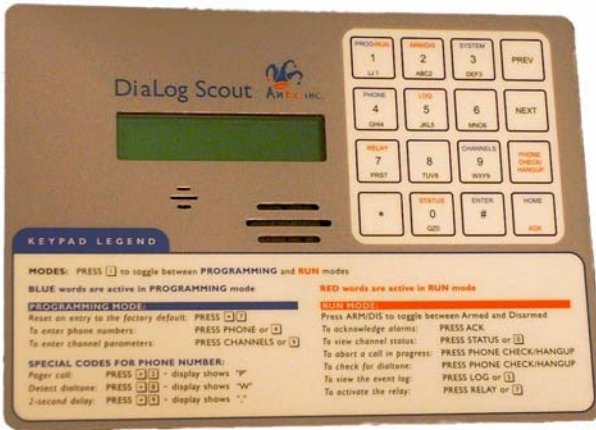


DiaLog Scout

Remote monitoring and
alarm notification system



User's Manual

Version 9.6
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1 Introduction

The DiaLog Scout DSxx is the most user-friendly and reliable remote monitoring and alarm notification system available. Mounted in an industrial aluminum enclosure, the Scout provides simple programming either locally through the integral keypad and display or remotely via a phone call.

Installation is made easy, whether the Scout is installed in a panel or in a door. All wiring connections are made through quick disconnect-type connectors, making it fast and simple.

1.1 General Operation

The Scout has 2 modes of operation – PROGRAM and RUN. During PROGRAM mode you can change how the Scout operates. During RUN mode the Scout is monitoring and performing alarm notification.

The Scout monitors up to 8 dry contact and up to 4 analog inputs continuously. When any one of the inputs changes from the normal condition to the alarm condition, the DiaLog Scout starts calling the first of up to 8 phone numbers to deliver the user recorded alarm message.

When alarms are acknowledged from the keypad, when a person is called or by a person calling in, no further calls are made unless another channel goes into alarm or the Redial After Acknowledge timer expires.

This manual is applicable to firmware versions 9.6 and later.

1.1.1 Acknowledging Alarms

Alarms are acknowledged remotely by pressing the '9' key on your phone keypad. The Scout tells you that the channel has been "acknowledged".

Locally, alarms are acknowledged by pressing the ACK key while in RUN mode.

1.1.2 Controlling Relays on other Scouts

Scout units configured with GSM cell phones can perform relay output control to other Scout-RT SPLC units which are also configured with GSM cell phones.

Control is performed via a secure SMS messaging protocol between the Scouts. Up to 4 individual Scout-RT SPLC units can be used for control.

2 Installation

You can mount the DiaLog Scout to a panel or it can be flush mounted to a door. The brackets on the either side of the Scout can be removed and turned around for panel mounting.

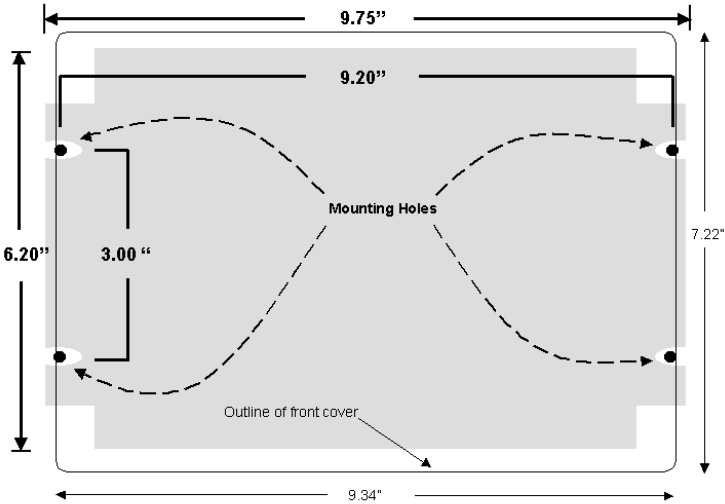


Figure 1 Panel Mount mounting holes

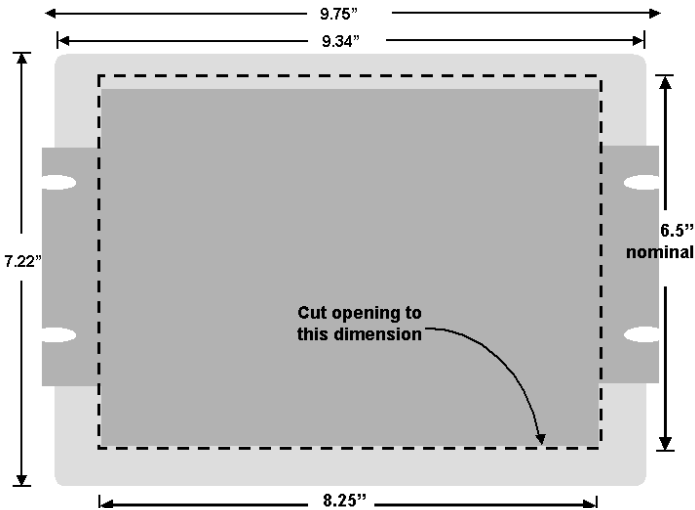


Figure 2 Flush Mount cut-out dimensions

The connectors for Primary Power, Phone and I/O use quick disconnect plugs. The diagram below shows the location of these connections.

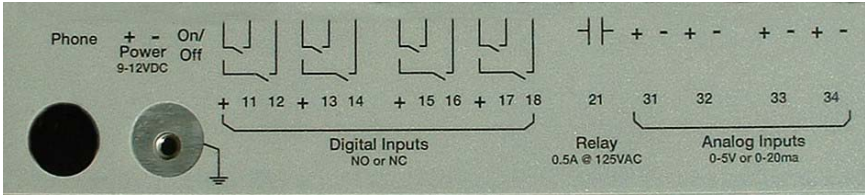
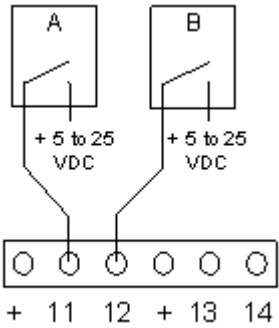
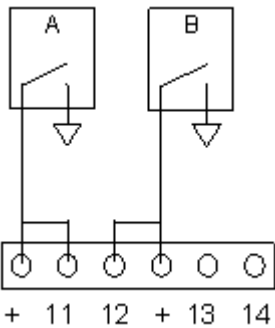
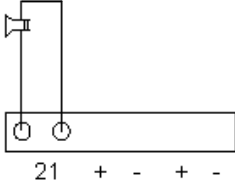
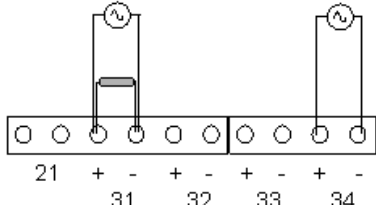


Figure 3 Field wiring diagram

Connection point	Function
Phone	Connect the included phone cord. WARNING: A solid connection to Earth Ground must be provided to validate the warranty.
Power	Connect the included power connection from the wall-mount power supply to the Scout.
On/Off	To supply power to the Scout, flip the switch. The Scout will power up and the display will read "DiaLog Scout".
Digital Inputs	<p>For Dry Contacts: Connect from the '+' to one side of your dry contact and connect from the Channel # to the other side of your contact.</p> <p>NOTE: There are 3 connections for 2 channels.</p>

Connection point	Function
<p>Digital Voltage Inputs</p>	<p>For Voltage inputs up to 25 VDC: Connect the positive voltage of your input to the Channel # input on the Scout.</p> <p>NOTE: Do not connect anything to the '+' input</p> <p>NOTE: If the grounds are not already common between your device and the Scout, connect the "-" signal of the Scout power supply to a signal ground on your device.</p> 
<p>Digital Ground Inputs</p>	<p>For Contacts that close to Ground: Jumper the '+' and Channel # input together. Connect another wire from the Channel # input to the contact that will close to ground.</p> <p>NOTE: Set the channel to Normally Closed</p> <p>NOTE: You cannot use the same '+' for any other channel</p> 

Connection point	Function
<p>Relay Output</p>	<p>Normally Open .5A relay output: Connect your device or another interposing relay to the 2 contacts of the relay.</p>  <p>NOTE: If the system is equipped with a GSM cell phone, the relay channel is already used to cycle the power on the GSM phone and cannot be used by the user.</p>
<p>Analog Inputs</p>	<p>For Voltage inputs up to 5 VDC: Connect the positive voltage to the (+) terminal and the negative to the (-) terminal. Example: channel 34 is wired as a voltage input</p> <p>For Current inputs up to 20ma: Connect the supplied precision resistor across the (+) and (-) terminals. Connect the (+) terminal to the (-) lead of the sensor. Connect the (-) terminal to the (-) side of the external power supply. Example: channel 31 is wired as a current input</p> 

2.1 Enabling power

Connect the provided DC power supply, or another source of 9 to 12VDC, to the Power connection. Move the On/Off switch to the up or On position. The Scout will start its power up diagnostics.

