Quick Start Guide

Tek-Sub 4800B

Submersible Level Transmitter

796 Tek Drive, Crystal Lake, IL 60014 USA +1 847 857 6076 | +1 847 655 7428 +1 847 655 6147 www.tek-trol.com

Quick Start Guide

1. Before You Begin

This guide provides basic guidelines to assist you in quickly getting started.

Installation of the device must be carried out by trained and qualified specialists authorized to perform such work by the system owner. The specialist must have read and understood these operating instructions and must follow them.

Handle the instrument with care, both in packed and unpacked condition.

All permissible media are specified in the data sheet. In addition, it has to be ensured that this media is compatible with the wetted parts of Tek-Sub 4800B.

2. Unpack

Tek-Sub 4800B Submersible Level Transmitter (1 unit)

3. Dimensional Drawing

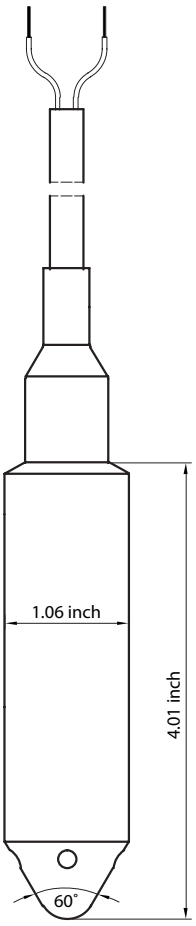
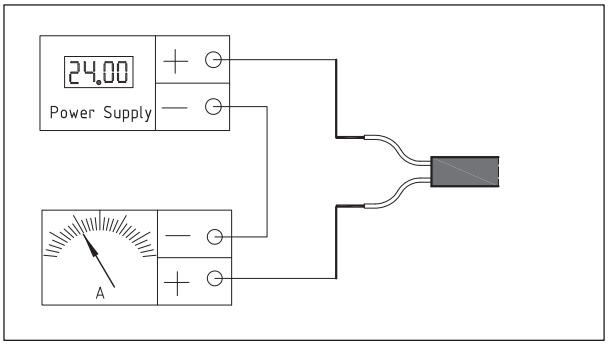


Fig. 1. Dimensional Drawing

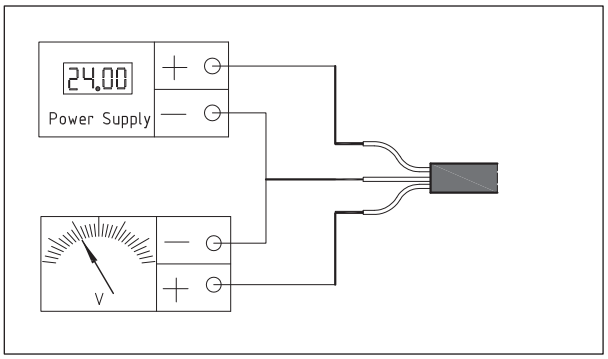
4. Power Supply Wirings

Wiring Diagram

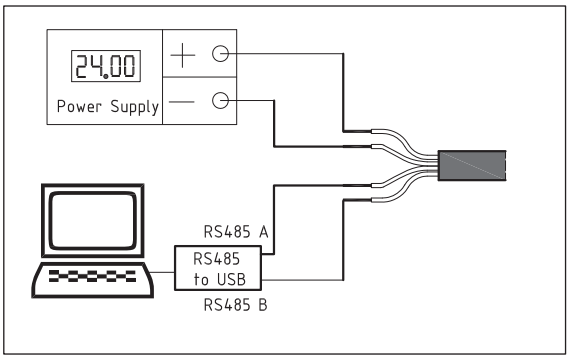
4~20mA/4~20mA+HART (2 wire)
Power+: Red
Signal+: Green



0~5voc/1~5voc/o.5~4.5V/0~10VDC3 wire)
Power+: Red
Gnd: Green
Signal+: Yellow



RS485 (4 wire)
Power+: Red
Gnd: Green
485 A: Yellow
485 B: Blue



5. Installation

Installation Method

- The installation direction of the transmitter is vertically down.
- In a flowing liquid application, the surface of the transmitter should be parallel with the direction of the liquid flow.

