn off" procedure.

C. (Optional) No. 5608 Remote Keypad/Transmitter: (See Diagram 3)

The No. 5608 permits the burglary protection to be turned on and off remotely, without interconnecting wires. Fire, police, emergency and auxiliary alarms may also be triggered and reset from the No. 5608. No audible or visual system status indications are provided by the No. 5608, nor are the TEST and BYPASS functions that are on the No. 5621. A single red indicator LED lights while the unit is transmitting.

Note: Burglary protection can be turned on (armed) from the No. 5608 only if there are no faulted burglary transmitters.

D. Transmitter/Sensors: (See Diagram 4)

1. **No. 5603 Door/Window Transmitter** (Diagram 4a): Permits protection of doors and windows via a closed protective loop, which may contain reed type magnetic contacts or foil. Also see Diagram 8.

2. **No. 5610 Door Transmitter (Slimline Design)** (Diagram 4b): Provides door protection with no wiring required. Transmitter unit containing reed switch mounts on door frame and its accompanying magnet mounts on door. Also see Diagram 9.

3. **No. 5611 Window Transmitter (Slimline Design)** (Diagram 4b): Particularly convenient for mounting on narrow window frames (unit is less than 1 3/8" wide). Provides protection via a closed protective loop which may contain reed type magnetic contacts or foil.

4. **No. 5614 Entry/Exit Transmitter (Slimline Design)** (Diagram 4b): Specifically configured transmission format for use on doors in the entry/exit zone. Convenient for mounting on or adjacent to door frames. Provides protection via a closed protective loop which contains reed type magnetic contacts.

5. **No. 5650 Passive Infrared Detector/Transmitter** (Diagram 4c): Provides 17 zones of wide angle (75° span) coverage with a pattern range of up to 50 feet. Separate pan and tilt controls permit pattern adjustment to achieve desired coverage or avoid hazards. Wall/corner mounting plate is included for fast and easy installation. Has LED walk test capability. Complete descriptive and installation information accompanies the No. 5650.

6. **No. 5605 Smoke Detector Adapter/Transmitter** (Diagram 4d): Provides a base for mounting a No. 591TX Smoke Detector. Has removable drawer for batteries which provide power for adapter's transmitter as well as for the smoke detector. Location and other information for the smoke detector accompanies the No. 591TX and installation information for the No. 5605 accompanies that unit.

7. **No. 5601 Emergency (Panic) Transmitter** (Diagram 4f): This transmitter may be carried about the protected area in a pocket or purse or clipped to a belt. A keyslot hole in its belt/mounting clip permits mounting in any convenient location if desired.

   Momentary activation (even for a fraction of a second) of the unit's pushbutton will cause a signal transmission. The unit's LED lights when the pushbutton is activated. The LED may not light if the battery is weak (as indicated by a low BATTERY message on the No. 5621 Security Console) but the unit may still transmit.

8. **No. 5606 Dual Emergency (Panic) Transmitter:** (future addition). Similar to No. 5601 Transmitter except that it has both Emergency (panic) alarm and Police Alarm button capability.

IV FUNCTIONAL DESCRIPTION OF No. 5621 SECURITY CONSOLE AND No. 5608 REMOTE KEYPAD TRANSMITTER:

The following describes how to operate the No. 5621 and 5608. Select the desired function and push the indicated keys for the result described.

Note: Several functions cannot be performed from the No. 5608 as it is a keypad/transmitter only and provides no sounds or indications except a red indicator which lights when it is transmitting.

/MANUAL ALARMS/

1. **TO TRIGGER FIRE, POLICE, EMERGENCY AND/OR AUXILIARY ALARM AT ANY TIME:** PUSH BOTH ALARM KEYS (**FIRE-FIRE, POLICE-POLICE, EMERG-EMERG** OR **AUX-AUX**) AT THE SAME TIME.

   External Siren/bell and No. 5621 Security Console speaker's sound will begin immediately (unless POLICE - POLICE is pushed and silent POLICE alarm has been programmed and/or if the Auxiliary zone has been programmed for "all lights on" operation or just as an interior audible alarm zone). The LED (No. 5621 only) between the pushed keys will light. Communicator (optional) will send message to central station.

2. **TO TRIGGER AMBUSH (SILENT POLICE) ALARM** (via optional communicator): ENTER FIRST 3 DIGITS (ONLY) OF 4 DIGIT ACCESS CODE, FOLLOWED BY PROGRAMMED AMBUSH DIGIT, FOLLOWED BY DEPRESSION OF KEY FOR REQUESTED FUNCTION (**OFF, AWAY, HOME,** ETC).

   Silent police alarm will be sent to central station via (optional) communicator, while desired function is executed.

3. **TO TURN OFF ANY ALARM IN PROGRESS:** ENTER 4 DIGIT ACCESS CODE IMMEDIATELY FOLLOWED BY DEPRESSION OF **OFF** FUNCTION KEY.

   Siren/bell will stop, No. 5621's transmitter I.D. display will indicate transmitter(s) that caused alarm (alarm memory). **Note:** If a transmitter is activated during the armed period, the siren/bell will sound for the programmed time and then turn off. Alarms from that transmitter (PROM option) are ignored thereafter until the system is disarmed; however, other transmitters are still capable of initiating an alarm and an additional siren/bell sounding interval.

   To clear display, enter access code again, followed by depression of the OFF function key.

4. **TO CHECK FOR FAULTED TRANSMITTER(S) BEFORE TURNING ON BURGLARY PROTECTION** (No. 5621 only.): If **READY** LED IS LIT, NO TRANSMITTERS ARE FAULTED. OTHERWISE PUSH **READY** FUNCTION KEY.

   Faulted transmitter number(s) will be displayed.

5. **TO TURN ON BURGLARY PROTECTION WHEN HOME IS NOT GOING TO BE OCCUPIED:** ENTER ACCESS CODE IMMEDIATELY FOLLOWED BY DEPRESSION OF **AWAY** FUNCTION KEY. MAY BE FOLLOWED BY FUNCTION 9 AND/OR 10 BELOW. LEAVE BEFORE EXIT DELAY PERIOD ENDS.

   If no transmitters are faulted, the No. 5621 will beep twice and the AWAY indicator will light. Otherwise, one beep is heard (indicating that the burglary protection is still off) and the faulted transmitter number(s) will be displayed.

   NOTE: If the system is armed in the HOME mode, it is possible to arm it directly into the AWAY mode when leaving. However, if a fault is present in the interior zone when this is attempted, the system's burglary protection will turn off.

6. **TO TURN ON BURGLARY PROTECTION WHILE HOME IS OCCUPIED:** ENTER ACCESS CODE IMMEDIATELY FOLLOWED BY DEPRESSION OF **HOME** FUNCTION KEY. MAY BE FOLLOWED BY FUNCTION 9 AND/OR 10 BELOW.

   If no transmitters are faulted, the No. 5621 will beep 3 times and the HOME indicator will light. Otherwise one beep is heard and the faulted transmitter number(s) will be displayed. Interior zone sensors/ transmitters are automatically bypassed while the rest of the burglary protection is armed.

   NOTE: If the system is armed in the AWAY mode, it is possible to arm it directly into the HOME mode upon entering without causing an alarm.

7. **TO TURN OFF BURGLARY PROTECTION:** ENTER ACCESS CODE IMMEDIATELY FOLLOWED BY DEPRESSION OF **OFF** FUNCTION KEY (COMPLETE BEFORE ENTRY DELAY PERIOD, IF ANY, ENDS WHEN REENTERING HOME AFTER BEING AWAY).

If entering and no alarm(s) had occurred, the No. 5621's sounder will begin beeping slowly when home is entered. If alarm(s) had occurred, it will begin beeping rapidly (or be silent if the alarm had occurred in the entry/exit zone). After the burglary protection is turned off, the No. 5621 will beep once if there had been no alarms. Otherwise, the faulted transmitter number(s) will be displayed (alarm memory).

9. **TO TURN BURGLARY PROTECTION ON AND BYPASS FAULTED TRANSMITTERS (AS INDICATED BY FUNCTION 4 ABOVE AND ONLY AT No. 5621):** PERFORM EITHER FUNCTION 5 or 6 ABOVE, IMMEDIATELY FOLLOWED BY DEPRESSION OF **BYPASS** FUNCTION KEY.

   Same result as either function 5 or 6 above, except BYPASS indicator will be lit and any faulted transmitters will be bypassed. All bypasses are automatically removed when the burglary protection is turned off.

   NOTE: If the system is armed in the AWAY (HOME) mode and it is armed directly into the HOME (AWAY) mode, any bypasses present in the earlier mode are maintained in the later arming mode only if the BYPASS key is pressed as part of the later arming procedure.

10. **TO TURN BURGLARY PROTECTION ON AND MAKE ENTRY ZONE AN INSTANT ALARM ZONE (NO ENTRY DELAY):** PERFORM EITHER FUNCTION 5 OR 6 ABOVE, IMMEDIATELY FOLLOWED BY DEPRESSION OF **INSTANT** FUNCTION KEY.

    Same result as either function 5 or 6 above, except INSTANT indicator will be lit and (after expiration of exit delay) entry will trigger immediate alarm. When the burglary protection is turned off, the entry delay is automatically returned to normal.

11. **TO ASSIGN NEW TEMPORARY ACCESS CODE:** ENTER 4 NUMBERS OF MASTER (PERMANENT) ACCESS CODE, IMMEDIATELY FOLLOWED BY DEPRESSION OF **ACCESS** FUNCTION KEY, IMMEDIATELY FOLLOWED BY THE ENTRY OF 4 NUMBERS CHOSEN FOR TEMPORARY ACCESS CODE. CHECK BY ENTERING NEW TEMPORARY ACCESS CODE FOLLOWED BY DEPRESSION OF **OFF** FUNCTION KEY. INTERIOR SOUNDER WILL BEEP ONCE IF NEW CODE IS IN EFFECT.

    Caution: The 4th digit chosen for the temporary access code must be different from the programmed Ambush digit. Ambush alarms may be triggered with either the master or temporary access code as described under Function 2 above. If the 4th digit chosen is the same as the programmed Ambush digit, there will be no ambush capability for the temporary access code until the code is changed to one where the 4th digit chosen is not the same as the Ambush digit.

The **master** access code, PROM programmed at the time of installation, never changes and can be used at any time. Its use should be limited to the owner of the system. The **temporary** access code may be changed whenever desired and allows others temporary access to the home. **Note:** Burglary protection turned on by using the **master** access code can only be turned off by using the **master** access code, although if turned on with the **temporary** access code, it may be turned off by either the **temporary** or **master** code.

To remove a **temporary** access code, enter **master** access code, depress ACCESS, and key the **master** access code again.

/CHIME/

12. **TO TURN ON CHIME FEATURE (ONLY WHEN BURGLARY PROTECTION IS OFF):** ENTER ACCESS CODE, IMMEDIATELY FOLLOWED BY DEPRESSION OF **CHIME** FUNCTION KEY.

    While the system is disarmed, whenever an entry/exit or perimeter sensor/transmitter is disturbed, the No. 5621 beeps once. Transmitter numbers will be displayed if the READY function key is pushed.

13. **TO TURN OFF CHIME FEATURE:** ENTER ACCESS CODE, IMMEDIATELY FOLLOWED BY DEPRESSION OF **CHIME** FUNCTION KEY (the CHIME feature is not turned off by arming or disarming).

    No. 5621 no longer sounds for entry/exit or perimeter sensor/transmitter disturbances.

/TEST/

14. **TO TURN ON TEST FEATURE (AT No. 5621 ONLY AND ONLY WHEN BURGLARY PROTECTION IS OFF):** ENTER ACCESS CODE, IMMEDIATELY FOLLOWED BY DEPRESSION OF **TEST** FUNCTION KEY.

    No. 5621 will beep twice and TEST indicator will light. Subsequently, No. 5621 will beep once every 30 sec. if no message is received and twice each time a sensor/transmitter message is received. Transmitter number will be displayed while the sensor/transmitter is disturbed (in the case of emergency transmitters, smoke detector transmitters and remote keypads, no display will appear). The external sounder and dialer triggers will not operate.

15. **TO TURN OFF TEST FEATURE (AT No. 5621 OR 5608):** ENTER ACCESS CODE, IMMEDIATELY FOLLOWED BY DEPRESSION OF **OFF** FUNCTION KEY.

    No. 5621 will beep once and TEST indicator will go out. The system cannot be armed unless the TEST feature is off.

/CHECK/

16. **TO TURN OFF No. 5621's LOSS OF CHECK-IN OR LOW BATTERY SOUNDER:** ENTER ACCESS CODE, IMMEDIATELY FOLLOWED BY DEPRESSION OF **OFF** FUNCTION KEY.

    No. 5621 will stop beeping continuously, but affected transmitter number(s) will be displayed. Procedures for clearing TROUBLE and BATTERY message indications are described in Section III; B; 10,11 on Page 6.

