

DigiTRAK

FALCON™ F2®

Directional Drilling Locating System



- Falcon frequency optimizer analyzes and overcomes active interference at different jobsites
- One Falcon F2 wideband transmitter supports multiple frequencies from 4.5 kHz to 45 kHz
- Infrared pairing of receiver and transmitter
- 0.1% precision pitch for completing critical grade bores
- Max mode noise filtering boosts data range and stabilizes depth readings
- Increased power in a 15 in. transmitter for industry-best 80 ft. depth and 110 ft. data range
- Supports Roll Offset and Target Steering® features
- Compatible with DigiTrak Aurora™ touchscreen display

Introducing DigiTrak Falcon™ F2®

The classic DigiTrak® F2® locating system has earned a reputation as a workhorse that provides customers with dependable locating capabilities. With the introduction of Falcon frequency optimization technology, the DigiTrak Falcon F2 is a more powerful locating system that addresses active interference using a single wideband transmitter.

Active Interference

Interference is one of the primary obstacles to completing HDD projects and can impair the accuracy of underground depth measurements. The ability of a locating system to perform well in interference has become a crucial factor in maintaining crew productivity and completing jobs on time.

Not All Job Sites are Created Equal

Interference varies between jobsites. The frequency at which the underground signal is transmitted is the single most important factor affecting the performance of a walkover locator, and therefore also your ability to get the job done.

Falcon F2 Innovation

As a leader in the HDD industry, DCI has taken a revolutionary approach to tackling active interference with Falcon technology. The Falcon F2 measures jobsite noise and clearly displays several bands of the quietest transmitter frequencies to select from. Choose two of the best bands and complete more HDD projects at greater depths in the noisiest environments.

Band	7	11	16	20	25	29	34	38	43
Range in kHz	4.5 – 9.0	9.0 – 13.5	13.5 – 18	18 – 22.5	22.5 – 27	27 – 31.5	31.5 – 36	36 – 40.5	40.5 – 45

How Does DigiTrak Falcon F2 Work?

Using its familiar menu system, the Falcon F2 adopts a radically different approach to tackling interference at jobsites. Unlike other locating systems, the Falcon frequency optimizer scans for noise between 4.5 kHz and 45 kHz.

Upon completing the scan, the receiver displays a simple chart that depicts the noise levels across several bands. Select the two quietest bands and pair with the Falcon wideband transmitter. In areas with varied interference, switch between bands to stabilize data readings and complete the bore. For extreme interference, engage Max mode for maximum performance.



Falcon Frequency Optimizer

DigiTrak **FALCON™ F2®** Locating System

Ease of Use

Even with advanced locating performance, Falcon F2 retains the features you have come to rely on from a DigiTrak locating system, like an easy-to-read menu, *Target Steering®*, and Roll Offset. DCI's patented *Ball-in-the-Box™* visualization of the transmitter still provides real-time status of the bore and keeps the job on track. All backed by world-class customer support.

Receiver Specifications

Product ID/Model number..... FAR2
 Receiving frequencies.....4.5–45.0 kHz
 Telemetry channels¹.....4
 Telemetry range²..... defined by remote display
 Power sourceLithium-ion battery pack
 Battery life 10–14 hrs
 Functions.....Menu-driven
 Controls..... Trigger switch
 Graphic display..... LCD
 Audio output Beeper
 Operating temperature -4 to 140° F
 Accuracy..... ±5%
 Voltage14.4 VDC nominal
 Current300 mA max
 Dimensions..... 11 x 5.5 x 15 in.
 Weight (with battery) 7.6 lb

Transmitter Specifications

Product ID FT2
 Model numberBTW
 Transmitting frequencies.....4.5–45.0 kHz
 Pitch resolution..... ±0.1% at level
 Depth range³.....80 ft.
 Data range³..... 110 ft.
 Battery life up to 20/70 hrs alkaline/SuperCell
 Voltage1.2–4.2 VDC nominal
 Current1.75 A max
 Weight (without batteries)..... 1.7 lb
 Length x diameter..... 15 x 1.25 in.

¹ Local telemetry frequencies and power levels available at www.DigiTrak.com.
² Telemetry range can be increased with an optional external receiving antenna.
³ Range figures are based on SAE Standard J2520. Actual ranges and battery life will vary based on environment, transmitter housing, and frequency.
⁴ Dimensions do not include external mounting hardware.

Aurora Touchscreen Display Specifications

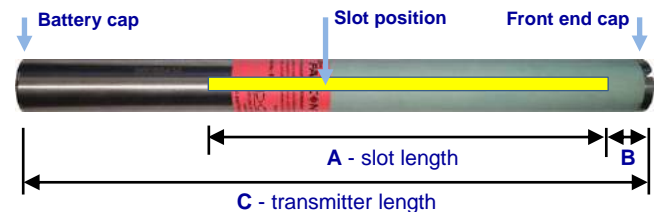
Product ID/Model number AF10
 Power source 10–28 VDC
 Current.....2.1 A maximum
 Controls..... 10.4 in. touchscreen
 Graphic display LCD
 Audio output..... Speaker
 Telemetry range²1800 ft.
 Telemetry channels..... 4
 Operating temperature..... -4 to 140° F
 Dimensions⁴ 11.5 x 9.3 x 2.3 in.
 Weight.....6.4 lb



**Aurora
Touchscreen
Display**

Transmitter Drill Head Requirements

DCI's transmitters require three slots equally spaced around the circumference of the drill head for optimal signal emission and maximum battery life. Measure slot lengths on the *inside* of the drill head; slots must be at least 1/16 in. wide. DCI transmitters fit standard housings but may require a battery cap adapter in some cases.



	A Minimum	B Maximum	C
Falcon Dual Wideband	9.0 in.*	1.0 in.*	15 in.

* Ideal measurement. The standard DCI (A) slot length of 8.5 in and (B) distance of 2 in. remain acceptable.

DCI: THE BUSINESS OF HDD LOCATING