Installation in Static Liquid

- Fig. 2 shows the installation method used in case of static liquid.
- While pumping the liquid, the transmitter should be uninstalled from the tank or it should be protected by a stilling well as shown in Fig. 3.

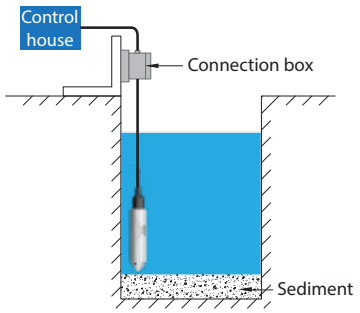


Fig. 2. Installation in static liquid

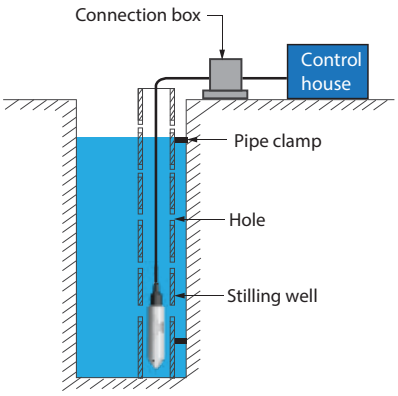


Fig. 3. Stilling well protection

Installation in Flowing Liquid

- **Method One: Use a stilling well in the water channel .**

Fig. 4 shows the installation method used in case of flowing liquid, for example, reservoir area or river channel. Use of a stilling well will dampen disruptions and provide a steady level for an accurate measurement.

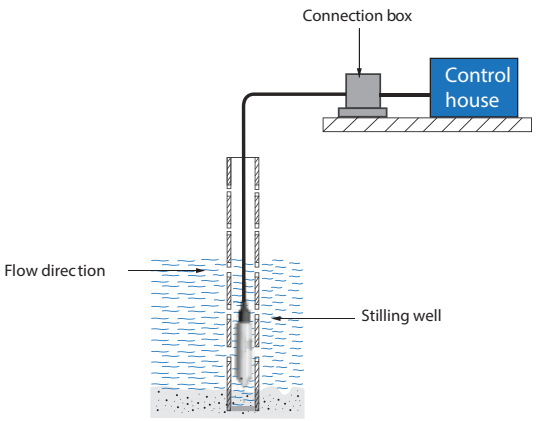


Fig. 4. Stilling well protection

- **Method Two: Fig. 5 shows the superficial burying is done in the sand and stone channel.**

This method not only eliminates pressure of the water flow and wave influence, but also filters the sand and mud particles.

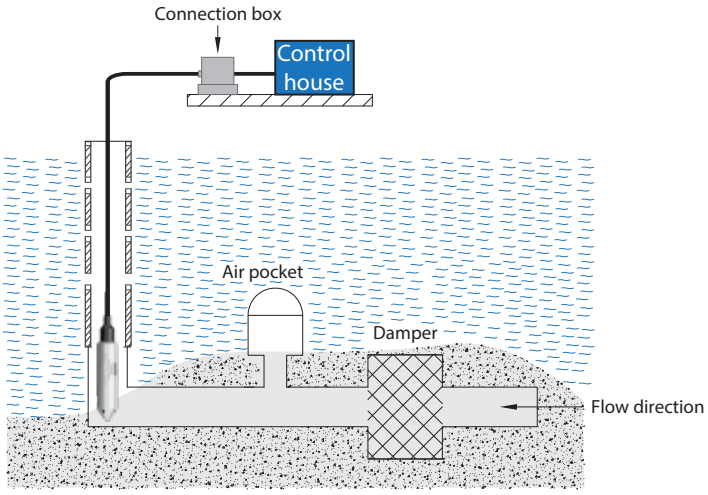


Fig. 5. Superficial burying

6. Maintenance

The Tek-Sub 4800B Submersible Level Transmitter does not require regular maintenance, however the following points must be observed for better operation and reliability.

- Make sure that the wire connection is reliable.
- Make sure that the cable is not damaged.
- Clean the protection cap and diaphragm space regularly.
- Do not pull the cables violently or poke the diaphragm with metal objects.