17. **TO RESTORE No. 5621's POWER LED WHEN AC POWER HAS BEEN OFF LONGER THAN PROM PROGRAMMED INTERVAL:** ENTER ACCESS CODE, IMMEDIATELY FOLLOWED BY DEPRESSION OF **OFF** FUNCTION KEY.

No. 5621 will stop beeping continuously (if not previously silenced) and POWER indicator will light (if AC has been restored).

V SYSTEM PROGRAMMING:

A. Preliminary PROM Data:

The No. 5620 Receiver/Control uses a PROM chip (No. 691) (not supplied) that must be custom programmed (by or for the installer) for each system. The following preliminary PROM data will be needed for each installation and should be determined, where appropriate, by consulting with the homeowner. Use Table A to record the data. Complete information for utilizing this data in the programming of the PROM with a No. 690 PROM Programmer accompanies the No. 690.

1. **AC POWER LOSS AUDIBLE/TRIGGER WARNING DELAY:** Any multiple of 4 minutes, 0 thru 8 (32 minutes maximum) may be chosen. Selection of 9 eliminates the warning for loss of AC.

2. **PERMANENT ACCESS CODE:** Any 4 digits (different or repeated) may be selected.

3. **AMBUSH DIGIT:** Sends silent police alarm via optional communicator, when entered in lieu of last digit of Master Access Code. Any digit different from last digit of Master Access code may be selected.

4. **ENTRY DELAY:** Any multiple of 15 seconds, 0 thru 8 (120 seconds max.) may be chosen (choose "0" only if no entry delay is desired). 9 gives infinite delay; DO NOT USE.

5. **EXIT DELAY:** Any multiple of 15 seconds, 1 thru 8 (120 seconds max.) may be chosen. 9 gives infinite delay; DO NOT USE.

6. **DELAY ON EXTERIOR BURGLARY SIREN/BELL SOUNDING AND DIALER TRIGGER OUTPUT:** Any multiple of 15 seconds, 0 thru 8 (120 seconds max.) may be chosen (choose "0" if immediate sounding is desired). 9 gives infinite delay; DO NOT USE.

7. **SIREN/BELL SOUNDING DURATION:** Any multiple of 4 minutes, 1 thru 8 (32 minutes max.) may be chosen. Selection of 9 causes sounding with no cutoff. Selection of 0 gives no sounding.

8. **CHECK-IN INTERVAL:** Any multiple of 2 minutes, 120 thru 998 (240 minutes thru 1996 minutes) may be chosen. **A value of 720 (1440 minutes or 24 hours) is recommended.** If no signals are received from a given transmitter by the No. 5620 during the programmed Check-In Interval, a TROUBLE message is annunciated for that transmitter by the No. 5621. Selection of 999 eliminates the check-in interval.

   Notes: a. The elapsed time from the beginning of a condition that interferes with the reception or transmission of a transmitter's check-in and other signals (e.g. dead or missing transmitter battery, missing transmitter, altered transmission path) and the annunciaton of a TROUBLE message by the No. 5621 may vary from one to just under two times the programmed Check-In Interval.

For example, consider the recommended Check-In Interval of 1440 minutes (24 hours). If a transmitted signal is received by the No. 5620 from a given transmitter immediately following the start of a timed Check-In Interval, but none is received thereafter from that transmitter, it will be just under 48 hours later (the remainder of that 24 hour interval plus the ensuing 24 hour interval) that a Check-In TROUBLE message is annunciated for that transmitter by the No. 5621.

On the other hand, suppose that a transmitter's signal is received immediately preceding the start of a new timed Check-In Interval, but none is received thereafter from that transmitter during that interval. A check-in TROUBLE message will in this case be annunciated for that transmitter by the No. 5621 just 24 hours later.

b. Shorter than 24 hour intervals increase the possibility of unnecessary TROUBLE messages resulting from temporary extraordinary interferences while longer intervals delay notification of genuine conditions that should be checked.

9. **LOSS OF CHECK-IN/TRANSMITTER LOW BATTERY ANNUNCIATION:** Audible and visual annunciation to the user of the system may be chosen to be at the time that the receiver/control becomes aware of the situation (24 hour annunciation independent of the arming status of the system) OR only when the system is disarmed (avoids disturbance of the occupants at night when they are sleeping and the system is likely to be armed).

10. **AUTOMATIC/MANUAL BYPASS SELECTION:** In the manual mode, the system is fail safe armed, wherein an unresolved sensor fault prevents arming of the burglary protection unless the manual BYPASS procedure (described previously in Section IV;9 on page 10) is used. If automatic bypass is chosen, any unresolved sensor faults will be automatically bypassed when the burglary system is armed in either the HOME or AWAY modes.

11. **EXTERNAL SIREN SOUNDING SELECTION:** Two siren sounding configurations are selectable for burglary, audible police, and emergency alarms. One provides a continuous, slowly alternating two tone sound. The other provides a continuous, rapidly alternating two tone sound. In either case, a pulsed, rapidly alternating two tone sound is produced for fire and exterior audible auxiliary alarms.

12. **AUXILIARY ALARM SOUNDING:** Selection of internal sounding for an auxiliary alarm or of both internal and external sounding for an alarm in this zone is provided.

13. **"LIGHTS-ON" OUTPUT DELAY:** A "lights-on" voltage output, capable of energizing a No. 477 AC Line Carrier Transmitter, can be selected for activation as soon as the console speaker starts producing alarm sounds (instantly for instant zones and after entry delay for delayed zones). Alternatively, it can be selected to be activated as soon as the exterior speaker or bell starts producing alarm sounds.

14. **AUXILIARY FUNCTION DEFINITION:** The auxiliary function may be selected as a non-alarm function that merely provides the "all lights-on" voltage output or as a 24 hour auxiliary alarm function with "all lights-on" as well.

15. **"LIGHTS-ON" REACTION TO ENTRY WHEN ARMED "AWAY":** The "lights-on" voltage output can be selected for activation immediately upon faulting the entry/exit zone (opening of a main access door as well as after an alarm) or only subsequent to an audible alarm.

16. **HOUSE I.D.:** Any number from 00 thru 31 may be chosen. All of the system's transmitters will later be set for this House I.D. number and only transmitters sending this number will be recognized and processed by the No. 5620 Receiver/Control.

    It is imperative that a House I.D. that is not being used in a nearby installation be chosen in order to prevent accidental triggerings.

17. **INTERIOR ZONE RESPONSE TO INTRUSION:** When in the AWAY armed mode, one of two responses is possible (depending upon programming selection) to an intrusion into the interior zone -- an instant alarm or a delayed alarm (the same as in the entry/exit zone). The latter selection permits motion detection to be used in an entrance foyer through which passage must be made on entry and exit, to or from the system's console.

18. **DIALER TRIGGER CONFIGURATION:** Two configurations of dialer triggers are selectable. One provides a unique trigger for every condition: burglary, fire, police, emergency, and auxiliary alarms, AC power loss, transmitter low battery, and loss of transmitter check-in signal. The second provides burglary triggers by zone -- entry/exit, perimeter, and interior. However, to get this the auxiliary alarm trigger is eliminated and the transmitter low battery condition and the loss of transmitter check-in signal condition have their reporting combined into one common dialer trigger, produced for either condition.

19. **WIRED LOOP:** The No. 5620 Receiver/Control has provision for a wired, supervised protective zone that may be PROM programmed as an "Entry/Exit", "Interior" or "Perimeter" burglary zone, as a "Police", "Emergency" or "Auxiliary" alarm zone or "Not Used". One of these options should be selected.

    Caution: Do not select the wired zone as an "Interior" zone unless one or more transmitters are also going to be used in the Interior zone. Otherwise, the wired zone will not be bypassed when the burglary protection is turned on while the home is occupied (Section IV; function 6 on Page 9).

20. **INTERIOR SOUNDER RESPONSE TO ARM/DISARM:** The No. 5621 Security Console's internal sounder may be PROM programmed to be "silent" or "audible" upon arming and disarming. One of these two options should be selected.

21. **RESPONSE TO POLICE ALARM** (from No. 5601, 5606, 5608 or 5621) may be PROM programmed to be "silent" (no bell, siren, or LED) or "audible" upon triggering. One of these two options should be selected.

22. **BURGLARY ALARMS TRIGGERED PER TRANSMITTER DURING AN ARMED PERIOD:** Selection may be made of single or multiple alarm sounding/reporting during one armed period.

23. **TRANSMITTER I.D.s:** The number of transmitters to be assigned to each of the no. 5620 Receiver/Control's burglar alarm zones must be determined by surveying the premises. Section VI; A on Page 17 should be consulted for guidance in selecting locations for the transmitters.

a. Burglary Transmitter I.D.s: A maximum total of 25 burglary transmitters (e.g. Nos. 5603, 5610, 5611, 5614, 5650) may be assigned to the Entry/Exit Delay, Interior and Perimeter zones, apportioned in any manner (25 if 4 smoke detectors are to be used and up to 29 if no smoke detectors are to be used). Moreover, a single transmitter (such as the No. 5603, 5611 or 5614) may protect more than one opening if several contacts or devices are connected in its protective loop.

b. Fire and Gas Detector Transmitter I.D.s: A maximum total of 4 No. 5605 Smoke Detector Adapter/Transmitters may presently be assigned to the system.

c. Panic Transmitter I.D.s: Any number of No. 5601 or 5606 Emergency (Panic) Transmitters may be used with the system; however, their Transmitter I.D.'s are pre-determined and no PROM programming is necessary.

d. Transmitter I.D. numbers should be assigned, in accordance with the following rules:

1) I.D. Number "00" is reserved for the wired zone. Numbers 01 through 25 (through 29 if smoke detectors are not used) are available for burglary transmitters (group them by zone in this order: Entry/Exit, Interior, Perimeter). Numbers 26 through 29 are reserved for fire and gas detection. Numbers 30 and 31 are used by panic transmitters (30 for police panic, 31 for emergency panic).

2) Leave gaps between each zone's transmitter I.D. numbering sequence to permit future expansion.

3) Never have unused I.D. numbers between the first and last I.D. numbers of a zone.

4) If the zone has only one transmitter, that zone's "first" and "last" I.D. number in the PROM programming will be the same.

EXAMPLE: For a system with 6 Entry/Exit zone transmitters, 6 Interior, 6 Perimeter, 2 Fire and 2 Panic transmitters, the following I.D. numbers could be assigned:

TRANSMITTER I.D.	ASSIGNMENT
00	Reserved for Wired Loop (may be programmed for Entry/Exit, Interior or Perimeter) if used.
01 - 06	Entry/Exit
07, 08	(future Entry/Exit or Interior)
09 - 14	Interior
15	(future Interior or Perimeter)
16 - 21	Perimeter
22 - 25	(future Perimeter)
26, 27	Fire
28, 29	(future Fire or Gas)
30	Police Panic (may be PROM programmed for "silent" or "audible")
31	Emergency Panic (always "audible")

Table B, which reproduces the Data Cards that accompany the No. 5621 Security Console, may be used to enter appropriate transmitter I.D. information for this installation.

B. Transmitter Programming:

The DIP Switches located on each transmitter must be set for the proper "House I.D." and "Transmitter I.D." as assigned previously for the No. 5620's PROM. **NOTE:** Do **not** use a pencil point to set the DIP switches as conductive graphite dust can fall inside and cause erroneous circuit operation. Use the DIP Switch Tool supplied with the No. 5625 Installation Aid or alternatively a paper clip if the tool is not available. To avoid possible damage, do not use excessive force.

See Diagrams 3, 4 and 5.

1. **For EACH transmitter** (including the No. 5608 Remote Keypad transmitter[s]), the first 5 switches (1,2,3,4,5) are used to set the "House I.D.". See Note following Step 5.

2. **For BURGLARY Transmitters** (e.g. Nos. 5603, 5610, 5611, 5614, 5650), the next five switch positions (6,7,8,9,10) are used to set the "Transmitter I.D.". See Note following Step 5.

3. **For FIRE (e.g. No. 5605) Transmitters,** switch positions 6 and 7 are used to select their "Transmitter I.D.s" as shown in Diagram 5.

4. **For the No. 5601 Emergency (Single Button Panic) Transmitter,** switch position 6 determines whether the unit is set for EMERGENCY Panic ("ON", I.D. 31, always audible) or POLICE Panic ("OFF", I.D. 30, either silent or audible as PROM programmed).

5. **For the No. 5606 Dual Emergency (Panic) Transmitter,** no internal "Transmitter I.D." setting is necessary. The two position switch on the transmitter's cover permits the user to select an always-audible EMERGENCY Panic (I.D. 31) or a silent or audible (as PROM programmed) POLICE Panic (I.D. 30) operation.

Note: An alternative to using the Switch Postion "ON-OFF" table shown in Diagram 5 to set the "House I.D." or Burglary "Transmitter I.D." numbers is provided by the following method:

Assume I.D. Values associated with the switches as shown in the following table. Then, the sum of the I.D. Values for switches 1-5 that are set in the ON position will equal the desired House I.D. number and the sum for switches 6-10 set in the ON position will equal the desired Transmitter I.D. number.

