INSTALLATION AND PROGRAMMING MANUAL

DD3E

DIGITAL COMMUNICATOR

SCANTRONIC

SECTION I - INSTALLATION INSTRUCTIONS

1.0 SYSTEM DESCRIPTION

The Scantronic Model DD3E is a digital communicator capable of reporting 14 programmable function codes from one installation when using receivers Such as Adcor Model 250, Ademco, DCI, Franklin, Osborne-Hoffman, Radionics, Sescoa, Veritech and Silent Knight; the unit can dial in either rotary (dial pulsing) or Touch Tone.The unit is also compatible with receivers capable of receiving hexadecimal format. Each of the two phone numbers may be programmed for dialing pauses and to wait for second dial tone. Each of the two account numbers may be three or four digits.

Four external alarm zones are monitored by this system. These zones may be programmed to report Alarm codes, Restore codes, Test Cancel codes, and Status codes. They may also be programmed for a Reporting (Abort) Delay.

In addition to the four external alarm zones, there are six other internal zones that may initiate reports. They are Zones Five through Eight, Low Battery, and a 24-Hour Timer. Zones Five through Eight may be used to report individual restoral codes for Zones One through Four, when using the standard format. A separate code may also be programmed for a global Restore Code. Reporting (Abort) Delays are also available.

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1.1 TOUCH TONE/ROTARY DIALING SELECTION

The dialing selection link is shipped from the factory for Rotary Dialing. If Touch Tone Dialing is desired, move the link to the Touch Tone position.

1.2 MEMORY STORAGE

Telephone numbers, account numbers and other functions are stored in a reprogrammable EEPROM which may be programmed by using Scantronic Model P-4000 EEPROM Programmer, or Scantronic Control Panel Models AV-4000, AV-6000 or AV-8000.

NOTE: The Digital Communicator will not work without a programmed EEPROM.

1.3 INSTALLATION

NOTE: Refer to Fig. 1 for proper Installation.

1) Determine the characteristics required for the installation. Program an EEPROM according to the Programming Instructions in Section II.
2) Install the EEPROM making sure that the identification notch is located as shown in Fig.1
3) Mount the unit using double-sided foam tape or two screws.
4) Determine dialing selection and install dialing link into proper position.
5) Cut resistor R2 as shown on **Fig. 1.** If Low Battery Detection is desired (a 12 Vdc power supply must be used). Do not cut if Low Battery Detection is not desired or when 6 Vdc power supply is used.
6) Connect the input triggers. Both Open Circuit and Closed Circuit loop triggers may be used. Closed loops are returned to TRIP RETURN, for dry contact operation.
7) Using an FCC approved cable with an 8-position modular plug, connect the unit to the telephone network.
8) Connect EARTH GROUND terminal. Suggested Earth Ground and protection levels are:
   a)Preferred Protection - Separate Metal Grounding Rod
   Acceptable Protection - Metal Cold Water Pipe

b)Use at least 16 gauge wire between the terminal and Earth Ground.
c)Keep wire run as short as possible and away from other panel wiring.
d)Do NOT use an existing lightning rod ground, it can provide a path for lightning strikes to the unit.

9) Connect 6 or 12 Vdc to the +V and -V input terminals.
WARNING: Be sure to observe correct polarity or the unit may be damaged.

10) Snap the cover into position. The unit is now ready for operation.
NOTE: Reporting cycle can be aborted by disconnecting power for 15 seconds. When power is reapplied the unit will reset.

1.4 SPECIFICATIONS

Input Voltage	5.5 to 16 Vdc Supply.
Current:	
Standby	Less than 60 mA
Operate	Less than 115 mA
Temperature Operating Range	35° Fahrenheit to 135° Fahrenheit
Transient and Lightning Protection	Lightning and surge protection provided on all input, power and telephone lines.
Zone Response Time	300 msec. During reporting cycle, response time increases to approximately 1 sec.
Maximum Loop Resistance	Do not exceed 300 ohms on any zone loop.
Dimensions	3.4" x 6.3" x 1.7"
FCC Registration Number	AB798Z-67793-AL-E
Ringer Equivalence	O.lB

1.5 COMPLIANCE FCC

Consumer Information

The Federal Communication Commission (FCC) requires the following information be provided for all computing devices:

This equipment complies with Part 68 of the FCC rules. The hook-up label of this equipment contains, among other information, the FCC Registration Number and Ringer Equivalence Number (REN) for this equipment. You must, upon request, provide this information to your telephone company.

