

# DigiTrak<sup>®</sup> Mark IV

## Directional Drilling Locating System



- Enhanced performance over the Mark III
- Graphic display provides data at a glance
- Menu-driven operation is intuitive and easy to learn
- Linear graphic image guides you to the locate point
- No ghosts or false locates
- Available as an upgrade to Mark III receivers and remote displays

The DigiTrak<sup>®</sup> Mark IV system is the latest version of the DigiTrak<sup>®</sup> Mark series receivers. The Mark IV has a single display window with simple-to-understand graphics and menu-driven operations. It employs all of the advanced features of the Mark III, including the patented *look-ahead*<sup>™</sup> locating capability. It is compatible with all DigiTrak<sup>®</sup> Mark series transmitters and remote displays, DataLog<sup>®</sup> equipment, and NiCad battery packs and chargers.

The DigiTrak<sup>®</sup> Mark IV Receiver simplifies locating by providing the operator with a large easy-to-read graphic display. This display illustrates how to position the receiver to find the locate points, the position above the transmitter or directly off to the side, and the predicted depth out in front of the drill head. A "box" on the display represents the DigiTrak<sup>®</sup> receiver. As the operator moves towards a locate point, a bull's-eye (representing the locate point) will appear on the display screen. As the receiver passes directly over the locate point, the bull's-eye moves into the box. It's that simple—*target-in-the-box*<sup>™</sup>. Turning the box 90 degrees over the locate point pinpoints the locate point's left/right position. As you approach the drill head, a line will appear on the display; once the line moves into the box, the receiver is over the tool. The line can also be used for off-track locating.

All of the transmitter's information, including signal strength, is displayed in the window with the trigger in

the released position. When the trigger is held in, the display shows the tool's depth below ground and the ultrasonic distance (height-above-ground measurement). When the trigger is held in at the front locate point, you will observe the predicted depth along with the ultrasonic measurement. The depth becomes the slant range and is continuously displayed.

Other Mark IV features include the capability to view depth measurement modes in metric or English units—meters and centimeters or feet and inches. The transmitter's temperature is shown in either Celsius or Fahrenheit, depending on the depth measurement mode. The pitch angle can be set to display in either percent grade or degrees.

All Mark III receivers can be upgraded to the Mark IV system.





## DigiTrak® Mark IV Receiver

### Features

- ◆ *Look-ahead™* locating provides location, depth, pitch, and roll of transmitter in drill head, in addition to transmitter battery and temperature status.
- ◆ *Target-in-the-box™* locating technique.
- ◆ Easy-to-learn locating technique that leads you to the transmitter or locate point.
- ◆ Enhanced locating features built upon an accurate, proven design.
- ◆ Simple one-button, single-hand operation.
- ◆ No ghosts or false locates.
- ◆ Smooth auto-gain changes are transparent to the operator.
- ◆ The display shows real-time movement of the transmitter to allow "on-the-fly" locating.
- ◆ Patented calibration procedure offers superb accuracy and the ability to recalibrate while drilling.
- ◆ Left/right steering indicator allows remote steering from the drill rig.
- ◆ Remote left/right steering capability.
- ◆ Fast data updates increase drilling efficiency.

### Specifications

Model number .....	MDR, MDRR
Frequency .....	33 kHz
Power source .....	DigiTrak® NiCad battery pack
Battery life .....	8–12 hr (approx.)
Battery charger .....	12/28 V DC or 110/220 V AC
Depth/range .....	up to 140 ft (42.7 m)
Depth display .....	Real time
Functions .....	Menu driven
Controls .....	Trigger switch
Graphic display .....	LCD
Audio output .....	Beeper
Telemetry range .....	2000 ft (610 m)
Operating temperature range .....	-4°F to 140°F -20°C to 60°C
Accuracy .....	±5% absolute
Height .....	11 in. (27.9 cm)
Width .....	5 in. (12.7 cm)
Length .....	13.5 in. (34.3 cm)
Weight (w/ battery) .....	8.7 lb (3.9 kg)
Sleep mode .....	After 15 min

## DigiTrak® Mark IV Remote Display

The DigiTrak® Mark IV Remote Display is the latest version of the Mark series remote displays. It features an easy-to-read graphic display for quick and easy interpretation of drilling data. The remote display provides the drill operator with the pertinent data from the Mark IV receiver, and it can obtain information with the receiver as far as 2000 ft (610 m). The information viewed on the remote display includes depth, pitch, roll, transmitter temperature, and battery status. The remote display is powered by the same DigiTrak® NiCad battery as the DigiTrak® receiver.

The remote display has four channel setting options, so multiple receivers can be run in a restricted geographical area. The remote display also has a centering bar graph to track remote left/right steering when walkover locating is not possible. The graph will display the left/right deviation of the intended target heading. This feature is great for highway, small river, and railway crossings.

### Specifications

Model number .....	MDD
Frequency .....	33 kHz
Power source .....	DigiTrak® NiCad battery pack
Battery life .....	8-12 hr (approx.)
Battery charger .....	12/28 V DC or 110/220 V AC
On/Off Controls .....	Push button
Graphic display .....	LCD
Telemetry range .....	2000 ft (610 m)
Telemetry channels .....	4 channels
Telemetry controls .....	Knob
Operating temperature range .....	-4°F to 140°F -20°C to 60°C
Height .....	4.6 in. (11.7 cm)
Width .....	3.5 in. (8.9 cm)
Length .....	10.0 in. (25.4 cm)
Weight (w/ battery) .....	4.1 lb (1.8 kg)



425 S.W. 41st Street  
Renton, Washington 98055 USA  
800-288-3610 / 425-251-0559 • Fax 425-291-0005  
E-mail dci@digital-control.com • [www.digitrak.com](http://www.digitrak.com)