

DigiTRAK[®] MFCB

Multi-Function Cable Box

Operator's Manual



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The DCI logo, CableLink[®], DataLog[®], DigiTrak[®], Eclipse[®], F2[®], MFD[®], SST[®], *target-in-the-box*[®], *Target Steering*[®], and TensiTrak[®] are U.S. registered trademarks and DucTrak[™], F Series[™], FSD[™], FasTrak[™], SE[™], SED[™], and SuperCell[™] are trademarks of Digital Control Incorporated.

Limited Warranty

All products manufactured and sold by Digital Control Incorporated (DCI) are subject to the terms of a Limited Warranty. A copy of the Limited Warranty is included at the end of this manual; it can also be obtained by contacting DCI Customer Service, 800-288-3610 or 425-251-0559, or by connecting to DCI's website, www.digitrak.com.

Important Notice

All statements, technical information, and recommendations related to the products of DCI are based on information believed to be reliable, but the accuracy or completeness thereof is not warranted. Before utilizing any DCI product, the user should determine the suitability of the product for its intended use. All statements herein refer to DCI products as delivered by DCI and do not apply to any user customizations not authorized by DCI nor to any third-party products. Nothing herein shall constitute any warranty by DCI nor will anything herein be deemed to modify the terms of DCI's existing Limited Warranty applicable to all DCI products.

FCC Compliance Statement

This equipment complies with Part 15 of the Rules of the FCC. Operation is subject to the following two conditions: (1) this equipment may not cause harmful interference, and (2) this equipment must accept any interference received, including interference that may cause undesired operation. DCI is responsible for FCC compliance in the United States: Digital Control Incorporated, 19625 62nd Ave. S., Suite B-103, Kent, WA 98032; phone 800-288-3610 or 425-251-0559.

WARNING: Changes or modifications to any DCI equipment not expressly approved and carried out by DCI will void the user's authorization to operate the equipment.

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Safety Precautions and Warnings

IMPORTANT NOTE: All operators must read and understand the following Safety Precautions and Warnings and must review this operator's manual as well as the operator's manual(s) for your DigiTrak[®] locating system and remote display.

☠ Serious injury and death can result if underground drilling equipment makes contact with an underground utility such as a high-voltage electrical cable or a natural gas line.

▽ Substantial property damage and liability can result if underground drilling equipment makes contact with an underground utility such as a telephone, cable TV, fiber-optic, water, or sewer line.

- DigiTrak locating systems cannot be used to locate utilities.
- Continued exposure of the transmitter to heat, due to frictional heating of the drill head, can cause inaccurate information to be displayed and may permanently damage the transmitter.

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

- The battery charger provided with your DigiTrak locating system is designed with adequate safeguards to protect you from shock and other hazards when used as specified within the operator's manual provided with your system. If you use the battery charger in a manner not specified by that document, the protection provided may be impaired. Do not attempt to disassemble the battery charger. It contains no user-serviceable parts. The battery charger is not to be installed into caravans, recreational vehicles, or similar vehicles.
- Remove the batteries from all system components during shipping and prolonged storage.

Safety Precautions and Warnings (Continued)

- Before each drilling run, test your DigiTrak locating system with the transmitter inside the drill head to confirm that it is operating properly and is providing accurate drill head location and heading information and accurate transmitter depth, pitch, and roll information.

- During drilling, the depth displayed on the receiver will not be accurate unless:
 - The receiver has been properly calibrated and the calibration has been checked for accuracy so that the receiver shows the correct depth.
 - The transmitter has been located correctly and accurately and the receiver is directly above the transmitter in the drill head underground or at the point.
 - The receiver is kept level and the height-above-ground has been set correctly.

- Interference can cause inaccuracies in the measurement of depth and loss of the transmitter's pitch, roll, or heading. You should always perform an electrical interference check prior to drilling.
 - Sources of interference include but are not limited to traffic signal loops, invisible dog fences, cable TV, power lines, fiber-trace lines, metal structures, cathodic protection, telephone lines, cell phones, transmission towers, conductive earth, salt water, rebar, radio frequencies, and other unknown sources of interference.
 - Interference with communication to the remote display may also occur from other sources operating nearby on the same frequency, such as car rental agencies using their remote check-in modules, other directional drilling locating equipment, etc.
 - Background noise must be minimal and signal strength must be at least 150 points above the background noise during all locating operations.

- Carefully review this manual and be sure you always operate your DigiTrak locating system properly to obtain accurate depth, pitch, roll, and locate points. If you have any questions about the operation of the system, please call DCI's Customer Service Department at any of the phone numbers provided on the cover, and we will do our best to assist you.

Dear Customer:

Thank you for choosing DigiTrak[®] locating systems. We are proud of the equipment that we have been designing and building in Washington State since 1990. We believe in providing a unique, high-quality product *and* standing behind it with superior customer service and training.

Please take the time to read this entire manual—especially the section on safety. Also, please fill in the product registration card provided with this equipment, and mail it to DCI headquarters or fax it to us at 253-395-2800; you can also complete and submit the form online at our website. We will put you on the Digital Control mailing list and send you product upgrade information and our *FasTrak*[™] newsletter.

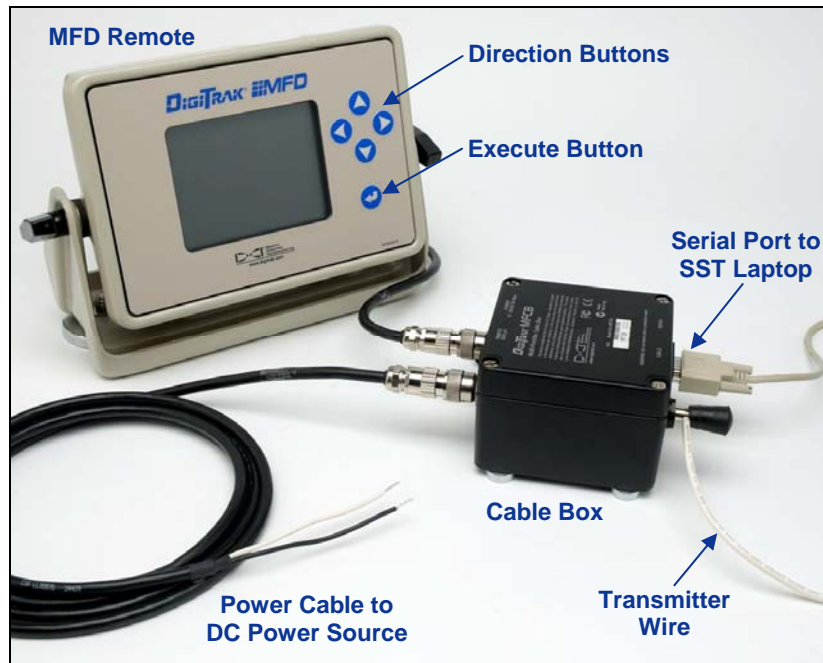
Feel free to contact us at any of our global offices listed on the front cover if you have any problems or questions. Our Customer Service Department is available 24 hours a day, 7 days a week to provide assistance.