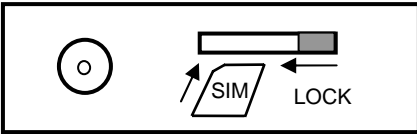
Upon completing the power up diagnostics, the Scout will be in Program Mode.

If an Access Code has been programmed, the Scout will start up in Run Mode.

2.2 SIM card installation on a GSM phone

If the Scout is equipped with an internal GSM cell phone, a GSM SIM card must be installed for the Scout to make calls out. The SIM card is installed in a slot on the side of the GSM phone.

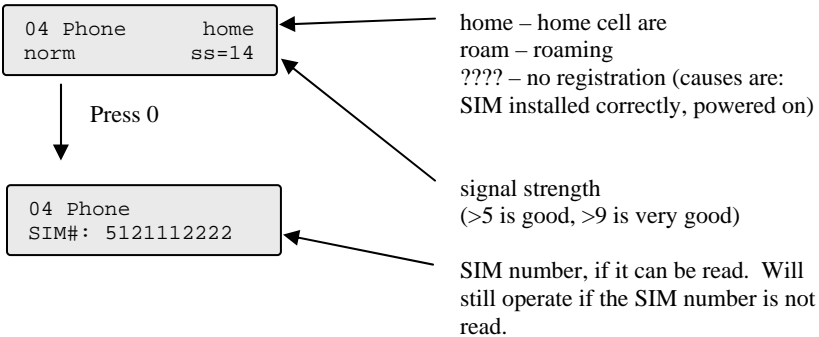
The card is installed with the circuit facing down. Be sure to LOCK the SIM card in place.



2.3 GSM signal strength and registration

The GSM signal strength and registration can be viewed from the Status screen.

Press the STATUS (0) key from either Run or Program mode. Press the NEXT key until the 04 Phone channel status is displayed.



3 Programming from the keypad

The DiaLog Scout is programmed from the front panel by pressing the keypad to access the various portions of the system. For the most basic application, you can simply program some phone numbers and put the Scout into the RUN mode.

In more complex applications, you can program individual messages for each channel being monitored, adjust the amount of time channels must be in the alarm condition before starting the callout sequence and enter phone and pager numbers for alarm notification.

When programming, all prompts are displayed. To navigate the menu:

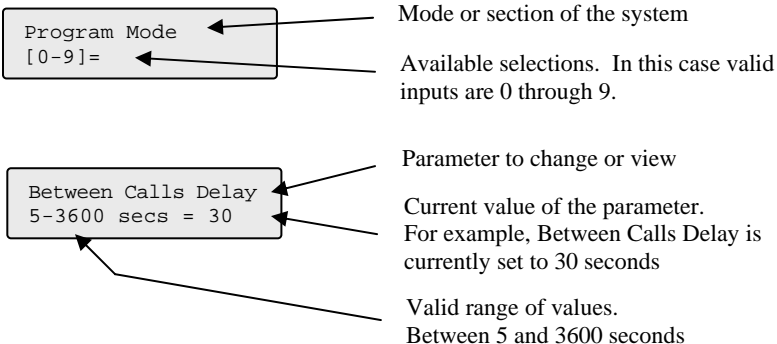
Key	Function	Key	Function
ENTER	Accept the current entry or move to next option	PREV	Moves to the previous selection in a menu
HOME	Go to the top of the Menu (HOME)	NEXT	Moves to the next selection in a menu
*7	Reset the value back to the factory default		

NOTE: When you have finished programming, return the Scout to the RUN mode by pressing the 1 key. If the Scout is not in RUN mode, it will not perform any alarm call operations.

NOTE: The Scout automatically returns to RUN mode after 30 minutes.

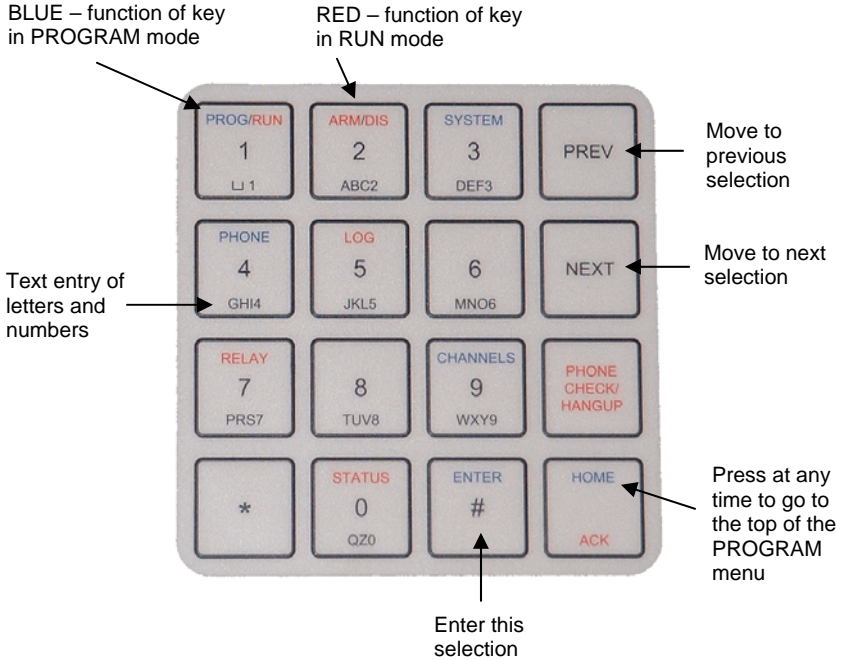
NOTE: Configuration changes are only saved to non-volatile memory when RUN mode is activated

3.1 How to Read the Menus



3.2 How to use the Keypad

The DiaLog Scout keypad is designed to make programming easy. At the bottom of the front panel is a legend to assist in programming the most common functions. The keypad components are:



The specific functions of each key are:

Key	Function in PROGRAM mode
1	Toggles the unit between PROGRAM and RUN mode.
3	Enter SYSTEM wide parameters
4	Enter PHONE numbers and parameters
9	Enter CHANNEL parameters
0	View STATUS of each channel
**	To toggle between Positive (+) and Negative (-) when entering zero, full scale and limit values.
ENTER	Enter or keep the current setting Exit the View STATUS screen
PREV	Go to the PREVIOUS selection
NEXT	Go to the NEXT selection
HOME	Go to the top of the PROGRAM mode menu

3.3 How to Enter Text for Names

The DiaLog Scout allows the user to enter names for the Site (Unit) and for each channel. Entering names is very similar to entering names on most cell-phones that are used today.

On the bottom of each key, there are letters and numbers. To select a specific letter or number, press that key the designated number of times. For example, to enter the letter 'L', press the 5 key 3 times.

Key to Press	Number of times to press the key				
	1	2	3	4	5
1	space	1			+
2	A	B	C	2	.
3	D	E	F	3	,
4	G	H	I	4	-
5	J	K	L	5	*
6	M	N	O	6	#
7	P	R	S	7	/
8	T	U	V	8	_
9	W	X	Y	9	
0	Q	Z	0	0	@
*	Erases previous letter				

NOTE: To switch between Upper and Lower case, press the PHONE CHECK key. If Upper case is active, an UP ARROW is shown on the right-hand side of the display.

