Directional Drilling Locating System

DCI is the world’s leading supplier of the very best walkover locating technology for the trenchless industry.

The DigiTrak® F5® Directional Drilling Locating System is the most advanced in DCI’s F Series™ line of locating systems. Over five years in development and backed by over 20 years of HDD locating experience, the F5 platform builds on DCI’s industry-standard Eclipse® locating technology.

The F5 receiver incorporates DCI’s patented 3D antenna technology, Ball-in-the-Box™ locating that lets you walk directly to a locate point from any direction, colorful and intuitive icon-driven menus, a four-way toggle switch, and easy-to-understand graphics, which together provide a best-in-class user experience.

The F5 system offers multiple transmitter options in five frequencies to help you overcome jobsite interference better than ever at depths of up to 90 ft. (27.4 m). DCI transmitters can track existing non-metallic ducts, measure pullback tension and mud pressure, and steer reliably where a direct walkover is not possible. Dual-frequency transmitters can change frequency in-ground, a valuable time-saving feature. FPT fluid pressure transmitters (a technology patented by DCI) monitor pressure in real time to help prevent inadvertent returns while drilling pilot bores.

The F5 receiver comes standard with DigiTrak DataLog®. Built-in Bluetooth technology transfers this data from the F5 receiver to a PC with Log-While-Drilling (LWD™) software, where a variety of options are available for analyzing, annotating, and displaying data. View both current and past data logged by the F5 receiver even while still drilling.
The DigiTrak F5 receiver gives a bird’s-eye view of the relative positions of the receiver and transmitter, a 24-position roll indicator, pilot hole fluid pressure data, and the transmitter’s pitch, signal strength, temperature, and battery strength. During a depth reading, the depth display shows a side view of the drill head along with the bird’s-eye view, providing the transmitter’s location in three dimensions on the same screen. The F5 provides depth readings over the transmitter and predicted depth readings at the front locate point (FLP), allowing for tracking on-the-fly over a level drill path. All of this information is sent to the remote display (FSD) on the drill.

The F5 receiver is compatible with the remote F Series Display (FSD™) and Multi-Function Display (MFD®). The F5 system comes with an F5R receiver, FSD remote display, three DigiTrak lithium-ion battery packs, and an intelligent charger with both AC and DC power cords. Transmitters are sold separately.

F-Series Display Specifications

Model number ................................................................. FSD
Receiving frequencies ........................................... 1.3, 8.4, 12, 18.5, or 19.2 kHz
Power source ........................................... Lithium-ion battery pack
Battery life ................................................................. 14–18 hrs
Battery charger ...................................................... 10–28 VDC
Controls ................................................................. Five-button touch pad
Graphic display ................................................................. LCD
Audio output ................................................................. Beeper
Telemetry range ................................................................. 1800 ft (550 m)
Telemetry channels ...................................................... 4
Operating temperature ........................................... -4 to 140° F (-20 to 60° C)
Accuracy ................................................................. ±5% absolute
Dimensions ................................................................. 9.5 x 7.6 x 8.5 in. (24.13 x 19.3 x 21.6 cm)
Weight (with battery) ........................................... 6.2 lb (2.8 kg)

1 Local telemetry frequencies and power levels available at www.DigiTrak.com.
2 Telemetry range can be increased with an optional external receiving antenna.