INSTRUCTIONS MANUAL

RV0 10/24

ODG

UPGRADE PACK

INSTRUMENTS CLUSTER

ELECTRIC DUAL GAUGES #136.16.01

PRESENTATION

The instrument with a double indicator was developed to simultaneously display both the oil temperature and the fuel level within a single 100mm gauge.

This instrument has translucent lighting with 7 selectable colors.

With indicators for turn signals, high beams, oil, and brake.

To control the lighting intensity (dimmer function), it is necessary to install it together with any ODG speedometer or the Dimmer Module code ODG 148.0.0.0.0, which must be purchased separately.

INSTALLATION

The installation is relatively simple. However, it is recommended that it be performed by a professional with experience in automotive electrical systems and the necessary tools.

Use a circuit test light to identify the function of the original cables of the old panel connector and other necessary signals.

We recommend to avoid soldering cable joints, as this makes the joint rigid and may cause the cable to break.

The instrument can be fixed directly to the panel, using the included mounting clip.

The configuration key should be fixed in the chosen location using the self-adhesive tape. Clean the surface where the key will be fixed well to ensure better adhesion.

White Cable / Lighting Signal - The White cable of the main harness is responsible for lighting the panel. It must be connected directly to the headlight switch (half light / taillights) BEFORE the vehicle's original rheostat / dimmer.

Yellow Cable / +12V battery - The Yellow cable of the main harness is part of the panel power circuit. It must be connected directly to the battery positive (line 30). It is responsible for maintaining the instrument power supply and when the ignition is turned off, it allows the pointers to return to the beginning of the scale and the odometer values to be saved. As soon as the pointers return, the yellow cable circuit is turned off internally, completely interrupting battery consumption to prevent it from discharging.

Red Cable / +12V ignition - The red cable of the main harness is responsible for activating the instrument. It must be connected to the +12V post-key (line 15) that does not turn off when the starter motor is activated.

The original instrument harness normally has an accessory +12V, but this turns off during the start, causing the pointers to start twice and may even corrupt the panel's memory. It should not be used.

If the* instrument *displays fluctuations in the indications, it is likely that electromagnetic interference is occurring and causing such fluctuations. In this case, check for wear on the spark plugs, spark plug wires, rotor and distributor cap. Always use suppressive spark plug wires and resistive spark plugs.

WE DO NOT RECOMMEND INSTALLING THIS PANEL ON VEHICLES WITH POINTS DISTRIBUTOR due to the high noise level generated by this type of distributor.

SETTINGS

Fuel level indicator:

To configure the fuel level sensor, the instrument must have its electrical installation ready.

Standard, pre-configured floats:

1 - With the ignition and headlights off, press the configuration button.

2 - Turn on the ignition (no need to start), the reserve LED will flash (quickly), while the needle moves along the scale in ¼ increments.

Each needle position represents one of the 4 sensor models, according to the previous table.

	EMPTY	HALF	FULL
SENDER 1	70	35	6
SENDER 2	8	17	34
SENDER 3	2	46	90
SENDER 4	260	150	40
CUSTOM			

3 - When the needle is in the position corresponding to the sensor used, release the button, the reserve LED will turn off and then flash twice in quick succession, finally the needle will move along the entire scale indicating the end of the configuration.

The configuration will be saved in the device's memory.

Other sensors:

To use a sensor with a resistance value different from those listed in table 1, it will be necessary to empty and fill the tank with the sensor installed.

This feature allows the use of several different sensor models and tank sizes.

1 - With the fuel tank EMPTY and the ignition and headlights off, press the configuration button.

2 - Turn on the ignition (no need to start), the reserve LED will flash (fast), while the pointer will move along the scale in ¼ increments.

3 - When the pointer is in the F (FULL) position, release the button, the pointer will go to the E (EMPTY) position and the reserve LED will flash.

4 - Press the button and wait for the reserve LED to turn off. At this point, the instrument will memorize the resistance value for an empty tank.

5 - Release the button, the pointer will go to the 1/2 tank position and the LED will start flashing again.

6 - Fill the tank halfway.

7 - Press the button and wait for the reserve LED to turn off. At this point, the instrument will memorize the resistance value for a half tank.

8 - Unground the purple cable, the pointer will go to position F (FULL) and the LED will flash again.