The REN is useful to determine the quantity of devices you may connect to your telephone line and still have all of those devices ring when your telephone number is called. In most, but not all areas, the sum of the REN's of all devices connected to one line should not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the REN, you should contact your local telephone company to determine the maximum REN for your calling area.

If your telephone equipment causes harm to the telephone network, the Telephone Company may discontinue your service temporarily. If possible, they will notify you in advance, but if advance notice is not practical, you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC.

Your telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

If you experience trouble with this telephone equipment, please contact Scantronic USA Inc., 4772 Frontier Way-Stockton, CA 95215 for information on obtaining service or repairs. The telephone company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

Except for the telephone company provided ringer, all connections to the telephone network shall be made through standard plugs and telephone company provided jacks, or equivalent, in such a manner as to allow for easy , immediate disconnection of the terminal equipment. Standard jacks shall be so arranged that, if the plug connected thereto is withdrawn, no interference to the operation of the equipment at the customer's premises which remains connected tot he telephone network shall occur by reason of such withdrawal.

This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subject to state tariffs.

INSTALLATION - The device must use a USOC RJ31X connector.

This product has been tested on a sample basis and found to comply with the limits for Class B digital device, pursuant to Part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. There is, however , no guarantee that interference will not occur in a particular installation. If interference generated by this unit is suspected, contact Scantronic USA Inc., 4772 Frontier Way-Stockton, CA 95215.

If it is found that this equipment does cause unacceptable interference to television reception, the following steps can be taken to reduce and/or eliminate the problem.

1. Reorient or relocate the receiving antenna.
2. Move the television or receiver away from the unit.
3. Plug the unit and the TV/radio receiver into different outlets, i.e. not on the same circuit breaker.
4. Move the antenna leads away from any wire runs for unit.
5. If necessary, you should contact Brinks Home Security or an experienced TV/Radio technician for additional suggestions.

NOTICE: The Canadian Department of communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian Maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connection of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.
Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electrical inspection authority, or electrician, as appropriate.

The Load Number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop which is used by the device, to prevent overloading. The termination of a loop may consist of any combination of devices subject only to the requirement that the total of the Load Numbers of all the devices does not exceed 100.

The Load Number of this unit is 30.

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the
interference-causing equipment shandard entitled "Digital Apparatus", ICES-003 of the Department of Communications.

Cet appareil numerique respecte les limites de bruits radioelectriques applicables aux appareils numeriques de Classe B prescrites dans la dans la norme sur le materiel brouilleur: "Appareils Numeriques", NBS-003 edictee par le ministre des Communications.

AVIS: L'etiquette du ministere des Communications du Canada identifie le materiel homologue. Cette etiquette certifie que le materiel est conforme a certaines normes de protection, d'exploitation ed de securite des reseaux de telecommunications. Le Ministere n'assure toutefois pas que le materiel fonctionnera a la satisfaction de l'utilisateur.

Avant d'installer ce materiel, l'utilisateur doit s'assurer qu'il est permis de le raccorder aux installations de 'l'entreprise locale de telecommunication. Le materiel doit egalement etre installe en suivant une method acceptee de raccordement. Dans certains cas, les fils interieurs de l'entreprise utilises pour un service individuel a ligne unique peuvent etre prolonges au moyen d'un dispositif homologue de raccordement (cordon prolongateur telephonique interne). L'abonne ne doit pas oublier qu'il est possible que la conformite aux conditions enoncees ci-dessus n'empechent pas la degradation du service dans certains situations. Actuellement, les entreprises de telecommunication ne permettent pas que l'on raccorde leur materiel a des jacks d'abonne, sauf dans les cas precis prevus pas les tarrifs particuliers de ces entreprises.

Les reparations de materiel homologue doivent etre effectuees pas un centre d'entretien canadien autorise designe par le fournisseur. La compagnie de telecommunications peut demander a l'utilisateur de degbrancher un appareil a la suite de reparations ou de modifications effectuees par l'utilisateur ou a cause de mauvais fonctionnement.

Pour sa propre protection, l'utilisateur doit s'assurer que tous les fils de mise a la terre de la source d'energie electrique, des lignes telephonique et des canalisations d'eau metalliques, s'il y en a, sont raccordes ensemble. Cette precaution est particulierement importante dans les regions rurales.

