

Translation of the Original Instruction Manual SMART COMMAND terminal 7"

ISOBUS terminal

Article no.: 560888 Version: EN 1.0 March 2024

SW version: 1.0.0.7.7

Corresponds to Version DE 1.0

Imprint

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Responsible party for the content and layout of this publication: Reichhardt GmbH Steuerungstechnik.

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1 General Information

This section contains general information about the product *SMART COMMAND terminal 7"*, the manufacturer and this manual, that are relevant to you as the user of the product.

1.1 Manufacturer's Data

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GENERAL INFORMATION

General Information about the Product



1.2 General Information about the Product

Please observe the following information about the SMART COMMAND terminal 7".

1.2.1 Warranty and Liability

Warranty or liability claims apply according to the General Terms and Conditions of Reichhardt GmbH Steuerungstechnik. You can find the General Terms and Conditions at www.reichhardt.com.

Reichhardt reserves the right to supply replacement products or a credit note for faulty parts.

Reichhardt assumes no liability for damage caused by improper use.

Use of non-approved accessories and spare parts

Only accessories and spare parts approved by Reichhardt may be used for the product.

These are specially designed for Reichhardt products and meet high safety and reliability standards.

Reichhardt expressly indicates that accessories or spare parts that have not been approved by Reichhardt must not be used on Reichhardt systems. Otherwise, the safety and operational readiness of the product may be impaired. In addition, personal injury or damage to property may occur due to a malfunction of the product.

Reichhardt assumes no liability for the use of non-approved accessories or spare parts.

Unauthorized changes to the product

As soon as changes are made to the product that have not been expressly approved by Reichhardt, any warranty claim and any liability on the part of Reichhardt in the event of possible malfunctions of the product will become void.

Other regulatory approvals may also become ineffective. This also applies to the removal of factory-fitted seals or sealing wax.

1.2.2 Service and Repair

For questions about the product and ordering system extensions, licenses, or spare parts, please contact your nearest dealer or the manufacturer directly.

Always immediately report any damage to the product to your respective dealer or to Reichhardt directly.





1.3 General Information about this Manual

Please read and observe the following information. It contains important information about these instructions.

1.3.1 Reading and Following the Instructions

This instruction manual describes the commissioning, configuration, and operation of the SMART COMMAND terminal 7" from Reichhardt GmbH Steuerungstechnik.

The instruction manual is an integral part of the SMART COMMAND terminal 7" and must be passed on to the new owner when sold.

Please observe and follow all information and instructions in this manual precisely to ensure the fault-free operation of the SMART COMMAND terminal 7".

If there are parts of this instruction manual you do not understand or if you require other help, please get in touch with the contact person from whom you purchased the SMART COMMAND terminal 7".

Additional documents may also be supplied.

Please note that depending on the work step being completed, knowledge of the corresponding documents is required.

1.3.2 Understanding the Instructions

Dimensions

The dimensions in this manual adhere to the metric system. The imperial system may also be taken into account in English-language manuals.

Directions

The directions "left" and "right" can generally be understood as the direction of travel when sitting in the driver's seat.

Figures/graphics

The figures and graphics shown in this manual are for reference purposes. They may differ slightly from the actual displays as there are a variety of configurations.

Language

This manual may be available in other languages. Please contact your dealer for further information.

GENERAL INFORMATION

General Information about this Manual



1.3.3 Warning Indications in this Manual

This is the warning symbol for a safety-related warning: $oldsymbol{\Lambda}$

Please pay particular attention when you see this symbol. It provides warnings about possible physical injuries. Please also follow the blue notices to ensure that operation runs smoothly and no damage is caused.

A DANGER

The signal word DANGER is used together with the warning symbol to alert you to a dangerous situation which, if not avoided, will result in death or serious personal injury.

WARNING

The signal word WARNING is used together with the warning symbol to alert you to a hazardous situation which, if not avoided, can result in death or serious personal injury.

CAUTION

The signal word CAUTION is used together with the warning symbol to alert you to a hazardous situation which, if not avoided, can result in minor or moderate bodily injuries.

NOTICE

The signal word NOTICE indicates important information which, if disregarded, may impair the proper functioning of the product or the vehicle. Observe these instructions to ensure a long service life and proper functionality of the product and the vehicle.



2 For Your Safety

Read the following safety instructions carefully and in full.

The safety instructions contain important information that is indispensable for the safe commissioning and maintenance of SMART COMMAND.

Non-compliance with the safety instructions may result in personal injury and property damage and in the loss of any claims for damages.

In addition to the instructions in this manual, please also observe the instructions in other related documents, as well as the generally applicable regional regulations on occupational health and safety, accident prevention, and road traffic.

2.1 Intended Use

The SMART COMMAND terminal 7" is only designed to be operated by persons working in the agriculture or forestry sector, including specialized cultivations (e.g. vineyards, fruit, and vegetable cultivation), gardening and landscaping operations, and municipal services on private roads and tracks.

Any other use shall be deemed unintended and is therefore prohibited.

Furthermore, the following also applies:

The intended use also includes compliance with the operating conditions, as well as the maintenance and repair guidelines specified by Reichhardt.

Reichhardt assumes no liability for damage resulting from unintended use. The user alone shall bear the risks associated with unintended use.

The SMART COMMAND 7" terminal and associated components must not come into contact with chemicals such as acids, alkalis, oils, lubricants, or aggressive petrochemical substances.

2.2 Requirements for Operating and Service Personnel

Any person who installs, calibrates, commissions, maintains, or operates the SMART COMMAND terminal 7" and associated components must fulfill the following minimum requirements:

- The person must understand the operation of the vehicle and be allowed to drive it (have a valid driver's license for the respective vehicle).
- The person must be in a suitable physical and mental condition to control the vehicle and operate the system.
- The person must not be under the influence of any medications, alcohol, or drugs which could impair their ability to react in any way.
- The person has read in full and understood these and any associated instructions.
- The person understands how the system works.
- The person can carry out work on the vehicle and system safely, and can recognize and avoid possible dangers and risks related to the work to be carried out by them.



2.3 Safety Instructions for Operation – Observing Exceptions in SMART COMMAND

If unplanned system states occur these are displayed as exceptions with warning symbols in SMART COMMAND.

Exceptions are displayed until they are acknowledged manually by the user or automatically by SMART COMMAND. Work with SMART COMMAND may need to be discontinued for a short time.

The exceptions are split by differing degrees of severity. These are explained in the following.

Icon	Designation/severity	Description
STOP	Extremely serious warning: Critical system state that requires immediate action; can cause personal injury.	If ignored, extremely serious warnings can result in personal injury and property damage. They thus require immediate action. Work must be interrupted until the cause of the fault has been resolved.
	Serious warning: System error or adverse system state that severely restricts its use. Action must be taken.	Serious exceptions require the user to take action as the system can otherwise not be used as intended until the cause of the error has been resolved.
<u> </u>	Warning: System message that requires action	Warnings indicate a vehicle state that requires the user to take action as it can impair the intended use of the system.
0	Notice: System message	Notices inform the user about processes and system states that can have a significant impact on the use of the system.

2.4 Safety Instructions for Disassembly and Disposal

To prevent environmental damage during disposal, the following safety regulations must be observed:

- Sort components according to material characteristics and dismantle them if required.
- Find out how to dispose of the individual components from your local municipality or a specialist disposal company. Some components must be treated as hazardous waste.
- · Dispose of the components properly.



3 Product Overview and Description

The SMART COMMAND terminal 7", including the corresponding connections and interfaces, the accessories supplied and any accessories required are explained below.

Commissioning the terminal is explained in chapter 4.

The "SMART COMMAND" user interface and working with the terminal are described in chapters 5-8.

The technical data of the terminal is listed in chapter 10.

3.1 SMART COMMAND Terminal 7"

The SMART COMMAND terminal 7" is an ISOBUS terminal that can be used to operate and control ISOBUS implements (see Fig. 1).

A SMART VT license is required to load the operating screens of the connected ISOBUS devices in the user interface of the SMART COMMAND terminal 7". This is installed by default on the SMART COMMAND terminal 7" with ISOBUS incl. SMART VT (705551).

The prerequisite for using the SMART COM-MAND terminal 7" is an ISOBUS equipped vehicle.

An existing InCab socket in the driver's cab is advantageous.

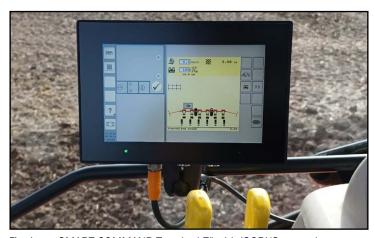


Fig. 1: SMART COMMAND-Terminal 7" with ISOBUS operating screen

3.1.1 Threaded holes, speaker and label on the back

The following objects are located on the back of the terminal (see Fig. 2):

- Three threaded holes (Ø = 5 mm) to which the supplied RAM round base with ball 1.5" (see chapter 3.1.4) or an equivalent bracket can be attached.

 The speaker of the terminal is located between the threaded holes.
- B The label on which the article number and HSN of the terminal can be found. The HSN is required for service purposes.



Fig. 2: Threaded holes, speaker and label of the SMART COMMAND terminal 7"



3.1.2 Connections

The SMART COMMAND terminal 7" has three connections located on the bottom of the terminal (see Fig. 3).

- 1 Connector for Reichhardt connection cable to connect the terminal in the vehicle (power supply and ISOBUS communication) (see chapter 3.2.2)
- Ethernet connector for maintenance purposes.
- 3 USB 2.0 connector to import and export data and for terminal updates (see chapter 3.2.3).

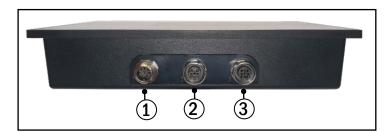


Fig. 3: Connections of the SMART COMMAND terminal 7"

3.1.3 Status LED and Ambient Light Sensor

The SMART COMMAND terminal 7" has a status LED and an ambient light sensor below the display (see Fig. 4).

A Status LED:

Off:

Terminal is switched off

O - O - Flashing yellow:
Terminal is starting up; a short signal

Steady green:
Terminal in operation

O Steady yellow:

tone sounds

Terminal is shutting down or restarting

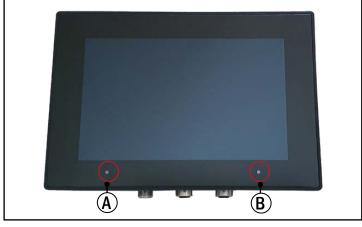


Fig. 4: Status LED and ambient light sensor

B Ambient light sensor

Dims the brightness of the terminal depending on the ambient light.

3.1.4 Supplied Accessories – RAM Ball with Screws

The following accessories are supplied with the SMART COMMAND terminal 7" (see Fig. 5):

- A RAM round base with ball 1,5" with
- B three pan-head screws (M5x12) for attaching the RAM ball to the threaded holes on the back of the terminal.