Switch:	1	2	3	4	5
Switch:	6	7	8	9	10
I.D. Value:	16	8	4	2	1

For example, if switches 1 and 3 are "ON", the House I.D. set will be 20 (16 + 4). If switches 8 and 9 are ON, the Transmitter I.D. set will be 6 (4 + 2).

VI SYSTEM INSTALLATION AND WIRING:

A. Preliminary Location Considerations:

In order to obtain optimum performance of the system, it is necessary to have some understanding of the transmission characteristics of the radio signals used in the system. These transmission frequencies penetrate building materials such as wood and plaster, but the signal strength is more greatly reduced by concrete and brick, and these frequencies will not penetrate metal at all. It is, therefore, necessary to consider the effects of placement of various elements of the system with regard to the physical surroundings. In certain cases, it may be necessary to move either a transmitting unit or the No. 5620 Receiver/Control, to provide reliable operation of the system. In general, certain precautions should be observed.

/DO NOT YET MOUNT ANY OF THE SYSTEM/
/ COMPONENTS PERMANENTLY IN PLACE /

1. **The No. 5620 Receiver/Control should be located in a central location,** at least a few feet above ground level. Basement installation is not absolutely precluded, but the operating range will probably be less and transmitters located outside the structure itself (e.g. in a detached garage) may not be received. A location in a first floor closet is often preferable.

2. **The No. 5620 should not be located near large metal objects** such as refrigerators, ranges, storage cabinets, etc. In no case should the No. 5620 be mounted to a metal wall, post or girder.

3. **The No. 5620 should not be mounted on a concrete or brick wall** if it can be avoided.

4. **The transmitters should always be located at least four inches away from any substantial metal objects** in order to avoid detuning effects. They obviously must not be located inside a metal structure, such as a file cabinet or safe, since there would be no penetration through the metal. Where protection of such a unit is required, a remote sensor should be utilized, and connected in the protective loop of a No. 5603, 5611 or 5614 unit.

   Locations near electric motors, air conditioners, lamp dimmers and similar electrical appliances should be avoided as well.

5. **The approximate indoor range of the transmitters in most residential buildings is 100 feet,** although in some surroundings greater range may be obtained.

6. **Transmitters should be installed only where the temperature is maintained between 32°F and 120°F (0° and 50°C).** Do not locate a transmitter where it will be exposed to freezing temperatures or direct sunlight. If such areas need to be protected, run wires from the sensor to a transmitter located in a temperature controlled area.

7. **No. 5605 Smoke Detector Adapter/Transmitters, if used, should be located in accordance with the guidelines supplied with the smoke detectors to be used** and the results of the preliminary tests described in the following section.

8. **No. 5650 Passive Infrared Detector/Transmitters, if used, should be located in accordance with the instructions that accompany them** and the results of the preliminary tests described in the following section.

B. Preliminary Programming/Location Test:

The following procedure is intended to provide a preliminary check on the system programming and to determine the suitability of proposed locations for the No. 5620 Receiver/Control and the transmitters, before permanent installation is made.

1. **Place the No. 5620 Receiver/Control temporarily in its proposed location and:**

   a. Install the programmed PROM carefully in the PROM socket in the middle of the No. 5620's PC board (if available, a No. 692 PROM Insertion Tool should be used). Ensure that the PROM's index mark is toward the left, as indicated in Diagram 6.

   b. Connect the No. 5621 Security Console to the No. 5620, temporarily, via its four leads as indicated in Diagram 6.

   c. Connect a 1K ohm resistor (e.g. No. 606) across terminals 12 and 13 if one is not already in place.

d. Install the antenna by guiding it into the grommeted hole at the top of the cabinet and inserting it in the connector at the upper left hand corner of the receiver's circuit board. The antenna must stand straight up and must not be bent in any direction.

Caution: Do not use excessive force when inserting the antenna. It must not be allowed to penetrate beyond the bottom of the connector, which would result in less than maximum projection of the antenna from the cabinet.

e. Temporarily connect terminals 1 and 2 to the output terminals of the No. 1324 transformer supplied, with enough wire to reach the nearest 120VAC outlet (do not plug it in until Step 3 below).

2. **Connect the 6V battery** to the No. 5620's battery connector cable.

3. **Plug the transformer into the 120VAC outlet.** The green LED within the No. 5620 should light. The No. 5621's green READY and POWER indicator LEDs will light and its sounder will beep continuously. Enter the 4 digit access code, followed immediately by depression of the OFF function key. The sounder will silence.

4. **Temporarily place a jumper across the SUPERVISION TEST POSTS in the No. 5620 (See Diagram 6).** The No. 5621's TROUBLE message will light and the sounder will beep continuously.

   a. At the No. 5621, enter the 4 digit access code, followed immediately by depression of the OFF function key. The sounder will stop.

   b. Verify that all burglary and fire transmitter numbers programmed into the PROM are sequencing through the No. 5621's transmitter I.D. display (emergency/panic transmitters will not have an indication).

   Note: This step does not actually check if each transmitter is transmitting properly. Instead, it verifies that each transmitter I.D. is properly included in the PROM. If discrepancies are revealed, disconnect the battery, unplug the transformer, remove the PROM (with a No. 692-1 PROM Removal Tool, if available) and verify its programming by using a No. 690 PROM Programmer.

5. **Remove the jumper from the No. 5620's SUPERVISION TEST POSTS.**

6. **At the No. 5621, enter the 4 digit access code, followed immediately by the TEST function key.** The sounder will beep and the amber TEST indicator LED will light.

7. **Set each transmitter's coding switches** as described in Section V; B on Page 16 if this has not already been done. Mark each transmitter temporarily (e.g. with a tag or piece of masking tape) to indicate its transmitter I.D. number and proposed location.

8. **Install the required battery (or batteries) in each transmitter** as indicated thereon and in Section X starting on Page 32 herein. See Diagrams 3 and 4 for battery access information.

Important: Make sure that the battery terminals are not bent and reshape them if necessary to ensure good contact when connected.

After a transmitter's battery is installed, open circuit and short circuit the terminals and observe that its corresponding I.D. number will appear and then clear, respectively, from the display on the No. 5621.

Note: **At this point, use of the No. 5625 Installation Aid is MANDATORY for testing the quality of the transmission path between each transmitter's proposed location and the No. 5620 Receiver/Control.** Follow the instructions accompanying it and then skip to Step 10. If the No. 5625 is not available, proceed as follows, but bear in mind that, without use of the No. 5625 to assure the quality of the transmission path, no absolute statement concerning transmitter location acceptability and transmission reliability is possible.

9. **At each proposed transmitter location, force several transmissions from the transmitter intended for that location** (while holding it in the position it will occupy when installed and listen (or have an assistant listen) for two beeps from the No. 5621 each time a transmission is received at the No. 5620. The proposed location may be acceptable if successive transmissions consistently result in two beeps at the No. 5621. At times, changing the transmitter location by only a few inches can mean the difference between a successful, and unsuccessful transmission. Occasionally, a new location may have to be selected for the No. 5620 Receiver/Control.

   a. No. 5608 will transmit whenever any of its numeric keys is depressed.

   b. No. 5603, 5611 and 5614 will transmit whenever a circuit (use a jumper) across the unit's screw terminals is closed or opened.

   c. No. 5610 will transmit whenever its associated magnet is brought close to or removed from the space between the wedge-shaped magnet positioning marks on its side (with a jumper across its protective loop terminals).

   d. No. 5605 (with appropriate smoke detector connected, see instructions accompanying No. 5605) will transmit when its test switch is depressed (every 6 seconds if the switch is kept depressed).

   e. No. 5609 will force a transmission when its test switch is depressed.

   f. No. 5650 will transmit when sensing motion (test with cover removed).

   g. No. 5601 and 5606 will transmit when the unit's actuator button is depressed. Walk throughout the premises to determine areas where "successful", "questionable" and "unsatisfactory" transmission paths exist and so-inform the subscriber of these areas.

10. **When satisfactory locations have been determined,** disconnect the No. 5620's plug-in transformer and battery, and proceed with the permanent installation. Transmitter batteries need not be removed.

C. Installation and Wiring of No. 5620 Receiver/Control:

DO NOT PLUG IN THE TRANSFORMER OR CONNECT THE BATTERY UNTIL ALL SYSTEM WIRING IS COMPLETE AND READY FOR TEST AND CHECKOUT.

Use of twisted wiring is recommended for all runs for immunity to unwanted signals.

1. **Mount the No. 5620** in the location selected in accordance with Section VI; A,B starting on Page 17.

2. **Make terminal block connections** in accordance with Diagram 6 and the following:

Terminal(s)	Connections
1, 2	12VAC INPUT: Connect the output terminals of the No. 1324 Transformer, but do not plug in the transformer.
3	SIREN DRIVER POWER INPUT: See Diagram 7 to determine appropriate voltage input for siren configuration used. +6V may be obtained from terminal 20, +12V from terminal 16, or power may be provided from an external source (in which case connect [+] to terminal 3 and [-] to terminal 17 in the No. 5620).
4	YELLOW LEAD OF No. 5621 (and optional second No. 5621, if used, with separate wiring run from this terminal).
5	Not used.
6	ARM/DISARM STATUS OUTPUT for control of accessories. 0VDC when armed, +6VDC (5mA max) when disarmed.
7	"ALL LIGHTS ON" OUTPUT for activation of No. 477 AC Line Carrier Transmitter. Open circuit when off, 68 ohm path to ground when the output is active. The output remains until the system is turned OFF.
8	GREEN LEAD OF No. 5621 (and optional second No. 5621 if used, with a separate wiring run from this terminal).
9, 10, 11	BELL RELAY (DRY) CONTACTS (Rating: 2A max at 28VDC). Center Arm (10) transfers from 9 (N.C.) to 11 (N.O.) on alarm: steadily for "Burglary" or "Audible Panic" and pulsing for "Fire", "Gas", or "Auxiliary". An optional bell may be powered from terminal 11, with +6V obtained from terminal 20 or +12V obtained from terminal 16, and wired to terminal 10.

12, 13 — WIRED ZONE (if used): Run a twisted pair of wires to all protection points in the zone and terminate with a 1000 ohm (e.g. No. 606) end-of-line resistor. Maximum permissible loop resistance is 1300 ohms (including the 1000 ohm resistor). No. 5620 is supplied with this zone set for normal (250 msec) response to disturbances. For fast response (10 msec) to fast acting devices (such as vibration contacts, glass protection devices and photoelectric units without built-in delay) cut the GREEN jumper at the upper right hand corner of the No. 5620's PC board. This zone may be PROM programmed as an Entry/Exit, Perimeter Interior, Police, Emergency, Auxiliary zone (or "off" if not used). As explained earlier, the wired zone may be used in the Interior zone only if one or more transmitters are also included in that zone.

14, 15 — EXTERNAL SIREN SPEAKER: No. 705, No. 705-8 or No. 713 Speaker(s) may be used. Depending upon the voltage selected to power the built-in siren driver and the speaker being used, speakers may be connected singly or in parallel (for concentrated sound intensity) at full output voltage, or in series (for reduced sound intensity but spread over a wider area) with each speaker receiving half voltage. Diagram 7 indicates the allowable speaker configurations that stay within the siren driver's current limit of 2 A.

16 (+) — UNREGULATED POWER OUTPUT: 12VDC, 2A (max). May be connected to terminal 3 as power input to siren driver, to terminal 10 as power input for a 12V bell, or to the (+) terminal of the No. 477 AC Line Carrier Transmitter.

17(-), 18(-) — GROUND RETURN: Connect BLACK lead of No. 5621 (and optional second No. 5621, if used with separate wiring run from this terminal) to 18. Connect 17 to earth ground (cold water pipe or electrical box may be suitable in some installations) to obtain maximum immunity to malfunction or damage due to electrostatic discharge and lightning transients.

19(+), 20(+) — REGULATED 6VDC OUTPUT: Connect RED lead of No. 5621 (and optional second No. 5621, if used with separate wiring run from this terminal) to 19 (or 20). Permissible maximum continuous total current from these terminals and pin 1 of the Dialer Trigger Connector is 500mA (each No. 5621 draws 120mA). On alarm, a maximum of 2 A is available from terminals 19 and 20 combined.

DO NOT PLUG IN THE TRANSFORMER OR CONNECT THE BATTERY YET.

3. **If a digital communicator (e.g. No. 678) is to be used,** connections to the communicator should be made from the DIALER TRIGGER CONNECTOR via a connector cord (No. SA5620-4) supplied with the No. 5620. For optimum protection from the effects of electrostatic transient discharges (e.g. static, lightning), the communicator should be mounted in the same cabinet as the No. 5620.