Avertissement. - L'utilisateur ne doit pas tenter de faire ces raccordements lui-meme; il doit avoir recours a un service d'inspection des installations electriques, ou a electricien, seelon le cas.
L'indice de charge (IC) assigne a chaque dispositif terminal indique, pour evciter toute surcharge, le pourcentage de la charge totale qui peut etre raccordee a un circuit telephonique boucle utilise par ce dispositif. La terminaison du circuit boucle peut etre constituee de n'import quelle combinaison de dispositifs, pourvu que la somme des indices de charge de l'ensemble des dispositifs ne despasse pas 100.

L'Indice de charge de cet produit est 30.

1.6 STANDARD FORMAT INDIVIDUAL ZONE (SFIZ) RESTORE REPORT

The Standard Restore Report of the DD3E uses a common (single) restore code programmed in memory location **58** for all Alarm Zones 1 through 4. Any Alarm zone that is desired for a restore report is selected in memory location **57**. The Non-Extended Format can not identify *which* zone restored using the Standard Restore Report.

Alternatively, the DD3E may also be configured to use individual Restore Zone Codes for these four

external Alarm Zones. This feature, which is recommended for reporting using the Standard Format Only, is referred to as the SFIZ Restore Report throughout this publication. To assign and enable a restore report for any Alarm Zone 1 through 4, its corresponding Restore Zone must be programmed with a report code. The following shows the Alarm Zones 1 through 4 and their corresponding Restore Zones.

Alarm Zones
1 (Memory Location 64) **2** (Memory Location 65) **3** (Memory Location 66) **4** (Memory Location 67)

Corresponding Restore Zones
5 (Memory Location 68) **6** (Memory Location 69) **7** (Memory Location 70) **8** (Memory Location 71)

As an example, assuming that the First Account Number is programmed as "123", the Receiver Format for Telephone Number One is programmed for Standard Format, memory locations 57 and 58 are cleared, zone 2 reporting code (memory location 65) is "2", and its Restore Zone (Zone 6) memory location 69 is programmed with code "6". A trip on zone 2 will be reported as follows:

Example Report
Trip Zone 2 123 2
Restore Zone 2 123 6

If an Alarm Zone (Zones 1 through 4) is not enabled (i.e. without reporting code), its corresponding Restore Zone Code must not be programmed.

SFIZ Restore Is only Intended for use with the Standard Reporting Format and It Is not factory programmed. Therefore, when other receiver formats (i.e. Extended, 4+2, and Acron) are used, these four Restore Zones must be disabled, i.e. memory location 68 through 71 must be defeated. Then, any Alarm Zone that is to report a restoral must be selected in memory location 57, and the common restore code in memory location 58 must be programmed. For example, memory locations 68 through 71 are cleared, the receiver format is programmed for Extended, Alarm Zone 2 is selected in memory location 57, and the restore code programmed in memory location 58 is "O". A trip on Alarm Zone 2 will be reported as follows:
Example Report

Trip Zone 2 1232 222 2
Restore Zone 2 123 0 000 2

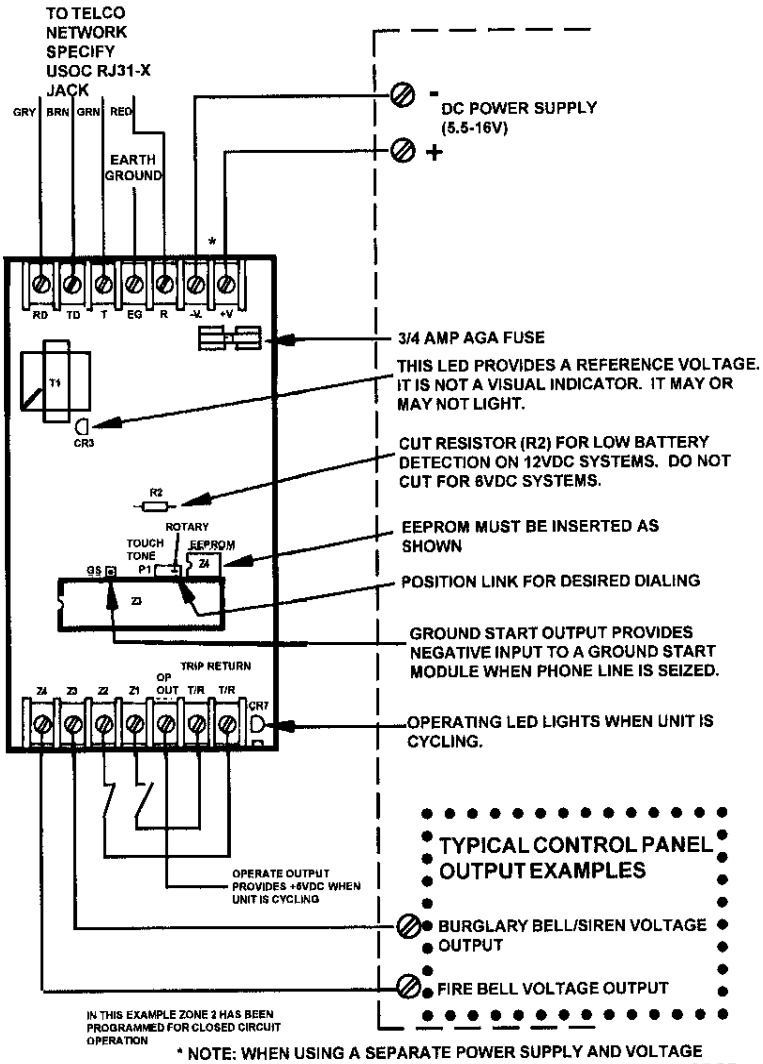
NOTE: Memory Locations 51, 52, 59, 61, and 63 must be programmed appropriately for either type of restore. Please refer to Section II Programming Instructions for proper programming definitions.

