

DigiTRAK[®] Mark III

Directional Drilling Locating System



- Depth prediction capability
- No ghosts or false locates
- Left/right remote steering
- Locates over obstacles
- In-ground calibration
- Off-track guidance
- Simple one-button operation
- Continuous depth display
- Upgradable to the Cable System
- DataLog[®] mapping capability

The DigiTrak[®] Mark III locating receiver is the most widely used directional tracking receiver in the world. The Mark III receiver incorporates features that were pioneered in the directional drilling industry by Digital Control Incorporated. Innovations introduced by DCI include a compact design, pitch and roll data, sensitive-pitch transmitters for gravity sewer installations, remote steering with a receiver, and above-ground calibration for greater depth accuracy. The unique ultrasonic feature allows separation from in-ground interference sources and enables below-ground calibration. A complete self-diagnostic feature assists the operator by confirming proper operation.

The patented locating system results in a compact and lightweight design that makes locating over and around obstacles easier than with any other type of receiver. Advanced internal shielding and the unique x-antenna configuration produce accurate readings over a considerable range.

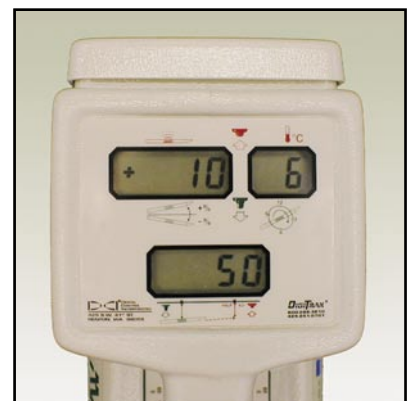
Unique features such as front and rear locate points allow the operator to accurately track the direction of the drill head, which reduces oversteering. The locate points also allow for independent confirmation of depth by using the known mathematical relationship between locate points, pitch, and depth.

The DigiTrak[®] Mark III receiver has a modular internal design that, along with the self-diagnostic function, facilitates fast and simple maintenance.

Advanced drillers can take advantage of off-track guidance when access over the drill head is limited due to interference or physical obstacles.

The patented design also allows the drill head to be tracked while it is moving. This ability to locate "on the fly" minimizes or eliminates idle time for the drill rig, resulting in greater production and increased efficiencies.

The DigiTrak[®] Mark III receiver can be upgraded to any later-model Mark series receiver. The Mark III locating system is also compatible with the DataLog[®] Mapping System.





DigiTrak® Mark III Receiver

Features

- ◆ Depth prediction firmware provides the locator with the estimated depth at the front locate point.
- ◆ Robust, upgradable design.
- ◆ 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.
- ◆ Rechargeable NiCad batteries power the receiver.
- ◆ Patented calibration procedure offers superb accuracy and the ability to recalibrate while drilling.
- ◆ Left/right steering indicator allows remote steering from the drill rig.
- ◆ Fast data updates increase drilling efficiency.
- ◆ DataLog® and Cable System compatible.

Specifications

Model number	DR, DRR
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
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
Depth 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 III Remote Display

The DigiTrak® Mark III Remote Display 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 III receiver, and it can obtain information with the receiver as far away 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 Mark III 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.

The Mark III remote display is compatible with DCI's DataLog® Mapping System, used for data collection

and mapping of bores. It can also be upgraded for use with the DigiTrak® Cable System.

Specifications

Model number	DD, DDC
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. (117 mm)
Width	3.5 in. (89 mm)
Length	10.0 in. (254 mm)
Weight (w/ battery)	4.1 lb (1.8 kg)



DCI Headquarters

19625 62nd Ave. S., Suite B-103, Kent, WA 98032 USA
Tel 800 288 3610 / 425 251 0559 • Fax 253 395 2800
E-mail DCI@digital-control.com • www.digitrak.com

DCI Europe, Kurmainzer Strasse 56, D-97836 Bischbrunn, Germany • T +49(0) 9394 990 990 • F +49(0) 9394 990 999 • DCI.Europe@digital-control.com
DCI Australia, 2/9 Frinton Street, Southport, Queensland 4215, Australia • T +61(0) 7 5531 4283 • F +61(0) 7 5531 2617 • DCI.Australia@digital-control.com
DCI India, SCO # 259, Sector 44-C, Chandigarh (UT) 160 047, Punjab, India • T +91(0) 172 464 0444 • F +91(0) 172 464 0999 • DCI.India@digital-control.com
DCI China, USA Excalibre, 2803 Bldg C, 70 Cao Bao Rd, Shanghai P.R.C. 200233 • T +86(0) 21 6432 5186 • F +86(0) 21 6432 5187 • DCI.China@digital-control.com