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DLKPro Download Key

Advanced Digital Tachograph Solutions

T.M.S.
(ANALYSIS) LTD

2 DLKPro Download Key

The DLKPro product family by VDO sets new standards for data downloading and archiving. With the DLKPro you can download mass memory and driver card data and view it either directly on the screen or in the "DownloadTools" PC programme.

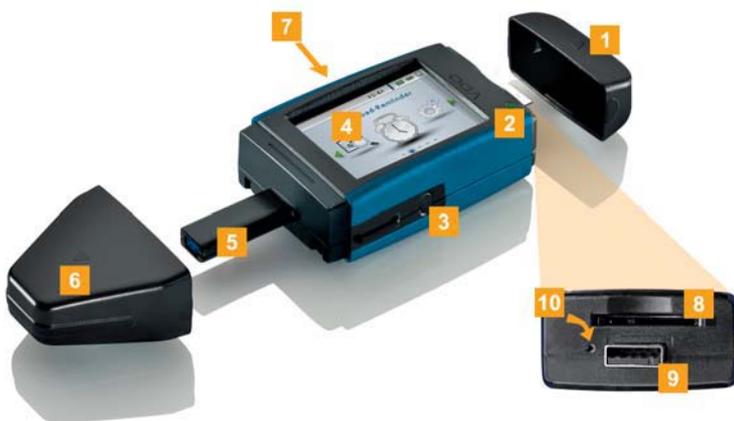
Package contents



The package contains:

- 1 DLKPro Download Key with
 - software for configuring, visualising and archiving digital tachograph data,
 - operating instructions.
- 2 USB extension cable
- 3 Download leaflet

Product overview



- 1 USB plug cover
- 2 LED indicating the operating status
- 3 Push button for switching the DLKPro on and off
- 4 Screen with touch function
- 5 6-pin download plug
- 6 6-pin download plug cover
- 7 Chip card reader
- 8 Card slot for SD™ or SDHC™ card
- 9 USB 2.0 plug (type A)
- 10 Reset button

3 Getting started with the DLKPro

With the DLKPro you can

- download digital tachograph mass memory and driver card data; see page 8.
- download driver cards via the integrated chip card reader – after it has been activated; see page 10.
- immediately determine exactly when data is due to be downloaded thanks to the download reminders displayed on the screen; see page 11.
- use the PC programme to keep an eye on when the next digital tachograph periodic inspection is due; see page 24.
- use the PC programme to see at a glance when a driver card is due to expire and an application for a new card must be submitted; see page 24.
- use the PC programme to check whether or not the data has been downloaded without errors; see page 33.
- process and manage the download files in accordance with the pertinent legal regulations; see page 21.

Synchronising the clock and downloading data for the first time

The DLKPro has an integrated real-time clock, which is based on UTC time. The first time the device is connected to a digital tachograph the clock is automatically synchronised – provided that a company card, control card or workshop card is inserted in the digital tachograph.

1 Insert your company card, control card or workshop card into the digital tachograph.

2 Plug the DLKPro into the digital tachograph; see page 7.
The mass memory and driver card data is downloaded.
The clock is synchronised.

You can view the downloaded data directly on the screen or display it using the “DownloadTools” PC programme; see page 11 and page 21.

Switching on the DLKPro

- 3** Switch on the DLKPro by
- pressing the on-off button; see page 4.
 - inserting a card into the activated chip card reader; see page 10.
 - connecting the DLKPro to the download interface of a digital tachograph; see page 8.

Note: You cannot operate the screen during data download.

The DLKPro can be operated either by means of an external power supply (vehicle) or the integrated rechargeable battery.

Note: Before you use the DLKPro for the first time, please charge the battery. The battery is fully charged after approx. 2 hours.
If the battery charge level is well below the limit of 30 %, the LED will flash green/red every 30 minutes for around 3 seconds, even if the DLKPro is not being used.
The battery cannot be charged while data is being downloaded.

Switching off the DLKPro

- 4** Switch off the DLKPro by pressing the on-off button; see page 4.

Note: To save battery power, the DLKPro switches itself off automatically after 20 seconds of inactivity.

