

Guide to Driver
Decision Support
Compatibility

Document Change Record

Revision	Date	Owner	Details
0.1	11 th Feb 2015	James Scott-Evans	Initial Draft
0.2	25 th Apr 2016	James Scott-Evans	VDO 2.2 released
0.3	14 th Jun 2016	Chris Cuffe	Features of DDS and Counter (as displayed by digiCentral)

Table of Contents

Document Change Record	2
Table of Contents	2
1. Introduction	3
2. References	3
2.1. Stoneridge web page	3
2.2. Stoneridge manual.....	3
2.3. VDO web page	3
2.4. DTCO 1381 manual	3
3. Stoneridge.....	4
4. VDO.....	4
5. Checking compatibility	5
5.1. Stoneridge.....	5
5.2. VDO:.....	5
6. Features of DDS in digiCentral.....	6
7. Forwarding of DDS data by digiCentral	7

1. Introduction

In 2012 Stoneridge and VDO released tachographs that were able to provide real time updates on driving and rest times. Stoneridge have named this feature “Duo technology” and for VDO this is known as “Counter”.

Both of these manufacturers have provided an interface so that external systems can access a similar set of values that allow real time monitoring of the driving and rest times.

Tachosys with the digiBLU device and an Android app called digiDriver have combined these outputs so a driver is able to easily monitor his available driving time and know when breaks or rests are due.

Tachosys with the digiDL and digiDLex devices have taken these outputs at regular intervals and sent them to the digiCentral platform. This data can then be displayed to planners and driver managers to assist in day to day fleet optimisation.

The purpose of this document is to show which models of tachograph have implemented this Driver Decision Support (DDS) system.

2. References

2.1. Stoneridge web page

SE5000 Exakt Duo Digital Tachograph

<http://www.stoneridgeelectronics.com/products/se5000-exakt-duo-digital-tachograph>

2.2. Stoneridge manual

SE5000 Digital Tachograph - Driver & Company Manual

http://www.se5000.com/client/downloads/Driver_Company_Manual/Driver_Company_Manual_ExaktDuo_EN.pdf

2.3. VDO web page

Digital tachograph DTCO® 2.1 active

<http://www.fleet.vdo.com/laws/recording-trips/digital-tachograph-dtco-21-active/>

2.4. DTCO 1381 manual

DTCO 1381 Release 2.0 – 2.1 Operating instructions Company & Driver

http://www.fleet.vdo.com/media/1107/flc_instrucion_manual_dtco_1381_release_2_1_gb_en.pdf

3. Stoneridge

There are currently two models that support DDS, the Exakt Duo and Exakt Duo². These models have the revision status of R7.4 and R7.5 respectively.

By default DDS is enabled on the tachograph but a driver can override this and turn it off. Please use the following instructions on the tachograph to turn it on.

1. Press OK to show the menu.
2. Select: `SETTINGS`
3. Press OK and select: `DDS Settings`
4. Press OK and select: `DDS enable`
5. Select `YES` to enable the DDS presentation.
6. Press OK to confirm.

4. VDO

The table below shows which version supports this function and whether updates are needed.

	DTCO 1.3	DTCO 1.4	DTCO 2.0*	DTCO 2.0a	DTCO 2.1	DTCO 2.2
VDO Counter	—	—	—	✓	✓**	✓

* Upgrade of the release is possible via workshop

** Must be activated with an Update Card

The VDO Counter Update Card comes in two types Single or Multi Use.

The part numbers are:-

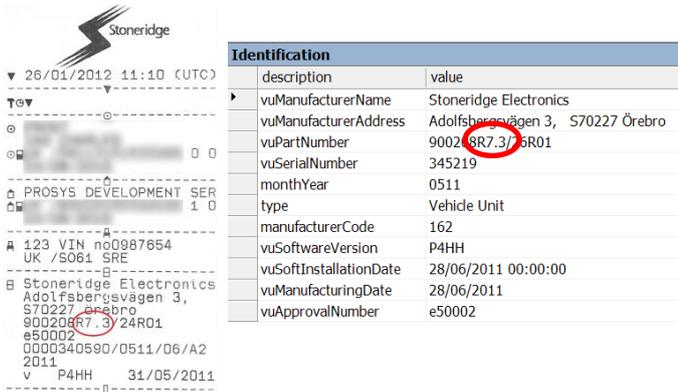
Single: A2C59516603

Multi Use: A2C59516604

5. Checking compatibility

You can check compatibility of a tachograph by looking at a technical printout from the head. You can also use the Tacho File Viewer application from Tachosys to open a download file from the vehicle. Use the Identification tab to see the same information.