As the horizontal directional drilling industry grows, we're keeping an eye on the future to develop equipment that will make your job faster and easier. Stay current by visiting our web site at **www.digitrak.com** or by giving us a call.

We welcome questions, comments, and ideas.

Digital Control Incorporated
Kent, Washington
2010

Introduction



DigiTrak Multi-Function Cable Box (MFCB) Connected to MFD Remote, Cable Transmitter, and SST Laptop Computer

The DigiTrak Multi-Function Cable Box (MFCB), referred to as the cable box, can be used with a variety of DigiTrak cable transmitter systems. It provides power to the cable transmitter and sends transmitter data to the remote display.

The cable box can be used with the following DigiTrak transmitters:

- Eclipse cable transmitter (ECP)
- F Series cable transmitter (FC)
- Eclipse steering tool transmitter (SST)

The cable box can be used with the following DigiTrak multifunctional remotes:

- Multi-Function Display (MFD), panel-mounted and freestanding
- F Series Display (FSD)

This manual provides instructions for setting up power to the cable box and connecting it to your DigiTrak cable transmitter and remote display. Then it describes how to use the cable mode menu on your DigiTrak cable transmitter system.

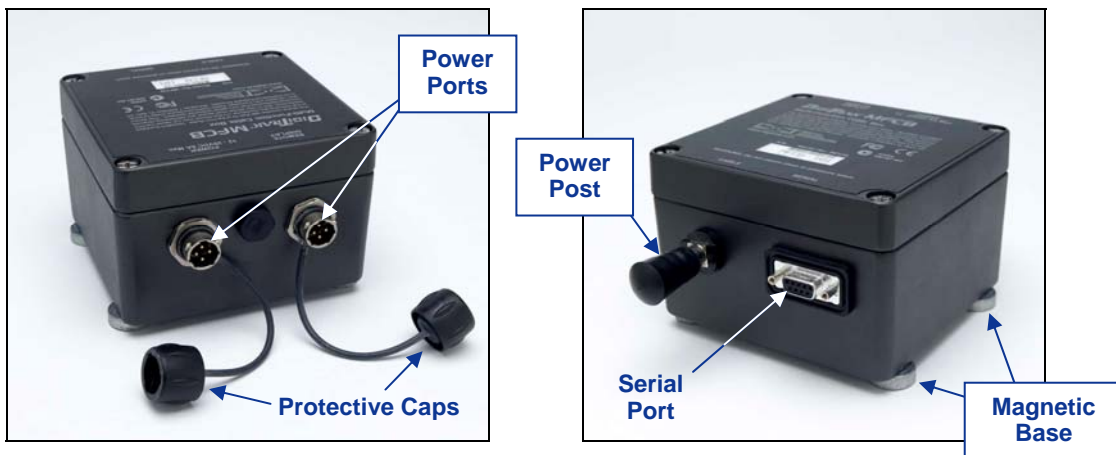
This manual does not give instructions on how to operate your locating system. You must read the operator's manual for your locating system and remote display before you use the cable box with your MFD or FSD remote. Call DCI if you have any questions.

Items such as compression fittings, 10-gauge copper wire, heat shrink, butt splices, and collector ring or mud swivel assemblies are not available from DCI. Drill manufacturers or tooling manufacturers will have information on collector ring (slip-ring) assemblies, mud swivels, and compression fittings. Electrical supply houses will carry the rest of the equipment needed to connect the wires as drill rods are added to the drill string.

An option available from DCI is a product called the CableLink connection system, which eliminates the need for butt splices and heat shrinks. The CableLink system is permanently installed into the drill pipe, and the wire connection occurs automatically when the pipe ends are threaded together. For more information, contact DCI.

Power Setup

One side of the cable box has two identical power ports. One port connects to the DC power source (drill rig or automotive battery), and the other to the remote display's DC power port. The other side of the unit has a power post for connecting the transmitter wire and a serial port for use with the Eclipse SST system.



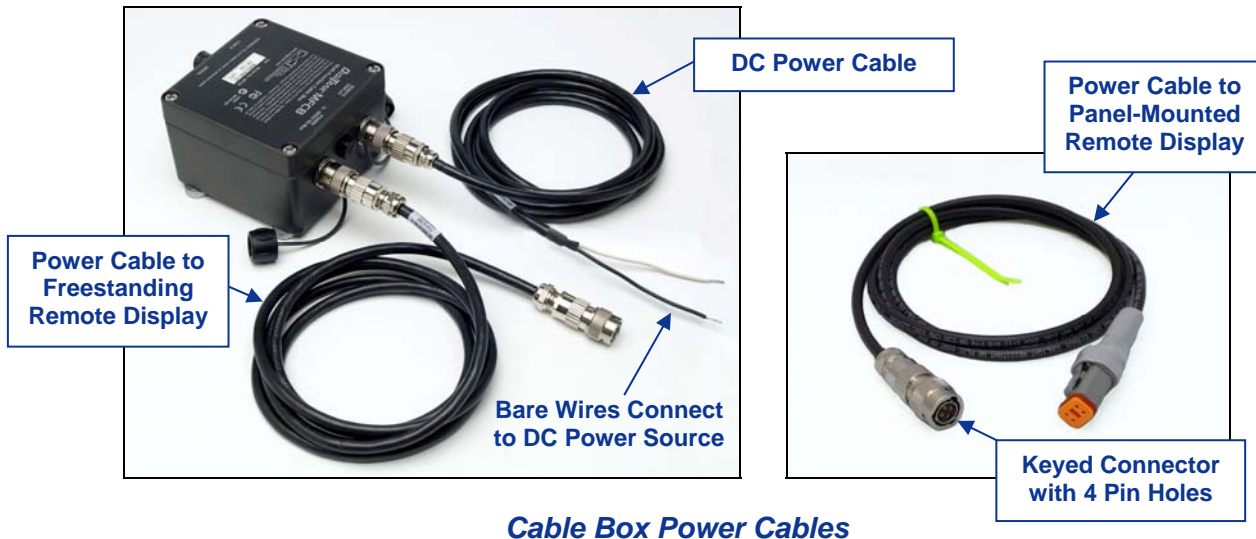
DigiTrak Multi-Function Cable Box (MFCB)

Connecting to Power Source

The DC power cable that is used to power a freestanding multi-function display through the DC power port on the drill rig may be used to power the cable box. However, DCI recommends connecting the cable box directly to an independent automotive battery or other DC power source to avoid voltage disruptions and current draw variations that may interrupt power to the transmitter.

The power cable with the bare wires at one end will be used to connect the cable box to an independent DC power source. The power cable with the four-hole connector at both ends will be used to plug the cable box into a freestanding remote display. The power cable for the panel-mounted remote display has a four-hole connector at one end and a square connector at the other end.

NOTE: Although the power ports on the cable box are labeled "Power" and "Remote Display", they are identical and can be used interchangeably.

