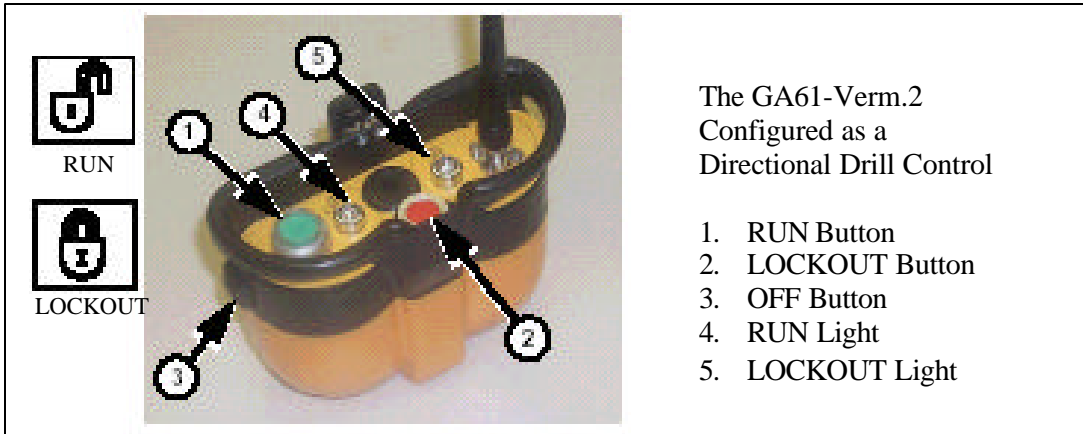


# GA61-Verm.2-TX Operator Manual



## ELECTRICAL SPECIFICATIONS

Temperature Range	-30° to +70° Celsius
Supply Voltage Range	3.0-5.5 VDC
Inputs	TX Recognition (Reed), Lockout Pulse (Piezo Switch), Run and Turn-off Buttons, Receiver TTL
Outputs	LEDs (Red/Green), Vibrator, Buzzer, Antenna Switch, TX Standby, TX TTL
Run and Turn-off Button Delay	2 seconds

## OPERATIONAL DESCRIPTION

- Pressing the Transmitter Lockout button starts the Transmitter and selects the Lockout mode.
- Pressing and holding the Transmitter Run button for 2 seconds selects the Run mode.
- Pressing and holding the Transmitter Stop Button for 2 seconds turns off the transmitter.
- Low Battery indicator is tripped at 3.15 volts; the transmitter power is turned off at 2.70 volts.
- The Transmitter can select either RUN or LOCKOUT mode. The GA61-Verm.2-TX controls lights, buzzer and vibrator to indicate system status.
- Transmitter Indicator (LED/Buzzer/Vibrator) functions are given in Table 1.

## COMPLIANCE

**This device has been tested and found to be compliant with Part 90 of the FCC Rules and Regulations. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.**

Table 1 Logic Configured for Directional Drill Control

	Red LED	Green LED	Buzzer	Vibrator
Turn-on and/or Lockout	On	Off	3 beeps, repeated 3 times	Off
Failed Lockout Acknowledgment	Flashes	Flashes	On for 60 sec.	On for 60 sec.
Run (press button for 2 sec.)	Off	On	On for 3 sec.	Off
Low Battery in Run	Off	Flashes 3sec.on 0.5sec. off	Beeps 0.5sec. on 3sec. off	Off
Low Battery in Lockout	Flashes 3sec.on 0.5sec. off	Off	Off	Off
Loss of communication in Run	Flashes	Flashes	On for 20 sec.	Off
Loss of Communication in Lockout	On	Off	Off	Off