Remote Monitoring, Control and Alarm Notification System

Quick Reference Guide

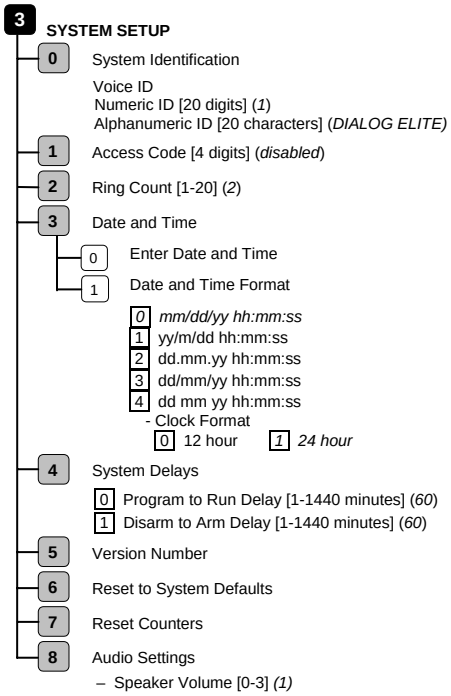
RUN Mode Commands

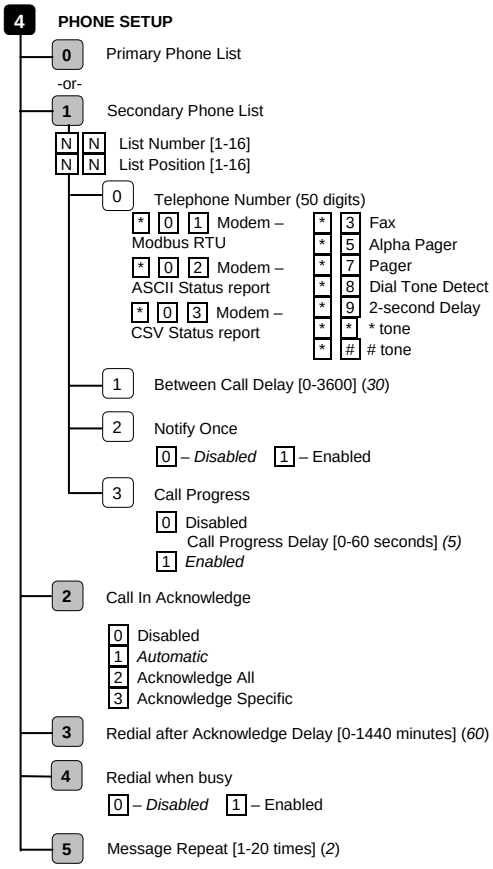
Local	Remote
0 Status 0 – System status 1 – Channel status	0 Status 0 – System status 1 – Channel status
1 Prog Enter Programming mode	1 Enter Programming mode
5 SpkrPh Speaker Phone	5 Listen In
7 Activate Relays	7 Activate Relays
Ack Clear Acknowledge alarms	* 4 Toggle Arm/Disarm
Arm Reset Arm the DiaLog to make alarm calls	* or, 8 or, 9 Acknowledge Alarms when called
Disarm Bksp Disarm the DiaLog to prevent alarm calls	
Home Hangup phone call in progress	

