



Discovery Sound **Technology**

MS-3000 PRECISION ULTRASONIC RECEIVER



OPERATING GUIDE



MS3000
Precision Ultrasonic Receiver
Operating Guide

CAUTION

This is a precision instrument requiring the same safety and handling considerations as other comparable test equipment:

- **Do not immerse in water. Not for use in condensing environment.**
- **Do not leave in direct sunlight or expose to continuously elevated temperatures above 120 deg. F. [LCD Display]**
- **Not for use below 32 deg. F. [LCD Display]**
- **Do not expose to corrosive environment.**
- **Do not drop onto non-resilient surface.**
- **Do not clean with abrasives or chemical solvents. Use a damp, clean, soft cloth with warm water only.**
- **Do not modify or use power sources other than those provided with this instrument.**

WARNING!

Failure to heed the following can lead to extreme injury or death:

- Do not use metal probe adapter inside electrical cabinet. Use Nylon probe adapter instead.*
- Do not allow metal case to contact high-voltage circuits.*
- Use extreme caution when examining kilovolt-level components and electrical cabinets. Know and understand min/max arc-over distances.*

Not for use in explosive environment.

****Notice****

Your MS-3000 was shipped with fresh batteries already installed. A second set of packaged batteries is included – these can be charged with the included charging adapter. Batteries should be maintained in a state of readiness if moderate to heavy usage is anticipated.

The transmitter shipped with this package also includes a pre-installed 9 VDC battery.

Front Panel Operation

KEYS

- ON** Power-on sequence. Initiates self-calibration cycle. Automatically nulls all electronic offsets to 'zero' the instrument.
- OFF** Powers the instrument off.
- PK HOLD** The instrument must first be placed in the MANUAL GAIN-mode for the 'PEAK HOLD' function to operate. (See below). When the desired gain range is selected, pressing the 'PK HOLD' key will place a single vertical bar at the highest recorded level. The bar is retained until replaced by a higher level. Pressing 'PK HOLD' again or changing gain ranges will return the instrument to MANUAL GAIN mode.
- LASER** 'Toggle' function - turns laser pointer on and off with button press. Laser will automatically power off after five minutes.
- ILLUMINATE** 'Toggle' function - turns the two white LED's on and off. LED's will automatically power off after five minutes.
- WIDE** Disables the bandpass filter – enables the full spectral response of the transducer.
- NARROW** Enables the bandpass filter. Response of the transducer is sharply rolled off either side of its center frequency.
- SOUND BYTES** Activates SOUND BYTES samples menu. The highlighted item will be played if the headset is connected. Pressing the SOUND BYTES switch will repeat the selection. Pressing the '+' or '-' switch will scroll through the menu selections. Pressing the WIDE or NARROW switch will exit the SOUND BYTES samples menu.
- VOL [- +/-]** Adjusts headset sound volume. Simultaneously depress 'VOL' key while pressing '+' or '-' key to achieve desired sound level.
- Manual Gain Mode** - Press 'WIDE' while simultaneously pressing '+' key. Gain ranges can now be stepped by pressing '+' or '-'. Return to autoranging by simultaneously pressing 'NARROW' and '+' keys.
- Adjust Display Contrast** - While holding down the ILLUMINATE key, press the '+' or '-' key to achieve desired contrast. Returns to default when powered off.

Laser
Ultra Sound
Transducer
High Intensity
LED's
High Intensity
LED's



Dual Audio Jacks



**Remove
Front Cover
Screws
For
Battery
Replacement**



**Remove
Front Cover
Screws
For
Battery
Replacement**

Charger



**Aux.
Battery
Pack**



**Standard 120 VAC
Charging Adapter**



**Overseas
220 Volts
Charging
Adapter**



**12 Volt
Vehicle
Charging
Adapter**

**Standard
Probe
Adapter**



**Insulated
Probe
Adapter**



Coupler



**Extended
Probe
Adapter**



**Vibration
Probe**