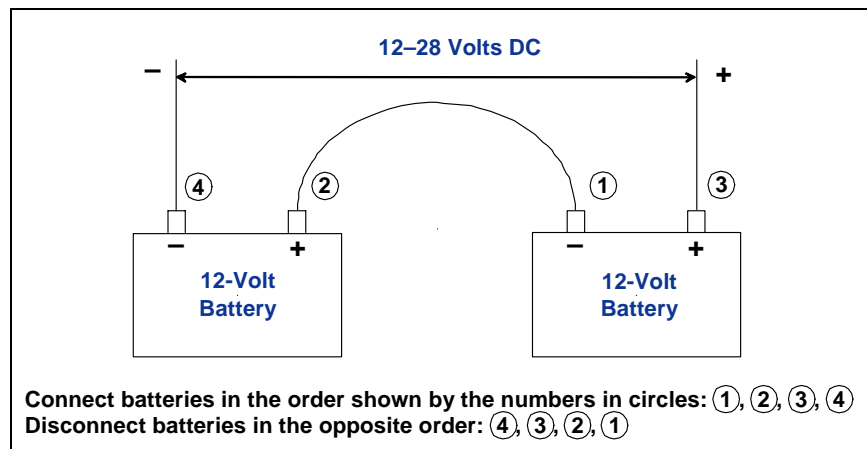


Cable Box Power Cables

The power ports and power cables for use with the cable box and freestanding remote display are keyed for proper alignment. To connect the DC power cable to the cable box, align the key marks in the connector with the key slots in the power port. Push in and rotate the cable connector clockwise until the connector locks into place, as indicated by a snapping sound and the connector ceasing rotation.

Connect the other end of the power cable to the DC power source. When using the cable with the bare wires at one end, connect the white wire to the positive terminal and the black wire to the negative terminal. If using the power cable that plugs directly into the drill rig's DC power port, plug the DC cable connector directly into the drill rig's DC power port.

For the best results, DCI recommends powering the cable box directly with a standard 12-28 V DC battery or power source, although it can be powered by the drill rig's battery. For bores shorter than 1000 ft (305 m), one 12-V battery will suffice. If the bore length increases beyond 1000 ft (305 m), an additional battery may be added in series (see diagram).



Adding Batteries in Series

Connecting to Cable Transmitter

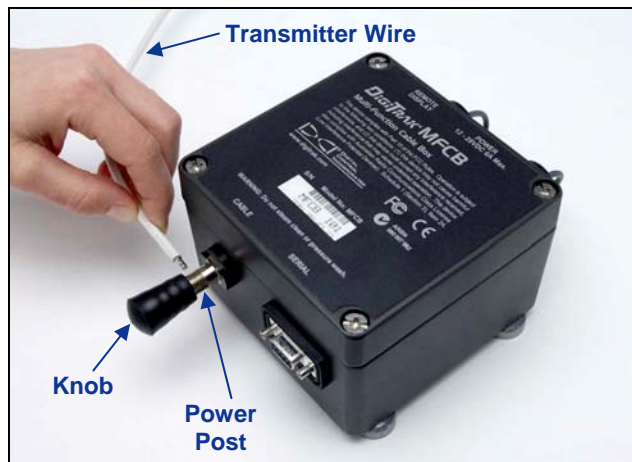
Before the cable transmitter can be connected to the cable box it must be grounded. The ground point on the cable transmitter is the metal end section of the tube.



Eclipse Cable Transmitter

When the cable transmitter is properly fitted into the housing, the ground connection occurs automatically because the housing is grounded through the drill. When testing the cable transmitter outside of the housing, you can make a ground connection by taking a piece of wire and touching the negative terminal of a battery with one end and touching the other end of the wire to the transmitter's ground.

Once the cable transmitter is properly grounded, it can be connected to the cable box as shown below. Rotate the knob on the power post counterclockwise until the hole in the post is exposed. Insert the stripped end of the transmitter wire into the hole and gently tighten the knob.



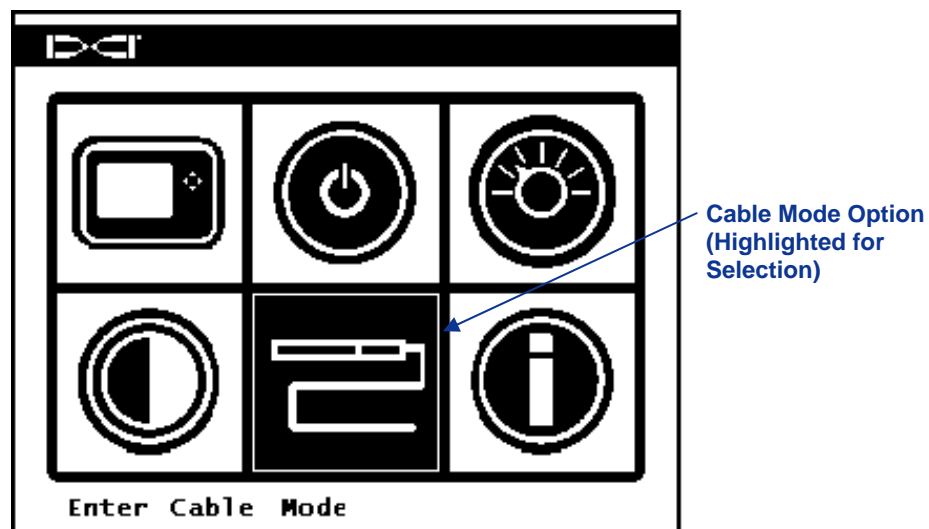
Connecting Cable Transmitter to Cable Box

Cable Mode

Before using the cable box unit, you must be sure that your remote display is programmed for the correct receiver. Please refer to the operator's manual for your remote display if you are not sure how to do this. You should also refer to the remote display manual if you have questions when using the menus on the remote display.

Main Menu

The main menu on the MFD and FSD remotes has a cable mode option that is used with the cable box unit. The cable system components must be properly connected with power supplied before you can access this menu option. If you do not see the cable mode option, then you will need a software upgrade. Please contact DCI Customer Service.

