

DTI Security

A DIVISION OF DATURA INTERNATIONAL, INC.

1034 Kiel Court, Sunnyvale, California 94086

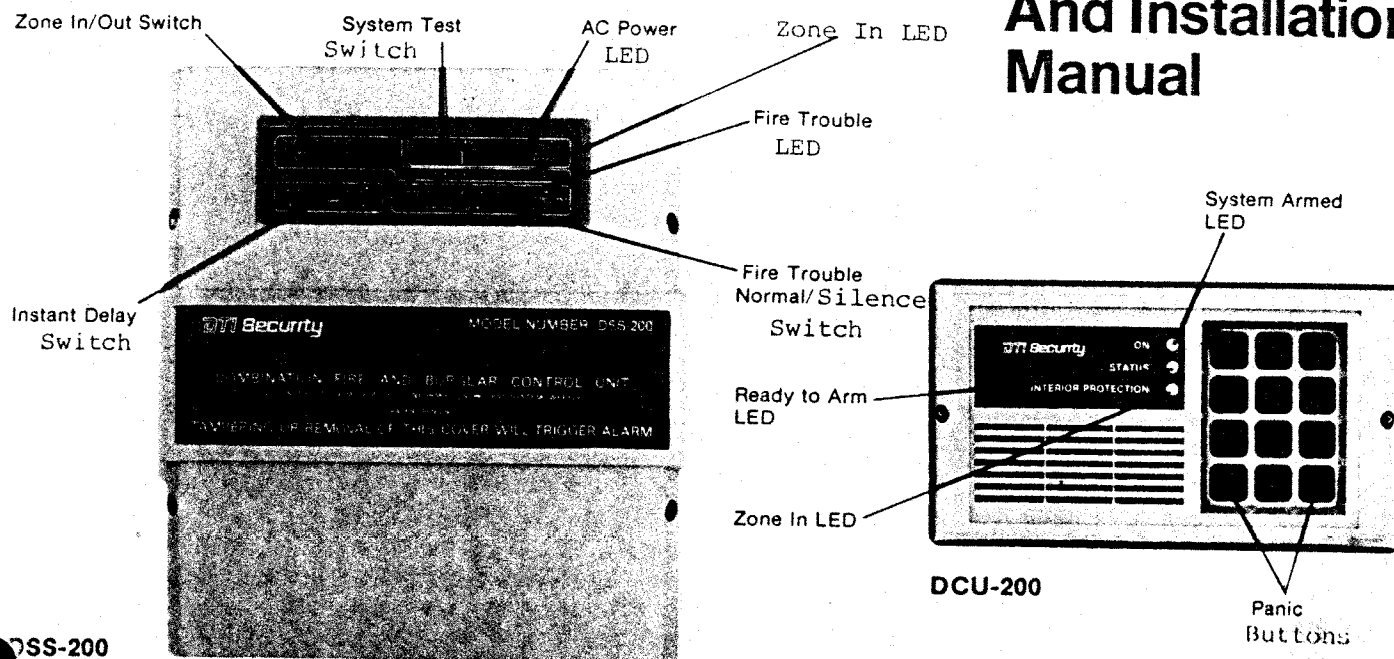
Phone (408) 744-1200 Outside California Phone (800) 538-8488

Telex 172032

DSS-200 Burglar/Fire Alarm Control Panel*

DCU-200 Digital Remote

Operation And Installation Manual



DSS-200

DCU-200

Description

The DSS-200 System is designed to provide central station monitoring of burglar and fire* alarm systems and has the capabilities of zone shunting, panic, programmable alarm time-out and E/E delay times, built-in prealarm, siren driver and 4-channel digital dialer, along with many other additional features described further in this manual. The system allows the option of central station reporting via cable with the plug-in addition of a BS-101X series Pioneer modem.¹

In the tradition of all DTI products, the DSS-200 control panel and the DCU-200 remote incorporate the latest in electronic technology with priority given to reliability and user convenience.

¹The operation of this equipment in conjunction with the cable system has not been investigated by Underwriters Laboratories.

- ZONE IN/OUT SWITCH:** Provided for inclusion or deletion or interior protection (located on the control panel). When the interior protection is included, the Zone In LED both on the remote unit and the control panel will be illuminated.
- SYSTEM TEST SWITCH:** This switch located on the front of the control panel permits testing of the system to ensure proper operation.
- AC POWER INDICATOR:** This indicator will be lit when normal A.C. power is being provided to the system. This LED will flash when the unit is operating on battery power.
- FIRE TROUBLE INDICATOR & SWITCH:** This LED will be illuminated and the prealarm will beep every 15 seconds when trouble on the fire circuit is present. Placing the switch in the right position will silence the prealarm and should be placed in the left position after the trouble has been cleared.
- INSTANT/DELAY SWITCH:** When in the instant position, this switch will eliminate the delays associated with the exit/entry and normally open zone loops.
- SYSTEM ARMED LED:** This LED will be lit when the system is armed.
- READY TO ARM LED:** This LED will illuminate when all protected circuits are cleared and the system is ready to arm.
- DUAL PANIC BUTTONS:** Depression of both panic buttons simultaneously will trigger an instant alarm.

Installation

Mounting the DSS-200

The DSS-200 is typically surface mounted to a wall using screws, toggle, or molly bolts through the holes in the rear of the cabinet. Wiring is brought into the cabinet through one or more of the entry holes or knockouts provided. The panel should be mounted in a location easily accessible to the user to simplify and encourage regular testing, as well as use of the zoning and instant/delay features provided in the system.

MOUNTING THE DCU-200

The DCU-200 is typically mounted to a wall at a location within the premises which allows the user maximum convenience. The aesthetically pleasing appearance of the faceplate allows it to be mounted in a variety of locations and yet blend with most residential decors. As with the DSS-200, mount the remote to the wall using screws, toggle or molly bolts through the holes provided in the rear of the housing.

The DCU-200 requires 9 wires to connect with the DSS-200. Typical installations use a single 10-conductor cable and connect two of the wires in parallel for ground. Up to 4 remotes may be connected to a single DSS-200. Refer to the system wiring diagram for further details. (Page 9)

Wire from the transformer to the control panel should be at least 18 ga. for runs up to approximately 25 feet. Longer runs should use 16 ga. wire. Space for the required standby battery (12V, 6 AH) is provided underneath and below the control panel printed circuit board inside the enclosure.

The DSS-200 is capable of driving a maximum of two 8-ohm, 15 watt siren speakers. Alarm output wires should be at least 18 ga.

Telephone connections are intended to be made via an RJ-31 or 33X jack. This device must be supplied and installed by the local telephone company.

