

Software Manual

Card File Handler

This Manual applies to **Card File Handlers** as of version 1.0

Copyright

© 2004 Lenze Drive Systems GmbH. All rights reserved.

Imprint

Lenze Drive Systems GmbH

Postfach 10 13 52, 31763 Hameln, Germany

Phone: ++49 (0)5154 / 82-0

Fax: ++49 (0)5154 / 82-2111

E-mail: Lenze@Lenze.de

Copyright information

All texts, photos and graphics contained in this documentation are subject to copyright protection. No part of this documentation may be copied or made available to third parties without the explicit written approval of Lenze Drive Systems GmbH.

Liability

All information given in this documentation has been selected carefully and tested for compliance with the described hardware and software. Nevertheless, discrepancies cannot be ruled out. We do not accept any responsibility or liability for any damage that may occur. Required corrections will be included in updates of this documentation.

Trademarks

Microsoft, Windows and Windows NT are either registered trademarks or trademarks of Microsoft Corporation in the U.S.A. and/or other countries.

Adobe and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the U.S.A. and/or other countries.

All other product names contained in this documentation are trademarks of the corresponding owners.

Contents

- 1 About this Manual 5
 - 1.1 Conventions used 6
 - 1.2 Definition of icons and signal words used 7
- 2 User interface..... 8
 - 2.1 Title bar 8
 - 2.2 Menu bar 9
 - 2.3 Toolbar 9
 - 2.4 Archive tree 10
 - 2.5 Dialog area 12
- 3 Operation 13
 - 3.1 Organising archives..... 14
 - 3.1.1 Renaming an archive 14
 - 3.1.2 Creating a new archive 15
 - 3.1.3 Opening an existing archive 15
 - 3.1.4 Deleting an archive 16
 - 3.2 Organising cards 17
 - 3.2.1 Renaming a card 18
 - 3.2.2 Adding another card to an archive 18
 - 3.2.3 Importing data from a SmartMedia card..... 19
 - 3.2.4 Exporting data to a SmartMedia card 21
 - 3.2.5 Adding a comment to a card 22
 - 3.2.6 Removing a card from an archive 22
 - 3.2.7 Loading a card from another archive 23
 - 3.3 Editing drive sets 24
 - 3.3.1 Renaming a drive set 25
 - 3.3.2 Adding/removing a DDS binary file 26
 - 3.3.3 Adding/removing a GDC parameter set file..... 27
 - 3.3.4 Adding/removing user data 28
 - 3.3.5 Activating the option "Execute reset (origin) at download" 29
 - 3.3.6 Adding a comment to a drive set..... 29
 - 3.3.7 Deleting a drive set..... 30
 - 3.3.8 Loading a drive set from another archive 30

4 **Appendix** 31

 4.1 File structure 31

 4.2 Lenze standard folder for program and parameter data 32

 4.3 Installation of program updates 33

 4.4 Supported SmartMedia card readers 33

 4.5 Supported SmartMedia memory cards 33

5 **Glossary** 34

6 **Index** 36

Your opinion is important to us 37

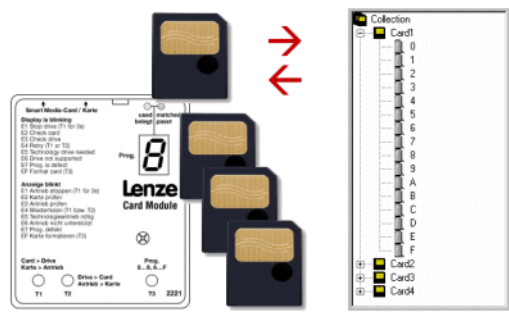
1 About this Manual

This Manual contains information about the **Lenze Card File Handler**.

What is a Card File Handler?

The **Card File Handler** is a tool which can be used to create and organise card archives for the SmartMedia cards of the Lenze card module.

- ▶ When used together with a card reader connected to a PC, it is possible to transfer the drive sets of a SmartMedia card to "virtual" archive cards and vice versa:



- ▶ Drive sets consisting of IEC 61131 programs and (optional) parameter and user data can be easily edited on a PC and afterwards transferred to a SmartMedia card for use with the card module.
- ▶ The archives are listed in a clear folder structure on the file system level. This facilitates the creation of back-up copies and general data handling.

1.1 Conventions used

This Manual uses the following conventions to distinguish between different types of information:

Type of information	Marking	Examples/notes
Variable name	<i>italic</i>	Set <i>bEnable</i> to TRUE to...
Window pane		The <i>message window</i> ... / The <i>Options</i> dialog box...
Control element	bold	The OK button... / The Copy command... / The Properties tab... / The Name input field...
Sequence of menu commands		If the execution of a function requires several commands, the individual commands are separated by an arrow: Select the command File→Open to...
Keyboard command	<bold>	Use <F1> to call the Online Help. If a command requires a combination of keys, a "+" is placed between the key symbols: Use <Shift>+<ESC> to...
Program listings	Courier	<pre> IF var1 < var2 THEN a = a + 1 END IF </pre>
Keyword	Courier bold	
Hyperlink	<u>underlined</u>	Hyperlinks are highlighted references which are activated by means of a mouse click.
Step-by-step instructions		Step-by-step instructions can be recognized by an icon.