Charging the battery

Battery power is needed for

- the real-time clock,
- the integrated chip card reader and
- the screen.

Each time the DLKPro is plugged into the computer, its battery is automatically charged. During charging, the LED on the DLKPro flashes orange.

Battery power is not needed to download digital tachograph data. The download will function irrespective of the battery's charge level. If the charge level is very low, however, use of the screen display will be limited or even impossible.



- 5** If possible, leave the DLKPro plugged into the computer when you finish working with it – this will charge the integrated rechargeable battery e. g. for the next card download.

Tip: If you use a USB hub as a DLKPro connection, make sure that the hub has its own power supply. Otherwise the DLKPro's battery can only be charged with a minimal charging current.

Creating a backup copy on the SDHC™ card

If an SDHC™ card is inserted, a backup copy of the data is stored on it after the data download has finished.



- 6** If you require a backup copy, insert an SDHC™ card into the card slot. The DLKPro screen is facing upwards; the contact points of the SDHC™ card are facing downwards; the angled corner is on the right.

Note: You can use either an SD™ or an SDHC™ card. The cards are not included in the package. When using an SD™ card, please remember that the card's memory capacity may not be 128 MB (memory capacity of the KEYTOOLS partition). Otherwise the DLKPro will not recognise the existing partition and the configuration software cannot be started. In these Operating Instructions, 'SDHC™ card' also means an 'SD™ card'.



4 Downloading data

With the DLKPro you can download the following data:

- the complete contents of the mass memory (data from at least 365 days),
- mass memory data covering a specified period and including specific data blocks,
- the contents of a driver card inserted in the digital tachograph (driver data from at least 28 days),
- the contents of a driver card inserted in the chip card reader (driver data from at least 28 days).

Note:

- Before downloading data from a digital tachograph, you must read and strictly observe the General Information on page 3.
- Downloading data from digital tachographs is only possible if a company card, control card or workshop card is inserted in card slot 2 for instance.
- The exception to this rule is the driver card download:
You can download driver card data from the DTCO 1381 Rel. 1.4 or a later release without inserting one of these cards.
- Activate the integrated chip card reader with the licence card if you want to use it for card downloading; see page 10.

Note: Please remember that the provisions for identifying download files in France and Spain differ from those in other European countries. Check the DLKPro's configuration before using the DLKPro for data downloading.

Downloading mass memory and driver cards

- 1 Insert your company card, control card or workshop card into the digital tachograph.
- 2 Open the cover of the digital tachograph's download interface.
- 3 Remove the cover from the DLKPro's download plug.
- 4 Insert the DLKPro's download plug into the download interface of the digital tachograph. When the DLKPro is connected, its LED flashes green.
- 5 When the data has been transferred, remove the DLKPro from the download interface. Replace the cover, close the download interface of the digital tachograph and remove your company card, control card or workshop card from the digital tachograph.

You can then view the downloaded data either on the screen or using the "DownloadTools" PC programme; see pages 11 and 21.

Note: If the download was not successful, the LED on the DLKPro flashes red and intermittent beeps can be heard.

- In this case, check whether or not the DLKPro has enough memory available; see page 13.
- Try the download again.

If the download fails a second time, use the PC programme to collect the support files and contact your service partner; see page 31.



A progress bar shows how the download is progressing.

When the download has finished, the LED on the DLKPro remains green and beeps indicate that the download was successful; see note on page 8.

Note: If a driver card is inserted in the digital tachograph, its contents – together with the tachograph's mass memory – are downloaded automatically.

Downloading a driver card with the DTCO 1381, Rel. 1.4 and later releases

Note: With the DTCO 1381, Rel. 1.4 and later releases, you can download driver card data without inserting a company card, control card or workshop card.

- 1 If the driver card has not yet been inserted into the DTCO, please insert it now.
- 2 Open the cover of the DTCO's download interface.
- 3 Remove the cover from the DLKPro's download plug.
- 4 Insert the DLKPro's download plug into the download interface of the DTCO.
When the DLKPro is connected, its LED flashes green.



A progress bar shows how the download is progressing.
When the download has finished, the LED on the DLKPro remains green and beeps indicate that the download was successful; see note on page 9.