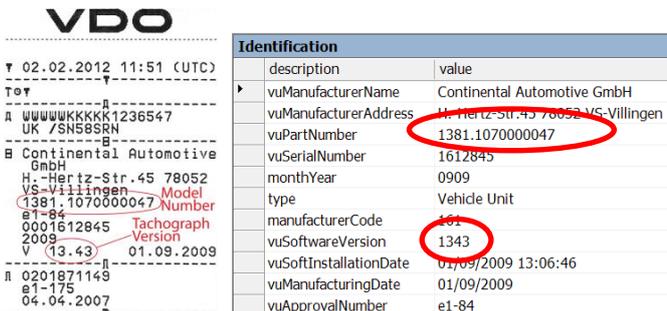
5.1. Stoneridge



Identification	
description	value
vuManufacturerName	Stoneridge Electronics
vuManufacturerAddress	Adolfsbergsvägen 3, S70227 Örebro
vuPartNumber	9002 8R7.37 5R01
vuSerialNumber	345219
monthYear	0511
type	Vehicle Unit
manufacturerCode	162
vuSoftwareVersion	P4HH
vuSoftInstallationDate	28/06/2011 00:00:00
vuManufacturingDate	28/06/2011
vuApprovalNumber	e50002

In this example the tachograph revision status is 7.3. This means it is an Exakt model and does not support DDS.

5.2. VDO:



Identification	
description	value
vuManufacturerName	Continental Automotive GmbH
vuManufacturerAddress	H. Hertz-Str. 45 78052 VS-Villingen
vuPartNumber	1381.1070000047
vuSerialNumber	1612845
monthYear	0909
type	Vehicle Unit
manufacturerCode	161
vuSoftwareVersion	1343
vuSoftInstallationDate	01/09/2009 13:06:46
vuManufacturingDate	01/09/2009
vuApprovalNumber	e1-84

In this example the tachograph version is 1343 = 1.3 so it does not support DDS. As the above chart shows if the version is 20XX then a workshop can upgrade the tachograph to enable DDS. If the version is 21XX then you can use one of the Upgrade cards to enable DDS. You can confirm that VDO Counter is enabled by using the up/down arrow buttons on the tachograph to navigate the display when the vehicle is stationary. If VDO Counter is enabled the tachograph will show VDO in the top left of some of these screens.

6. Features of DDS in digiCentral

digiCentral displays the DDS data as a subset of the Employee record under the Employees tab. It will only display where a driver is using a vehicle fitted with a digiDL that has been enabled for DDS or Counter. This is also subject to the conditions set out in 3, 4 and 5 above.

Current activity

45

 14/06/2016 15:51 0h00 D161FOB

The user can view the current activity of the driver in 'real time'. The granularity is defined by the maximum log send time set in the digiDL, once a minute by default.

digiCentral displays a detailed summary in the left margin.

Driver decision support

At: 14/06/2016 15:51

DRIVE TOTALS

 2h20
 2h20 (10h)
 2h25 (56h)
 2h59 (90h)

DRIVE TIME REMAINING

 2h10  45'

EXTENDED DRIVE AVAILABLE

 2

BREAK OR REST TAKEN

 0h00

TIME REQUIRED

 0h45  4h30

REDUCED DAILY REST AVAILABLE

 3

NEXT REST PERIOD

 Wed 01:54 for 9h00

 Wed 12:21 for 24h00

[show legend](#)

Legend

	Driving
	Other work
	Period of availability
	Rest
	Cumulative driving time of current day.
	Cumulative driving time of current week.
	Cumulative driving time of previous and current week.
	Breaks taken during driving period.
	Rest required until next week.
	When then next daily rest is due to start.
	When the next weekly rest is due to start.
	-h-- Times not available from this Tachograph unit.

7. Forwarding of DDS data by digiCentral

It is not always practical for hosts of digiCentral to provide user access (see 6. above) however data from digiCentral can be forwarded to other systems using a variety of methods.

TACHO · SYS digiCentral

The screenshot displays the 'Data Forwarding' configuration interface within the digiCentral application. The navigation menu on the left includes options like 'Account details', 'User access', 'Locations', 'Company cards', 'File forwarding', 'Data forwarding' (which is highlighted), 'Notifications', 'Software', and 'Terms and Conditions'. The main content area is titled 'Data Forwarding' and features a form for adding a new forwarding destination. The form contains the following fields and values:

- Name: * Test Forwarding
- Type: * Packet
- Host Name: * Test.test.com
- Port Number: * 4616
- Method: * SOAP
- Format: * base64binary

A legend below the form states: * = required fields. At the bottom of the form, there are 'Confirm' and 'Cancel' buttons.

The preferred data forwarding method is SOAP and the packets are defined in our document “Data Packet forwarding from digiCentral”, available on request. The advantage of using the data in an existing system is that driver information can be combined to give a single view. The data is particularly useful for planners who need to deploy drivers with sufficient driving hours to complete the task in hand.