Dialer terminals:
connect to RJ-31/33X
phone jack

Prealarm buzzer
System Fuses

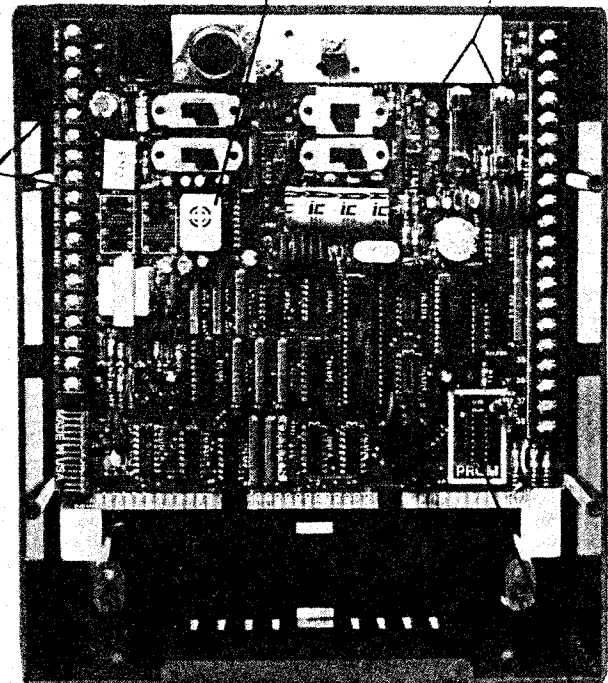
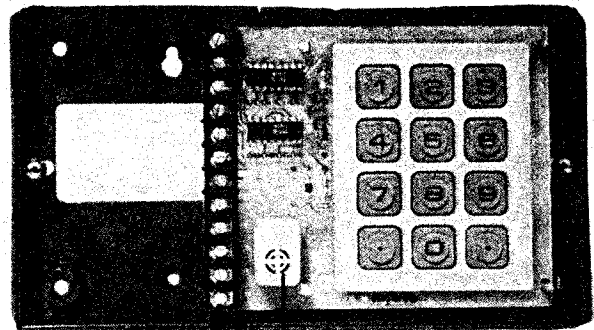


Fig. # 1 Inside View of DSS-200
Connector for optional Pioneer BX-101X cable modem.
Installer programmed PROM: contains master code and optional telephone and account numbers for dialer.



Prealarm buzzer
Fig. # 2 Inside View of DCU-200

OPERATING INSTRUCTIONS

How To Turn the Control Panel Sensor Loops On

Check to see that the Ready to Arm indicator is lit. This shows that all sensors are in a safe condition and the system is ready to be armed. If the Ready to Arm LED is not lit, a protected portion of the premises is in an unsafe condition. THIS MUST FIRST BE CORRECTED SINCE THE CONTROL PANEL INCORPORATES A FAIL SAFE ARMING FEATURE WHICH WILL NOT ALLOW THE SYSTEM TO BE ARMED WHILE IN AN UNSAFE CONDITION.

Arm the control panel using either the master or auxiliary code on the DCU-200 remote and verify that the Armed indicator is lit. This shows that the system is now armed.

How To Turn the Control Panel Loops Off and Reset an Alarm

To turn the control panel off or reset an alarm, enter a valid master or auxiliary code on the digital remote and verify that the Armed indicator is not lit. This shows that all sensor loops are off.

The Exit/Entry Time Delay Feature

To enable the user to turn the panel on or off from within the protected premises, programmable time delay periods are provided which delay the detection circuitry by a sufficient amount of time to allow the user to exit or enter through specified exit/entry doors without causing an alarm. Exit/entry doors are determined during installation and wired accordingly.

To Leave

After turning the panel on, exit from the premises through a specified delayed door within the pre-set time period to avoid setting off the alarm.

To Enter

When re-entering the premises, the user as well as the intruder will be detected immediately unless the instant/delay switch is in the delayed (or left) position in which case the prealarm buzzer will sound indicating the need to disarm the system prior to the end of the entry delay period. The standard delay period is approximately 30 seconds. If a shorter or longer delay period is required, please refer to the programming section on page 6.

How To Use the Instant Alarm Feature

To eliminate the Exit/Entry time delay period, before turning the panel on, move the Instant/Delay slide switch to the Instant (or right) position. When the system is armed, any violation of the detection sensors will now initiate an immediate alarm. Please note that violation of the normally closed zone loop will always create an instant alarm independent of what position the Instant/Delay switch is in. When the panel is on and the instant/delay switch is in the instant mode, the homeowner cannot exit or enter the premises without causing an alarm.

How To Use the Switchable Zone Feature

To enable the user to add or delete a specific portion of his detection circuit as required, a supervised zone switch is provided on the control panel which will add or delete the normally open and normally closed loops as required.

To add the zone to the protection circuit, move the slide switch to the right. The zone indicators on the control panel and also on the remote will be lit, showing that the zone is now included in the protection circuit. If the zone is violated, the Ready to Arm LED will go off and the zone will not be included in the protected circuit.

To delete the zone, move the faceplate slide switch to the left. The zone indicators will then go out.

The normally open zone loop is also controlled by the instant/delay switch and has the same delay times as the exit/entry loop when in the delayed mode.

NOTE: AS AN ADDED SECURITY FEATURE THE SLIDE SWITCH IS SUPERVISED. ANY ATTEMPT TO REMOVE THE ZONE WHILE THE SYSTEM IS ARMED WILL INITIATE AN IMMEDIATE ALARM.

How To Use the Panic Feature

As an optional feature, the security system may be installed with one or more remote panic switches which can be manually used to initiate an alarm at any time regardless of whether the system is armed or disarmed.

To sound the alarm in any emergency situation, depress the lower left and right dual panic buttons on the remote simultaneously or push the panic button on any one of the other remote switches which may have been installed. Please refer to wiring diagram on page 9 for further information.)

(THIS IS FOR EXTREME EMERGENCIES ONLY!)

If an alarm has been sounded, it can be reset by entering a correct master or auxiliary code on the digital remote. All alarms except the fire alarm will automatically shut off after the pre-set alarm time, which is 5 minutes unless programmed to be otherwise.

The Tamper Switch

Whenever the main cover of the DSS-200 is removed, a tamper switch mounted directly on the printed circuit board will instantly trip a burglary alarm, which will be reported to the central station (via either the digital dialer or the cable.) To reset the system and turn off the siren, the tamper switch must first be pushed down, and then a valid 4 digit code entered at a DCU-200 digital remote station.

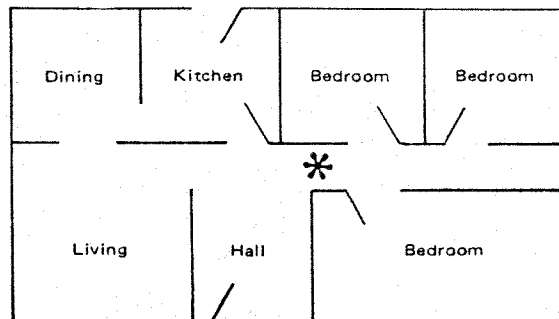
How To Use the Fire Alarm Feature

If a fire alarm has been installed as part of the security system its detection circuitry will be continually active and cannot be shut off. The fire alarm signal is a steady, high-pitched, uninterrupted alarm and is different from the burglary and panic alarms. The fire alarm system will transmit a supervisory signal to the central station in the event of trouble such as a broken wire on the fire sensor circuit if your system is connected via the cable. If this occurs, a short beep will sound from the prealarm buzzer once every 15 seconds and the Fire Trouble LED will illuminate. Move the Fire Trouble LED switch to the right to silence the tone. The LED will flash. When the trouble is cleared, the LED will again turn on constant and the beep will sound as before once every 15 seconds until the switch is moved to the left (normal) position. To reset a fire alarm, first clear the smoke/heat detector by blowing briskly into detection chamber, or allow a heat sensor (if used) to cool sufficiently to cause its contacts to open. Next, enter a correct master or auxiliary code on the digital remote. This should cause the panel to reset.