1.2 Definition of icons and signal words used

This documentation uses the following icons and signal words to indicate dangerous situations and important information:

Safety information

Layout of the safety information:

**Icons and signal words**
(characterize the type and severity of danger)
Note
(describes the danger and suggests how to avoid the danger)

Icon	Signal word	Meaning
	Danger!	Danger to persons due to hazardous electrical voltage Indicates an impending danger which may lead to death or severe injuries unless appropriate measures are taken.
	Danger!	Danger to persons due to a general danger Indicates an impending danger which may lead to death or severe injuries unless appropriate measures are taken.
	Stop!	Danger of damage to material Indicates a potential danger which may lead to material damage unless appropriate measures are taken.

Application information

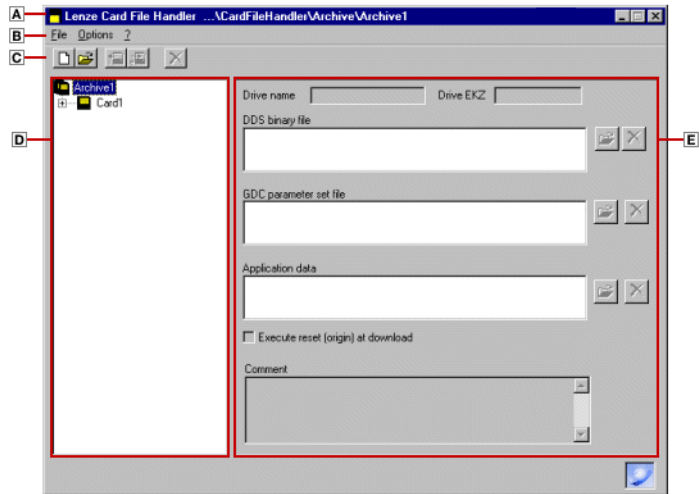
Icon	Signal word	Meaning
	Note!	Important note for trouble-free operation
	Tip!	Useful tip for easy handling

Card File Handler

User interface
Title bar

2 User interface

The user interface of the Card File Handler contains the following control and function elements:



- A [Title bar](#)
- B [Menu bar](#) (19)
- C [Toolbar](#) (19)
- D [Archive tree](#) (10)
- E [Dialog area](#) (12)

2.1 Title bar

The *title bar* at the top of the application window shows the **program icon** and the **program name** on the left and the **window icons** on the right.

- ▶ A click on the **window icon** _ reduces the application window to the icon in the *task bar*.
- ▶ A click on the **program icon** opens the **system menu** which also includes commands for positioning and changing the size of the application window.
- ▶ A click on the **window icon** X or a double-click on the **program icon** closes the Card File Handler.

2.2 Menu bar

Via the *menu bar* you can access the menu commands of the Card File Handler.

- ▶ A click on an item of the main menu opens the corresponding menu and lists the menu items contained in it.
- ▶ Click a menu item to execute the corresponding function.
 - Menu items which are displayed in light gray are currently deactivated because the execution of the corresponding function would not make any sense in the current program state.



Tip!

Many frequently used functions can be executed faster by means of the [Toolbar](#) icons.

2.3 Toolbar

Via the icons of the *toolbar* you can directly execute some of the most frequently used menu commands without making a detour via the [Menu bar](#).

- ▶ Simply click an icon to activate the corresponding command.



Note!

Which icons and functions are available in the *toolbar* depends on the element currently selected from the [Archive tree](#).

Icon	Function
	If an archive is selected: ▶ Creating a new archive (15)
	If a card is selected: ▶ Adding another card to an archive (18)
	If an archive is selected: ▶ Opening an existing archive (15)
	If a card is selected: ▶ Loading a card from another archive (23)
	If a drive set is selected: ▶ Loading a drive set from another archive (30)
	▶ Importing data from a SmartMedia card (19)
	▶ Exporting data to a SmartMedia card (21)
	If a card is selected: Remove selected card from the archive. • Only possible if the archive contains more than one card. ▶ Removing a card from an archive (22)
	If a drive set is selected: Delete all data of the selected drive set. ▶ Deleting a drive set (30)

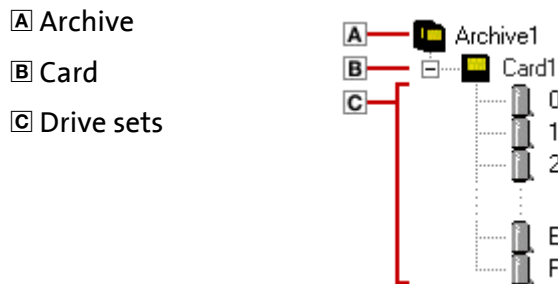


Tip!

If you position the mouse pointer for a short time over an icon, a "tool tip" will be indicated with information about the corresponding function.

2.4 Archive tree

The *archive tree* of the Card File Handler contains a hierarchical tree structure similar to the folders of the *Windows Explorer*, which allows quick access to all **cards** and **drive sets** of an **archive**:



Archive

- ▶ Each archive can contain one or several cards.
- ▶ You can create an unlimited number of archives, but always only open one archive in the Card File Handler.

