Getting Started with the Tasman DVL

Step 1

Verify all parts are present

The Tasman DVL includes:

- Tasman DVL
- Optional Spare Transducer*
- Pigtail Power/Comm Cable
- Shipping case
- Spare Parts Kit
- Software and Documentation download instructions
- Printed copy of Getting Started and Integration Guide

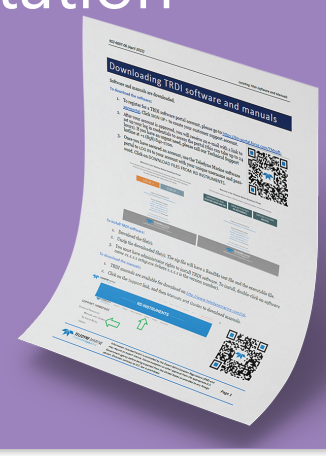
* Check packing slip for additional options

Step 2

Download the Software and Documentation

See Deployment Guide for details:

- Install TRDI Toolz software
- Install NavUI software
- Install other included software as needed
- Download Tasman manuals



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

- Innovative phased array transducer design delivers enhanced position accuracy at a reduced size, eliminates the need for speed of sound correction, and reduces drag on your vehicle
- Optional XRT (Extended Range Tracking) delivers up to a 60% increase in bottom tracking range
- Field replaceable transducer
- Ethernet compatibility allows for plug-n-play with vehicle network interfaces
- Time of validity output for highly accurate coupling with an Inertial Navigation System (INS) further improves your resulting DVL aided INS position accuracy

The Tasman DVL is designed as a replacement for the Workhorse Navigator for ease of installation.

Measurements include:

- Bottom track velocity
- Altitude: 4 individual measurements
- Error velocity (data quality indicator)
- Acoustic echo intensity
- Water track velocity
- Current profiling (optional)
- Temperature

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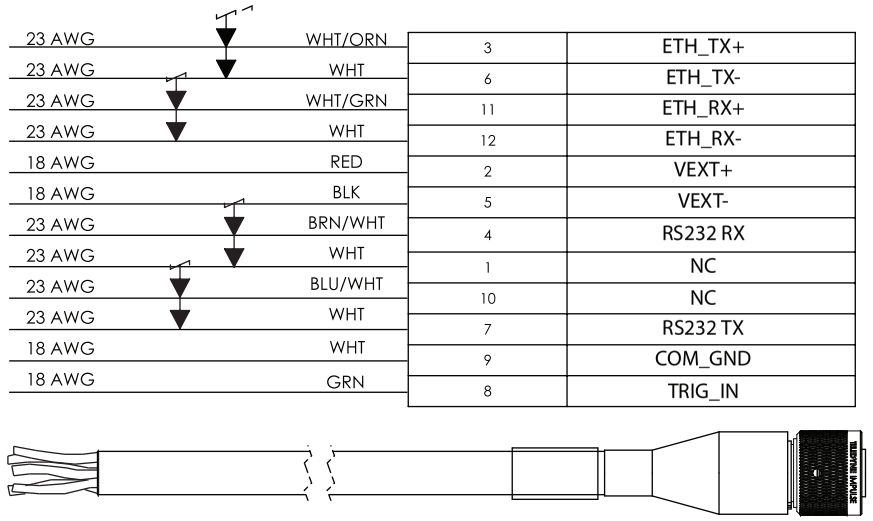
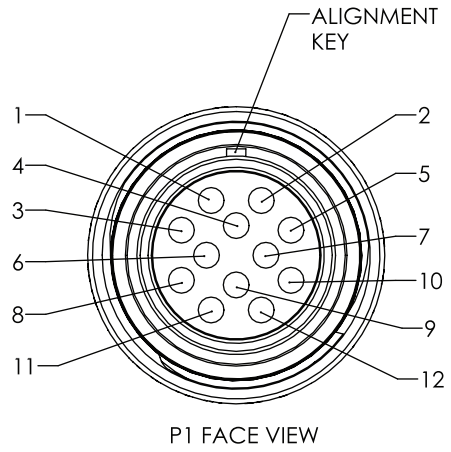
Step 3 Communication and Power Setup - Detailed Instructions