Eight different dialer trigger outputs (in two different configurations) and 6VDC power are available from this plug-in connector block to accommodate a digital communicator (e.g. No. 678). Each output goes high (+6VDC, 5mA max) when activated.

Connector Block Pins (from left to right)	Connector Cord Conductor Color	Description
1	BROWN	+6VDC Power Output
2	- -	Not used
3	ORANGE	(-) Power Output (Ground)
4	YELLOW	Burglary Alarm (or Perimeter Burglary Alarm)
5	GREEN	Fire Alarm
6	BLUE	Police Alarm (2 sec. momentary HIGH for Ambush and Silent Panic)
7	VIOLET	Emergency Alarm
8	GRAY	Auxiliary Alarm (or Interior Burglary Alarm)
9	WHITE	Low Battery (or Low Battery/Loss of Check-in Signal)
10	BLACK	Loss of Check-in Signal (or Entry/Exit Burglary Alarm)
11	RED	AC Power Loss

CAUTION: To avoid possible short circuits, all connections to the communicator should be made first before the connector cord is plugged into the connector block.

D. Installation and Wiring of No. 5621 Security Console:

1. **Select a location for the No. 5621** that will be convenient for the entering of system commands and the receiving of the various visual and audible system signals.

2. **Run wiring for connection of the No. 5621 to the No. 5620 Receiver/Control.** Use a 4 wire run (See Diagram 6). A second No. 5621 (if used) may be connected in parallel with the first, as indicated in Diagram 6, with a separate wiring run from the receiver/control.

   For runs of less than 100 feet, 4 #22 conductors may be used (e.g. No. 295 cable or 2 No. 289 Twisted Pairs). For longer runs, the wire size to be used depends upon the distance from the No. 5620. Use the following table to determine the correct wire size.

DISTANCE TO No. 5621	WIRE SIZE	ADEMCO NO. (TWISTED PAIRS)
to 100'	#22	*2 No. 289
100' to 200'	#20	2 No. 283
200' to 300'	#18	2 No. 284

*or No. 295 Four Conductor (#22) Cable.

3. **Mount the No. 5621 as follows:** Snap off the front cover of the No. 5621, after pushing-in the lower tab. Move up the keypad retaining tab above the keypad illumination bulb to free the keypad and PC board assembly. Remove the assembly. Disconnect the speaker cable by unplugging the brown connector from the PC board. Slide out the transmitter data drawer to expose one of the mounting holes and use the back of the No. 5621 as a template to locate the 3 screw mounting holes (2 keyslot) and the wiring access hole. Drill the necessary holes, route the wiring in the wall through the access hole and mount the back of the No. 5621. Splice the wire run to the No. 5621's wires and plug in the speaker cable. Push the interface wiring back into the wall and snap in the keypad and PC board assembly. Snap on the front cover.

   Alternatively, if mounting with only two screws via the keyslot holes on the back of the unit is acceptable, the mounting template supplied with the unit may be used to locate the two holes and the wiring access hole. In this case, the PC board need not be removed.

4. **An optional No. 701 Speaker may be added to each No. 5621 as a remote sounder (for use near a No. 5608 for example),** if desired. Extend a connection from the No. 5621's WHITE and RED leads to the No. 701's screw terminals (not polarized) as shown in Diagram 6.

5. **Enter the appropriate transmitter data (zone, location, etc.) on the data cards** (located in the transmitter data drawer on the right side of the No. 5621) in accordance with the transmitters' assigned I.D. numbers and proposed locations (See Sections V; A; 12 starting on Page 13, Section VI; B starting on Page 18 and Table B.

E. Installation of Transmitters:

Install the transmitters in locations selected in accordance with Section VI; A starting on Page 17, the results of Section VI; B starting on Page 18 and as follows:

1. **General:**

   a. Set each transmitter's coding switches as described in Section V; B on Page 16 if this has not already been done.

   b. Install the required battery (or batteries) in each transmitter as it is installed. Battery requirements are shown on the unit and listed in Section X starting on Page 32.

Important: Make sure that the battery terminals are not bent and reshape them if necessary to ensure good contact when connected.

c. If a transmitter is dropped, immersed in water or otherwise abused it may not operate properly.

2. No. 5608 Remote Keypad/Transmitter:

The unit may be left unmounted, resting on a table, countertop or other surface, or mounted via keyslot holes provided on its rear. Mounting with double-sided tape is not advisable as the battery compartment cover on its rear should be kept accessible.

3. No. 5603 Door/Window Transmitter:

a. Contains terminals for the connection of a closed protective loop which may include such sensors as magnetic contacts, foil or devices that provide a dry contact opening compatible with this unit. Loop response is 100 msec for detection of an open. Loop resistance should be limited to 3000 ohms maximum.

b. Route the loop wires from the terminals only as shown in Diagram 8. Do not route wires near the printed circuit board components as reduced transmission range may result.

c. On a window protected by a magnetic contact, an additional magnet can be installed on the window to permit the window to be left open for ventilation (6" or less, to prevent intrusion) while keeping the contact closed.

d. Mount the unit with two screws (the battery must be removed while mounting) or double-sided tape.

4. No. 5610 Door Transmitter (Slimline Design):

Remove the cover (raised end first) and mount on the door frame with two screws or use double-sided tape. The No. 5610 can also be used to monitor contacts by connecting a protective loop to the unit's screw terminals. If this capability is not used, the two screw terminals must be jumpered by the installer.Replace the cover, narrow end first. Mount its accompanying magnet on the door so that it is adjacent to either pair of wedge-shaped alignment marks that appear on both sides of the transmitter's cover. Maximum gap between magnet and transmitter should be 1/2". When the door is closed, the magnet will keep one of a pair of reed switches within the transmitter closed. Recommended locations and installation details are shown in Diagram 9, although other acceptable locations and orientations will suggest themselves to the installer.

5. No. 5611 Window or No. 5614 Entry/Exit Transmitter (Slimline Design):

The No. 5611 is a slim version of the No. 5603 which lends itself particularly to installation on narrow window frames or other mounting surfaces (the unit is less than 1 3/8" wide). The No. 5614 is identically packaged but has a transmission format specifically configured for use on entry/exit doors. Follow the same wiring connection procedure

as given above for the No. 5603. Remove the cover (raised end first) and mount with 2 screws (use slotted opening at one end and either round hole at other end) or use double-sided tape. Make wiring connections and replace the cover (narrow end first). See Diagram 10.

6. **No. 5650 Passive Infrared Detector/Transmitter:**

   Complete information on the No. 5650 accompanies that unit.

7. **No. 5605 Smoke Detector Adapter/Transmitter:**

   Complete information on the installation of the No. 5605 accompanies that unit, and location and other information for the smoke detector (No. 591TX) used with it accompanies the smoke detector.

8. **No. 5609 Gas Detector:**

   Complete installation information on the No. 5609 will accompany that unit when it becomes available.

9. **Nos. 5601 and 5606 Portable Emergency (Panic) Transmitters:**

   No installation is required. These transmitters may be carried about the protected area in a pocket or purse or clipped to a belt. If desired, however, the transmitter(s) may be mounted in any convenient location via a slotted mounting hole in the unit's belt/mounting clip.

VII SYSTEM FINAL TEST AND CHECKOUT:

Perform these tests after system installation is complete.

1. **Connect the battery** to the No. 5620's battery connector cable.

2. **Plug the transformer into a 120VAC outlet** that is active 24 hours a day (not under switch control). The green LED within the No. 5620 will light. The No. 5621's green READY and POWER indicator LEDs will light and its sounder will beep continuously. Enter the 4 digit access code followed immediately by depression of the OFF function key. The sounder will silence.

3. **Temporarily place a jumper across the SUPERVISION TEST POSTS in the No. 5620 (see Diagram 6).** The No. 5621's TROUBLE message will light and the sounder will beep continuously.

   a. At the No. 5621, enter the 4 digit access code followed immediately by depression of the OFF function key.

   b. Verify that all burglary and fire transmitter numbers programmed into the PROM are sequencing through the No. 5621's transmitter I.D. display (emergency/panic transmitters will not have any indication).

4. **Temporarily unplug the transformer.** Note that the green POWER indicator LED on the No. 5621 goes out and the sounder begins beeping continuously. Also check communicator (optional) operation. To silence sounder, enter the 4 digit access code followed immediately by depression of the OFF function key.

5. **Plug the transformer in.** The green POWER indicator LED will not be lit. Enter the 4 digit access code, followed immediately by depression of the OFF function key to turn it on.

6. **Check the operation of the No. 5621's (and 5608's) data entry keys** as follows:

   a. At the No. 5621, assign a temporary access code of 1 2 3 4, using the procedure described in Section IV, Step 11, starting on Page 10 and verify the new code by entering it, immediately followed by depression of the OFF function key. The No. 5621 should beep once.

   b. Change the temporary access code to 5 6 7 8 and verify it as before.

   c. Repeat, using 7 8 9 0.

   d. At each No. 5608, repeat steps a,b and c to check the unit's data entry keys. Listen for the No. 5621's (or an optional nearby No. 701's) beeps since the No. 5608 produces no sound.

7. **Check the operation of the No. 5621's (and each 5608's) manual alarm keys** as follows:

   a. At the No. 5621, push both FIRE alarm keys at the same time. The No. 5621's sounder and the system's siren/bell will sound for 1/60th of their normal timeout duration (all times are divided by 60 while the jumper of step 3 is in place). To silence the siren/bell and sounder enter the 4 digit access code, followed immediately by the depression of the OFF function key. Check operation of the communicator, if used.

   b. Repeat the above with the EMERGENCY and AUXILIARY (if programmed for alarm) alarm keys and (if audible POLICE alarm has been selected) POLICE alarm keys as well.

   c. Repeat steps a and b for each No. 5608 used.

Function	Siren Sound / Bell Sound	
FIRE	INTERRUPTED RAPID HI-LO	PULSED
AUXILIARY	INTERRUPTED RAPID HI-LO*	PULSED*
EMERGENCY	RAPID OR SLOW HI-LO	STEADY
POLICE	RAPID OR SLOW HI-LO**	STEADY**

* Only if AUXILIARY programmed for alarm (and No. 5621's sounder only, if "Internal Sounder Only" option has been selected).

** Only if audible POLICE alarm programmed.

8. **Remove the jumper connected during Step 3.**

9. **Test the operation of all transmitters** as follows:

   a. Place system in TEST mode by entering access code, immediately followed by depression of the TEST function key.

      Reminder: In TEST mode, the No. 5621 will beep once every 30 seconds if no message is received (as a reminder that the system is in the TEST mode and that all protection is turned off) and twice each time a transmitter message is received.

   b. Activate each door and window burglary transmitter (disturb a contact in its protective loop) and listen for the No. 5621 to beep twice as each is disturbed. While each is disturbed, its corresponding transmitter I.D. number will appear on the No. 5621's display in sequence with other disturbed transmitters. With all transmitters disturbed, observe that all numbers are sequencing through the display. Then close all transmitter loops and observe that the display is off. The No. 5621 will beep twice as each loop is closed.

   c. Walk test each No. 5650 used and listen for two beeps from the No. 5621 each time the No. 5650 trips. The appropriate transmitter I.D. number will be displayed by the No. 5621 while the unit is disturbed.

      Note: The No. 5650 has a walk test LED that is active only when the unit's cover has been removed. Also, with the cover in place, the unit's "hold off" feature limits transmissions to once every 3 minutes. Therefore, conduct preliminary walk tests with the cover removed and a final walk test with the cover in place. Additional information accompanies the No. 5650.

   d. Push the test button on each smoke detector and gas detector used. The 5621 should beep twice as each is tripped (every 6 seconds if the button is kept depressed) - see Section VI;B;9;d,e on page 20).

   e. Push the button on each No. 5601 or 5606 Emergency (Panic) Transmitter (test both switch positions on the No. 5606). The No. 5621 should beep twice as each is pushed, but no display will appear on the No. 5621 for these units.

   f. Turn off the TEST mode by entering the 4 digit access code, followed immediately by depression of the OFF function key.

10. **Disturb a contact in the wired protective zone** (if connected to screw terminals 12 and 13 in the No. 5620). Push the READY function key on the No. 5621 and observe that "00" is shown on the number display. Restore the disturbed contact and observe that "00" is no longer displayed.

11. **Turn the burglary protection on** (as described in Section IV; Function 5) on Page 9) and simulate leaving the premises via the Entry/Exit zone.

12. **Simulate entering the premises** via the entry/exit zone (after allowing enough time for the exit period to end after Step 11) by following the procedure described in Section IV; Function 7 on Page 9.

13. **If desired, test the other ARM/DISARM FUNCTIONS described in Section IV** (in particular Functions 6, 9 and 10 on Pages 9 and 10) and the CHIME feature (Function 12 on Page 11).

VIII TURNING SYSTEM OVER TO HOMEOWNER:

1. **Fully explain the operation of the system to the homeowner** by going over each of its features as well as the Owner's Manual supplied.