3.4 Programming Menu Structure

1	Toggle between Run and Program Modes
3	System Setup
	Site ID message
	Site Name
	Numeric ID
	Keypad Sensitivity
	Access Code
	Audio Volume
	Speaker Mode
	Rings to Answer
	Set Date/Time
	For GSM cellular (Auto, Manual)
	Reset Configuration to factory default or user-saved configuration
	Reset Run Data
	Reset Event Log
	Reset Data
4	Phone Setup
	Message Repeat
	Phone Position (1-8)
	Call Type
	Phone Number or e-mail address
	Next Call Delay
	Call Progress Delay
	Notify Once
	Control Phone Position (1-4)
	Phone Number of Remote Scout-RT SPLC
	Next Call Delay
9	Channel Setup
	Channel Number
	System
	Channel Mode
	Alarm Delay
	Redial Delay
	Alarm Type
	Alarm Relay

9 Channel Setup

Digital	Channel Message
	Channel Name
	Reports
	Normal State
	Channel Mode
	Alarm Delay
	Alarm Type
	Alarm Relay
	Run Limit
	Control Phone
	Remote Relay Number
	Relay State when in Alarm
	Relay State when in Normal
	Relay
	Channel Name
	Pulse Duration
Analog	Channel Message
	Channel Name
	Reports
	Input Type
	Decimal Position
	Engineering Units
	Channel Mode
	Input Scaling
	Minimum Counts
	Maximum Counts
	Zero
	Full Scale
	Alarm Delay
	Alarm Type
	Alarm Relay
	Low Alarm Limit
	High Alarm Limit
	Control Phone
	Remote Low Relay Number
	Relay State in Low Alarm
Relay State in Normal	
Remote High Relay Number	
Relay State in High Alarm	
Relay State in Normal	

	What you do:	What the display shows:
Step 7	Press # if OK or enter a new 4-digit Access Code.	Access Code nnnn
Step 8	The Audio Volume can be adjusted to be louder (up) or softer (down). Press # when you have the level you desire. (7 is maximum volume)	Audio Volume 0-dec 1-inc = 4
Step 9	Local Speaker specifies whether the speaker is on or off during alarm calls. If off, then the alarm call is not spoken over the local speaker. If On+Monitor, the alarm call and any sound coming in over the phone line are spoken over the local speaker. 0 – Off, 1 – On, 2 – On+Monitor	Speaker Mode 0-2 = On+Monitor
Step 10	Rings to Answer is the number of times the Scout detects an incoming ring before it answers. Press # if OK or enter a new value as nn (e.g. 03 for 3)	Rings to Answer 1-20 = nn
Step 11	Set the time and date as needed. Press 1 to set the time. NOTE: 24-hour clock. NOTE: If this is a GSM unit, you are asked to set it manually or automatically. Automatically will only work if the SIM card supports GPRS (data) communication, NOT if it only supports voice.	Set Date/Time 1-set =
Step 12	Reset Config sets the unit back to the factory default values. Press 0 or # to keep your programming or 1 to reset back to the factory defaults. NOTE: The Scout has a separate storage area to Backup or Restore configuration settings. To access this, press 9 then enter the Access Code **2689.	Reset Config 1-rst =

	What you do:	What the display shows:
Step 13	Reset Run Data clears the Run-time logs for a specific channel.	<div style="border: 1px solid black; padding: 5px; background-color: #f0f0f0;"> Reset Run Data Chan 1x-3x = </div>
Step 14	Reset Event Log clears the Event log	<div style="border: 1px solid black; padding: 5px; background-color: #f0f0f0;"> Reset Event Log 1-rst = </div>
Step 15	Reset Data clears the Data Log for a specific channel.	<div style="border: 1px solid black; padding: 5px; background-color: #f0f0f0;"> Reset Data 1-rst = </div>

3.6 Programming Phone Settings

Phone settings consist of options to set for all calls in or out of the Scout. They are generally setup once during initial installation.

	What you do:	What the display shows:						
Step 1	<p>Press the 1 key for PROGRAM mode.</p> <p><i>Enter Access Code if requested.</i></p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Program Mode 0-9 = </div> <p>NOTE: <i>If the Scout is in RUN mode and an Access Code has been programmed, the Scout will show a screen to enter it.</i></p>						
Step 2	Press 4							
Step 3	<p>Msg Repeat is the number of times the alarm message will be repeated when an alarm call is made.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Msg Repeat 1-20 = nn </div>						
Step 4	<p>There are 8 phone numbers that can be entered in the Scout. These are processed in order from 1 to 8.</p> <p>Enter the position of the phone number you want to check or modify.</p> <p>Press # if you do not want to change any phone numbers.</p> <p>See Section 3.3 How to Enter Text for Names for specific details.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Enter Phone Pos 1-8 = </div>						
<p>Skip to Step 6 if the Scout does NOT have a GSM cell phone with SMS messaging enabled</p>								
Step 5	<p>Enter a call type</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>1</td> <td>Voice/Pager</td> </tr> <tr> <td>2</td> <td>SMS Text</td> </tr> <tr> <td>3</td> <td>Email</td> </tr> </table>	1	Voice/Pager	2	SMS Text	3	Email	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Pos 1 Call Type 1-3 = 1 Voice/Pager </div>
1	Voice/Pager							
2	SMS Text							
3	Email							

What you do:	What the display shows:												
<p>Step 6</p> <p>For phone and SMS messages: The phone number in the position specified is shown. Press # if OK or enter a new phone number.</p> <p>NOTE: <i>Number can be 25 digits.</i></p> <table border="1" data-bbox="219 349 600 553"> <tr> <td>*2</td> <td><i>For a pager call</i></td> </tr> <tr> <td>*7</td> <td><i>Deletes phone number</i></td> </tr> <tr> <td>*8</td> <td><i>Detects a dialtone</i></td> </tr> <tr> <td>*9</td> <td><i>2-second delay</i></td> </tr> <tr> <td>**</td> <td><i>for a '*'</i></td> </tr> <tr> <td>*#</td> <td><i>for a '#'</i></td> </tr> </table> <p>(e.g. 5124442233P would call a pager at 5124442233)</p> <p>For e-Mail – enter the e-mail address to receive the message.</p> <p>See Section 3.3 How to Enter Text for Names for specific details.</p>	*2	<i>For a pager call</i>	*7	<i>Deletes phone number</i>	*8	<i>Detects a dialtone</i>	*9	<i>2-second delay</i>	**	<i>for a '*'</i>	*#	<i>for a '#'</i>	<div data-bbox="636 186 912 256" style="border: 1px solid black; padding: 5px; margin-bottom: 20px;">Ph Num: 1234567890</div> <div data-bbox="636 651 916 721" style="border: 1px solid black; padding: 5px;">E:sales@antx.com</div>
*2	<i>For a pager call</i>												
*7	<i>Deletes phone number</i>												
*8	<i>Detects a dialtone</i>												
*9	<i>2-second delay</i>												
**	<i>for a '*'</i>												
*#	<i>for a '#'</i>												
<p>Step 7</p> <p>The amount of time to wait before calling the next number in the list.</p>	<div data-bbox="636 776 912 846" style="border: 1px solid black; padding: 5px;">Pos 1 Next Call Dly 5-3600 secs = nnnn</div>												
<p>Step 8</p> <p>Time the Scout waits after issuing the last digit in the phone number before issuing the alarm message.</p> <p>NOTE: <i>0 means Call Progress is enabled. The Scout will call and wait until the phone has been answered before the alarm message is delivered.</i></p> <p><i>If the Scout calls and never delivers the message, then the Scout is not able to determine that the phone has been answered, probably because the voice answering the phone is not loud enough.</i></p>	<div data-bbox="636 873 912 943" style="border: 1px solid black; padding: 5px;">Pos 1 Call Prog Dly 0-60 secs = nn</div>												
<p>Step 9</p> <p>If Notify Once is Disabled, then this number is included in the call sequence until the call has been acknowledged.</p> <p>If Notify Once is Enabled, then this number is only called once, regardless of the alarm being acknowledged.</p>	<div data-bbox="636 1235 912 1305" style="border: 1px solid black; padding: 5px;">Pos1 Notify Once 0-1: Disabled</div>												

Loop back to Step 4 if you are NOT doing remote relay control

	What you do:	What the display shows:
Step 10	If this Scout has a GSM cellphone and you are going to be controlling remote relays on another Scout-RT SPLC unit, there are 4 available phone positions for the communicating with the remote Scout.	Control Phone Pos 1-4 = -1
Step 11	Enter the phone number of the remote Scout-RT SPLC. SMS text messages will be sent and received to perform the control desired.	Ph Num: <SMS ph #>
Step 12	The amount of time to wait before calling the next number in the list.	Pos 1 Next Call Dly 5-3600 secs = nnnn
Loop back to Step 4		

3.7 SMS text and e-Mail messages

SMS text and e-mail messages can be sent if the Scout is equipped with a GSM cell phone and the SMS/e-Mail option has been enabled.

