



# Installation instruction MFA 2.0 Nissan S13



## Foreword

Thank you for choosing to purchase the MFA 2.0 for installation in the Nissan S13 instrument cluster.

During the development of the MFA, attention was paid to the highest accuracy of fit and quality. With this installation instruction, the MFA has been assembled by several test persons and continuously improved so that you don't have any problems converting your instrument cluster.

Despite the utmost care and testing, there can always be unpredictable difficulties and problems. On the one hand, this results from the many different versions of the instrument cluster, not all of which can be taken into account in advance. On the other hand, MFA 2.0 has very little installation space available. We apologize for this in advance.

If you have any feedback, criticism or change requests for us, please send us an e-mail to [info@canchecked.de](mailto:info@canchecked.de).

## Required tools

- Phillips head small
- Slotted screwdriver small
- Ø10mm drill bit
- File

## General Information

The conversion set is a very sensitive device. You should work on an antistatic surface and wear a grounding bracelet. Any strong pressure or touching the display during operation is not recommended. This can lead to the destruction of the delicate OLED screen.

CANchecked assumes no liability for this conversion or for damage during the conversion or during operation. The instructions have been created to the best of our knowledge and belief.

## Preparation



Push out the eight clips of the windshield and frame (marked in red) to separate the windshield and frame from the instrument cluster.





Loosen the coolant temperature indicator (green) on the right side by unscrewing the three Phillips screws on the back (marked in red) and then remove it.



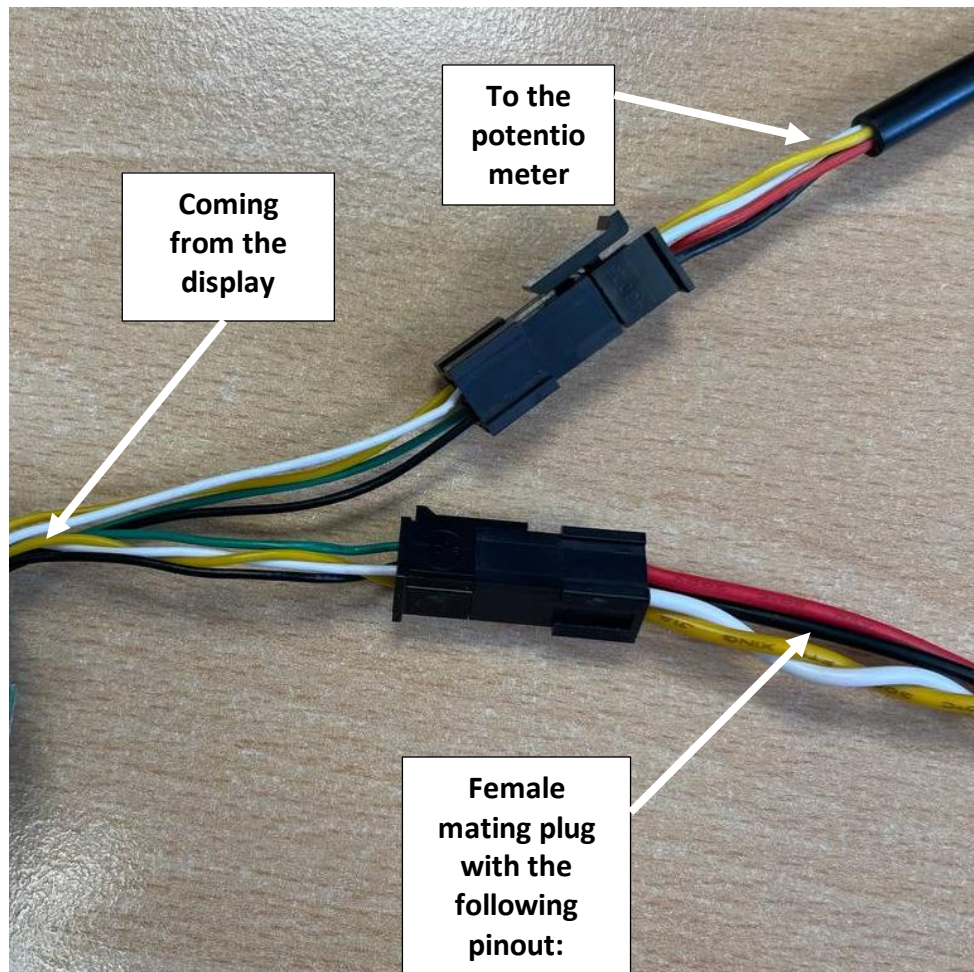


Now two 10mm holes have to be drilled next to each other (blue) and then worked out with the file so that the largest plug fits through the cutout.