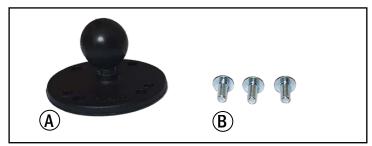


Fig. 5: RAM round base with ball 1,5" with pan-head screws



3.2 Additional accessories

Additional components are available for mounting and connecting the SMART COMMAND terminal 7" in the vehicle and for transmitting certain data. These can be obtained from Reichhardt or your dealer.

3.2.1 RAM mount bracket and other brackets

A RAM mount round base with a diameter of 1.5" is supplied with the SMART COMMAND terminal 7".

A suitable RAM mount bracket (see Fig. 6), additional RAM ball and various other brackets are available for mounting the terminal in the vehicle.



Fig. 6: Example: RAM mount bracket 1.5"

3.2.2 Connection Cable SMART COMMAND Terminal to InCab (704250-00)

The Connection cable SMART COMMAND terminal to InCab (704250-00) is required to connect the SMART COMMAND terminal 7" to the vehicle's ISOBUS (InCab socket) (see Fig. 7).

The cable is connected to connector 1 of the terminal (see chapter 3.1.2).



Fig. 7: Connection cable



3.2.3 USB Connection Cable M12 – SMART COMMAND Terminal (161098)

Some processes require the import or export of files.

These include:

- A system update of the SMART COMMAND terminal 7".
- · activating/importing licenses,
- exporting error logs and importing a logging configuration file.

The import/export is carried out using the USB connection cable (see Fig. 8).

The USB connection cable is attached to connector 3 of the terminal (see chapter 3.1.2).

A standard USB stick can be inserted into the USB connection cable to export the data to or import the data from.

Please note:

The USB stick used must be formatted with the FAT32 file system. This is usually possible directly via the PC.

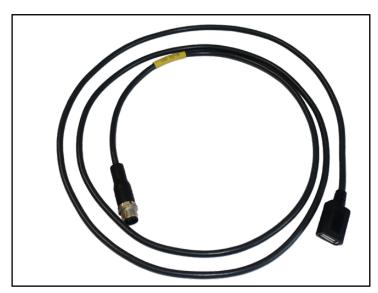


Fig. 8: USB connection cable



4 Commissioning

The following describes the steps for commissioning the SMART COMMAND terminal 7", including the associated hardware components and SMART COMMAND software.

This includes procedures that generally only have to be completed once and those that have to be completed again and again when work is restarted.

4.1 Mounting the SMART COMMAND Terminal 7" in the Vehicle

WARNING

Risk of accident due to obstructed view!

The terminal or the bracket must not obstruct your view of the road or your view of the mirrors when driving on the road.

Mount the terminal in a suitable location. If necessary, remove the terminal before driving on the road.

Proceed as follows to mount the terminal:

1. Attach the supplied RAM ball (or an equivalent holder) to the terminal (see Fig. 9).

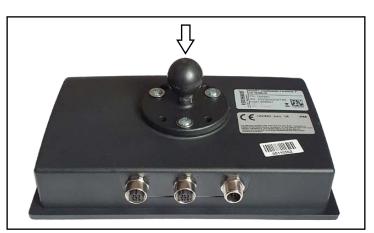


Fig. 9: Attach the RAM ball to the terminal

- 2. Attach the bracket to a suitable location in the vehicle (e.g. guide rail, steel tube, etc.; see Fig. 10 1).
- 3. Attach the terminal to the bracket (see Fig. 10 2).



Fig. 10: Terminal mounted in the vehicle



4.2 Connecting the SMART COMMAND 7" Terminal

Proceed as follows to connect the terminal:

- 1. Take the Connection cable SMART COM-MAND terminal to InCab (704250-00).
- 2. Attach the M12 plug of the connection cable to connector 1 of the terminal (see Fig. 11 and Fig. 12 A). (The plug is fixed in place by screwing).

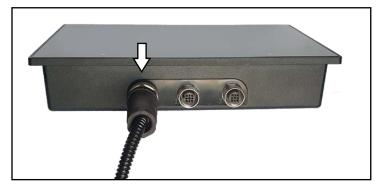


Fig. 11: Connection cable connected to connector 1 of the terminal

 Guide the other connection of the cable to the InCab socket and attach it there (see Fig. 12 - B). (The plug is secured by screwing it in place.)

The 12-pin Deutsch connector X19 is not required. It is used with other SMART COMMAND terminal variants.



Fig. 12: Terminal connected to the vehicle's InCab socket

4.3 Starting the SMART COMMAND Terminal 7"

Switch on the vehicle's ignition.

The SMART COMMAND terminal 7" switches on automatically as soon as the vehicle ignition is started and the terminal is supplied with power.



4.4 Accepting the General Conditions of Sale and Delivery

The first time you start the SMART COMMAND terminal 7", you must accept the General Conditions of Sale and Delivery (see Fig. 13).

Read the conditions, accept them (1). Then tap "Next" (2).

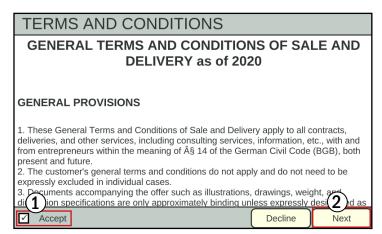


Fig. 13: Accepting the General Conditions of Sale and Delivery

4.5 Initialization Process

At first, the SMART COMMAND terminal 7" will implement a few initialization processes following every restart.

During this process, it is checked whether other ISOBUS participants are available (see Fig. 14).



Fig. 14: Initialization process

Confirming Existing AUX Assignments



4.6 Confirming Existing AUX Assignments

If AUX-N operating devices are connected and the SMART COMMAND terminal 7" is defined as the main terminal in the vehicle, AUX assignments are made via the AUX editor of the SMART COMMAND terminal 7".

Information about existing AUX assignments may appear (see example in Fig. 15).

Check these.



Confirm the assignments using the check button.



If you reject the assignments by tapping the X button, they are still present (will not be removed), but are not active.

The assignments are only active again after restarting the terminal and accepting the assignments, or after making a new assignment or deleting an assignment via the AUX editor.

You can find out more about the AUX editor in chapter 6.4.



Fig. 15: Existing AUX assignments

4.7 Start Screen

The user interface of the SMART COMMAND terminal 7" is always started in operating mode.

It shows a sidebar and at least three windows (see Fig. 16).

Various applications (SMART COMMAND applications and operating screens of ISOBUS devices) can be executed in the windows (see Fig. 17).

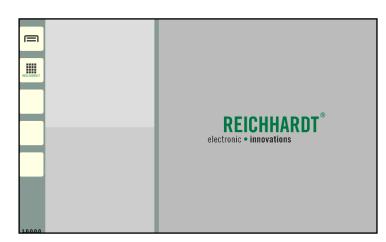
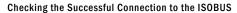


Fig. 16: Start screen (operating mode without running applications)





If applications were active in the windows the last time the SMART COMMAND terminal 7" was shut down, they are opened again (see Fig. 17).

More information about the operating mode and executing applications is provided in chapter 5

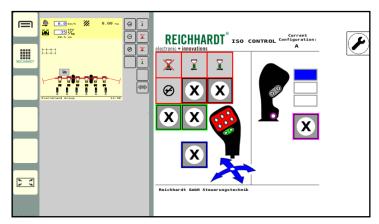


Fig. 17: Start screen (operating mode with active applications)

4.8 Checking the Successful Connection to the ISOBUS

When starting the SMART COMMAND terminal 7", the VT instance is displayed at the top left of the screen (see Fig. 18).

You can set the VT instance via the system settings (see chapter 6.3.1).



Call up the application overview via the sidebar (see Fig. 19 – 1).

If ISOBUS applications are displayed in the bottom line, the connection was successful in all cases (see Fig. 19 – 2).

The displaying of existing AUX assignments (see chapter 4.6) is also an indication of a successful connection.

If no ISOBUS applications are displayed in the application overview, this may be due to several reasons. However, this does not mean that the SMART COMMAND terminal 7" is not connected to the ISOBUS.

Possible causes are described in chapter 5.3.4.3.

The application overview and the various applications are explained in chapter 5.3.4.

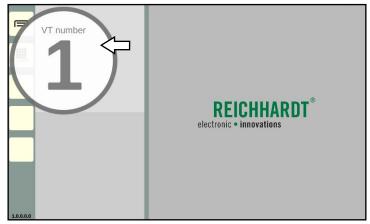


Fig. 18: ISOBUS-VT instance is displayed

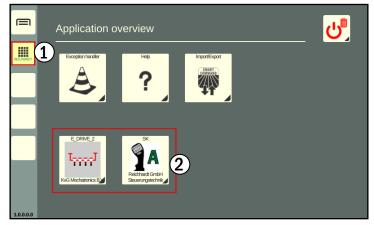


Fig. 19: Application overview with ISOBUS applications



4.9 Checking the Successful Connection and Communication of the Components

If there is a faulty connection, this may be indicated by warning message symbols (see Fig. 20).

The error that has occurred is processed via the SMART COMMAND application "Exception handler" (see chapter 9.1).



Very serious warning



Serious warning:



Warning



Notice

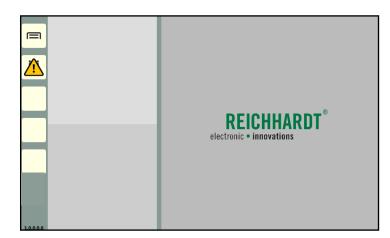


Fig. 20: Warning message symbol on the left in the sidebar



5 Operation and Functionality

The operation and functionality of the user interface of the SMART COMMAND terminal 7" are explained below. The user interface is called "SMART COMMAND".

5.1 Touchscreen Gestures

The following touchscreen gestures are used to operate SMART COMMAND (see Fig. 21):

- Tap: Briefly tap the screen.
- Press and hold:
 Press and hold the object for approx.
 2 seconds.
- Swipe: Touch the object and move the finger in one direction.
- Drag:
 Press and hold the object for approx. 2 seconds and drag it to the required position.
- Double tap: Tap the screen twice.
- Pinch (zoom out):
 Touch the screen with two fingers and bring them closer together.
- Spread (zoom in):
 Touch the screen with two fingers and move them apart.

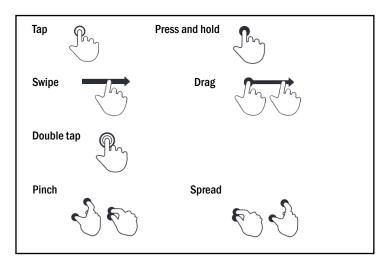


Fig. 21: Touchscreen gestures



5.2 SMART COMMAND Keyboard

If text or numeric entries are required, a keyboard or numeric keypad is automatically displayed when the corresponding field is tapped (see Fig. 22 and Fig. 23).

When operating ISOBUS applications, a keyboard provided by the ISOBUS application is displayed. This is not the keyboard shown here, which is provided by the user interface of the SMART COMMAND terminal.

The keys on the SMART COMMAND keyboard correspond to those on standard digital keyboards on mobile devices.

Some less common keys are explained below.



Switches to character view: Calls up keys with characters and numbers.



Switch to letter view:

Calls up the normal keyboard view with letters and numbers.



Hide keyboard:

Tap the key to hide the keyboard.



Backspace key:

Tap the key to delete character strings from right to left.