SMS text message format:

Site ID, channel name, channel name value engineering units

Example:

Remote Site 343, Tank Level 123.4 ft

e-Mail text message format:

Site ID

channel name

channel name value engineering units

Example:

Remote Site 343

Main Pump Down

Tank Level 123.4 ft

3.8 Programming Channel Settings

This section allows you to configure the information specific to each channel or condition being monitored. For each channel the following options can be programmed.

3.8.1 System Channel Setup

Model	System channel numbers	
All	01 – Primary power	02 – Low battery
	03 – Low low battery	04 – Phone fault

	What you do:	What the display shows:
Step 1	Press the 1 key to enter PROGRAM mode. You can now enter options 0 – 9.	Program Mode 0-9 =
Step 2	Press 9 (or CHAN)	
Step 3	Enter the Channel Number that you wish to examine or program. Press # or PREV to back-up the menu.	Enter Chan Number 0x, 1x, 2x, 3x =
Step 4	Channel Mode is set to 1 for Call on Alarm conditions or 0 for Status Only. Press # or NEXT if the value is OK.	Chan 01 Mode 0-2 = 2 Alarm
Step 5	The Alarm Delay specifies the amount of time the input must be in the alarm condition before a call-out begins.	Chan 01 Alarm Delay 0-65535 sec = nnnnn
Step 6	The Redial Delay is the amount of time after a channel has been acknowledged before another call is made if the channel is still in the alarm condition.	Chan 01 Redial Delay 1-168 hrs = 1
Step 7	The Alarm Type allows the alarm to track the input signal or latch. 0 (normal) the alarm condition tracks the input signal in and out of alarm. 1 (latch) once an alarm condition occurs it continues to call until the channel is acknowledged EVEN IF the input has returned to the normal condition. Press # or NEXT if the value is OK.	Chan 01 Alarm Type 0-norm 1-latch = 0

Loop back to Step 3 if no relay is installed

	What you do:	What the display shows:
Step 8	Enter 1 to Activate the Relay when the channel goes into alarm or 0 to not activate. The relay will follow the channel into and out of alarm.	<div style="border: 1px solid gray; padding: 5px; width: fit-content;">Chan 01 Alarm Relay 0-no 1=yes = 0</div>
Loop back to Step 3		

3.8.2 Digital Channel Setup

Model	Digital channel numbers
DS2	11 through 12
DS4 and DS5	11 through 14
DS8, DS9, DS11 and DS13	11 through 18

	What you do:	What the display shows:
Step 1	<p>Press the 1 key to enter PROGRAM mode. You can now enter options 0 – 9.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Program Mode 0-9 = </div>
Step 2	<p>Press 9 or CHAN</p>	
Step 3	<p>Enter the Channel Number that you wish to examine or program. Press # or PREV to back-up the menu.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Enter Chan Number 0x, 1x, 2x, 3x = </div>
Step 4	<p>The Scout repeats the current message. If the message is OK, press # or NEXT. To record a new message, press 1 and speak your new 6-second message into the microphone followed by the # key. To listen to the current message again, press 0.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Msg 0-play 1-rec = </div>
Step 5	<p>Each channel can have a 16 character name that will be displayed whenever the Status is shown or a channel is in alarm. To enter the name, press the key that corresponds to the letter or number that you want. To move to the next character, wait 1 second between entries.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Name nnnnnnnnnnnnnnnnnnnn </div>
Step 6	<p>1 to compute the number of times this channel has gone from Normal to non-Normal and the total time that the channel in is the non-Normal state. This is typically used to compute motor cycles and run time. NOTE: <i>No alarms are created for channels with Reports set to On.</i></p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Reports 0-off 1-on = 0 </div>

	What you do:	What the display shows:
Step 7	<p>0 for normally open 1 for normally closed. NOTE: <i>An alarm occurs when the input transitions out of the 'normal' state.</i></p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Normal State 0-n/o 1-n/c = 0 </div>
Step 8	<p>The Channel Mode should be set to 2 for Call on Alarm conditions or 1 for Status Only, 0 to Disable.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Mode 0-2 = 2 Alarm </div>
Step 9	<p>Time the input must be in the alarm condition before a call-out begins.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Alarm Delay 0-65535 sec = nnnnn </div>
Step 10	<p>The amount of time after the channel has been acknowledged before another call is made if the channel is still in the alarm condition.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Redial Delay 1-168 hrs = 1 </div>
Step 11	<p>0 (normal) indicates the alarm condition follows the input signal in and out of alarm. 1 (latch) indicates once an alarm condition occurs it continues to call until the channel is acknowledged EVEN IF the input has returned to the normal condition.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Alarm Type 0-norm 1-latch = 0 </div>

Skip to Step 13 if no relay is installed (DS2, DS4, DS8) or if this Scout has a GSM cellphone

Step 12	<p>1 to activate the relay when the channel goes into alarm 0 to not activate. Relay follows channels in/out of alarm.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Alarm Relay 0-no 1-yes = 0 </div>
Step 13	<p>The Starts Limit is an alarm limit on the number of times that the channel has been in the non-Normal condition. e.g. to call out when a motor has started a pre-determined number of times.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Start Limit 0-999999 = disabled </div>
Step 14	<p>The Run Limit is an alarm limit on the total time that the channel is in the non-Normal condition. e.g. to call out when a motor has run for a pre-determined number of minutes.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Run Limit 0-999999 = disabled </div>

Loop back to Step 3 if this is NOT a GSM cell-phone unit

What you do:	What the display shows:
<p>Step 15 The Control Phone Position specifies the SMS phone number of the remote Scout-RT SPLC that is called to turn relays on and off.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Cntrl Phone 1-4 = -1 </div>
<p>Step 16 The Remote Relay is the relay number in the remote Scout-RT SPLC that is being called.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Remote Relay 11-26 = 0 </div>
<p>Step 17 The Alarm State is the state to change the remote relay to when this channel goes into the alarm state. (0 = open, 1 = closed, 2 = static)</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Alarm State 0-2 = 1 Close </div>
<p>Step 18 The Normal State is the state to change the remote relay to when this channel goes back into the normal state.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Normal State 0-2 = 0 Open </div>
<p>Loop back to Step 3</p>	

3.8.3 Relay Channel Setup

Model DS9, DS11, and DS13 **Relay channel number** 21

	What you do:	What the display shows:
Step 1	Press the 1 key to enter PROGRAM mode. You can now enter options 0 – 9.	Program Mode 0-9 =
Step 2	Press 9	
Step 3	Enter the Channel Number that you wish to examine or program. Press # to back-up the menu.	Enter Chan Number 0x, 1x, 2x, 3x =
Step 4	The Scout repeats the current message. If the message is OK, press #. To record a new message, press 1 and speak your new 6-second message into the microphone followed by the # key. 0 to listen to the current message again.	Chan 21 Msg 0-play 1-rec =
Step 5	Each channel can have a 16 character name that will be displayed whenever the Status is shown or a channel is in alarm. To enter the name, press the key that corresponds to the letter or number that you want. To move to the next character, wait 1 second between entries. Press # key when finished.	Chan 21 Name nnnnnnnnnnnnnnnnnn
Step 6	The Pulse Duration specifies the length of time relay will stay activated. If you specify 0, then the relay will deactivate when all channels that reference it are in the normal condition.	Chan 21 Pulse Dur 0-86400 sec = nnnnn
Loop back to Step 3		

