

# Dig!down

Digital Tachograph Download Device

Operating Instructions



# Introduction

The Digidown device downloads data from digital tachograph vehicle units (VUs) from all current tachograph manufacturers. Data downloaded from the Tachograph is stored in a Secure Digital memory card, normally known as an SD card.

Three types of download are available:

- |           |   |
|-----------|---|
| ALL VU    | Downloads all contents from the VU  |
| LATEST VU | Programmable <sup>1</sup> . Options include the last 1 or 3 months of data plus a selection from events & faults, detailed speed and technical information. |
| CARD      | Downloads a Driver Card inserted into the VU  |

If required, 'Latest VU' can also be programmed to include download of a Driver card inserted in the VU.

Pressing the relevant button starts the Download. Download status is indicated by the 3 LEDs positioned by the buttons.

## Initial Set Up

In order to operate successfully, the Digidown requires an SD card to be inserted into the slot in the end of the device. A suitable ready-formatted SD card is supplied with the unit. When a suitable memory card has been inserted into a Digidown and the Digidown is connected to a VU it checks the card format and then indicates that it is ready for use.

## Insertion and removal of the SD card

When in use a suitable SD card must be inserted into the slot in the bottom of the Digidown. To insert the card, push it into the slot in the end of the Digidown until it latches in place. To remove the SD card from the Digidown (for instance in order to read it using a different memory card reader) the protruding end of the memory card should be pushed back into the Digidown. This will release the SD card and it will spring out for easy removal. DO NOT try to remove the latched memory card by pulling on the end of the card.

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<sup>1</sup> Please contact your dealer to discuss the options available.

# Download Process

Please note that for any download from a digital tachograph VU to work, a Company, Workshop or Control card must first be inserted in the VU and the vehicle ignition must be switched on.

Connect the Digidown to the 6-pin Download connector on the front of the VU. Please note that Digidown should NOT be connected to an analogue (chart-recording) tachograph.

On connection, the Digidown will check the presence and format of the SD card and then indicate that it is ready for operation by blinking briefly each of the LEDs in turn. Pressing any of the buttons will initiate the download indicated by the button's label.

During download, the LED by the button pressed will flash repeatedly about twice each second. Successful completion will be indicated by the LED blinking briefly about once every second. Note that the download of data from a VU can take a considerable time, potentially in excess of 30 minutes. Downloading using 'Latest VU' can reduce the download time considerably.

NOTE: DO NOT disconnect the Digidown or remove the SD card during a download. Doing so may cause file errors on the SD card.

## Reading the SD card

The SD card can be read via the USB port on the Digidown. Once connected to a PC via the USB port, the Digidown will appear as a standard removable disk drive<sup>2</sup>.

Alternatively data on the SD card can be read and/or copied by removing the SD card from the Digidown and plugging it into a separate SD card reader available from Lisle Design or from major computer or camera shops.

## LED status / Error indication

The LEDs are used to show the status of the download and any error. The patterns used are:

### Normal Operation:

Each of the LEDs blinking briefly in turn  
Indicates power is on and Digidown is ready

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<sup>2</sup> The required driver software is included within Windows 2000, XP and Vista. For use with Windows 98 a driver software file is required. Please contact your dealer for more details.

- Single LED flashing about twice per second  
Indicates Digidown is busy performing download
- Single LED blinking briefly about once every second  
Indicates successful completion of download
- 'All VU' and 'Card' LEDs on  
Indicates Digidown is in USB mode.

## Error Conditions:

Each of the LEDs stepping smoothly from one to the next  
Indicates that there is no SD card present.

With units prior to Serial No. 13000, SD card errors are also reported by each of the LEDs stepping smoothly from one to the next.

All three LEDs flashing together  
Indicates that there is a problem with the SD card

Single LED permanently on  
Indicates download failure

Single LED on briefly (approx 3s)  
Indicates button press while Digidown is busy

## Suggested Actions on Error Condition

SD Card Error: Check card is correctly inserted  
Check card Lock Switch is in the unlocked position  
Check card is not full  
Check card is formatted as FAT16  
(Windows refers to this format as FAT)

Download Failure: Ensure that a Company, Control or Workshop card is inserted in the VU and that vehicle ignition is switched on.  
Retry download

Button Press Error: No action required - original download will continue.

'Download Fault 12' When downloading data from some SiemensVDO digital tachographs the message 'Download Fault 12' may occasionally be shown on the tachograph display. This can safely be ignored. Allow the download to finish and then press 'OK' to cancel the error message.

# Digidown Operating Instructions - Appendix

## Choice of SD Memory Card

The Digidown will work successfully with most types of SD memory card provided that they are formatted FAT16 (which Windows calls 'FAT'). A few SD card types are unfortunately not suitable as they do not conform fully to the SD card specification. Cards supplied by Lisle Design are to be preferred as they have been selected for optimum performance in this application.

Although 64Mbyte memory cards are supplied as standard by Lisle Design (and this memory capacity is entirely adequate for this application) larger capacity memory cards can also be used provided that they are formatted FAT16.

## SD Card Formatting

For any SD memory card to work with the Digidown it must be formatted FAT16 (which Windows calls 'FAT').

When a newly formatted SD card is inserted into a Digidown or Digidown Plus and the unit is connected to a VU, the format of the memory card is first checked. The Digidown then creates a directory structure on the card.

Two top-level directories are created:

- 'DIGIDOWN' and
- 'UPDATES'

'Digidown' has 2 sub-directories:

- 'VU' where VU downloads are stored and
- 'CARD' where driver card downloads are stored.

This process is automatic and generally takes just a few seconds.

## SD Card directory structure

The downloaded data appears on the SD card in the '\digidown\vu' or '\digidown\card' directory depending on download type. Each download is labelled vuxxxxxx.esm or cdxxxxxx.crd where xxxxxx is a number starting at 000001 and increasing by 1 for each download recorded on the SD card.

The Digidown Plus can also be programmed (unit serial numbers 13000 onwards) to name the files vuxxxxxx.ddd and cdxxxxxx.ddd for use with software which only accepts ddd files. Whatever the file names, the contents of the downloaded files are exactly according to the digital tachograph regulations.

## Upgrade of the Digidown

The software within the Digidown can be upgraded when appropriate without the need to return it to a dealer.

Similarly the programming of the 'Latest VU' button can be updated without the need to return the Digidown to a dealer.

**For more  
information  
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