TM

LINKS 1000 TM

Cellular Alarm Transmitter

PROGRAMMER

DSC
Digital Security Controls

LINKS 1000 Glossary of Terms

The following is a description of various terms used with regards to cellular technology.

Electronic Serial Number (ESN)

The ESN is the unique serial number of a cellular phone. It is used by the cellular network to track calls and increment billing. The ESN is stored at the time of manufacture and cannot be reprogrammed. This number, in either hexadecimal or decimal, must be loaded into the database of the cellular carrier before service can begin.

Cellular Phone Number and Area Code

A 10 digit number (3 digit area code and 7 digit directory number) identifying the cellular telephone. Do not enter the phone number of the central monitoring station as the cellular phone number when programming the LINKS 1000.

Initial Paging Channel

A three digit number that specifies which 'Side' carrier you have contracted for service. Each cellular service area only has two sides, A or B. The initial paging channel for Side A is '333' and for Side B is '334'.

System ID

Also called the Home Access ID, this 5 digit number identifies the customer's pre-defined 'Home System'. This number refers to a geographic area and is used by the cellular carrier to determine if the unit is 'Home' or in 'Roam'.

Access Overload Class

This is the number that specifies the level of priority of the cellular call. There is no correlation between this number and the level of cellular service unless there is a network emergency.

Group Identification Mark

This number is factory programmed and specifies how many bits of the Home Access ID are compared when processing signals. The Group Mark ID for LINKS 1000 is set at 10. This number will make the LINKS 1000 compatible with all North American networks.

Preferred System Mark

This number is determined by the Initial Paging Channel and refers to which system, A or B, is scanned for first.

Roam/Roaming

Using cellular service outside of one 'Home' area. Usage charges are higher when Roaming.

Setting Up The Programmer

Install 4 AA batteries in the LINKS 1000 Programmer, being sure to note proper orientation. If the batteries are installed incorrectly, the Programmer will not function.

Using the Keypad

Operation of the Programmer is as simple as scrolling through the menu to find the desired programming option and pressing the [✱] Key to select the option.

- Use the △ and ▽ Keys to scroll through the menu displays to locate the desired menu or programming item

- When the screen displays the desired menu item or programming option, press the [✱] Key to select the item or option

- The Programmer will automatically shut itself off if there is no keypad activity for a period of 2 minutes.

Connect cable to LINKS 1000 programming jack.
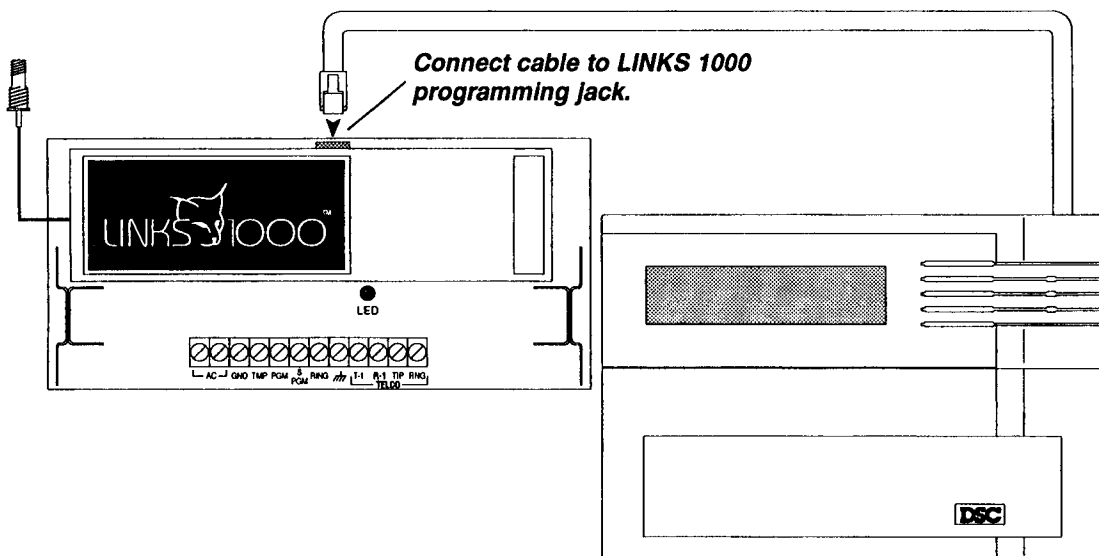
Programmer Low Battery Indication

If the Programmer's batteries begin to run low, this message will be displayed:

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✱ PROGRAMMER ✱
✱ LOW BATTERY ✱
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The low battery message will remain on the screen for 3 seconds or until it is acknowledged by pressing any key while it is displayed. If a key is pressed while the message is displayed, the message will not reappear for the rest of the programming session.