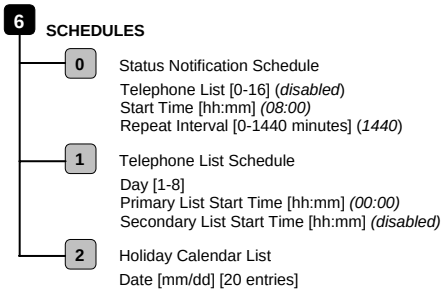
Programming Mode Commands

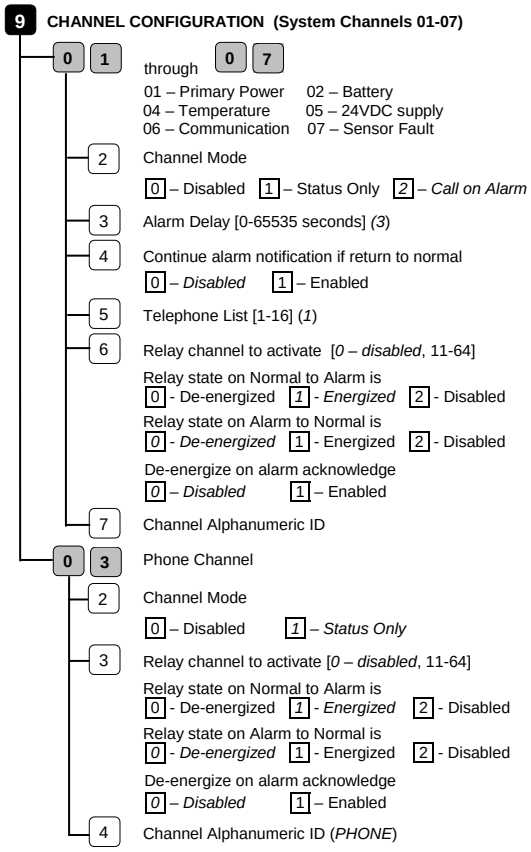
Local	Remote
2 Run Enter Run mode	2 Enter Run mode
Ack Clear Clear current field	0 System Status
Arm Reset Reset to factory setting	* 2 Reset to factory setting
Disarm Bksp Erase last character	
Home Go to top of menu	* 6 Home –top of menu
# Enter Enter this entry	# Enter this entry
* 4 Global enable	* 4 Global Enable

Programming Mode Commands




4 PHONE SETUP
0 Primary Phone List
-or-
1 Secondary Phone List
N N List Number [1-16]
N N List Position [1-16]
0 Telephone Number (50 digits)
* 0 1 Modem – Modbus RTU
* 0 2 Modem – ASCII Status report
* 0 3 Modem – CSV Status report
* 3 Fax
* 5 Alpha Pager
* 7 Pager
* 8 Dial Tone Detect
* 9 2-second Delay
* * * tone
* # # tone
1 Between Call Delay [0-3600] (30)
2 Notify Once
0 – Disabled 1 – Enabled
3 Call Progress
0 Disabled
Call Progress Delay [0-60 seconds] (5)
1 Enabled
2 Call In Acknowledge
0 Disabled
1 Automatic
2 Acknowledge All
3 Acknowledge Specific
3 Redial after Acknowledge Delay [0-1440 minutes] (60)
4 Redial when busy
0 – Disabled 1 – Enabled
5 Message Repeat [1-20 times] (2)


6
SCHEDULES
0
Status Notification Schedule
Telephone List [0-16] (disabled)
Start Time [hh:mm] (08:00)
Repeat Interval [0-1440 minutes] (1440)
1
Telephone List Schedule
Day [1-8]
Primary List Start Time [hh:mm] (00:00)
Secondary List Start Time [hh:mm] (disabled)
2
Holiday Calendar List
Date [mm/dd] [20 entries]


9 CHANNEL CONFIGURATION (System Channels 01-07)
0 1 through 0 7
01 – Primary Power 02 – Battery
04 – Temperature 05 – 24VDC supply
06 – Communication 07 – Sensor Fault
2 Channel Mode
0 – Disabled 1 – Status Only 2 – Call on Alarm
3 Alarm Delay [0-65535 seconds] (3)
4 Continue alarm notification if return to normal
0 – Disabled 1 – Enabled
5 Telephone List [1-16] (1)
6 Relay channel to activate [0 – disabled, 11-64]
Relay state on Normal to Alarm is
0 - De-energized 1 - Energized 2 - Disabled
Relay state on Alarm to Normal is
0 - De-energized 1 - Energized 2 - Disabled
De-energize on alarm acknowledge
0 – Disabled 1 – Enabled
7 Channel Alphanumeric ID
0 3 Phone Channel
2 Channel Mode
0 – Disabled 1 – Status Only
3 Relay channel to activate [0 – disabled, 11-64]
Relay state on Normal to Alarm is
0 - De-energized 1 - Energized 2 - Disabled
Relay state on Alarm to Normal is
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De-energize on alarm acknowledge
0 – Disabled 1 – Enabled
4 Channel Alphanumeric ID (PHONE)

9 **CHANNEL CONFIGURATION (Digital Input Channels)**

[N] [N] Channel Number [11-68]

0 Channel State

[*0*] – *Normally Open*
[1] – Normally Closed

1 Channel Messages
Alarm message [8 seconds]
Normal message [8 seconds]

2 Channel Mode

[0] – Disabled
[1] – Status Only
[*2*] – *Call on Alarm*
[3] – Call on Limit

[0] – Totalizer Limit [0-999,999,999 counts] *(0)*
Scaling Value [1-1000] *(1)*
Engineering Units [0-27] *(0)*

