

***TRU-REMOTE*** INDUSTRIAL WELDING EQUIPMENT LTD.  
WORLDWIDE PATENTS PENDING

WIRELESS WELDING MACHINE REMOTES

**OWNER'S MANUAL**

**MODEL TYPES: TR 4    TR 6**

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## **SECTION ONE**

### **General Specifications Models TR 4 & TR 6.**

#### **Transmitter Specifications:**

1.     **Enclosure: IP65**
2.     **Structure: glass fibre**
3.     **Operating temperature: -40°C to +80°C**
4.     **ID code: 32 bit.**
5.     **Hamming distance  $\geq 4$**
6.     **Weight 175g (w/batteries)**
7.     **2 x AA size alkaline batteries**
8.     **Push button jam detector**
9.     **Modulation: FSK**
10.    **Error free hamming code technology**

## **SECTION TWO**

### **Receiver Specifications:**

1.     **Enclosure: IP65**
2.     **Structure: glass fibre**
3.     **Operating temperature: -40°C to +80°C**
4.     **Weight: 1100g (w/out cable)**
5.     **Size: 167mm x 154mm x 88mm**
6.     **Power supply 12 – 24 Volts DC**
7.     **Sensitivity: -108dBm**
8.     **Shock resistant**
9.     **20 Amp rated output relays**

## **SECTION THREE**

### **Scope of Supply**

**Standard unit consists of the following:**

- 1. One transmitter unit – batteries not included**
- 2. One transmitter unit carrying strap**
- 3. One receiver box unit complete with 1.5 meter of 20 Amp rated cable and one cable strain relief connector.**
- 4. One 85 mm antenna**
- 5. One Owner's Manual**

## **SECTION FOUR**

### **TR 4 Function Specifications**

1. **Frequency range 310 – 320 MHz**
2. **LCD screen with the following functions:**
  - ♦ **Greeting message (8 letter message)**
  - ♦ **Back display light (5 to 60 seconds)**
  - ♦ **Start indicator (power on)**
  - ♦ **Battery Power indicator (battery level)**
  - ♦ **Run indicator (function enable)**
  - ♦ **Digital Amperage Display (set to each machine)**
  - ♦ **L.C.D. sleep mode (5 to 60 seconds)**
  - ♦ **Shut down message (8 letter message)**
3. **Keypad with following programmable functions:**
  - ♦ **Start button (delay 0.1 to 4 seconds)**
  - ♦ **Key pad lock (1 or 2 key password)**
  - ♦ **Increase/Decrease button (timer 0.5 to 5.0 seconds)**
    - hold down timer programmed for key pad lock password
  - ♦ **Increase/Decrease button (step time 0.1 to 1.0 seconds)**
    - programmed for rapid increase/decrease function

## **SECTION FIVE**

### **TR 6 Function Specifications**

1. Frequency range 310 – 320 MHz
2. LCD Screen with the following functions:
  - ♦ Greeting message (8 letter message)
  - ♦ Back light (5 to 60 seconds)
  - ♦ Start indicator (power on)
  - ♦ Battery power indicator (battery level)
  - ♦ Run indicator (function enable)
  - ♦ Digital Amperage Display (set to each machine)
  - ♦ L.C.D. sleep mode (5 to 60 seconds)
  - ♦ Contactor (C1 or C0)
  - ♦ Shut down message (8 letter message)
3. Keypad with following programmable functions:
  - ♦ Start button (delay 0.1 to 4 seconds)
  - ♦ Key pad lock (1 or 2 key password)
  - ♦ Increase/Decrease button (timer 0.5 to 5 seconds)
    - hold down timer programmed for key pad lock password
  - ♦ Increase/Decrease button (step timer 0.1 to 1 second)
    - programmed for rapid increase/decrease function
  - ♦ Glow plug / choke push button (5 to 20 second delay before starting engine)
  - ♦ Contactor off (output contactor off / push start for output contactor on)

