

RS<sub>3</sub>

# Custom icon creation

## **Question:**

How can I create and configure an icon so that I can display it on my device?

## **Answer:**

After reference signals have been correctly configured, the icons setting must be executed from the "Icons manager" tab of Race Studio 3.

Input signals can be configured from the tabs listed below:

- "Channels" tab: configuring the analog channels to which sensors are connected; if third-parties sensors are connected, they must be characterized from the "Custom Sensors" section
- "ECU Stream" e "CAN2 Stream" tab: selecting the compatible communication protocols, to obtain channels from ECU and additional CAN modules
- "CAN Expansions" tab: correctly identifying a connected expansion (i.e.: LCU-One CAN) and eventually setting the analog channels to which sensors are connected (i.e.: Channel Expansion)
- "Math Channels" tab: it is possible to apply mathematical operation to the existing channels of the configuration, in order to obtain additional ones

For further details about configuration steps, it is recommended to refer to the Documentation – Products and FAQ sections of our website www.aim-sportline.com.

After these first settings, icons can be programmed from the "Icons manager" section of Race Studio 3, following the procedure explained below.

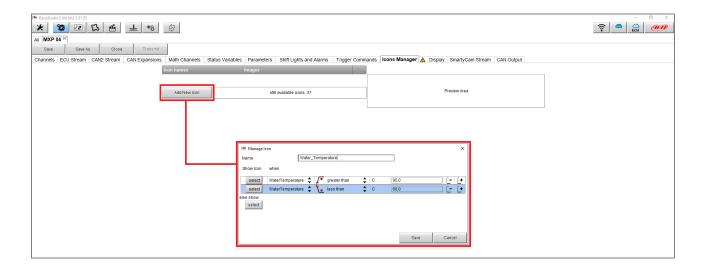


Enter the "Icons Manager" tab and press the "Add New Icon" button (following image): after a name has been added, it is necessary to set the condition that, if verified, provokes the associated icon displaying, selecting the reference channel threshold value.

To add/remove a condition, press the <u>t</u> and the <u>t</u> buttons respectively.

N.B.: to set multiple conditions for a single icon, it is necessary to previously create a Status Variable ("Status Variable" tab): for further details about this feature, visit the FAQ – Race Studio 3 section of our website.

In the following example, water temperature icon setting is shown, according to the value sent by the ECU (>  $95^{\circ}$ C; <  $60^{\circ}$ C).

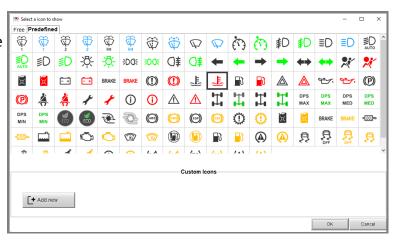




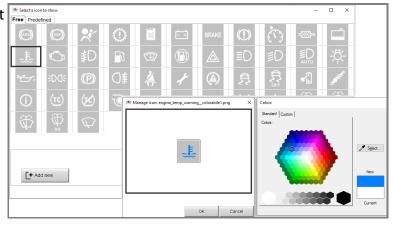
Pressing "select", the window that allows to set the specific icon for each condition appears (following image): the "Predefined" area (first image) shows a set of icons with predefined colors (enabled/disabled icon); the "Free" area (second image) shows a set of icons that can be freely colored. Once the color has been chosen, press "OK" to make this setting effective for the new icon, that will be included into the Custom Icons area.

Starting from the previous example, the icons that refer each condition occurrence must be chosen:

 Water temperature > 95°C: it is possible to choose the icon to associate, available from the Predefined tab (image on the right)



 Water temperature < 60°C: the icon must be selected from the Free tab. Once chosen, the color selection windows appear (in this case, blue; image on the right)





Pressing the "select" button referred to the "else show" setting, it is possible to choose the icon that must be displayed when none of the conditions is verified (switched off icon), in the same mode as explained before.

If desired icon is not present in the available sets, it can be imported from the PC, clicking "Add New" button ( '+ Add new '): it will be added in the Custom Icons area.

The icon that must be imported **must be saved in bitmap format** (file extension: .bmp) and must have the following graphic settings:

- the icon must be **squared**: the software will automatically adapt its format to 150x150 pixels during import phase
- the icon must be saved with the following parameters: 16bit A1, R5, G5, B5
- it is suggested to build custom icons starting from pictures with **transparent background**, that will be converted while saving in bmp format

N.B.: bmp images colors cannot be modified through Race Studio 3: pictures must be colored in the desired way before importing them.

Once these settings are done, icons are added to the tab main list. When pointing the mouse on the specific window for each icon, a preview of its internal settings appears on the right (following image), in addition to and buttons, that allow to change settings and delete the icon, respectively.





To place each icon in the specific pages fields, enter the "Display" tab and click "Add New page": choosing a page from "Set Ico" set, it is possible to configure each bar field to show one of the previously created icons (following image).

