



I-Meter X100/Custom Models *DIGITAL MULTIPLE INDICATOR*

Thank you for choosing a PZR product. The i-meter X100 is a next-generation time/tilt/temperature/voltage indicator. It features a high-brightness IPS color TFT touchscreen display that allows you to view the following values individually or simultaneously: -TIME - TILT (Roll – Pitch) - BATTERY VOLTAGE

Furthermore, thanks to the GPS1, OBD1, TPMS1, and BOX1 accessories (sold separately), you can also detect:

GPS MODULE 1 (values detected by the GPS antenna):

- GPS SPEED
- COMPASS
- ALTITUDE
- DISTANCE TRAVELED
- ENGINE HOUR METER
- GPS COORDINATES

OBD1 MODULE (values detected by the diagnostic port of the OBDII-equipped vehicle with CAN-BUS):

- ENGINE SPEED (RPM)
- SPEED
- ENGINE TEMPERATURE (ECT)
- THROTTLE OPEN (TPS)
- INTAKE AIR TEMPERATURE (IAT)
- MASS AIR FLOW (MAF)

TPMS1 MODULE (values detected by the sensors installed on the tires):

- TIRE PRESSURE
- TIRE TEMPERATURE

BOX1 MODULE (values detected by installed sensors):

- LAMBDA (10 - 20 AFR S. Lambda Narrowband Cod. LAMNB, S. Lambda 4.9 Wideband + interface Cod. LAM49, we recommend using a 4.9 Lambda probe)
- OIL PRESSURE (0 - 10 Bar OIL pressure sensor Cod. POIL1)
- TURBO (-1 / 3 Bar Turbo sensor Cod. TURB1)
- EXHAUST GAS TEMPERATURE EGT (0 – 1000 °C K thermocouple + interface Cod. KEGT1)
- OIL TEMPERATURE (0 – 150 °C temperature sensor TEMP1)
- THROTTLE OPEN (TPS)
- ENGINE TEMPERATURE (0 – 150 °C temperature sensor TEMP1)
- ENGINE SPEED (RPM)

Technical features:

- Power supply from 7 to 32 Volts
- IPS TFT display 240x240 65K colors
- 32-bit dual-core processor 240MHz
- Voltmeter 6/26 Volts, 1/10 Volt resolution
- Dimensions: 52mm diameter X 17mm
- Consumption less than 100 mA
- Capacitive touch screen
- Inclinator +/-90 degrees with +/-1° accuracy
- Units of measurement: °C/°F – Km/h/MPH – Bar/Psi/Kpa

The inclinometer screen is created by displaying your exact vehicle (for custom models) or the side and rear outline of a specific vehicle type, selectable from the following: SEDAN – SMALL CAR – JEEP – PICK-UP (for the universal X100 model) in your preferred color. You can upload the exact shape of your vehicle; simply download the relevant file for your vehicle from pzr-tech.it (if your vehicle is not listed, please contact PZR).

Various specific kits are available to facilitate the installation of the I-Meter X100 on your vehicle. Using these plastic adapters, the device will integrate perfectly with your vehicle interior (if the kit for your vehicle is not available, please contact PZR). It can also be mounted in any commercially available 52mm instrument panel holder.

You can also customize the ignition screen with your own logo or the logo of the vehicle brand, etc...

1) INSTALLATION

1.1) MECHANICAL INSTALLATION

Note: Remember to customize the images (car silhouette/custom logo) before installation, as you will not be able to access the side USB connector afterwards.

-Insert the device into the 52mm instrument panel holder (Please note that PZR offers specific air vent grille replacement brackets for various vehicle models).

-Rotate the device so that it is perfectly horizontal once installed.

-Apply the supplied adhesive around the device adjacent to the instrument panel holder to glue it and keep it secure. Press the adhesive repeatedly to ensure it adheres between the two surfaces.

1.2) CONNECTIONS:

To power the device, simply connect the RG45 cable supplied with the 2 RED and BLACK cables to the X100 display module: RED to a positive 12V under key and BLACK to the vehicle ground.

1.3) INSTALLING MULTIPLE I-METER DISPLAY MODULES

Multiple X100 devices can be connected together to monitor multiple screens simultaneously. Simply connect the X100 modules in cascade using the supplied RG45 cable using one of the two connectors on the back of the X100 devices.

In this case, simply use the RG45/12V adapter and connect it to any of the X100s.

1.4) OBD1-TPMS1-BOX1 INTERFACE INSTALLATION (sold separately)

To connect the various interfaces, follow the attached diagram.

2) VIEWING:

When you turn it on, the last screen you were on before you turned it off will be displayed.

To switch between screens, simply swipe your finger from right to left or vice versa on the display.

2.1) “TIME” SCREEN

On the "TIME" screen, you can select whether to add the voltage value by briefly pressing the display. You can also choose the dial type from three models:

- HAND-TUNED DIAL WITH YELLOW BACKGROUND (RETRO STYLE)
- HAND-TUNED DIAL WITH WHITE BACKGROUND (MODERN STYLE)
- DIGITAL DIAL (this screen also displays the date)

To select the desired dial, simply swipe your finger from top to bottom or vice versa on the display.

