

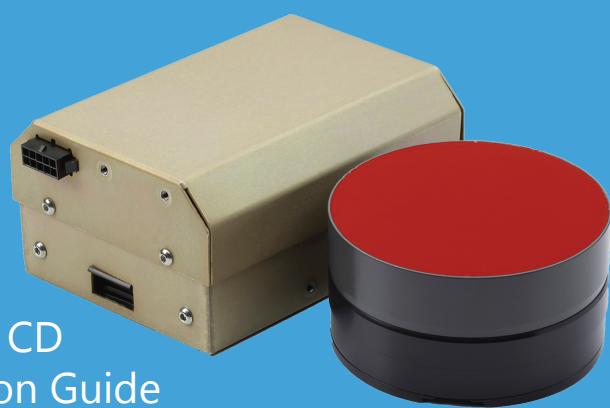
Getting Started with the Pathfinder OEM DVL

Step
1

Verify all parts are present

The standard DVL includes:

- Pathfinder OEM DVL and Electronics Chassis
- Pigtail Power/Comm Cable
- Shipping case
- Spare Parts Kit
- Pathfinder DVL Software and Documentation CD
- Printed copy of Getting Started and Integration Guide
- Check packing slip for additional options

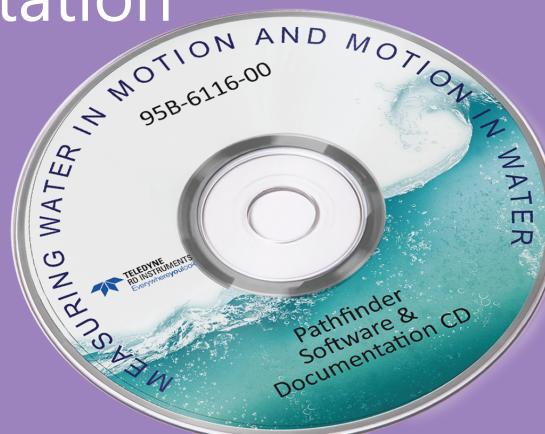


Step
2

Install the Software and Documentation

The Documentation and Software CD includes:

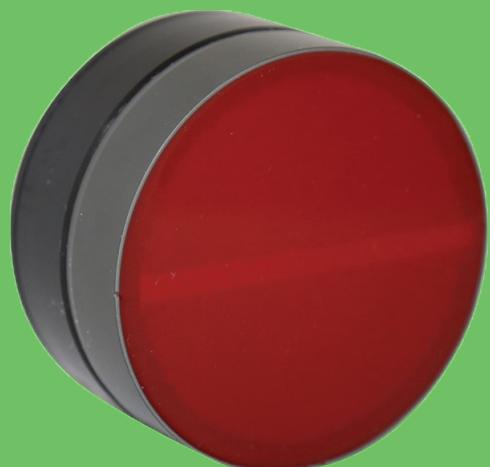
- TRDI Toolz software
- Pathfinder DVL Guide PDF
- Getting Started PDF
- Pathfinder Integration Guide PDF



Step
3

Communication and Power Setup

See the reverse side of this guide for detailed instructions.



Step
4

Read the Integration Guide

Included with the system is a printed copy of the Integration Guide.



The Pathfinder DVL is based on a TRDI patented Phased Array design which offers the following benefits:

- **Smaller Package** while keeping the same specs
- **Extended Range** from a smaller size array
- **Improved Low Altitude:** New advanced Bottom Detection method has been developed to allow for the Pathfinder DVL to track closer to the seabed
- **Improved Long Term Accuracy:** Our BroadBand algorithm has been fine tuned to allow for twice the accuracy
- **Improved position accuracy**

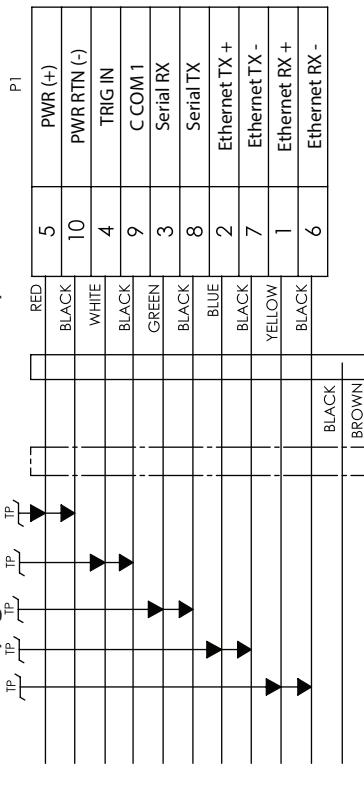
The Pathfinder DVL comes with our most advanced Bottom Tracking algorithm, Bottom Mode 8, which offers the following benefits over earlier bottom tracking instruments:

