



**SensAiry**

**Quick  
Start  
Guide**

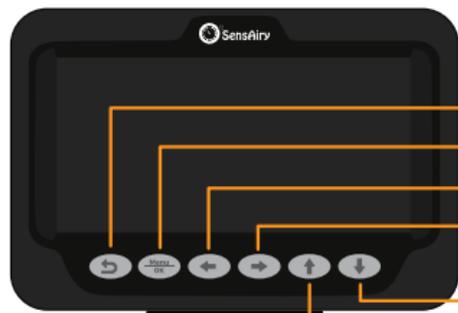
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This guide has been designed to provide you with all the information you need to setup and install SensAiry sensors and Head Unit Display (HUD) on your vehicle.

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# Package Content



## Head Unit Display

-  Back
-  Menu/OK
-  Left
-  Right
-  Down
-  Up

Base

Adhesive Tape



Valves and Screws

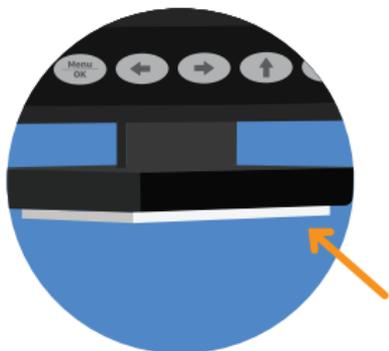


USB Cable



Four Wheeler Sensors

# INSTALLING SENSAIRY HUD



- SensAiry HUD comes with 3M Very High Bonding (VHB) tape affixed at its base. We recommend attaching HUD on your vehicle's windshield.

- Choose a location on windshield close to dashboard such that your windshield view is not blocked.
- Make sure that supplied USB cable can reach to your USB connector on your vehicle and HUD.



- Clean the surface of windshield where HUD will be fixed so that it is dust free. This is a critical step as bonding strength of tape depends on dust free surface.

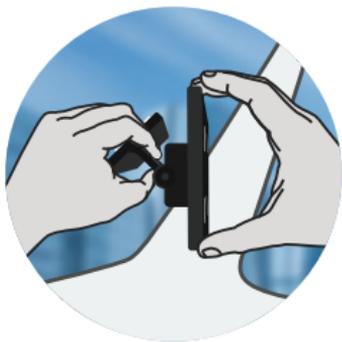


VHB

- Carefully peel the protective layer on the tape.

- Place the HUD on the cleaned surface and press the base with tape firmly so that tape is bonded to windshield.

Wait for 10 minutes.



- To adjust the angle of view, press the base of HUD with one hand and adjust HUD display using the other.

Note: Affixing SensAiry HUD on car dashboard is not recommended as dashboard surface is usually made of low surface tension material. Due to this, the tape may not bond properly and may come off over time.



# Home Screen

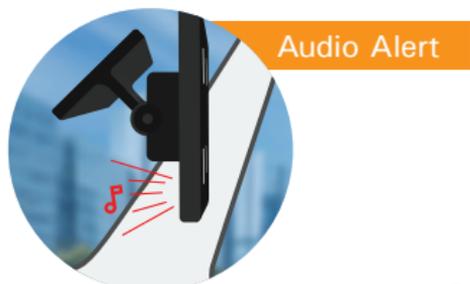
SensAiry HUD is powered using the supplied USB cable. HUD turns on when USB cable is connected to the power source. HUD can display data from 4 tyres at a time.

Using ◀ / ▶, you can navigate to other screens to view the sensor data of other tyres. If you have more than 5 sensors configured, screen number of current screen position will be displayed for 1 second before sensor data is shown.



Tyre Pressure data is shown in bigger number in units of psi. Maximum pressure that can be displayed is 99 psi and minimum is 0 psi. Next to tyre pressure, tyre temperature is shown as superscript in units of Celsius. Maximum temperature displayed is 99°C and minimum is -40°C.

- In case of Low Pressure of a tyre, pressure value and tyre icon of the associated tyre will blink and Low Pressure alert message in red will be displayed next to that reading. HUD also gives audio alert using built in buzzer.
- In case of High Pressure of a tyre, pressure value and tyre icon of the associated tyre will blink. HUD also gives audio alert using built in buzzer.



- In case of Low/High Temperature of a tyre, temperature value and tyre icon of the associated tyre will blink. HUD also gives audio alert using built in buzzer.

## FEATURES AND TIPS

- When audio alert is made, pressing the  button will mute it for 1 hour.
- As soon as HUD is turned on, dashed lines will be displayed by default for pressure and temperature. Soon after HUD receives data from sensors inside tyres, dashed lines will be replaced with pressure and temperature values. It may take up to 3 minutes to display pressure and temperature data of all tyres.



- If HUD cannot communicate with a sensor for more than 24 hours, CHEC message will be displayed on that corresponding tyre.



- During dark time, if the display is too bright, you can instantly reduce the brightness by pressing  button. To come back to currently saved brightness value, press  button again.



Minimum Brightness



Set Brightness

- Press  button to see last updated time of each sensor. Last updated time will be displayed where temperature is displayed and it will be displayed for 90 seconds. Use this feature for troubleshooting purpose to make sure sensors are communicating with HUD. Press  button anytime to display temperature again.

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To customize safe zone alerts, brightness control etc., please continue reading the following sections.