(Note: To inhibit false alarms caused by normal cooking or tobacco smoke, the DSS-200 fire loop requires a 2-second closure before tripping an alarm.)

DETECTOR INSTALLATION & PLACEMENT

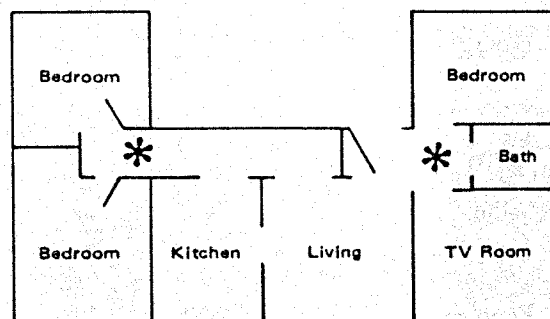
Since most fires in a home occur at night when everyone is asleep, the ideal location for a minimum of one smoke detector is between the bedroom area and the rest of the house. If the bedrooms are spread out or if they are located in different sections of the house, one smoke detector should be placed near each of these sleeping areas.



Best Residential Detector Location Placement
Between Bedrooms and Rest of House

Fig. #3

In multi-level houses, one smoke detector may be sufficient to protect an entire floor. Since smoke rises, a stairwell in a home tends to become a natural "chimney" for smoke rising from one level to the next. Therefore, by locating a smoke detector near the top of the stairs leading to a main sleeping area, all bedrooms can be successfully protected using a minimum of units.



NOTE: Place Detector Near All Sleeping Areas

Fig. #4

EMERGENCY EVACUATION PLAN

An emergency evacuation plan should be established for an actual fire alarm condition. For example, the following steps are recommended by the National Fire Protection Association and can be used as a guide in establishing this plan for homes. Similar plans may be made for commercial establishments.

1. Draw up a floor plan of your home. Show windows, doors, stairs, and rooftops that can be used for escape. Indicate each family member's escape routes. Always keep these routes free from obstruction.
2. Determine two means of escape from each bedroom. One will be the door leading to the normal exit from the house. The other may be a window that opens easily. An escape ladder may have to be located near the window if there is a long drop to the ground below.
3. Set a meeting place outdoors for a head count of family members.
4. Practice escape procedures. Sleep with the bedroom door closed. It will increase your escape time. If you suspect fire, test the door. If it is hot, don't open it—the hall is already too hot to enter. If you think it's safe, brace your shoulder against the door and open it cautiously. Be ready to slam the door if smoke or heat rush in. Practice escaping to the outdoors and meeting at an assigned spot. Call the fire department from a neighbor's phone.

NOTE: After the installation of your alarm system has been completed, notify your local Fire and Police Departments to give them your name and address for their records.

Evacuation Plan

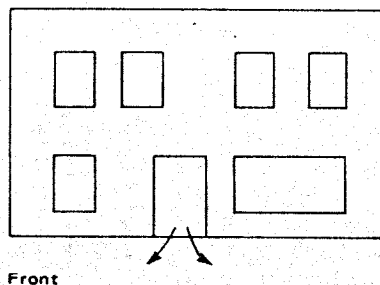
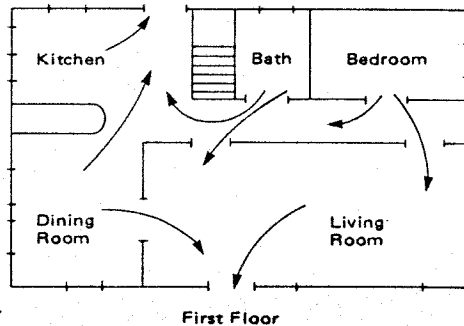


Figure #5

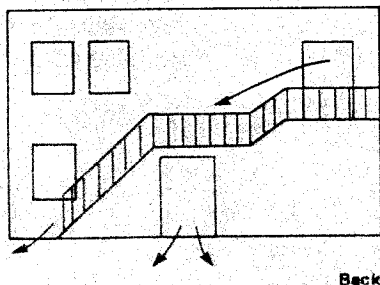
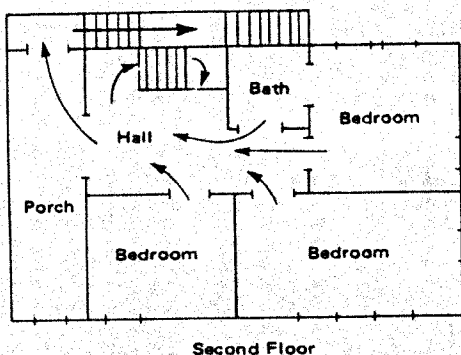


Figure #6

How To Use the Medical Feature

To transmit a medical alarm signal to the central station, depress the lower right dot and the digit "0" on the DCU-200 remote or any one of the individually installed switches. The medical signal is a silent alarm condition; however, the Armed LED will blink. This feature is an option and should be used in extreme emergencies only.

How To Use the Audio/Tactile Feedback Keyboard

Depression of the digit keys on the remote will result in a short beep for each key depressed. This feature will confirm to the user proper operation and help eliminate errors. Arming of the system will result in a pulsing beep which will sound for 30 seconds (or for the predetermined delay time that has been programmed.)

How To Use the AC Power Indicator

The AC Power Indicator is illuminated on the control panel when normal A.C. power is being provided to the system. If the A.C. power has been interrupted, this LED will begin to flash on and off. If your system is connected via the cable, a supervisory signal is transmitted simultaneously to the central station indicating loss of A.C. power. The system will not function on standby battery power. In addition, a low battery signal will be transmitted to the central station if the A.C. power remains off long enough to permit discharge of the battery if your system is connected via the television cable. The battery will normally power the system for about 8 hours with a 12V, 6 AH battery. The exact time will depend on how many smoke detectors and other accessory devices are connected.

How To Use the System Test Feature

The System Test switch located on the front of the control panel permits the user to test the system to ensure that it is functioning properly. Place the switch in the right position and hold for a few seconds. The siren will sound indicating proper operation. Release the switch, and it will return to its normal position. No alarm signal will be transmitted to the central station during this test.

Homeowners should be encouraged to test their systems weekly.

SYSTEM PROGRAMMING

The DSS-200 system has been designed to allow the installer to quickly and easily set up the operating parameters of the installation, as well as offer the user versatility and convenience in its daily operation.

How To Program the Master Code, Central Station Telephone Number, and the Account Number

Programming of the master code, central station telephone number and the customer account number is accomplished through the use of DTI's model DPP-100 PROM programmer. The DPP-100 requires that the installer use a 74S288 32 x 8 bit bipolar PROM. The DPP-100 programmer operates from a 12VAC, class II plug-in transformer with a minimum rating of 20 VA. Once the transformer is plugged in, insert a 74S288 PROM, and press the Start button.

If there is no telephone number previously programmed, the display will automatically display:

TELEPHONE no.

Using the DPP-100 keyboard, enter the area code, if necessary and the telephone number of the central station. This will appear on the display. If a wrong entry is made from the keyboard, depress the "Error" button and the last entry made will be erased.