SECTION II - PROGRAMMING INSTRUCTIONS

MEMORY LOCATION		DEFINITIONS
1-42	**2.0**	**TELEPHONE NUMBERS**

The DD3E is capable of reporting through two different telephone numbers. Telephone numbers are entered into the appropriate Memory Locations.

FIGURE 1
TYPICAL WIRING EXAMPLE



* NOTE: WHEN USING A SEPARATE POWER SUPPLY AND VOLTAGE TRIGGER FROM A CONTROL PANEL, THE PANEL NEGATIVE (-) MUST BE CONNECTED TO THIS TERMINAL

DD3E PROGRAMMING WORKSHEET

CUSTOMER NAME_____

CUSTOMER ADDRESS_____ ACCOUNT #_____

MEMORY LOCATION	DESCRIPTION	DATA ENTERED	FACTORY DEFAULT
(1- 21)	FIRST TELEPHONE MEMORY LOCATIONS	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	
	FIRST TELEPHONE NUMBER DIGITS		
(22 - 41)	SECOND TELEPHONE MEMORY LOCATIONS	22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42	
	SECOND TELEPHONE NUMBER DIGITS		
(43 - 46)	FIRST ACCOUNT NUMBER MEMORY LOCATIONS	43 44 45 46	
	FIRST ACCOUNT NUMBER DIGITS		
(47 - 50)	SECOND ACCOUNT NUMBER MEMORY LOCATIONS	47 48 49 50	
	SECOND ACCOUNT NUMBER DIGITS		
		Enter Numbers / (SELECT ZONES) 1 2 3 4 5 6 7 8	
51	DIAL SECOND NUMBER ONLY, SELECT ZONES		
52	DIAL BOTH NUMBERS, SELECT ZONES		
53	1 = TIP/RING SHORTING FOR PULSE DIAL 2 = EUROPEAN MAKE/BREAK 3 = FALSE ALARM SHUTDOWN 4 = FAST/SLOW INVERT		
54	TEL #1 Blank = Std. 2 = Ext.Rep. 4 = SK4+2 8 = Acron		Standard
55	TEL #2 Blank = Std. 2 = Ext.Rep. 4 = SK4+2 8 = Acron		Standard
57	RESTORE ZONES		
58	ZONE RESTORE CODE (1 - 15)		0
59	TEST CANCEL ZONES		
60	ZONE TEST CANCEL CODE (1 - 15)		9
61	REPORTING DELAY ZONES		
62	ZONE REPORTING DELAY (x 10 secs)		
63	NORMALLY CLOSED - SELECT ZONES Select any of the zones 1 - 4, also 5 - 8 MUST be selected		5 - 8
64	ZONE 1 REPORT CODE (1 - 15)		1
65	ZONE 2 REPORT CODE (1 - 15)		2
66	ZONE 3 REPORT CODE (1 - 15)		3
67	ZONE 4 REPORT CODE (1 - 15)		4
68	ZONE 5 REPORT CODE (1 - 15)		
69	ZONE 6 REPORT CODE (1 - 15)		
70	ZONE 7 REPORT CODE (1 - 15)		
71	ZONE 8 REPORT CODE (1 - 15)		
72	LOW BATTERY REPORT CODE (1 - 15)		
73	LOW BATTERY RESTORAL REPORT CODE (1 - 15)		
74	24 HR SELF TEST REPORT CODE (1 - 15)		
75	STATUS REPORT CODE (1 - 15)		
78	LOW BATTERY REPORT DELAY TIME (x 1 min) (1 - 15)		
79	Number of Reporting Attempts (Clr = Unlimited) (1 - 15)		8
80	NON EMERGENCY, DIAL SECOND NUMBER ONLY 1 = LOW BATTERY 3 = 24 HR SELF TEST		
81	NON EMERGENCY, DIAL BOTH NUMBERS		

