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# **TPMS Gauge - User Manual**



## **Proprietary Information**

Please read this User Manual carefully before using this product.

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### **Description of Device**

- 1. There are 3 buttons for navigating the screens through an intuitive menu system.
- 2. Back-lighting can be controlled through the panel lamp dimmer input through the menu screen. A deadfronted warning indicator is positioned above the graphic display window and is capable of illuminating as an amber or red warning.
- 3. This user guide is intended to help you understand functionality of the C-COM 2G module.

### **Main Screens**

LEFT HOLD will start 2.5 second automatic rotation decrementing through Tire position, then Axle position. When on the lowest Axel-Tire position, it will then repeat from highest Axle-Tire position. ANY button press will stop rotation.

automatic rotation incrementing Tire position, then Axle position. When on the highest Axle-Tire position, it will then repeat from lowest Axle-Tire position. ANY button press will stop rotation.



HOLD CENTER BUTTON (Takes You To Setup And Info Screens)

## **Setup And Info Screens**



## **Additional Displays**



## **Pop-up Warnings**







### **POWER-UP SCREEN**

#### Description

- Performed when power is turned on. Back-light turns on.
- All-LCD segments screen displays for 1.5 seconds, then Valor logo screen displays for 1.5 seconds.
- Amber LED is on for 1.5 seconds, and then Red LED is on for 1.5 seconds.
- After All-LCD segments screen (3 seconds from power on) display will go to a TPMS Initializing Screen.

#### LED

 Amber LED is on for 1.5 seconds, and then Red LED is on for 1.5 seconds.

#### **Buttons**

No function.

# TPMS Initializing

### **TPMS INITIALIZING SCREEN**

#### Description

 Performed when power is turned on following power-up screen. When same tire location is received twice (assumes all tire locations have been transmitted in rotation) or same tire location is not received for 20 seconds, then exits to Main Screen.

#### LED

Off.

#### **Buttons**

No function.

















### **MAIN SCREEN**

#### Description

- Displays tire location, tire temperature and tire pressure. Axle position number is displayed in center.
- Tire position is filled within graphic based on position.
- Tire axle and position display is learned and populated continually.
- If a temperature warning is active for tire location, warning graphic is displayed and temperature display value is highlighted.
- If a pressure or leak warning is active for tire location, warning graphic is displayed and pressure display value is highlighted.
- Temperature value is display in nearest whole Fahrenheit (F) if English units selected, or nearest whole Celsius (C) if Metric units selected.
- Pressure value is display in nearest whole pound per square inch (PSI) if English units selected, or nearest whole kilo pascal (kPa) if Metric units selected.
- TIRE COMM warning is displayed if no sensors are received or all sensors have lost reception for 100 seconds.

- Left Button Hold will start forward 2.5 second automatic rotation decrementing Tire position, then Axel position. When on lowest Axle-Tire position, then repeat from highest Axle-Tire position. Any button press will stop automatic rotation.
- Center Button Hold will go to Active Warning Intro screen.
- Right Button Hold will start forward 2.5 second automatic rotation incrementing Tire position, then Axel position. When on highest Axle-Tire position, then repeat from lowest Axle-Tire position. Any button press will stop automatic rotation.
- Left Button Press will go to next available Axle position or rotate back to first axle position.
- Center Button Press if in 2.5 second auto rotate sequence, will stop 2.5 second auto rotate sequence.
- Right Button Press will go to next available Tire position for axle or rotate back to first tire position for axle.



### **ACTIVE WARNINGS INTRO SCREEN**

#### Description

 Active Warnings Intro Screen is an introductory screen for entering and reviewing active warnings.

- Center button press will go to Units Select Screen.
- Right button press will go to Active Warnings Screen.
- Center button hold will go to Main Screen.





### **ACTIVE WARNINGS SCREEN**

#### Description

 Active Warnings Screen displays a list of all active pop-up warnings that have previously been displayed.

#### **Display Items**

- "No Warnings" is displayed if no pop-up warnings are active.
- If at least one pop-up warning is active, the pop-up warning will display in the list.

- Center button press will go to Active Warnings Intro Screen.
- Left button press, if at least one pop-up warning is active, will go to next active pop-up warning in list.
- Center button hold will go to Main Screen.



### **SELECT UNITS SCREEN**

#### Description

 Units Select Screen allows the user to switch the displayed units between Metric and English.

- Left button press will change setting between Metric and English.
- Right button press will save selected setting, and go to Contrast Adjust Screen. Center button press will keep setting before screen was entered and go to Contrast Adjust Screen.
- Center button hold will go to Main Screen.