3.8.4 Analog Channel Setup

Model	Analog channel numbers
DS11	31 through 32
DS13	31 through 34

	What you do:	What the display shows:
Step 1	<p>Press the 1 key to enter PROGRAM mode. You can now enter options 0 – 9.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Program Mode 0-9 = </div>
Step 2	<p>Press 9</p>	
Step 3	<p>Enter the Channel Number that you wish to examine or program. Press # to back-up the menu.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Enter Chan Number 0x, 1x, 2x, 3x = </div>
Step 4	<p>The Scout repeats the current message. If the message is OK, press #.</p> <p>To record a new message, press 1 and speak your new 6-second message into the microphone followed by the # key. To listen to the current message again, press 0.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 31 Msg 0-play 1-rec = </div>
Step 5	<p>Each channel can have a 16 character name that will be displayed whenever the Status is shown or a channel is in alarm.</p> <p>To enter the name, press the key that corresponds to the letter or number that you want.</p> <p>To move to the next character, wait 1 second between entries.</p> <p>Press # key when finished.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 31 Name nnnnnnnnnnnnnnnnnnnn </div>
Step 6	<p>Set the Channel Reports to on (1) to compute the number of times this channel has gone from Normal to non-Normal and the total time that the channel in is the non-Normal state. This is typically used to compute motor cycles and run time.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 31 Reports 0-off 1-on = 0 </div>

	What you do:	What the display shows:																														
Step 7	<p>The Input Type is:</p> <p>0 – 0-5V 1 = 1-5V 2 = 0-20ma 3 = 4-20ma</p> <p><i>If you are using a current input, install the supplied precision resistor.</i></p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 31 Input Type 0-3 = 0 0-5V </div>																														
Step 8	<p>The Decimal Position is the number of digits to the right of the decimal point when converted into engineering units.</p> <p>For example, if the desired value is 12.5 psi, then you would enter 1.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 31 Dec Pos 0-6 = 2 </div>																														
Step 9	<p>The Engineering Units field has the following options:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">0 none</td> <td style="width: 33%;">10 degF</td> <td style="width: 33%;"></td> </tr> <tr> <td>1 pct</td> <td>11 inches</td> <td></td> </tr> <tr> <td>2 ppm</td> <td>12 meters</td> <td></td> </tr> <tr> <td>3 gals</td> <td>13 kmeters</td> <td></td> </tr> <tr> <td>4 gpm</td> <td>14 liters</td> <td></td> </tr> <tr> <td>5 gph</td> <td>15 kliters</td> <td></td> </tr> <tr> <td>6 ft</td> <td>16 grams</td> <td></td> </tr> <tr> <td>7 rpm</td> <td>17 kg</td> <td></td> </tr> <tr> <td>8 psi</td> <td>18 lbs</td> <td></td> </tr> <tr> <td>9 degC</td> <td></td> <td></td> </tr> </table>	0 none	10 degF		1 pct	11 inches		2 ppm	12 meters		3 gals	13 kmeters		4 gpm	14 liters		5 gph	15 kliters		6 ft	16 grams		7 rpm	17 kg		8 psi	18 lbs		9 degC			<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 31 Eng Units 0-18 = 0 none </div>
0 none	10 degF																															
1 pct	11 inches																															
2 ppm	12 meters																															
3 gals	13 kmeters																															
4 gpm	14 liters																															
5 gph	15 kliters																															
6 ft	16 grams																															
7 rpm	17 kg																															
8 psi	18 lbs																															
9 degC																																
Step 10	<p>The Zero specifies the engineering unit value at the lowest input level.</p> <p>NOTE: <i>Press ** to toggle between positive and negative.</i></p> <p>For example, if the input is a 4-20ma signal, then this is the engineering unit value at 4ma with the specified decimal point position.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 31 Zero Scale +/-999999 = 0 </div>																														
Step 11	<p>The Full Scale specifies the engineering unit value at the highest input level.</p> <p>For example, if the input is a 4-20ma signal, then this is the engineering unit value at 20ma with the specified decimal point position.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 31 Full Scale 0-999999 = 100.0 </div>																														
Step 12	<p>The Channel Mode should be set to 2 for Call on Alarm conditions or 1 for Status Only or 0 for Disabled</p> <p>Press # if the value is OK.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 31 Mode 0-2 = 2 Alarm </div>																														

	What you do:	What the display shows:
Step 13	<p>The Alarm Delay specifies the amount of time the input must be in the alarm condition before a call-out begins. Press # if OK or enter a new 5-digit value as nnnnn (e.g. 00300 for 300)</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 31 Alarm Delay 0-65535 sec = nnnnn </div>
Step 14	<p>The Redial Delay is the amount of time after the channel has been acknowledged before another call is made if the channel is still in the alarm condition.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Redial Delay 1-168 hrs = 1 </div>
Step 15	<p>The Alarm Type specifies the following 0 (normal) indicates the alarm condition tracks the input signal in/out of alarm. 1 (latch) indicates once an alarm condition occurs it continues to call until the channel is acknowledged AND the input goes back to the normal condition. Press # if OK.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 31 Alarm Type 0-norm 1-latch = 0 </div>
Skip to Step 17 if this Scout has a GSM cellphone		
Step 16	<p>Enter 1 to Activate the Relay when the channel goes into alarm or 0 to not activate. The relay will follow the channel into and out of alarm.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 31 Alarm Relay 0-no 1=yes = 0 </div>
Loop back to Step 3 if Mode is NOT Alarm		
Step 17	<p>If the present reading is below the Low Limit, the channel goes into alarm and initiates a call and/or a relay activation. NOTE: Press ** to toggle between positive and negative.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 31 Low Limit +/-999999 = </div>
Step 18	<p>If the current reading exceeds the High Limit, the channel goes into alarm and initiates a call and/or a relay activation.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 31 High Limit +/-999999 = </div>
Loop back to Step 3 if this is NOT a GSM cell-phone unit		
Step 19	<p>The Control Phone Position specifies the SMS phone number of the remote Scout-RT SPLC that is called to turn relays on and off.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Cntrl Phone 1-4 = -1 </div>

	What you do:	What the display shows:
Step 20	The Remote Relay is the relay number in the remote Scout-RT SPLC that is being called.	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Rem Lo Relay 11-26 = 0 </div>
Step 21	The Alarm State is the state to change the remote relay to when this channel goes into the Low alarm state. (0 = open, 1 = closed, 2 = static)	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Lo Alarm State 0-2 = 1 Close </div>
Step 22	The Normal State is the state to change the remote relay to when this channel goes back into the normal state. (0 = open, 1 = closed, 2 = static)	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Lo Normal State 0-2 = 0 Open </div>
Step 23	The Remote Relay is the relay number in the remote Scout-RT SPLC that is being called.	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Chan 11 Rem Hi Relay 11-26 = 0 </div>
Step 24	The Alarm State is the state to change the remote relay to when this channel goes into the High alarm state. (0 = open, 1 = closed, 2 = static)	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Hi Alarm State 0-2 = 1 Close </div>
Step 25	The Normal State is the state to change the remote relay to when this channel goes back into the normal state. (0 = open, 1 = closed, 2 = static)	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Hi Normal State 0-2 = 0 Open </div>
Loop back to Step 3		

4 Programming remotely over a phone

There are 2 functions that can be programmed from a remote call-in – Phone Numbers and Channel Mode.

When you call-in, the Scout will:

- Repeat the current status
- 3 “beeps”

You have 5 seconds after the 3 ‘beeps’ to press the # key on your phone to inform the Scout that you want to perform remote programming. After pressing the # key, the Scout will say “System ready, enter selection.”

4.1.1 Phone numbers

	What you do:	What the Scout says:
Step 1	Press # within 5 seconds after hearing 3 “beeps”	“System ready. Enter selection.”
	Press 4 or press # if finished. <i>NOTE: If an Access Code has been programmed, the Scout says “Enter Access Code”</i>	“Phone setup. Enter phone position. Or press # to exit”
Step 2	Enter Call type. Press # when finished.	“The Call Type is” [1-4]
Step 3	Enter a new phone number followed by the # key or press the # key to keep the current phone number.	“Position” nn “Phone number is” nnnnnnnnnnnn
Step 4	Press # if the number is OK or enter a new number followed by the # key.	“Position” nn “Phone number is” nnnnnnnnnnnn “Enter new number or press # to exit”
Loop back to Step 2		

4.1.2 Channel settings

	What you do:	What the Scout says:
		“System ready. Enter selection.”
Step 1	Press 9 or press # if finished.	NOTE: <i>If an Access Code is been programmed, the Scout says “Enter Access Code”</i>
	Enter Access Code if requested.	
Step 2	Enter a channel number	“Channel setup.”
		“Enter channel number or press # to exit”

For Digital Inputs...

