DigiTrak FALCON F2

Directional Drilling Guidance System

- Falcon frequency optimizer helps overcome active interference
- 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
- 12-position roll clock with roll offset
- Max Mode noise filtering boosts fringe data and stabilizes depth readings
- Increased power in a 15 in. transmitter for industry-best 100 ft. depth and 125 ft. data range
- Supports Remote Steering on FCD and *Target Steering*® with Aurora® touchscreen display

Introducing DigiTrak Falcon F2

The classic DigiTrak® Falcon 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 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 quietest bands and complete more HDD projects at greater depths in the noisiest environments.

Band Number	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

Get Covered

For customers who register their new Falcon transmitter, DCI now offers a standard 3-year/500-hour (whichever comes first) warranty for Falcon 15- and 19-inch transmitters. Ask your dealer about our extended 5-year/750-hour warranty.

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

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Ease of Use

Even with advanced locating performance, Falcon F2 retains the features you have come to rely on from a DigiTrak guidance 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	FF2
Model number	FAR2
Receiving frequencies	4.5–45.0 kHz
Telemetry channels[1]	4
Telemetry range[2]	defined by remote display
Power source	Lithium-ion battery pack
Battery life	10–14 hrs
Functions	Menu-driven
Controls	Trigger switch
Graphic display	LCD
Audio output	Beeper
Accuracy	±5%
Voltage, current	14.4 VDC nominal, 300 mA max
Dimensions	11 x 5.5 x 15 in.
Weight (with battery)	7.6 lb

Aurora Touchscreen Display Specifications

Product ID and model number	AF8, AF10
Power source - cabled	10–28 VDC
Current	1.75, 2.1 A maximum
Controls	8.4, 10.4 in. touchscreen
Graphic display	LCD
Audio output	Speaker
Telemetry channels[1]	4
Telemetry range[2]	1800 ft.
Dimensions[3]	9.8 x 6.6 x 3.2, 11.5 x 9.3 x 2.3 in.
Weight	4.3, 6.4 lb

[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] Dimensions do not include external mounting hardware.

[4] Range figures are based on SAE Standard J2520. Actual ranges and battery life will vary based on environment, transmitter housing, and frequency.

[5] Pitch resolution decreases with increased pitch; see manual for details.

Transmitter Specifications

15-inch

Product ID	FT2
Model number	BTW
Transmitting frequencies	4.5–45.0 kHz
Depth range[4]	100 ft.
Data range, Max Mode[4]	125 ft.
Pitch resolution[5]	±0.1% at level
Battery life, alkaline/SuperCell	up to 20/70 hrs

8-inch

Product ID	FT2s
Model number	BTS
Transmitting frequencies	4.5–45.0 kHz
Depth range[4]	25 ft.
Data range, Max Mode[4]	30 ft.
Pitch resolution[5]	±0.1% at level
Battery life, 123 3V lithium	up to 12 hrs

Transmitter Drill Head Requirements

For maximum transmitter range and battery life, the slots in the drill head must meet minimum length and width requirements and be correctly positioned. DCI's transmitters require a minimum of 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 $^{1}/_{16}$ inch wide. DCI transmitters fit standard housings but may require a battery cap adapter in some cases.

1. Battery cap
2. Slot position
3. Front end cap

A. Slot length
B. Distance
C. Transmitter length

	A Minimum	B Maximum	C
15-inch Wideband	9.0"	1.0"	15"
8-inch Wideband	4.0"	1.0"	8"

While a Falcon transmitter is compatible with older housing slot dimensions, optimal performance requires the A and B measurements shown above.