

# digiDL



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### **INSTALLATION GUIDE**

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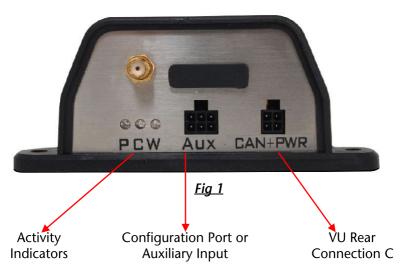
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#### digiDL connections

#### **Components**

- digiDL
- Tachograph cables
- Antenna

#### digiDL connections and indicators



#### **Digital tachograph rear connections**



Fig 2

- A Power
- B Speed Sender
- C CAN-Bus C. For use with digiDL.
- D Serial Outputs. Not used in this context.

#### Cables supplied with digiDL

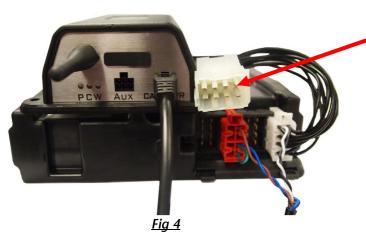
digiDL power — place in socket A at the rear of the tachograph. Replace existing cable.

New power socket — Provides a new "piggy back" connector for the original cable removed from socket A of the tachograph.



CAN-Bus C; Place in socket C of tachograph. Place in digiDL CAN + PWR socket.

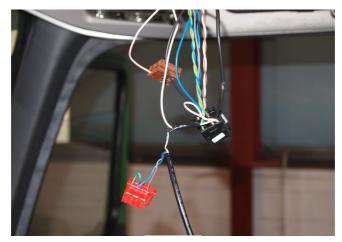
#### digiDL with cables in place



New Socket A for the original plug A at the rear of the tachograph.

Please Note — The Speed Sender connection remains in the tachograph socket B, this is not shown. You have to remove the existing plug A from socket A of the tachograph. The plug you removed from socket A must be placed in the new socket clearly visible at the top of *Fig 4*.

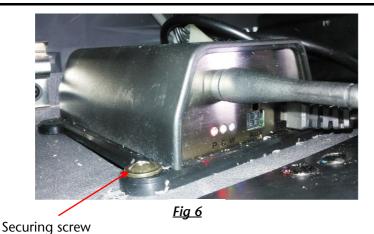
#### **Alternative wiring**



<u>Fig 5</u>

If there is no room at the rear of the tachograph for the new power plug and socket, using an approved method, connect the power supply for the product to pins 1 and 5 of plug A.

#### Securing digiDL unit

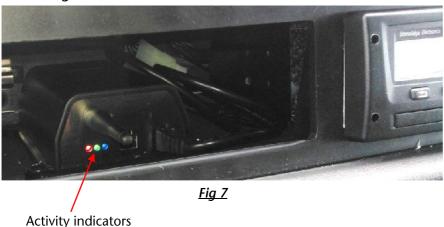


The digiDL unit can be secured by screws/bolts through the 4 corner lugs.

#### **Alternative securing**

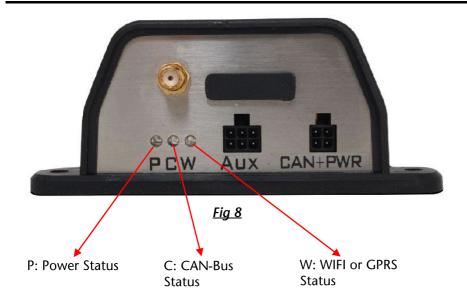
Alternatively, if there is no suitable surface to secure it to, the unit and cable should be secured to an existing cable loom.

#### Installed digiDL unit



Once the digiDL unit has been secured and all connections made, the Activity indicators will illuminate as necessary.

#### **Activity indicators**



The digiDL has three indicator lamps (see Fig 8) each of which has one of three statuses; ON / OFF or Flashing. See the table below for details on the meaning of each light status.