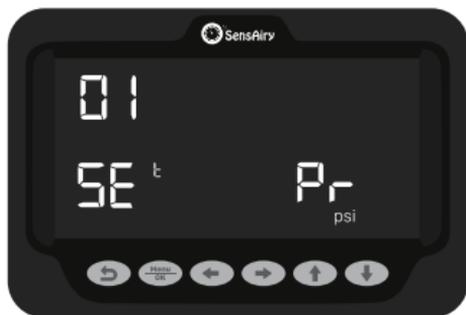
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## Setting Safe Zone

You can set pressure and temperature safe zone as per your needs by setting lower and higher threshold values by following below instructions. When pressure or temperature of a tyre goes beyond this safe zone, HUD will alert you with audio alarm and visual notification.

## PRESSURE SAFE ZONE

- Press  button from home screen. By default, you will be shown option 1 to set safe zone for pressure as shown below.



- Press  button again to set pressure safe zone.
- You will be presented with a screen that shows the lower and higher threshold currently set for all tyres.

**Note:** You can not set pressure safe limit of a tyre if it is not paired with a sensor.



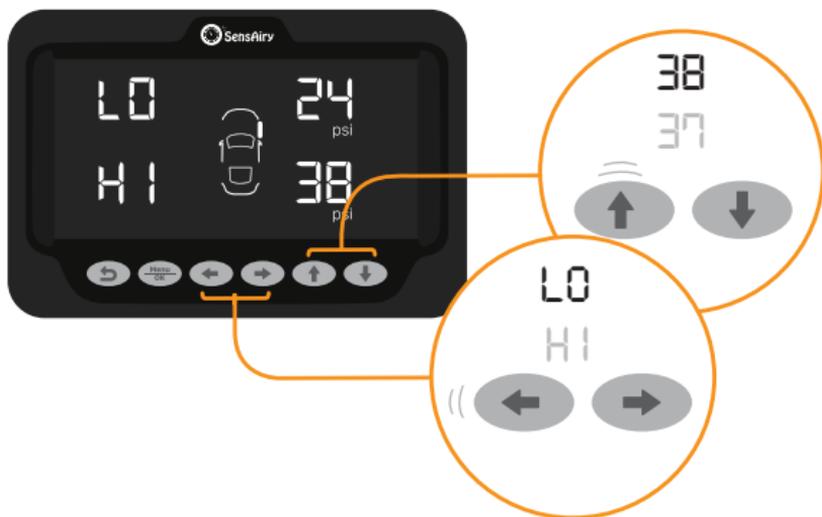
**Lower Threshold**  
**Higher Threshold**

(In place of higher threshold, HUD will display tyre number for 1 second, if more than 5 tyres are present in your vehicle.)

- Currently selected tyre will blink and by default, it is front left tyre. Use  /  to reach the desired tyre.



- Press  button again to set threshold values.
- Press  /  to move between **LO** and **HI**.
- Use  /  to modify the values.



Minimum pressure you can set is 20 psi and the maximum pressure you can set is 99 psi.

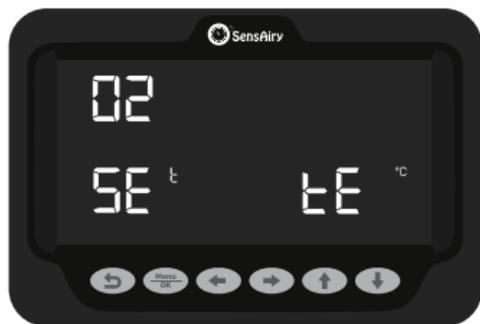
- Press  button to save and go back to previous screen.



Go back to previous screen

## TEMPERATURE SAFE ZONE

- Press  button from home screen. By default, you will be shown option 1.
- Press  to move to option 2 to set temperature safe zone as shown below.



- Press  button again to set temperature safe zone.
- You will be presented with a screen that shows the lower and higher threshold currently set for all tyres.

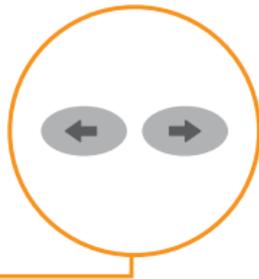
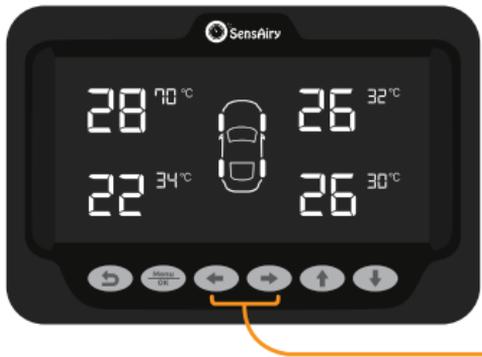
Note: You can not set temperature safe limit of a tyre if it is not paired with a sensor.



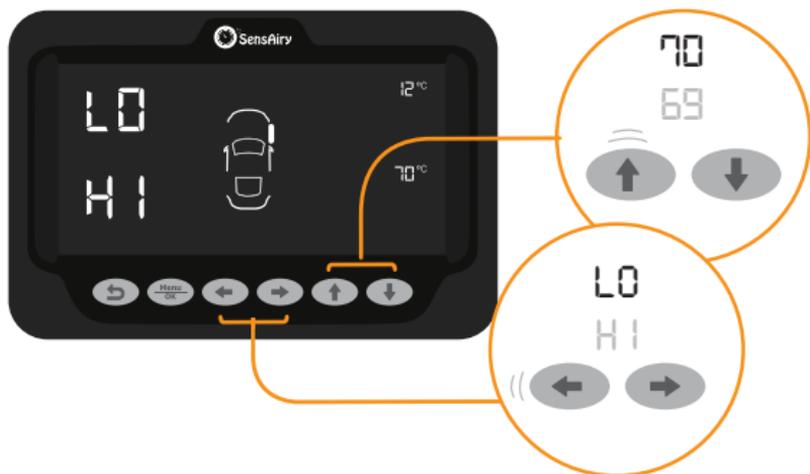
Lower Threshold  
Higher Threshold

(In place of higher threshold, HUD will display tyre number for 1 second, if more than 5 tyres are present in your vehicle.)

