

## Set Up Instructions for Brantz International 2S Pro Tripmeter (BR7)

### Wiring (Not Applicable if you are using your meter in conjunction with a BR57 & BR45/BR47):

- **Power:**
  - Connect up to the vehicle's 12 volt power supply as directed by the label on the BLACK POWER CABLE coming out of the base of the tripmeter or Plug Kit (BR43). This is BROWN to the POSITIVE Terminal and GREEN/YELLOW to the NEGATIVE Terminal.
  - Connect straight to the vehicle's battery posts **via a 2 Amp fuse** (Not Provided - Available from Brantz) on the live wire, usually the BROWN on +12V cars, however on Positive Earth vehicles it is customary to fit the fuse to the live GREEN/YELLOW wire.
- **Sensor:**
  - The Sensor is connected to the GREY CABLE coming out of the base of the tripmeter as directed by the separate sensor instruction sheet showing how to wire the exact type of sensor you have chosen.



### Calibration:

- The Tripmeter is calibrated to be accurate on any vehicle fitted with any type of Brantz Sensor and using any wheel size or gearing by means of the three push-wheel switches marked 'CALIBRATION'.
- If the Tripmeter is to measure in hundredths of a Kilometre/Mile the push-wheel switch needs first to be set to **100**.
- At the start of an accurately measured Kilometre/Mile, press the Zero button to ensure the counter reads 00.00.
- Drive the measured distance and stop accurately at the end of the distance – Note the figure that comes up on the readout. **(This is the Calibration Figure for this particular vehicle)**
- Enter this figure into the calibration push-wheel switches on the front of the tripmeter. e.g. If the readout is 05.67 set the push-wheel switches to 567. N.B. If the readout is greater than 09.99 a **Pre-Scaling Interface (BR5)/Dividing Pre-Scaler (BR5-2A)** is required – please contact us on 0044 (0) 1625 669366 or Email: [sales@brantz.co.uk](mailto:sales@brantz.co.uk)
- The accuracy can be confirmed by re-running the measured distance from zero, the meter should read exactly 01.00
- If several wheel sizes and gearings are available for the vehicle; repeat the calibration procedure for each combination and note down the different calibration figures.
- If you are using a **Dual Sensor Switch (BR49)** make a note of the calibration figures for both sensors **A** and **B**.

## Operating Instructions for Brantz International 2S Pro Tripmeters (BR7)

### Use/Controls:

- The tripmeter is switched on by use of the switch on the base of the tripmeter.
- When the switch is moved from position '0' to the '1' position the meters digits will light up. N.B. A battery charger is not a suitable power source to test the tripmeter.
- The RED button on the remote reset box, when pressed will Zero the INTERMEDIATE DISTANCE readout.
- **The upper toggle switch** on the front of the tripmeter marked 'Freeze Total'/'Zero Total' has 3 positions and will normally be in the middle position.
  - If the switch is pushed UP the TOTAL DISTANCE readout will be FROZEN, when the switch is returned back to the middle position the readout will continue from the Frozen value. *(This facility is useful if the competitor wishes to correct (Pre-Set) the Total Distance readout to a value that he knows should be displayed at a certain point on the road. The readout can be unfrozen at this point on the road so that the correct value is displayed from this point on. This facility is also useful if the Total Distance readout is too high; the readout can be frozen and then the vehicle driven without the displayed value increasing).*
  - If the switch is momentarily switched DOWN this will Zero the TOTAL Readout.
- **The middle toggle switch** on the front of the tripmeter marked 'Count +'/'Count -' allows the tripmeter to count upwards or downwards.
- **The STEP control knob** is to edit the TOTAL DISTANCE readout value. Turning the knob clockwise a click will be felt and the TOTAL DISTANCE readout will start to count either up or down depending on the position of the Count +/Count - toggle switch. *(This facility is useful to align the Total readout value to any given value, say, by the organisers handbook at a certain point).*
  - The STEP control can be used with the FREEZE switched ON.
  - The STEP control should normally be in the off position that is turned fully anti-clockwise until a click is felt.
- **The three digit 'SPEED/AVERAGE SPEED' readout** will display the vehicle's current speed in whole numbers in the units to which the tripmeter is calibrated i.e. calibrated in miles, shows mph or calibrated in kilometres shows kph.
- **The lower toggle switch** marked 'SPD/AVG/ST AVG' should be left in the position marked 'SPD' to use the readout as a conventional speedometer.
  - In the central position marked 'AVG' the readout will illuminate the decimal point and show Average Speed to 1dp.
  - To initial the calculation of Average Speed (above), push the switch to the right marked 'ST AVG' and hold for