Step 3	If you enter a 1 to record a new message, listen to the instructions.	“The channel message is <message>. Press 1 to record a new message or press # to exit.”						
Step 4	Enter your selection	“The channel normal state is” open/closed. “Enter new normal state or # to exit”						
	<table border="1"> <tr> <td>#</td> <td>Keep current</td> </tr> <tr> <td>0</td> <td>Normally open</td> </tr> <tr> <td>1</td> <td>Normally closed</td> </tr> </table>		#	Keep current	0	Normally open	1	Normally closed
	#		Keep current					
	0		Normally open					
1	Normally closed							
NOTE: <i>A new entry is repeated back.</i>								
Step 5	Enter your selection	“The channel mode is” “status only” or “call on alarm” “Enter new selection or press # to exit”						
	<table border="1"> <tr> <td>#</td> <td>Keep current</td> </tr> <tr> <td>0</td> <td>Status only</td> </tr> <tr> <td>1</td> <td>Call on alarm</td> </tr> </table>		#	Keep current	0	Status only	1	Call on alarm
	#		Keep current					
	0		Status only					
1	Call on alarm							
NOTE: <i>A new entry is repeated back.</i>								

Loop back to Step 2

What you do:	What the Scout says:
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For Analog Inputs...	
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Step 6	If you enter a 1 to record a new message, listen to the instructions.	“The channel message is <message>. Press 1 to record a new message or press # to exit.”						
Step 7	Enter your selection	“The channel mode is” “status only” or “call on alarm” “Enter new selection or press # to exit”						
	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="width: 30px; text-align: center;">#</td> <td style="text-align: center;">Keep current</td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">Status only</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">Call on alarm</td> </tr> </table>	#	Keep current	0	Status only	1	Call on alarm	
	#	Keep current						
0	Status only							
1	Call on alarm							
NOTE: A new entry is repeated back.								
Step 8	Enter a new low limit with 1 assumed digit to the right of the decimal, or # if the current value is OK. Enter *7 to disable the low limit. e.g. 252 would be 25.2 %	“The channel low limit is nn.n %” “Enter new selection or press # to exit”						
	NOTE: A new entry is repeated back.							
Step 9	Enter a new high limit with 1 assumed digit to the right of the decimal. Enter *7 to disable the high limit. e.g. 850 would be 85.0 %	“The channel high limit is nn.n %” “Enter new selection or press # to exit”						
	NOTE: A new entry is repeated back.							

Loop back to Step 2

For Relay Output...	
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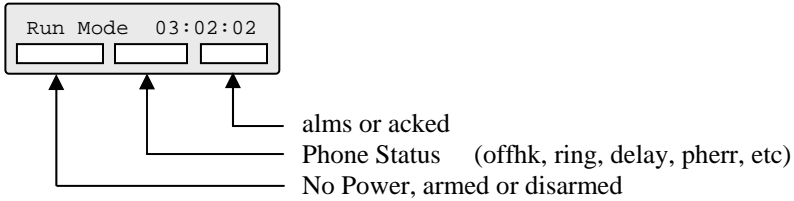
Step 10	If you enter a 1 to record a new message, listen to the instructions.	“The channel message is <message>. Press 1 to record a new message or press # to exit.”
Step 11	Enter your selection	“The channel pulse duration is” nnnn “Enter new selection or press # to exit”
	NOTE: A new entry is repeated back.	

Loop back to Step 2

5 RUN Mode functions

While the Scout is in RUN mode it is scanning all inputs, evaluating them for transitions into and out of alarm conditions, performing alarm calls and updating the display.

The default RUN mode display looks like this:



The functions that can be performed while in RUN mode are:

Function	Capability
STATUS (Keypad 0)	Get system status (use PREV and NEXT keys)
PROG/RUN (Keypad 1)	Enter Program mode
ARM/DIS (Keypad 2)	Toggle Arm/Disarm
LOG (Keypad 5)	View Event Log or Data Log (use PREV and NEXT keys)
ACK	Acknowledge alarms
PHONE CHECK/ HANGUP	Test phone line (if phone is not in use) Hang Up phone (if phone is in use)

5.1 Phone Status messages

The following messages can be displayed in the Phone Status field.

Message	Meaning
ring	Ring is detected on call out or call in.
offhk	Phone is offhook for a phone call or phone check.
delay	Scout is waiting the between call delay to make another call
pherr	Phone error – no current detected from phone line. (unplugged?)
phflt	Phone fault – no dialtone detected (dead line?)
noGSM	Cannot communicate with the GSM cell phone (serial cable connected? SIM card installed correctly?)
noReg	No registration on GSM phone (SIM card installed correctly? Out of minutes?)
noNUM	SMS phone number invalid
noGW	SMS/e-mail Gateway number is invalid
noSC	No SMS service center detected
noRSP	No response from the SMS service center
noCAR	Lost carrier while transmitting SMS or e-mail
erSMS	General SMS error
WrErr	Write error to the Serial EEPROM on the Scout board. (contact Antx for support/repair)

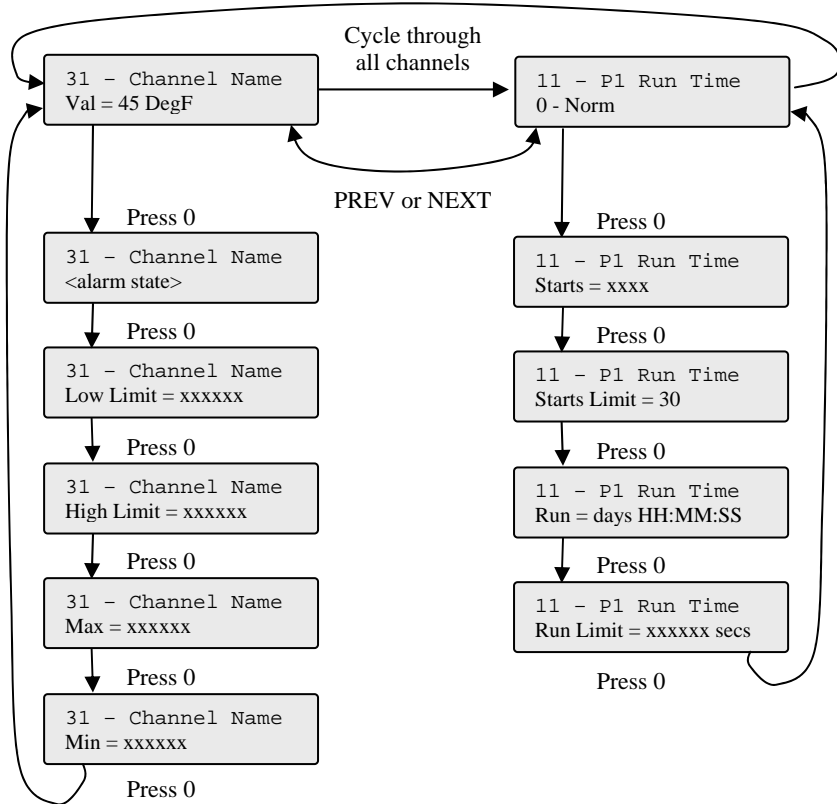
6 Getting System Status

System Status reports the current conditions of the DiaLog Scout. It will report any channels that are in alarm or acknowledged, including the primary power and battery channels.

6.1 From the front panel

The Scout displays the first channel (Power). To view the other channels **press the PREV key to move backward** or the **NEXT key to move forward** through all the channels.

The channels are: Power, Low Battery, Low Low Battery, Phone line status, each input channel and then the version of the firmware in the Scout.