7. Error Identification

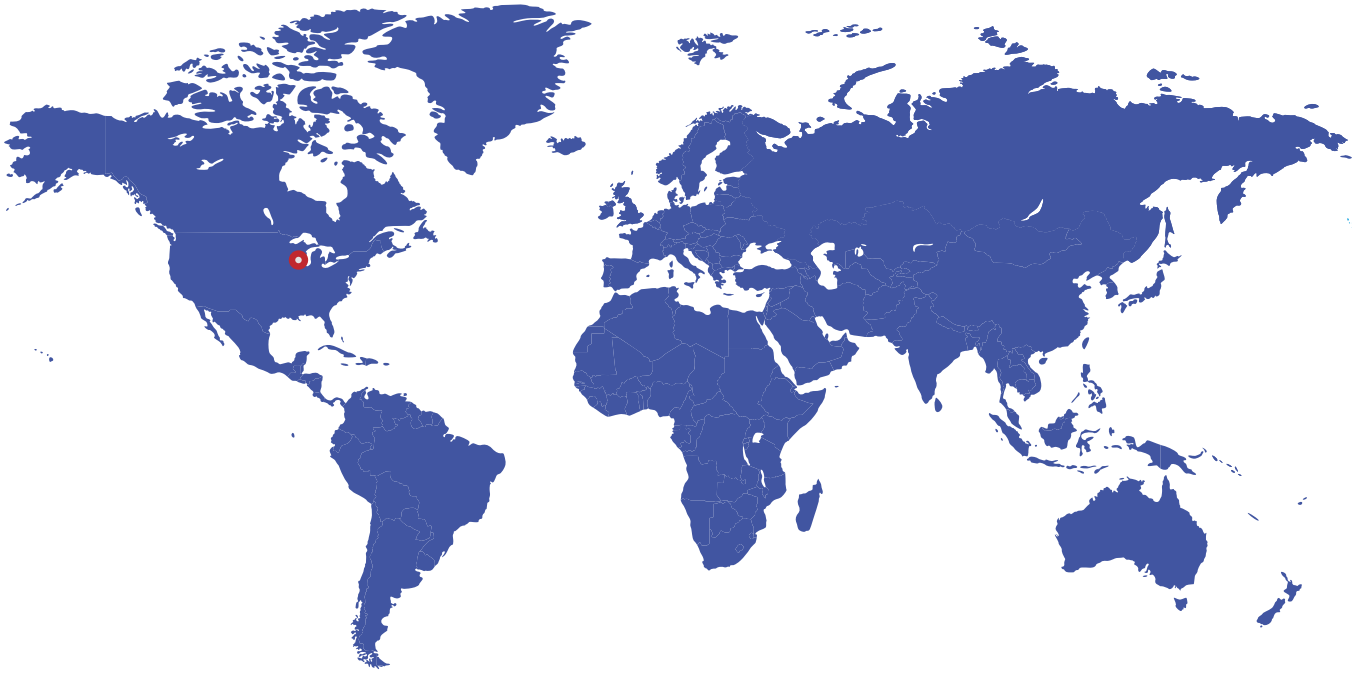
Table 1 shows the troubleshooting techniques for most common operating problems.

Symptom	Corrective Action
No Output or Low Output	Check for the polarity of the terminals, intermittent shorts, open circuits and multiple grounds.
	Check for adequate voltage to the transmitter. The transmitter requires 12 to 36 VDC.
	Verify sensor positioning and consider sensor cleaning.
High Output	Check for the dirty or defective terminals and interconnecting pins.
	Check for adequate voltage to the transmitter. The transmitter requires 12 to 36 VDC.
	Check the sensor limits to ensure input to the sensor is within the range.
Erratic Output	Check for adequate voltage to the transmitter. The transmitter requires 12 to 36 VDC.
	Check for the polarity of the terminals, intermittent shorts, open circuits and multiple grounds.
	Verify sensor positioning and consider sensor cleaning.

Table 1: Troubleshooting

NOTE: If error persists, contact Tek-Trol representative immediately.

TEKTROL
Technology Solutions



796 Tek Drive
Crystal Lake, IL 60014
USA
Fax: +1 847 655 6147
Email: tektrol@tek-trol.com
www.tek-trol.com

Tek-Sub 4800B