LED	ON	OFF	Flash
Р	Power Okay	No Power	Power okay and a Task is in progress
С	CAN okay	No CAN	Infers intermittent CAN connection
W	Comms okay	No Comms	Initiating Comms with GPRS or WIFI

Please note that when the power LED (Red) is on and the CAN-Bus LED (Green) is off it would suggest that either the CAN-Bus connector is not connected correctly or the vehicle ignition is off.

#### **Authentication of company card**

#### The role of digiCentral

digiCentral is a centralised server software created to manage communication with the remote device. digiDL needs to communicate with a designated digiCentral server in order to open a dialogue with the appropriate Company Card, to pass data and to receive schedules and tasks. The Company Card is physically placed in a card reader where the attached Windows PC runs a copy of 'digiCentral Authenticate' and in turn communicates with digiCentral, the card's whereabouts can then be managed by digiCentral.

#### **Authentication**

In order to download the mass memory of a Digital tachograph a valid Company Card must be available for the unit to authenticate against. Previously this was only possible by inserting a Company Card into the tachograph. The introduction of Remote Download made it possible for the tachograph to communicate remotely with a Company Card, in this case by using digiDL as a gateway. digiDL will try and authenticate every 12 hours and the status of authentication is shown in the digiDL Configuration Device Window. Please note that the Company Card being used remotely, or one in the same series, must have been inserted into the tachograph at some time, if not then the tachograph cannot use this Company Card.

Your designated digiCentral server will have access to a relationship created between the Vehicle and the Company Card. This would be set up in one of three ways; by your service provider, via a web interface provided by your service provider, via your own server.

In summary the essential elements for the Authentication process are;

- 1. A valid company card which the vehicle has seen and is available online via digiCentral Authenticate.
- 2. A relationship between the company card and the vehicle created on digiCentral.
- 3. A digiDL able to communicate via WIFI or GPRS to the appropriate digiCentral via the Internet.

#### **Registering Company Cards**

Log onto digiCentral at <a href="http://dcsre.tachosys.eu/">http://dcsre.tachosys.eu/</a>



<u>Fig 9</u>

Enter your "Account ID", "User" name and "Password"

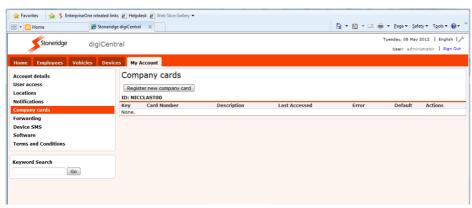


Fig 10

From the My Account tab click on the "Company Cards" menu item

Then click on the "Register a new company card"



Fig 11

Enter the "Card number" and "Description"

Then click "Confirm"

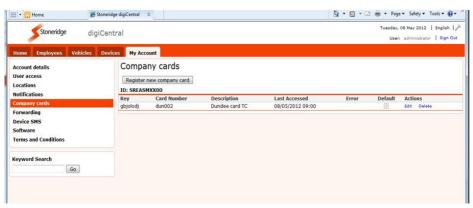


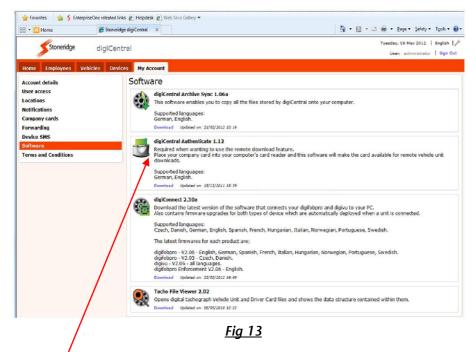
Fig 12

The system will then generate a unique key which must be entered into digiCentral Authenticate to authenticate the remote downloading.

#### **Remote Downloading**

To set up the remote downloading the tachograph needs to be authenticated using a company card.

The tachograph must be locked with the company card. If a different company card is to be used for remote downloading the company card must be issued to the same post code as the card that has been used to lock the unit.



To authenticate remotely "digiCentral Authenticate" must be downloaded from the "Software" menu item on the "My Account" tab of digiCentral.

