



# GTR TACHO INSTRUCTION MANUAL

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## DESCRIPTION

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The GTR Tacho is a self-contained electronic engine monitoring system that displays RPM, coolant temp, oil pressure, battery voltage and also with the option of up to 2 x exhaust pyrometers. The compact 3-1/8" x 3-1/8" size is very easy to mount. The GTR Tacho's extremely rugged construction allows it to perform well in almost any racing environment.

The GTR Tacho recalls and displays the highest overall RPM and gives total engine RPM, coolant temp, oil pressure and exhaust temp (if exhaust temperature option is used) from the race start to finish in a simple graph form. The Tacho works on 4, 6 & 8 cylinder engines with either magnetos or distributors and is powered by a common 9 volt battery or can be hard wired in to and 6-12 volt supplies with simple wiring and sensor installation.

## INSTALLATION

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The kit comes with mounting wings that attach to the Tacho housing with 4 x M4 x .7mm button screw and can be fixed to the vehicle with 2 x dzues fastners. The unit should be securely mounted in the cockpit in a good viewing position and clear from interfering with any of the vehicle controls.

### Wiring Instructions:

Red	→	Batt Pos (8-16V)
Brown	→	Oil Power
Blue	→	Water Temp
White	→	Aux 0
Green	→	Pryo 0 Neg
Pink	→	Pryo 0 Pos
Yellow	→	Tacho
Black	→	Batt Neg/Earth
Grey	→	Oil Pressure
Violet	→	Aux 1
Orange	→	Pryo 1 Pos
Light Green	→	Pryo 1 Neg

### Tach Oil Pressure

Brown	→	White
Grey	→	Red
Black	→	Black

## OPERATION

### Turning on:

The Tacho will turn on automatically when the engine is started, but can be manually turned on by pushing the red button. The unit will display the GTR symbol for 6 seconds before displaying the main screen (*Figure 2.*) and automatically turn off 5 minutes after the engine is turned off. When it turns off it will still retain its recall memory.

When the unit is turned on press the right arrow button, this will take you to the main menu see (*Figure 3.*) to select any of the below features scroll down using the down arrow button then press the right arrow button to select. If up or down arrow is pushed on the home screen this will brighten or dim the screen back light. If the up and down arrows are pushed at the same time this will change the back ground colour.



Figure 1.



Figure 2.

### Statistics:

This feature gives the recall on all parameters measured throughout the race (Engine RPM, Oil Pressure, Coolant Temperature, Pyro Temperature), and recalls in a simple graph format. Once you have selected statistics (*Figure 3.*), you can select RPM Graph (*Figure 4.*). When viewing the RPM Graph you can see RPM on the left side of the Graph and time horizontally along the bottom. You can use the up / down arrows to scroll back in time to view the RPM for the entire engine run time.



Figure 3.



## Statistics *continued:*

You can also select either Oil Pressure; Water Temperature; Pyro Temperature (*Figure 5,6,7.*) and view an Oil Pressure; Water Temperature; Pyro Temp Graph. On the left hand side of the Graph you can see the Oil Pressure; Water Temperature; Pyro Temperature and time is displayed horizontally along the bottom. You can use the up / down arrows to scroll back in time to view the Oil Pressure; Water Temperature; Pyro Temperature for the entire engine run time.



Figure 4.



Figure 5.

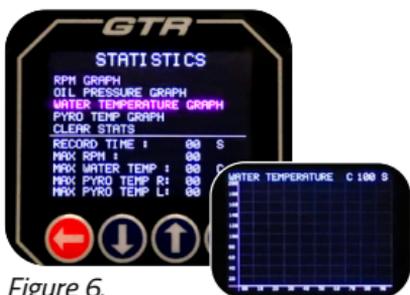


Figure 6.



Figure 7.

Select 'clear stats' (*Figure 8.*) to clear statistics. If this is not cleared this will roll over as the Tacho has a 2 hour recall time.

Please note at the bottom of the Statistics Menu there is a 'Record Time' which details the length of Engine run time.



Figure 8.

'Max RPM' which details the maximum RPM, 'Max Water Temp' which details the maximum water temperature and 'Max Pyro Temp' which details the maximum pyro temperature reached whilst in operation.

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### Set back light: (Figure 9.)

This enables the screen brightness to be adjusted. This is adjusted by using the up and down arrow buttons to the desired setting (Figure 10.) then by pressing the right arrow button this selects the setting and will take you back to the main menu.



Figure 9.



Figure 10.

### Set RPM warning: (Figure 11.)

This feature is for an RPM warning. This is adjusted by using the up and down arrow buttons to the desired setting (Figure 12.), then by pressing the right arrow button this sets the setting and will take you back to the main menu.



Figure 11.



Figure 12.



### Set oil pressure warning: (Figure 13.)

This feature is a low oil pressure warning which is adjusted by using the up and down arrow buttons to scroll to the desired setting. Press the right arrow button to select the setting (Figure 14.) and then the Tacho will automatically return to the main menu.



Figure 13.



Figure 14.

### Set water temp warning: (Figure 15.)

This feature is a high temperature warning which is adjusted by using the up and down arrow buttons to scroll to the desired setting (Figure 16.). Press the right arrow button to select the setting and then the Tacho will automatically return to the main menu.



Figure 15.



Figure 16.

## OPERATION

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### Set ignition type: (Figure 17.)

To set Tacho feature up, turn the unit on and press the right button, this will take you to the main menu. Scroll down to 'set ignition type' using the down arrow button, then press the right arrow button, select 'ignition type'.



Figure 17.

### Set idle RPM: (Figure 18.)

This feature determines the RPM at which the recall records from. To prevent unwanted recording during warm up and engine idling etc. This is adjusted by using the up and down arrow buttons to scroll to the desired setting. Press the right arrow button to select the setting and then the Tacho will automatically return to the main menu.



Figure 18.

### Set Pressure and temp units: (Figure 19.)

This feature allows the pressure units to be changed between PSI and Bar and Temperature units to be changed between C° and F°. This is adjusted by using the up and down arrow buttons to scroll to the desired setting. Press the right arrow button to select the setting and then the Tacho will automatically return to the main menu.



Figure 19.



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