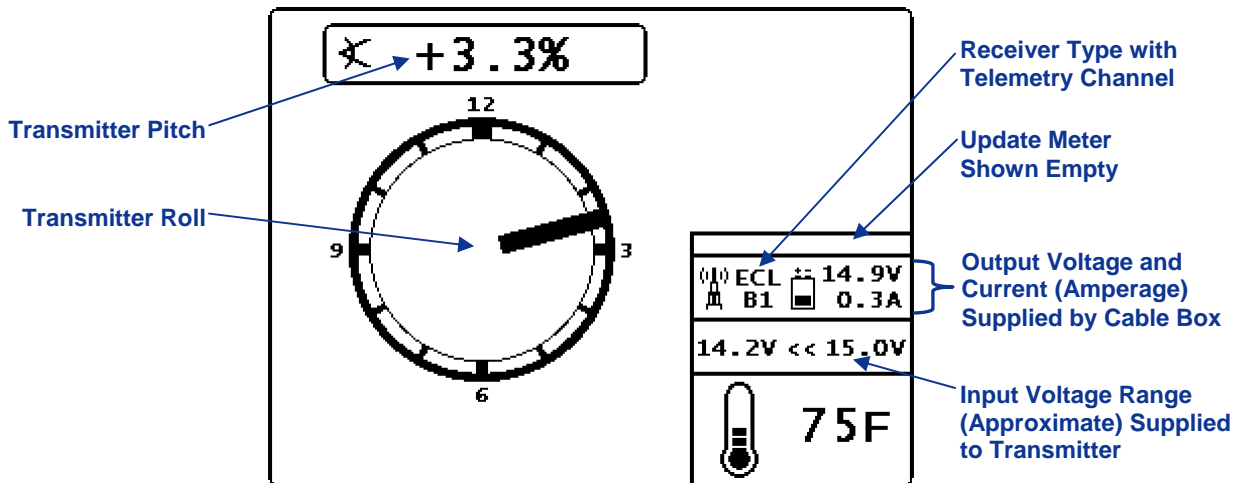


Main Menu with Cable Mode Highlighted

The display screens and menus for the Eclipse and F Series cable transmitters, which are similar, are discussed below, and then the display screens and menus for the Eclipse SST system are discussed.

Eclipse and F Series Cable Transmitters

When an Eclipse or F Series cable transmitter is used, the cable mode screen will display when you enter cable mode and the receiver type will be identified. The Eclipse and F Series modes have essentially the same screen display. The only significant difference between the Eclipse and the F Series display screens is that the Eclipse mode will display roll at the ½ clock positions as well as the standard 12 clock positions. The number of clock positions that display is a function of the transmitter.



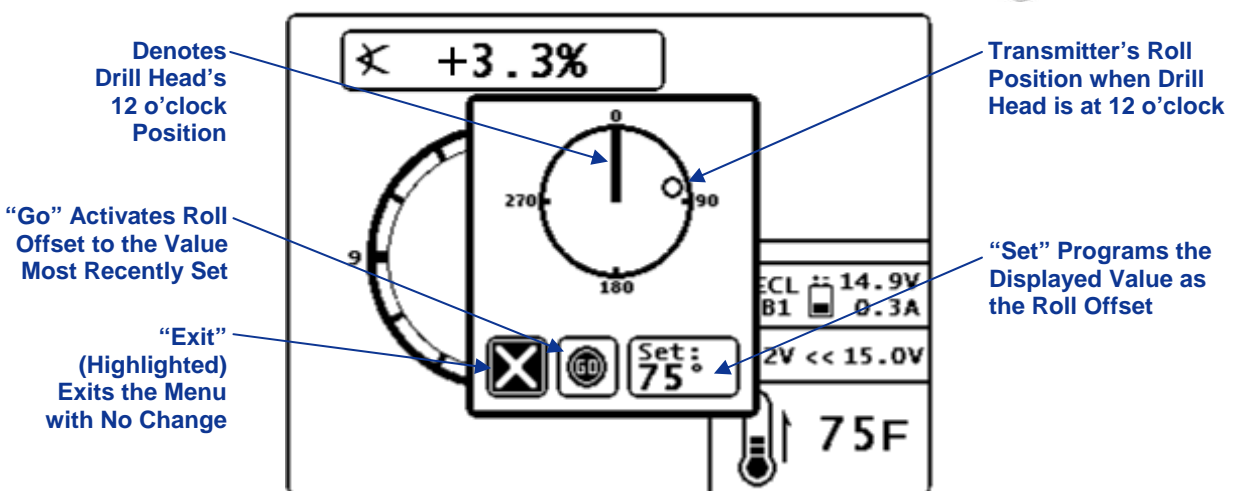
Eclipse and F Series Cable Mode Display

The above screen shows an empty update meter, which means the remote is not receiving telemetry data. The roll, pitch, and temperature are provided through the cable. Depth information will display only when the remote is receiving telemetry data, as indicated by bars in the update meter, and the receiver is used to take a depth reading.

Roll Offset

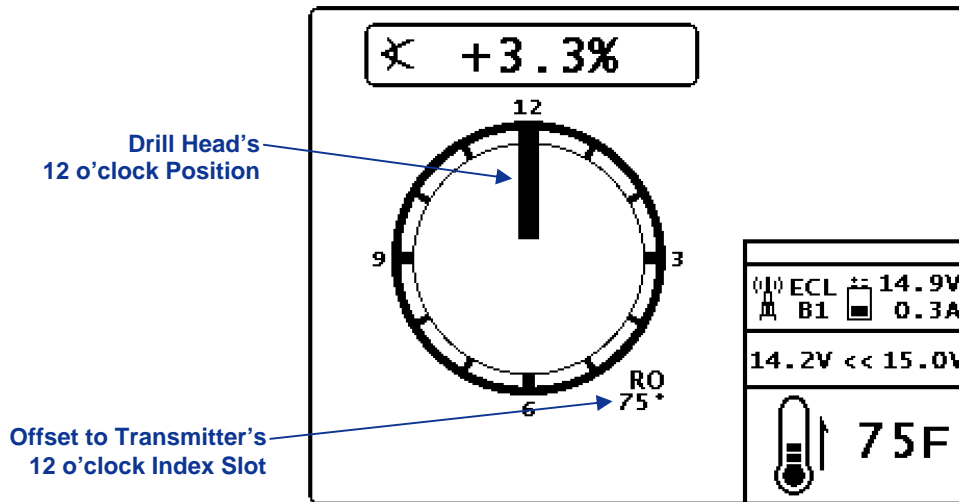
The roll offset function is used when the transmitter's 12 o'clock position does not match the drill head's 12 o'clock position. If the roll offset is required, it must be set on both the receiver and the remote display. For instructions on setting the roll offset on the F2 or Eclipse receivers, please see the operator's manual for your system.

To access the roll offset popup menu on the remote display, push the right direction button from the cable mode display screen. The roll offset popup menu will appear with three options: Exit, Go, and Set. Use the direction buttons to highlight the desired option and press the execute button to select it.