Card

- ▶ Each archive card represents one SmartMedia card and can thus - just like the SmartMedia card for the Card module - contain 16 drive sets called "0" ... "F" in the default setting.
- ▶ In the [Dialog area](#) you can enter a comment (option) on the selected card.
- ▶ When a Card reader is connected to your PC, you can transfer the drive sets of a SmartMedia card to an archive card and vice versa:

Drive set

- ▶ Each drive set contains all data required by the target system, i.e. the program created with the Drive PLC Developer Studio, the parameter data generated with Global Drive Control (option) and additional user data (option).
- ▶ In the default setting, the 16 drive sets of each card are called "0" ... "F". As an option, you can add another name to this designation.
- ▶ If you select a drive set from the *archive tree* the corresponding settings will be displayed in the [Dialog area](#). It is possible to change the settings in the dialog area.
- ▶ Just like for a card, you can enter a comment on the selected drive set in the [Dialog area](#) (option).

► The colour of the drive set icon depends on the usage of the drive set:

-  Drive set is free.
-  Drive set is used.
-  Drive set is incomplete or invalid usage.



Tip!

The operation of the Card File Handler is context-sensitive, i.e. you can only execute functions that are possible for the element selected from the *archive tree*.

In the *archive tree* you can use a *context menu* with the most frequently used menu commands. The context menu is activated by a click on the right mouse key.

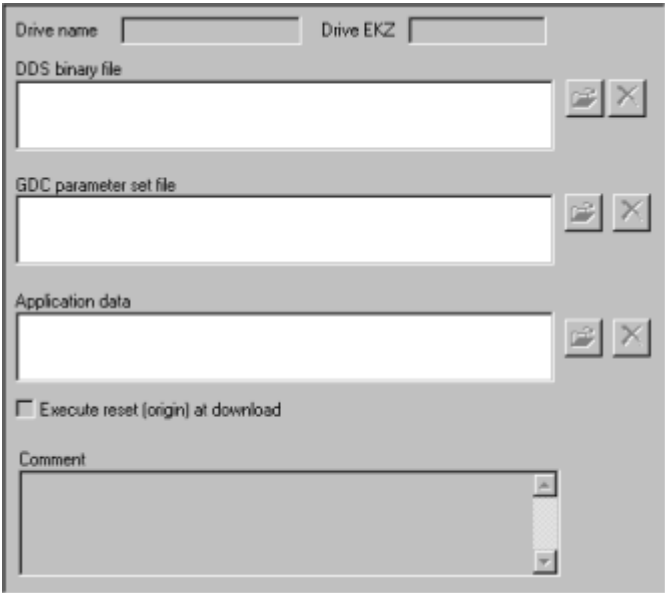
If a plus sign  appears in front of an element in the *archive tree* this element has sub-elements.

- A click on the plus sign  opens the list of sub-elements.
- A minus sign appears instead of the plus sign. Clicking the minus  closes the list of sub-elements.

2.5

Dialog area

The settings of the drive set selected from the [Archive tree](#) are indicated in the *dialog area*. It is possible to change the settings in the dialog area:



Parameter	Info
Name of drive	Name of the target system
Product code of drive	Product code of the target system
DDS binary file	IEC 61131 program (*.bin file) compiled with the Drive PLC Developer Studio (DDS)
GDC parameter set file	Parameter set file (*.gdc file) created with Global Drive Control (GDC)
Application data	Optional: Cam profile data or motion profiles (*.lc9 file)
Execute reset (origin) at download	If this checkbox is activated the Card module executes a Reset (origin) in the corresponding target system before the data is downloaded. Reset (origin) resets all variables of the target system, including the RETAIN and PERSISTENT variables to their initialisation value. The user program is deleted and the control is reset to its original state.
Comment	Optional entry of a comment on the drive set.



Tip!

You can also enter a comment on a card.

3 Operation

After the first start of the Card File Handler, the [Archive tree](#) contains one archive including one card.

- ▶ You can edit the (free) drive sets of the card and add more cards to the archive.
- ▶ If a Card reader for SmartMedia cards is connected to your PC, you can transfer the drive sets of your SmartMedia card to the selected archive card and vice versa.
- ▶ Of course, you can also create new archives or - if available - open other existing archives.

What do you want to do?

- ▶ [Editing drive sets](#) (📖 24)
- ▶ [Adding another card to an archive](#) (📖 18)
- ▶ [Importing data from a SmartMedia card](#) (📖 19)
- ▶ [Exporting data to a SmartMedia card](#) (📖 21)
- ▶ [Creating a new archive](#) (📖 15)
- ▶ [Opening an existing archive](#) (📖 15)



Tip!

The operation of the Card File Handler is context-sensitive, i.e. you can only execute functions that are possible for the element selected from the *archive tree*.

3.1 Organising archives

If you want to archive different drive sets it may be useful to store them in different, task or machine-oriented archives.

- ▶ The Card File Handler can be used to create and organise an unlimited number of archives.
- ▶ For each archive a separate archive folder will be created. When creating the archive folder, you can freely select the memory location within your computer or network environment.



Tip!

For a clear data management it is recommended to store all archive folders in a shared root folder.

- The installation program of the Card File Handler automatically creates the "Archives" root folder in the program directory of the Card File Handler. The root folder also includes the archive folder for the archive indicated at the first start of the Card File Handler.

What do you want to do?

- ▶ [Renaming an archive](#) (📖 14)
- ▶ [Creating a new archive](#) (📖 15)
- ▶ [Opening an existing archive](#) (📖 15)
- ▶ [Deleting an archive](#) (📖 16)

3.1.1 Renaming an archive



Note!