- 5 When the data has been transferred, remove the DLKPro from the download interface.
Replace the cover and close the DTCO's download interface.

You can then view the downloaded data either on the screen or in the "DownloadTools" PC programme; see pages 11 and 21.

Note: If the download was not successful, the LED on the DLKPro flashes red and intermittent beeps can be heard.

- In this case, check whether or not the DLKPro has enough memory available; see page 13.
- Try the download again, e. g. with the chip card reader.

If the download fails a second time, use the PC programme to collect the support files and contact your service partner; see page 31.

Downloading a driver card using the integrated chip card reader

Using the integrated chip card reader, you can transfer the data of a driver card straight to the DLKPro

Notes:

- Activate the integrated chip card reader if you want to transfer the card data directly to the DLKPro.
- Before the first card download, connect the DLKPro to the digital tachograph and carry out a mass memory download.
- Please remember to charge the battery for the card download.

Note: Card download is not possible if the DLKPro is plugged into the computer.

Note: You can also use the integrated chip card reader to download data from company cards, control cards and workshop cards.

Activating the chip card reader

Note: The licence card for activating the integrated chip card reader can be obtained from your service partner.

- 1 Insert the licence card into the integrated chip card reader with the chip facing upwards and the arrow pointing in the direction of the reader. A message is displayed indicating that the licence has been activated.



- 2 Remove the licence card.
- 3 Write down the serial number of the DLKPro on the licence card. The serial number is at the back of the DLKPro on the model plate.

You can then use the integrated chip card reader for downloading driver cards.

Downloading driver card data

- 1 Insert the driver card into the integrated chip card reader with the chip facing upwards and the arrow pointing in the direction of the reader. Card download starts automatically.



A progress bar shows how the download is progressing.

When the download has finished, the LED on the DLKPro remains green and beeps indicate that the download was successful.

- 2 When data transfer has finished, remove the driver card.

You can then view the downloaded data either on the screen or using the "DownloadTools" PC programme; see pages 11 and 21.

Note: If the download was not successful, the LED on the DLKPro flashes red and intermittent beeps can be heard.

- In this case, check whether or not the DLKPro has enough memory available; see page 13.
 - Try the download again, e.g. using the digital tachograph.
- If the download fails a second time, use the PC programme to collect the support files and contact your service partner; see page 31.

5 The screen – the first data check

The DLKPro screen lets you view the downloaded data immediately on site.

The screen elements



- 1** Navigation bar
The navigation bar shows you the currently selected menu level. Touching this bar will return you to the higher level menu at any time.
If you want to return to the main menu, keep your finger on the bar until the main menu is displayed.
- 2** Time display
- 3** Status icons
The icons on the status bar show you at a glance
 - how much memory has been used,
 - the battery charge status,
 - whether an SDHC™ is inserted.
- 4** Display area
This area is reserved for displaying menus and data.
Use your finger to navigate the menu.

Screen navigation

Navigate on the screen by selecting the icons with your finger.

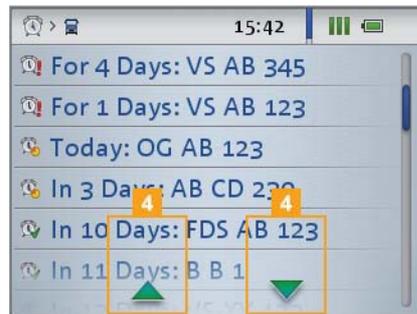
Note: Only use your finger for navigation. Please do not use any sharp-edged or pointed objects.

- 1** Switch the DLKPro on by pressing the on-off button.
The screen display area shows the main menu.

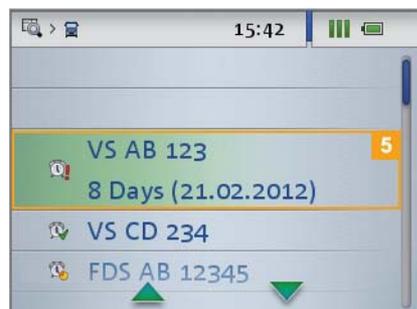
Note: The texts shown on the screen are always displayed in the dialogue language that you selected last.
Set the dialogue language via **Settings > Languages**.
The newly selected language is shown immediately.