Delete key:

Tap the button to delete character strings from left to right.



Clear key / Delete everything: Press and hold the key to delete the entire content of the selected field.



Caps Lock key:

Press and hold the Shift key to activate the Caps Lock key and then only write in capital letters.

The active Caps Lock key is marked with a green dot.

Tap the Caps Lock key to deactivate capitalization again.



Key with multiple selection: Press and hold the key. The other options can then be selected by tapping them.

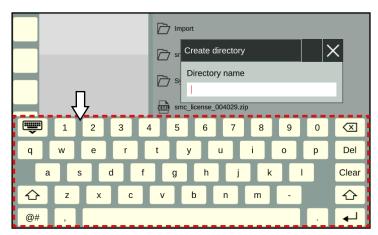


Fig. 22: Keyboard

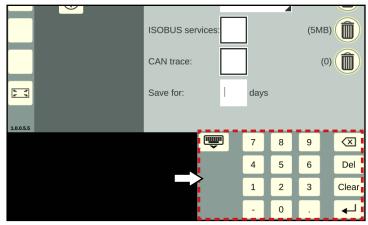


Fig. 23: Numeric keypad



5.3 User Interface Structure

The interface is split into two subsections (see Fig. 24).

A Sidebar

The sidebar is always displayed on the left edge of the user interface (see chapter 5.3.1). It comprises of buttons to call up the main menu, the application overview, and assignable buttons. It also displays the version of SMART COMMAND.

(B) Working Area

The remaining area of the user interface represents the working area in SMART COMMAND. Depending on your selection, this shows one of the following contents:

- Operating mode SMART COMMAND is always started in operating mode. This is where applications can be executed in different windows (see chapter 5.3.2).
- Main menu You can implement settings and configurations via the main menu (see chapter 5.3.3).
- Application overview Overview of all available SMART COMMAND and ISOBUS applications (see chapter 5.3.4).

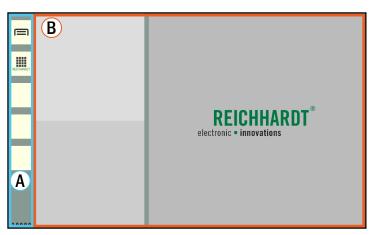


Fig. 24: SMART COMMAND in operating mode

5.3.1 Sidebar – Permanently Visible Buttons and Information

The sidebar is located on the left side of the user interface and is always visible (see Fig. 25).

It is also displayed when an application is operated in full screen mode (see chapter 5.6.6).

- The sidebar contains buttons via which menus, settings, and applications can be called up amongst other things (see chapter 5.3.1.1).
- (2) It also displays the installed SMART COMMAND version (see chapter 5.3.1.2).

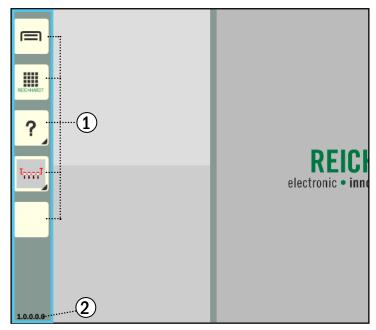


Fig. 25: Sidebar in SMART COMMAND



5.3.1.1 Overview of the Buttons



Show main menu/Hide main menu (show operating mode)

This button is used to show and hide the main menu.

When the main menu is hidden, the operating mode is displayed with the application windows.

The settings for the SMART COMMAND terminal 7" and for the individual applications can be made in the main menu (see chapter 5.3.3).



Show application overview/Hide application overview (show operating mode)

This button is used to show and hide the application overview.



When the application overview is hidden, the operating mode is displayed with the application windows. The application overview contains the SMART COMMAND and ISOBUS applications (see chapter 5.3.4).

In the event of unexpected system states, a flashing warning symbol is displayed on the button.

The associated warning can be called up and resolved via the SMART COMMAND "Exception handler" application. Please refer to chapter 9.1.



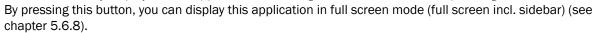
3 assignable buttons

The third to fifth buttons can be assigned freely. An application can be assigned to them to create a short-cut (see chapter 5.5).



Full screen mode/Exit full screen mode

This button is only displayed if an application is running in the main window of operating mode.



The button symbol changes in full screen mode. Tapping it will close full screen mode again.

5.3.1.2 Display of the SMART COMMAND Version

The version of the operating SMART COMMAND version is displayed (see Fig. 26).

The SMART COMMAND version is also displayed in the system information, where the system can also be updated (see chapter 6.5).



Fig. 26: SMART COMMAND version at the bottom of the sidebar



5.3.2 Operating Mode – Executing and Operating Applications

After starting the SMART COMMAND terminal 7" and when the main menu or the application overview is hidden, the working area is displayed in operating mode.

In operating mode, at least three windows are displayed in which SMART COMMAND and ISOBUS applications can be executed (see Fig. 27 and Fig. 28). For more information on applications, see chapter 5.3.4. For information on how to start and end applications, see chapter 5.6.

Applications that were active in the windows when the SMART COMMAND terminal 7" was last shut down are executed again.



Small window

There are at least two miniature windows on the left working area. Applications can be executed there. Any number of miniature windows can be added.

NOTICE

The full functional scope of applications that are executed in small windows may not be available.

Functions, that are usually called up by swiping or by pressing and holding, are blocked in the small windows as applications in small windows can be dragged into other windows when pressed and held.

The same applies to the swiping function as this is used to scroll through more than two small windows.



(B) Main window

A large window, the main window, is located on the right of the working area. The full functional scope is available for an application that is executed in the main window.

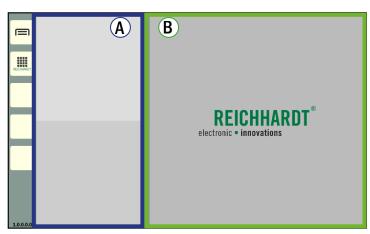


Fig. 27: Operating mode of SMART COMMAND

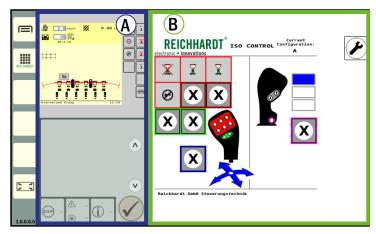


Fig. 28: Operating mode of SMART COMMAND with active applications



5.3.3 Main Menu – Implementing Settings and Configurations

Settings and configurations for the SMART COMMAND terminal 7" can be made in the main menu.



Tap this button in the sidebar to show/hide the main menu.

The operating mode is displayed when the main menu is hidden.

5.3.3.1 Accessing and Displaying Menu Contents

The working area in the main menu is divided into two sections (see Fig. 29):



Menu tree

When navigating the main menu, this is expanded towards the right on the left side of the screen across a maximum of three levels.

Menu items that are not selected are displayed in beige.

Selected menu items and higher level menu items are displayed in yellow.



Inactive menu item (beige)



Active menu item (yellow)

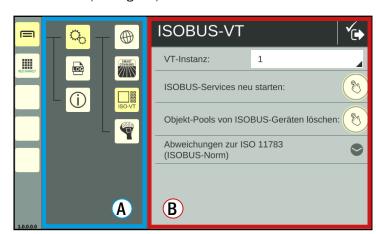


Fig. 29: ISOBUS VT settings in the main menu

(B) Menu contents

The menu contents are displayed in a separate window on the right.

The menu name is displayed in the black header of the menu.

In addition, there are usually buttons for executing actions or calling up different tabs. These are explained in the corresponding menus.



The button shown at the top of the black header is used to close the menu and save the settings if this is not done automatically.



5.3.3.2 Menu Structure

By default, the main menu is divided into three menu items, some with additional sub menus. The structure and contents are shown below (see Fig. 30).

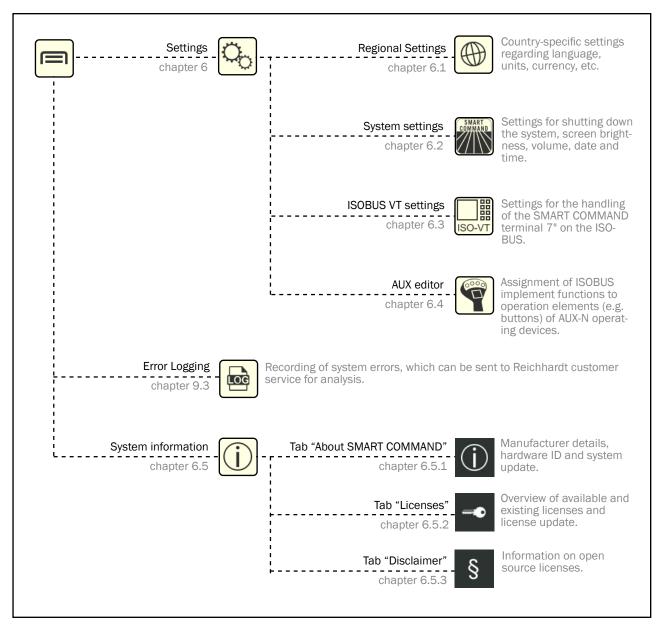


Fig. 30: Menu structure and contents with chapter references



5.3.4 Application Overview – List of All Available Applications



Tap this button in the sidebar to show/hide the application overview in the working area. The operating mode is displayed automatically when the application overview is hidden.

The application overview can, in principle, be made up of two lines. These contain different applications (see Fig. 31 and Fig. 32):

• Upper line: SMART COMMAND applications

• Bottom line: ISOBUS applications (operating screens of ISOBUS devices)

Five applications can be displayed simultaneously in each line. If there are more applications, you can scroll through them horizontally.

Applications are executed in the operating mode windows. Read chapter 5.6 for more information.

The application buttons are long press buttons (see chapter 5.4).

5.3.4.1 SMART COMMAND Applications

SMART COMMAND applications are displayed in the upper line (see Fig. 31). These include:



Exception handler

Display and editing of SMART COM-MAND-specific warning messages (see chapter 9.1).



Help/Context help

Context help, which can be used to display help texts for menu items and buttons (see chapter 7).



Import/Export

Import licenses and logging configuration files and export error logs (see chapter 8).

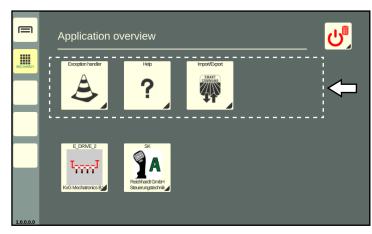


Fig. 31: SMART COMMAND applications



5.3.4.2 ISOBUS Applications – Operating Screens of Connected ISOBUS Devices

ISOBUS applications are displayed in the bottom line (see Fig. 32).

With these applications the operating screens of ISOBUS devices can be displayed in an operating mode window and the ISOBUS devices can be operated.

The following prerequisites must be met:

- ISOBUS devices are connected to the vehicle.
- · a SMART VT license is installed,
- the VT settings are set in such a way that the ISOBUS applications are loaded in the SMART COMMAND terminal 7".

