

TFT screen for VW T3 – User manual

PcbT3machin' . Oct 14, 2026

Presentation

This kit replaces and complements your original instruments with a color screen that displays gauges, time, and alarms. It is available in two versions depending on your engine's cooling system.

Version	For which engines	Available gauges	Optional
Watercooled	Engines cooled by water	Fuel, water temperature	Oil temperature, oil pressure, battery voltage
Aircooled	Air-cooled engines: Fuel, oil temperature, oil pressure, battery voltage		oil temperature, oil pressure, battery voltage

Both versions also display the time. The oil temperature, oil pressure, and battery gauges only appear if the corresponding sensor or battery is connected.

Starting and gauge layout

When the ignition is switched on, the dashboard detects the connected sensors, then after a 4-5 second test to prevent any errors, the screen illuminates with all the gauges already displayed. You can start the engine before this happens; it makes no difference. The time (or a message) is displayed at the top of the screen, with the gauges below automatically arranged in two rows:

Version watercooled

Probes connected, top left		Top right	Bottom left	Bottom right
Battery only	Fuel	Water	Battery	vide
Battery + pressure or oil	Fuel	Water	Battery	Pressure or oil
Battery + pressure and oil	Fuel	Water	Pressure	Oil
No battery detected	Fuel	Water	Pressure (or oil alone)	Oil

The fuel and water gauges are still displayed.
When both oil pressure and temperature are connected, the battery gauge takes its place but can be displayed instead of the time.

Version aircooled

Top left	Top right	Bottom left	Bottom right
Fuel	Battery detected, otherwise empty	Pressure (or oil alone)	Oil

Probe added or removed while driving

If a probe is connected or disconnected during use, the screen goes black and displays "GAUGE DETECTED" or "GAUGE DETECTED" for 2 seconds, then "CHANGE IN PROGRESS." The screen then lights up again with the new layout. The change takes effect after approximately 5 seconds to prevent false connections.

The control button block

The unit has two buttons, BP1 and BP2, and a potentiometer to adjust the brightness. Each press is confirmed by a short beep.

Action	Effect
Short press on BP1	Switching between time and battery voltage (only if a battery is detected)
Short press on BP2	Turn off the beeping and the message for current alarms
Press and hold BP1 and BP2 for 5 seconds (time display)	Enter time setting mode
When setting the time, press and hold BP1 or BP2 for 5 seconds.	Enter color adjustment mode

Set the time

1. From the time display, hold BP1 and BP2 together for 5 seconds.
2. The letters "HR" appear on the left side of the screen.
3. Each press of BP1 adds 1 hour, each press of BP2 adds 1 minute. The time is recorded.
immediately.
4. Do not touch anything else: the setting will finish automatically after 10 seconds.

Change the display color

You can choose the color of everything that is white on the screen (numbers, texts, logos) from 6 shades: white, yellow, sky blue, magenta, turquoise, light gray.

1. Enter time setting mode (BP1 + BP2 for 5 seconds).
2. Press and hold BP1 or BP2 alone for 5 seconds. A colored circle will replace "HR" on the left side of the screen.
3. BP1 changes to the next color, BP2 returns to the previous one.
4. The setting finishes automatically after 10 seconds without pressure being applied. The color remains memorized, even when the ignition is off.

Gauges and colors

Each gauge is a bar with its value in numbers below. Its color indicates the state: green = normal, orange = to be monitored, red = alarm.

Gauge	Displayed beach	Orange	Green	Red (alarm)
Fuel	0 to 60 L	7 L or less (reserve)	Above the reserve	-
Water temperature	30 to 150 °C	Under 80°C and 100 to 110 °C	80 to 100 °C	From 110 °C

Gauge	Displayed beach	Orange	Green	Red (alarm)
(watercooled)				
Oil temperature (watercooled et aircooled)	30 to 150 °C	Under 75°C and 121 to 140 °C	75 to 120 °C	From 141 °C
Oil pressure	0 to 5 bar	–	0.3 bar and above	Below 0.3 bar
Battery	0 to 20 V	11.5 to 12.4 V	12.4 to 15 V	At 11.5 V or from 15 V

To prevent flashing between two colors, each gauge returns to the previous zone only with a small margin (approximately 2°C for temperatures). The fuel reserve ends at 10 L, the low pressure at 0.4 bar.

Alarms and messages

An alarm is signaled by a beep every second, and depending on the situation, by a message at the top of the screen (in place of the time) and a flashing red bar. A short press of BP2 silences the beep and the message; the bar continues to flash as long as the fault persists. The alarm resets when the value returns to normal.

Message or signal	Cause	What to do
LOW COOLANT ALERT and flashing red bar (watercooled) + beep	Coolant level too low	Stop and check the liquid level
ENGINE OVERHEATING ALERT and flashing red bar (watercooled) + beep	Water at 110°C or more	Stop and check the engine
OIL TEMP ALERT and Bar Flashing red oil light + beep (air- cooled and water-cooled)	Oil at 141°C or higher	Slow down or stop and control the engine
LOW PRESSURE ALERT and Flashing red pressure bar. + beep (air-cooled and water- cooled)	Oil pressure below 0.3 bar	Stop the engine and check the oil level
Orange fuel bar + beep	Reserve level reached (7 L or less) Fill up	or exceed 10 L to exit the alert
RECHARGE BATTERY (aircooled et watercooled) +bip	Voltage below 11.5 V for more than 5 s	Have the battery and the charge
CHANGE ALTITUDE REGULATOR +bip (aircooled et watercooled)	Voltage of 15V or more	Have the alternator regulator checked.
CHANGE BATTERY TIME (aircooled et watercooled)	The clock battery is dead: the time stopped while the ignition was off.	Replace the battery and then set the time; the message will disappear.

If multiple messages are active, the most important one is displayed first. The low fluid alert takes priority over the overheating alert.

Good to know

- **After disconnecting and then reconnecting a fuel sensor**, the gauge may take 20 to 30 minutes to return to an accurate reading. This is normal; there is a complex smoothing process to compensate for gauge deviations while driving due to the shape of the fuel tank. For an instant reading, turn the ignition off and then back on, immediately display the correct value.
- **Low coolant level at startup (watercooled)**. If the level is already low when the ignition is switched on, the actual temperature appears a few seconds before the alert appears.
- **Without a battery detected**, the battery gauge disappears, its alerts are deactivated and BP1 no longer displays the voltage.
- **Clock battery**. The entire module consumes absolutely no current when the ignition is off. However, the time is kept by a small battery on the side of the casing. Its lifespan is at least 5 years (with a quality battery). When the battery is low, the message "CHANGE TIME BATTERY" will appear.
As shown in the image below, push on the lock to change the battery.

