

The Smart Tachograph DTCO® 4.0e

The function update for the smart tachograph DTCO[®] 4.0e deals with the preliminary stage of cabotage for international transport such as border crossing, working time and weight recording, with transfer of confidential data to the data management services VDO Fleet. In addition to usability enhancements, additional data records for the VDO Fleet Cloud solution have been integrated.



Preselected country International transport

Preselected country (Cabotage light) via the GNSS signal.

- The DTCO[®] will propose to the driver the current country for a begin /end country entry via the DTCO[®] menu and the begin country entry at the end of manual entry
- In addition the last regions entered regions will be stored for manual entry (Spain)
- A first implementation step towards mobility package I (border crossing)

When used twice a week for 50 weeks per year, this results in a time saving of

58 minutes per year

Easy to use, no false start/end land entries!



Working time directive 2002/15 EG

The DTCO® supports two new working time counters (daily /weekly working time)

that are shown in a new display. Moreover, two warnings are available when the driver reaches a configurable limit of working time. Interpretation of availability time can be configured.

- 1. Consistent working time (duration of the currently set working time without rest period).
- 2. Daily working time (total working time since the last day or weekly rest period).
- 3. Cumulative rest period (sum of the resting times during the current working hours).
- 4. Current weekly working time (total of the currently adjusted working hours for the current calendar week up to current time).



Support of OBW functions according to directive (EU)719/2015 and regulation (EU) 2019/1213

Recording the total vehicle weight and transferring the data to VDO Fleet.

- \bullet Communication protocol between Motor Vehicle Unit (MVU) and $\mbox{DTCO}^{\circledast}$ \bullet Display of
 - total weight of the vehicle and
 - technically permissible maximum loaded mass
- OBW information is available on CAN via diagnostic parameters

| 4x1 workins time x 04h15 | continuous working time |
|-------------------------------|-------------------------|
| 401 driving time 24h 03h15 | daily driving time |
| 401 rest in →⊢01h45 | daily/weekly rest time |
| 401 drivins time 01h45 | weekly driving time |
| 4₀1 drivins time ∥ 01h45 | two-week driving time |
| | VD |

The DTCO® can be configured to display warnings for:



Card insertion within the same calendar minute

With the DTCO[®] 4.0e you can immediately reinster the card and start the manual entry.

If the manual entry is completed within one minute change, a "please wait" message will be displayed on the screen with the remaining seconds.

When used twice a day, 6 days per week, 50 weeks per year, this results in a time saving of

60 minutes per year



welcome

10:31UTC

12:31.



Combined welcome screen

With DTCO 4.0e, the "Welcome" and "Driver Name" screen are combined, thus the time before the driver is able to perform manual entry is shorter.

Standard case- Reduction 3 seconds per use.

If used twice a day, 6 days per week for 50 weeks per year, this results in a time saving of:

30 minutes per year

Multi-drivers – Reduction 3 minutes per day.

If used 6 days a week for 50 weeks per year, this results in a time saving of:

900 minutes per year

Timeout for the manual entry is increased to 10 minutes

Better usability of the device.

If used twice a day, 6 days a week for 50 weeks a year, this results in a time saving of:

Avoidance of any unintentionally card entries!

Faster process for manual entry in multi-driver mode



Faster VDO counter availability after card insertion

Faster and more robust VDO Counter.

In total, a time saving of 228 minutes (3h 48min) in standard mode and 1698-1998 minutes (28h 18min - 33h 18min) in multi-driver mode is possible.



"Ready to drive" screen display

The DTCO[®] indicates to the driver after manual entry when the driver is allowed to start driving and if the DTCO[®] is in single or multi-driver mode.

Reduction 3 seconds per use. If used twice a day, 6 days a week at 50 weeks a year, this results in a time saving of

30 minutes per year

Faster card ejection

Optimized process

If used twice a day, 6 days per week for 50 weeks per year, this results in a time saving of:

50 minutes per year



Additional data sets for the VDO Fleet digital Services

The status of the following parameters is available on the CAN bus and can be read by data management systems:

- Onboard Weighing (OBW) data
- Status of Ferry/Train flag
- Driver1 name
- KITAS 4.0 Sensor data (serial number, housing seal serial number)

With one driver change.

Reduction 2-3 minutes per day. If used 6 days a week for 50 weeks a year, this results in a time saving of:

600-900 minutes per year

Your local contact

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Upgrade for the DTCO[®] 4.0 is available

The DTCO[®] 4.0e uses the same efficient and proven hardware platform as the DTCO[®] 4.0.

Existing DTCO[®] 4.0 can be upgraded to DTCO[®] 4.0e in workshops without device replacement. Licenses will be available on request.