To permanently program this new telephone number into the PROM, simultaneously depress the two buttons labeled "Program" for three seconds.

NOTE: If you insert a PROM that has a telephone number previously programmed, the preprogrammed number will be displayed alternating with the words "Telephone No." To duplicate this telephone number into another unused 74S288 PROM, remove the previously programmed PROM and insert the unused PROM into the programming socket. The previously programmed PROM's telephone number will be automatically stored in the DPP-100.

To permanently program this stored telephone number into the unused PROM, simultaneously depress the two buttons labeled "Program" for three seconds.

If the PROM fails to program properly, the display will show an

Error

message and a new PROM must be inserted.

NOTE: Once the PROM is programmed, it cannot be erased or used again. After the telephone number has been programmed, the display will automatically display:

MASTER Code

Enter the master code (this must be a 4 digit number) into the keyboard. This number will appear on the display. The "Error" button can be used to correct a wrong entry.

To permanently program the master code into the PROM, simultaneously depress the two buttons labeled "Program" for three seconds.

After the master code has been programmed, the display will automatically show the words:

ACCOUNT no.

Enter the account number (must be a 3 digit number) into the keyboard. This number will also appear on the display. The "Error" button can again be used to correct a wrong entry before permanently programming the PROM.

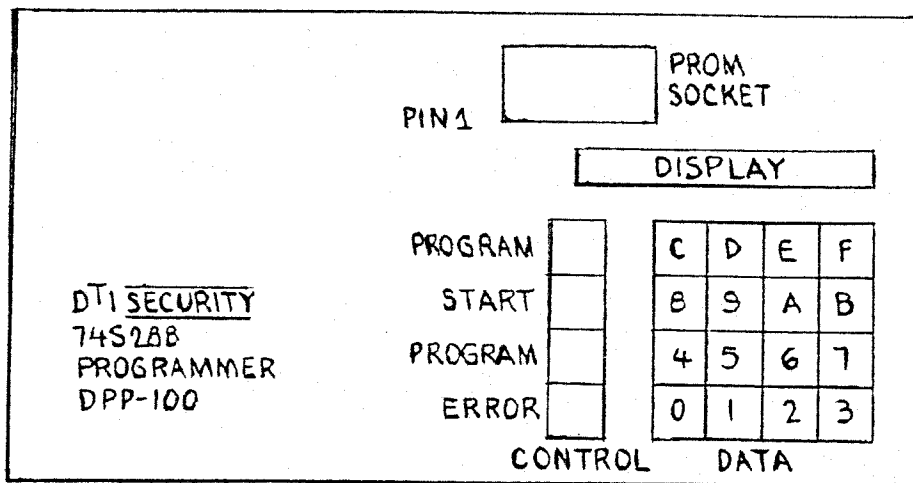
To permanently program the account number into the PROM, simultaneously depress the two buttons labeled "Program" for three seconds.

If the program is properly entered, the display will show the words:

ALL done

(Please refer to Fig. #7)

Figure #7



How To Program An Auxiliary Code

An auxiliary code can be programmed into the system by the user for use by babysitters, guests, etc. to enable others designated to arm and disarm the system without revealing the master code. To program an auxiliary code, follow these basic steps:

1. System must be disarmed.
2. Press the dot in the lower left hand corner of the keyboard on the remote.
3. Enter the master code.
4. Enter the number "3".
5. Enter the alternate code (any four digit number desired, digits may be repeated).
6. Press the lower left dot again.
7. The auxiliary code is now programmed. It is good practice to test it by turning the system on and off again using this code.

To Remove an Auxiliary Code, the following steps must be followed:

1. The system must be disarmed.
2. Press the lower left dot.
3. Enter the master code.
4. Enter the number "3".
5. Enter the master code.
6. Press the lower left dot.
7. The auxiliary code is now removed.

A homeowner pamphlet is provided along with this installation manual in order that the user may keep it for future reference on operation of the system's features.

How to Program the Exit Time Delay, Entry Time Delay and Alarm Output Duration

Programming of the above functions will be accomplished through the remote keyboard after selection of the below proper time increments:

1. Exit Time Delay (0 to 60 seconds)
2. Entry Time Delay (0 to 45 seconds)
3. Alarm Output Duration (4 to 15 minutes)

The above timing durations may be programmed into memory. If all power to the control panel is lost, then the timing increments will default to the following predetermined set of values. This will also occur during initial power-up.

The DSS-200 indicates when all power has been lost by flashing the Ready To Arm (Status) LED on the DCU-200 when power is restored. This flashing continues until entry of the master code.

1. Exit Time Delay (30 seconds).
2. Entry Time Delay (30 seconds).
3. Alarm Output Duration (5 minutes).

To program the control panel from the remote control requires use of the following sequence:

1. Enter left dot.
2. Enter 4 digit master code.
3. Enter a 1 digit function number, i.e.:
 - a. A "4" selects Exit Time Delay.
 - b. A "5" selects Entry Time Delay.
 - c. A "6" selects Alarm Duration.
4. Enter desired time (2 digit number)
5. Enter left dot again.

The master code is the only code which will allow the programming of these functions.

