

Programming the R34 MFD

Author - "Ned" (with web help from anyone whose pictures or words I stole)

The MFD



DISP



Display button, takes you into a menu to set brightness, auto-dimming, gauge peak tracking, and to turn the display off.

RETURN = has many similar functions to mode button, but only toggles 2 modes (???)

MENU



Menu button takes you to the options available for that mode

MODE

BOOST		0.00 kg/cm ²
THROTTLE		0%
INJECTOR		0.0%
OIL-TEMP		83 °C
W-TEMP		88 °C
EXH-TEMP		--- °C
INT-TEMP		32 °C



Mode button cycles you through the available modes (multiple sensors, dual virtual gauges, single gauge with memory)

The MFD will not allow you to make changes while road speed is above about 20km/hr, but you can do so once speed drops below about 5km/hr.

Mode 1 – Multiple sensors

This mode allows you to see the values for all available sensors.

GTR MFD's show;

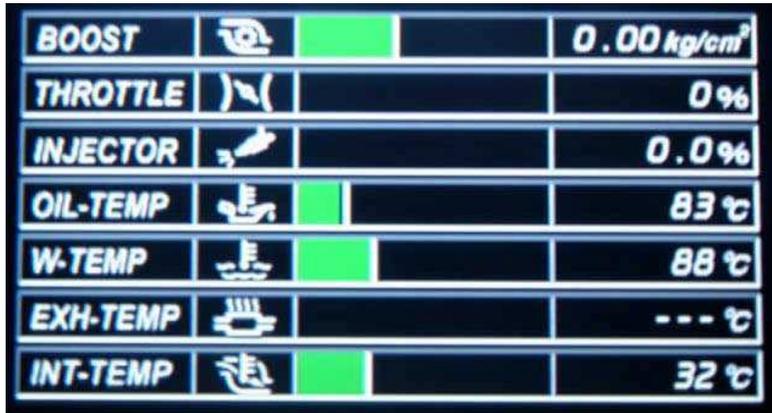
- boost,
- throttle,
- injector duty cycle,
- oil temperature
- water temperature,

Vspec and UK cars MFD's show;

- boost,
- throttle,
- injector duty cycle,
- oil temperature
- water temperature
- exhaust temperature
- intercooler temperature.

Nismo offer an upgrade (MFD 2) which offers a higher max boost reading, some additional gauges, a longer memory (with downloadable data via RS232), and lap timer.

- The white line on the bar graph during mode 1 is a peak hold that will show the highest value achieved (reset this by pushing the **joystick** button in).
- The oil and water temperature values will only register ---C until the temp is up to 70C, then they show current temp.



Pressing the **MENU** button when in mode 1 allows you to see the option screen again, with only the red zone and rev light options available. Use the **joystick** to navigate left or right to the **RED ZONE** option and **press the joystick** again to bring up the red zone screen. This lets you set warning points for each monitored sensor.

To set the warning points, use the **joystick** to navigate up and down the sensors (the current selected one is highlighted in yellow as on the screen shot), then push the **joystick** left or right to change the levels to higher or lower values. Once finished, use the **joystick** to highlight the **END** button and push the joystick again.

This setting only has an effect when you exceed the set point for any sensor as once exceeded the



screen will switch back to Mode 1 from any other screen, and highlight which sensor went over the limit.

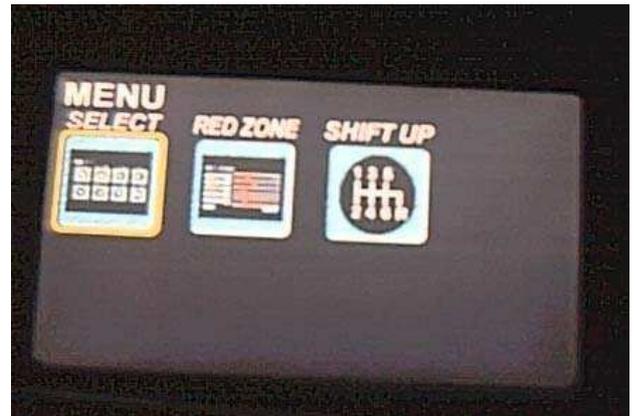
Mode 2 – Dual virtual gauges



This mode lets you monitor any 2 gauges simultaneously (1 is permanently stored in RAM, the other 3 are use selectable). If you disconnect the battery or pull the fuse, you will find only the default pair available.

