

DigiTRAK® Mark V

Directional Drilling Locating System



- Dual-frequency operation for optimal locating and depth accuracy in interference areas
- Lowest frequency in the industry for best rebar penetration
- Advanced circuitry for enhanced roll/pitch speed and range
- Menu-driven operation
- Available as an upgrade to Mark III receivers and remote displays

The DigiTrak® Mark V locating system is a dual-frequency system and the latest version of the DigiTrak® Mark series receivers and transmitters. The Mark V is designed to combat both passive and active interference. Passive interference, such as caused by rebar, is virtually eliminated by the use of a second, new very low frequency. New receiver circuitry significantly reduces the effects of interference caused by power lines and traffic loops while providing a greatly increased transmitter data update rate.

The frequency can be changed either above ground before drilling starts or while drilling.

All Mark III systems can be upgraded to a Mark V system.

The DigiTrak® Mark V 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® receiver. As the operator moves towards a locate point, a target symbol (representing the locate point) will appear on the display screen. As the receiver passes directly over the locate point, the target moves into the box. It's that simple—*target-in-the-box*®. 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 transmitter. The line can also be used for off-track locating, a feature particularly useful when access over the head is restricted.

All of the transmitter's information, including signal strength, tool's depth below ground, and the ultrasonic distance (height-above-ground measurement) are displayed. At the front locate point, the *look-ahead*® or predicted depth is displayed.

Other Mark V features include the capability to view depth measurement modes in metric or English units, meters and centimeters, feet and inches or inches only. The pitch angle can be set to display in either percent grade or degrees.



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With offices in the United States, Germany, Australia, India & China



DigiTrak® Mark V Receiver

Features

- ◆ Dual-frequency receiver and transmitter.
- ◆ Effective interference rejection.
- ◆ *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 are built upon an accurate, proven design.
- ◆ Smooth auto-gain changes are transparent to the operator.
- ◆ 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.
- ◆ Remote left/right steering capability.

Specifications

Model number	DRRV
Frequency	1.5 / 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	40 ft (12.2 m)
Depth display.....	Real time
Functions.....	Menu driven
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
Data update rate - Roll position.....	12 times/second
Pitch value	Once/second
Accuracy.....	±5% absolute
Height.....	11 in. (279 mm)
Width	5 in. (127 mm)
Length	13.5 in. (343 mm)
Weight (w/ battery)	8.7 lb (3.9 kg)
Sleep mode	After 15 min

DigiTrak® Mark V Remote Display

The DigiTrak® Mark V 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 V receiver. The information viewed on the remote display includes depth, pitch, roll, transmitter temperature, frequency of operation and battery status.

The remote display also indicates to the drill operator when the receiver is over the drill head or one of the locate points.

The remote display has four channel setting options, so multiple systems can be run within a proximal geographical area. The remote display also has a centering bar graph to track remote left/right steering.

The remote display is powered by the same DigiTrak® NiCad battery as the DigiTrak® receiver.

Specifications

Model number	DDV
Frequency	1.5 / 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	Menu driven
Operating temperature range	-4°F to 140°F -20°C to 60°C
Height.....	4.6 in. (117 mm)
Width	3.5 in. (89 mm)
Length	10.0 in. (254 mm)
Weight (w/ battery)	4.1 lb (1.8 kg)



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