E L E C T R I C A L C O N N E C T I O N S

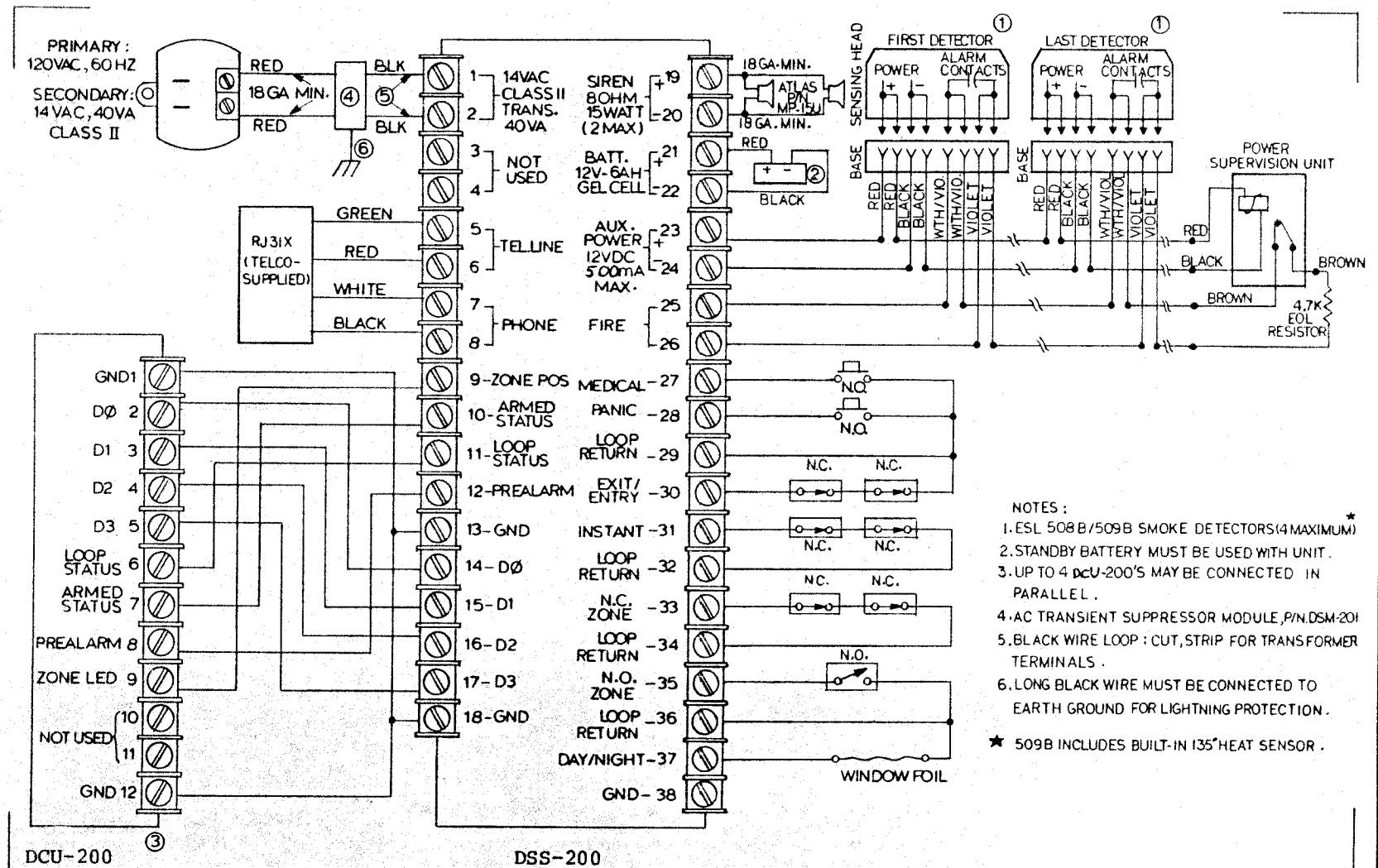
Terminal	Function	Description
1 & 2	14 VAC Input	Connect these terminals to a 14 VAC, Class II Plug In 40 VA transformer. 14 VAC is recommended for correct operation under brown-out conditions. A 12 VAC, Class II, 40 VA transformer will work satisfactorily at normal line voltages. NOTE: The transformer must never be plugged into an outlet controlled by switch.
3 & 4	Make no connection	
5 & 6	Telephone Line	Connect the green and red wires from the telephone company installed RJ31X block jack to terminals 5 & 6 to enable the system to seize the line and report alarm data to the central station. During this dialing out period, all phones will be inoperable until transmission of all pertinent data is completed. Refer to the system wiring diagram.
7 & 8	Phone Line	Connect the white and black wires from the telephone company installed RJ31X block jack to terminals 7 & 8. Refer to the system wiring diagram.
9	Zone In LED Output	Connect terminal 9 on the control panel to terminal 9 on the remote which will allow the LED to be illuminated when the zone is included in the protection circuit.
10	Armed LED Output	Connect terminal 10 on the control panel to terminal 7 on the remote. The LED will be illuminated when the system is armed.
11	Ready To Arm LED Output	Connect terminal 11 on the control panel to terminal 6 on the remote. When all loops are safe and the system is ready to be armed, this LED will be illuminated.
12	Prealarm Output	Connect terminal 12 on the control panel to terminal 8 on the remote. This output will sound during the Exit/Entry delay periods, beep to indicate Fire trouble, function as a day/night loop trouble indicator and indicates acceptance of code digits as entered on the remote.
13 & 18	Common	These terminals are the "common" points for the keyboard. Connect terminals 13 and 18 on the panel to terminals 1 and 12 on the remote.
14	Keyboard Bit 0	Connect terminal 14 on the control panel to remote terminal 2.
15	Keyboard Bit 1	Connect terminal 15 on the control panel to remote terminal 3.
16	Keyboard Bit 2	Connect terminal 16 on the control panel to remote terminal 4.
17	Keyboard Bit 3	Connect terminal 17 on the control panel to remote terminal 5.
		The above connections (14 through 17) will allow the flow of information from the keyboard to the control panel.
19 & 20	Alarm Output	Connect a maximum of two 8 ohm, 15 watt speakers in parallel. No external siren driver is necessary.
		NOTE: Use 18 gauge wire minimum for long runs.

E L E C T R I C A L C O N N E C T I O N S

Terminal	Function	Description
21 & 22 (+) (-)	Standby Battery	Connect a 12V, 6 Amp hour capacity gell cell rechargeable battery to these terminals. Do not connect a dry cell battery.
23 & 24 (+))-)	Auxiliary Power Output	These terminals provide 12-14 VDC, at 500 mA maximum for auxiliary equipment connected to the control panel such as microwaves, passive infrared, smoke detectors, etc. The total maximum current draw must not exceed 500 mA.
25 & 26	Fire Loop (N.O.)	Connect smoke detectors or thermostats with normally open alarm contacts in parallel with a 4.7K OHM EOL resistor to these terminals. Total maximum current draw must not exceed 500 mA.
27 & 29	Medical Loop (N.O.)	Connect any number of normally open pushbutton switches in parallel with these terminals. A closure of any of these contacts will trigger a silent medical alarm. The Armed LED output will flash when a medical alarm is tripped, and will continue flashing until reset by entry of a master or auxiliary code.
28 & 29	Panic Loop (N.O.)	Connect any number of normally open switches in parallel with these terminals. A momentary closure of any switch connected to these terminals will cause an alarm signal similar to the continuous whooping burglary siren. The system need not be armed for this feature to function.
30 & 32	Exit/Entry Loop (N.C.)	Connect any number of normally closed contacts in series with terminals 30 & 32. An open in the loop will cause an alarm if the control is armed. The duration of the exit/entry delay periods are independently programmable through the remote unit.
31 & 32	Instant Loop (N.C.)	Connect any number of normally closed contacts in series with terminals 31 & 32. An open in the loop will cause an immediate alarm if the control panel is armed.
33 & 34	Zone Instant Loop (N.C.)	Connect any number of normally closed contacts in series with terminals 33 and 34. When the zone is enabled, an instant alarm will occur upon violation of the loop if the control panel is armed.
35 & 36	Zone Delayed Loop (N.O.)	Connect any number of normally open contacts in parallel with terminals 35 & 36. This sensor loop is typically used for interior protective devices such as floor mats, etc. This is an independent loop but has the same exit/entry time delays as the Exit/Entry loop. When the zone is enabled, an alarm (or exit/entry time delay) will result from a closure of this loop if the control panel is armed.
37 & 38	Day/Night Loop (N.C.)	Connect any number of normally closed contacts in series with terminals 37 & 38. With the control panel disarmed, the day/night loop will provide an intermittent signal to the prealarm output if the loop is bad (one short beep every 15 seconds.) It will also ignore the loop when the control panel is armed with the loop violated. If the day/night loop is good at the time the control panel is armed, the loop will respond like a normal instant loop if it is opened. This loop is intended to be used with window foil.

NOTE: This is the only burglary loop which does not prevent arming of the control panel if it is violated. This loop also does not affect the Ready To Arm LED output.