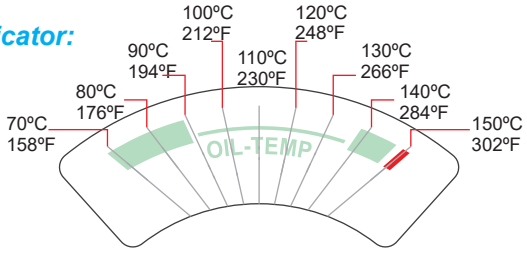
9 - Fill the tank.

10 - Press the button and wait for the reserve LED to turn off. At this point, the instrument will memorize the resistance value for a full tank.

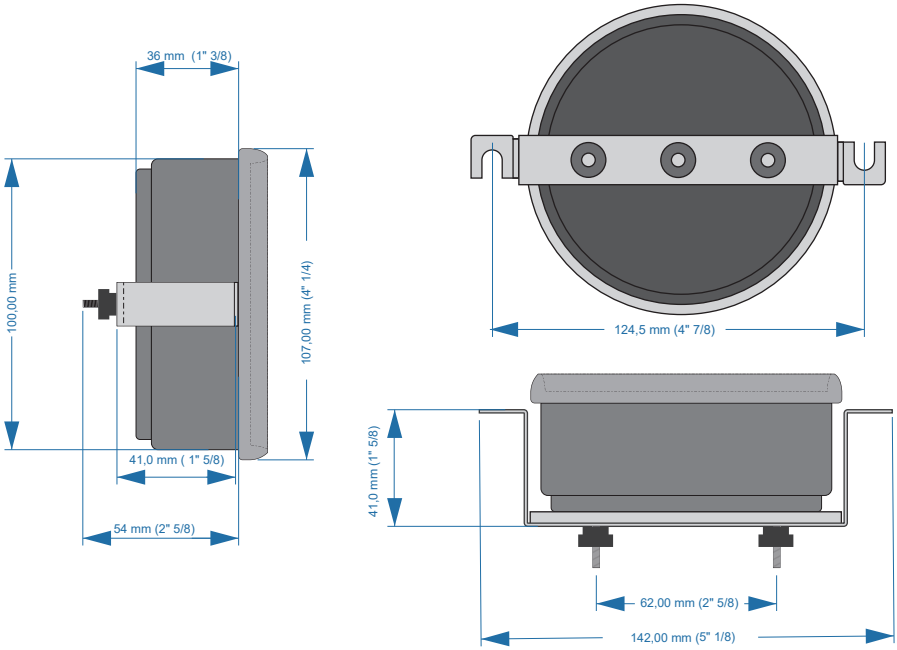
11 - Release the key, the pointer will return to position E (EMPTY), the reserve LED will turn off and then flash twice quickly. Finally, the pointer will move across the entire scale indicating the end of the configuration.

The configuration will be saved in the device's memory.

Oil temperature indicator:



DIMENSIONS:



PACKAGE CONTENT

1 Electric Dual Gauge
1 Main Harness
1 Indicators Lights Harness
1 Configuration Key
1 Mounting Bracket
1 Instructions Manual
1 Warranty Certificate
1 ODG Sticker

TECHNICAL SPECIFICATIONS

Supply Voltage: . . . . . 9 a 16 Vdc
Maximum Fuel Level Resistance: . . . . . 1k ohm
Compatible Temperature Sensor: MTE4054
Operating Current: . . . . . 750mA (max)
Resting Current: . . . . . < 1mA
Cables: . . . . . 20AWG x 20"

ELECTRICAL CONNECTIONS

MAIN HARNESS

Red:	(+) Ignition Positive (Line 15)
Yellow:	(+) Direct battery positive (Line 30)
White:	(+) Headlight switch
Black:	(-) Ground (chassis or battery)
Brown:	Brightness intensity control input(DIMMER)
Purple:	Color control Input
Blue:	Temperature Signal Input
Pink:	Level Sensor Signal Input