Analog Channels

Digital Channels with Reports turned on

	What you do:	What the display shows:
Step 1	Press the 0 key.	
Step 2	<i>Primary power is being supplied.</i> Press the NEXT key.	Power normal
	<i>Battery level is normal.</i> Press the NEXT key.	Low Batt normal
	Through all channels...	
	<i>Digital Input 11 is in the alarm condition and is closed.</i> Press the NEXT key.	DIN Chan 11 in alarm closed
	<i>NOTE:</i> If the channel being viewed is an analog input or a digital input that has Reports enabled, there is additional information that can be seen by pressing the '0' key repeatedly. The additional information is:	
	<i>Analog input</i>	
	<i>Alarm state</i>	
	<i>Low limit</i>	
	<i>High limit</i>	
	<i>Min since midnight</i>	
	<i>Max since midnight</i>	
	<i>Digital input</i>	
	<i>Starts</i>	
	<i>Starts limit</i>	
	<i>Run time</i>	
	<i>Run time limit</i>	
		<i>Loop through remaining channels</i>
	DiaLog Scout version	Dialog Scout-D8 V8.4

Loop back to Step 1

NOTE: Press any key on the keypad to stop the System Status display.

6.2 Remotely

The System Status can be retrieved remotely by calling into the Scout from a phone.

The Scout will answer after the number of rings specified by Rings to Answer. Then the Scout will:

	What you do:	What the Scout says:
Step 1	Dial the DiaLog Scout phone number	Site ID Message (followed by any channels in alarm) <i>beep beep beep</i>
Step 2	Press the # key. (within 5 seconds)	“System ready. Enter selection.”
Step 3	Press 0	“System status.” The System Status report is spoken. “Enter channel number or press # to exit”
Step 4	Enter a channel number	Channel message “is normal/in alarm” “The present value is open/closed” or “The present value is xx.x %”
Loop back to Step 3 or enter # to exit		

7 Listening In from a remote call

The DiaLog Scout allows you to call into it from a phone and Listen-In on the noise around the Scout. This is typically used to determine if motors, pumps, fans, etc. are running.

	What you do:	What the Scout says:
Step 1	Dial the DiaLog Scout phone number	Site ID Message (followed by any channels in alarm) <i>beep beep beep</i>
Step 2	Press the # key	“System ready. Enter selection.”
Step 3	Press the 5 key to enable Listen-In Press the # key during the 60 seconds. Press any of the 0 through 9 keys to extend the period 60 more seconds.	The Scout's microphone is turned on for 60 seconds. Disables Listen-In “System ready. Enter selection.”

8 Acknowledging alarms

A channel goes into alarm when it transitions out of the normal condition specified in the Alarm State.

For example, if a channel has an Alarm State of Normally Open, then the channel goes into alarm when the input closes. The channel will stay in alarm as long as the input is closed. If the Alarm Type is set to Latching, then it will stay in alarm, even if the input goes back to open, until the channel is acknowledged.

When any channel goes into alarm and the Channel Mode is set to Call on Alarm, the Scout will start calling the phone numbers in the Phone List. It will continue to call through the list of phone numbers until the channel goes out of alarm or until it is acknowledged.

When acknowledged, the Scout will stop calling and wait the time specified by the Ack Redial Delay before starting to call again if the channel is still in the alarm condition.

8.1 Acknowledge from the keypad

While in RUN mode, press the ACK key.

The Scout will change the display information for the channel(s) in alarm from Alarm to Acknowledged and stop calling.

8.2 Acknowledge when called

The Scout calls the phone numbers programmed into the Phone List beginning with the first position. If the call is busy, the Scout will go to the next number.

	What you do:	What the Scout does:
Step 1		Calls next phone number.
Step 2		Waits time specified by the Call Progress Delay for that phone number.
Step 3		Says: Site Message ID Channel Message ID "is in alarm" "please acknowledge"
	You have 5 seconds to press the 9 key to acknowledge the alarm.	
	If you do not acknowledge, loop back to Step 3 the number of times specified by Msg Repeat	
	If you do acknowledge	"Channel acknowledged." <i>beep beep beep</i>
	NOTE: After all the channels have been spoken, the Scout will give you three (3) beeps. You have 5 seconds to press the # key if you wish to continue.	
	If you do not press the # key.	"Good-bye"

8.3 Acknowledge when you call in

If you receive a pager notification that a channel is in alarm and you call into the Scout, the Scout asks you to acknowledge any alarms.

	What you do:	What the Scout does:
Step 1	Call into the Scout	Says: Site Message ID Channel Message ID "is in alarm" "Please acknowledge"
	You have 5 seconds to press the 9 key to acknowledge the alarm.	
If you do acknowledge	<p>NOTE: <i>After all the channels have been spoken, the Scout will give you three (3) beeps. You have 5 seconds to press the # key if you wish to continue.</i></p> <p>If you do not press the # key.</p>	<p>"Channel acknowledged." <i>beep beep beep</i></p> <p>"Good-bye"</p>

9 Arming and Disarming

At times it may be beneficial to Disarm the Scout to prevent it from calling out. This is generally done when you are performing maintenance on equipment being monitored and do not want unnecessary alarms generated.

9.1 From the front panel

NOTE: *The Scout must be in the RUN mode*

	What you do:	What the display shows:
Step 1	Press the 2 key to toggle between Armed and Disarmed.	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;"> Run Mode 03:04:07 armed </div>
	NOTE: <i>If the Scout is Disarmed, it will automatically become Armed after 30 minutes.</i>	

9.2 Remotely

You can Arm or Disarm the Scout when you call into it.

	What you do:	What the Scout says:
Step 1	Dial the DiaLog Scout phone number	Site ID Message (followed by any channels in alarm) <i>beep beep beep</i>
Step 2	Press the # key within 5 seconds <i>If an Access Code has been activated, you will be requested to enter it.</i>	“System ready. Enter selection.”
Step 3	Press 2 (ARM/DIS) to toggle between arm/disarm.	“System is armed/disarmed” “Return to arm in 30 minutes” “System ready. Enter selection.”
Loop back to Step 2		

10 Activating the Relay

The relay (Channel 21) can be manually activated or deactivated from the keypad or remotely over the phone.

If the relay is also controlled via a digital or analog channel going into alarm, the relay will perform that function in addition to any manual operation.

10.1 From the front panel

NOTE: *The Scout must be in the RUN mode*

	What you do:	What the display shows:
Step 1	Press the 7 (RELAY) key to see the Activate Relay selection screen. 1 to activate or 0 to deactivate the relay.	Activate Relay 0-off 1-on = 0

10.2 Remotely

You can activate or deactivate the relay when you call into the Scout or when the Scout has called you during an alarm notification.

	What you do:	What the Scout says:
Step 1	Dial the DiaLog Scout phone number	Site ID Message (followed by any channels in alarm) <i>beep beep beep</i>
Step 2	Press the # key within 5 seconds <i>If an Access Code has been activated, you will be requested to enter it.</i>	“System ready. Enter selection.”
Step 3	Press 7 to listen to the Activate Relay prompt..	“Activate relay. ” “Relay is energized (or deenergized)” “Enter new selection or press # to exit.”
Step 4	1 to activate the relay or 0 to deactivate the relay.	“Relay is energized (or deenergized)” “Enter new selection or press # to exit.”

11 Retrieving the Event Log

The DiaLog Scout keeps the last 100 events that occurred in a local non-volatile log. The Event Log can be viewed locally on the display or retrieved remotely over the phone.

The **PREV** moves backwards and the **NEXT** moves forwards through the logs.

11.1 To view the Event Log locally

	What you do:	What the display shows:
Step 1	Press the 1 key to enter Program Mode	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Program Mode 0-9 = </div>
Step 2	Press the LOG (5) key	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> View Logs 0-Evt 1-Data = </div>
Step 2	Press 0 to view the Event Log Press 1 to view the Data Log	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> 1) PROG Mode date time </div>
Step 3	Press the NEXT key to advance forward through the Event Log or the PREV key to move backward. Press the # key when you are finished.	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> 2) DIN3 Cl Alm date time </div>
Press # when finished		

11.2 To retrieve the Event Log remotely

The Event Log can be retrieved remotely via a phone call in to the DiaLog Scout.