- Currently selected tyre will blink and by default, it is front left tyre. Use  /  to reach the desired tyre.



- Press  button to set threshold values.
- Press  /  to move between LO and HI.
- Use  /  to modify the values.



Minimum temperature you can set is  $-09^{\circ}\text{C}$  and the maximum temperature you can set is  $99^{\circ}\text{C}$ .

- Press  button to save and go back to previous screen.



## Brightness Control

- Press  button from home screen. By default, you will be shown option 1.

- Press  to move to option 3 to change the brightness of HUD as shown below.

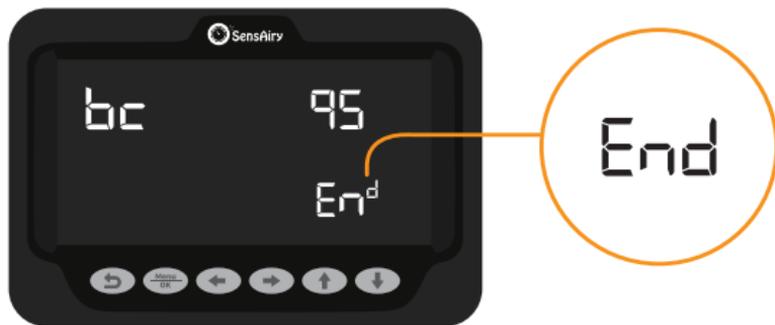


- Press  button to change display brightness.

- Current brightness level will be displayed. Using  / , you can increase and decrease brightness respectively.



- Minimum brightness you can set is 5 and the maximum brightness that can be set is 95. Once maximum or minimum brightness limit is reached, **End** message will be displayed.



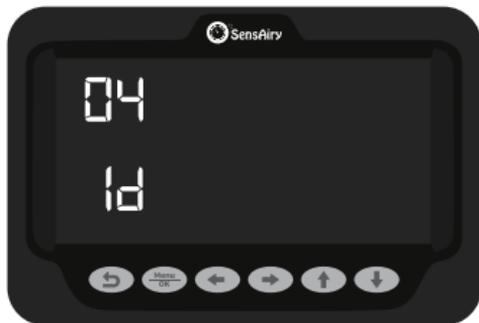
- Press  button to save and go back to previous screen.

## Identify Sensor

To find out sensor IDs of sensors installed in each tyre, Identify Sensor operation must be performed. Option 4 under  will let you identify sensor IDs in each tyre and reconfigure the display appropriately.

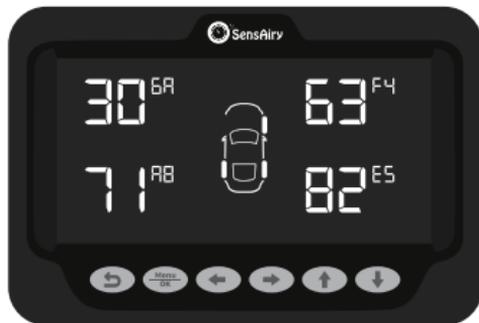
- **Note:** ID operation must be performed only for sensors that are already configured in HUD. This is because calibration information has to be retrieved. Do not install a new sensor or replace a malfunctioning sensor with a new one without adding that sensor in HUD using ADD operation (option 5 under ) or by first pairing in SensAiry app on your phone.
- Please note that this operation involves releasing at least 5 psi of air on each tyre. So please ensure to perform this operation at a gas station with access to air pump or if you have portable inflator at home.
- Press  button from home screen. By default, you will be shown option 1.

- Press  to move to option 4 to identify sensors as shown below.



- Press  to start identifying sensors.

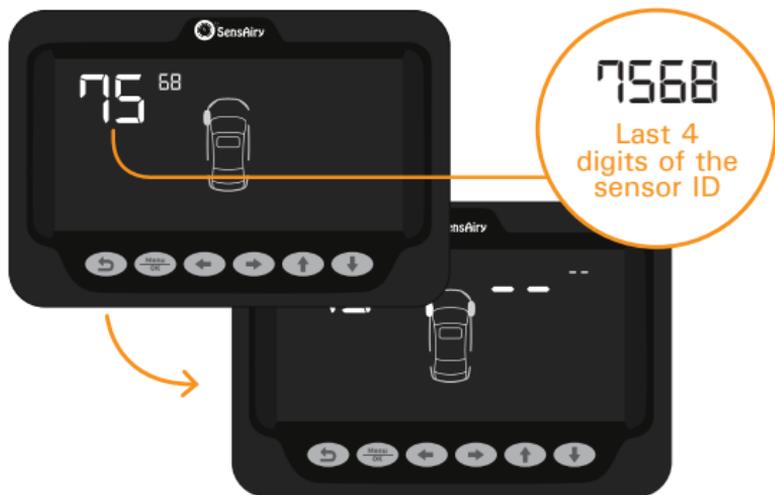
- By default, last 4 digits of sensor IDs will be displayed with first tyre selected. Selected tyre will blink. If HUD is paired with more than 5 sensors, there will be a superscript indicating the tyre number which will display for 1 second.