If you rename an archive the corresponding archive folder will be renamed accordingly.



How to rename an archive:

1. Select the archive from the *archive tree*.
2. Click the name of the archive once again in the *archive tree* or select the command **File→Archive→Rename archive**.
3. Enter the new name into the *Rename archive* dialog box and confirm your entry with **OK**.
 - The name must not include more than 17 characters.
 - The following letters, digits and special characters are permissible: **A..Z** or **a..z**, **0..9** and **\$ & # % ' () - @ ^ !**

3.1.2 Creating a new archive



How to create a new archive:

1. Select the archive level (the topmost element) from the *archive tree*.
2. Go to the *toolbar* and click the  icon or select the command **File→Archive→Create archive**.
3. Enter the name for the new archive in the **Name of new archive** input field.
 - The name must not include more than 17 characters.
 - The following letters, digits and special characters are permissible: **A..Z** or **a..z**, **0..9** and **\$ & # % ' () - @ ^ !**
4. Click **Select folder** to select the root folder in which the archive folder is to be created.
5. Click **Create archive** to create the new archive with the selected settings.
 - The new archive including one card will be listed in the *archive tree*.

3.1.3 Opening an existing archive

If several archives are available you can also open another archive and edit it.



How to open an existing archive:

1. Select the Archive level from the *archive tree*.
2. Go to the *toolbar* and click the  icon or select the command **File→Archive→Select archive**.
3. Go to the *Select folder* dialog box, select the corresponding archive folder and confirm your selection with **OK**.
 - You can only click **OK** if a valid archive folder has been selected.

3.1.4 Deleting an archive



Note!

The *Windows Explorer* is required to delete an archive. Furthermore, the archive must not be open in the Card File Handler!

When the archive is deleted, all cards and drive sets contained in it will be deleted as well!



How to delete an archive:

1. Open the *Windows Explorer*.
2. Select the archive folder to be deleted in the *Windows Explorer*.
3. Click the key to delete the selected archive folder.

3.2 Organising cards

You can organise an unlimited number of cards in an archive.

- ▶ For each card, a separate sub-folder will be created in the corresponding archive folder.



Note!

Each archive contains at least one card.

- When a new archive is created, the archive already includes a card with 16 free drive sets. In the default setting, the hexadecimal numbers "0" to "F" are used to designate the drive sets.
- It is only possible to remove a card from an archive if the archive contains more than one card.

What do you want to do?

- ▶ [Renaming a card](#) (📖 18)
- ▶ [Adding another card to an archive](#) (📖 18)
- ▶ [Importing data from a SmartMedia card](#) (📖 19)
- ▶ [Exporting data to a SmartMedia card](#) (📖 21)
- ▶ [Adding a comment to a card](#) (📖 22)
- ▶ [Removing a card from an archive](#) (📖 22)
- ▶ [Loading a card from another archive](#) (📖 23)

3.2.1 Renaming a card



Note!

If you rename a card the corresponding sub-folder in the archive folder will be renamed accordingly.



How to rename a card:

1. Select the card to be renamed from the *archive tree*.
2. Click the name of the card once again in the *archive tree* or select the command **File→Card→Rename archive card**.
3. Enter the new name into the *Rename archive card* dialog box and confirm your entry with **OK**.
 - The name must not include more than 11 characters.
 - The following letters, digits and special characters are permissible: **A..Z** or **a..z**, **0..9** and **\$ & # % ' () - @ ^ !**

3.2.2 Adding another card to an archive



How to add another card to an archive:

1. Select the Card level from the *archive tree*.
2. Go to the *toolbar* and click the  icon.
 - As an alternative, you can use the command **File→Archive→Create archive card** when you are on the Archive level of the *archive tree*.
3. Enter a name for the new card in the *Create new archive card* dialog box and confirm your entry with **OK**.
 - The name must not include more than 11 characters.
 - The following letters, digits and special characters are permissible: **A..Z** or **a..z**, **0..9** and **\$ & # % ' () - @ ^ !**

3.2.3 Importing data from a SmartMedia card

This function is used to import drive sets from a SmartMedia card of the card module into an archive card.

- ▶ All valid drive sets of the SmartMedia card will be imported into the selected archive card.
- ▶ The drive sets will be automatically marked with the program names.

**Note!**

- All drive sets of the selected archive card will be overwritten during the data import!
- This function requires a Card reader for SmartMedia memory cards to be connected to the USB interface of your PC!
 - ▶ [Supported SmartMedia card readers](#) (p 33)
- Never remove the SmartMedia card during read/write access from the *card reader*. This could result in loss of data or damage the SmartMedia card!

**How to import data from a SmartMedia card:**

1. Insert the SmartMedia card into the *card reader* connected to your PC.
2. Select the card into which the drive sets of the SmartMedia card are to be imported from the *archive tree*.
3. Go to the *toolbar* and click the  icon or select the command **File→Card→Import from SmartMedia card**.
4. Go to the *SmartMedia card --> Archive card X* dialog box and select the letter for the drive to which the *card reader* has been assigned.
5. Click **Load**.

**Note!**

After the data import, the Card File Handler automatically executes the "eject" function in the *card reader* to ensure that the SmartMedia card can be removed without loss of data from the *card reader*.

