

Product D-Box 2
Version V02.01

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User Manual

SmarTach D-Box 2



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Warning: The complete reading of this manual is recommended in order to familiarize the user with the functions and operations of the equipment before using it.

1. Introduction

D-Box 2, designed by ACTIA, is a portable tool to download digital Tachographs and Smartcards. It is designed to download data from both vehicle units when connected, and "Drivers", "Control", "Company" and "Workshops" smartcards when inserted in the card reader.

D-Box 2 is compatible with all tachographs brands and all archiving software. Easy to use, it is also a tool to transfer collected data to your computer. This function allows you to respect archiving obligations and to import your data to your management software.

Main functions

- Download data from tachographs. See p.6 section 4.1
- Standalone and automatic smartcard download. See p.7 section 4.2
- Transfer collected data to a computer. See p.8 section 5.



2. Components

- D-Box 2 AC600206



- USB cable to PC
AY14600030



- 6-pin cable to tachograph
AC600210



- Rubber protection (optional)
AC600209



- 2 Go Micro SD card
AY14600028



- CR 123A (3V) Battery



3. General characteristics

3.1 Technical specifications

- 32 character LCD display
- Robust plastic casing
- Size (L×W×H) : 144mm×63mm×21mm
- Weight: 106g (with battery)
- Power supply: CR123A (3V) Battery
- UTC Time (Universal Time Coordinated)
- 26 Languages available
- Work environment temperature: 0°C to +60°C

3.2 Functional specifications

3.2.1 LEDs

LED1 comes on permanently when the product is powered:

LED2 comes on blinking during an operation:

It becomes permanent at the end of the operation:

LED3 comes on permanently when the operation is successful:

When the operation is failed, LED3 comes on blinking:



3.2.2 Buttons



D-Box 2
Settings menu



- Partial Download of a
tachograph
- Scroll down in settings mode



- Full download of a
tachograph
- Scroll up in settings mode



Validate

3.2.3 Connections



1: Connection for tachograph cable

- To Tachograph



2: Location of the Micro SD card

- Micro SD card




3: Connection for the USB cable

- USB to PC



3.3 Configuration

The access of the configuration menu is possible when D-Box 2 is powered.
(Connected to a tachograph or a smartcard is inserted and downloaded).

The button  allows to access to the menu:

In this menu, the user is allowed to configure the following elements:

- The language
- The date and time
- The mode used and the content to download for partial download
- The extension of the downloaded files

In these submenus, the navigation is done by the following buttons:



Come back to the roots of the
configuration menu



Scroll down or
decrement



Scroll up or
increment



Enter in a submenu and
Validation


3.3.1 Language

At the beginning of the line, the icon ► indicates the language preselected.

This icon is positioned on the active choice when you enter in this submenu.

The user chooses in the list the wished language thanks to the buttons ▼ and ▲ and press the button "OK".

On the second line, message "validate OK?" is displayed:

- To memorize the choice made, user must press on "OK" button.
This action allows coming back to the configuration menu. The choice made previously is validated.
- To cancel the choice made, user must press on button 
This action allows coming back to the configuration menu. The choice made previously is cancelled.

3.3.2 Date and time

If the proposed value corresponds to user need, user can avoid modification by pressing on button 

On the opposite, the "OK" button allows user to start modification.

Then a blinking cursor is positioned under the value to change. The user changes the values thanks to the buttons ▼ and ▲

The button "OK" allows validating the displayed value and going to the next number.

The two first numbers of the year, "20" are not editable.

The last press on the button "OK" at the end of the line validates the choice.

3.3.3 "Partial download" configuration

To configure the "Partial download" mode, 4 submenus are available:

- "Since the last download"
- **Or** "the last X days of activity" **NEW**
- "Detailed speed"
- "Additional data"


At the beginning of the line the icon ► indicates the submenu preselected.

The user chooses the downloading mode of activity, among:

- "Since the last download"
- **Or** "the last X days of activity" **NEW**

The user chooses in the list the element thanks to the buttons ▼ and ▲ and press the button "OK".

On the second line, message "validate OK?" is displayed:

- To memorize the choice made, user must press on "OK" button.
This action allows coming back to the configuration menu. The choice made previously is validated.
- To cancel the choice made, user must press on button 
This action allows coming back to the configuration menu. The choice made previously is cancelled.