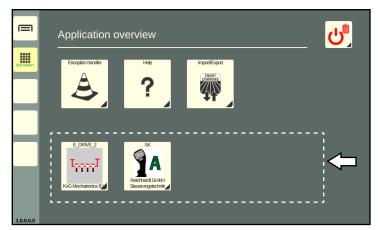


Fig. 32: ISOBUS applications (SMART VT)

5.3.4.3 Reasons for ISOBUS Applications Not Being Available in the Application Overview

If not all ISOBUS applications are available in the application overview, this may be due to one of the following reasons.

5.3.4.3.1 ISOBUS Plug Symbol with Progress Bar – Object Pool of an ISOBUS Device Being Loaded

If ISOBUS devices are connected for the first time the object pools (operating screen data) are initially loaded.

An object pool that has not finished loading can be recognized by the ISOBUS plug symbol with a progress bar (see Fig. 33 - 1).

A progress bar is also displayed on the menu item for the application overview in the sidebar (see Fig. 33 – 2).

Wait a few minutes and the ISOBUS application will be available.

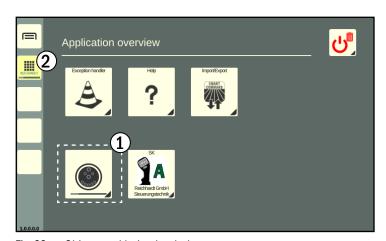


Fig. 33: Object pool being loaded



5.3.4.3.2 Key Symbol – SMART VT License Not Recognized

If no SMART VT license has been detected, no ISOBUS applications can be loaded and the symbol shown in Fig. 34 appears.

Check the availability of the license via the system information (see chapter 6.5.2).

If the license is not available, you must request it from Reichhardt or your dealer and import it using the SMART COMMAND "Import/Export" application (see chapter 8.1).

This requires a USB connection cable and a USB stick. The USB stick must be formatted with the FAT32 file system. You can also obtain the USB connection cable (see chapter 3.2.3) from Reichhardt or your dealer.

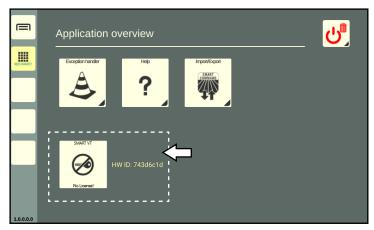


Fig. 34: SMART VT license not recognized

5.3.4.3.3 No ISOBUS Applications available

If one or more ISOBUS devices are not displayed in the application overview (see Fig. 35), although a valid SMART VT license is available, this may have the following causes:

- ISOBUS device disconnected/not connected correctly.
 - ▶ Please check the connection and reconnect the device if necessary.
 - See also chapter 5.6.7 "Paused ISOBUS applications of disconnected ISOBUS devices in operating mode".
- · ISOBUS device loaded on another ISO-VT.
 - ► Check the VT instances of the existing ISO VTs and the setting in the ISOBUS operating screens.

The setting of the VT instance of the SMART COMMAND terminal 7" is described in chapter 6.3.1.

- ISOBUS device registration on the ISOBUS incorrect.
 - ► Restart the ISOBUS services (see chapter 6.3.2).
 - ▶ If restarting the ISOBUS services does not help, there may be a problem with the object pools of the ISOBUS devices. If necessary, delete these (see chapter 6.3.3) so that they are then reloaded correctly.

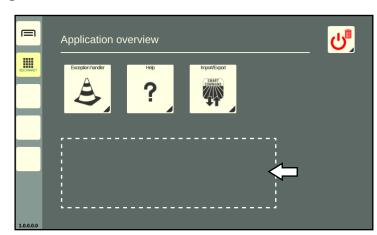


Fig. 35: No ISOBUS devices available



Long Press Buttons - Buttons with a Black Triangle

5.3.4.4 Delete/Exit Button in the Application Overview



The Delete/Exit button in the application overview (see Fig. 36) has several functions. You can use it to

- remove the assignment of a shortcut (by dragging on to the shortcut; see chapter 5.5.3);
- terminate an application (by dragging it on to the window with the running application; see chapter 5.6.8);
- dim the screen (by tapping it and selecting "Standby"; see chapter 5.7);
- shut down the SMART COMMAND terminal 7" (by tapping it and selecting "Exit"; see chapter 5.8).

The Delete/Exit button is a long press button (see chapter 5.4).

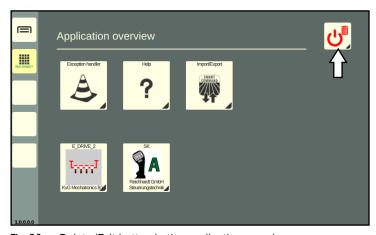


Fig. 36: Delete/Exit button in the application overview

5.4 Long Press Buttons – Buttons with a Black Triangle

In SMART COMMAND there are various objects via which you can carry out actions or implement settings. These objects include buttons, symbols, slide bars, selection lists (drop-down menus), checkboxes etc., that are generally intuitive to operate.

Some of the buttons have a small triangle in the bottom right corner. The function of these long press buttons is initiated by pressing and holding or dragging them (the gestures are explained in chapter 5.1). Long press buttons often have a second function that is triggered by tapping it.

The following provides an overview of some examples.



The applications in the application overview can

- be tapped (to execute an application in the main window of the operating mode; see chapter 5.6.1) or
- be dragged (to create a shortcut for this application in the sidebar or to execute an application in any window of the operating mode; see chapter 5.5.1 or chapter 5.6.2).



Shortcuts (button to which an application is assigned) in the sidebar can

- be tapped (to execute an application in the main window of the operation mode; see chapter 5.6.1) or
- be dragged (to execute an application in any window of the operation mode; see chapter 5.6.2).

However, long press buttons must not be confused with selection lists that display a selection list when the small arrow is tapped (see Fig. 37).



Fig. 37: Long press button and drop-down list

Shortcuts - Assignable Buttons in the Sidebar



5.5 Shortcuts – Assignable Buttons in the Sidebar

You can use shortcuts to run applications via the sidebar in the operating mode windows without switching to the application overview. (The execution of applications in operating mode is described in chapter 5.6).

You can create up to three shortcuts with applications in the sidebar. The procedure is described below.

5.5.1 Creating a Shortcut – Assigning an Application to a Button

Via the application overview



Open the application overview.

Press and hold the corresponding application in the application overview (see Fig. 38).

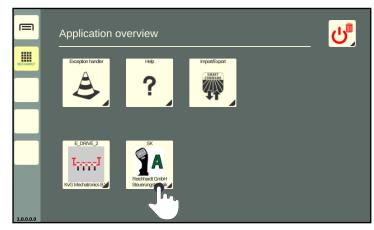


Fig. 38: Pressing and holding the application

Drag the application on to an assignable button on the sidebar (see Fig. 39).

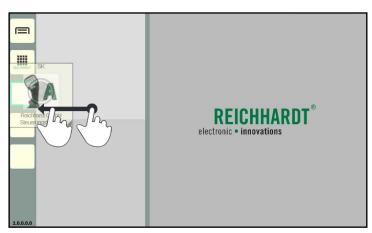


Fig. 39: Dragging the application to an assignable button and letting go



OPERATION AND FUNCTIONALITY

Shortcuts - Assignable Buttons in the Sidebar

Let go of the application over the desired assignable button to designate it as a shortcut (see Fig. 40).

If the button is already assigned, the old assignment is replaced by the new one.

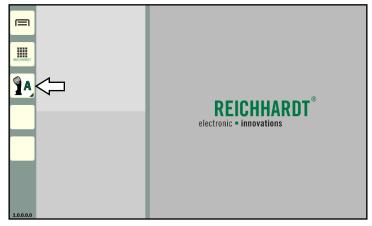


Fig. 40: Shortcut for application in the sidebar

Via small window in operating mode

You can also create a shortcut by dragging a running application from a small window on to an assignable button (see Fig. 41 and chapter 5.6).

However, applications cannot be dragged from the main window on to an assignable button.

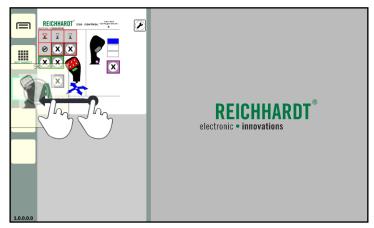


Fig. 41: Dragging an application from a small window to an assignable button and letting go

OPERATION AND FUNCTIONALITY

Shortcuts - Assignable Buttons in the Sidebar



5.5.2 Moving a Shortcut

Press and hold the shortcut and drag the application to another assignable button (see Fig. 42).

If this button is already assigned, the applications of the two buttons are swapped.

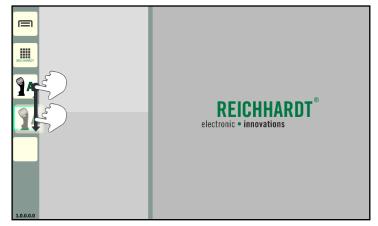


Fig. 42: Moving a shortcut

5.5.3 Deleting the Assignment of a Shortcut



Open the application overview.

Press and hold the Delete/Exit button (see Fig. 43).



Fig. 43: Pressing and holding the Delete/Exit button

Drag the Delete/Exit button on to the shortcut for which you wish to remove the assignment and release the button (see Fig. 44).

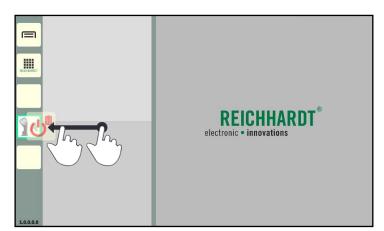


Fig. 44: Dragging the Delete/Exit button on to the shortcut



5.6 Executing SMART COMMAND and ISOBUS Applications in Operating Mode Windows

SMART COMMAND and ISOBUS applications (operating screens of ISOBUS devices) are executed in operating mode windows.

During initial commissioning, applications can only executed via the application overview. If there are already short-cuts for applications in the sidebar, these can also be used to run applications.

There are several ways to run an application, which are explained below.

Information on the various applications and troubleshooting if not all ISOBUS applications are available in the application overview can be found in chapter 5.3.4.

Information on shortcuts can be found in chapter 5.5.

Information on paused ISOBUS applications can be found in chapter 5.6.7.

5.6.1 Tapping the Application and Executing it in the Main Window

Tapping is the fastest and simplest way to execute an application in the main window.

It is possible to tap an application via

- the application overview (see Fig. 45),
- a shortcut in the sidebar (see Fig. 46).

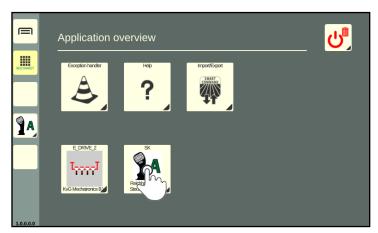


Fig. 45: Tapping the application in the application overview

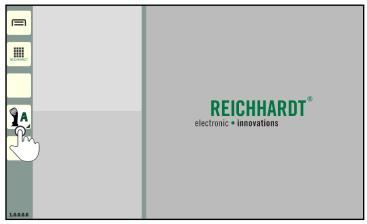


Fig. 46: Tapping a shortcut the sidebar

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OPERATION AND FUNCTIONALITY

Executing SMART COMMAND and ISOBUS Applications in Operating Mode Windows

After tapping an application, the operating mode is displayed and the application is started in the main window (see Fig. 47).