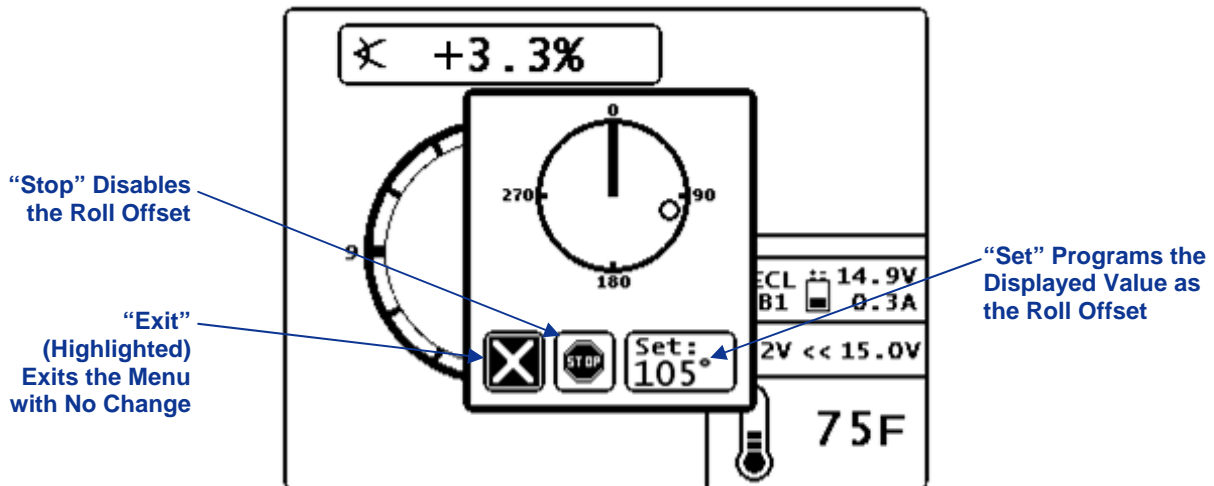
Eclipse and F Series Roll Offset Popup Menu (Activate or Set)

Once the roll offset is programmed, the following screen will display.



Eclipse and F Series Cable Mode Screen with Roll Offset

The roll offset will remain active until you access the roll offset popup menu to disable it. When you access the roll offset popup menu while roll offset is active (by pushing the right direction button from the cable mode display screen), the following screen will display with three options: Exit, Stop, and Set.

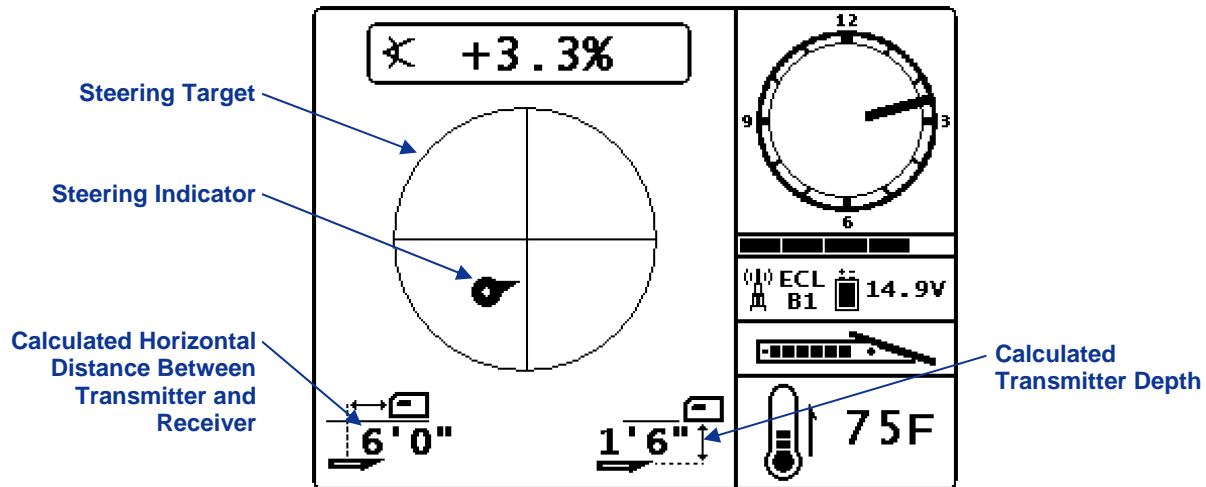


Eclipse and F Series Roll Offset Popup Menu (Disable or Set)

Selecting Stop will disable roll offset and return you to the standard cable mode display screen. The value displayed for roll in the Set option will be that of the transmitter after roll offset is disabled. Selecting Set will program the roll offset to the displayed value.

Target Steering

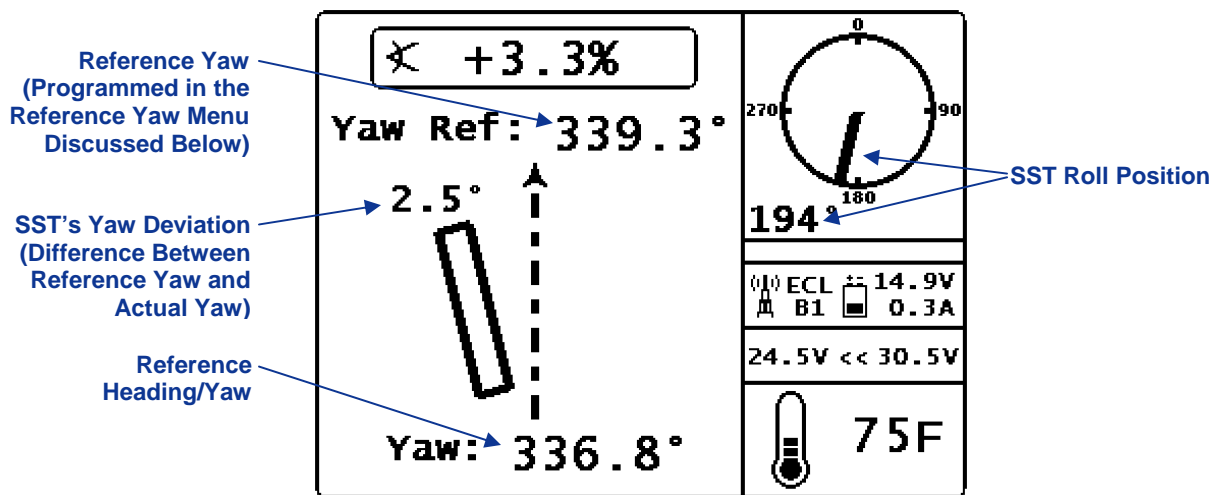
When a target depth has been programmed into the receiver and the remote is receiving telemetry data, the *Target Steering* display screen will appear.



Eclipse and F Series Target Steering Display

Eclipse Steering Tool Transmitter (SST)

When an Eclipse SST system is used, the Eclipse SST cable mode screen will display when you enter cable mode (see example below).