Step 3 A Wiring the Standard Power/Comm Pigtail Cable

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

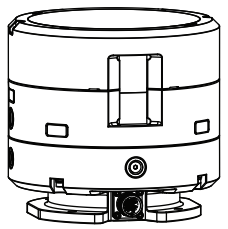


3	ETH_TX+
6	ETH_TX-
11	ETH_RX+
12	ETH_RX-
2	VEXT+
5	VEXT-
4	RS232 RX
1	NC
10	NC
7	RS232 TX
9	COM_GND
8	TRIG_IN

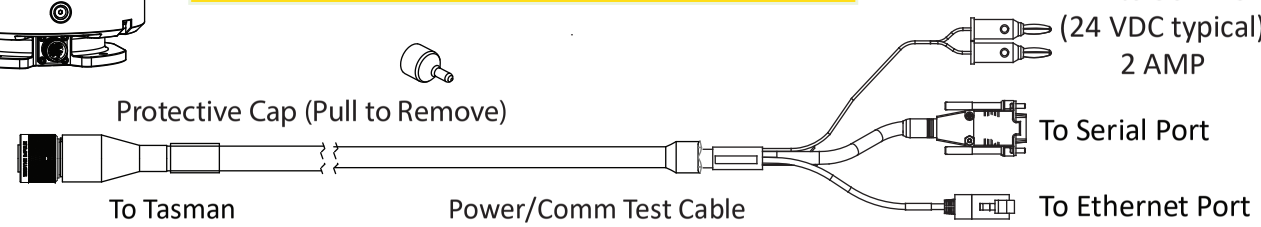


P1 FACE VIEW

Optional Power/Comm Test Cable



Remove the cap and lubricate the female cable connector by placing a light amount of silicone lubricant on the mating surfaces of the connector (rubber portion only). Silicone lubricant is included in the Spare Parts kit.



Step 3 B Connecting the Power/Comm Cable

1. Place the Tasman transducer face up on a soft surface.
2. Remove the Power/Comm protective cap and lubricate the female cable connector by placing a light amount of silicone lubricant on the mating surfaces of the connector (rubber portion only).
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.
5. Connect +12 to 36 VDC (24 VDC typical) power. The power supply should be able to source at least 2 Amps.

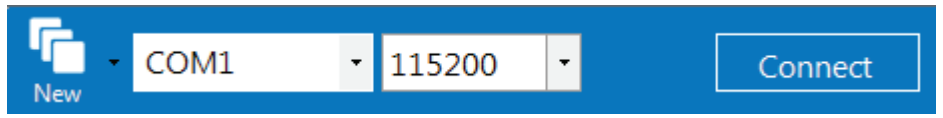
The optional Power/Comm Test Cable must be ordered separately.

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.

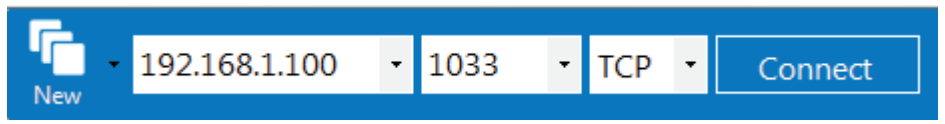
   For **Serial** comms select the COM Port the cable connected to and set the Baud Rate to 115200.



   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) 2019
All rights reserved.
Firmware Version: 83.xx
Current time is: 21/12/22,21:01:38.47
Break received, serial
>
```

7. Verify the LED on the Tasman is:
   - Solid ON when no data is moving over the ports.
   - Blinks twice per second when there is data on the serial port.
   - Blink once per second when there is traffic on the Ethernet port.

Refer to the Integration Guide for further information.