

MiX 3D Setup

1. Select the correct script, i.e. FM3D TCO (VDO or Stoneridge) v1.2.0.4 or above
 - a. Tick the boxes in the screenshot below, this is at the Peripheral Library Level

Peripheral library

Peripheral description *
FM3D TCO VDO v1.2.0.4

Peripheral type
Scriptable Device

Features and settings

FM3D functionality

Roaming

CAN baud rate 250

TCO functionality

Reset TCO signal when in rest

Enable ELVIST functionality

Audible warning if Driver 2 has not been identified

Audible warning when door has not opened for 24 hours

Enable DTCO functionality

DTCO Driver identification

Unknown Extended Driver IDs will disarm unit, and be matched to a known driver during the data download

2. Make the correct 3D FW version available: 1.1.18 or above
3. Make the correct DDR version available: E15.09.8 or above
4. Make the correct 5 x TCO Driver 1 and 4 x Driver 2 events available if necessary, these are **NO LONGER NECESSARY** for HOS

TCO driver 1 active work	System	Available
TCO driver 1 driving	System	Available
TCO driver 1 ID change	System	Available
TCO driver 1 passive work	System	Available
TCO driver 1 resting	System	Available
TCO driver 2 active work	System	Available
TCO driver 2 ID change	System	Available
TCO driver 2 passive work	System	Available
TCO driver 2 resting	System	Available

5. Each event must not be set to Active, Message Priority Critical and Send current position in message, see screenshot below

Active

Send active message

Queue after a delay of

0 : 0 : 0 and Send when condition becomes true

Hours Minutes Seconds

Message priority

Normal

The message will be sent when the message buffer is full

Send current position in message

6. Set the FM OBC to use the following settings, **DO NOT** tick Switch off RS232 Comms

The start of a trip will be recorded when Speed or Revs are detected OR	As soon as the ignition is turned on
Record interval (tacho) data while in trip mode.	<input checked="" type="checkbox"/>
Record interval (tacho) data between trips.	<input checked="" type="checkbox"/>
Switch off RS232 Comms when positive drive switches off (on when positive drive on)	<input type="checkbox"/>
Enable Deep Sleep Mode (Power Saving Mode)	<input type="checkbox"/>
Only disarm the immobiliser relay while a valid driver code plug is in the socket or identification card is in the card reader	<input type="checkbox"/>
Location of driver access list	Driver list stored on mobile device

7. Create the vehicle as per normal and then set the default FW and DDRs and add the TCO events above as well as any others required.

8. Once the vehicle has been created, go to the Assets tab, select the vehicle, access control and allow the unmatched extended driver as part of the driver list

The screenshot displays the 'Access control' settings for a vehicle. On the left, a sidebar lists various asset management options: Asset details, Asset status, Access control, Service history, Reminders, Fuel data, Other cost data, Mobile device settings, Required driver certificates, and Required driver licences. The main area shows a white truck icon and the vehicle identification 'FM 3607i + MIX 3D + CAN' with the ID 'FM 3607I/3617I'. The 'Access control' section indicates '10 drivers allowed' and '11 total drivers'. A checkbox is checked for 'All new drivers (in this organisation) may operate this asset'. Below, a tree view shows the hierarchy: Belgium Bouwmaterialen Kerremans & Co nv > Default Site. Under 'Default Site', several drivers are listed with checkboxes: 'Automatically created driver 0000000000000000' (checked), 'Automatically created driver B110000057235001' (checked), 'Automatically created driver B110000100000000' (checked), 'Automatically created driver B110000154488000' (checked), 'Bart Verheyden' (checked), 'Franciscus Van den Eynde' (checked), 'Installer' (checked), 'Pascal Van Looy' (checked), 'Steve Smolderen' (checked), 'Unknown' (unchecked), and 'Unmatched Extended DriverID' (checked).

9. Installation and testing

a. Pre-requisites

- i. FM OBC not connected to 3D
- ii. FM OBC and 3D powered up
- iii. Driver card for driver identification
- iv. Company card to set D8 protocol on Stoneridge DTCO
 1. see Change D8 Setting pdf

b. Check unmatched extended driver ID enabled in Access Control

c. Check config for correct DTCO type, DDR version, RS232 not switched off when out of trip

d. Re-compile config and send to FM OBC over the air (**MUST BE SENT OTA**)

e. Switch ignition on, press remote button switch on 3D, wait about 60 seconds

f. Switch ignition off

g. Power off the FM OBC

h. Connect 3D to FM OBC

- i. Re-connect power to FM OBC
- j. Switch ignition on
- k. 3D Diagnostic window shows CAN data from DTCO, may take up to 3 minutes
- l. Press number 1 or 2 button to change work states
- m. Wait about a minute and then switch ignition off
- n. Wait for FM OBC to come out of trip
- o. Wait for data to show in DynaMiX
- p. Check Activity Timeline for work state changes (if driver card is not available)
- q. Updated 3D DTCO data may take up to 6 minutes to come back
- r. Odometer reading should come back if speed is set to CAN or serial script

CAN Connection between DTCO C plug and 3D

Check the baud rate of the C connector, this could be 250 kB (standard) or 500 kB (Mercedes, newer Scania). This can be set in the 3D script config on S3, re-compile and then send out. The 3D must be reset after the config has been sent in order for it to connect to the server and retrieve the new settings.

Only 3D connected to DTCO C Plug

1. CAN high (yellow) on C5
2. CAN low (green) on C7
3. Link wire between C7 & C8
4. Jumper link inserted on the PCB of the 3D

Other device connected to DTCO C Plug and 3D connected to C Plug

1. CAN high (yellow) on C5
2. CAN low (green) on C7
3. Remove link wire between C7 & C8
4. Jumper link removed from the PCB of the 3D