For another read/write access to the SmartMedia card, remove the SmartMedia card and reinsert it into the *card reader*. After this, it can be identified by the Card File Handler.

If the import has been successful the imported drive sets will be listed with the corresponding program name below the selected card in the *archive tree* .

- ▶ The colour of the drive set icon depends on the usage of the drive set:
 -  Drive set is free.
 -  Drive set is used.
 -  Drive set is incomplete or invalid usage.
- ▶ In the dialog area, you can find the following information on the drive set:

Text field	Information
DDS binary file	Comment, project name and compiling date from binary file
GDC parameter set file	Comment and standard date of card module • If the card module was used to write (upload) data from the target system to the SmartMedia card, the date will not be displayed.
Application data	Comment, designation and time stamp of application data

3.2.4 Exporting data to a SmartMedia card

This function is used to export the drive sets of an archive card to a SmartMedia card for subsequent use with the card module.

- ▶ All drive sets of the card selected from the archive tree will be exported to the SmartMedia card.

**Note!**

- All drive sets available on the SmartMedia card will be deleted!
- This function requires a Card reader for SmartMedia memory cards to be connected to the USB interface of your PC!
 - ▶ [Supported SmartMedia card readers](#) (p 33)
- Ensure that the SmartMedia to be written is not provided with a write-protect sticker!
- Never remove the SmartMedia card during read/write access from the *card reader*. This could result in loss of data or damage the SmartMedia card!

**How to export data to a SmartMedia card:**

1. Insert the SmartMedia card to be written into the *card reader* connected to your PC.
2. Select the card the drive sets of which you want to export to the SmartMedia card from the *archive tree*.
3. Go to the *toolbar* and click the  icon or select the command **File→Card→Export to SmartMedia card**.
4. Go to the *Archive card X --> SmartMedia card* dialog box and select the letter for the drive to which the *card reader* has been assigned.
5. If required, change the name of the SmartMedia card by clicking the **Change** button.
 - Enter the new name into the *Rename SmartMedia card* dialog box and confirm your entry with **OK**.
6. Click **Save**.

**Note!**

After the data export, the Card File Handler automatically executes the "eject" function in the *card reader* to ensure that the SmartMedia card can be removed without loss of data from the *card reader*.

For another read/write access to the SmartMedia card, remove the SmartMedia card and reinsert it into the *card reader*. After this, it can be identified by the Card File Handler.

3.2.5 Adding a comment to a card

To each card you can add a comment of several lines, e.g. to save additional information about the machine or drive task.

- ▶ When a new card is created, the date will be automatically saved as a comment. When the **Card File Handler** is operated under Windows® 2000/XP, the user name will also be entered as a comment.



How to add a comment to a card:

1. Select the corresponding card from the *archive tree*.
2. Go to the *Dialog area* and enter the desired comment in the **Comment** input field.

3.2.6 Removing a card from an archive



Note!

Each archive contains at least one card. It is only possible to remove a card from an archive if the archive contains more than one card!
When the card is removed, all drive sets contained in it will be removed as well!



How to remove a card from an archive:

1. Select the corresponding card from the *archive tree*.
2. Go to the *toolbar* and click the  icon or select the command **File→Card→Remove archive card**.
3. You will be asked if you really want to remove the archive card. Confirm this question with **OK**.

3.2.7 Loading a card from another archive

This function is used to copy an archive card from a freely selectable archive within your computer environment to the current archive.



Note!

The card selected from the archive tree will be completely overwritten with the data of the archive card to be loaded!



How to load a card into an archive:

1. Select the card to be overwritten with the data of the archive card to be loaded from the *archive tree*.
2. Go to the *toolbar* and click the  icon or select the command **File→Card→Load archive card**.
3. Go to the *Search folder* dialog box, select the archive card to be loaded from your computer environment and confirm your selection with **OK**.
 - Only valid archive cards can be loaded.
4. You will be asked if you really want to overwrite the card selected from the *archive tree* with the data of the archive card selected in the *Search folder* dialog box. Confirm this question with **OK**.

3.3 Editing drive sets

What is a drive set?

A drive set contains all data required for a specific target system, i.e.:

- ▶ the DDS binary file (*.bin) including the compiled IEC 61131 program
- and as an option -
- ▶ the GDC parameter set file (*.gdc) including the parameter settings (codes) of the target system,
- ▶ additional user data, e.g. cam profiles or motion profiles.



Tip!

You can add a comment to each drive set and provide that the card module executes a Reset (origin) before the data is downloaded to the target system.

Reset (origin) resets all variables of the target system, including the RETAIN and PERSISTENT variables to their initialisation value. The user program is deleted and the control is reset to its original state.

Organisation of the drive sets

Just like the SmartMedia card of the card module, each archive card may contain up to 16 drive sets called "0" ... "F" in the default setting.

- ▶ The colour of the drive set icon depends on the usage of the drive set:
 -  Drive set is free.
 -  Drive set is used.
 -  Drive set is incomplete or invalid usage.
- ▶ The settings for a drive set selected from the *archive tree* can be entered in the *Dialog area*.
- ▶ Each drive set has a separate sub-folder on the file level in which the files for the target system are stored.

What do you want to do?