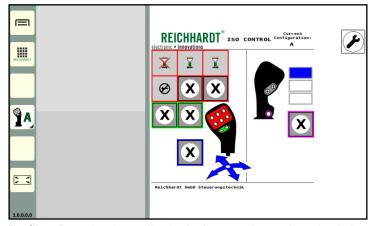


Fig. 47: Executing the application in the operating mode main window

Please note



The help is not a regular SMART COMMAND application that is executed in an operating mode window. This is possible, but only an explanation for using the context help is displayed (see Fig. 48).

The context help can only be used via a shortcut in the sidebar. If this is tapped, the context help is executed (see chapter 7).

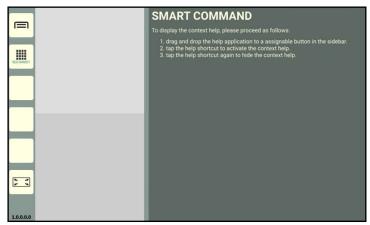


Fig. 48: Help in the main window



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Executing SMART COMMAND and ISOBUS Applications in Operating Mode Windows

Also observe the following rules for tapping applications:

- If an application that is already being executed in a small window is tapped in the application overview or via a shortcut, it will then be executed in the main window.
 If a different application is already active in the main window, then the applications will be swapped.
- If an application is active in the main window when a second application is tapped, the first application is automatically moved from the main window to a small window (see Fig. 49 and Fig. 50).

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Fig. 49: Shortcut of an application (already running in the small window) is tapped to run it in the main window

NOTICE

Applications that are automatically moved to a small window when a new application is tapped may not have access to the full scope of functions.

Functions that are usually called up by pressing and holding, for example, are blocked in the small windows, as applications in small windows can be dragged into other windows when pressed and held.

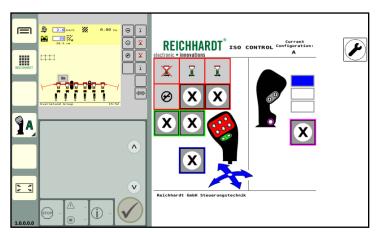


Fig. 50: Application is moved to the main window and swapped with the original application from the main window

OPERATION AND FUNCTIONALITY

Executing SMART COMMAND and ISOBUS Applications in Operating Mode Windows



5.6.2 Dragging an Application into Any Window and Execute it there

To execute an application in any window of the operating mode, they must be dragged into the corresponding window.

It is possible to drag an application to any window

- from a shortcut on the sidebar (see chapter 5.6.2.1),
- from the application overview (see chapter 5.6.2.2) or
- from any small window (see chapter 5.6.2.3).

NOTICE

You cannot drag the application from the main window to the small window.

NOTICE

Applications that are executed in small windows may not have access to the full scope of functions of the application. Functions that are usually called up by pressing and holding, for example, are blocked in the small windows, as applications in small windows can be dragged into other windows when pressed and held.

A simplified version of SMART COMMAND applications is generally displayed in small windows. The full scope of functions for these applications can only be used in the main window.

Observe the following rules for dragging applications into a window:

- If an application is dragged into a window although it is already being executed in another window, it is terminated in the other window.
- If the selected application is dragged into a small window in which an application is already being executed, the previously executed application is terminated and replaced by the selected application.
- If the selected application is dragged into the main window in which an application is already running, the previously running application is moved to the topmost free small window.

5.6.2.1 Dragging a Shortcut from the Sidebar in to Any Window

1. Press and hold the shortcut for the corresponding application in the sidebar (see Fig. 51).



Fig. 51: Pressing and holding the shortcut for the application in the sidebar

2. Drag the shortcut button from the sidebar to any window and let it go (see Fig. 52).

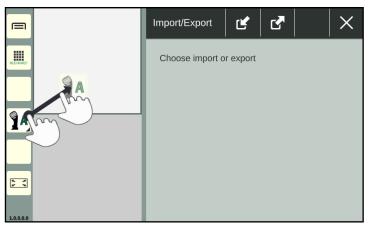


Fig. 52: Dragging the shortcut to the desired window and letting go

3. The application is then executed in the selected window (see Fig. 53).



Fig. 53: Application is executed in the selected window



5.6.2.2 Dragging the Application from the Application Overview into Any Window

1. Press and hold the application symbol in the application overview (see Fig. 54).

The operating mode is automatically displayed with the windows (see Fig. 55).

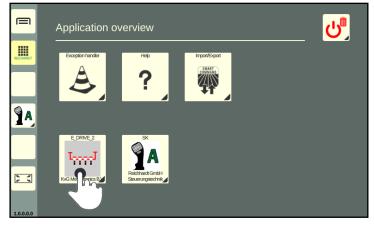


Fig. 54: Pressing and holding the application symbol in the application overview

2. Drag the application into any window and let it go (see Fig. 55).

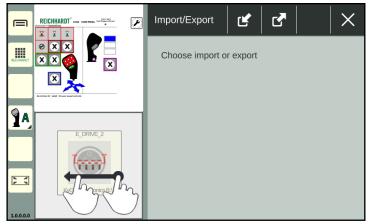


Fig. 55: Dragging the application into the required window and letting go

3. The application is then executed in the selected window (see Fig. 56).



Fig. 56: Application is executed in the selected window



5.6.2.3 Dragging an Application from a Small Window to Another Window

1. Press and hold the application in the small window until the application symbol appears (see Fig. 57).

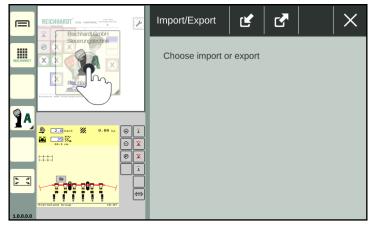


Fig. 57: Pressing and holding the application in a small window

2. Drag the application into any window and let it go (see Fig. 58).



Fig. 58: Dragging the application into the required window and letting go

3. The application is then executed in the selected window (see Fig. 59).

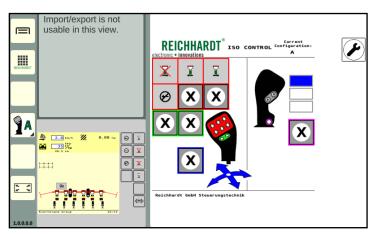


Fig. 59: Application is executed in the selected window



5.6.3 Adding a Small Window – Executing More than Three Applications

There are two small windows as standard. However, you can add as many small windows as you like. A prerequisite is that applications are already being executed in the two standard small windows. The small windows are displayed underneath one another and you can scroll through them vertically.

To add a new small window with an application, proceed as follows:

1. Press and hold an application in the application overview or a shortcut on the sidebar (see Fig. 60).

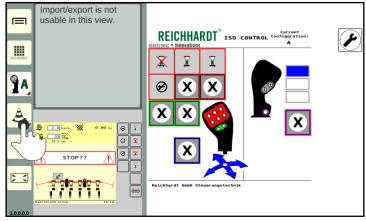


Fig. 60: Pressing and holding the application

- 2. Drag the application into the area of the small window.
- Position the application above the first, underneath the last, or between any two small windows.
- 4. Wait until a small, empty window stands out (see Fig. 61).
- 5. Let go of the application above the empty window to position it.

If the application is unintentionally released over a small window in which an application is already being executed, the previously executed application is terminated and replaced by the new one.

Swipe vertically to scroll through the window.

A small yellow bar on the side of the small window indicates the number of available small windows and their positions (see Fig. 62).

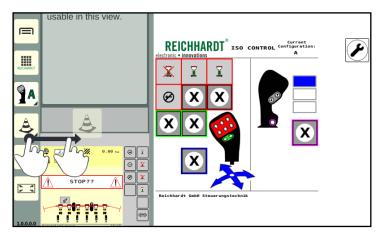


Fig. 61: Positioning the application in the small window

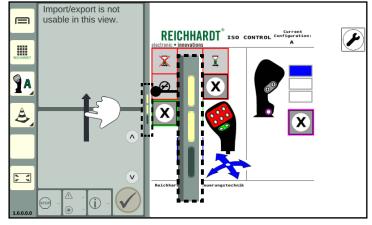


Fig. 62: Number of available windows/scrolling through the small window



5.6.4 Changing the Order of Applications in the Small Windows

The order of the applications in the small windows can be changed:

1. Press and hold an application in the small window (see Fig. 63).

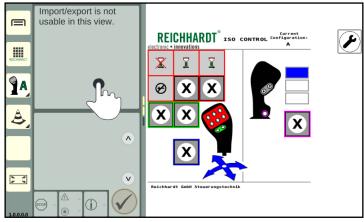


Fig. 63: Pressing and holding an application in the small window

2. Position the application above the first, underneath the last, or between any two small windows (see Fig. 64). In the same way as adding new small windows.

If you let go of an application directly over another small window, then the application that is being executed in it will be terminated.

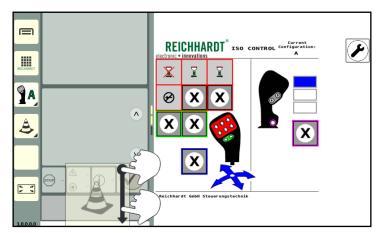


Fig. 64: Moving and positioning an application in a new small window



5.6.5 Operating an Application in a Small Window

The full scope of applications that are displayed in a small window may not be available.

The following provides some examples of this.

Read the relevant section for explanations for specific applications.

SMART COMMAND applications



Exception handler:

A small window displays how many warnings there are for a severity level (see Fig. 65).

Errors that have occurred can be acknowledged in sequence.

By tapping the arrow buttons you can scroll through the full description of the warning. (Swiping is not possible.)

The exception handler is described in chapter 9.1.





Troubleshooting in the small window (1) and main window (2)



Help:

The help is only available as context help by pressing a shortcut.

When executing in a small window (as in the main window), an explanation of how to execute the context help appears (see Fig. 66).

You can navigate through the description by tapping the arrow buttons. (Swiping is not possible.)

Help as context help is described in chapter 7.





Help in the small window (1) and main window (2) Fig. 66:



OPERATION AND FUNCTIONALITY

Executing SMART COMMAND and ISOBUS Applications in Operating Mode Windows

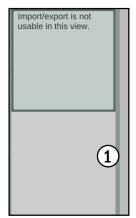


Import/Export:

The "Import/Export" application cannot be used in a small window (see Fig. 67).

This application must be used in the main window.

The "Import/Export" application is described in chapter 8.



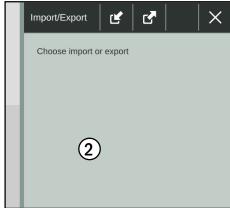


Fig. 67: Import/Export application in the small window (1) and main window (2)

ISOBUS applications

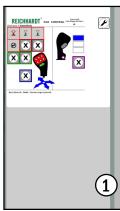


Example: ISO CONTROL ISOBUS applications are displayed in the same way in a small window as in the main window.

However the size of the window does mean that they are smaller.