"the X last days of activity" mode: **NEW**

When this mode is selected, the user configures the number of days to download.

This number is fixed to 28 by default.

Te user can select the right number thanks to the buttons ▼ and ▲

On the second line, message "validate OK?" is displayed:

- To memorize the choice made, user must press on "OK" button.
This action allows coming back to the configuration menu. The choice made previously is validated.
- To cancel the choice made, user must press on button 
This action allows coming back to the configuration menu. The choice made previously is cancelled.

In a partial download, the data taken into account by default are: Overview, technical data, events and faults, data from the "Driver" card if present in the tachograph. The user chooses also the content to download or not, among:

- Data sort "Detailed speed"
- Data sort "Additional data"




3.3.4 Extension of downloaded files

At the beginning of the line the icon ► indicates the extension preselected.
This icon is positioned on the active choice when you enter in this submenu.
The user chooses the extension of the downloaded files among:

- “DDD” format
- “ESM” format
- “V1B, C1B” format
- “TGD” format

The user chooses in the list the element thanks to the buttons ▼ and ▲ and press the button “OK”.
On the second line, message “validate OK?” is displayed:

- To memorize the choice made, user must press on “OK” button.
This action allows coming back to the configuration menu. The choice made previously is validated.
- To cancel the choice made, user must press on button 
This action allows coming back to the configuration menu. The choice made previously is cancelled.

4. Download

*Warning: D-Box 2 must not has to be connected in the same time with 2 different communication medias.
(Example: USB and Tachograph, Card and Tachograph or USB and Card)*

4.1 Tachograph

4.1.1 Connection

- To Tachograph Use the 6-pin cable (AC600210) to connect D-Box 2.
(Look p.4 section 3.2.3 Connection 1)



In the tachograph, this cable has to be connected on the front panel of the product in the 6-pin connector.

D-Box 2 is powered when it is connected to the tachograph
and the following screen appears:



4.1.2 Process

Reminder : To download the content of a tachograph, a smartcard of the type “Company”, “Control” or “Workshop” must be inserted in the tachograph in order to allow download.

2 downloading modes are available regarding the button pressed:



Partial download

- Overview
- Activities since the last download **or the X last days of activities NEW**
(if configured previously, See p.5 section 3.3.3)
- Events and faults
- Detailed speed (if configured previously, See p.5 section 3.3.3)
- Technical data
- “Driver” card if present in the tachograph
- Additional data (if configured previously, See p.5 section 3.3.3)





Full download

- Overview
- Range for activities days needed **(date to date) NEW**
- Events and faults
- Detailed speed
- Technical data
- "Driver" card if present in the tachograph
- Additional data

In Full download mode,

The starting and ending dates of the recordings contained in the tachograph are proposed by default. To validate without modifications press the green button.

To modify these dates use the buttons ▼ and ▲ and validate the values by successive pushes on button "OK" until the end of the line.

START ?
2010/01/01



END?
2010/06/01



After choosing one of the 2 download mode (partial or full), the following screens appears:

DOWNLOAD
WAIT



NB: During the operation, the elements downloaded are displayed on the second line of the screen.
(allows to show the progress of the download)

If the download was successful, the following screen appears:

DOWNLOAD
OK



If the download failed, the following screen appears:

DOWNLOAD
ERROR



4.2 Smartcard

Reminder:

There is two ways to download data from a smartcard:

- Introduce the card in the tachograph and download its content (See p.6 section 4.1)
- Introduce directly the smartcard in D-Box 2 (See this section)

N.B: The data collect with D-Box 2 **is much faster** than the one made by the tachograph.

When the user introduce a smartcard, D-Box 2 comes on automatically and the following screen appears:

WAIT



Then when the download starts, the following screen appears:

DOWNLOAD
WAIT



If the download was successful, the following screen appears:

DOWNLOAD
OK



If the download failed, the following screen appears:

DOWNLOAD
ERROR



5. Transfer the collected data to a computer

Reminder: The legislative support for storage is CD-ROM or floppy disk.

5.1 Connection

- USB to PC Use the USB cable (AY14600030) to connect D-Box 2 to a computer.
(See p.4 section 3.2.3 Connection 3)



On the computer, this cable has to be connected on a USB port.