- 2** Press ◀ or ▶ to select a different menu.
- 3** Confirm your selection with your finger.



4 Press ▲ or ▼ to select an item from a list.



5 Confirm your selection with your finger.



6 Press ◀ or ▶ to scroll.

7 Press the navigation bar to return to the higher level menu.

The menu

You can select one of the following menus:

- **Overview**
- **Reminder**
- **Settings**
- **Info**



The **Overview** menu shows you information about the mass memory and driver card files stored on the DLKPro.

You can check

- when the DLKPro was last used to download data from a specific vehicle or driver card.
- when the next download of a specific vehicle or driver (card) is due.



The **Reminder** menu shows you a list of all the vehicles or drivers with upcoming or overdue downloads.

Tip: Use the download reminder function to carry out mass memory and driver card data downloads on schedule.

Please bear in mind that downloads must take place regularly using this particular DLKPro; otherwise the download reminders will be inaccurate.



-  You can choose the screen dialogue language in the **Settings** menu. The new language is set immediately and is displayed each time you switch on the DLKPro.



-  The **Info** menu provides the following information:
- DLKPro version used
 - Firmware version
 - Serial number
 - Free memory capacity on the DOWNLOADKEY partition that is available for further downloads
- You can also see whether or not – and if so, when – the integrated chip card reader was activated.

The icons and what they mean

Data download



Mass memory data is being downloaded.



Driver card data is being downloaded.



Company card data is being downloaded.



Control card data is being downloaded.



Workshop card data is being downloaded.

Note: In the case of company cards, control cards and workshop cards, downloading can only be carried out with the integrated chip card reader; see page 10.

Memory usage



0% – 25% of the memory is full.



25% – 75% of the memory is full.



75% – 99% of the memory is full.



100% of the memory is full.

No more downloads can be carried out.

Charge level of the rechargeable battery



Battery charge between 75% and 100%
(colour: green)



Battery charge between 50% and 75%
(colour: green)



Battery charge between 25% and 50%
(colour: green)



Battery charge between 0% and 25%
(colour: red)

SDHC™ card inserted



SDHC™ card is inserted. Data can be written on to and read from the card (colour: green).



SDHC™ card is inserted. Data cannot be read from the SDHC™ or the card's memory is full (colour: red).

Menus



Overview menu:

Information about all the download files stored on the DLKPro



Reminder menu:

List of upcoming vehicle and driver card downloads sorted by due date



Settings menu



Info menu:

Display of the DLKPro version, the serial number, the software version and the free memory capacity

Sub-menus (type of the download files)



Vehicle



Driver



Company



Control



Workshop/Test centre

Further sub-menus



Dialogue language selection

Information about the selected vehicle

-  The next mass memory download for the selected vehicle is due in 8 days at the earliest.
-  The next download is due on the current day or within the next 8 days.
-  The mass memory download is overdue.

Information about the selected driver

-  The next driver card download for the selected driver is due in 8 days at the earliest.
-  The next download is due on the current day or within the next 8 days.
-  The driver card download is overdue.

Note: The periods specified for the reminder functions correspond to the default factory values. Choose **Configuration (module) > Options (tab)** to specify reminder periods; see page 28. Please bear in mind that downloads must take place regularly using this particular DLKPro; otherwise the download reminders will be inaccurate.

Information about the selected company card:**Activities carried out**

-  Mass memory download
-  Driver card download
-  Company 'lock-in' (to the digital tachograph VU) by inserting the company card; this procedure is only carried out if the company is not yet 'locked in'.
-  Company 'lock-out' from the digital tachograph when removing the company card

Information about the selected control card:**Activities carried out**

-  Mass memory download
-  Driver card download
-  Printout from the digital tachograph
-  Data viewed in the display of the digital tachograph

Information about the selected workshop card:**Programmed parameters**

- W** Characteristic coefficient (imp/km) programmed into the digital tachograph
- K** Correction value programmed into the digital tachograph
- L** Tyre circumference programmed into the digital tachograph
-  Tyre size programmed into the digital tachograph