

DigiTrak F5 Locating System

Important Safety Instructions

Warnings



To prevent potentially dangerous conditions, all operators must read and understand the following safety instructions and warnings and must review the DigiTrak F5 System Operator's Manual and Quick Start Guide (QSG) before using a DigiTrak F5 Locating System.



A DigiTrak F5 Locating System is used during horizontal directional drilling operations to locate and track a transmitter installed in the drill head. A DigiTrak F5 Locating System **cannot** be used to locate utilities.

Failure to use the front and rear locate points technique for locating the transmitter can lead to inaccurate locates. See the manual/QSG.

Interference can cause inaccuracy in measurement of depth and loss of a transmitter's pitch, roll or heading.

Serious injury and death, as well as substantial property damage, can result if drilling equipment makes contact with natural gas lines, high-voltage electrical cable, or other underground utilities.



DCI equipment is not explosion-proof and should never be used near flammable or explosive substances.

Remove the batteries from all system components during shipping and prolonged storage. Failure to do so may result in battery leakage, which may lead to risk of explosion, health risks, and/or damage.

Store and transport batteries using a suitable protective case that will keep batteries safely isolated from one another. Failure to do so may result in short circuits, which may lead to hazardous conditions including fire.

Directional drilling operators **MUST** at all times:

- Understand the safe and proper operation of drilling and locating equipment, including proper grounding procedures and techniques for identifying and mitigating interference.
- Ensure all underground utilities and all potential sources of interference have been located, exposed, and accurately marked prior to drilling.
- Wear protective safety clothing such as dielectric boots, gloves, hard hats, high-visibility vests, and safety glasses.
- Test the DigiTrak system with the transmitter inside the drill head prior to drilling to confirm proper operation.
- Locate and track the transmitter in the drill head accurately and correctly during drilling.
- Maintain a minimum distance of 8 in. from the front of the receiver to the user's torso to comply with RF exposure requirements.
- Comply with federal, state, and local governmental regulations (such as OSHA).
- Restrict use of this equipment to construction sites that are protected from public intrusion.

Pre-Drill Testing and Interference

Before each drilling run, test your DigiTrak locating system with the transmitter inside the drill head to confirm it is operating properly and accurately. Depth measurements may not be accurate unless you have properly calibrated the system according to the calibration procedure described in the Manual/QSG.

Prior to drilling, perform a background noise check using your locating system to identify sources of active interference and conduct a thorough site investigation to identify sources of passive interference. A locating system **cannot** detect sources of passive interference. Examples of interference are listed on the next page.

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Pre-Drill Testing and Interference (continued)

Interference is classified as either **active** (generating electro-magnetic signals) or **passive** (material that can conduct or block electro-magnetic signals). Sources of *active* and *passive* interference may include:

Active	Passive
<ul style="list-style-type: none"> • Traffic signal loops • Buried dog fences • Cathodic protection • Radio communications • Security systems • Microwave towers • Power, phone, fiber-trace and cable TV lines 	<ul style="list-style-type: none"> • Metal pipes • Rebar • Trench plates • Chain-link fences • Vehicles • Salt water / salt domes • Conductive earth, such as iron ore

Lower frequencies will work better around passive interference, such as rebar, than higher frequencies. If system performance changes during drilling, reevaluate possible sources of active interference.

Environmental Requirements

Device (Model)	Relative Humidity	Operating Temperature
DigiTrak F5 Receiver	<90%	-20 to 60° C
DigiTrak FS Transmitter	<100%	-20 to 82° C
DigiTrak HDT and HDTL Transmitters	<100%	-20 to 104° C
DigiTrak Fluid Pressure Transmitters	<100%	-20 to 104° C
DigiTrak DucTrak Transmitters	<100%	-5.6 to 50° C
DigiTrak F Series Battery Charger (FBC)	<99% for 0–10° C <95% for 10–35° C	0 to 35° C
DigiTrak F Series Lithium-Ion Battery Pack (FBP)	<99% for <10° C <95% for 10–35° C <75% for 35–60° C	-20 to 60° C

System working altitude: up to 2000 m.

Storage and transportation temperature must remain within -40 to 65° C.

Operation may be compromised if the equipment is subjected to conditions outside these specified limits.

Ship in original carrying case or packaging of sufficient durability to prevent mechanical shock to equipment during transportation.

If you have any questions about the operation of the system, please contact DCI Customer Service for assistance.