2.2) “TILT” SCREEN

In the "TILT" screen, two silhouettes of your car will be displayed in the color you set and with the relative current inclination, on the left the lateral silhouette (Pitch) and on the right the rear silhouette (Roll), the Pitch and Roll values will also be displayed numerically in a box above the relative silhouette.

2.3) “TPMS” (TYRE PRESSURE MONITORING SYSTEM) SCREEN if TPMS1 interface is connected:

The "TPMS" screen will display the pressure, temperature, battery level and signal strength data received from each sensor in a screen divided into "4 sections" defining the position of the sensor for each tire.e di ogni pneumatico.

2.4) "COMPASS" SCREEN if GPS1 interface is connected:

The "COMPASS" screen will display direction, altitude, and GPS coordinates.

2.5) REMAINING SCREENS

You can choose the dial type from three models:

- HAND DIAL WITH BLACK BACKGROUND
- HAND DIAL WITH WHITE BACKGROUND
- DIGITAL DIAL

To select the desired dial, simply swipe your finger from top to bottom or vice versa on the display.

3) CONFIGURATION

To enter the settings menu, hold down the display until it goes completely black. When you release it, four icons for the relevant settings will appear, only in the “SPEED GPS” screen an intermediate screen will be displayed where you can choose whether to reset the distance traveled and the hour meter or enter the menu.

3.1) SETUP:

- Press the "PENCIL/KEY" icon.
- You will be able to set the backlight level and the temperature units (°C/°F), speed (km/h/mpH), and pressure (bar/psi/kPa).
- Select your preferred backlight level or units of measurement.
- Press "Exit".

3.2) SCREEN SETUP

- Press the "GAUGE" icon.
- The settings for the various screens available on the device will appear.
- To scroll through the various screens, swipe your finger from right to left or vice versa on the display.
- To enable or disable the screen, tap the screen icon. A red X will appear above the screen if it is disabled, otherwise it will be enabled.
- The various settings available for the corresponding screen will be displayed on the right side:

3.2.1) CLOCK SCREEN SETUP

- Press the "Set" button.
- The HOURS setting will appear; select the correct hours using the + and - buttons and press "Next."
- The MINUTES setting will appear; select the correct minutes using the + and - buttons and press "Next."
- The DAY setting will appear; select the correct day using the + and - buttons and press "Next."
- The MONTH setting will appear; select the correct MONTH using the + and - buttons and press "Next."
- The YEAR setting will appear; select the correct year using the + and - buttons and press "Next."
- To exit the time setting, simply press "Exit" at any time.

3.2.2) INCLINOMETER SCREEN SETUP

- To calibrate the inclinometer, position the vehicle on level ground and press the "Calibrate" button. The device will prompt you to wait a few seconds before returning to the main screen. Do not move or sway the vehicle during this phase; the device will calibrate itself to allow for precise tilt measurement.
- To select the vehicle type and color, press "Car."
- The silhouettes of the selected vehicle will appear. To change the color, simply swipe from right to left or vice versa. To change the type (SEDAN – SMALL CAR – PICK-UP – JEEP), simply swipe from top to bottom or vice versa. If a customized vehicle has been loaded (read chapter 4), only the color can be changed.
- Once you have selected the desired color, press "OK."

3.2.3) LAMBDA SCREEN SETUP

- Press the "Angle" button to set the angular aperture of the needle dial on the corresponding screen. Press "+" to increase it and "-" to decrease it. Press Exit to exit.
- Press the "Sensor" button to set the type of lambda sensor installed. Select "NARROWBAND LAMBDA SENSOR" for a narrowband lambda sensor (not very accurate), or "4.9 WIDEBAND LAMBDA SENSOR" for a wideband lambda sensor (very accurate).

3.2.4) SETUP OF THE REMAINING SCREENS

- Press the "Angle" button to set the angle of the needle dial. Press "+" to increase it and "-" to decrease it. Press Exit to exit.
- Press the "Minimum" button to set the minimum value on the needle dial. Press "+" to increase it and "-" to decrease it. Press Exit to exit.
- Press the "Maximum" button to set the maximum value on the needle dial. Press "+" to increase it and "-" to decrease it. Press Exit to exit.
- Press the "Limit 1" button to set the lower limit of the red band on the needle dial. Press "+" to increase it and "-" to decrease it. Press Exit to exit.
- Press the "Limit 2" button to set the upper limit of the red band on the needle dial. Press “+” to increase it and “-” to decrease it. Press Exit to exit.

3.3) LANGUAGE CHOICE

- Press the "WORLD" icon
- The national flag of the corresponding language will appear on the display to change, simply swipe your finger from right to left or vice versa on the display.
- Once you have selected the desired language, press "EXIT".

3.4) EXIT SETTINGS MENU

- Press the "EXIT" icon to return to the main screens.

4) CAR LOADING DISPLAYED ON TILT SCREEN

To display your vehicle on the TILT screen, follow these instructions:

Download the file for your vehicle from pzz-tech.it (if it's not available, contact PZR).

Connect the device to a PC using a USB-C cable and place the .pz0 file in the generated mass storage.àassa generato il file .pz0

5) CUSTOMIZING THE HOME SCREEN

-To display your own custom startup screen instead of the PZR manufacturer logo, simply connect the device to a PC via a USB-C cable and place a 24-bit 360x360 pixel .bmp image file into the resulting mass storage.

Any image with different characteristics will be discarded and the default screen will be displayed.