

TRUBEND®

S3 MEASUREMENT SYSTEM For Cross Country Pipeline Bending INSTRUCTION SHEET

Battery Installation and Operation

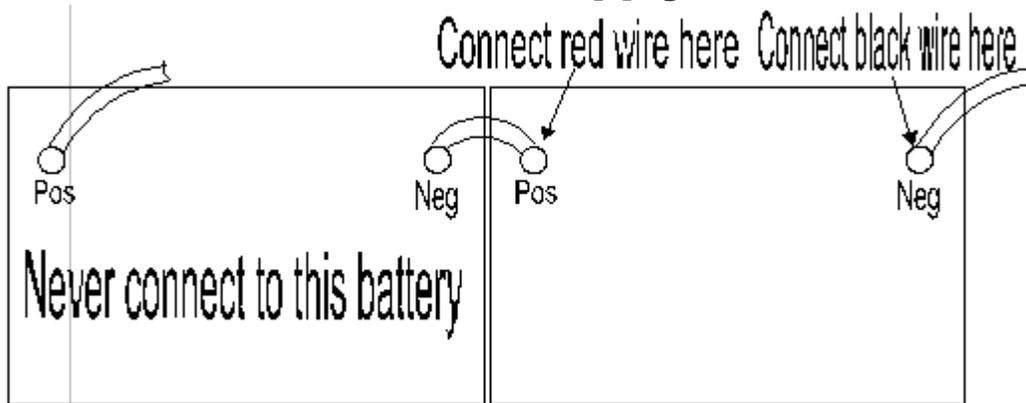


Mount the Receiver at the operators stand. Connect the power cable to the Bending Machine battery, black or brown wire negative and red wire positive.

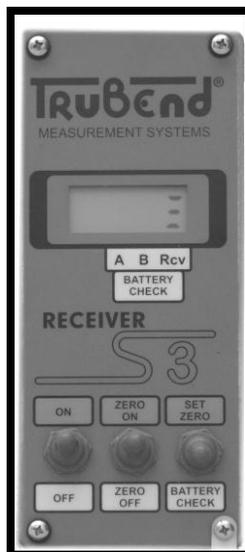
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15505 E. 520 Rd.
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24 Volt Supply



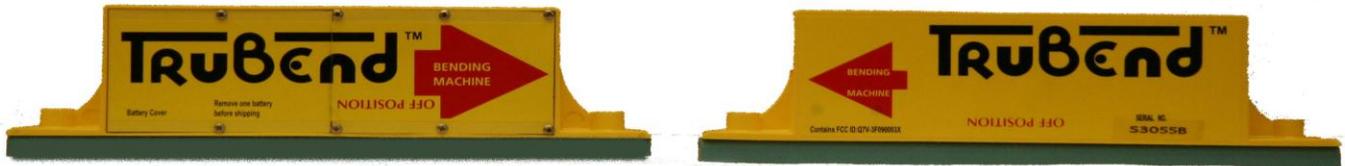
When the power supply is 24 volts, connect the black led to the negative post and the red led to the positive post of the first battery in the series. **Never** connect to the last battery of the series. Connect the two prong plugs at the receiver.



Turn the receiver on. Three bars will appear above RCV indicating that the battery condition is good.

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Transmitters

Remove the transmitter battery cover to install the batteries by removing two philip head screws.

Insert six AA Alkaline Batteries in transmitters A and B inserting the negative ends toward the springs. Replace the cover and set the Transmitters upright with the magnets down.



Flip and hold the battery check switch to check the battery condition.

Three bars indicate full charge for Tx A, Tx B and the Receiver. The transmitters will operate plus or minus 240 hours before the top bar drops out. The second bar will drop out after approximately 48 hours. Low Bat will blink on the receiver screen and the unit will shut down in about 12 hours. If there is no indication replace the batteries with new fully charged batteries. **Never mix new and old batteries.**

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Angle measurements are displayed in degrees and tenths.

To set zero flip the toggle switch on the receiver to ZERO ON, Set the transmitters on a flat surface with the arrows pointing toward each other. Toggle the switch to SET ZERO and hold until the screen goes blank then release the switch. The receiver will read Zero. This feature can be turned off by turning the switch to ZERO OFF. This feature is limited to one degree.



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Place the pipe in the bending machine positioned for the first pull. Clean metal particles from the magnets before placing the transmitters on the pipe. Place one transmitter on each end of the pipe with the arrows pointing toward the bending machine. The transmitters must be on top center of the pipe. Turning the transmitters up right will switch them on. Turning the transmitters upside down will turn them off. Either transmitter may be used at either end of the pipe.

Warning: The arrows on the transmitters must be pointing toward each other to obtain the correct reading.

Important: Multiple 3000 series TruBends may be used in close proximity without interfering one set to another.

Note: The transmitters will automatically shut off if there is no movement for 1 ½ hours. To restart, turn the transmitters (upside down) to the off position for 5 seconds. Turn the transmitters to the upright on position, and the set will restart. The battery indicator will light in the receiver, and an angle will display when both transmitters are on. If the transmitters do not come on, replace the batteries with new Alkaline “AA” Batteries. Do not mix used batteries with new batteries.

Caution: Handle the transmitters with caution and with gloved hands. The magnets are very strong and can pinch or cut unprotected skin.

To set the transmitter on the pipe, stand facing the pipe’s side, place the edge of the magnet near you on the pipe, near the top center and parallel to the pipe. Gently rock the transmitter away from you until the magnet makes full contact. To remove the transmitter, grasp the transmitter and rock the top toward you.

For best results: Store the equipment in the carry case when not in use. Wipe water and dirt from the equipment before placing it into the case. Keep the interior of the case clean and dry. Store and transport the case lying flat, lid on top, so the transmitters will stay off to conserve the batteries.



Technical Specifications

Transmitters:

Angle Measurement:

Maximum Reading:	+/- 45.0 degrees
Resolution:	0.1 degree
Update Interval:	350 mS

Radio Transmitter:

"A" Channel Frequency:	868.225 MHz
"B" Channel Frequency:	868.375 MHz
Transmit Level:	+11 dBm
Transmit Rate:	9.6 KB

Power:

Batteries:	6 each per transmitter 1.5V Alkaline "AA" size
Rated Operating Voltage:	6.2 – 9.0 Volts DC
Max. Operating Voltage:	9.8 Volts DC
Battery Status Indicators:	3 bars: >7.7 Volts
	2 bars: 7.2 – 7.7 Volts
	1 bar: 6.8 – 7.2 Volts
	1 bar + flash: 6.2 – 6.8 Volts
Supply Current:	6.5 mA average

Receiver:

Angle Display:

Maximum Reading:	+/- 45.0 degrees
Resolution:	0.1 degree
Relative Mode Offset:	1.0 degree max

Power:

Rated External Supply Voltage:	9 – 12 Volts DC
Max. External Supply Voltage:	16 Volts DC
Supply Current:	20 mA Average
Fuse:	AGC .25 A, 250 Volt

Environmental Operating conditions:

Temperature:	-18°C to +65°C
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Water Resistant

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Declaration of Conformity

We, Trubend Systems, Inc., located at 15505 East 520 Road, Claremore, Oklahoma, 74019 in the United States of America, declare under our own responsibility that the products:

**S3 Measurement System for Cross Country Pipeline Bending
Receiver Unit
Sensor/Transmitter Units**

to which this declaration refers conforms with the relevant standards or other standardizing documents

**ETSI EN 300 220-2 V2.1.1:2006-04
EN 61010-1:2001
EN 61326:1997, A1:1998, A2:2001, A3:2003**

14 January, 2008

Date



Mel Trammell, President

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