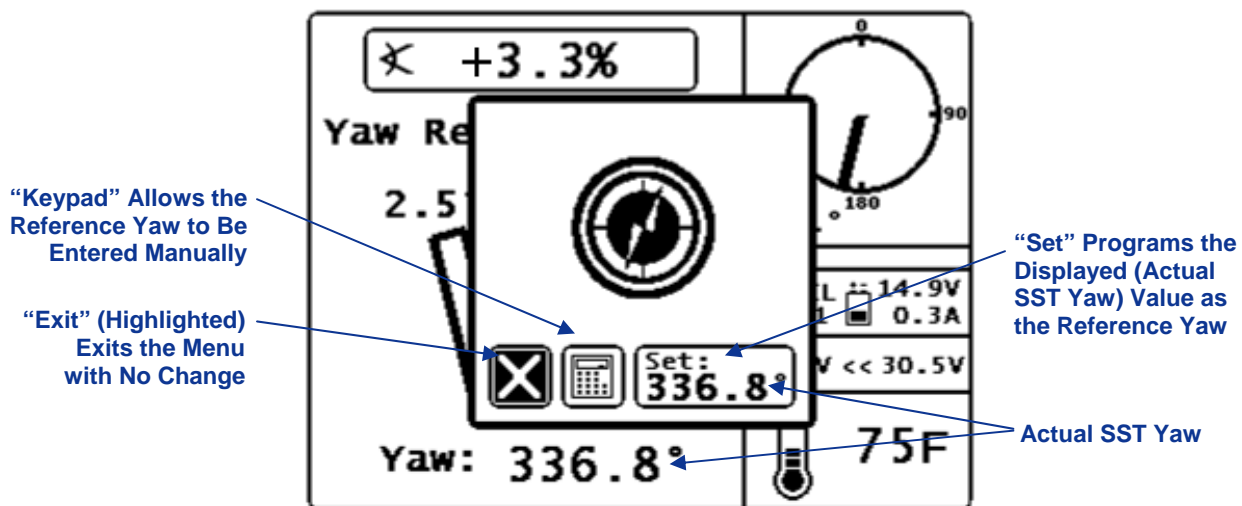
Eclipse SST Cable Mode Display

Reference Heading / Yaw


When using the Eclipse SST system, it is necessary to first establish the reference yaw using the SST transmitter, a non-magnetic housing, and the remote display. This procedure is sometimes referred to as “shooting the probe.”

Shoot the probe (determine the reference yaw) by carefully aligning the SST transmitter (in the non-mag housing) onto the bore path and pointing in the direction of drilling. The remote will display the transmitter’s heading or “yaw” at the bottom of the Eclipse SST cable mode display. The reference yaw must be programmed to this value. Program the reference yaw in the reference yaw popup menu as described below.

From the Eclipse SST cable mode display, press the up direction button  on the MFD or FSD remote to access the reference yaw popup menu.

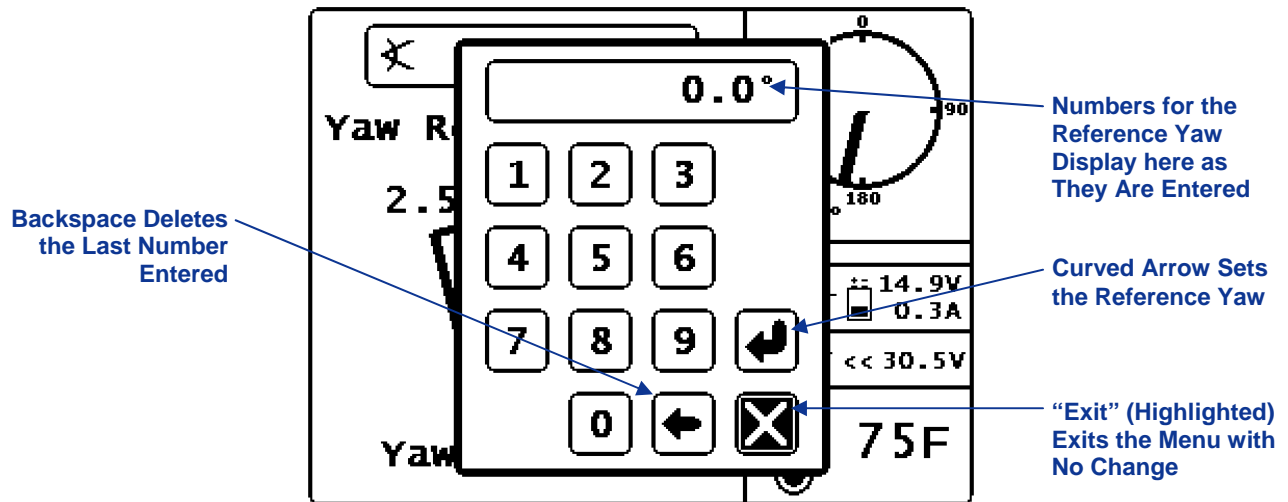


Reference Yaw Popup Menu

There are three options in the reference yaw menu: Exit, Keypad, and Set. Use the direction buttons to highlight the desired option and press the execute button  to select it.

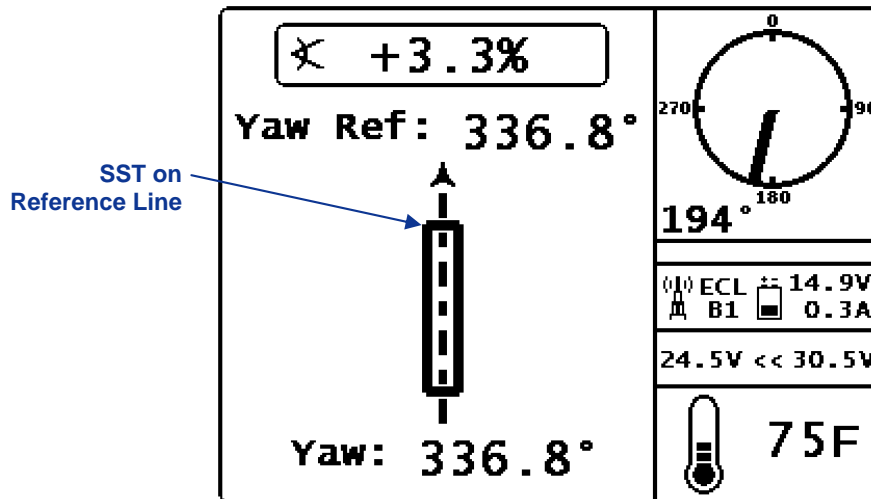
When the Set option is selected, you will be returned to the Eclipse SST cable mode display with the new reference yaw displayed.

If you want to change the reference yaw value shown in the Set option, then select the Keypad option to display the following screen.



Reference Yaw Manual Entry Keypad

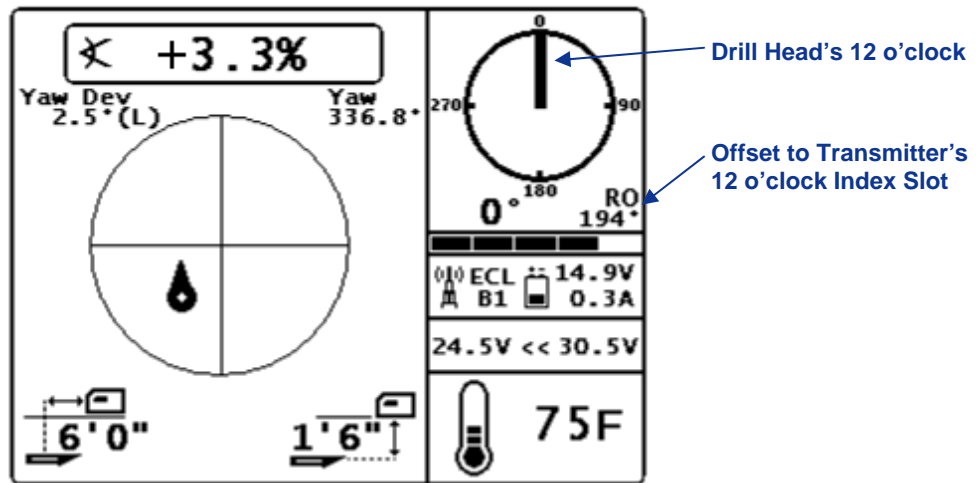
Enter the reference yaw value in this screen by using the direction buttons on the remote to highlight a number and the execute button on the remote to select it. Enter the value for the reference yaw one digit at a time left to right; then select the curved arrow on the manual entry keypad to set it. For example if you want to set 76.5° as the reference yaw, select 7, then 6, then 5, and then select the curved arrow . You will be returned to the Eclipse SST cable mode screen with the new reference yaw displayed, as shown below. When the SST transmitter's yaw matches the reference yaw, the transmitter is considered to be "on-line".