- Use  /  to navigate to the tyre to identify its sensor. Once you are in the desired tyre location, press  button to initiate ID operation. During ID operation, all tyres except currently selected tyre will be hidden.

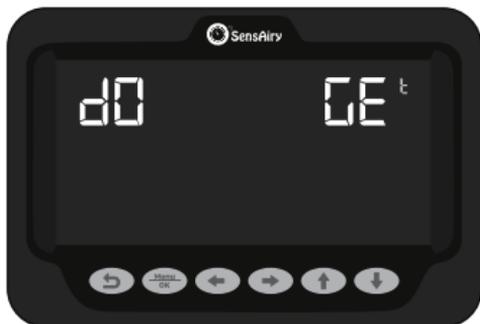


- Release at least 5 psi of air from the selected tyre **without pause** and wait.
- System will identify the sensor and display the last 4 digits of the sensor ID in HUD.



Note: If the detected sensor ID is already associated with a different tyre, then the Sensor IDs will be swapped.

- If HUD detects a sensor that is not already configured in HUD, it will display do GET message. This message is displayed under assumption that you have paired your sensor in SensAiry app on your phone. In this case, using GET operation (option 7 under ) , you can transfer sensor details to HUD.



- Perform the above operations to find out sensor IDs of all tyres.
- Press  button to go back to previous screen.

## Add Sensor

Option 5 under  lets you add and configure a new sensor to a tyre. You can add up to 20 sensors per HUD.

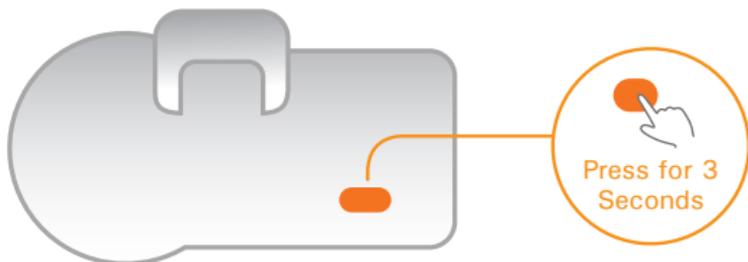
- Press  button from home screen. By default, you will be shown option 1.
- Press  to move to option 5 to add a sensor as shown below.



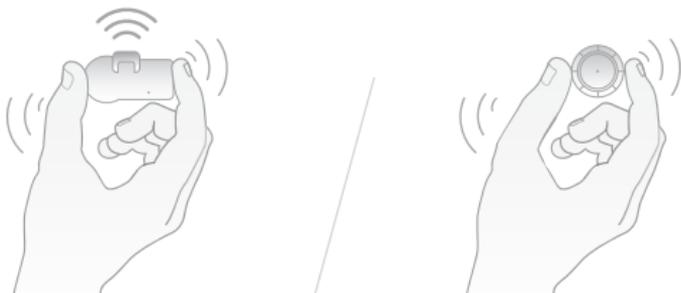
- Press  button again to Add Sensor with HUD.
- By default, HUD will configure the front left tyre. You will notice the front left tyre blinking with dashed lines. Press  button to initiate adding sensor. During ADD operation, all tyres except currently selected tyre will be hidden.



- If HUD is paired with more than 5 sensors, there will be a superscript indicating the tyre number which will display for 1 second.
- If there are tyres with sensors present already, HUD by default show the first available tyre without any sensor. Using  / , you can select other available tyres that can be paired with sensors. All tyres with sensors present will display last 4 digits of sensor IDs.
- Now depending on the type of sensor, you need to activate the sensor. If you have a sensor that has button, press the button for 3 seconds to activate it and wait.



- If you have a buttonless sensor, vigorously shake the sensor for 3 seconds and wait.



- Once a sensor is detected in HUD, it will display the last 4 digits of sensor ID. Next available tyre will blink.



Note: To Abort/Cancel Add Operation - Press  button.

- Press  button to go back to previous screen.

## Delete Sensor

Option 6 under  lets you delete a sensor from a tyre.

- Press  button from homescreen. By default, you will be shown option 1.

- Press  to move to option 6 to delete a sensor as shown below.



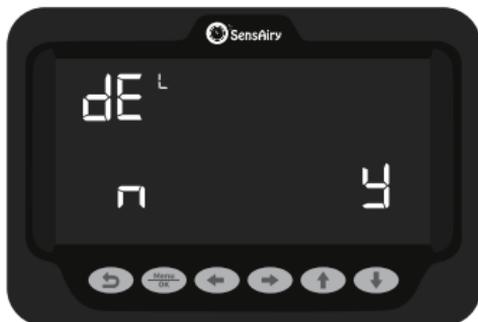
- Press  button again to delete a sensor.

- By default, last 4 digits of sensor IDs will be displayed with first tyre selected. Selected tyre will blink. If HUD is paired with more than 5 sensors, there will be a superscript indicating the tyre number which will display for 1 second.



- Use  /  to navigate to the tyre from where you want to delete a sensor.
- Press  to delete the sensor from currently selected tyre.

- You will be presented with a screen that asks for your confirmation. By default, "n" (NO) will be blinking. Press  to move to "Y"(YES). Press  to confirm your selection. If you don't want to delete the sensor, you can go back either by pressing  button or by selecting "n" (NO).



- During the delete operation, sensor ID will blink, and once the operation is over, dashed lines will be shown in that tyre position.



- Perform the above steps to delete more sensors.
- Press  button to go back to previous screen.