- ▶ [Renaming a drive set](#)
- ▶ [Adding/removing a DDS binary file](#) (📖 26)
- ▶ [Adding/removing a GDC parameter set file](#) (📖 27)
- ▶ [Adding/removing user data](#) (📖 28)
- ▶ [Activating the option "Execute reset \(origin\) at download"](#) (📖 29)
- ▶ [Adding a comment to a drive set](#) (📖 29)
- ▶ [Deleting a drive set](#) (📖 30)
- ▶ [Loading a drive set from another archive](#) (📖 30)

3.3.1 Renaming a drive set

The hexadecimal numbers "0" ... "F" are used to designate the 16 drive sets of a card.

- ▶ If you assign a DDS binary file to a drive set or import drive sets from a SmartMedia card the program name will be added to the designation.

Example:  3 - *program name*

 **Note!**

If you rename a drive set the corresponding sub-folder on the file level will be renamed accordingly.

The hexadecimal numbers "0" ... "F" are always indicated and cannot be changed.



How to rename a drive set:

1. Select the drive set to be renamed from the *archive tree*.
2. Click the name of the drive set once again in the *archive tree* or select the command **File→Drive set→Rename drive set**.
3. Enter the new name in the *Rename drive set* dialog box and confirm your entry with **OK**.
 - The name must not include more than 215 characters.
 - The following letters, digits and special characters are permissible: **A..Z** or **a..z**, **0..9** and **\$ & # % ' () - @ ^ !**
 - The name will be added to the hexadecimal number separated by a hyphen.

3.3.2 Adding/removing a DDS binary file

Adding a DDS binary file

This function is used to load an IEC 61131 program created with the Drive PLC Developer Studio to the selected drive set.

- For the import into the selected target system, the IEC 61131 program must have been properly compiled as a binary file (*.bin).



Tip!

Use the command **Project→Build** to create a DDS binary file in the Drive PLC Developer Studio.

If you go to **Project→Options** and activate the option **Build GDC device description** in the Drive PLC Developer Studio the DDS binary file and a GDC device description file (*.pdb) will be generated during compiling.

GDC device description files are required if you want to create GDC parameter set files (*.gdc) with Global Drive Control.

► [Adding/removing a GDC parameter set file](#) (27)



How to add a DDS binary file to a drive set:

1. Select the drive set to which you want to add the DDS binary file from the *archive tree*.
2. Go to the *Dialog area* and click the  icon to the right of the **DDS binary file** text field.
3. Go to the *Open DDS binary file* dialog box, select the corresponding DDS binary file (*.bin) and click **Open**.

Removing a DDS binary file



Note!

If you remove a DDS binary file from a drive set all other data (GDC parameter set file, application data) will be removed from the drive set as well!



How to remove a DDS binary file from a drive set:

1. Select the drive set from which you want to remove the DDS binary file from the *archive tree*.
2. Go to the *Dialog area* and click the icon to the right of the **DDS binary file** text field.
3. You will be asked if you really want to remove the DDS binary file. Confirm this question with **OK**.

3.3.3 Adding/removing a GDC parameter set file

Adding a GDC parameter set file

After a DDS binary file has been added to the drive set, you can use Global Drive Control to generate a parameter set file that matches the DDS binary file and add it to the drive set (option).

- If the GDC parameter set file is not contained in a drive set the current parameters of the target system will remain unchanged when the data is downloaded with the card module.



Tip!

In Global Drive Control, the creation of a GDC parameter set file is based on a GDC device description file (*.pdb) for the corresponding target system.

After the required parameters (codes) have been configured, select the GDC command **Drive parameters→ Write all parameters to file** to generate the GDC parameter set file (*.gdc).



How to add a GDC parameter set file to a drive set:

1. Select the drive set to which you want to add the GDC parameter set file from the *archive tree*.
2. Go to the *Dialog area* and click the icon to the right of the **GDC parameter set file** text field.
 - The function can only be activated if you have already added a DDS binary file to the drive set.
3. Go to the *Open parameter file* dialog box, select the corresponding GDC parameter set file (*.gdc) and click **Open**.
 - If the GDC parameter set file does not match the DDS binary file a corresponding message will be displayed and the file will not be loaded.

Removing a GDC parameter set file



How to remove a GDC parameter set file from a drive set:

1. Select the drive set from which you want to remove the GDC parameter set file from the *archive tree*.
2. Go to the *Dialog area* and click the  icon to the right of the **GDC parameter set file** text field.
3. You will be asked if you really want to remove the GDC parameter set file. Confirm this question with **OK**.

3.3.4 Adding/removing user data

Adding user data

After a DDS binary file has been added to the drive set, you can add an *.lc9 file including motion profiles or cam profile data to the drive set (option).



Note!

Ensure that the user data match the program because this will not be checked automatically.

In the Drive PLC Developer Studio, you can use the **CAM Support** to add cam profile data to your project. For detailed information, please read the documentation for the Drive PLC Developer Studio.



How to add user data to a drive set:

1. Select the drive set to which you want to add the user data from the *archive tree*.
2. Go to the *Dialog area* and click the  icon to the right of the **User data** text field.
 - The function can only be activated if you have already added a DDS binary file to the drive set.
3. Go to the *Open user data* dialog box, select the corresponding *.lc9 file and click **Open**.

Removing user data



How to remove user data from a drive set:

1. Select the drive set from which you want to remove the user data from the *archive tree*.
2. Go to the *Dialog area* and click the  icon to the right of the **User data** text field.
3. You will be asked if you really want to remove the user data. Confirm this question with **OK**.