- **Better Handling of Tilted or Over Slope Operation**
- **High resolution altitude**
- **Lowered Energy Demand**
- **More Robust Bottom Detection**
- **Superior Station-Keeping Performance**

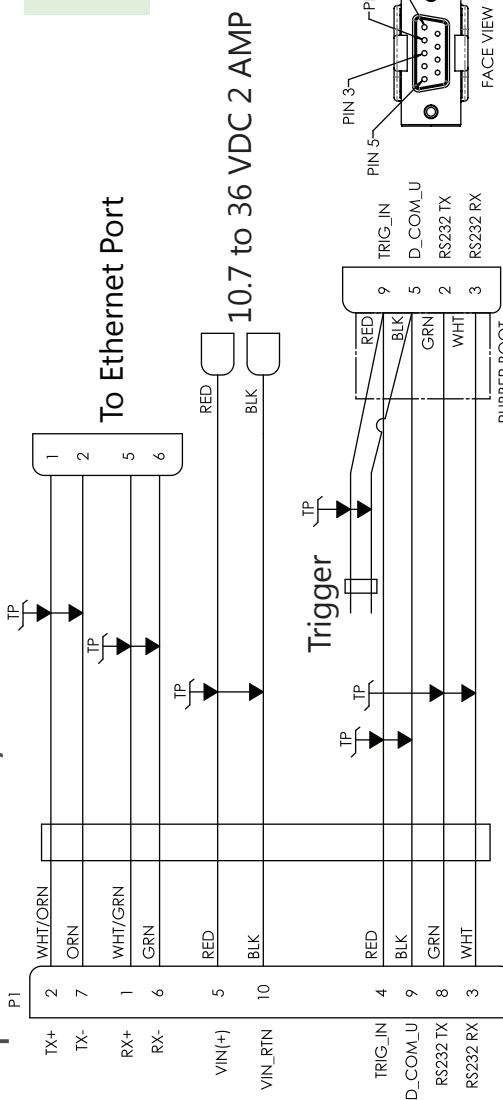
Step 3 Communication and Power Setup - Detailed Instructions

Step 3 A Wiring the Standard Power/Comm Pigtail Cable

Wire the pigtail cable or use the optional Power/Comm Test Cable.



Optional Power/Comm Test Cable



Step 3 C Setting Up the Communications

To establish communications with the Pathfinder:

1. Connect and power the system as shown in Steps 3A and 3B.
2. Start the *TRD/ Toolz* software (installed in Step 2).
3. Select **New Serial Connection** or **New Ethernet Connection**. The **command and control port can be Serial or Ethernet, but not both**.
4. Enter the Pathfinder's communication settings.

For **Serial** comms select the COM Port the cable connected to and set the Baud Rate to 115200.



For **Ethernet** comms enter the Static DHCP server IP or host name 192.168.1.100 - for Dynamic DHCP networks, see the Integration Guide for information on how to determine the IP Address.

Enter the Port Number 1033

Select TCP



5. Click the **Connect** button. Once connected, the button will change to Disconnect.
6. Click the **Break** (⚡) button located at the bottom left of the terminal window. The wakeup banner below will be displayed.

Pathfinder
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Firmware Version: 67.xx
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7. Verify the LED on the Pathfinder is:
 - Solid ON when no data is moving over the ports.
 - Blinks 250ms/500ms when there is data on the serial port.
 - Blink 250ms/1000ms when there is traffic on the Ethernet port.

Refer to the Integration Guide for further information.



CAUTION
ELECTROSTATIC SENSITIVE DEVICE
OBSERVE PRECAUTIONS

Step 3 B Connecting the Power/Comm Cable

1. Place the Pathfinder transducer face down on a soft surface.
2. Connect P1 to the Electronics Chassis.
3. With an ESD wrist strap on, remove the top cover on the transducer. Loosen, but do not remove the two screws next to the cable exit slot.
4. Connect the five cables and ground wire. The 3-pin beam cables have the beam number on the connector and are color-coded: Beam 1 = black, Beam 2 = red, Beam 3 = yellow, Beam 4 = blue. Attach the only 4-pin connector to the board. Tighten the ground screw to 4 IN-LB.
5. Thread the cables through the slot and attach the cover. Tighten the four M3 screws to 4 IN-LB. Tighten the two screws next to the cable exit slot to hold the cables in place.
6. Attach the Power/Comm cable to the computer's serial or Ethernet communication port.
7. Connect +10.7 to 36 VDC power. The power supply should be able to source at least 1.5 to 2 Amps.