Each number may be up to 20 digits long. The 1st number must be programmed in memory locations 1-20. The 2nd number in locations 22-41. Each number must have a

CLEARED location after the last digit of the phone number.

If more than 20 digits are required, the second telephone number's memory locations may be used to dial a single long number of up to 41 digits which must begin in memory location 1. However, the second account number MUST NOT be programmed to avoid automatic BACK-UP REPORTING (as will be explained later) in case of unsuccessful reporting attempts.

In addition to the telephone digits, two special function digits may be inserted:

1) **SECOND DIAL TONE**

In installations where two dial tones are received (first for internal line and second for outside line). The DD3E may be programmed to detect a second dial tone by entering a "14" between the internal line number and the outside line number.

2) **DIALING PAUSE**

In areas where a dialing pause is required a dialing pause may be programmed after any dialing digit by entering a "15". The dialing pause is approximately 2.5 seconds.

NOTE: Memory location 1 must be programmed for any report transmission.

1-21 2.1 FIRST NUMBER DIALING

Spaces 1-20 are reserved for entering the first telephone number. Starting at Memory Location 1.

22-42 2.2 SECOND NUMBER DIALING

Spaces 22-41 are reserved for entering the second telephone number, starting at Memory Location 22. In special cases when a longer single telephone number is required, these spaces may be used. There are three second number dialing modes:

NOTE., Second number is disabled if a 2nd account number Is not programmed.

1) **BACK-UP REPORTING**

If the primary receiver does not answer after two attempts the second number will be

called for another two attempts. This alternating process between both numbers will repeat until the programmed number of attempts are completed.

2) **DIAL-SECOND NUMBER ONLY**

(SEE MEMORY LOCATIONS 51 & 80)

MEMORY LOCATION	DEFINITIONS

Zones may be selected to dial second number only. Useful for reporting non-emergency conditions without tying up the primary receiver. For example using a zone for testing on demand.

3) **DIAL BOTH NUMBERS - (SEE MEMORY LOCATIONS 52 & 81)**

Zones may be selected to dial both numbers. Used in high security applica tions where redundant reporting is desired.

43-46 2.3 FIRST ACCOUNT NUMBER

A three or four digit account number can be used, beginning in Memory Location 43. If a three digit account number is required, location 46 must be cleared. Hexadecimal digits may be programmed when required. Although these are programmed as 10 through 15, some receivers will display them as letter A through F. Some receivers will not accept a four digit account number.

47-50 2.4 SECOND ACCOUNT NUMBER

A second account number may be entered beginning in memory location 47. If a three digit account number is required, location 50 must be cleared.

NOTE: Second Account is disabled if Memory Location 47 is cleared.

51 2.5 DIAL SECOND NUMBER ONLY, SELECT ZONES

Any combination of Alarm Zones 1 through 4 may be selected to Dial Second Number Only If the SFIZ Restore is used, Restore Zones 5 through 8 must be selected corresponding to Alarm Zones 1 through 4 respectively. For example, Alarm Zone 3 is selected for Second Number Only, a "7" must also be entered for Restore Zone 7.

52 2.6 DIAL BOTH NUMBERS, SELECT ZONES

Any combination of Alarm Zones 1 through 4 may be selected to dial both numbers. Selections are made in the same manner as in memory location 51.

53 2.7 TIP/RING SHORTING FOR PULSE DIALING

Note: External hardware is not provided for this feature.

The GROUND START output (negative voltage) can be used to drive a Tip and Ring Shorting relay circuit, if installed. This feature is designed to provide zero impedance on the output transformer of the telephone circuit during pulse dialing for some areas, for example, in South America. A "1" must be programmed into this location to enable this feature. The shorting relay at the output transformer will be activated for normal dialing digits (including the wait digit "15"), and deactivated during second dial-tone wait (i.e. digit "14"). The "1" must be cleared if the feature is not desired.