2. **In particular, explain the operation of each zone** (entry/exit, perimeter, interior, panic and fire) including the ARM/DISARM, TEST and CHECK functions described in Section IV on Pages 8, 9, 10 and 11.

3. **Encourage the homeowner to find and remedy any unintentionally disturbed transmitters** in order to avoid having to bypass them when arming.

4. **Instruct the homeowner in how to change his own transmitter batteries** and clear the low BATTERY signal from the No. 5621's display should it appear. Alternatively (and preferably) battery replacement may be scheduled and done by the service company, at least annually or after low BATTERY message indication, whichever occurs sooner. See Section X starting on Page 32, for replacement recommendations.

IX TROUBLESHOOTING:

A system with a properly programmed PROM and properly coded transmitters is assumed in the following.

Trouble 1: No. 5621's POWER LED IS OFF (INTERIOR SOUNDER WILL BEEP CONTINUOUSLY AFTER 30 MINUTES)

CAUSE	REMEDY
AC power loss	Check transformer for insertion in live AC outlet. Silence sounder (if beeping) by entering access code followed by depression of OFF function key. If AC is off less than PROM selected interval, POWER LED will relight when AC restores. If AC is off longer than PROM selected interval, relight LED (when AC has been restored) by entering access code followed by depression of OFF function key.

Trouble 2: "TROUBLE" MESSAGE DISPLAYED ON No. 5621 AND INTERIOR SOUNDER BEEPING

CAUSE	REMEDY
No. 5620's receiver has not received any regular transmissions during the Check-In Interval from burglary or fire/gas transmitter indicated on No. 5621's display.	Silence sounder as described in Section IV; 16 on Page 11. Examine indicated transmitter to determine whether it has been removed or relocated. Inspect transmitter's battery to ensure it is properly connected and making good contact. With burglary protection off, force a transmission from the transmitter in question and attempt to turn off TROUBLE message as described in Section III; B; 10 on Page 6. If TROUBLE message can't be cleared, or if it clears and later recurs, check transmission path with No. 5625 Field Strength Indicator or with another, similarly coded, transmitter (use TEST function described in Section IV; 14 on Page 11). Replace or relocate transmitter if required.

Trouble 3: "BATTERY" MESSAGE DISPLAYED ON No. 5621 AND INTERIOR SOUNDER BEEPING

CAUSE	REMEDY
A. Weak transmitter battery (approx. 30 days of life remains, but see Section X, starting on Page 32, for replacement recommendations).	Silence sounder as described in Section IV; 16 on Page 11. Replace battery of transmitter indicated (make sure battery clips are making good contact... reshape if necessary). Then turn BATTERY message off as described in Section III; B; 11 on Page 6.

CAUSE	REMEDY
B. Transmitter located where temperature drops below 32°F (0°C).	Move transmitter to climate controlled location and, if possible, extend sensing circuit to protected opening.

Trouble 4: "TROUBLE" AND "BATTERY" MESSAGES BOTH DISPLAYED ON No. 5621 AND INTERIOR SOUNDER BEEPING

CAUSE	REMEDY
Battery in transmitter too weak for reliable transmission.	Silence sounder as described in Section IV; 16 on Page 11. Examine battery in indicated transmitter. If its clips had been making good contact, it is weak and should be replaced as soon as possible (reshape battery clips, if necessary, to ensure good contact). Then turn BATTERY AND TROUBLE messages off simultaneously by forcing a transmission and entering the access code followed by depression of the OFF function key. For transmitters with multiple batteries, ALL of the batteries should be replaced to insure proper operation.

Trouble 5: FALSE ALARM(S)

CAUSE	REMEDY
A. Sensor(s) not properly installed or connections bad.	BURGLARY: Check protective circuit or sensor associated with transmitter(s) causing alarm (as indicated by display on No. 5621). PANIC: Be sure panic transmitter's button is not accidently pressed. FIRE/GAS: Be sure detectors are placed in areas where they will not false trigger. See instructions accompanying detectors.
B. Nearby installation has similar system set to same House I.D.	Check neighbors. Free space (no obstruction) range of system can be 1000 feet. Change House I.D. if necessary.

X GENERAL SPECIFICATIONS:

A. No. 5620 Receiver/Control:

See Diagrams 1 and 6.

1. **Physical:**

Width:	8" (20.3cm)
Height:	15" (38.1cm)
Depth:	3" (7.6cm)

2. **Electrical:**

Voltage: 12VAC (from No. 1324 29VA Plug-in Transformer).

Wired Zone: Normal Response 250msec, Fast Response (GREEN jumper cut): 10msec, Maximum permissible resistance (including 1000 ohm EOL resistor): 1300 ohms.

Siren Driver Load: 2A. max. at 6VDC or 12VDC.

6VDC Regulated Output: Continuous: 500mA max. (incl. Pin 1 of Dialer Trigger Connector)
On Alarm: 2A max.

12VDC Unregulated Output: On Alarm: 2A max.

Bell Relay (Dry) Contacts: SPDT, Rating: 2A at 28VDC

Dialer Trigger Power Output: Continuous: 500mA max (incl. terminals 19/20)
On Alarm: 2A max.

Dialer Trigger Outputs: Normal: 0V
Activated: +6VDC, 5mA max.

"Lights On" Output: Compatible with Ademco No. 477 AC Line Carrier Transmitter. Open circuit when not activated, 68 ohms to ground when activated.

Arm/Disarm Status Output: Armed: 0V
Disarmed: +6VDC, 5mA max.

Fuses: Three 2A Fuses (No. 90-2) for Dialer, Regulated 6VDC output and Unregulated 12VDC output.

Standby: 6V Sealed Lead Acid Rechargable Battery, 2.5AH (No. 496) or 5AH (No. 498). Up to 10 hours with 2.5AH battery and 20 hours with 5AH battery (including one No. 5621 drawing 120mA continuously). Additional accessories (e.g. second No. 5621 drawing 120mA) will reduce standby time. Battery normally need not be replaced for at least 5 years.

B. No. 5621 Security Console:

See Diagram 2.

1. **Physical:**

Width:	6 1/2" (17.7cm) (requires additional 3" (7.6cm) clearance at right, for opening of Transmitter Data Drawer)
Height:	4 3/8" (11.1cm)
Depth:	1 3/8" (3.5cm)

2. **Electrical:**

Power: 120mA at 6VDC from No. 5620

C. No. 5608 Remote Keypad Transmitter:

See Diagram 3.

1. **Physical:**

Width:	6 1/2" (17.7cm)
Height:	4 3/8" (11.1cm)
Depth:	1 3/8" (3.5cm)

2. **Electrical:**

Voltage: 6V from four 1 1/2V "AA" Carbon Zinc Chloride type batteries; Ademco No. 463, Eveready 1215, Ray-O-Vac 5AA, Panasonic UM-3N or equivalent.

Batteries should be changed at least annually or within 30 days after a low BATTERY message indication ("00" and "BATTERY" appearing simultaneously on the No. 5621's display), whichever occurs sooner.

Range: 100ft (nominal), indoor.

D. Nos. 5603, 5610, 5611, 5614 (Burglary) Transmitters:

See Diagram 4.

1. **Physical:**

	No. 5603	No. 5610, No. 5614 or No. 5611	
Width:	2 1/2" (6.4cm)	Width:	1 5/16" (3.3cm)
Height:	4 7/8" (12.4cm)	Length:	5 7/8" (14.9cm)
Depth:	1 3/16" (3.0cm)	Depth:	1 1/2" (3.8cm)

2. **Electrical:**

Voltage:	9V Alkaline type Battery; Ademco No. 464, Eveready 522, Duracell MN1604, or equivalent	9V Alkaline or Carbon Zinc Chloride Type Battery; Ademco No. 464 or 461 Eveready 522 or 1222VP, Duracell MN1604, Panasonic 006P-N, or equivalent

Battery should be changed at least annually or within 30 days after a low BATTERY message indication (7 days if the transmitter sees frequent daily activation), whichever occurs sooner.

Loop — 100msec Response for detection of an open. Limit loop resistance to 3000 ohms max.

Range (all units): 100ft (nominal), indoor.

E. No. 5650 Passive Infrared (Burglary) Detector/Transmitter:

See Diagram 4.

1. Physical:

Width: 4 1/16" (10.3cm)
Height: 5 11/16" (14.5cm)
Depth: 2 7/8" (7.3cm)

Protection Pattern: 9 main zones (75° span), 5 intermediate zones, 3 downward zones, coverage up to 25 feet.

2. Electrical:

Voltage: 9V from two Alkaline or Carbon Zinc Chloride Type Batteries; Ademco No. 464 or 461, Eveready 522 or 1222VP, Duracell MN1604, Panasonic 006P-N or equivalent.

Change batteries at least annually or within 30 days after a low BATTERY message indication (7 days, if the transmitter sees frequent daily activation), whichever occurs sooner.

Transmission Range: 100ft (nominal), indoor.

For additional information, see instructions accompanying the No. 5650.

F. No. 5605 Smoke Detector Adapter/Transmitter:
(for use with No. 591TX Smoke Detector)

See Diagram 4.

1. Physical:

Diameter: 6 1/4" (15.9cm)
Height: 1 1/16" (2.7cm)

2. Electrical:

Voltage: 9V from six 1 1/2 V "AA" Carbon Zinc Chloride type batteries; Ademco No. 463, Eveready 1215, Ray-O-Vac 5AA, Panasonic UM-3N or equivalent.

Batteries should be changed at least annually or within 30 days after a BATTERY message indication, whichever occurs sooner.

Range: 100ft (nominal), indoor.

For additional information, see instructions accompanying the No. 5605.

G. No. 5609 Gas Detector:

To be available in the future.

H. Nos. 5601, 5606 Emergency (Panic) Transmitters:

See Diagram 4.

1. **Physical:**

Width:	2 1/2" (6.4cm)
Height:	4 3/8" (11.1cm)
Thickness:	1 1/4" (3.2cm)

2. **Electrical:**

Voltage: 9V Alkaline or Carbon Zinc Chloride type battery; Ademco No. 464 or 461, Eveready 522 or 1222VP, Duracell MN1604, Panasonic 006P-N or equivalent.

Battery should be changed at least annually or within 30 days after a low BATTERY message indication, whichever occurs sooner.

Range: 100 ft. (nominal), indoor.

TABLE A: PRELIMINARY PROM PROGRAMMING DATA

AC POWER LOSS WARNING DELAY: ..... 4 min. x ☐
(Select digit 0 thru 8, 9 eliminates warning)

MASTER (PERMANENT) ACCESS CODE: ..... ☐☐☐☐
(Select any 4 digits)

AMBUSH DIGIT: ..... ☐
(Select digit different from last digit of Master Access Code)

ENTRY DELAY: ..... 15 secs. x ☐
(Select digit from 1 thru 8, 0 for No Delay)

EXIT DELAY: ..... 15 secs. x ☐
(Select digit 1 thru 8, 0 for No Delay)

DELAY TO EXTERIOR BURGLARY SIREN/BELL & DIALER TRIGGER: ..... 15 secs. x ☐
(Select digit 1 thru 8, 0 for No Delay)

SIREN/BELL SOUNDING DURATION: ..... 4 min. x ☐
(Select digit from 1 thru 8, 9 for no cutoff)

CHECK-IN MONITORING INTERVAL: ..... 2 min. x ☐☐☐
(Select 3 digit number from 120 thru 998, 999 eliminates monitoring
....720 [24 hour interval] is recommended)

LOSS OF CHECK-IN/LOW BATTERY ANNUNCIATION: .. ☐ 24 HR. ☐ only while disarmed
(Check one)

BYPASS: ..... ☐ Automatic at Arming ..... ☐ Manually Selectable at Arming
(Check one)

EXTERNAL SIREN SOUND: (Check one)

☐ Slow 2-Tone for burglary/police (audible)/emergency
Pulsed rapid 2-Tone for fire/auxiliary

☐ Rapid 2-Tone for burglary/police (audible)/emergency
Pulsed Rapid 2-Tone for fire/auxiliary

SOUNDER RESPONSE TO AUXILIARY ALARM: (Check one)
Applicable only if Auxiliary Function "Lights-On", Alarm option is selected below.

☐ Internal Console Speaker Only

☐ Internal Speaker and External Sounder

DELAY TO "LIGHTS-ON" OUTPUT: (Check one)

☐ Same as for External Sounder

☐ Same as for Internal Speaker

AUXILIARY FUNCTION: (Check one)

☐ "Lights-on", no alarm ☐ "Lights-on", alarm

RESPONSE OF LIGHTS TO ENTRY WHEN ARMED "AWAY": (Check one)

☐ Lights On ☐ No Lights On

HOUSE I.D.: ..... ☐☐
(Select any number from 00 thru 31 that is not used nearby)

CONT. ON NEXT PAGE

TABLE A: CONT.