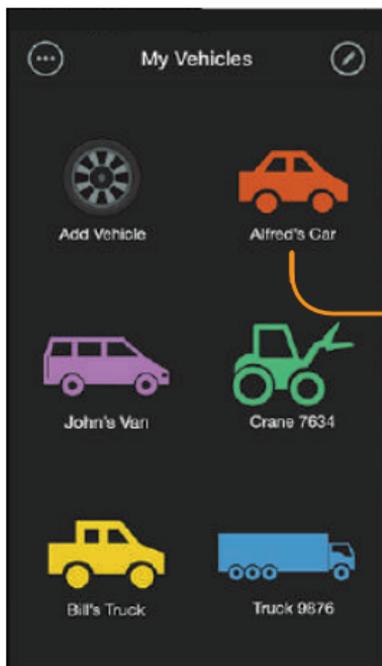
## Get Sensor Details

If you already have SensAiry sensors configured on your smartphone and would like to transfer sensor details to HUD, then you need to select option 7 under . HUD displays data of 4 sensors per screen and using  /  buttons, you can move to next or previous screen to view the data of other sensors.

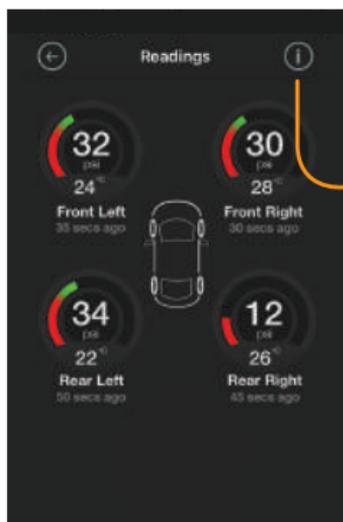
- Press  button from home screen. By default, you will be shown option 1. Press  to move to option 7 to get sensor details from your smartphone.



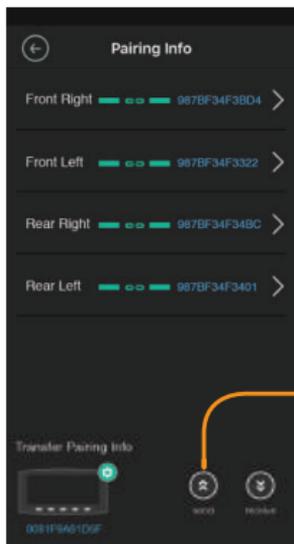
- Press  button to get sensor details. At this stage, HUD will start looking for nearby smartphone and all the tyres will be blinking.
- In your smartphone, tap on the vehicle icon whose sensor details you want to transfer to HUD.



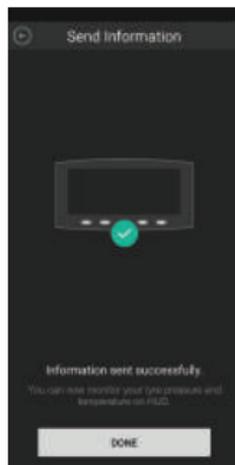
- Tap on information icon on the reading screen.



- Scroll to bottom of the pairing info screen and tap on **Send** to transfer sensor details to HUD.



- Follow the on screen instructions and your smartphone will transfer sensor details to the connected HUD. Once the operation is complete, success message will be displayed on the app.

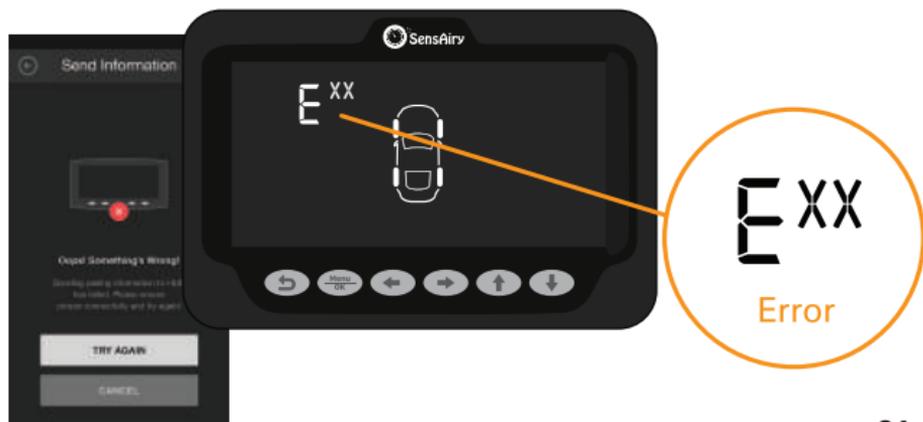


- dOnE message will be displayed in HUD after sensor details are saved successfully. After 1 second, home screen will be shown with sensor data.



Note: To Abort/Cancel Get Operation - Press  button.

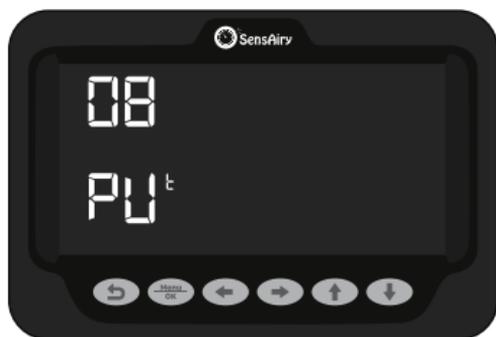
- In case of any error, both app and HUD will display error message.