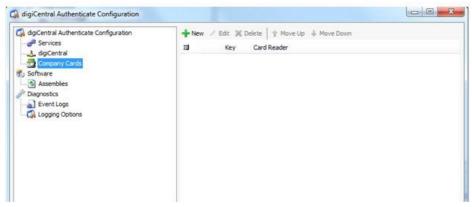
This software must be installed on a server or a PC that is always on and connected to the internet.

Download the software by clicking the download button and follow the on screen instructions to install.

After installing you will need to add the company card to the system.

#### **Adding a Company Card**

Insert the company card in a suitable smart card reader and plug into the PC / Server onto which you have installed digiCentral Authenticate.



Fia 14

Open the software and click on "Company Cards"

Click on the "+New" button



Enter the digiCentral ID into the ID field, this is the account ID that is used to log into digiCentral

Enter the key that was previously generated when the company card was added to digiCentral

Fig 15

Then click on the "Card Reader" tab and select the reader that is connected to the computer into which the company card has been inserted

Then click "OK"

#### **Downloading the Tachograph Files to your PC**

The tachograph files can automatically be downloaded to a PC connected to the internet using "digiCentral Archive sync" which can be downloaded from the software page on the "My Account" tab of digiCentral; see fig 13.

Download the software and follow the on-screen instructions to install;



<u>Fig 16</u>

To set up the software enter the location where you would like the files downloaded to in the "Sync folder location" box

Then click "OK"

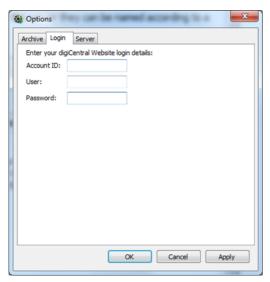


Fig 17

Click on the "Login" tab and enter your digiCentral account details

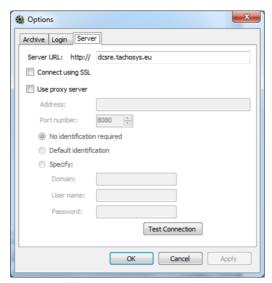


Fig 18

Click on the "Server" tab and enter "dcsre/tachosys.eu" in the Server URL and click "OK"

#### Troubleshooting

#### Known issues in digiDL Configuration Windows software V1.12

When configuring a mixture of WIFI and GPRS digiDL units the Configuration Window is not correctly refreshed between digiDL types. If you swap between a digiDL GPRS and digiDL WIFI unit when configuring then you should exit the application to refresh this window.

#### **Error Code 12**

Some tachographs will report an error code 12 on the unit display and the unit will indicate a download failure. This amongst other things can be caused by a vehicle registration number change within the period being downloaded. To work around this problem download from the date of the last calibration.

#### WIFI connectivity issues

The Blue LED will shine constantly if you have a solid connection to WIFI. Please bear in mind that WIFI settings are generally case sensitive this certainly applies to the SSID and Password in particular. In order to have WIFI connection you must be in range of your WIFI router, in 'line of sight' preferably. Signal issues may be resolved by fitting a more powerful aerial to the router and/or the digiDL.

#### **GPRS** connectivity issues

If the Blue LED is flashing it means that a SIM card is present however the unit is unable to initiate communication with the GPRS network. Initially check all of your GPRS settings. If the unit still fails to connect first try repowering the unit. If the unit still fails then you can view the status of connectivity in the digiDL Configuration Status window. The code displayed will show the stage of connection.

You must make sure that the SIM card is not PIN locked and that the contract allows you to pass Internet data. This is often termed 'data enabled SIM'.

Whilst we have endeavoured to ensure the accuracy of the information supplied, Stoneridge Electronics cannot be held responsible for any errors or omissions. It is the installer's responsibility to ensure compliance with specific vehicle manufacturers repair procedures, especially with regard to the procedure for disconnection/reconnection of the battery. Failure to comply with the vehicle manufacturers instructions may result in personal injury and/or component damage/data loss.

## digiDL



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