SIGNALS HARNESS

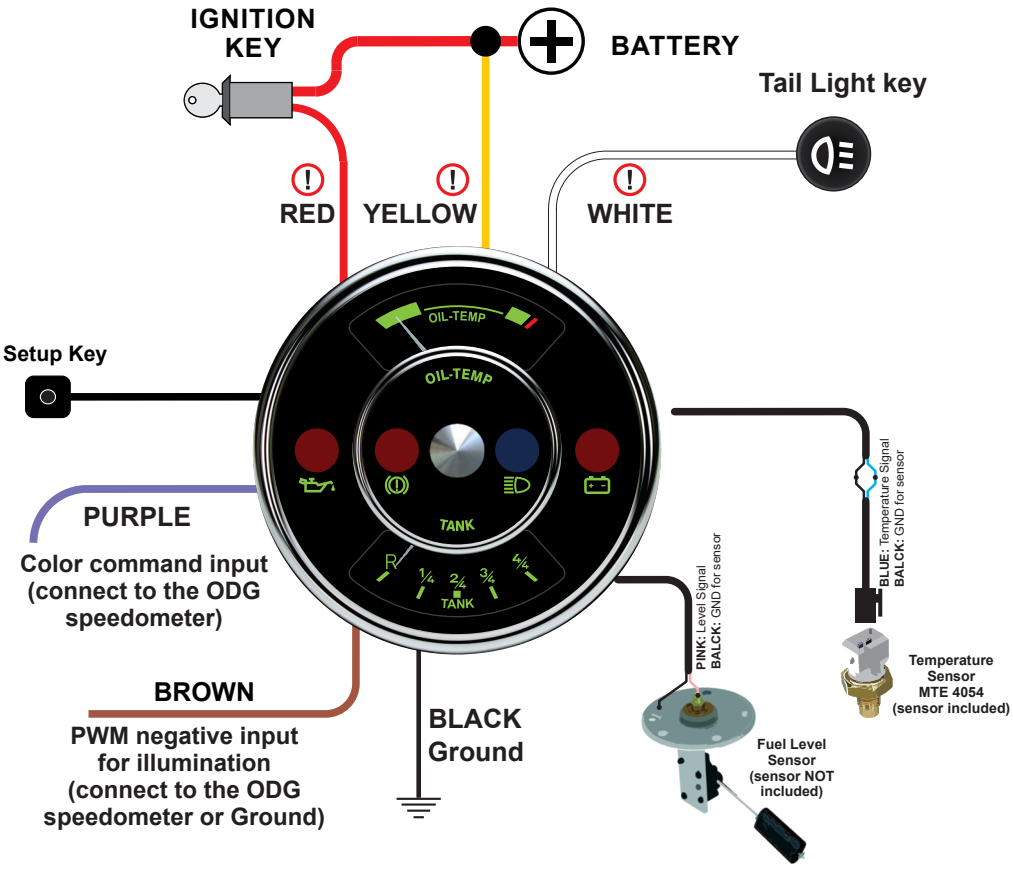
Orange:	(-) Oil Pressure Switch
Blue:	(+) High Beam
Purple:	(-) Breaks
Pink:	(-) Alternator

*The **RED** cable must be connected to the +12V ignition that does not turn off when starting, preventing the device from starting when turning the key and trying to start again when starting.*

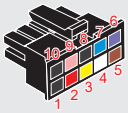
*The **YELLOW** cable must be connected to the +12V battery (line 30), as it is responsible for maintaining the device's power supply and allows the pointer to return to its initial position after the ignition is turned off.*

*The **WHITE** cable must be connected before the potentiometer/rheostat (if the vehicle has an original dimmer). Directly to the cable that comes out of the Headlight/Taillight switch that powers the external lamps and does not have brightness control.*

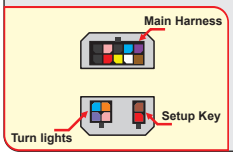
ELECTRICAL DIAGRAM:



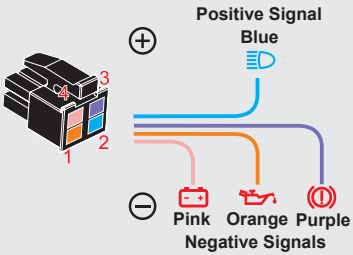
MAIN HARNESS - 10 Ways

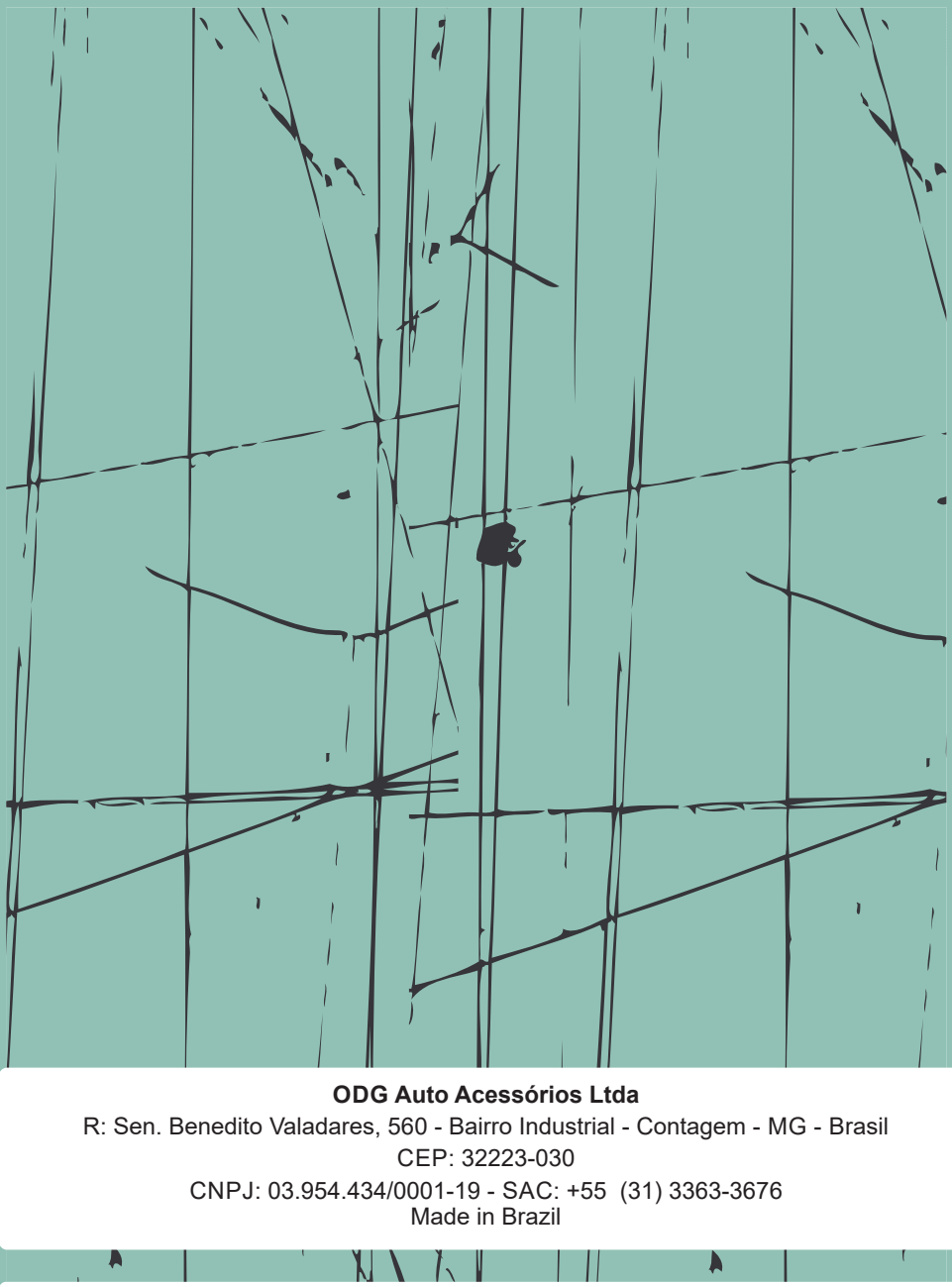


1 - Black	GND input
2 - Red	+12V Ignition
3 - Yellow	+12V Battery
4 - Branco	+12V Taillight
5 - Brown	Dimmer Input
6 - Purple	Color Command Input
7 - Blue	Temperature Signal
8 - Black	GND to Temp. Sensor
9 - Pink	Fuel Level Sensor Signal
10 - Black	GND to Level Sensor



INDICATORS LIGHTS HARNESS - 4 Ways





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