MEMORY LOCATION DEFINITIONS

2.8 EUROPEAN MAKE/BREAK

American standard make/break rotary dialing ratio of 60/40 is factory programmed. If European make/break ratio of 70/30 is desired, enter a "2" in memory location 53.

2.9 FALSE ALARM SHUT DOWN (SWINGER REJECTION)

This feature is not factory programmed. This feature may be selected by programming a "3" in Memory Location 53. When this feature is selected, 4 reports on the same zone within a 2 hour period will shut down that zone and ignore alarm signals for 24 hours or until power is disconnected

for 15 seconds.
NOTE: False alarm shut down will not work with zones programmed for SFIZ Restore reports.

2.10 FAST/SLOW INVERT

The DD3E recognizes both Slow and Fast handshake from the receiver, and normally transmits data at the appropriate rate; however, the system can be set up so that it will invert the transmitting rate depending upon the handshake received. Hence, data is sent in Fast format when a Slow handshake is received and in Slow format when a Fast handshake is received. This is useful when a receiver sends a Slow handshake first, but can receive Fast format; in this situation, Fast/Slow Invert reduces transmission time.

To enable this feature, program a "4" in memory location 53

54 2.11 RECEIVER FORMATS TEL #1

If this memory location is cleared, the standard reporting format will be selected.

Entering a "2" will select EXTENDED reporting. (This method allows compatibility with Radionics receivers). Extended format identifies each tripped zone and code (i.e. Alarm, Restore or Test Cancel).

Entering a "4" will select SILENT KNIGHT 4 + 2 format.

When using SILENT KNIGHT 4 + 2 reporting format the DD-3E should be programmed as follows:

1) 4 Account digits must be used.
2) Memory locations 64 to 67 must contain "10' or "A".
3) If Restores are desired memory location 58 should contain "2".
4) Test Cancel should not be used.
5) The SFIZ Restore should not be used, i.e. memory locations 68 through 71 should be cleared.

When using the non-emergency codes (Low Battery, and 24-Hour Self Test) with SILENT KNIGHT 4+2 format, these codes should be programmed as follows:

1) Memory Location 72 Low Battery = 6
2) Memory Location 74, 24-Hour Self-Test - 3

MEMORY LOCATION DEFINITIONS

Entering an "8" will select ACRON superfast format. This format is a full status report including zone, code, and zone status (if status reporting code is programmed). Reports of account number, zone, code, and status information in one line in less than three seconds, compatible with Quick-Alert receiver manufactured by Osborne-Hoffman, Inc.
NOTE: If two number reporting is used, 2 different receiver formats may be used. Example: Acron Superfast format receiver on one number and Ademco 660 "Slow" format receiver on the other.

55 2.12 RECEIVER FORMATS TEL 02

Specific zones may be selected to dial both telephone numbers or second telephone number

only. Memory location 51 and 52 are used to select zones 1 through 4 for emergency reporting. Memory locations 80 and 81 are used to select non-emergency reporting conditions.

Receiver formats for telephone #2 are selected in the same manner as telephone #1. See memory location 54.

57 2.14 RESTORE, SELECT ZONES

Select Alarm Zones (1 through 4 only) which will report restores. A Restore is defined as a return to normal after a zone has previously been tripped. If the alarm for a zone has been reported, a Restore on the same zone, provided it is so selected, will also initiate a restoral report.

NOTE: A restore code must be programmed in memory location 58 if any zone is selected for restoral report in this memory location 57.

If the SFIZ Restore is used, this memory location MUST BE CLEARED. Program the individual restore codes into memory locations 68 through 71 instead.

58 2.15 RESTORE CODE

Enter restore code desired in this location. Also refer to notes under Test Cancel Code. (Memory Location 60). The factory programmed Restore Code is "0".

59 2.16 TEST CANCEL, SELECT ZONES

Select Alarm Zones (1 through 4) which will report test cancels. If a test cancel zone is tripped and restored before transmission of the alarm code, the Test Cancel code will be sent.

NOTES:

1) A test cancel code must be programmed if any zone is selected for test cancel report.
2) Also, test cancel is not used for non-emergency alarm (i.e. Low Battery, and 24-Hour Self-Test).
3) Selection numbers "5" through "8" must not be entered.

MEMORY LOCATION | DEFINITIONS

60 2.17 TEST CANCEL CODE

Enter Test Cancel Code desired in this location. The factory programmed Test Cancel Code is "9".