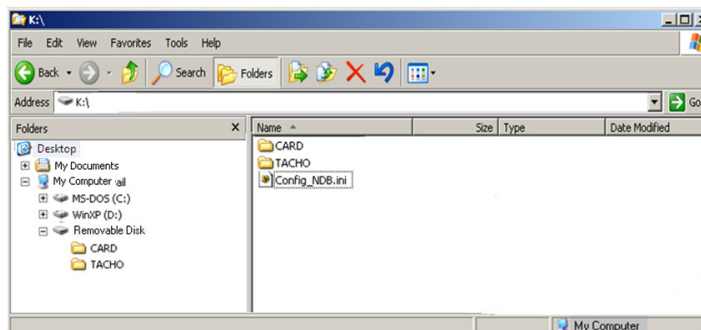
D-Box 2 is powered when its connected to the USB port and the following screen appears:



5.2 Process

D-Box 2 is seen as a memory device type removable disk.

The structure of this memory is:



The root of the disc contains two directories and a configuration file:

- Under the directory "CARD", it is located all the uploaded files from smartcards.
The extension of these files depends of the format chose by the user (See p.6 section 3.3.4)
The user can copy, remove or delete these folders regarding its needs.
- Under the directory "TACHO", it is located all the uploaded file from tachographs.
The extension of these files depends of the format chose by the user (See p.6 section 3.3.4)
The user can copy, remove or delete these folders regarding its needs.
- The file "Config_NDB.INI" contains all the configuration of D-Box 2.

Warning: The file "Config_NDB.INI" » *must not be changed or deleted by the user.*

Important: To save your data in case of problem

In case of breakdown, data from D-Box 2 can be recovered thanks to the removable Micro SD card.

- Micro SD card To remove the Micro SD card from D-Box 2, it is necessary to unlock it by pressing on
(See p.4 section 3.2.3 Connection 2)



When the SD card is removed, insert it in the card reader of your computer and recover the data.
If your computer doesn't have a SD card reader, use an adaptor or an external card reader.

When the operation is finished, replace the Micro SD card as shown
and contact your distributor or your after sale service (See p.10)



6. Replace the battery

Step 1:

Open the battery compartment by unscrewing the screw



Step 2 :

Remove the old battery



Step 3 :

Put the new battery respecting the polarity



Step 4 :

Replace the battery compartment by screwing the screw



Security directives about the battery:

- Only battery type CR123A is authorised.
- Do not try to open the battery neither to throw it in the fire.
- Do not throw batteries in the house waste, eliminate them in accordance with the current legislation on the protection of the environment.
- Keep batteries out of reach of children. In case of ingestion of the batteries, contact immediately your doctor or a medical assistant.
- Do not try to reactivate the batteries with heat, an electric charge or any others ways.

7. Error messages

**DOWNLOAD
ERROR**

Tachograph download:

- Check the presence of a "Driver", "Company" or "Control" smartcard in the tachograph in order to allow the download
- Check if the cable is correctly connected and not defective
- Check if the SD card is correctly inserted and not defective

Smartcard download:

- Check if the SD card is correctly inserted and not defective (unreadable)

**DOWNLOAD
ERROR**

This message appears when the following download conditions are not respected:

- The start date (selected by user) must be less than or equal to the end date (selected by user)
- The start date(selected by user) must be superior than or equal to the minimum downloadable time
- The end date (selected by user) must be superior than the maximum downloadable time

**INSERT
MEMORY CARD**

This message appears when the SD card is not present or not inserted correctly

- Introduce correctly the memory card SD supplied with the product

**INVALID
MEMORY CARD**

This message appears when the SD card is defective

- The system does not manage to format the card
- The system does not manage to read or to write on the card
- Introduce a new memory card SD (available in ACTIA under the reference AY14600028)

**FULL
MEMORY**

This message appears when the SD card is full

- Connect the product to a computer in order to empty the data from the SD card (See p.8 section 5)

**INVALID
BATTERY**

This message appears when the battery is too low and does not allow the product to run

- Change the battery (See p.9 section 6)

**INVALID
S.CARD**

This message appears when the smartcard introduced in D-Box 2 is not compatible
Only smartcards type "Driver" or "Workshop" are available to download (See p.7 section 4.2)



AFTER SALE SERVICE

COMPANY NAME
ADDRESS

Hotline