## Built-in MFA 2.0

Then insert the display into the speedometer. And pass the cables through the previously made cutout. When using analog sensors, only the twelve-pin connector has to be plugged into the board. The four wires for connecting the potentiometer are led out as a four-pin female Molex connector. The male Molex connector carries 12V, ground, can high and can low. The plugs are assembled in different designs, so that mixing is impossible.

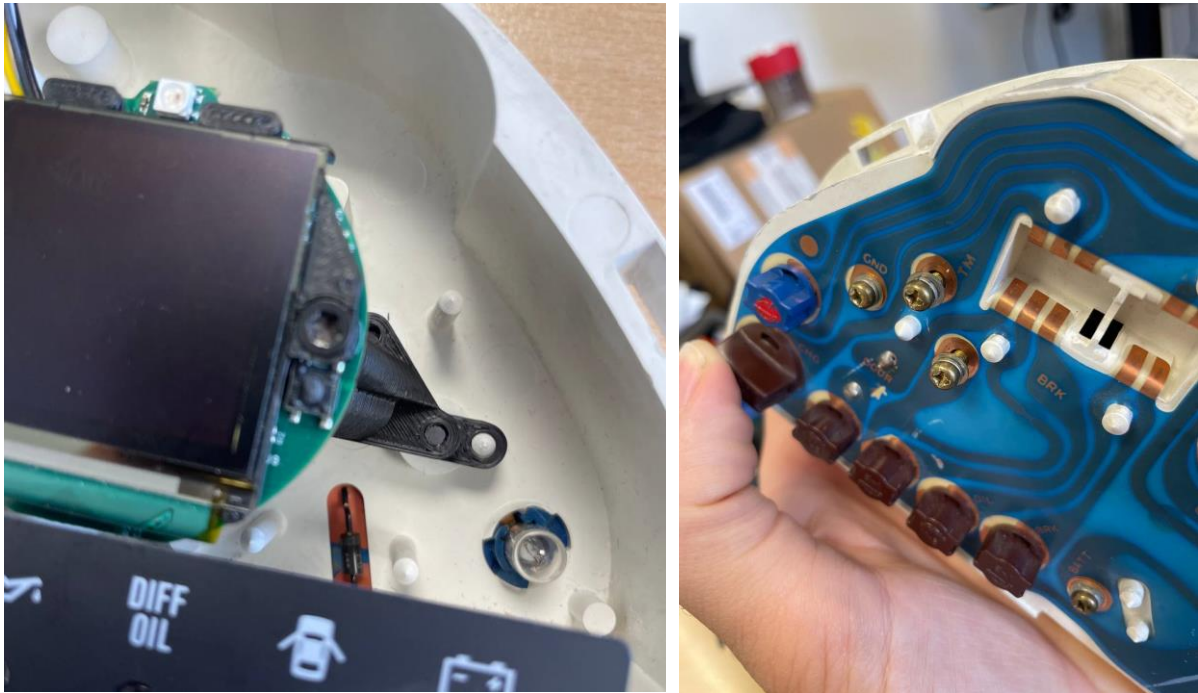


- Pin 1: Can High      **white**
- Pin 2: Can Low      **yellow**
- Pin 3: 12V ignition plus      **red**
- Pin 4: Ground      **black**