approximately half a second. **This must be done when the meter is first turned on (if the average speed has not been initialised the display will simply show - - . -)** and can be used any time thereafter when the vehicle is moving or stationary to recalculate.

- **For Long Distance events** the decimal place on the TOTAL display can be shifted from 00.00 to 000.0, by:
  - With the tripmeter OFF; hold down the Zero Total toggle switch and switch the tripmeter ON.
  - The tripmeter will return to it's default 00.00 when the unit is switched Off and On again.

### Official Measured Distances and Calibration

**If the rally organiser has laid out an 'official distance' or you wish to make your tripmeter read the same as the rally organisers distances then the following instructions apply for calibration:**

- Enter **100 (C)** into the push-wheel calibration digits (N.B. If the official measured distance is greater than 20 miles you would need to enter a much higher figure for **C** e.g. between 399-999).
- With the Total and Intermediate Displays showing Zero drive the total official measured distance i.e. **4.8 (D)** miles and note down the readings i.e. **21.98 (T)** (this should be identical on both Intermediate and Total Displays)
- Now use the following formula:

$$(T/D) \times C$$

e.g.

$$(21.98/4.8) \times 100$$

$$\Rightarrow 4.579 \times 100$$

$$\Rightarrow 457.91$$

So enter **458** into your calibration push-wheel switches.

**To confirm the figure, re-drive the measured distance and your displays should show the official distance e.g. 4.8 miles.**

### International 2S Pro (BR7) Extras Available:

#### ESSENTIAL EXTRAS:

- **BRANTZ Sensor**
- **In-Line Fuse Kit (BRFUSE)**

#### OPTIONAL EXTRAS:

- **International Driver Display (BR71) – International 2S-DD Pro (BR7-DD) Upgrade Required**
- **Plug Kit (BR43)**
- **Dual Sensor Switch (BR49)**
- **Average Speedtable (BR19)**
- **Pulse Doubler (BR52) – for Calibration figures less than 499**
- **Sensor Extension Cable (BR2X)**
- **Rally Timer PLUS (BR32+)**
- **Sun Screen/Night Filter (BRSS7)**
- **Power Conditioner (BR21) – Essential for 6V Vehicles**

### Other Items in the International Range:

- **International 1 Pro (BR13) – Single Display Tripmeter**
- **International 2 Pro (BR6) – Dual Display Tripmeter showing Total Distance & Intermediate Distance**
- **International 2-DD Pro (BR6-DD) + Driver Display (BR61) – Dual Display Tripmeter with Driver Display Unit**
- **International 3 Pro (BR8) – Triple Display Tripmeter showing Total Distance, Intermediate Distance & Speed.**
- **International 3-DD Pro (BR8-DD) + Driver Display Unit (BR81) – Triple Display Tripmeter with Driver Display Unit**
- **International 2S-DD Pro (BR7-DD) + Driver Display Unit (BR71) – Triple Display Tripmeter with Driver Display Unit**

#### **Trouble-Shooting:**

If you are having problems please see our Trouble-Shooting guide (available at [www.brantz.co.uk](http://www.brantz.co.uk)), contact your local supplier or Contact us via Email: [sales@brantz.co.uk](mailto:sales@brantz.co.uk) or Phone: 0044 (0) 1625 669366