Functions that are executed in the operating screen of the ISO-BUS device by dragging or holding are blocked in the small windows, as applications in small windows can be dragged to other windows by holding them.

The same applies to the swipe function, as this is used to scroll through more than two small windows.



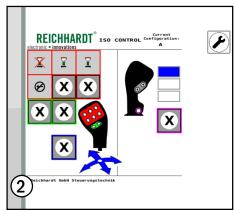


Fig. 68: ISOBUS application of the ISO CONTROL joystick in the small window (1) and main window (2)



5.6.6 Displaying the Application in Full Screen Mode in the Main Window

An application executed in the main window can be displayed in full screen mode. The small windows are hidden during this process. However, the hidden applications continue to be executed.

Activating full screen mode



As soon as an application is executed in the main window, the full screen mode button appears at the bottom of the sidebar.

Tap the button to activate full screen mode (see Fig. 69).

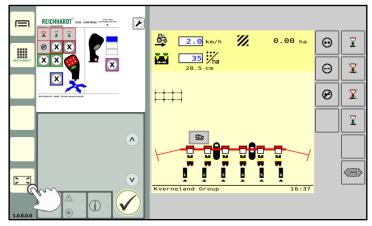


Fig. 69: Tapping the full screen mode button

Full screen mode is then activated and the full screen mode button changes (see Fig. 70).

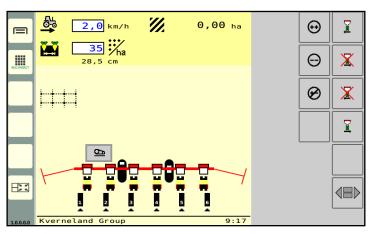


Fig. 70: Full screen mode activated

Exiting full screen mode



Tap the exit full screen mode button on the bottom left of the sidebar to exit full screen mode and to display the small windows again (see Fig. 70).



5.6.7 Paused ISOBUS applications of disconnected ISOBUS devices in operating mode

If an ISOBUS device is disconnected, the running ISOBUS application and any associated shortcuts are replaced by an ISOBUS plug symbol (see Fig. 71).

Functions for a disconnected ISOBUS implement that were assigned to a connected AUX-N-capable ISOBUS operating device are not available.

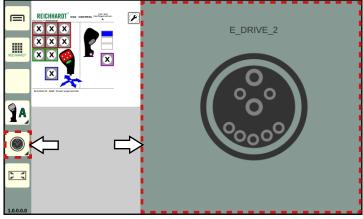


Fig. 71: Shortcut and paused application of a disconnected ISOBUS implement

If the ISOBUS implement is reconnected, the ISOBUS application and the icon of an associated shortcut are displayed again (see Fig. 72).

Functions of a reconnected ISOBUS implement that were assigned to a connected AUX-N-capable operating device are (again) available.

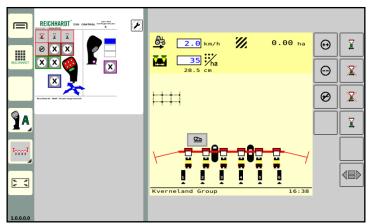


Fig. 72: ISOBUS implement (re)connected



Terminating SMART COMMAND and ISOBUS Applications 5.6.8



Open the application overview.

Press and hold the Delete/Exit button (see Fig. 73).

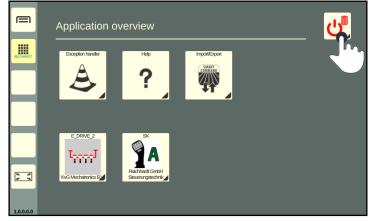
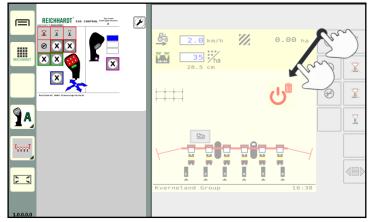


Fig. 73: Pressing and holding the Delete/Exit button

Drag the Delete/Exit button on to the window in which the application is being executed and let it go (see Fig. 74).

The application will then be terminated.

If the Delete/Exit button is dragged onto an application in a small window, the applications in the following small windows will be moved upwards.



Dragging the Delete/Exit button on to an application and ter-Fig. 74: minating it



Fig. 80: Shutting down the SMART COMMAND terminal 7" by switching off the ignition

Using Standby Mode - Dimming the Terminal Screen

5.7 Using Standby Mode – Dimming the Terminal Screen

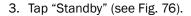
Activating standby mode

Standby mode is suitable to be used when driving at night between fields (especially on roads) as this will dim the screen and thus preventing visual distractions.

SMART COMMAND remains active in the background and can continue to be used afterwards.

To switch on standby mode, proceed as follows:

- 1. Open the application overview.
- 2. Tap the Delete/Exit button (see Fig. 75).



If you tap "Leave On", the process will be cancelled and the screen will not be dimmed.

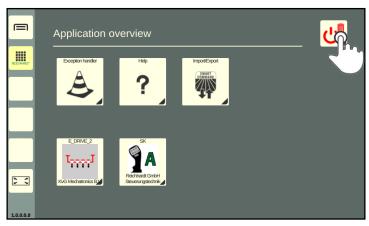


Fig. 75: Tapping the Delete/Exit button

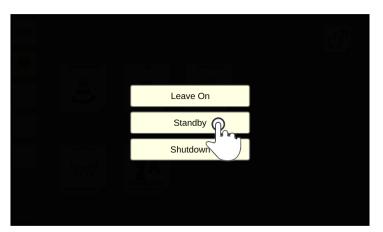


Fig. 76: Activating standby mode

Exiting standby mode - switching on the screen

Tap the deactivated screen to exit standby mode (see Fig. 77).

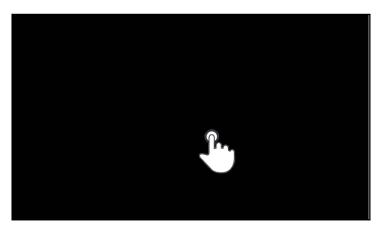


Fig. 77: Exiting standby mode/switching on the screen

OF ERAFION AND FOROTIONALITY



Shutting down the SMART COMMAND Terminal 7 $^{\circ}$

5.8 Shutting down the SMART COMMAND Terminal 7"

To shut down the SMART COMMAND terminal 7" proceed as follows:

- 1. Open the application overview.
- 2. Tap the Delete/Exit button (see Fig. 78).

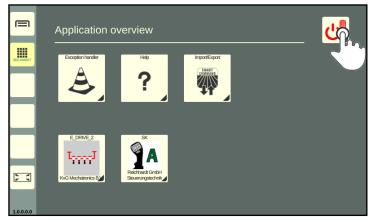


Fig. 78: Tapping the Delete/Exit button

3. Tap "Shutdown" (see Fig. 79).

Tap "Leave On" to cancel the process and not shut down the SMART COMMAND terminal 7".

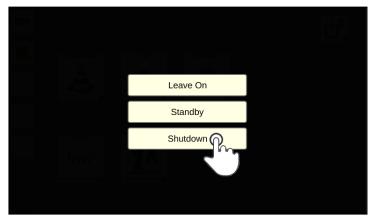


Fig. 79: Shutting down the SMART COMMAND terminal 7"

If you turn off the ignition of the vehicle without first shutting down the SMART COMMAND terminal 7", then the screen shown in Fig. 80 will be displayed.

If you do not select an action, the terminal is automatically shut down after 10 seconds.

Alternatively, you can leave the terminal switched on and leave it to shut down automatically after a follow-up time of two minutes (see chapter 6.2).

In addition, you can place the terminal in standby mode (see chapter 5.7) and let it shut down automatically upon expiry of the follow-up time.



6 Settings

System-relevant settings and information are explained in this chapter.

6.1 Regional Settings – Country-Specific Terminal Settings

In this menu, you can set the country-specific settings.

Open the regional settings via the main menu (see Fig. 81 and Fig. 82):



Country presets:

By selecting a country under "Country presets" the standard settings for the relevant country are automatically set.

Language, Date/Time, Units, Decimal mark:

You can change the individual settings via the menu items "Language", "Date/Time", "Units", and "Decimal mark".



Open/close the individual setting options by tapping the arrows.



NOTICE

The settings are usually changed automatically.

If the changes are not applied in full, we recommend restarting the SMART COMMAND terminal 7".

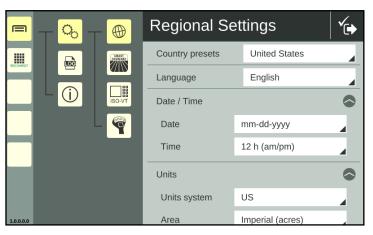


Fig. 81: Regional settings 1/2

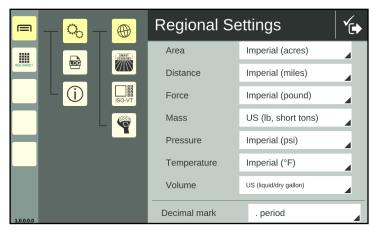


Fig. 82: Regional settings 2/2

System Settings - Terminal-Specific System Settings



6.2 System Settings – Terminal-Specific System Settings

In this menu, you can make terminal-specific system settings.

Open the system settings via the main menu (see Fig. 83):





Open/close the individual setting options by tapping the arrows.



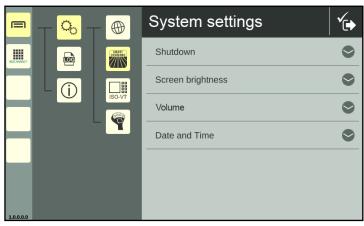


Fig. 83: System settings

Shutdown (system)

1. Power supply:

Select the type of power supply from the selection list (see Fig. 84):

- "ISOBUS-InCab" (power supply via InCab socket)
- "Direct wiring" (other power supply)

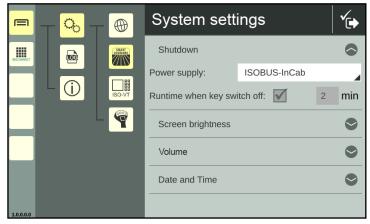


Fig. 84: System settings – shutdown

2. Runtime when key switch off:

A follow-up time of 2 minutes is set by default on the "SMART COMMAND terminal 7". This cannot be changed.

If the ignition is switched off and the "Leave on" button is tapped (see Fig. 85), the terminal is supplied with power for a further two minutes.

During this time, further work can be carried out on the terminal until the follow-up time has elapsed and the terminal is automatically switched off.

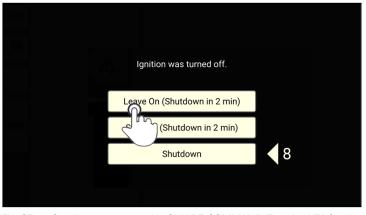


Fig. 85: Continue to power the SMART COMMAND Terminal 7" for the duration of the follow-up time



Screen brightness

Use the plus and minus buttons or the slider to set the screen brightness (see Fig. 86).



dark



bright

By activating the "Automatic brightness adjustment" option, the screen brightness is automatically adjusted via the ambient light sensor at the front right of the terminal (see Fig. 4).