NOTES:

1) To avoid confusion, the Restore and Test Cancel codes should not be the same. If they are, a momentary trip will not be distinguished from a restoral.
2) To avoid confusion, the Restore and Test Cancel Codes should not be the same as a Zone Code.
3) If the SFIZ Restore is used, an Alarm Zone with both Test Cancel selected and Restore Zone code programmed will have two reports on a momentary trip, i.e. a test

cancel report followed by a restore report.

61 2.18 REPORTING DELAY, SELECT ZONES

All inputs have a 300 msec. response time. An alarm signal must be stable for at least 300 msec to activate the DD3E. This built-in delay minimizes false triggering due to natural and man-made voltage transients. (During the reporting cycle the delay increases to 1 Sec.)

Additional reporting delays may be programmed for selected zones. Select the Alarm Zones (1 through 4) that are desired for additional delays in memory location 61. Selection numbers "5" through "8" must not be entered. If an alarm signal on a Delay Zone restores prior to expiration of the delay time, the zone will not report out.

NOTE. Combining delay, restore and test cancel functions
When more than one of the Delay, Restore and Test Cancel functions are selected for the same zone, the zone will operate under the following priorities:

DELAY -has first priority. An alarm signal that restores before the Delay Time expires will not be recognized.

62 2.19 REPORTING DELAY TIME

Enter the reporting delay time desired in this location. Delays from 10 to 150 seconds may be selected in 10 second increments. Enter a "1" for 10 seconds, a "2" for 20 seconds, up to a "15" for 150 seconds. The delay time programmed applies only to zones selected in memory location 61.

63 2.20 CLOSED CIRCUIT, SELECT ZONES

Any of the four zones (1 through 4) may be triggered by an open circuit (trip on application of positive voltage), or closed circuit (trip on removal of positive voltage). The positive voltage may be supplied by the DD3E "TRIP RETURN" terminals or from a control panel or other device. When using a separate power supply and voltage trigger from a control panel or other device, the negative (-) terminal of the panel must be connected to the "DC power -" terminal on the DD3E.

When a closed circuit (trip on removal of positive voltage) is to be used, the appropriate zone(s) must be programmed in Memory Location 63 for Closed Circuit operation.

MEMORY LOCATION	DEFINITIONS

NOTE: If the SFIZ Restore is used, Alarm Zones (selection numbers 1 through 4) that are selected for Closed Circuit operation must have their corresponding Restore Zones (selection numbers "5" through "8") inversely selected. For example, Alarm zone 3 only is selected for Closed Circuit operation, then Restore Zone 7 and Alarm Zones 1, 2, and 4 must NOT be selected (i.e. they are Open Circuit), and Restore zones 5, 6 and 8 must be selected also for Closed Circuit operation; therefore, the selection numbers entered into this memory location are "3", "5", "6", and "8".

64-67 2.21 ALARM ZONE 1 THROUGH ZONE 4 REPORTING CODES

Memory Locations 64 through 67 are reserved for entering reporting codes for the four Alarm Zones (1 through 4). The factory programmed code for Zone 1 is 1, Zone 2 is 2, and so on through Zone 4. A zone is disabled if its code is not programmed and will not initiate any report.

60-71 2.22 RESTORE ZONE 5 THROUGH ZONE 8 REPORTING CODES

If the SFIZ Restore is used, these memory locations may be used for individual restore report codes for Alarm Zones 1 through 4. Code entered in memory location 68 will enable a restore report for Alarm Zone 1, code entered in memory location 69 will enable a restore report for Alarm Zone 2, etc. If the SFIZ Restore is not used, these four locations must be cleared.

72 2.23 ZONE 9 LOW BATTERY REPORT CODE

An automatic low battery report is generated when battery voltage falls to a low level and a reporting code is selected in this memory location.

73 2.24 LOW BATTERY RESTORE CODE

Entering a number in this memory location selects the code that will report when a low battery condition is restored.

NOTE Low Battery restore will be ignored if its alarm code is not programmed in memory location 72.

74 2.25 ZONE 10 24-HOUR SELF-TEST CODE

The DD3E may be programmed to automatically report within 24 hours. THIS FEATURE IS RECOMMENDED IN HIGH SECURITY APPLICATIONS. This allows the monitoring facility to verity correct operations of the communicator on a daily basis. The 24-hour timer resets and restarts after any report (Alarm, Test Cancel, Low Battery, etc.) has been transmitted. Enter reporting codes desired in memory location 74 to enable this automatic self-test report.