### **CONTRAST ADJUST SCREEN**

#### Description

Contrast Adjust Screen allows the user to adjust the LCD contrast setting.

#### **Display Items**

 Contrast bar graph indication displays the current contrast setting. Range is 0- 100% with 5% resolution. Left button will decrease contrast, Right button will increase contrast, and Center button saves contrast.

- Left button press will decrement contrast by 5% until it reaches 0%. Left button hold will decrement while button is held until it reaches 0%.
- Right button press will increment contrast by 5% until it reaches 100%. Right button hold will increment while button is held until it reaches 100%.
- Center button press will save contrast setting and go to Backlight Control Screen. Center button hold will go to Main Screen.





### **BACK-LIGHT CONTROL SCREEN**

#### Description

 Back-light Control Screen allows the user to switch the backlighting control between an external dimmer ("Set by Pin 3" not available) or set manually in the menu screen ("Set Manually").

#### **Display Items**

 "Set manually" sets back-lighting control to Brightness Adjust Screen setting, pin-3 has no effect.

#### **Buttons**

- Left button press will change setting between "Set by Pin 3" (not available) and "Set Manually".
- Right button press will save selected setting. If "Set Manually" is selected, will go to Brightness Adjust Screen.
- Center button press will keep setting before screen was entered and go to Software Version Information Screen.
- Center button hold will go to Main Screen.

#### "Set Manually" Back-lighting Control

 "Set manually" back-lighting will set the back-lighting intensity of the LCD to the setting in Brightness Adjust Screen. Range of setting is 0-100% intensity level.



### **BRIGHTNESS ADJUST SCREEN**

#### Description

 Back-light Adjust Screen allows the user to change the backlighting intensity of the LCD.

#### **Display Items**

Intensity bar graph indication displays the current intensity setting. Range is 0- 100% with 5% resolution. Left button will decrease intensity, Right button will increase intensity, and Center button saves intensity.

- Left button press will decrement intensity by 5% until it reaches 0%. Left button hold will decrement while button is held until it reaches 0%.
- Right button press will increment intensity by 5% until it reaches 100%. Right button hold will increment while button is held until it reaches 100%.
- Center button press will save intensity setting and go to Software Version Information Screen.
- Center button hold will go to Main Screen.



### SOFTWARE VERSION INFORMATION SCREEN

#### Description

 Software Version Information screen display major and minor version level and software part number.

#### **Display Items**

- "SW:" + major and minor version text is Arial bold 10-point font. Center aligned.
- Valor determines major and minor version numbers.
- "SW P/N:" + part number text is Arial bold 10-point font. Center aligned. Valor determines 4-digit part number and revision letter.

#### **Buttons**

Any Button Press will go to Main Screen.



### **UNDER PRESSURE POP-UP WARNING**

#### Description

- Under Pressure Pop-up Warning displays immediately
- Amber LED is on when tire is more than 12.5% below base line.
- Red LED is on when tire is more than 20% below base line.
- Warning can be reviewed in the Active Warning Screen.

#### **Buttons**

 Any button pressed will return to previous displayed screen. LED will remain on.



### **OVER PRESSURE POP-UP WARNING**

#### Description

- Over Pressure Pop-up Warning displays immediately
- Amber LED is on when tire is 15% over base line pressure.
- Red LED is on when tire is 30% over base line
- Warning can be reviewed in the Active Warning Screen.

#### **Buttons**

 Any button pressed will return to previous displayed screen. LED will remain on



### **OVER TEMPERATURE POP-UP WARNING**

#### Description

- Over Temperature Pop-up Warning displays immediately and amber LED is on, if tire is over 176 degrees F.
- Warning can be reviewed in the Active Warning Screen.

#### **Buttons**

 Any button pressed will return to previous displayed screen. LED will remain on.

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### **LEAK POP-UP WARNING**

#### Description

- Leak Pop-up Warning displays immediately and red LED is on, if system detects pressure loss of 4.8 PSI (or greater) over 16 seconds.
- Warning can be reviewed in the Active Warning Screen.

#### **Buttons**

 Any button pressed will return to previous displayed screen. LED will remain on.



### TIRE COMMUNICATION POP-UP WARNING

#### Description

- Tire Communication Pop-up Warning displays immediately and no LED is on, if signal from the Valor Can transceiver is never received or lost reception for 100 seconds.
- Warning can be reviewed in the Active Warning Screen.

#### **Buttons**

 Any button press will return to previous displayed screen. LED will remain on.