[1] – Duration Limit [0-999,999,999 seconds] *(0)*
[2] – Limit Reset Period [0-999,999,999 minutes] *(0)*
[3] – Reset Counters on Acknowledge
[*0*] – *Disabled* [1] - Enabled

3 Alarm Delay [0-65535 seconds] (*3*)

4 Continue alarm notification if return to normal

[*0*] - *Disabled* [1] - Enabled

5 Telephone list [1-16] *(1)*

6 Relay channel to activate – [*0-disabled*, 11-64]

Relay state on Normal to Alarm is
[0] - De-energized [*1*] - *Energized* [2] - Disabled

Relay state on Alarm to Normal is
[*0*] - *De-energized* [1] - Energized [2] - Disabled

De-energize on alarm acknowledge
[*0*] – *Disabled* [1] – Enabled

7 Channel Alphanumeric ID (*CHAN nn*)

9 **CHANNEL CONFIGURATION (Analog Input Channels)**

N N Channel Number [11-68] (enter channel # first)

0 Channel Conversion

- 0 Decimal Position [0-5] *(2)*
  Zero [0-99999] *(0)*
  Full Scale [0-99999] *(10000)*
  Zero Sign [0 – negative, *1 – positive*]
- 1 Engineering Units [0-34] *(0)*
- 2 Input Type [0-5] *(5)*

0	0-1V	3	0-10V
1	0-5V	4	0-20ma
2	1-5V	5	*4-20ma*

1 Channel Messages
Alarm message [8 seconds]
Normal message [8 seconds]

2 Channel Mode

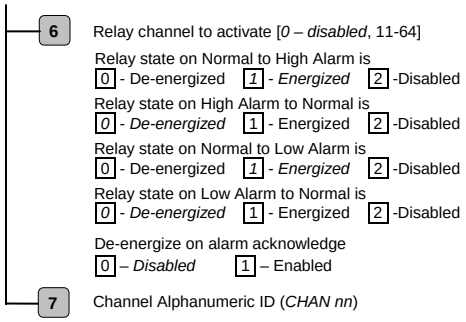
0 – *Disabled*
1 – Status Only
2 – Call on Alarm 4 Mode2 5 Mode3 6 Mode4

- 0 - Low Limit (*disabled*)
- 1 - High Limit (*disabled*)
- 2 - Positive Rate of Change (*disabled*)
- 3 - Negative Rate of Change (*disabled*)
- 4 - Rate of Change Period (*disabled*)

3 Alarm Delay [0-65535 seconds] (*3*)

4 Continue alarm notification if return to normal
0 - *Disabled* 1 - Enabled

5 Telephone list [1-16] *(1)*



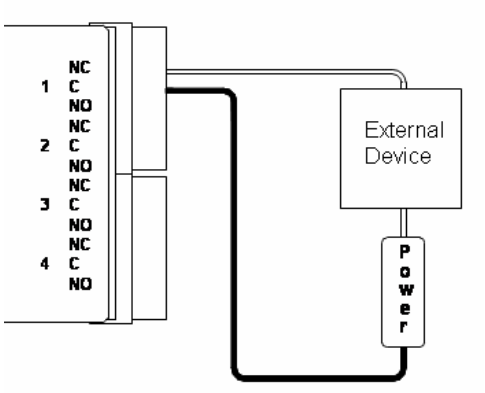
Engineering Units Index

0	*disabled*
1	ma
2	a
3	v
4	deg C
5	deg F
6	gal
7	l
8	lbs
9	kg
10	gpm
11	gph
12	mgpd
13	lph
14	cips
15	cfpm
16	cfph
17	pph
18	fps
19	in
20	ft
21	m
22	ppm
23	w
24	kw
25	deg
26	psi
27	pct
28	pH
29	hz
30	khz
31	mgal
32	ppb
33	%vol
34	%lel

9 **CHANNEL CONFIGURATION (Relay Output Channels)**

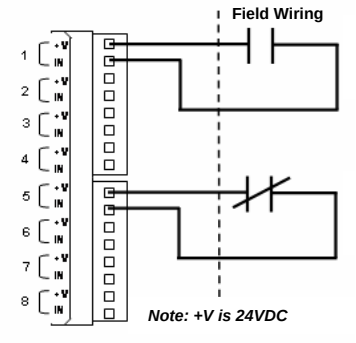
- [N] [N] Channel Number [11-64]
  - **0** Pulse Duration [0-86400 seconds] (*0*)
  - **2** Channel Mode
    - [0] – *Disabled*
    - [1] – Status Only
  - **3** Channel Alphanumeric ID (*CHAN nn*)
  - **4** Relay ID message [8 seconds]

