

Brantz Timer V2

(BR32V2)

The Brantz Timer is a Multifunctional Stopwatch specially designed for Historic Regularity & Jogularity Rallies, as well as other Historic and Modern Motorport.

The Brantz Timer maintains the same height and display size as the Brantz range of International Tripmeters, sitting alongside them perfectly as an invaluable piece of precise timing equipment.

Features Include:

- Real Time Clock - HH:MM:SS
 - 24Hr
 - 12Hr
 - 10Hr
 - SS = 100th's of a Minute
- Large 4 digit LED Stopwatch
 - MM:SS
 - SSSS
 - Decimal Seconds
- 4 Separate Stopwatch Modes:
 - Standard Stopwatch
 - Regularity Stopwatch
 - Jogularity Cumulative Stopwatch
 - Standard Cumulative Stopwatch
- Automatic Stopwatch Start
- Dimmable Display
- Connection Socket for Driver Display (BR321)
- Remote Reset Included
- Optional Plug Kit Version
- All Set Up Settings saved on power down

BRANTZ
Rallymeters

Set Up & Operating Instructions

1. Wiring:

- Connect up to the vehicles 12 volt power supply as directed by the label on the black power lead coming out of the base of the Rally Timer. This is BROWN to the POSITIVE Terminal and GREEN/YELLOW to the NEGATIVE Terminal.
- Connect straight to the vehicles battery posts via a **2 Amp fuse (BRFUSE - available separately from Brantz)** on the live (+12V) wire.
- It is important you always connect directly to the battery terminals rather than the chassis or fuse panel etc.

2. Mounting:

- For easy and removable mounting you can use Industrial Velcro Strips (*available from Brantz*)
- For a more permanent fix you can use the Rally Timer Mounting Plate (**BR32BK** – *available separately from Brantz*) to Screw or Bolt your Timer in place.
- Please do not drill into the case of the Timer as this will invalidate your warranty and may damage the circuitry inside.

3. Start Up:

On Power Up the upper display will show an initial status message.

r02-01

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Followed by a summary of the Clock Set Up Mode i.e

Cloc-1 : 24Hr : nn-SS : hAnd - *default setting*

(Standard Stopwatch : 24Hr Clock : Minute & Seconds : Manual Stopwatch Start)

After a variable period of time (message dependent) normal operation will begin with the upper display showing Time (**HH:MM:SS**).

Pressing any key while the start-up messages are being shown aborts the message sequence and begins normal operation immediately.

*NB. For a list of start-up messages and meanings please refer to the **Section 8**.*

4. Setting Time of Day:

- Press **Time Set | F1**
 - Press **F2** to toggle between:
 - **'t-rtc'** (Set Real Time Clock) **and**
 - **'t-Auto'** (Set Stopwatch Auto Start Time)
- Press **Time Set | F1** again to set the selected time or **C** to go back to normal operation

NB. Time setting is always done in 24Hr mode irrespective of Time Expression Configuration.

After selecting a time to Edit:

- Hour digits flash
 - Press **F1** or **F2** to adjust the hours; Hold either Key down to auto-repeat.
 - Press **F3** to move on to Minutes (or **C** to Go Back)
- Minute digits flash
 - Press **F1** or **F2** to adjust the minutes; Hold either Key down to auto-repeat.
 - Press **F3** to move on to Seconds (or **C** to Step back to hours)
- Second digits flash
 - Press **F1** or **F2** to adjust the seconds; Hold either Key down to auto-repeat.
 - Press **F3 to Accept Time** (or **C** to Step back to minutes)

5. Driver Display Unit

The 3 Pin Socket in the base of the Timer allows the connection of a Driver Display Unit which repeats the lower 'Stopwatch' display as an aid to the Driver during timed sections.

The Driver Display Unit is available as an extra from Brantz Rallymeters Pt Code: **BR321**

6. Settings:

Press **C** to enter the Configuration Menu, and use **F1 & F2** to scroll through the options shown in the table on pg4. LED flashes Red/Yellow when in the Configuration Menu

Press **F3** to go on to review/change the selected setting or **C** to go back to normal operation

NB. All setting sequences time out after several seconds of inactivity and revert to the current operating condition

Configuration Menu (Press C to enter the Configuration Menu):