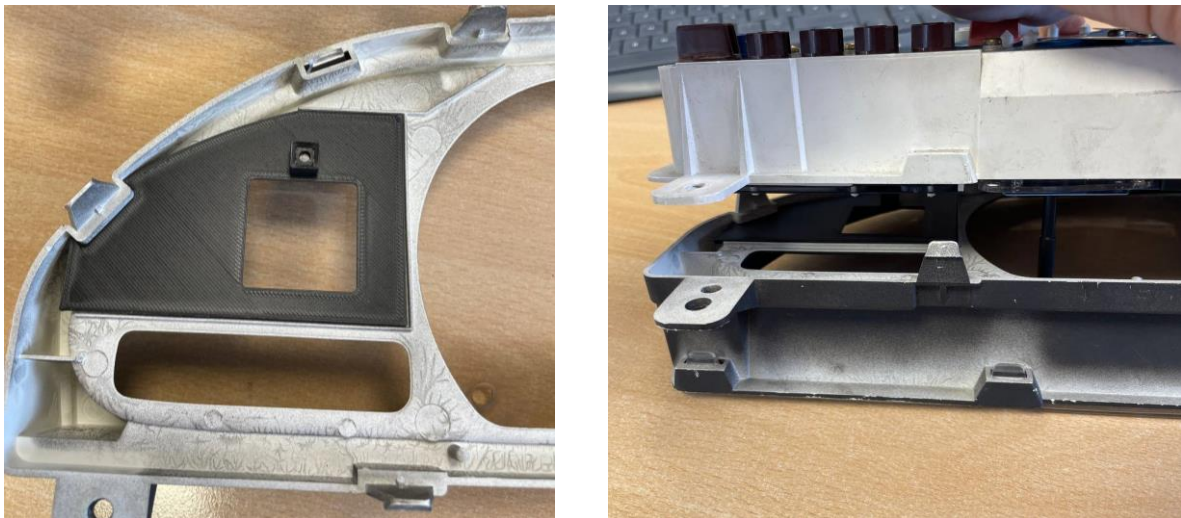
Position the display with bracket so that it sits above the screw connection points and the bracket is guided in the guide lug. The MFA 2.0 is screwed from behind with the original screws of the coolant temperature indicator.



There is a little play in the screw holes of the speedometer, so make sure that the display fits at right angles when putting it on. Slight corrections can be made here.



Now the front panel of the MFA 2.0 can be inserted into the disc on the front and then the speedometer unit can be plugged together with the horizontal disc.



Finally, clip the speedometer frame and disc back on, making sure that the display and the front panel are correctly seated.

Your instrument cluster should now look like the picture below.



You can find the manual for connecting and operating your MFA 2.0 on our website at

[Manual > Displays for Engine Management \(canchecked.de\)](https://canchecked.de/Manual%20Displays%20for%20Engine%20Management).

For fasterstart, however, we have summarized the most important points for you below.



## Electrical connection

Your MFA 2.0 is basically an MFD15 Gen2. The quick start guide of the MFD15 Gen2 is included in the packaging and can also be found in the download section ([www.canchecked.de/downloads](http://www.canchecked.de/downloads)).

The cable colors are as follows:

### Power supply:

Red cable = Terminal 15 (12V switched via ignition) with 5A fuse off

Black cable = Ground

### CAN bus connection:

White cable = CAN High

Yellow cable = CAN Low

The connection to the control unit is made by means of Can High and Can Low. The required Can Bus termination can be activated and deactivated in the display under "Setup" – "Options" – "CanTerm".

In most cases, there are no other devices in the Can bus, so that the resistor must be activated.

### Analogue inputs:

Orange cable = 5V out

Black cable = Ground

6x green/blue cable = Analogue inputs 1-6

## Setup

Basic settings such as active TRI file, can speed and can termination can be adjusted directly via the display. If the Can Bus connection is successful, the symbol in the top bar is displayed in green, if it is not successful, the symbol is displayed in red.

All other settings are made via WLAN connection via the oDSS. By default, Wi-Fi is disabled on the MFD15 Gen2. The TRI file can be edited via the oDSS or, for TRI files for freely programmable engine control units, via the DSS.

## Handling

If the rotary potentiometer is pressed and held before switching on the data display, you will be taken to the menu navigation instead of the regular side view.

The assignment of the functions of the rotary potentiometer can be freely defined in the oDSS. By default, the buttons are assigned as follows:

Turning the knob to the left changes:

- On the side view, the page to the left
- In the menu navigation, the selection to the top

Turning the knob to the right changes:

- On the side view, the page to the right
- In the menu navigation, the selection downwards

The short-term pressing (tapping) of the rotary knob:

- Has no effect in print view
- Confirms the current selection in the menu navigation

The long press (three seconds) of the knob:

- Toggles Wi-Fi on or off in side view
- Has no effect in the menu navigation