Eclipse SST Cable Mode Display (On-Line)

Roll Offset

The roll offset function can be used with the SST system to align the SST transmitter's 12 o'clock position with the drill head's 12 o'clock position. To access the roll offset popup menu, push the right direction button from the Eclipse SST cable mode display screen.

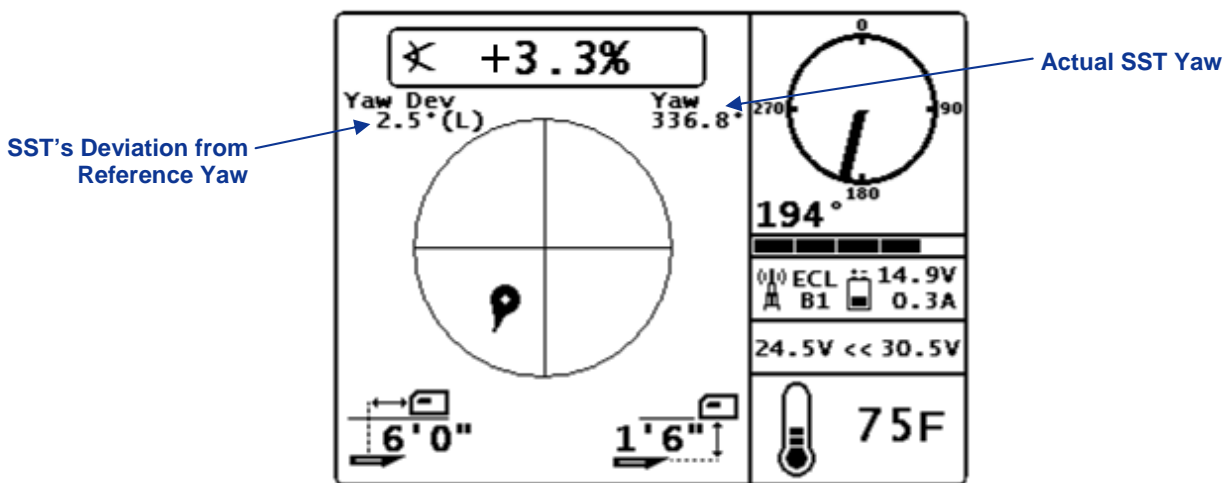


Eclipse SST Target Steering Display with Roll Offset

The roll offset popup menu will display. The roll offset popup menu functions the same way for the Eclipse SST transmitter as for the Eclipse and F Series cable transmitters. See the “Roll Offset” discussion under “Eclipse and F Series Cable Transmitters” above.

Target Steering

The *Target Steering* function can also be used with the SST system. When a target depth has been programmed into the receiver and the remote is receiving telemetry data, the *Target Steering* display screen will appear.



Eclipse SST Target Steering Display

Calibrating and Locating

All DigiTrak cable transmitters are calibrated using the 1-point calibration procedure at a distance of 10 ft (3 m). DCI recommends that you always check the depth readings at various locations against a tape measure to confirm good calibration.

The procedure for locating a cable transmitter is essentially the same as that for locating a battery-operated transmitter. The receiver is positioned at the front locate point or the locate line, and the trigger is held in to display the predicted depth or depth, respectively. The remote must be receiving telemetry data (bars appear in the update meter) to display the depth or predicted depth data. The data will remain on the remote display as long as the receiver's trigger is held in and for 10 seconds after it is released.

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Appendix:

System Specifications and Maintenance Requirements

The power requirements and environmental requirements for the DigiTrak Multi-Function Cable Box and remote displays are listed below. The Declaration of Conformity is provided on the following page.

Power Requirements

Device (Model Number)	Operational Voltage	Operational Current
DigiTrak Multi-Function Cable Box	12 - 28 V $\overline{\text{---}}$ (nominal)	6 A max
DigiTrak MFD Remote Display (MFD)	14.4 V $\overline{\text{---}}$ (nominal)	220 mA max
DigiTrak F Series Remote Display (FSD)	14.4 V $\overline{\text{---}}$ (nominal)	220 mA max

Environmental Requirements

Device	Altitude	Relative Humidity	Operating Temperature
DigiTrak Multi-Function Cable Box	<16,404 ft (<5000 m)	<90%	-4° to 140°F (-20° to 60°C)
DigiTrak MFD Remote Display (MFD)	<16,404 ft (<5000 m)	<90%	-4° to 140°F (-20° to 60°C)
DigiTrak F Series Remote Display (FSD)	<16,404 ft (<5000 m)	<90%	-4° to 140°F (-20° to 60°C)

Declaration of Conformity

We **Digital Control Incorporated**

 19625 62nd Ave South Suite B103 Kent, WA 98032 USA

Declare under our own responsibility that the product

 MFCB (DigiTrak Multifunction Cable interface Box)

to which this declaration refers conforms with the relevant standards or other standardizing documents

 EN 60950-1:2006; EN 60950-1:2006-09 + A11:2009-03; EN 61000-6-4:2007;
 EN 61000-6-2:2005; IEC 61000-4-6:2008; IEC 61000-4-3:2008; IEC 61000-4-4:2004;
 IEC 61000-4-2:2008; IEC 61000-4-8:2001

According to the regulations in **R&TTE Directive 1999/5/EC, Article 3**

 Kent Washington
(Place, date)



 John E. Mercer, CEO
(Name and signature of person responsible)

LIMITED WARRANTY

Digital Control Incorporated ("DCI") warrants that when shipped from DCI each DCI product will conform to DCI's current published specifications in existence at the time of shipment and will be free, for the warranty period ("Warranty Period") described below, from defects in materials and workmanship. The limited warranty described herein ("Limited Warranty") is not transferable, shall extend only to the first end-user ("User") purchasing the DCI Product from either DCI or a dealer expressly authorized by DCI to sell DCI Products ("Authorized DCI Dealer"), and is subject to the following terms, conditions and limitations:

1. A Warranty Period of twelve (12) months shall apply to the following new DCI Products: receivers/locators, remote displays, battery chargers and rechargeable batteries, and DataLog[®] modules and interfaces. A Warranty Period of ninety (90) days shall apply to all other new DCI Products, including transmitters, accessories, and software programs and modules. Unless otherwise stated by DCI, a Warranty Period of ninety (90) days shall apply to: (a) a used DCI Product sold either by DCI or by an Authorized DCI Dealer who has been expressly authorized by DCI to sell such used DCI Product; and (b) services provided by DCI, including testing, servicing, and repairing an out-of-warranty DCI Product. The Warranty Period shall begin from the later of: (i) the date of shipment of the DCI Product from DCI, or (ii) the date of shipment (or other delivery) of the DCI Product from an Authorized DCI Dealer to User.