Cloc	Stopwatch Operation Mode
Cloc-1	Standard Stopwatch
Cloc-2	Regularity Stopwatch
Cloc-3	Jogularity Cumulative Stopwatch
Cloc-4	Standard Cumulative Stopwatch
Rtc tE	Real Time Clock – Time Expression Format
24Hr	24 Hour Clock
12Hr	12 Hour Clock
10Hr	10 Hour Decimal Day
Hn-100	Clock & Stopwatch count in 100ths of a Minute
StP tE	Stopwatch – Time Expression Format
nn-SS	Minutes: Seconds
dEcSEc	Seconds
brt	Brightness Setting
brt-Lo	Minimum Brightness
brt-2	Medium Brightness
brt-Hi	High Brightness
brt-OFF	Switches both Displays Off
StpAuto	Stopwatch Auto-Start Enable
hAnd	Manual Operation of the Stopwatch
Auto	Stopwatch starts Automatically at pre-set time

Cloc – Stopwatch Operation Mode

Using **F1** & **F2** to scroll, you can choose which Stopwatch Mode you require and Press **F3** to Select the Mode or **C** to go back.

N.B. When the stopwatch is counting the 'C' & 'Time Set' buttons are inactive

Cloc 1 – Standard Stopwatch

Start, Stop, Reset, Hold Stopwatch (inc Time of Day Hold)

- Start the stopwatch by pressing the Remote Button (or Start/Stop Button on the fascia) at the Start of the Rally Stage.
- The stopwatch will count up in Seconds and then Minutes e.g. 02.23 is 2 mins 23 seconds.
 - When The Rally Timer stopwatch is counting, the LED on the 'Start/Stop' button should turn from RED to GREEN.
- At the end of the stage, again Press the Remote Button (or Start/Stop button on the fascia) once to pause the Stopwatch and also hold the Time for noting down.

- When the Rally Timer Stopwatch is paused, the LED on the 'Start/Stop' button will flash Red/Green.
- A second press of the Remote Button (or Start/Stop button on the fascia) will re-start the stopwatch from where it left off and the top display will return to the current time.
- If you hold down the Remote Button the Top Display will return to the Current Time and the Stopwatch will return to 00.00, alternatively press the 'RESET' button on the fascia.

Cloc 2 – Regularity Stopwatch

Start, Stop, Reset, 32 second Hold of Stopwatch (inc Time of Day) with automatic Restart in the background.

In this mode the stopwatch is always running internally and the Rally Timer Stopwatch displays will **HOLD** for approximately **32 seconds**, whenever the Remote Button is pressed. At this moment the stopwatch is **INTERNALLY RESET** to zero and **RESTART** counting from **00.00** thus immediately timing the next section.

- Start the stopwatch by pressing the Remote Button (or Start/Stop Button on the fascia) at the Start of the Rally Stage.
- The stopwatch will count up in Seconds and then Minutes e.g. 02.23 is 2 mins 23 seconds.
 - When The Rally Timer stopwatch is counting, the LED on the 'Start/Stop' button should turn from RED to GREEN.
- At your Timing Control Point, press of the Remote Button, this holds the Time and the Stopwatch for 32 seconds.
 - When the Rally Timer stopwatch is paused, the LED on the 'Start/Stop' button will flash Red/Green.

The 32 seconds *hold* period allows the Co-Driver to confirm the Time given by the Timing Marshal is correct.

- When the 32 seconds is up, the top display returns to the current time and the bottom display will display the 'Section Time' which commenced timing the last time the remote reset button was pressed e.g. 00.33
- This 32 seconds 'hold' can be interrupted by pressing the 'Start/Stop' button on the face of the unit. This is useful should you immediately need sight of the current time (Standard Rally Time) and the expired stopwatch time on that next section.
- If you press the 'RESET' button on the fascia the Top Display will return to the Current Time and the Stopwatch will return to 00.00

Cloc 3 – Jogularity Cumulative Stopwatch

Start, Stop, 32 Second Freeze of Stopwatch (inc Time of Day) with continued stopwatch counting in the background.

In this mode the stopwatch is always running internally and the Rally Timer Stopwatch displays will **HOLD** for approximately **32 seconds**, whenever the Remote Button is pressed. At this moment the stopwatch will **INTERNALLY CONTINUE COUNTING**, thus keeping track of the total/cumulative time.

- Start the stopwatch by pressing the Remote Button (or Start/Stop Button on the fascia) at the Start of the Rally Stage.
- The stopwatch will count up in Seconds and then Minutes e.g. 02.23 is 2 mins 23 seconds.
 - When The Rally Timer stopwatch is counting, the LED on the 'Start/Stop' button should turn from RED to GREEN.
- At your Timing Control Point, press of the Remote Button, this holds the Time and the Stopwatch for 32 seconds.
 - When the Rally Timer stopwatch is paused, the LED on the 'Start/Stop' button will flash Red/Green.