MEMORY LOCATION DEFINITIONS

75 2.26 STATUS REPORTING CODE

During any alarm report, the status of zones 1 through 4 can be obtained if a status reporting code is programmed in the memory location 75. If a zone is enabled (i.e. with its zone code programmed) and remains violated when another new alarm is reported, the status for this particular zone is also reported, provided the status code is entered.

NOTES:

1) For Acron Superfast format, a "1 " should be entered in this memory location, when Status Reporting is programmed.

2) Status Reporting is NOT recommended for the SFIZ Format since a normal condition on Alarm Zones 1 through 4 will always be indicated as a previous trip, with zone numbers of "5" through "8" respectively.

78 2.28 REPORTING DELAY - LOW BATTERY

Enter the reporting delay time desired for Low Battery reports in this location. An instant report for a Low Battery alarm is assumed if the memory location 78 is unprogrammed.

Delays from 1 minute to 15 minutes may be selected in 1 minute increments. Enter a "1" for 1 minute, a "2" for 2 minutes up to a "15" for 15 minutes. If the Battery voltage restores to normal before the delay time expires, both the Low Battery alarm and restore will not be reported.

79 2.29 REPORTING ATTEMPTS

Enter the number of reporting attempts desired in this location. If this location is cleared, the DD3E will continue to dial until a shut down signal is received from the receiver (in countries where allowed). If any number 1-15 is entered the unit will shut down after the entered number of attempts and retain this information until a new report occurs. Example: 8 is programmed and the central station is temporarily down. After 8 attempts, the DD3E will not attempt to communicate until a new report occurs.

80 2.30 NON-EMERGENCY, DIAL SECOND NUMBER ONLY

To select Second Number Dialing for Non-emergency Reports enter the following in this Memory Location 80:

1= Low Battery 3 - 24-Hour Self-Test

Example: If a Low Battery report is required to dial the Second Number only, program a "1" into memory location 80.

81 2.31 NON-EMERGENCY, DIAL BOTH NUMBERS

To select Non-emergency Reports to Dial Both Numbers, data should be entered in this Memory Location in the same manner as selecting Second Number Dialing for memory location 80.

FOR TECHNICAL ASSISTANCE CALL:
1-800-237-2344

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Scantronic (USA), Inc., warrants to the purchaser that under normal use and service, its products will be free from defects in material and workmanship for twenty-four (24) months from the date of manufacture of the products. Scantronic (USA), Inc.'s warranty obligation is limited to repairing or replacing (at Scantronic (USA), Inc.'s sole option) equipment which has been, during the warranty period and not more than thirty 30 days after discovery, reported to Scantronic (USA), Inc., as defective in material or workmanship and is so found to be by Scantronic (USA), Inc., upon inspection. For the purposes of this Warranty, Purchaser refers to wholesale purchaser, installer and retail purchaser. Retail purchaser must, however, in the case of defect, contact the person or entity who installed and maintains the product who in turn should contact Scantronic (USA), Inc., in accordance with the terms of this Limited Warranty.

Examination and repair or replacement of such equipment will, be performed at Scantronic (USA), Inc's. facilities located in Stockton, California, with no charge to purchaser for service time expended, except as otherwise stated in this Warranty Limitations and Disclaimer. Equipment to be examined, replaced or repaired at Scantronic (USA), Inc.'s facilities must be returned to Scantronic (USA), Inc., by purchaser within the warranty period, insurance and transportation charges prepaid. Prior to the return of the equipment, wholesale purchasers or installers shall obtain a return authorization number from Scantronic (USA), Inc.'s Customer Service Department. Retail purchasers are to contact the person or entity who installed and maintains the product. Under no circumstance with Scantronic (USA), Inc., be responsible for expenses or labor incurred in removing and reinstalling its products from the retail purchaser's location. If examined equipment is found not to be defective or is not for some other reason within the warranty coverage, Scantronic (USA), Inc.'s service time expended will be charged to purchaser.

Purchaser shall be responsible for all maintenance, service, replacing expendable parts, making minor adjustments and performing operating checks, all in accordance with procedures outlined in Scantronic (USA) Inc.'s operation manual. This Warranty shall not apply to any product failure that results from purchaser's failure to properly maintain, service, adjust, inspect and test the product in accordance with Scantronic (USA), Inc.'s operation manual.

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Technical Support 1-800-237-2344

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