## **SECTION SIX**

### **Operation:**

- 1. Verify correct wiring procedure of receiver wiring according to welding machine model.**
- 2. Install 2 fresh AA batteries in transmitter.**
- 3. Push start button to turn on receiver.**
- 4. For TR 4 models; push start button again to start welding machine.**
- 5. For TR 6 models; please note that for diesel or gas driven engines using a TR 6 remote transmitter it is necessary to push the GP/C push button before trying to start the engine. This push button electronically engages the glow plugs or choke for a preset time (factory set at 10 seconds). After 10 seconds press the start push button.**
- 6. Once welding machine is running, push increase button to increase amperage – push and hold to rapidly increase amperage setting.**
- 7. Once welding machine is running, push decrease button to decrease amperage – push and hold to rapidly decrease amperage setting.**
- 8. Push stop button to shut down welding machine and radio system.**



## **SECTION SEVEN**

### **Trouble Shooting:**

- ♦ Do not drop the transmitter or damage to the encoder board may occur. Should you drop your transmitter causing it to no longer operate, contact your nearest *Tru-Remote* distributor.
- ♦ Although your *Tru-Remote* transmitter is designed for outdoor use, it is not designed to be left lying unprotected in adverse weather conditions such as rain, snow etc. Failure to store the transmitter properly may cause corrosion problems due to moisture build-up.
- ♦ If the transmitter range decreases, check battery signal strength on the display. New batteries will provide maximum signal and range.
- ♦ If the liquid crystal display stops functioning, check the batteries. If batteries are fine, contact your nearest *Tru-Remote* distributor for service.
- ♦ If transmitter indicates that the welding machine is in “run” mode but you cannot strike on arc, check to ensure that the welding machine is actually running. Check to ensure that the receiver unit is turned on and receiving power. There is a green light mounted on the receiver unit that when lit indicates that power is being fed to the receiver unit.
- ♦ If receiver unit will not power up check for loose wires and make sure that 12 volts DC is being fed to the receiver unit. If there is 12 volts DC active in the receiver but no functions operating; check for a blown fuse. If there is 12 volts DC power and fuses are fine, contact your nearest *Tru-Remote* distributor for service.

# **Tru-Remote** INDUSTRIAL WELDING EQUIPMENT LTD.

## **WARRANTY**

EFFECTIVE JANUARY 1, 2007

**LIMITED WARRANTY** – Subject to the terms and conditions below, **Tru-Remote** Industrial Welding Equipment Ltd., warrants to its original retail purchaser that new **Tru-Remote** equipment sold after the effective date of this limited warranty is free of defects in material and workmanship at the time it is shipped by **Tru-Remote**. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

### **New Equipment:**

The warranty period for complete **Tru-Remote** radio systems is twelve months from date of installation or eighteen months from date of shipment, whichever is earlier.

### **Parts and Service:**

The warranty period for parts and labor, including replacement transmitters, is ninety days only.

**Tru-Remote** PRODUCTS ARE INTENDED FOR PURCHASE AND USE BY COMMERCIAL/INDUSTRIAL USERS AND PERSONS TRAINED AND EXPERIENCED IN THE USE AND MAINTENANCE OF WELDING EQUIPMENT.

This warranty does not include consumptive parts such as batteries, fuses, push buttons or relays. In addition, this warranty does not cover problems caused by improper installation, improper operation or unauthorized modifications.

In the event of a warranty claim covered by this warranty, the exclusive remedies shall be, at **Tru-Remote's** option (1) repair, or (2) replacement; or, where authorized in writing by **Tru-Remote** in appropriate cases, (3) the reasonable cost of repair or replacement at an authorized **Tru-Remote** service facility; or (4) payment of or credit for the purchase price (less reasonable depreciation based on time in service) upon return of the goods at customer's risk and expense. **Tru-Remote's** option of repair or replacement will be F.O.B., factory at Surrey, B.C., or F.O.B. at a **Tru-Remote** authorized service facility as determined by **Tru-Remote**. Therefore no compensation or reimbursement for transportation costs of any kind will be allowed.

**Tru-Remote** shall not be liable for any direct, indirect, special, incidental or consequential damages.

### **Warranty Questions?**

In Canada or U.S.A. call **1-800-883-1814** for your local **Tru-Remote** distributor.

## FCC Caution:

1. This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:
  - (1) This device may not cause harmful interference, and
  - (2) This device must accept any interference received, including interference that may cause undesired operation.
2. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.
3. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.