

Getting Started with the WorkHorse Monitor/Sentinel

Step 1

Verify all parts are present

The standard Monitor/Sentinel ADCP includes:

- Monitor or Sentinel ADCP
- Test cable or Pigtail cable
- Shipping case
- Spare Parts Kit
- USB to Serial adapter
- Software and Documentation download instructions

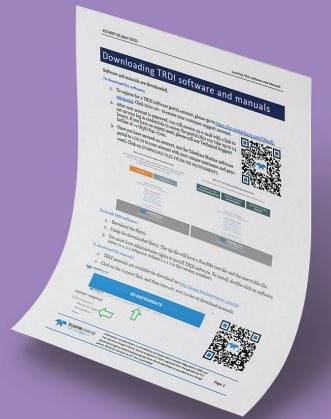


Step 2

Download the Software and Documentation

See Deployment Guide for details:

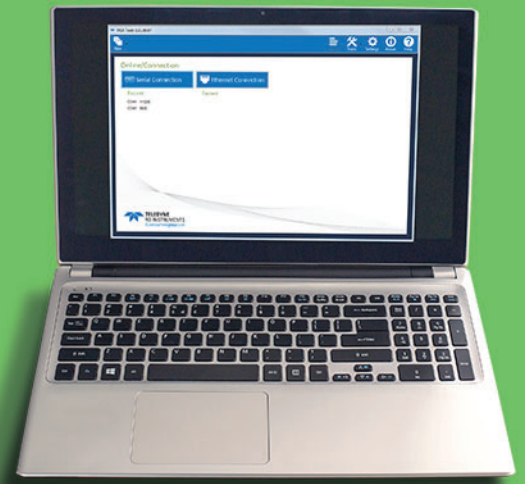
- Install TRDI Toolz
 - WH systems: Install PlanADCP
 - WHII systems: Install Workhorse II Plan, ISM Compass Calibration, Compass Post Calibration
- Install WinADCP, other as needed
- Download WorkHorse manuals



Step 3

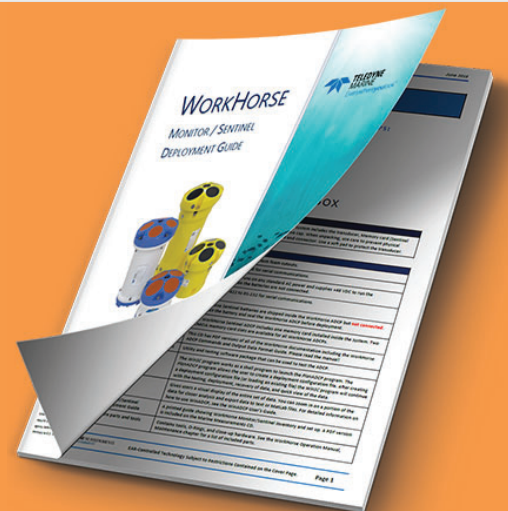
Communication and Power Setup

See the reverse side of this guide for detailed instructions.



Step 4

Read the Deployment Guide



PRODUCT FEATURES

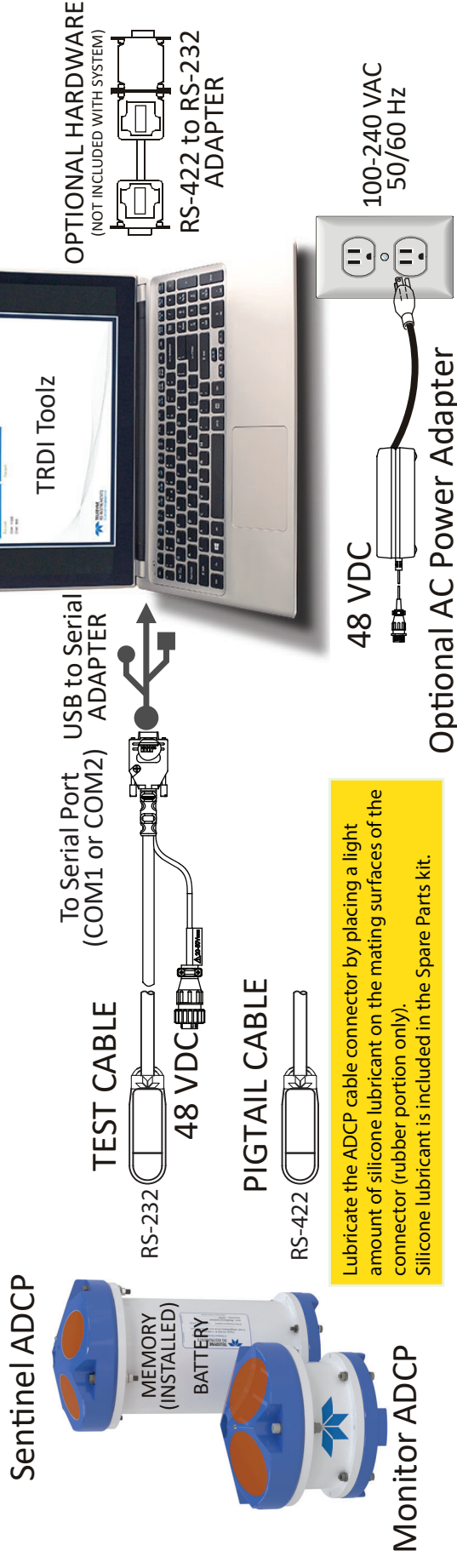
- **Versatility:** Direct reading or self contained, moored or moving, the WorkHorse provides precision current profiling data when and where you need it most.
- **A solid upgrade path:** The WorkHorse has been designed to grow with your needs. Easy upgrades include pressure, bottom tracking, and directional wave measurement. Workhorses can receive Workhorse II upgrades and continue to be serviced for many more years of successful deployments.
- **A four-beam solution:** Teledyne RDI's patented 4-beam design improves data reliability, improves data quality, and improves data accuracy.
- **Precision data:** Teledyne RDI's patented BroadBand signal processing delivers very low-noise data, resulting in unparalleled