The current controller setting is adopted when automatic control is activated. It influences the automatic control.

If the controller is set to a dark screen brightness, the screen also remains darker during automatic control. This is especially useful for night-time driving.

If the control is set to a bright screen brightness, the screen remains brighter even during automatic control. This is especially useful in bright light.

System settings Shutdown Screen brightness Automatic brightness adjustment: Volume Date and Time

Fig. 86: System settings - Screen brightness

Volume

Use the plus and minus buttons or the slider to set the volume for signal sounds (see Fig. 87). A sample sound is played when the setting is changed.

(The speaker of the SMART COMMAND terminal 7" is located on the back, between the threaded holes for the holder; see Fig. 2.)

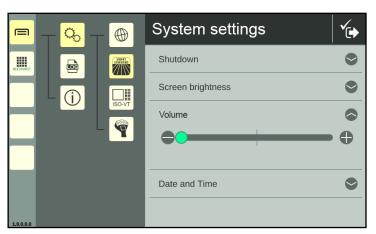


Fig. 87: System settings - Volume

ISOBUS VT Settings via the Main Menu of SMART COMMAND



Date and time

Use the text fields to enter the date and time (see Fig. 88).

If the SMART COMMAND terminal 7" is connected to the Internet via a network cable (at connection 2), it can determine the date and time automatically after activating the "Automatic date/time" checkbox.

The time information is also retained when the terminal is disconnected from the Internet again.

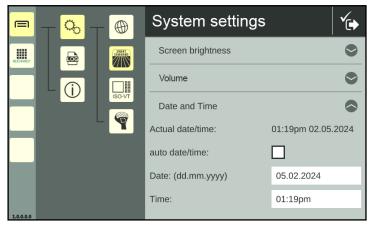


Fig. 88: System settings - Date and Time

6.3 ISOBUS VT Settings via the Main Menu of SMART COMMAND

Open the ISOBUS-VT settings via the settings in the main menu (see Fig. 89):



You have the following setting options:

- A VT instance: Specify the registration instance of the SMART COMMAND terminal 7" on the ISOBUS (see chapter 6.3.1).
- (B) Restart ISOBUS services: The SMART COMMAND terminal 7" disconnects and reconnects to the ISOBUS. ISOBUS devices with operating screens previously loaded on the terminal reconnect to the terminal (see chapter 6.3.2).
- © Delete object pools of ISOBUS devices (and reboot) (see chapter 6.3.3).
- Deviations from ISO 11783 (ISOBUS standard):

 Settings for devices that are not compliant with standard behavior (see chapter 6.3.4).

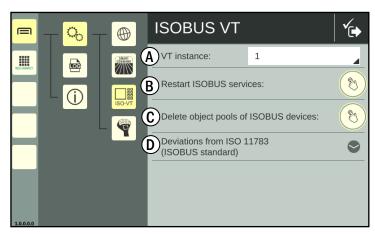


Fig. 89: ISOBUS VT settings



6.3.1 Specifying VT Instances on the ISOBUS

If you use several VTs (Virtual Terminals) on the ISOBUS, you must define an instance (number) for each VT. This determines the priority of the registration of different VTs on the ISOBUS.

The VT with the instance number 1 is the main terminal. The operating screens (ISOBUS applications) of the ISOBUS implements are loaded onto this VT if no other settings have been made in the operating screen.

Assign an instance from 1 to 32 by tapping the field and selecting a number (see Fig. 90).

Note that different terminals must not have the same instance.

The AUX Editor of the main terminal (VT instance: 1) is used to assign ISOBUS implement functions to AUX-N operating devices (e.g. joystick).

On the main terminal, the configuration screen of the AUX-N operating device is also loaded.

More information about the AUX Editor of the SMART COMMAND terminal 7" is available in chapter 6.4.



Save the setting using the button in the header bar.

The terminal then reconnects to the ISOBUS. The VT instance is displayed at the top left of the screen (see Fig. 91).

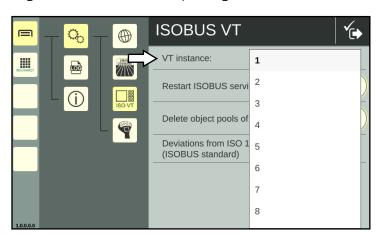


Fig. 90: Specifying a VT instance

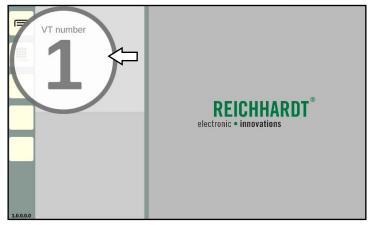


Fig. 91: ISOBUS VT instance is displayed



6.3.2 Restarting ISOBUS Services

If the operating screens of connected ISOBUS devices are not loaded onto the SMART COMMAND terminal 7" or another VT, an error may have occurred during registration.

If you have checked the correct coupling of the ISOBUS devices and VTs and the assignment of different instances for the VTs, restarting the ISOBUS services may help to resolve the problem.

This involves disconnecting and reconnecting the SMART COMMAND terminal 7" from the ISOBUS.

NOTICE

Unpredictable behavior of connected ISOBUS implements with possible material damage.

While the ISOBUS services are restarted, communication between the terminal and running ISOBUS implements is interrupted.

First stop the vehicle and stop working with connected ISOBUS implements.

Tap the button next to "Restart ISOBUS services" (see Fig. 92) to perform the restart (see Fig. 93).

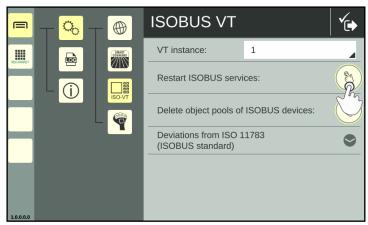


Fig. 92: Restarting ISOBUS services



Fig. 93: ISOBUS services are restarted



6.3.3 Deleting and Reloading Object Pools of ISOBUS Devices

The data to display ISOBUS operating screens is loaded during the first connection, and is saved in so-called "object pools".

If one or more ISOBUS applications are not displayed correctly and restarting the SMART COMMAND terminal 7" and the ISOBUS services does not change this, then you will need to delete the object pools in the terminal and reload them.

To do so, tap the button next to "Delete object pools of ISOBUS devices" (see Fig. 94).

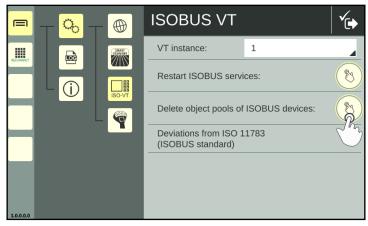


Fig. 94: Deleting object pools of ISOBUS devices

The operating screens of the ISOBUS devices found are then reloaded (see also Fig. 95).



Fig. 95: Object pools of ISOBUS devices being loaded



6.3.4 Settings for ISOBUS Devices that Deviate from ISO 11783

NOTICE

You should only activate these settings if advised to do so by your dealer/Reichhardt Customer Service. The settings only become effective once the SMART COMMAND terminal 7" has been restarted.





In the ISOBUS-VT settings, you can implement other settings for devices that are not compliant with ISO 11783 (see Fig. 96).

Tap the down arrow to open the settings.

- I: Activate the option "Do not validate object pools", to permit the operation of ISOBUS devices even though the object pool is faulty and/or is not ISOBUS-compliant. However, when using the SMART COMMAND terminal 7" this can cause unexpected secondary effects and, in the worst case, can cause the entire object pool to be deleted.
- II: Activate the option "Accept invalid device initialization sequence" to register ISOBUS devices that do not correspond to the ISOBUS-compliant initialization sequence.
 - However, this setting can have a negative impact on ISOBUS-compliant devices which can be difficult to foresee.
- III: Activate the option "Do not treat ISOBUS devices according to their VT version" to accept the non-ISOBUS-compliant functions of an ISOBUS device.
 - During this process, functions that the device is not officially allowed to use, may be approved.
 - This setting can cause other devices to not function correctly.
 - Example: An ISOBUS device registers with an older version of the ISOBUS standard but then supports functions from the newer version.
- IV: Activate the option "Suppress exception warnings in case of command not acknowledged" so that commands sent by the ISO-BUS device to SMART COMMAND do not cause a visible error message.
- V: Activate the option "Replace truncated number outputs with '#' character" to prevent numbers that are not displayed correctly from being misinterpreted. The truncation of numbers can otherwise be misinterpreted. For example, "-1000" could be displayed as "1000" on the screen if there is not enough space for the negative prefix. If the setting is activated, numbers in the operating screen of the ISOBUS device that are too long, are not truncated but are instead replaced with a # character. This settings is enabled by default.

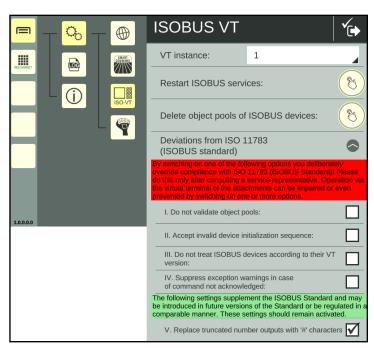


Fig. 96: Non ISO 11783-compliant settings



6.4 AUX Editor – Assigning Functions from ISOBUS Implements to AUX Operating devices

Via the AUX Editor, you can assign functions of AUX-N-capable ISOBUS implements to the operating elements of AUX-N-capable ISOBUS operating devices, such as a joystick.

Prerequisites:

- Connected, AUX-N-capable ISOBUS operating device.
- At least one connected AUX-N-capable ISOBUS implement.
- The SMART COMMAND terminal 7" must be specified as the main terminal (by assigning the corresponding VT instance) (also see chapter 6.3.1);

6.4.1 Confirming Existing AUX Assignments

If AUX-N capable implements and operating devices that have already been used together and assigned functions, have been detected, information about the existing assignments is displayed when the SMART COMMAND terminal 7" is started (see Fig. 97). You can accept or reject them.



Accept existing assignments.

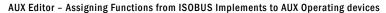


Reject existing assignments. (The assignments are available but not active. The assignments are only active after restarting the terminal and accepting the assignments, or after making a new assignment or deleting an assignment via the AUX Editor.

The assignment information will be displayed every time the SMART COMMAND terminal 7" is restarted, as long as the functions of the implement are assigned to the operating device.



Fig. 97: Information about existing assigned functions





6.4.2 Calling up the AUX Editor

Open the AUX Editor via the main menu (see Fig. 98).



As soon as at least one AUX-N-capable implement and one AUX-N operating device are connected, all connected AUX-N-capable ISOBUS implements are displayed in the AUX Editor (one below the other) (see Fig. 98).

If you have just started the SMART COMMAND terminal 7" or have just connected the ISOBUS implements, the object pool of the implements must first be loaded. The implements are not listed before then.

Wait until the implements are displayed in the application overview.

This may take up to two minutes.

If some AUX-N capable ISOBUS implements are still not listed after this, then

- · check the connections of the implements,
- · check the connections of the operating devices and
- ensure that the SMART COMMAND terminal 7" is selected as the main terminal (see chapter 6.3.1).