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED



- NOTES :
- ESL 508 B/509B SMOKE DETECTORS(4 MAXIMUM)★
 - STANDBY BATTERY MUST BE USED WITH UNIT.
 - UP TO 4 DCU-200'S MAY BE CONNECTED IN PARALLEL.
 - AC TRANSIENT SUPPRESSOR MODULE,P/N DSM-201
 - BLACK WIRE LOOP : CUT,STRIP FOR TRANSFORMER TERMINALS.
 - LONG BLACK WIRE MUST BE CONNECTED TO EARTH GROUND FOR LIGHTNING PROTECTION.
- ★ 509B INCLUDES BUILT-IN 135°F HEAT SENSOR.

TOLERANCES UNLESS OTHERWISE SPECIFIED		FRACTIONS DEC ANGLES	
±	±	±	±
APPROVALS		DATE	
DRAWN		1/1-21/91	
CHECKED		1-7/91	
SCALE		C	
SIZE		DRAWING NO	
16-0554		REV	
DO NOT SCALE DRAWING		SHEET 1 OF 1	

Specifications:

Operating Voltage: 14 VAC*, Class II, 40 VA plug-in transformer
Standby Power: 12-volt, 6 AH gel-cell
Alarm Outputs: Local-Integral siren driver (fused)
Communicator-integral 4-channel dialer with built-in line seize, Franklin Signal format

Fire	1	Medical	2
Panic	8	Burglary	4

Bell Cut-Off and Reset: Programmable from the keyboard; 4 to 15 minutes

Detection Circuits:

1. Normally Closed, Instant
2. Normally Closed, Exit/Entry, Instant or Delayed (switchable)
3. Normally Closed Zone, Instant
4. Normally Open Zone, same action as E/E loop
5. Normally Closed Day/Night, Instant (if in circuit; see operation description)
6. Normally Open 24-hour Panic, self-latching
7. Fire, Supervised (4.7K End-of-Line Resistor)
8. Tamper (on the control panel)
9. Normally open 24-hr. Medical, self-latching

Loop Specifications: 500 uA loop current; isolated power supply; RFI and transient suppression built-in

Exit/Entry Time Delay: Independently programmable from keyboard; 1 to 60 seconds Exit, 1 to 45 seconds Entry

Arm/Disarm Operation: Master Code; 4-digit (repeating) code, programmed into PROM at installation time
Auxiliary Code; 4-digit (repeating) code, programmable from keyboard

Pre-Alarm: Buzzer built into control panel. Remote output; 12 VDC, 100 mA

Auxiliary Power: 13.7 VDC 500 mA Max (fused)

Control Faceplate Indicators: AC Power LED, Fire Trouble LED, Zone In LED

Remote Indicator Outputs: System Armed LED, Ready to Arm (Loop Status) LED, Zone In LED, Prealarm

Panel Faceplate Controls: Zone In/Zone Out switch
System Test switch
Instant/Delay switch (E/E and Open Zone loops)
Fire Trouble Bypass switch

Enclosure: High Impact ABS plastic

Weight: DSS-200—2 lbs. 10 oz. (w/o battery)
DCU-200—10 oz.

Dimensions: DSS-200—9 1/4" x 10 3/4" x 4 3/8"
DCU-200—7 15/16" x 4 1/2" x 1 3/4"

Operating Temperature: 20°F to 125°F

*Recommended for correct operation under brown-out conditions. A 12 VAC, Class II 40 VA transformer will work satisfactorily at normal line voltages.

Installation Checklist

After installation is complete, we recommend following local and Central Station tests be performed. Disconnect the 109 cord from the RJ-31 or 33X telco jack and the cable drop from the terminal, if cable is used.

LOCAL TESTS:

1. Lock the tamper switch in. Arm the system with the master code.
2. Check entry and exit delay operation.
3. Open instant alarm loop (terminals 31 & 32). Local alarm should sound. Close loop.
4. Depress emergency buttons. Local alarm should sound. Disarm panel.
5. Disconnect the local siren(s) from terminals 19 and 20. Set the V.O.M. to AC, 50 volt range. Connect the meter leads to terminals 19 and 20.
6. Walk test all interior protection devices with the Interior Protection switch on. Unit should alarm and V.O.M. should read about 12 volts. The Zone LED on the terminal should be lighted.
7. Turn the Interior Protection switch off. Walk test one interior device. Unit should not alarm. The Zone LED on the terminal should not be lighted.
8. Activate the smoke detector. The V.O.M. should read about 12 volts.
9. Disconnect the lead from terminal 25. The local fire trouble signal should be heard. Reconnect the lead to terminal 25.

CENTRAL STATION TESTS

1. Reconnect the 109 cord.
2. Call the central station and advise that test signals will be transmitted.
3. Arm the system and send an emergency signal. Verify receipt of emergency signal by telephone receiver. Verify account code.
4. Open the instant loop, terminals 31 and 32. Verify receipt of burglar alarm signal. Close loop.
5. Reconnect the siren(s) to terminals 19 and 20.

6. Temporarily short terminals 25 and 26. Verify receipt of fire signal. Local horn should sound.
7. Disconnect one of the transformer leads from terminal 1. Verify that AC Power LED flashes. Reconnect the transformer lead. The AC Power LED should show steady light.

Troubleshooting

1. SYMPTOM:

Continuous siren.

TEST:

Press Test switch and then enter the master code. If siren doesn't stop, check the wiring to the remote. Next, power down and then power up the system. If you still have a siren, the board should be replaced.

If the siren stops after you press the test switch and enter the master code, but starts again after three seconds, check the fire loop and wiring. Most likely it is shorted and will require repair. If it is not shorted, try powering down and then powering up the system.

2. SYMPTOM:

No audio feedback when keys are depressed.

TEST:

Press the test switch. If keys produce a beep now, it was probably just a temporary problem. Depress the test switch again and perform a quick installation check. If the keys still do not produce a beep, check to see if the Power & LEDs are on. If they are on, check the wiring between the remote and the board. If the LEDs and Power are not on, check the AC power supply and the battery.

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TROUBLESHOOTING GUIDE

1. NO STATUS LIGHT

This indicates that there is a problem in either one or both of your burglar alarm circuits.

- A. The perimeter circuit - that is, the door and window contacts around the outside of the house. Check to be sure all doors and windows are closed securely.
- B. The interior circuit - that is, any detection devices you may have inside your house (such as interior doors, ultrasonics, photobeams, under carpet mats, etc.). Check the interior protection light on the remote unit. Turn to the OFF position (Master Code + Key #1). If the status light comes on, you will know that the perimeter circuit is intact.

DISARM THE SYSTEM.

Now turn the interior protection ON (Master Code + Key #1). If the status light goes out, you will know the problem is in this circuit. Make a physical inspection of any and all devices connected to this circuit. Make sure all protected interior doors are closed, under-carpet mats have nothing placed on them, photobeams are not blocked or have been bumped, and that any ultrasonics are not disturbed (no one walking around in their pattern). If this physical inspection should not reveal the problem, call for repair.

2. AC POWER LIGHT IS OFF OR FLASHING

This indicates that the AC power is no longer being supplied from the 14V transformer. There are two places for you to check:

- A. The transformer, to see if it is still plugged in properly.
- B. The circuit breaker or fuse that controls the outlet into which the transformer is plugged. This breaker or fuse needs to be "ON" or intact.

If either of these two checkpoints reveals the source of the problem, then you should be able to make the correction yourself. If it does not, call Warner Amex Security for repair.