Relay Output Card Wiring

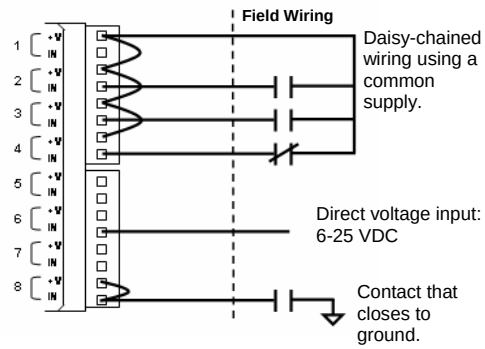


Wiring a DiaLog relay to an external device

Digital Input Card Wiring



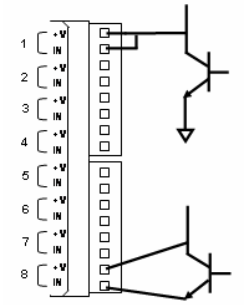
Separate wiring for each input channel



Note: +V is 24VDC

Daisy-chained, direct voltage and closure to ground wiring.

Digital Input Card Wiring



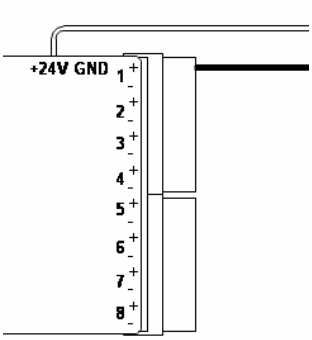
+ and – tied together.
Channel state set to
Normally Closed

NOTE: Ground on the Elite and the Open-Collector should have a common reference.

Isolated connection.
+24VDC from Elite is fed
through the transistor

Open-Collector wiring options

Analog Input Card Wiring

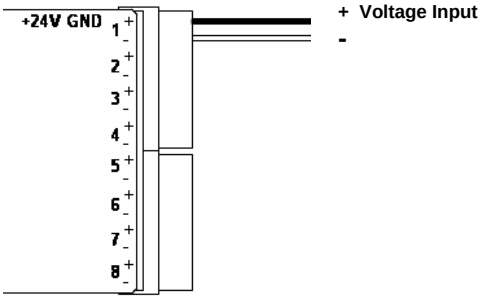


+ 0-20ma or

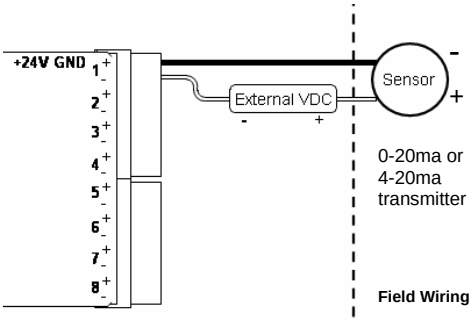
- 4-20ma transducer

Using internal power supply to drive current sensors

Analog Input Card Wiring



Direct connection of voltage or self-powered current sensor



Using external power source to supply current to sensors

System LEDs

LED	Primary Power	Battery	Phone Line	Elite Status
Off	DiaLog is off	No battery or failure		
Solid Green	Primary power active	Fully charged	Off hook	RUN mode
Blinking Green	In Bootloader	Being charged	Ring detected	Storing Config
Solid Red	Power fail alarm ack'd	Battery low alarm ack'd	Line fault	PROG mode
Blinking Red	Power fail alarm	Battery low alarm		Disarmed

Channel LEDs

LED	Digital Input	Analog Input	Relay Output
Off	Not configured	Not configured	Not configured
Solid Green	Configured	Configured	Configured Not Energized
Blinking Green	In alarm, alarm delay not met	In alarm, alarm delay not met	
Solid Red	In alarm, alarm ack'd	In alarm, alarm ack'd	Energized
Blinking Red	In alarm	In alarm	
Solid Amber	In alarm ack'd Exceeds low alarm in Mode 2 or Mode 3		
Blinking Amber	In alarm, exceeds low alarm in Mode 2 or Mode 3		