REDLINE

Our Monitors range from 2-channel up to a 24-channel. In-between we have a 4-channel, 8-channel and 16-Channel. You can specify Color of strobe: Red, Blue and Amber. You can also request an AC Power Cord or a cord grip to run your own power on the monitors.

8CH MONITOR

FEATURES

- **12-24 VDC IN 120VAC 150mA continuous consumption**
- **Four relays with latching capabilities**
- **Modbus default 232 9600 ,upon request 485 19200**
- **Mounted light and siren**
- **Adjustable relay set points and addresses**
- **Wireless communications**
- **Private Label Faceplate**

The 8 Channel Monitor is an **AC/ DC** input with 4 relays that can be selected for output by moving a fuse to make dry, AC or DC contacts. 24 LEDs give a quick view of the channel in alarm. There is a 485 output string that can show the activity on hyper terminal. This shows the ppm and battery voltage as well as the signal strength of the H2S head. The alarm set points are adjustable in the set alarm mode and are displayed during settings. Each of the 4 relays can be set independently.

P/N: RL-8CH

TOMAR MICROSTROBES

• built-in RFI filters • lens has hermetic o-ring seal

• solid state power supply

• 10,000 hour strobe lamp

• available in six lens colors

• UL listed

• NEMA 4X

REDLINE
Wireless Gas Detection Products

8CH MONITOR MANUAL

Modes and Instructions

1. **Normal Operation**- This mode is active at all times when the monitor is powered and not in another specific menu.

Pressing the RESET button on the faceplate when in any other mode, the system will return to the Normal Operating Mode. If the system is left in any other mode, the system wiil return to the Normal mode 2 minutes after a button was pressed.

In Normal Operating Mode, all relays are active. The green LEDs will scan across the channels that are turned on. To stop the scan and watch a channel, press the HOLD button on the faceplate to select a channel to examine. The selected channel will be displayed for one minute or until the RESET button is pressed.

If a channel is OFF, the scan will skip the channel, but if the HOLD button is pressed to advance to an OFF channel, the system will display "OFF" when you try to examine the channel.

If all 8 channels are off, the system will scan and display "OFF".

If alarms B or D or activated by a high level, pressing RESET will cause the B and D relays to be released (sometimes referred to as High Alarm Disable). When B and D are activated by a high gas level and the alarms have been disabled, pressing RESET again will enable the alarms.

2. **Set Alarm Set Points**

To enter this mode, the system must be in Normal Mode.
Press the Mode button at the top and back of the display circuit board. The green LED will indicate which channel isselected and the first digit in the display will indicate which alarm is selected (A, B, C, D).

To change the channel, press the HOLD button; to change the alarm, press the Test button at the bottom and rear of the Display circuit board. To change the set point, use the UP (2nd from the top)and DN (3rd from the top) buttons.

3. **Turn Channels ON/OFF**

To enter this mode, press the Mode button when in 'Set Alarm' mode. HOLD selects the channel, UP will turn the channel on; DN will turn the channel off.

For 4-20mA inputs, a third selection is possible (4-20). Press UP until the display shows "4-20". The monitor will ignore radio communications for this channel and use the 4-20mA input.

4. Assign Radio (Head) to Channel

To enter this mode, press the Mode button when in 'TurnChannels ON/' mode. HOLD selects the channel. Use UP and down to change the Head (radio#) assigned to the channel.

The letter 'r' in the first digit indicates this mode. The range is 0-255. When going up, the number will go from 255 back around to 0 and when going down, the number will go from 0 back around to 255 (the Head units cannot be set to ZERO, so do not use it).

Pressing MODE in this mode returns the system to Normal Operating mode. Also, by pressing the RESET button at any time, the system will return to Normal Operating mode.

To get into the second set of modes, press the TEST button while in Normal mode.

5. Relay / Wiring Test

The first digit in the display (as well as the green LEDs 1-4) will show which relay is being affected. The display shows if the relay is on("on" & Red LED) or off ("OFF" & Yellow, LED).

The UP button turns the relay on; the DN button turns the relay off. If you set a relay on (or off), pressing the TEST button will set the next relay on (or off), or each relay can be set on or off individually.

This mode can be used to verify the wiring of the alarms or auto dialers or dry contacts, AC contacts or DC contacts.

There is a fuse associated with each relay. This fuse is also a jumper to configure the relay to be DRY, AC or DC. For DC alarms, the return must be brought back to the DC return terminals.

For AC alarms, the return MUST be brought back to the AC Return (AC neutral) terminals.

When using the Dry contact configuration, the relay is isolated from the on-board power supplies.

6. **Check the Radio Power Level**

Pressing the MODE button while in Relay Test will display the radio signal level.

The Head unit must have had the signal strength test performed previously or this value will not be valid.

Use the HOLD button to scan the channels. UP and DN buttons have no function. The first digit in the display will be "L".

7. **Check Time since last Radio Message**

Pressing the MODE button while in Check Radio Level will display the time, in seconds, since the last good radio message.

Use the HOLD button to scan the channels.

(UP and DN buttons have no function.) The first digit in the display will look almost like a "t"

8. **Check Gas Type**

Pressing the MODE button while in Check Time will display the type of gas (only H2S so far, but CO coming soon).

Use the HOLD button to scan the channels. UP and DN buttons have no function. If there are "_" in the display, the Monitor has not received a message from a Head unit.

9. **Check Mode of Head Unit**

Pressing the MODE button while in Check Gas Type will display the mode of the Head unit.

Use the HOLD button to scan the channels.

(UP and DN buttons have no function)

The first digit will show "-". Refer to the Redline operation manual (also coming soon) for a description of the modes.

10. **Check Battery Voltage in Head Unit**

Pressing the MODE button while in Check Mode will display the mode of the Head unit. Use the HOLD button to scan the channels.

UP and DN buttons have no function.

The first digit will show "b". The display will show the battery voltage in the Head unit.

11. **Select Destination Address for Remote Shut-in**.

If the Monitor Destination Address (“DE" is set to 60, the Monitor will not send a message to the Remote Shut-in unit).

The Remote Address must be between 50 and 59. This address must be set to the same value on the Remote Shut-in’s address setting.

12. **Select Source Address for Remote Shut-in.**

The Remote Shut-in may receive a shut-in message from four different monitors. Each monitor must have a different Source Address.

The source address choices are 41-48. The Shut-in Unit must have a Source Address set to this source address.

13. **See Time (HR:MIN)**

Pressing the MODE button while in Set Source Address display the HR: MIN from the system clock. This is not useful except to show that the system memory is intact.

14. **See Time (MN:SEC)**

Pressing the MODE button while in See Time will display the MIN: SEC from the system clock.

Pressing the MODE button returns to the Normal Operating MODE Also, by pressing the RESET button at any time, the system will return to Normal Operating mode.

15. **Test Remote Shut-in Relays**.

This display looks like the Local Relay Test (#5 above), but the relays of the Remote Shut-in unit will be energized (Destination and Source Addresses must agree) instead of the local relays.

When Alarm A is activated, it appears on the Remote Shut-in unit on channel A. When Alarm B is on, it will appear on Channel 2. Alarm C will appear on channel 3 and Alarm D will appear on channel 4.

INSTALLATION

Important- before you install the monitor make sure you have read the basic operations to ensure proper understanding of the product. Also check battery voltage to ensure monitor will function properly.

MAINTENANCE

Redline Instruments recommends you check battery voltage every 90 days and Calibration every 30 days. If your instrument is in need of repair you may send your instrument to any of the redline location for repair. See website for location addresses. **For Troubleshooting assistance call the Redline office at (979)776-7200.**