RESPONSE TO INTERIOR INTRUSION: (Check one)

☐ Delayed (Entry/Exit) Alarm ☐ Instant Alarm

DIALER TRIGGER CONFIGURATION: (Check one)

☐ Entry/Exit Burglary, Perimeter Burglary, Interior Burglary, Police, Emergency, Transmitter Low Battery/Loss of Check-in Signal, Loss of AC Power

☐ Burglary, Fire, Police, Emergency, Auxiliary, Transmitter Low Battery, Loss of Transmitter Check-in Signal, Loss of AC Power

WIRED LOOP FUNCTION: ☐ Entry/Exit, ☐ *Interior, ☐ Perimeter, ☐ Not Used:
☐ Police, ☐ Emergency, ☐ Auxiliary
(Check one) *Select "Interior" only if a transmitter is also used in the Interior zone.

INTERIOR SOUNDER RESPONSE TO ARM/DISARM: ..... ☐ Silent, ☐ Audible
(Check one)

SIREN/BELL RESPONSE TO POLICE ALARM: ..... ☐ Silent, ☐ Audible
(Check one)

ALARMS TRIGGERED PER TRANSMITTER PER ARMED PERIOD:

☐ Multiple ☐ Single

TRANSMITTER I.D. ASSIGNMENTS:

ZONE	TRANSMITTER I.D. NUMBERS		
	AVAILABLE	*ASSIGNED FIRST	*ASSIGNED LAST
Entry/Exit Interior Perimeter	01-25 (01-29 if Fire zone not used)	☐☐ ☐☐ ☐☐	☐☐ ☐☐ ☐☐
Fire/Gas	26-29	☐☐	☐☐

*Use initial zeroes where applicable.
Leave blank if zone not used.*

0 WIRED ZONE	16
1	17
2	18
3	19
4	20
5	21
6	22
☐ 7	☐ 23
8	24
9	25
10	26
11	27
12	28
13	29
14	30
15	31

TABLE B: TRANSMITTER DATA CARDS (Included with No. 5621 Security Console)

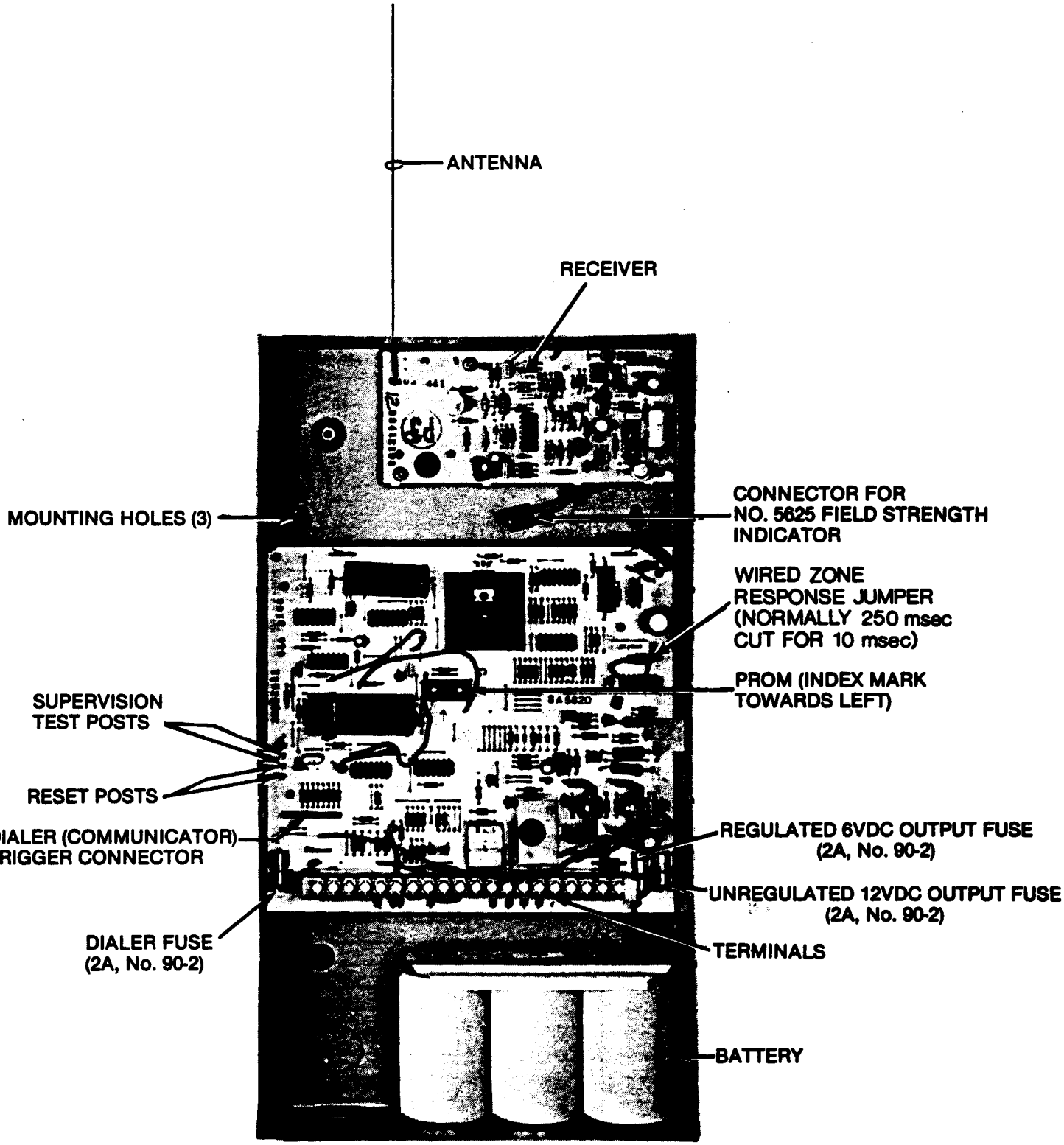


Diagram 1: No. 5620 RECEIVER/CONTROL (Less Cabinet Cover)

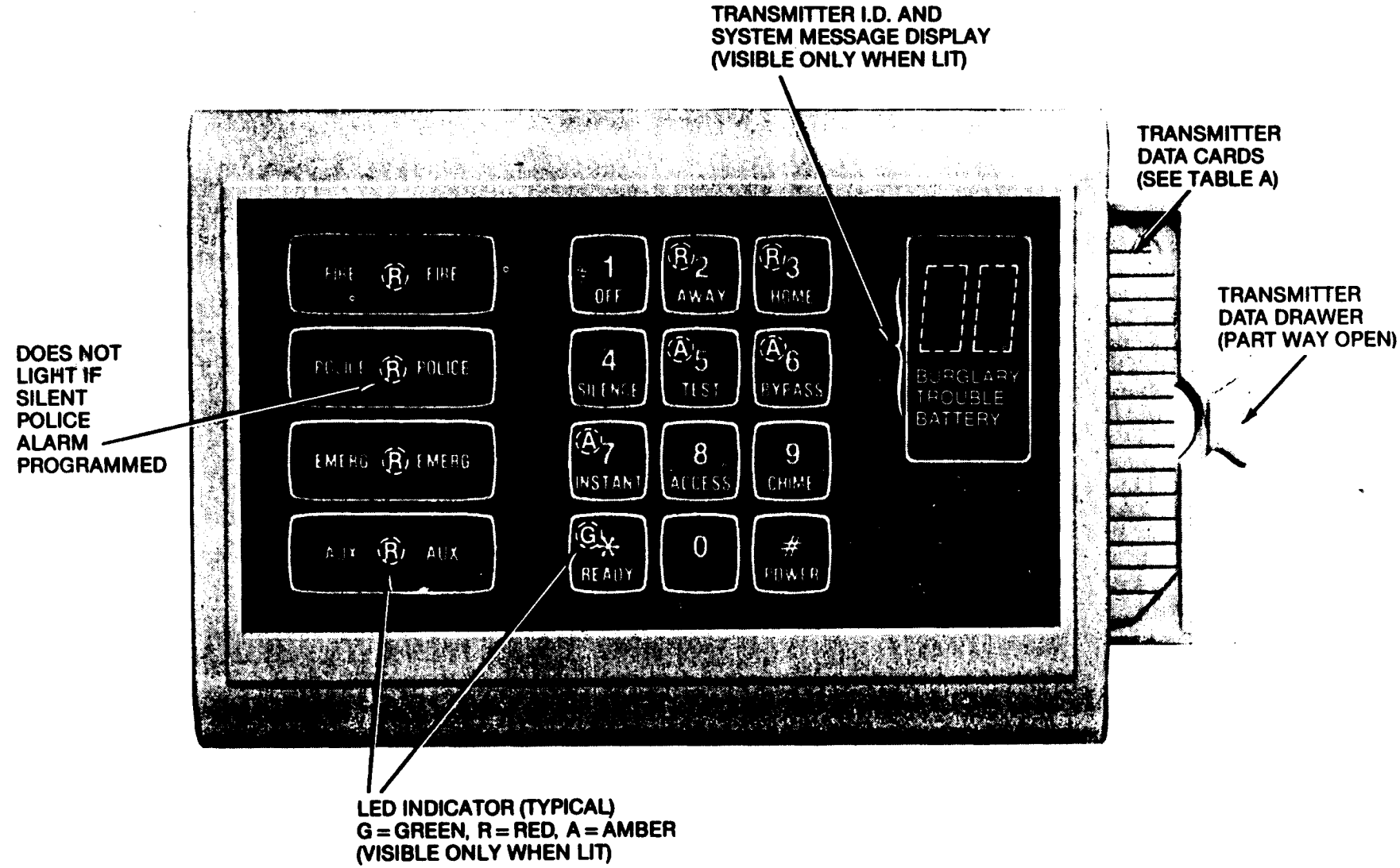


Diagram 2: No. 5621 SECURITY CONSOLE

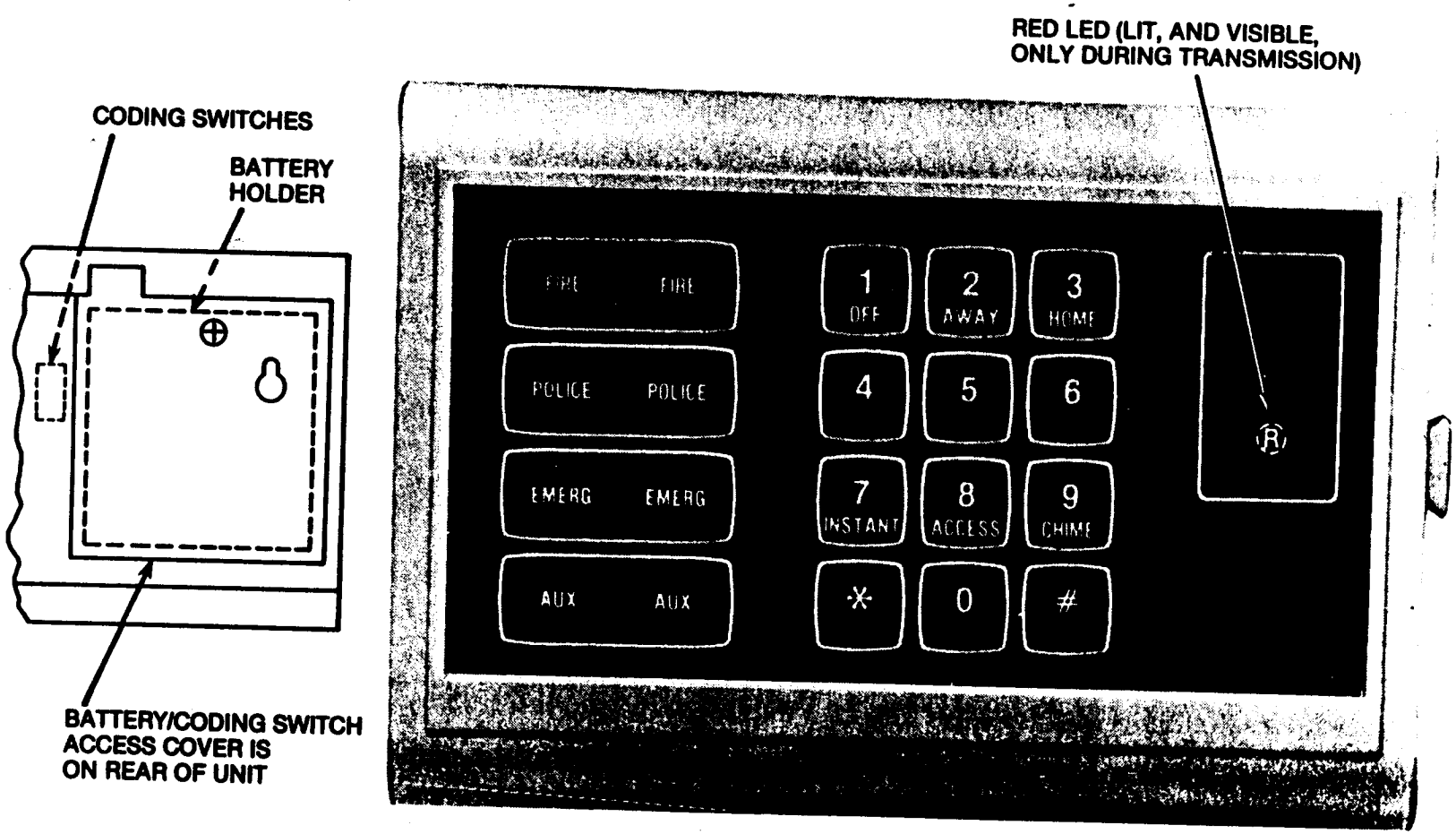
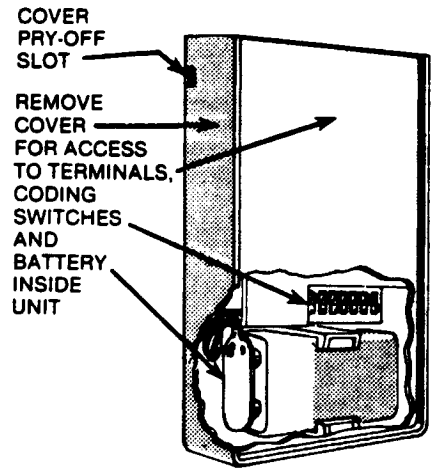
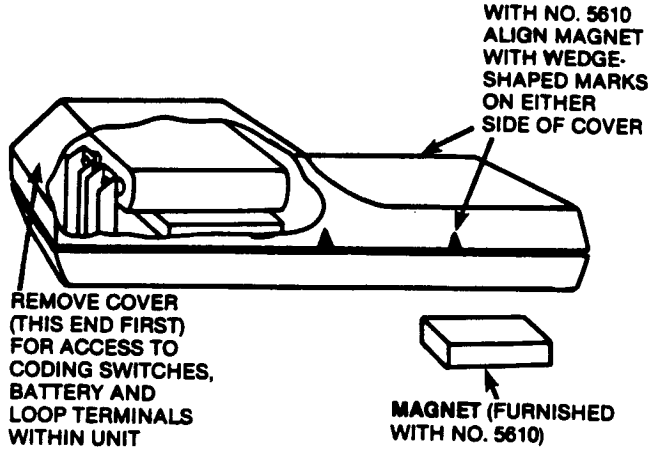