	What you do:	What the Scout says:
Step 1	Dial the DiaLog Scout phone number	Site ID Message (followed by any channels in alarm) <i>beep beep beep</i>
Step 2	Press the # key (within 5 seconds)	“Enter selection.”
Step 3	Press the 6 key.	“Event log start” “Type is ##” “Date is xx xx” “Time is xx xx xx”
Step 4	Press the 1 key to move to the next event, press the 0 key to move to the previous event. NOTE: <i>if the Date or Time is the same as the previous event, then the Date or Time will not be repeated.</i> NOTE: <i>the Scout will say “Event log end” prior to the type of the last entry in the event log.</i>	“Type is ##” “Date is xx xx” “Time is xx xx xx”
Loop back to Step 4 or press # to exit.		

12 Retrieving the Data Log

The DiaLog Scout keeps a Data Log for analog and digital channels that have Reports enabled.

The Data Log contains 100 entries of:

- Analog channels Daily Max and Min values
- Analog channels Total Flow if the engineering units are GPM
- Digital channels Daily total cycles and total run-time
 (cycles are the number of times the digital input goes from normal to non-normal)
 (run-time is the amount of time that the digital input is in the non-normal state)

	What you do:	What the display shows:
Step 1	Press the 5 key	View Logs 0-Evt 1-Data =
Step 2	Press the 1 key to select the Data Log	View Logs 0-Evt 1-Data =
Step 3	<p>Press the NEXT key to advance forward through the Event Log or the PREV key to move backward.</p> <p>Press the # key when you are finished.</p> <p>For example, Channel 11 has a run time of 00 days, 10 hours, 20 minutes, 04 seconds</p>	01) 07/25 11 Run=00:10:20:04
Press # when finished		

13 How Remote Relay Control Works

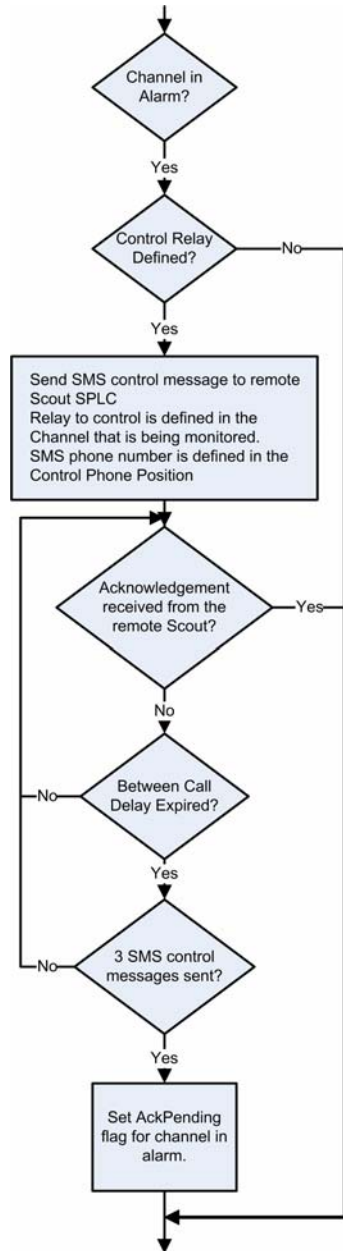
A Scout configured with a GSM cell phone can communicate with up to 4 other Scout-RT SPLC units via SMS text messaging.

The Scout that is monitoring conditions to determine when to send relay on and off commands is designated as the 'Master' Scout.

The Scout-RT SPLC that has relays that can be controlled is designated the 'Remote' Scout.

When the 'Master' sends a control message to a 'Remote', the 'Master' is expecting a return message indicating that the 'Remote' has successfully performed the required control.

The flowchart illustrates this communication from the 'Master's point of view.



Event #	Event Description	Event #	Event Description
0	NULL Event	42	GSM unsolicited reg event
1	Power On	43	GSM result of +CFUN cmd
2	Dead Task with task number	44	GSM attach to network
3	System Armed	45	GSM has reset
4	Armed	46	Pager call
5	RUN Mode	47	Phone check Telco/GSM
6	PROGram Mode	48	Sending SMS msg
7	Configuration Change	49	Sending e-mail msg
8	Reset to System Defaults	50	Sending GPRS UDP/PAD msg
9	Call Answered	51	Receiving SMS msg with cmd
10	No Dial Tone	52	Railed to execute SMS cmd
11	Call Busy	53	Automatic update call out
12	Call Error	54	Reset DIN run limit
13	Call Aborted	55	Reset DIN starts
14	Call Timeout	56	Reset AIN totals
15	Call No Answer	57	Write Holding
16	Call Incoming	58	Receive DTMF tone
17	Call Complete	59	Comm OK
18	Voice Call	60	Comm Fail
19	Data Call	61	DTMF tone
20	Alarms acknowledged locally	62	Time has been set
21	Alarms acknowledged remotely	63	GPS fix (1=valid, 0= not valid)
22	Alarm call / phone position	64	Midnight data posting to AT
23	Open alarm / digital channel number	65	GSM modem lockout start
24	Closed alarm / digital channel number	66	GSM modem lockout active
25	Run time alarm / digital channel number	67	GSM modem lockout end
26	Starts alarm / digital channel number	68	Time set from NIST
27	Low alarm / analog channel number		
28	High alarm / analog channel number		
29	Totalization alarm / analog channel number		
30	Channel is normal / channel number		
31	Channel acknowledged / channel number		
32	Relay channel on / channel number		
33	Relay channel off / channel number		
34	Normal data value for channel		
35	Starts data for digital channel		
36	Run time data for digital channel		
37	Totalizer data for analog channel		
38	Maximum value for analog channel		
39	Minimum value for analog channel		
40	Send status report		
41	Send events report		
42	Unknown		

14 Replacing the Backup Battery

The Backup Battery is continually monitored by the Scout to confirm that it is supplying enough power to run the Scout. If it is not, then the Low Battery (02) alarm will be activated.

This alarm is caused by:

1. the Scout has lost Primary Power, is running on the battery and is low on power, or
2. the battery cannot be recharged, which should take 6-12 hours.

The Backup Battery is located inside the enclosure. You will have to remove the front panel from the enclosure to expose the battery.

Battery replacement procedure	
Step 1	If panel mounted, dismount the enclosure by loosening the screws holding the enclosure to the panel.
Step 2	Remove the four (4) nuts that hold the front cover to the enclosure.
Step 3	Slowly tilt the top edge of the front cover away from the enclosure to expose the cable connecting the electronics to the battery.
Step 4	Put the front cover in a safe place and remove the battery bracket and battery.
Step 5	Put the new battery in the bracket with the leads facing the left-hand side of the enclosure.
Step 6	Reattach the battery cable and front cover.
Step 7	Mount the enclosure back in place.

NOTE: *be careful when removing the front panel as it holds the electronics and there is a cable between the electronics and the battery.*

15 Customer Service

Antx customer service can be reached toll-free at 877-686-2689.

Antx, inc.
P.O. Box 200816
Austin, TX 78720
www.antx.com
custserv@antx.com

16 Certifications

The Federal Communications Commission (FCC) has established rules that permit this device to be directly connected to the telephone network. Standardized jacks are used for these connections. This equipment should not be used on party lines or coin lines.

If this device is malfunctioning, it may also be causing harm to the telephone network. This device should be disconnected until the source of the problem can be determined and until repair has been made. If this is not done, the telephone company may temporarily disconnect service.

The telephone company may make changes in its technical operations and procedures. If such changes affect the compatibility or use of this device, the telephone company is required to give adequate notice of the changes. You will be advised of your right to file a complaint with the FCC.

If the telephone company requests information on what equipment is connected to their lines, inform them of:

- a. The telephone number this unit is connected to
- b. The ringer equivalence number: 0.2B
- c. The USOC jack required
- d. The FCC registration number: 60DAL02BSCOUT

Items b and d are indicated on the label.

The ringer equivalence (REN) is used to determine how many devices can be connected to your telephone line. In most areas, the sum of the REN's of all devices on any one line should not exceed five. If too many devices are attached, they may not ring properly.

Other DiaLog Scout certifications:

Industry Canada registration number: IC: 4825A-SCOUT

CE Mark



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