2. DCI's sole obligation under this Limited Warranty shall be limited to either repairing, replacing, or adjusting, at DCI's option, a covered DCI Product that has been determined by DCI, after reasonable inspection, to be defective during the foregoing Warranty Period. All warranty inspections, repairs and adjustments must be performed either by DCI or by a warranty claim service authorized in writing by DCI. All warranty claims must include proof of purchase, including proof of purchase date, identifying the DCI Product by serial number.

3. The Limited Warranty shall only be effective if: (i) within fourteen (14) days of receipt of the DCI Product, User mails a fully-completed Product Registration Card to DCI; (ii) User makes a reasonable inspection upon first receipt of the DCI Product and immediately notifies DCI of any apparent defect; and (iii) User complies with all of the Warranty Claim Procedures described below.

WHAT IS NOT COVERED

This Limited Warranty excludes all damage, including damage to any DCI Product, due to: failure to follow DCI's user's manual and other DCI instructions; abuse; misuse; neglect; accident; fire; flood; Acts of God; improper applications; connection to incorrect line voltages and improper power sources; use of incorrect fuses; overheating; contact with high voltages or injurious substances; or other events beyond the control of DCI. This Limited Warranty does not apply to any equipment not manufactured or supplied by DCI nor, if applicable, to any damage or loss resulting from use of any DCI Product outside the designated country of use. By accepting a DCI Product and not returning it for a refund within thirty (30) days of purchase, User agrees to the terms of this Limited Warranty, including without limitation the Limitation of Remedies and Liability described below, and agrees to carefully evaluate the suitability of the DCI Product for User's intended use and to thoroughly read and strictly follow all instructions supplied by DCI (including any updated DCI Product information which may be obtained at the above DCI website). In no event shall this Limited Warranty cover any damage arising during shipment of the DCI Product to or from DCI.

User agrees that the following will render the above Limited Warranty void: (i) alteration, removal or tampering with any serial number, identification, instructional, or sealing labels on the DCI Product, or (ii) any unauthorized disassembly, repair or modification of the DCI Product. In no event shall DCI be responsible for the cost of or any damage resulting from any changes, modifications, or repairs to the DCI Product not expressly authorized in writing by DCI, and DCI shall not be responsible for the loss of or damage to the DCI Product or any other equipment while in the possession of any service agency not authorized by DCI.

DCI reserves the right to make changes in design and improvements upon DCI Products from time to time, and User understands that DCI shall have no obligation to upgrade any previously manufactured DCI Product to include any such changes.

THE FOREGOING LIMITED WARRANTY IS DCI'S SOLE WARRANTY AND IS MADE IN PLACE OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ANY IMPLIED WARRANTY ARISING FROM COURSE OF PERFORMANCE, COURSE OF DEALING, OR USAGE OF TRADE, ALL OF WHICH ARE HEREBY DISCLAIMED AND EXCLUDED. If DCI has substantially complied with the warranty claim procedures described below, such procedures shall constitute User's sole and exclusive remedy for breach of the Limited Warranty.

LIMITATION OF REMEDIES AND LIABILITY

In no event shall DCI nor anyone else involved in the creation, production, or delivery of the DCI Product be liable for any damages arising out of the use or inability to use the DCI Product, including but not limited to indirect, special, incidental, or consequential damages or for any cover, loss of information, profit, revenue or use based upon any claim by User for breach of warranty, breach of contract, negligence, strict liability, or any other legal theory, even if DCI has been advised of the possibility of such damages. In no event shall DCI's liability exceed the amount User has paid for the DCI Product. To the extent that any applicable law does not allow the exclusion or limitation of incidental, consequential or similar damages, the foregoing limitations regarding such damages shall not apply.

This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. This Limited Warranty shall be governed by the laws of the State of Washington.

WARRANTY CLAIM PROCEDURES

1. If you are having problems with your DCI Product, you must first contact the Authorized DCI Dealer where it was purchased. If you are unable to resolve the problem through your Authorized DCI Dealer, contact DCI's Customer Service Department in Kent, Washington, USA at the above telephone number between 6:00 a.m. and 6:00 p.m. Pacific Time and ask to speak with a customer service representative. (The above "800" number is available for use only in the USA and Canada.) Prior to returning any DCI Product to DCI for service, you must obtain a Return Merchandise Authorization (RMA) number. Failure to obtain a RMA may result in delays or return to you of the DCI Product without repair.
2. After contacting a DCI customer service representative by telephone, the representative will attempt to assist you in troubleshooting while you are using the DCI Product during actual field operations. Please have all related equipment available together with a list of all DCI Product serial numbers. It is important that field troubleshooting be conducted because many problems do not result from a defective DCI Product, but instead are due to either operational errors or adverse conditions occurring in the User's drilling environment.
3. If a DCI Product problem is confirmed as a result of field troubleshooting discussions with a DCI customer service representative, the representative will issue a RMA number authorizing the return of the DCI Product and will provide shipping directions. You will be responsible for all shipping costs, including any insurance. If, after receiving the DCI Product and performing diagnostic testing, DCI determines the problem is covered by the Limited Warranty, required repairs and/or adjustments will be made, and a properly functioning DCI Product will be promptly shipped to you. If the problem is not covered by the Limited Warranty, you will be informed of the reason and be provided an estimate of repair costs. If you authorize DCI to service or repair the DCI Product, the work will be promptly performed and the DCI Product will be shipped to you. You will be billed for any costs for testing, repairs and adjustments not covered by the Limited Warranty and for shipping costs. In most cases, repairs are accomplished within 1 to 2 weeks.
4. DCI has a limited supply of loaner equipment available. If loaner equipment is required by you and is available, DCI will attempt to ship loaner equipment to you by overnight delivery for your use while your equipment is being serviced by DCI. DCI will make reasonable efforts to minimize your downtime on warranty claims, limited by circumstances not within DCI's control. If DCI provides you loaner equipment, your equipment must be received by DCI no later than the second business day after your receipt of loaner equipment. You must return the loaner equipment by overnight delivery for receipt by DCI no later than the second business day after your receipt of the repaired DCI Product. Any failure to meet these deadlines will result in a rental charge for use of the loaner equipment for each extra day the return of the loaner equipment to DCI is delayed.