3.3.5 **Activating the option "Execute reset (origin) at download"**

If the **Execute reset (origin) at download** checkbox is activated for a drive set in the *dialog area* the card module will execute a reset (origin) in the corresponding target system before the data is downloaded.

- Reset (origin) resets all variables of the target system, including the RETAIN and PERSISTENT variables to their initialisation value. The user program is deleted and the control is reset to its original state.

3.3.6 **Adding a comment to a drive set**

To each drive set you can add a comment of several lines, e.g. to save additional information about the machine or drive task.

- When a new card is created, the date will be automatically saved as a comment. When the Card File Handler is operated under Windows® 2000/XP, the user name will also be entered as a comment.
- When drive sets are exported to a SmartMedia card, the comment will be saved on the SmartMedia card and read again when the data is imported.



How to add a comment to a drive set:

1. Select the corresponding drive set from the *archive tree*.
2. Go to the *Dialog area* and enter the desired comment in the **Comment** input field.

3.3.7 Deleting a drive set

If a drive set is deleted only the data contained in the drive set will be deleted. The drive set folder will not be deleted.

- ▶ If the drive set has been renamed the name of the drive set will be reset to the standard designation "0" ... "F".
- ▶ The function "Delete drive set" corresponds to the function "Remove DDS binary file".



How to delete a drive set:

1. Select the corresponding drive set from the *archive tree*.
2. Go to the *toolbar* and click the  icon.
3. You will be asked if you really want to delete the drive set. Confirm this question with **OK**.

3.3.8 Loading a drive set from another archive

This function is used to copy a drive set from a freely selectable archive within your computer environment to an archive card of the current archive.



Note!

The drive set selected from the archive tree will be completely overwritten with the data of the drive set to be loaded!



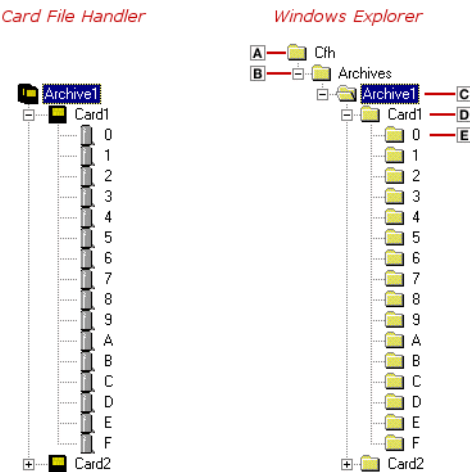
How to load a drive set into an archive:

1. Select the drive set to be overwritten with the data of the drive set to be loaded from the *archive tree*.
2. Go to the *toolbar* and click the  icon or select the command **File→Drive set→Load drive set**.
3. Go to the *Search folder* dialog box, select the drive set to be loaded from your computer environment and confirm your selection with **OK**.
 - Only valid drive sets can be loaded.
4. You will be asked if you really want to overwrite the drive set selected from the *archive tree* with the data of the drive set selected in the *Search folder* dialog box. Confirm this question with **OK**.

4 Appendix

4.1 File structure

The file structure of the archives in the file system corresponds 1:1 to the hierarchical structure of the archive tree:



- A Program directory of the Card File Handler
- B Root folder
- C Archive folder
- D Card folder
- E Drive set folder

Program directory

By default, "C:\Programs\Lenze\CardFileHandler..." is used as program directory for the Card File Handler. This selection can be changed when the Card File Handler is installed.

Root folder

The folder in which the archive folders are stored is called root folder.



Tip!

The installation program of the Card File Handler automatically creates the "Archives" root folder in the program directory of the Card File Handler. The root folder also includes the archive folder for the archive indicated at the first start of the Card File Handler.

Archive folder

If you create a new archive in the Card File Handler an archive folder will be created in the file system. The archive folder has the same name as the archive.



Tip!

For a clear data management it is recommended to store all archive folders in a shared root folder.

Card folder

If you create a new card in the Card File Handler a card folder will be created in the file system. The card folder will have the same name as the card in the corresponding archive folder.

Drive set folder

The card folder contains 16 drive set folders "A"..."F" in which the drive set files are saved.

- The drive set folders are automatically created when a new card is added.

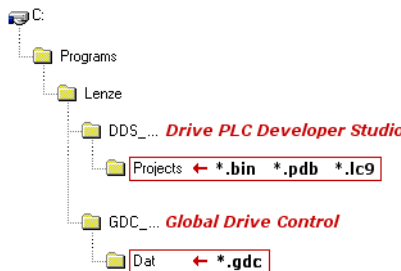


Note!

If you rename an archive, a card or a drive set in the archive tree of the Card File Handler the corresponding folder in the file system will be renamed accordingly!

4.2 Lenze standard folder for program and parameter data

If you have installed the **Drive PLC Developer Studio** and **Global Drive Control** in the standard directory provided in the installation program, you will find the corresponding drive set files (*.bin, *.gdc, *.lc9) which you can assign to a drive set in the Card File Handler in the following sub-folders.



4.3 Installation of program updates

If you have installed an earlier version of the Card File Handler this version should be uninstalled by using the system control.



Note!

The existing archives will be preserved after the uninstallation/reinstallation!