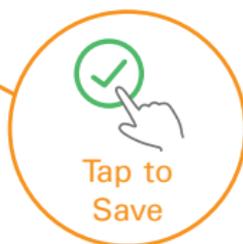
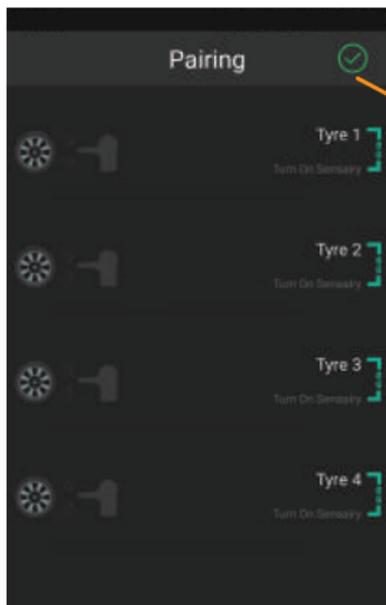
## Put Sensor Details

If you want to transfer sensor details from HUD to your smartphone, then you need to select Option 8 under .

- Press  button from home screen. By default, you will be shown option 1.
- Press  to move to option 8 to put sensor details to your smartphone.



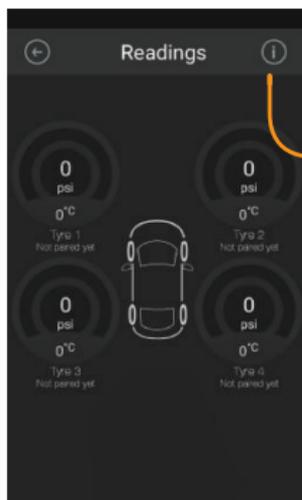
- Press  to put sensor details to smartphone. At this stage, HUD will start looking for nearby smartphone to transfer all sensor details. All the tyres and corresponding readings will be blinking.
- Install SensAiry app and create a vehicle. In the pairing screen, during the creation process, tap tick icon on top right to skip the pairing process and save the vehicle. **Make sure the number of tyres on the app matches with HUD.**



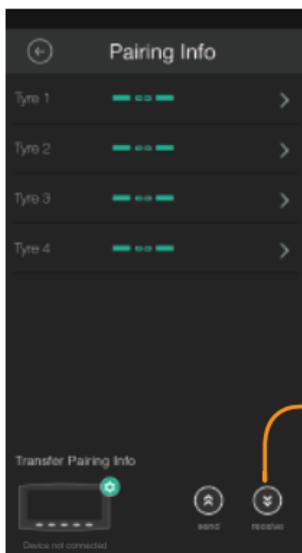
- Now tap on the vehicle for which you need to transfer information from HUD.



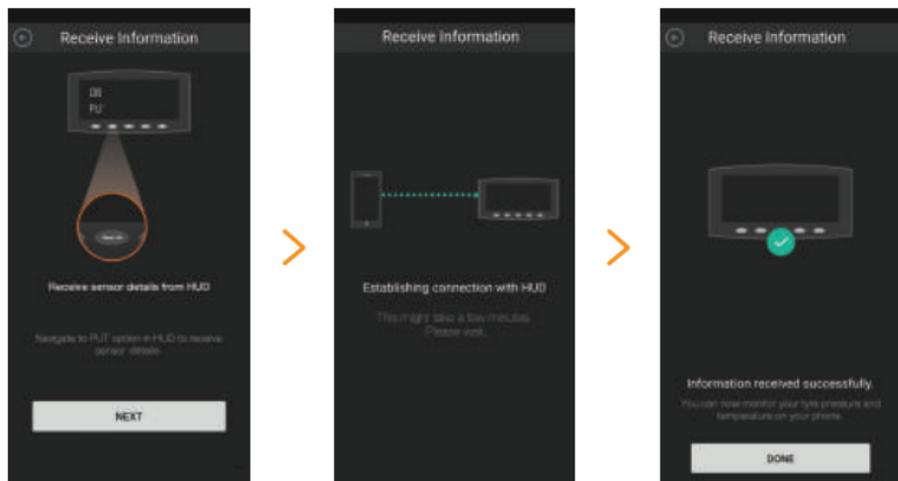
- Tap on information icon at the top right corner.



- Scroll to the bottom of the pairing info screen and tap on **Receive** to get all sensor details from HUD.



- Follow the on screen instructions and your smartphone will receive data from connected HUD. Once the operation is complete, success message will be displayed on the app.

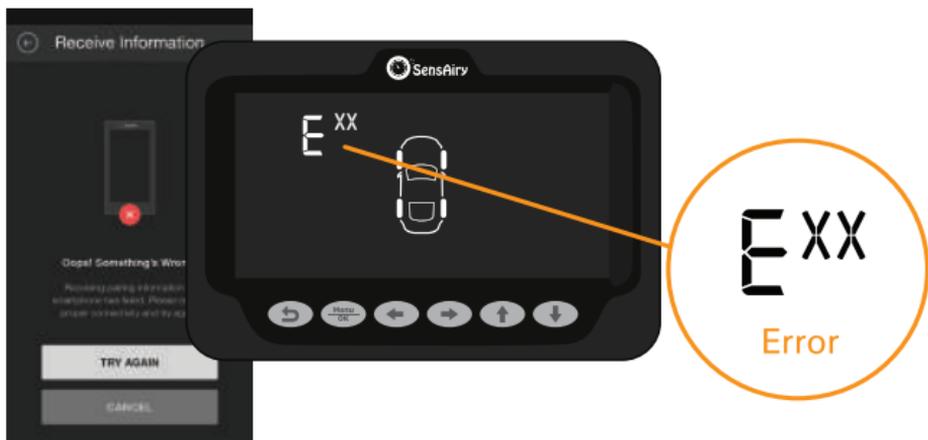


- dOnE message will be displayed in HUD after sensor details are transferred successfully. After 1 second, home screen will be shown with sensor data.