As with the Regularity Stopwatch the 32 seconds *hold* period allows the Co-Driver to confirm the Time given by the Timing Marshal is correct.

- When the 32 seconds is up, the top display returns to the current time and the bottom display will display the 'Total Cumulative Time' which commenced timing from the first 'Start' press.
- This 32 seconds 'hold' can be interrupted by pressing the 'Start/Stop' button on the face of the unit. This is useful should you immediately need sight of the current time (Standard Rally Time) and the expired stopwatch time on that next section.
- If you press the 'RESET' button on the fascia the Top Display will return to the Current Time and the Stopwatch will return to 00.00

Cloc 4 – Standard Cumulative Stopwatch

Start, Stop, Reset, Freeze Stopwatch (inc Time of Day) with continued stopwatch counting in the background.

- Start the stopwatch by pressing the Remote Button (or Start/Stop Button on the fascia) at the Start of the Rally Stage.
- The stopwatch will count up in Seconds and then Minutes e.g. 02.23 is 2 mins 23 seconds.
 - When The Rally Timer stopwatch is counting, the LED on the 'Start/Stop' button should turn from RED to GREEN

- At the end of the stage, Press the Remote Button (or Start/Stop button on the fascia) once to hold the Stopwatch and also hold the Time for noting down.
 - When the Rally Timer stopwatch is paused, the LED on the 'Start/Stop' button will flash Red/Green.
- A second press of the Remote Button (or Start/Stop button on the fascia) will release the hold function and the bottom display to show the 'Total Cumulative Time' since the initial start, and the top display will return to the current time.
- If you hold down the Remote Reset Button the Top Display will return to the Current Time and the Stopwatch will return to 00.00, alternatively press the 'RESET' button on the fascia.

Rtc-tE – Real Time Clock – Time Expression Format

The Clock can express time in 3 different formats:

- **24 Hour**
- **12 Hour**
- **10 Hour** – where the day is divided into 10 decimal hours with each hour containing 100 decimal minutes and 100 decimal seconds in a minute.
- **100ths of a Minute** – where the last 2 digits are displayed as 100ths of a minute on both the Real Time Clock and the Stopwatch. This mode is denoted by the single decimal point after the minutes on the Real Time Clock **00:00.00**

Midnight is 00.00.00 in ALL Modes

StP-tE – Stopwatch – Time Expression Format

The Stopwatch can in either of the following 2 formats:

- **nn-SS** : In this format the Stopwatch counts up in Minutes and Seconds **00.00**
- **dEcSEc** : In this format the decimal point disappears from the lower display and the stopwatch will count up in Seconds only, **0**. *This facility is useful for historic rallying or other activities which require simple seconds count.*

brt – Brightness Setting

The Brightness Setting has 4 different levels to suit your requirements:

- **brt-Lo** : This is the lowest visible setting available
- **brt-2** : Medium Brightness
- **brt-Hi** : This is the highest brightness Setting
- **brt-OFF** : This Switches both Displays OFF

brt-OFF Acts solely as a command to switch off the displays; pressing and key restores them at the previously set brightness level. **brt-OFF** is also cancelled after powering down the unit.

StpAuto – Stopwatch Auto Start Enable

This setting allows you to activate the Auto Start facility of the Stopwatch, this facility enables you to pre-enter a time for your Stopwatch to automatically start timing (See Section 4: Setting Time of Day).

- **hAnd** : This is manual Operation of the Stopwatch
- **Auto** : This enables the Automatic Start of the Stopwatch

7. Accessories:

- Fuse Kit (**BRFUSE**) – *Essential Item*
- Plug Kit (**BR43-RT**) – *Factory Fitting Available*
- Driver Display Unit (**BR321**)
- Foot Switch (**BR44F**)
- Sun Screen/Night Filter (**BRSS32**)
- Mounting Plate (**BR32BK**)
- Mounting Velcro
- 12V Aux Plug (**BR12VAX**) – *Factory Fitting Available*

8. Start Up Messages:

Message:	Description:
AutoEn	The Automatic Stopwatch Function is Enabled
Lo bAt	The Clock Back-Up Battery Voltage is Low – <i>Return to Brantz for a Service</i>
rSEt	A Manual Reset has been performed – all settings have been removed
Cl rst	The Timer has performed a Factory Reset so resolve an issue – this is most likely due to a completely dead or missing clock battery.

9. Manual Reset

The clock and configuration settings can be forced to reset their default values by pressing and holding down the **Reset | F2** key while power is applied. This is acknowledged by the ‘rSEt’ start up message.