OPTIONS

- **Bottom Track** – Use your WorkHorse ADCP from moving boats and ships with the Bottom Track Upgrade. Once the Bottom Track Upgrade is added, a WorkHorse ADCP can measure both water depth and boat velocity over the ground.
- **Waves** – This upgrade allows using the ADCP as a wave gauge.
- **LADCP** - This upgrade allows for Lowered ADCP deployments.
- **Shallow Water Bottom Track Mode 7** – Use your WorkHorse 1200 kHz ZedHed™ ADCP in water as shallow as 30cm.
- **High-Resolution Water Profiling Modes** – This upgrade allows collecting water profiles using Water Modes 1 and 11.
- **High Ping Rate Water Mode** – This upgrade allows collecting water profiles using Water Mode 12.

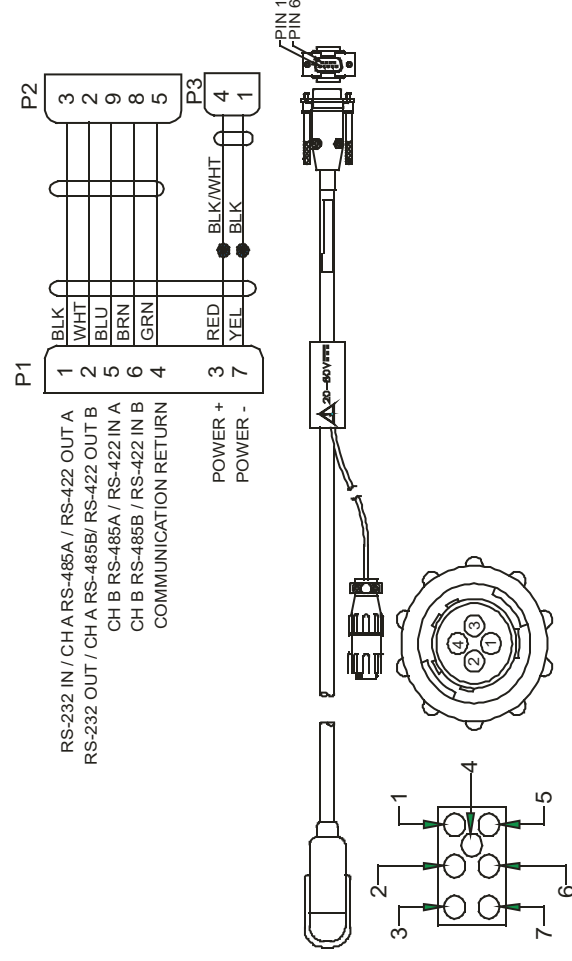
Step 3 Communication and Power Setup - Detailed Instructions

Step 3 A Cable Connection Overview




Step 3 B Connecting the I/O Cable

- Place the ADCP on its transducer face on a soft surface.
- Remove the Dummy Plug and lubricate the connector.
- Push the cable straight onto the connector ensuring the pins are properly aligned. Roll the retaining strap over the connector.
- Attach the I/O cable to the computer's serial communication port or connect the USB adapter to a spare USB port. Use a RS-422 to RS-232 adapter if the ADCP is configured as RS-422.
- Connect the AC power adapter to the I/O cable.
- Establish communications with the ADCP.



Step 3 C Setting Up the Communications

To establish communications with the WorkHorse:

- Connect and power the system as shown in Steps 3A and 3B.
 - Start the *TRDI Toolz* software (installed in Step 2).
 - Select **New Serial Connection**.
 - Select the COM Port the serial cable is connected to and set the Baud Rate from the drop down lists.
- 
- Click the **Connect** button. Once connected, the button will change to Disconnect.
 - Use **Alt+H** to switch to a Hard Break and then click the **Break** (⚡) button located at the bottom left of the terminal window. The wakeup banner below will be displayed.

How do I know if I have WH or WHII electronics?

Original WH Electronics:

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 5x.xx
Teledyne RD Instruments (c) 1996-2010
All Rights Reserved.

> The system has the original Workhorse electronics installed. Use the PlanADCP software to create a deployment command file.

WHII Electronics:

[BREAK Wakeup A]
WorkHorse II Broadband ADCP Version 7x.xx
Teledyne RD Instruments (c) 1996-2022
All Rights Reserved.

> The system has the Workhorse II electronics installed. Use the Workhorse II Plan software to create a deployment command file.

If you are unsure of the ADCP's baud rate, use Tools, Find ADCP. TRDI Toolz will try different baud rates until it connects to the ADCP. Refer to the Deployment Guide for further information.

If you don't know what com port(s) were added when using a USB to serial adapter, use Windows Device Manager® to determine the Com port. Remove the adapter, wait a moment, note the list of ports, reinsert the adapter and note the new port.

Install the USB to Serial adapter Virtual COM Port (VCP) driver. The free FTDI driver download page is available here: <https://ftdichip.com/drivers/>