3. FLASHING "ON" LIGHT AT REMOTE UNIT

This indicates that the system is either in alarm or has been alarmed and needs to be reset with the master code. Call the Central Station to confirm any alarm activity with your account. (Please have your account code ready to give the Central Station technician.)

4. CONTINUOUS STEADY SIREN

- A. A continuous steady siren tone normally indicates a fire alarm condition. Immediately enact your emergency evacuation procedure.

If it becomes apparent that there is no fire or if the severity of the fire or smoke is not presenting a threat to your family's safety, then enter your master code at the remote.

- B. If the AC power to the panel that has been off for an extended period, either because of one of the conditions covered on Page 10 or because your household power is off, the battery may be nearly discharged. This will normally cause a continuous steady siren until the battery completely discharges. NOTE: If the battery has completely discharged and the AC power is restored, the siren may sound for a few minutes until the battery recharges somewhat.

The fact that the siren sounds under these conditions is completely normal and represents your system's final attempt to alert you that it is almost completely without power and is not able to function properly.

- C. Like any other electronic device, your alarm system can experience an internal failure. This is unlikely; but when it does occur, it is most often caused by lightning (other electrical appliances in your home may have been lightning-damaged also).

If you find it impossible to stop the siren sound by normal means, then:

- (1) Remove the cover from the master control panel. (Remove the four Phillips-head screws.)
- (2) When the cover has been removed*, disconnect the wire(s) from the top screw terminal on the right hand side. This will disconnect the siren. You should now call for repair of your system.

* Removing the cover will send a Burglar Alarm signal to the Central Station if the panel is capable of communicating.

NOTE: All circuitry inside the control panel is low voltage and DOES NOT represent a shock hazard. However, the battery is capable of supplying high current and can cause sparks or overheating of wires. Therefore, be careful not to touch more than one metal conductor at a time with your screwdriver, and make sure that the wire you have removed does not touch any other wire or any part of the electronics board.

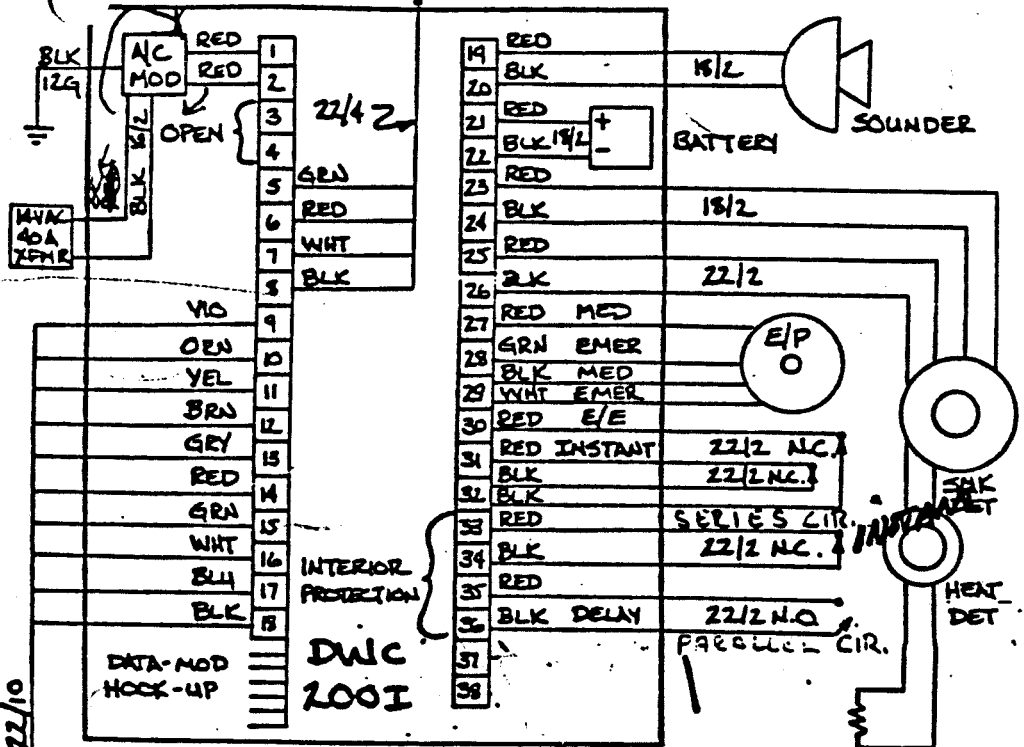
ALARM MEMORY CODES - DWC 203A →

- 0 = Medical - Keypad Initiated
- 1 = Delay Loop
- 2 = 24 Hour Loop
- 3 = Interior Loop - Normally Closed
- 4 = Interior Loop - Normally Open
- 5 = Instant Loop
- 6 = Police Emergency - E/P Button Initiated
- 7 = Medical - E/P Button Initiated
- 8 = Fire Loop
- 9 = Tamper

LD - Police Emergency - Keypad Initiated

DISARM FIRST
DO NOT REARM
PRESS LEFT DOT.
THEN EACH # 1-2-3-
5-6-7-8-9-0
THAT BEEP IS
ZONE THAT LAST TRIP

TO RISIX BLOCK



22/10

DATA-MOD
HOOK-UP

INTERIOR
PROTECTION

DWC
200I

GRN	1
RED	2
GRN	3
WHT	4
BLK	5
YEL	6
GRN	7
BRN	8
VIO	9
	10
BLK	11
	12

DWR
200

4.7 K E.O.L.
LOCATED IN LAST
HEAT DETECTOR
AND TROUBLE
RELAY



WARNER AMEX
SECURITY SYSTEMS

WIRING DIAGRAM FOR
DWC 200I
REVISED 9/25/81 IX

5. TELEPHONE LINE TROUBLE

If you should experience trouble on your telephone line (loss of dial tone, etc.) you can easily check to see if the problem is in the phone or with your alarm system.

- A. Go to the RJ31X (telephone jack) that was installed specifically for your alarm system. This is usually located near the telephone protector block.
- B. Disconnect the coupler cord going into the jack.
- C. Pick up one of your phones to see if the problem has been eliminated (dial tone, etc.). If it has, then the problem is in the alarm system and should be immediately reported to Warner Amex Security Systems for repair.

If the problem still exists, the trouble is in the phone system and should be reported to the telephone company for repair. Reconnect the coupler to the telephone jack.

- D. After the telephone service has been repaired, be sure to test your system with the Central Station to be sure it is operating properly (See Central Station test).

6. FLASHING "STATUS" LIGHT AT REMOTE

This is a "power up" condition, and indicates all power (both AC and battery) has been removed from the system. All programmed features will have been erased. Enter the master code to stabilize the status light. Reprogram any desired feature.

7. 15-SECOND BEEP FROM REMOTE

This is an audible supervisory signal indicating a trouble condition. To silence the tone, move the SYSTEM TEST switch to the right, hold for one second, then release. Call for repair.

8. TESTING THE SYSTEM

LOCAL TEST

You can test the sensors in your burglar alarm system without sounding the siren every time you open a door or window if you wish to do so. To do this, disarm the system, and place it in the Announce Mode. This mode provides a short beep from the Remote any time an enabled circuit is opened or closed.