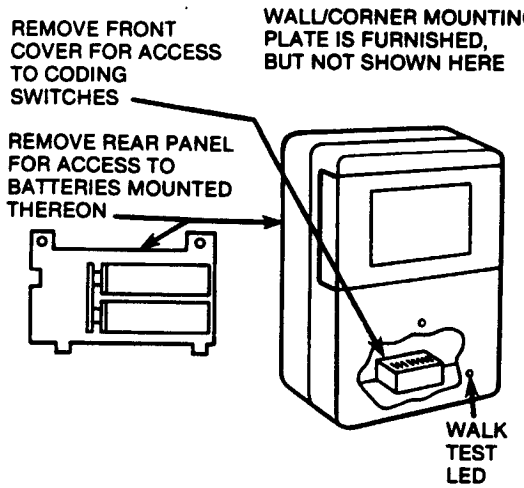
Diagram 3: No. 5608 REMOTE KEYPAD/TRANSMITTER



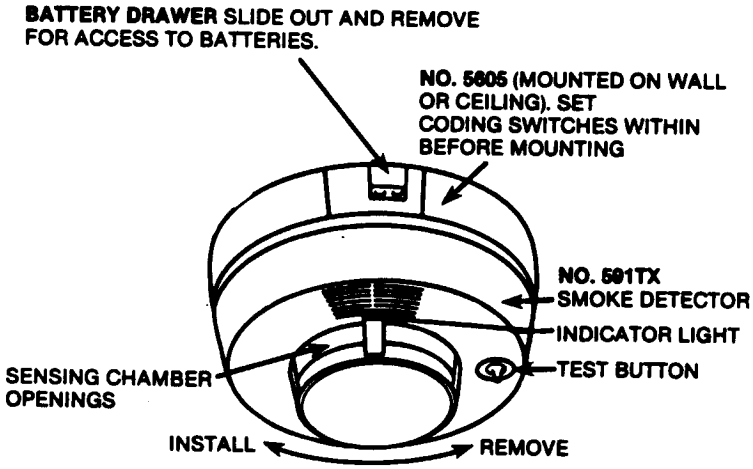
4a: No. 5603 DOOR/WINDOW TRANSMITTER



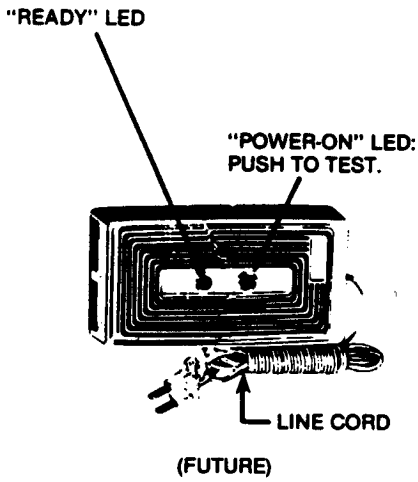
4b: No. 5610 DOOR TRANSMITTER
No. 5611 WINDOW TRANSMITTER AND
No. 5614 ENTRY/EXIT TRANSMITTER (SLIMLINE DESIGN)



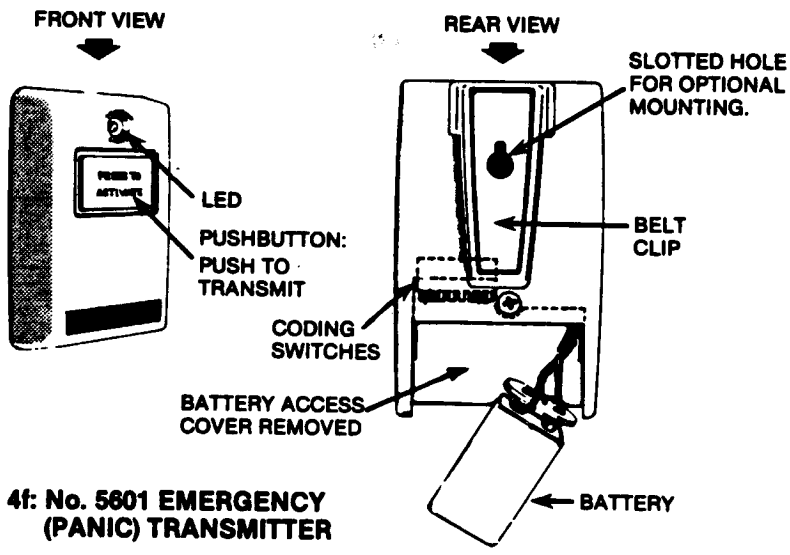
4c: No. 5650 PASSIVE INFRARED DETECTOR/ TRANSMITTER



4d: No. 5605 SMOKE DETECTOR ADAPTER/TRANSMITTER
(SHOWN WITH No. 591TX SMOKE DETECTOR INSTALLED)



4e: No. 5609 GAS DETECTOR



4f: No. 5601 EMERGENCY (PANIC) TRANSMITTER

Diagram 4: TRANSMITTER/SENSORS

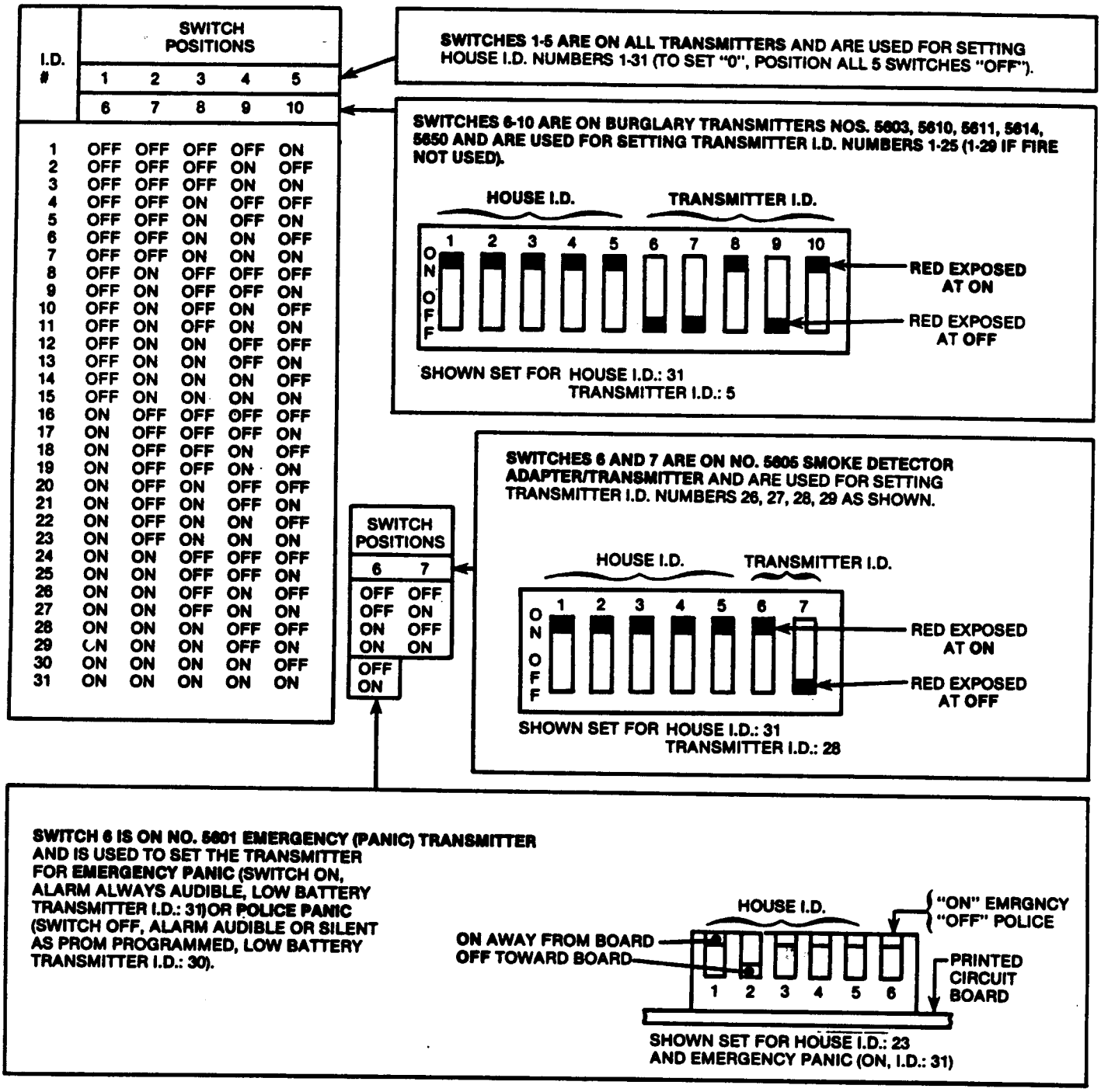
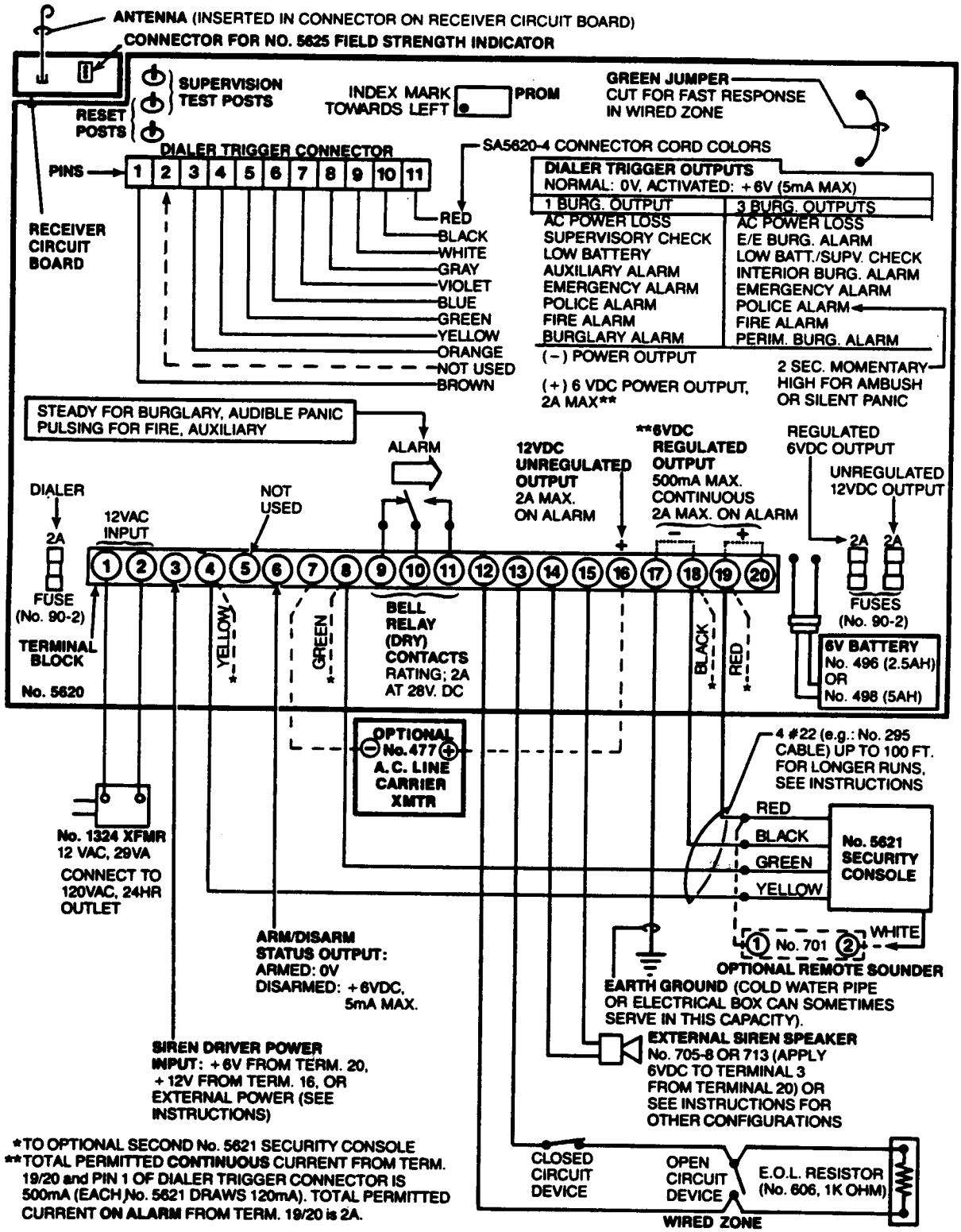


