

Getting Started with the Pathfinder ROV DVL

Step

1

Verify all parts are present

The standard DVL includes:

- Pathfinder ROV DVL
- Pigtail Power/Comm Cable
- Shipping case
- Spare Parts Kit
- Software and Documentation download instructions



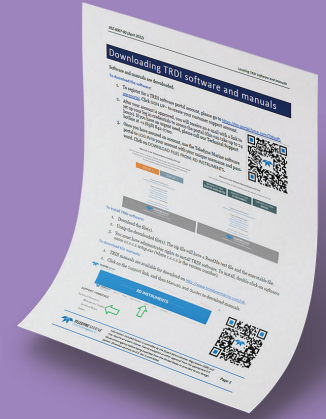
Step

2

Download the Software and Documentation

See Deployment Guide for details:

- Install TRDI Toolz software
- Install NavUI software
- Install other software as needed
- Download Pathfinder manuals



Step

3

Communication and Power Setup

See the reverse side of this guide for detailed instructions.



Step

4

Read 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**

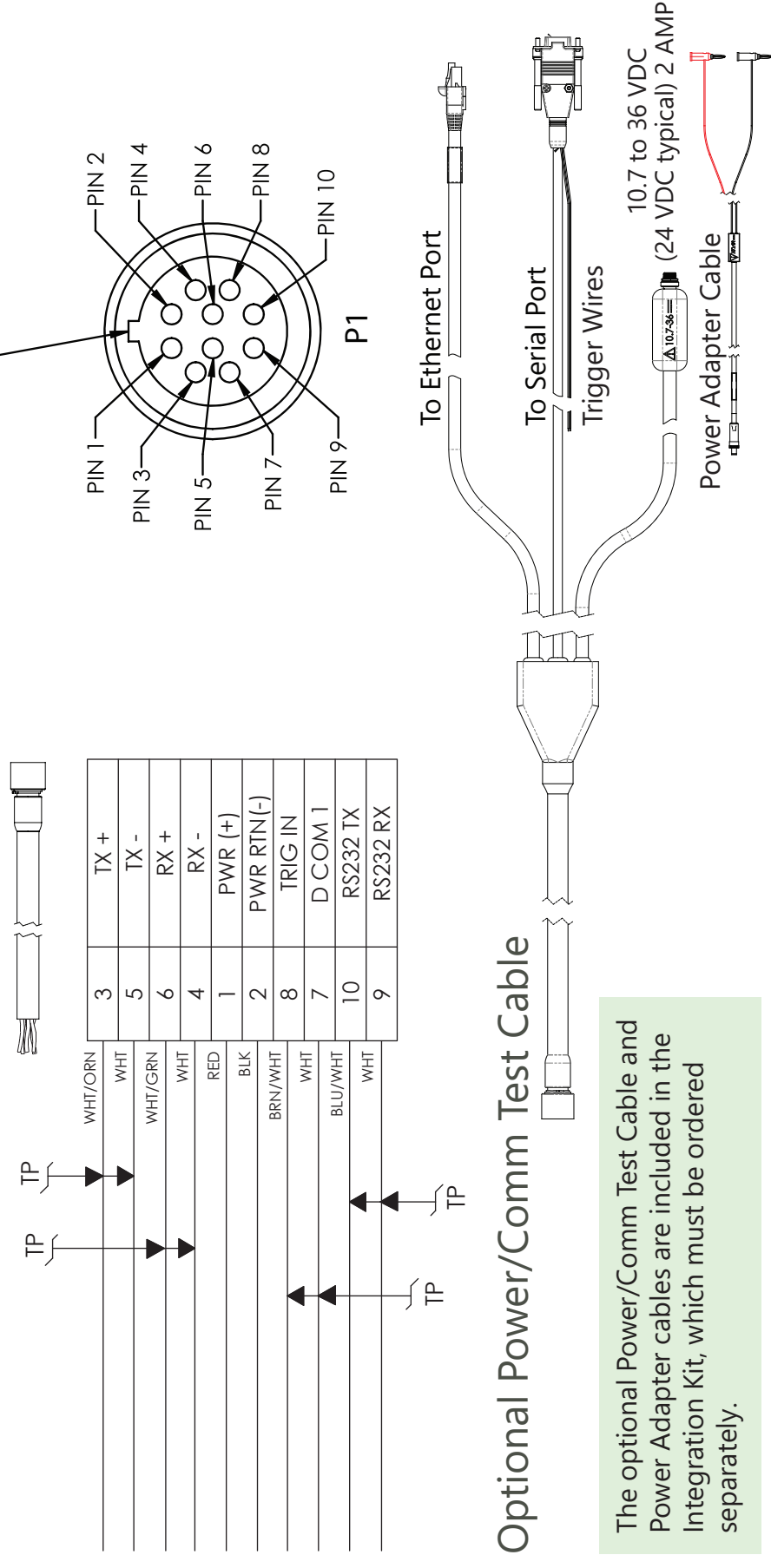
The Pathfinder DVL comes with our most advanced Bottom Tracking algorithm, Bottom Mode 8, which offers the following benefits over earlier bottom tracking instruments:

- **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.

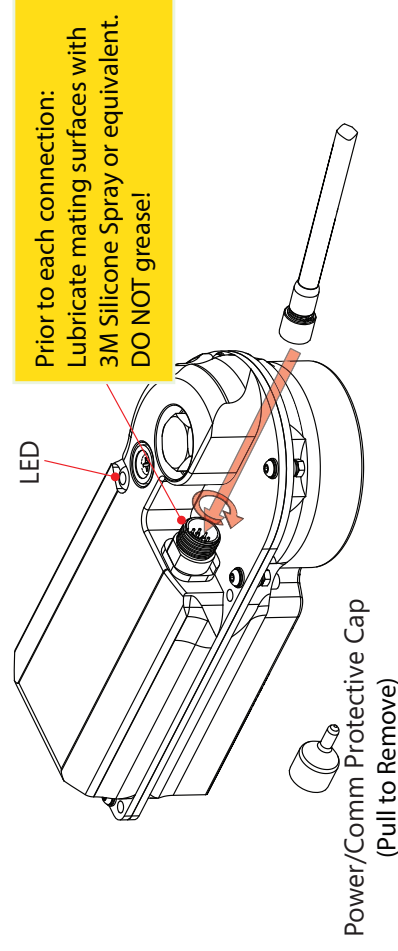


Optional Power/Comm Test Cable

The optional Power/Comm Test Cable and Power Adapter cables are included in the Integration Kit, which must be ordered separately.

Step 3 B Connecting the Power/Comm Cable

1. Place the Pathfinder on its transducer face on a soft surface.
2. Remove the Power/Comm protective cap and lubricate the connector.
3. Push the cable straight onto the Power/COMM connector ensuring the key and pins are properly aligned. While keeping a slight inward pressure on the cable connector and ensuring that the connector is straight, thread the locking sleeve onto the receptacle to complete the connection.
4. Attach the Power/Comm cable to the computer's serial or Ethernet communication port.



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 *TRDI 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 inside the terminal window and then click the Break (⚡) button located at the bottom left of the terminal window. The wakeup banner below will be displayed.

```
DVL
Teledyne RD Instruments (c) 2021
All rights reserved.
Firmware Version: 83.xx
Current time is: 21/12/22,09:01:38.47
Break received, serial
>
```

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.