DTI SYSTEMS-WARNER SYSTEMS

1. Buzzing or crackling sound out of siren>check back up battery.
2. If keypad buzzer sounds weak>check battery or put cap on keypad.
3. To put CAPACITOR on keypad>put across brn and blk.
4. If system locked on after storm>power down pull chip and power up, if sti not locked up then chip bad.
5. If primary shows open on transfomer>replace m.c.u.
6. If secondary shows open on transfomer>replace transformer
7. If 1amp fuse blown>check aux. output and keypads for shorts.
8. If 3amp fuse blown>check siren output of short or bad siren.
9. If fire trouble l.e.d flashing>meter fire loop should be 4.7k
10. If dialer relay clicking>power down and up and send signals.
11. If phones dead>unplug RJ31X if line clears then power down and up then check line and send signals. If still dead disconnect viristors and chec line.
12. If false fire alarm>clean all smokes of webs and dust.
13. To hook up siren to status led>press #5 and hold and press #8 and let go of both at same time, to stop 5-8 test press any #.
14. To trip medical>press 0 and left dot at same time.
15. To trip panic>press both dots at the same time.
16. To trip duress>press in code to turn of then press #3.
17. Temp codes>press left dot-master code-#3-new temp code-left dot.
18. Second code>same as above but use #4 instead of #3.
19. QUICK ARM ON >left dot-master-#8-left dot.OFF>use #9 instead of #8.
20. ANNOUNCE MODE ON>left dot-master-#1-left dot.OFF>#2 instead of #1.
21. ENTRY DELAY>left dot-master-#5-time (30-90 sec.)-left dot.
22. EXIT DELAY> left dot-master-#6-time (above)-left dot.

STORM CALLS

Test all contacts and all sensors
Send signals to central station.

DTI Fire Loop

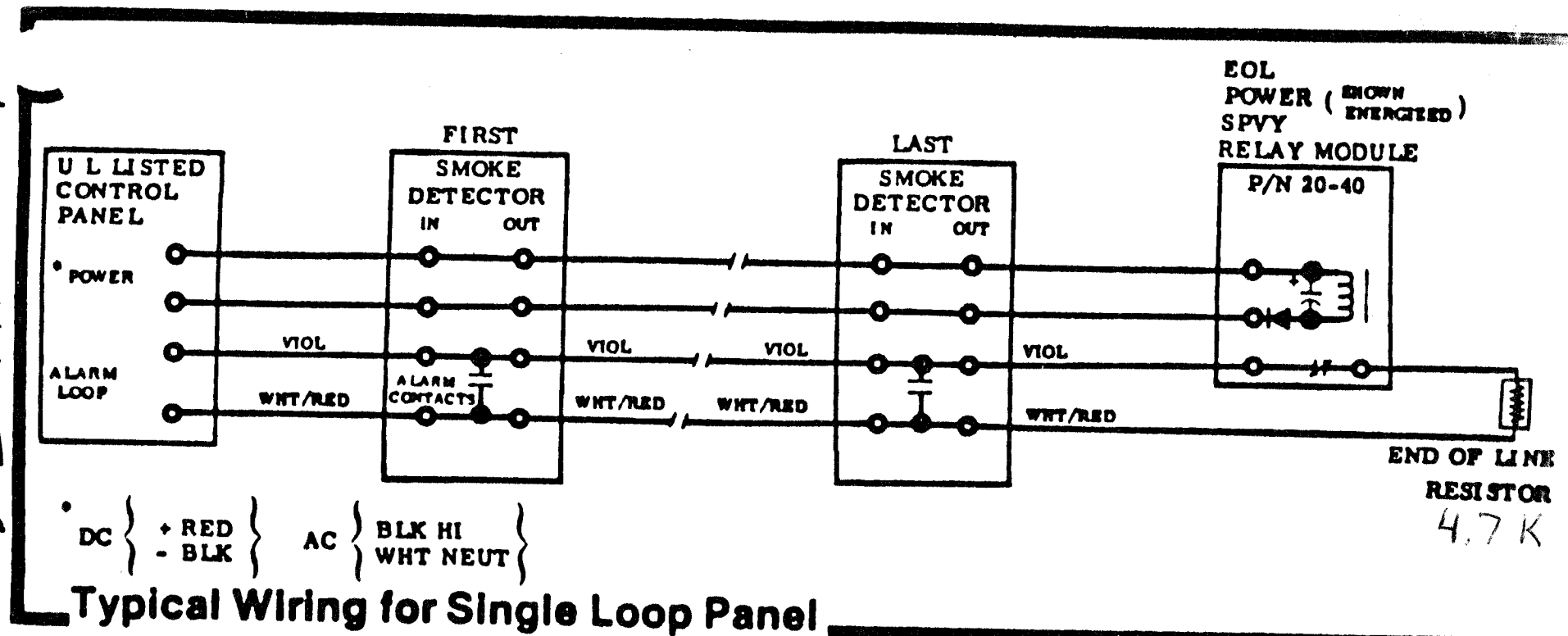


FIGURE 5

3. SYMPTOM:
Blinking Status LED

TEST:

This LED is a power up indicator & tells you that all functions must be reprogrammed, i.e. alarm time, auxiliary code and E/E times.

4. SYMPTOM:
Blinking AC Power LED

TEST:

This LED indicates the system is functioning but no AC power is being supplied. Check to see if the transformer is plugged in. Measure AC voltage at output of transformer. Voltage should be 12-14 VAC.

5. The System Test switch has several functions when placed in the right position:
- Checks the siren.
 - Checks the fire detection circuit.
 - Checks the battery.

When the Test switch is pushed to the right and held for a few seconds, the siren should give a short blast. If it does, the siren, battery and fire detection circuits are all working normally. If not, perform the following tests:

SYMPTOM:

The AC Power LED goes off and stays off as long as the Test switch is held to the right.

TEST:

The battery is discharged or defective and probably should be replaced.

SYMPTOM:

Pushing the Test switch does not sound the siren. When the cover is removed, the siren sounds as the tamper switch trips an alarm.

TEST:

The fire detection circuit is bad, and the board needs to be replaced.

SYMPTOM:

Neither the Test switch nor a tamper alarm cause the siren to sound.

TEST:

Press both dots on the remote to trip a panic alarm. If the siren sounds, both the tamper switch and the fire circuit are bad, and the board should be replaced.

If the siren still does not sound, the speaker and its wiring, as well as the alarm fuse, should be checked. If these are fine, the board has another problem, and should be replaced.

Warranty

DTI Security products are warranted to be free from defects in material and workmanship for a period of 12 months from date of shipment to the original purchaser. Defective units returned by the buyer at his own expense during this period will, at the seller's option, be repaired or replaced without charge provided that, after inspection, it is the seller's opinion that the unit has not been subject to electrical or physical misuse. In no event shall the seller be liable for any loss or damage, consequential or otherwise, arising out of the use by buyer or failure of the product to operate. This warranty is exclusive and given in lieu of all other warranties, expressed or implied, and is void if the equipment has been visibly damaged by accident, misuse, or if the unit has been modified by anyone other than DTI Security.

DTI Security

A DIVISION OF DATURA INTERNATIONAL, INC.

1034 Kiel Court, Sunnyvale, California 94086

Phone (408) 744-1200 Outside California Phone (800) 538-8488

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