Note: To Abort/Cancel Put Operation - Press  button.

- In case of any error, both app and HUD will display error message.

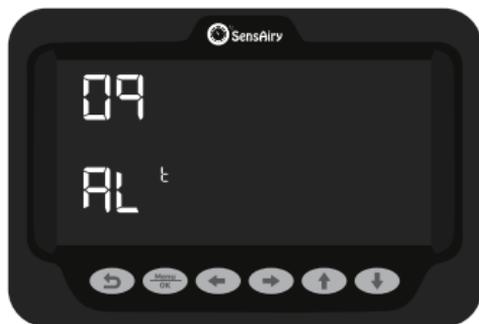


## Set Altitude

Since the atmospheric pressure varies by altitude, setting the altitude where the tyres are inflated will give accurate pressure readings.

You can set altitude value in HUD by following the below instructions.

- Press **Menu OK** button from home screen. By default, you will be shown option 1.
- Press **→** to move to option 9 to set altitude in HUD as shown below.



- Press  button to change altitude.
- Press  or  to set altitude values. Value changes in multiples of 100.

Note: Maximum altitude value you can set is 9000 and minimum altitude value you can set is 0.



- Once the maximum or minimum limit is reached, **End** text will be displayed.

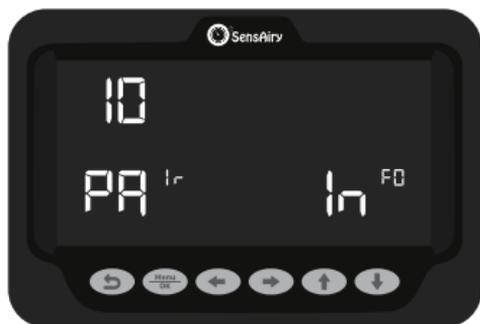


- Press  button to save altitude value and go back to home screen or press  button to save altitude value and go back to previous screen.

## Pairing Information

To find out the sensor IDs associated with tyres in HUD, use the pairing info option under .

- Press  button from home screen. By default, you will be shown option 1.
- Press  to move to option 10 to view pairing information as shown below.



- Press  to view pairing information.
- Last 4 digits of sensor ID will be displayed. By default, sensor IDs of 4 sensors will be shown. Use  /  to navigate between screens to see sensor IDs of other tyres. If you have more than 5 sensors configured, tyre number of each tyre will be displayed for 1 second before showing sensor data.



- Press  button to go back to previous screen.

## Reset HUD

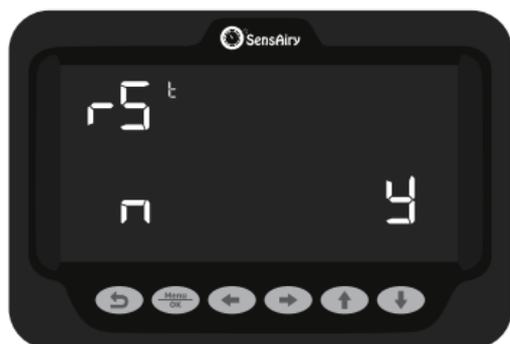
Reset function lets you erase existing HUD configuration, and revert back to its factory state. **This process is non reversible, so proceed with caution.**

- Press  button from home screen. By default, you will be shown option 1.
- Press  to move to option 11 to reset HUD as shown below.

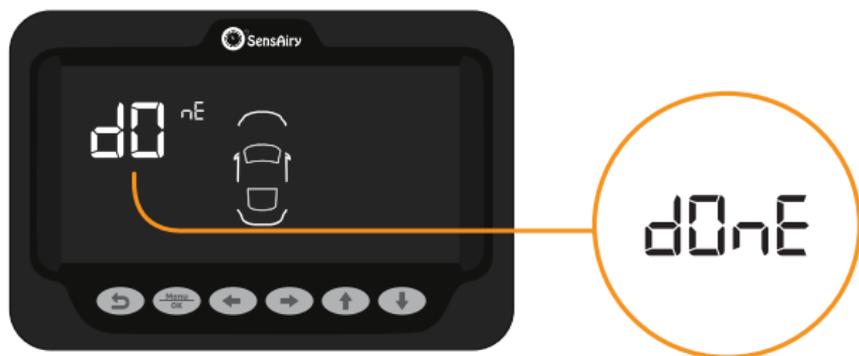


- Press  button again to reset HUD.
- You will be presented with a screen that asks for your confirmation. By default, "n" (NO) will be blinking. Press  to move to "Y" (YES). Press  to confirm your selection. If you don't want to reset HUD, you can go back either by pressing  button or by selecting "n" (NO).

Note: Once HUD is reset, the data cannot be restored. Perform “Get” operation to get data from SensAiry App. Refer page No.21.



- While reset in progress, all tyres will blink. dOnE message will be displayed when reset operation is completed. After 1 second, home screen will be shown with dashed lines.



# SENSAIRY HARDWARE INSTALLATION

Identifying which sensor must go in which tyre is the most critical step. Please follow below instructions to identify sensors location:

- 1 If you have purchased a package that comes with HUD and sensors together, go to Option 11 Pair Info under **Menu OK** in HUD to see the sensor details. Last 4 digits of Sensor IDs will be displayed in their corresponding tyre location. Match the last 4 digits of Sensor ID with Sensor ID label in sensors and install sensors in their corresponding tyre location.