If the message is not acknowledged, it will be removed from the screen after 3 seconds; the next time a key is pressed, the low battery message will again be displayed.

LINKS 1000 Programming Guide

The LINKS 1000 Programmer is used to enter the required cellular network parameters into the LINKS 1000. If the parameters are not entered correctly, the LINKS 1000 equipment will not operate.

AC power must be applied to program the LINKS 1000.

Before a cellular service provider will give the Cellular Phone parameters, you must first give the LINKS 1000 Electronic Serial Number (ESN). The ESN is found on the outside of the box, or can be read via the Programmer.

The following parameters must be obtained from the Cellular carrier:

- The cellular telephone number for the LINKS   └─┴─┴─┘ - └─┴─┴─┘ - └─┴─┴─┴─┘
- The System I.D.   └─┴─┴─┴─┴─┘
- The Initial Paging Channel   └─┴─┴─┘

Using the LINKS 1000 Programmer

The LINKS 1000 Programmer is menu driven (see Table 1 for a list of menu messages):

- use 'up' and 'down' arrows to scroll through the various fields
- when the desired field is displayed, use the [✳] to select it
- use the [#] key to enter data

Connect the modular connector of the Programmer to the modular jack on the LINKS 1000. Press the [#] key to activate the Programmer. The LCD screen will light.

Note: If the screen does not light, check to see if 4 AA batteries were correctly installed in the back of the Programmer.

If the ESN was not found on the outside of the box, scroll to "Read LINKS" menu and press [✳] to select. Scroll to "ESN" and press [✳] to select. The ESN will be displayed.

Programming the LINKS 1000

Step 1. Programming the Cellular Telephone Number

Scroll to "Write LINKS" and press [✳] to select. Scroll to "LINKS Phone #" and press [✳] to select. Enter the area code and phone number for the LINKS. Press [#].

Step 2. Program the Cellular Network Parameters

While still in "Write LINKS" menu, scroll to "System I.D." and press [✳] to select. Enter the five digit System I.D. number. Press [#].

Scroll to the "Initial Page" and press [✳] to select. Choose either "A SIDE 333" or "B SIDE 334" using the 'up' and 'down' arrow keys. Press [#].

Scroll to "Access Class" and press [✳] to select. (This is automatically set by the Programmer.) Press [#].
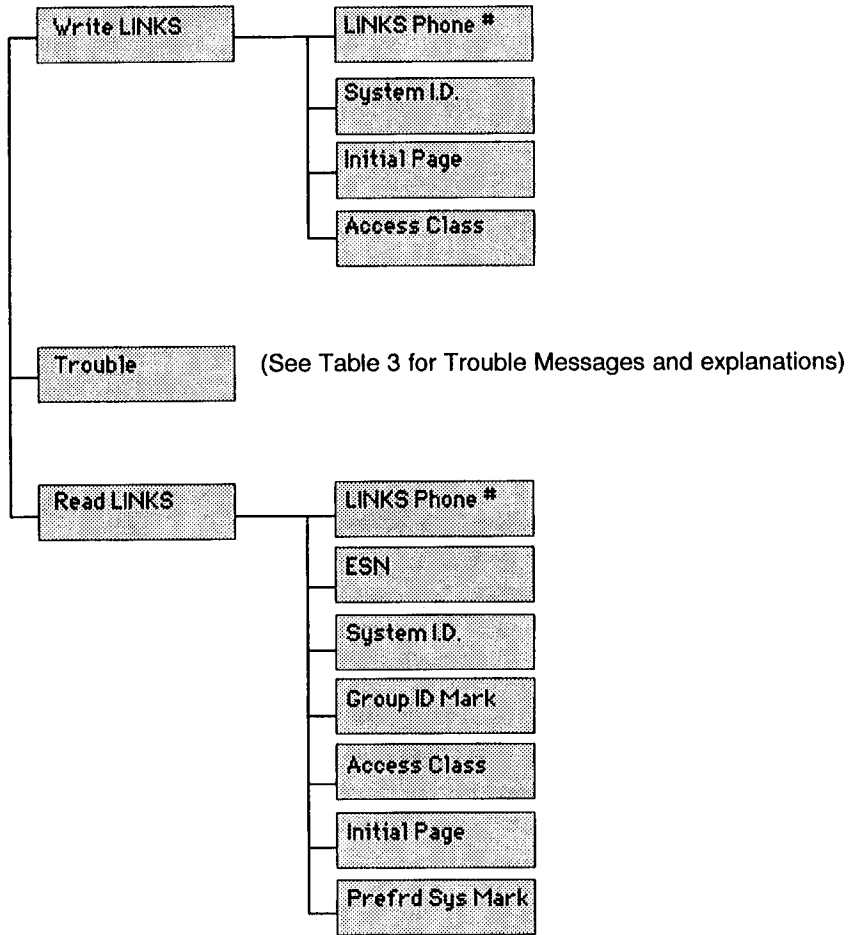
Disconnecting the LINKS 1000 Programmer