4.4 Supported SmartMedia card readers

The Card File Handler can be operated together with all commercial *card readers* (which can, for instance, be connected to the USB interface).



Note!

Please observe the instructions for the installation of the *card reader* provided by the manufacturer!



Tip!

Write down the letter for the drive the operating system has assigned to the *Card Reader*. This information will be needed for the import and export of drive sets.

4.5 Supported SmartMedia memory cards

Just like the card module, the Card File Handler supports all SmartMedia cards with a memory capacity ≥ 32 MB and a supply voltage of 3.3 V.

5 Glossary

A

AIF	Abbreviation for <i>Automation Interface</i> : Lenze-specific interface on the target system for the connection of additional peripherals (AIF modules).
Archive level	Topmost level of the archive tree. When selecting the topmost element (archive) from the archive tree, you will change to the archive level. Here you can execute all archive functions.
Archive tree	Hierarchical representation of the contents of an archive.

C

Card	Represents a SmartMedia card in the archive. Just like a SmartMedia card, each card can contain up to 16 drive sets.
Card File Handler	Software which can be used to build up, organise and save card archives for the SmartMedia memory cards of the Lenze card module.
Card level	Second level of the archive tree. When selecting a card from the archive tree, you will change to the card level. Here you can execute all card functions.
Card module	AIF module for the transfer of drive sets between a Lenze PLC and a SmartMedia card.
Card reader	Device used to read data and information from memory cards, e.g. SmartMedia cards.

D

DDS	Abbreviation for Drive PLC Developer Studio.
Device description	File with the ending *.pdb, describes all parameters (codes) of the target system and is required by Global Drive Control for the creation of a parameter set file.
Drive PLC Developer Studio	Development environment for the creation of IEC 61131 programs for Lenze PLCs.
Drive set	Includes all data required by the target system: DDS binary file, GDC parameter set file (optional) and user data (optional).
Drive set level	Lowest (third) level of the archive tree. When selecting a drive set from the archive tree, you will change to the drive set level. Here you can execute all drive set functions.

G

GDC	Abbreviation for Global Drive Control.
Global Drive Control	Software for the commissioning and parameterization of the Lenze 8200 and 9300 drive series.

H

Hyperlink	Highlighted reference which is activated by a mouse click.
------------------	--

P	
PLC	Abbreviation for Lenze PLC, e.g. Drive PLC or 9300 Servo PLC.
R	
Reset (origin)	Function which resets all variables, including RETAIN and PERSISTANT variables, in the target system to their initialisation value, deletes the user program and resets the control to its original state.
Root folder	Parent folder of the archive on the file system level.
S	
SmartMedia	Memory card family for digital cameras and multi-media devices with a memory capacity between 16 and 128 Mbytes (10/2003). SmartMedia cards are half as big as cheque cards.
T	
Target system	Lenze PLC, e.g. Drive PLC or 9300 Servo PLC.
Title bar	Bar at the top of the application window including the program icon and the program name on the left and the window icons on the right.
U	
USB	Abbreviation for <i>Universal Serial Bus</i> : Serial bus system representing an easy-to-use, universal interface for almost any kind of peripheral device.
User data	Additional data (e.g. cam profile data) required by the IEC 61131 program.
W	
Window icon	Button at the right end of the title bar which can be used to change the size of the window or to close the window.

6 Index

A

- Adding a card to an archive [18](#)
- Adding a comment to a card [22](#)
- Adding a comment to a drive set [29](#)
- Adding/removing a DDS binary file [26](#)
- Adding/removing a GDC parameter set file [27](#)
- Adding/removing user data [28](#)
- Application information [7](#)
- Archive [10](#)
- Archive folder [32](#)
- Archive tree [10](#)

C

- Card [10](#)
- Card folder [32](#)
- Card reader [33](#)
- Conventions used [6](#)
- Copyright [2](#)
- Copyright information [2](#)
- Creating an archive [15](#)

D

- Deleting a drive set [30](#)
- Deleting an archive [16](#)
- Dialog area [12](#)
- Drive set [10](#)
- Drive set folder [32](#)

E

- E-mail to Lenze [37](#)
- Execute reset (origin) at download [29](#)
- Exporting data to a SmartMedia card [21](#)

F

- Feedback to Lenze [37](#)
- File structure [31](#)

I

- Importing data from a SmartMedia card [19](#)
- Imprint [2](#)

L

- Layout of the safety information [7](#)
- Liability [2](#)
- Load archive card [23](#)
- Load drive set [30](#)

M

- Menu bar [9](#)

O

- Opening an archive [15](#)

- Organisation of the drive sets [24](#)

P

- Program directory [31](#)
- Program updates [33](#)

R

- Removing a card from an archive [22](#)
- Renaming a card [18](#)
- Renaming a drive set [25](#)
- Renaming an archive [14](#)
- Root folder [31](#)

S

- Safety information [7](#)
- SmartMedia memory cards [33](#)

T

- Title bar [8](#)
- Toolbar [9](#)
- Trademarks [2](#)

U

- User interface [8](#)

W

- What is a drive set? [24](#)



Your opinion is important to us

These Instructions were created to the best of our knowledge and belief to give you the best possible support for handling our product.

If you have suggestions for improvement, please e-mail us to:
feedback-docu@Lenze.de

Thank you for your support.
Your Lenze documentation team