Diagram 5: I.D. SWITCH SETTINGS

FOR COMPLETE INFORMATION, SEE TEXT

ALL INTERCONNECTIONS MUST BE MADE USING U.L. LISTED LIMITED ENERGY CABLE. IF FIRE PROTECTION IS IMPLEMENTED, FOLLOW INSTALLATION REQUIREMENTS OF NFPA STANDARD No. 74 (National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.)

TWISTED WIRING IS RECOMMENDED FOR ALL RUNS.



*TO OPTIONAL SECOND No. 5621 SECURITY CONSOLE

**TOTAL PERMITTED CONTINUOUS CURRENT FROM TERM. 19/20 and PIN 1 OF DIALER TRIGGER CONNECTOR IS 500mA (EACH No. 5621 DRAWS 120mA). TOTAL PERMITTED CURRENT ON ALARM FROM TERM. 19/20 is 2A.

Diagram 6: SUMMARY OF CONNECTIONS

DRIVER INPUT VOLTAGE	ALLOWABLE SPEAKER CONFIGURATIONS		
	No. 705 (4 OHM, 5W)	No. 705-8 (8 OHM, 10W)	No. 713 (8 OHM, 30W)
6VDC	C.D.	A.B.C.D.	A.B.C.D.
12VDC		C.D.	A.C.D.

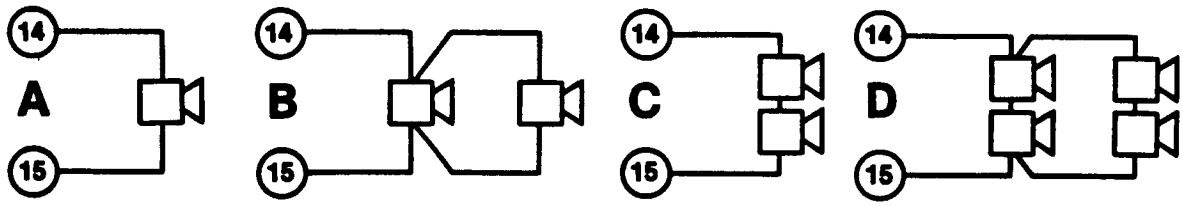


Diagram 7: SIREN SPEAKER CONFIGURATIONS

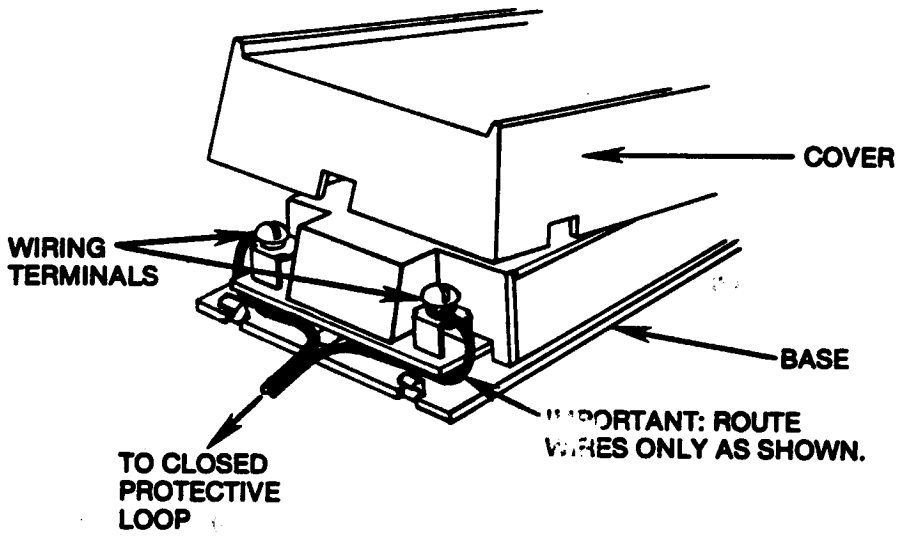
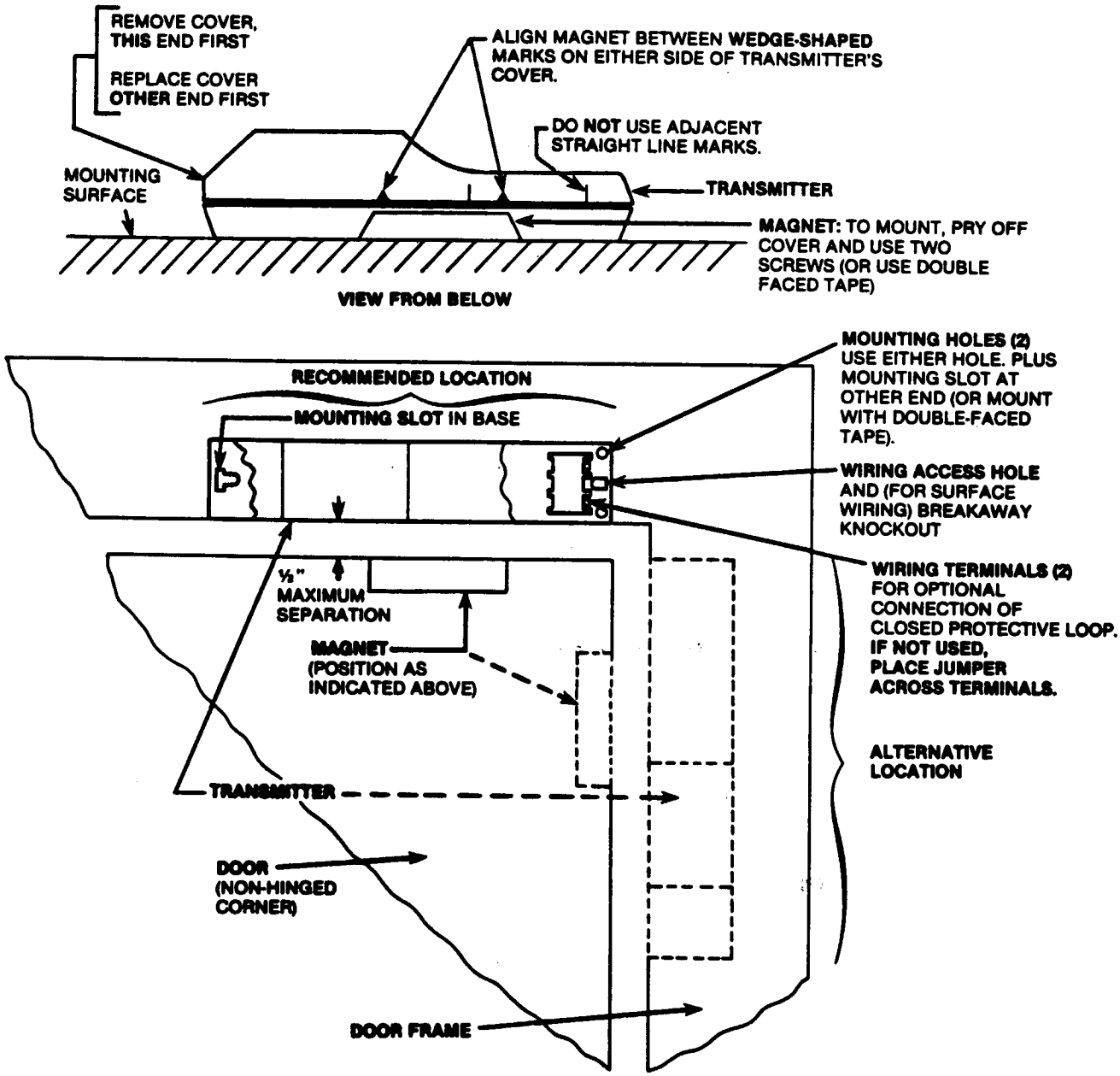


Diagram 8: No. 5603, WIRING CONNECTIONS



Note: Transmitter may be oriented in any position, as long as magnet is located adjacent to either pair of wedge-shaped alignment marks on transmitter, with no more than ½" separation between magnet and transmitter.

Diagram 9: No. 5610, INSTALLATION DETAILS

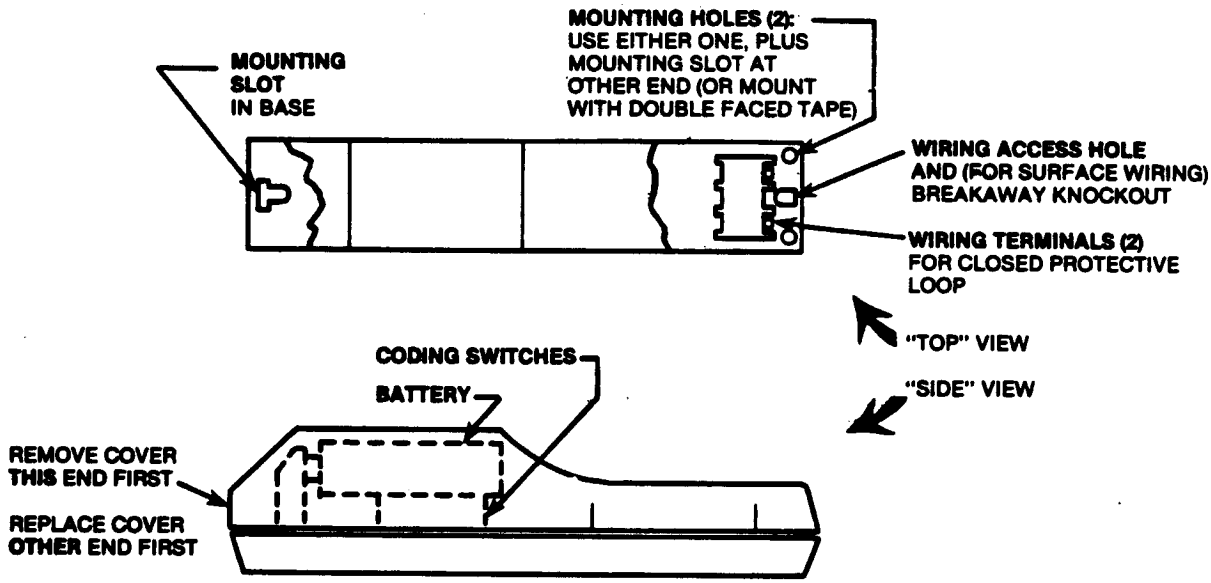


Diagram 10: No. 5611 or 5614, INSTALLATION DETAILS

TO THE INSTALLER

Regular maintenance and inspection (at least annually) by the installer and frequent testing by the user are 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 (at least weekly) to insure the system's proper operation at all times.

TRANSMITTER BATTERY REPLACEMENT may be done by the homeowner, but preferably it should be scheduled and done by the service company. Batteries should be replaced at least annually or after a low BATTERY message indication (within the interval prescribed in Section X: GENERAL SPECIFICATIONS, starting on Page 32, for the particular transmitter), whichever occurs sooner.

This device is sold under a waiver of FCC rules. Any interference that may be caused should be reported to Ademco, Customer Service, 165 Eileen Way, Syosset, N.Y., 11791, (516) 921-6704.