Step 1. Scroll to "Main Menu".

Step 2. Press [#], wait for the display to go blank.

Step 3. Disconnect the modular cord from the LINKS 1000.

Done

Table 1 — List of LINKS 1000 Programmer Menu Messages

Write LINKS	LINKS Phone #
	System I.D.
	Initial Page
	Access Class

Trouble — (See Table 3 for Trouble Messages and explanations)

Read LINKS	LINKS Phone #
	ESN
	System I.D.
	Group ID Mark
	Access Class
	Initial Page
	Prefrd Sys Mark

"Trouble" Display for LINKS 1000 Programmer

The trouble indicator, the red LED marked L1, on the LINKS 1000 will flash the number of times corresponding to the particular trouble (see table 2). If the trouble clears, L1 will return to flashing once every 10 seconds. This indicates a "No Trouble" condition.

The LINKS 1000 Programmer can be used to read the trouble, whether it is existing or cleared, provided the trouble was present long enough to set the supervising alarm terminal (PGM).

Reading trouble conditions on the LINKS 1000 via the LINKS 1000 Programmer

Step 1. With power applied to the LINKS 1000, connect the modular cord on the LINKS 1000 Programmer to the modular jack on the LINKS 1000.

Step 2. Press the [#] key on the Programmer.

Step 3. Use the arrow key(s) to scroll to the "trouble" menu.

Step 4. Press the [✳] key. The Programmer will display the trouble (see table 3 for display text).

Step 5. Trouble memory will be updated automatically if another failure occurs. Again, the trouble must be present long enough to set the PGM. Various delays apply (see table 2).

Step 6. The memory can be reset by pressing the [F] key and holding for 2 seconds. This will set the display to read "No Trouble". It is not necessary to reset the display to "No Trouble" in order to receive new trouble displays.

Step 7. Scroll to "Main Menu". (See disconnecting the LINKS 1000 Programmer.)

Table 2

Number of LED Flashes	Trouble	Time-outs for LINKS failures
2 flashes	AC Trouble	30 minutes
3 flashes	Battery Trouble	3 minutes, 20 seconds
4 flashes	Loss of Cellular Communication	90 seconds
6 flashes	Tamper Trouble	80 seconds
7 flashes	Internal Trouble	80 seconds
8 flashes	SPGM Trouble	80 seconds

Table 3 — Messages Appearing on Programmer Trouble Screen

Message	LINKS Trouble
"No Trouble"	No problems in LINKS trouble memory
"AC Trouble"	AC failure
"Battery Trouble"	Battery trouble
"Cellular Tbl"	Loss of Cellular Signal
"IIC Trouble"	Self-Test-Internal Failure
"Tamper Tbl"	Tamper fault on LINKS
"SPGM Trouble"	Trouble with SPGM connection, control panel has not been programmed for LINKS, or trouble with the ground connection between panel & LINKS 1000.
"Version not supported"	LINKS 1000 is of an older version which does not have trouble memory.