While in this mode, pushing **menu** will take you to the options available (gauge selection, and shift light setting).

To change gauges seen, navigate left or right to gauge selection with the **joystick**, then select it by pushing the **joystick** button in.



Create dual gauges button

From the screen you can use the **joystick** to navigate to a preferred pair of gauges.

If you have reset your MFD (via diagnostics or disconnected battery) twin 2 to 4 will be blank and programmable.

To programme you own combination of gauges, use the **joystick** to navigate to the button on the lower left of the screen and click the **joystick**

This takes you to another screen that lets you select the gauges to monitor, which side of the pair they are on, and what twin number they are.

Use the joystick to scroll to the pair to edit (it is then highlighted with a yellow border as shown), then click the joystick to enter edit mode. The screen changes to show the available gauges, and a green block appears in whichever side has been chosen (left or right). Select the left or right side with the joystick first, and click to edit. Next select the gauge for that side with the joystick, and click to enter. Repeat this for the other side, and other twin pairings.



Mode 3 – Gauge plus memory



This mode lets you see 1 gauge and the last 30 secs of data from that sensor, with a peak hold function and peak value displayed in the blue segment (this does not apply to the throttle position sensor shown)



Pushing menu while in mode 3 lets you navigate to the gauge select screen, which lets you nominate which single gauge, should be displayed.



Display button

Pushing the display button lets you change some of the options



Auto dimming with headlights on/off

MFD screen on/off

Gauge "tail"

Screen brightness

Use the joystick to navigate to the option desired, and then push the button in to toggle the options.

- Auto-dimming when toggled on means that the screen brightness changes when your headlights are on.
- MFD screen when toggled turns the whole unit off (for optimum night vision?)
- Gauge tail when toggled on, shows a green "tail" behind the red gauge pointer.
- Screen brightness when selected lets you use the joystick to increase or decrease the brightness

Shift up option



When the menu button is selected, you can navigate to the shift lift screen, and then select it by pushing the joystick button.

Using the joystick button, you can increase or decrease the revs set point that the MFD shift light LED flashes at.



Hidden options

The following were all found on the net so apologies for not referencing the appropriate people.

Calibration of throttle position sensor

- 1) Turn the key to the "OFF" position
- 2) Press and hold "RETURN" and "MODE" switches on the MFD at the same time.
- 3) Turn the key to the "ON" position while still holding down the "RETURN" and "MODE" switches
- 4) When the opening screen with the "GT-R logo" appears, release the "RETURN" and "MODE" switches, and click the joystick 5 times within the next 3 seconds.
- 5) Set the throttle gauge calibration on screen as below.

Fig. 1

"Click JOYSTICK when the accel is 0%."

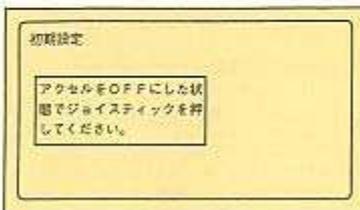


Fig. 2

"Click JOYSTICK when the accel is 100%."

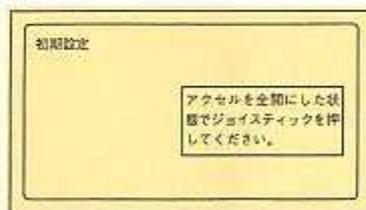
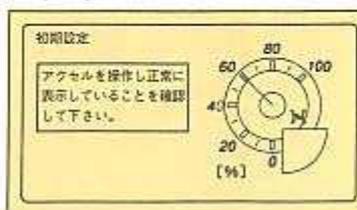


Fig. 3

"Check the gauge shows proper %."



Diagnostic mode

- 1) Turn the key to the "OFF" position
- 2) Push and hold the joystick
- 3) Turn the key to the "ON" position while still holding down the joystick
- 4) Release the joystick at least 1 second after the "GT-R logo" appears.
- 5) Click the joystick 5 times within the next 3 seconds.

This will show which sensors are functioning and have readings.