- 2 In some batches of packages that ship HUD and 4 sensors together, tyre locations of 4 sensors are marked on the sensors themselves in a label with below acronym:



FL - Front Left



FR - Front Right



RL - Rear Left



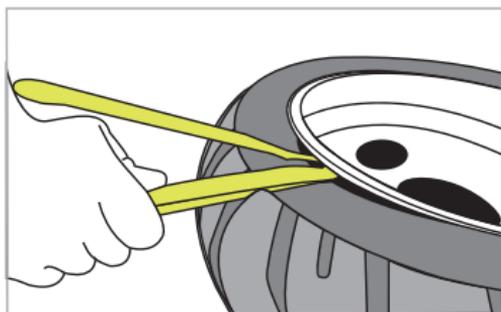
RR - Rear Right

Above identification on sensors can be used to install on correct location.

- 3 If you have sensors that are paired on your smartphone, you can find sensor location by tapping on corresponding vehicle icon in home screen. Then tap on information icon on top right of reading screen. Now you will be shown pairing info screen where all sensor location details are displayed.



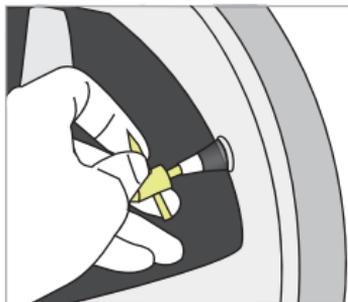
## STEP 1



Start by breaking the bead of the tyre from the rim by using a crowbar or a similar tool. Ensure that the tool is not placed close to the existing valve as it may damage the sensor if that tyre already has one.

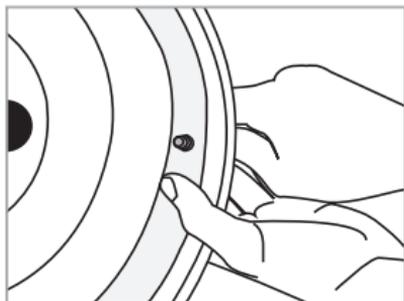
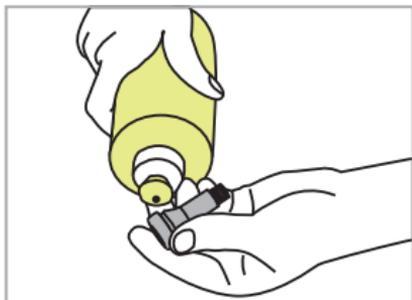
## STEP 2

After the tyre is removed, using the valve stem insertion/removal tool or similar tool, remove the existing valve.



### STEP 3

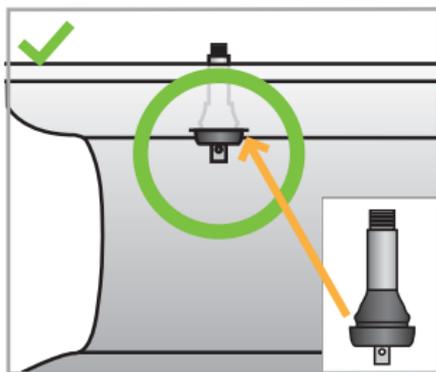
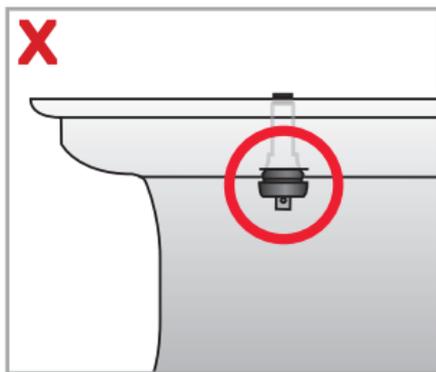
Coat the stem valve that comes with SensAiry with appropriate lubricant.



Insert the valve stem through the valve hole in the rim. Using the valve stem insertion/removal tool, pull the valve stem through the rim hole until the bottom ring at the base of the stem is touching the inside of the rim and the top ring at the base of the stem is on the outside of the rim.

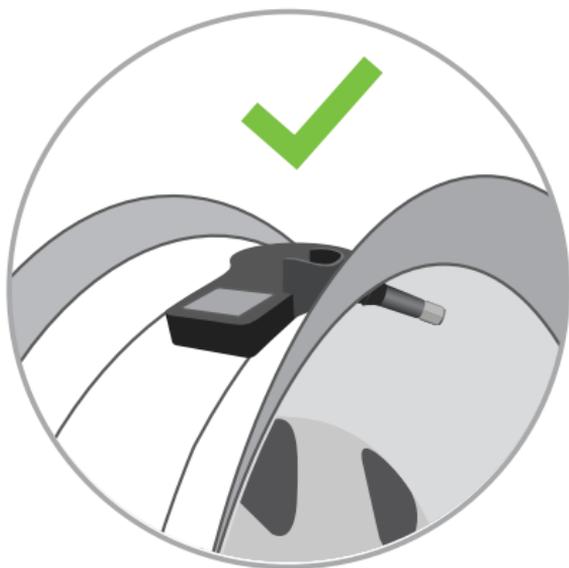
### STEP 4

Ensure the valve is properly installed by moving it side to side for a snug fit. The bottom of the valve will have a ridge completely visible. Similarly, check the bottom of the valve stem for snug fit.



**Warning:**

Installing the sensor with label facing towards the center of rim will lead to faster battery drain.



**STEP 5**

Mount the tyre to its expected location on the wheel and inflate to the manufacturer recommended pressure. Mounting at the wrong location will give incorrect reading on the app.



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