AUX Editor



You can use the arrow buttons to show/hide already existing assignments (see Fig. 99).



By tapping the red X, you can delete existing assignments (see chapter 6.4.8).



Tap the button with the plus sign and the link symbol in the black header bar to select implement functions.



AUX Editor with AUX-N-capable ISOBUS implements, existing Fig. 99: assignments displayed



6.4.3 Selecting an Implement

If several AUX-N-capable implements have been detected, you must first select an implement.

Tap the desired implement (see Fig. 100).

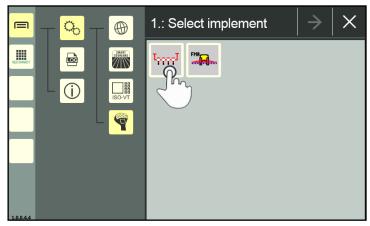


Fig. 100: Selecting an implement

The selected implement is then marked with a green checkmark (see Fig. 101).



Tap on the arrow button in the black header bar to then select implement functions.

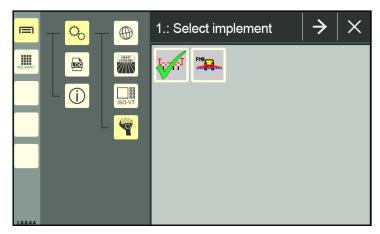


Fig. 101: Implement selected



6.4.4 Selecting Implement Functions

All functions of the selected implement will be displayed in the next screen (see Fig. 102).



 $\label{thm:condition} Swipe to scroll through the functions.$



Functions that are already assigned to an operating element of an AUX-N operating device are grayed out.

Tap the function to be assigned to an operating element of an AUX-N operating device.

Multiple selection is possible. You can assign any number of functions to an operating element of an AUX-N operating device.

Selected functions are marked with a green checkmark (see Fig. 103).



Tap on the arrow button in the black header bar to select an operating element of an AUX-N operating device.

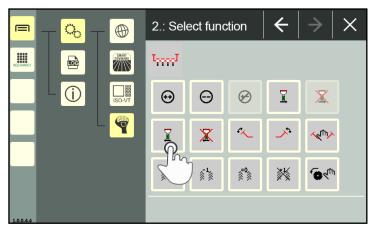


Fig. 102: Selecting a function

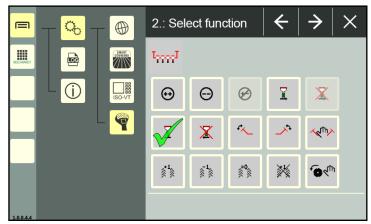


Fig. 103: Function selected



6.4.5 Selecting an Operating Device

If several AUX-N operating devices have been detected, you must first select an operating device.

Tap the desired operating device (see Fig. 104).

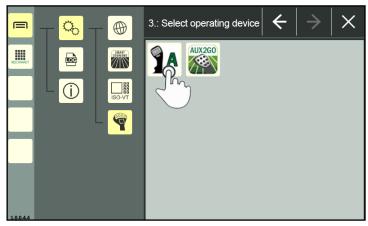


Fig. 104: Selecting an operating device

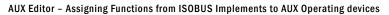
The selected operating device is then marked with a green checkmark (see Fig. 101).



Tap on the arrow button in the black header bar to then select an operating element of the operating device (see Fig. 105).



Fig. 105: Operating device selected





6.4.6 Selecting an Operating Element

In the following screen, all operating elements and various types of operating device actuation of the selected operating device are displayed (see Fig. 106).



Swipe to scroll through the operating elements.

Operating elements can usually be assigned several functions.

It is not displayed whether functions or which functions have already been assigned to an operating element.

You can see existing assignments in the assignment overview when starting the AUX Editor (see chapter 6.4.2).

After saving an assignment (see chapter 6.4.7) or after cancelling an assignment via the X button, you will automatically get there.

If operating elements are grayed out, this can be due to one of the following reasons:

- You have selected more implement functions than can be assigned to this operating element.
- The selected function is not suitable for the operation with this operating element.

Selected functions are marked with a green checkmark (see Fig. 107).



Tap the arrow button in the black header bar to save the assignment in the next step.

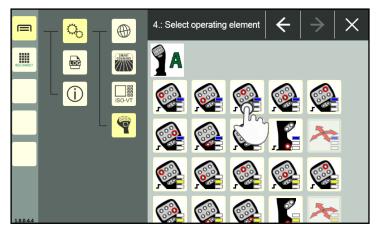


Fig. 106: Selecting an operating element

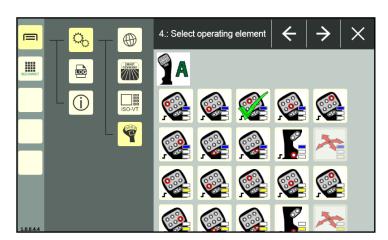


Fig. 107: Operating element selected



6.4.7 Creating a Function Assignment

The created function assignment is then displayed (see Fig. 108).



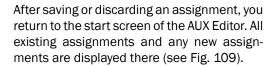
Tap on the floppy disk icon in the black header bar to assign the function to the operating element.



The assignment is discarded via the X symbol.



You can use the arrow button to go back one step in the assignment to make changes.



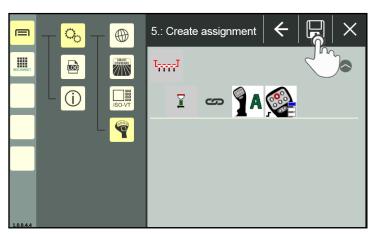


Fig. 108: Creating an assignment

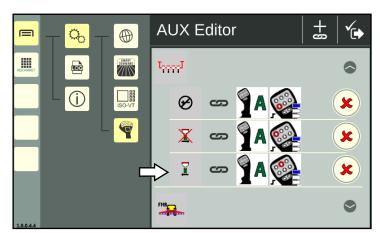


Fig. 109: AUX Editor start screen with new assignment

6.4.8 Deleting Assigned Functions

Existing assignments are deleted via the start page of the AUX Editor, where all existing assignments are displayed (see Fig. 110).



Tap the red X behind an assignment to delete it.

There is no confirmation prompt.



Fig. 110: Deleting assigned functions

System Information



6.5 System Information



Open the system information via the main menu (see Fig. 111):

The system information is split into two tabs:



About SMART COMMAND (Manufacturer and software information; see chapter 6.5.1)



Licenses (see chapter 6.5.2)



Disclaimer (Open source licenses; see chapter 6.5.3)



Fig. 111: Opening system information about SMART COMMAND

6.5.1 About SMART COMMAND – Manufacturer and Software Information



The "About SMART COMMAND" tab is displayed as standard when opening the system information (see Fig. 112).

The tab contains the following information:

- 1. Manufacturer's specifications
- 2. SMART COMMAND software version
- 3. ISOBUS service version

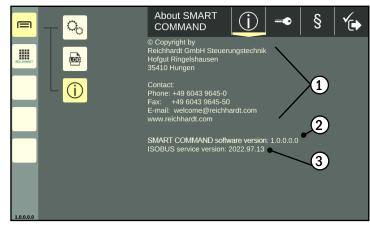


Fig. 112: Manufacturer and software information



6.5.2 Licenses – Overview of Existing SMART COMMAND Licenses



In the header bar of the system information, tap the button with the key symbol to display the "Licenses" tab (see Fig. 113).

The tab contains the following information:

· Licenses:

All of the available licenses for the SMART COMMAND terminal 7" are displayed on the page.



Valid license available



No valid license available

SMART VT is the activation for displaying ISOBUS operating screens on the SMART COMMAND terminal 7".

Licenses are imported via the SMART COMMAND "Import/Export" application. This is described in chapter 8.1.

· Hardware-ID:

The hardware ID is required if you wish to request new licenses.



Fig. 113: Licenses and hardware ID

6.5.3 Disclaimer (Open Source Licenses)



In the header bar of the system information, tap the button with the paragraph symbol to display the "Disclaimer" tab (see Fig. 114).

Information on the open source licenses used is provided there.

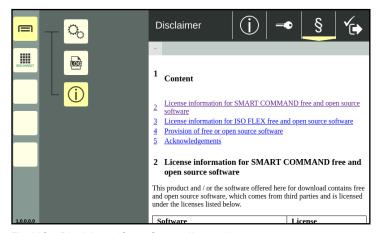


Fig. 114: Disclaimer (Open Source licenses)



6.6 Updates

The SMART COMMAND terminal 7" can be updated using the USB connection cable (see Fig. 8) and a USB stick via connection 3 at the bottom of the terminal. The USB stick must be formatted with the FAT32 file system.

To download the update file, a device connected to the Internet (PC, tablet, smartphone) with an Internet browser and a USB port is required.

Proceed as follows for the update:

- Open the Reichhardt update page in the Internet browser of the device connected to the Internet:
 - https://updates.reichhardt.com/SmartFarming/smc-vt/
- 2. Download the update by selecting the terminal icon (see Fig. 115).



Fig. 115: Downloading terminal update

- Create a folder called "UPDATE" on the USB stick.
- 4. Save the downloaded file in the "UPDATE" folder (see Fig. 116).



Fig. 116: Update folder with update file on USB stick

- 5. Attach the USB connection cable to port 3 of the switched-on terminal (see Fig. 117 A).
- 6. Attach the USB stick to the USB connection cable (see Fig. 117 B).

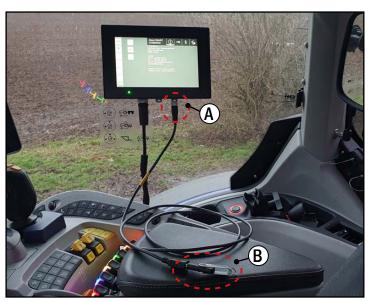


Fig. 117: Attaching the USB connection cable and USB stick to the terminal



- 7. Call up the system information in the terminal's main menu.
- 8. In the "About SMART COMMAND" tab, tap the update button (see Fig. 118).

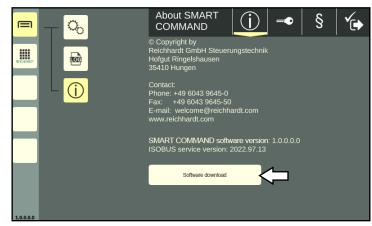


Fig. 118: Installing update

- 9. Wait until a message appears on the screen indicating that the update has been loaded (see Fig. 119).
- 10. Confirm the note via the button with the checkmark.
- 11. Restart the terminal
 - Shut down the terminal (see chapter 5.8),
 - Switch the ignition off and on again.

Do not remove the USB stick!

The update is installed automatically after the restart.

12.If SMART COMMAND is loaded on the terminal (operating mode is displayed), you can remove the USB stick and the USB connection cable.

The version number in the system information and at the bottom left of the sidebar should then be updated.

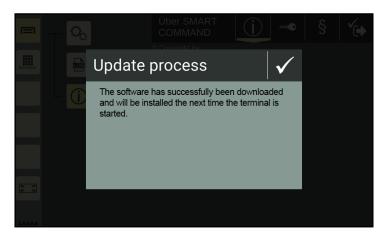


Fig. 119: Update has been loaded



7 SMART COMMAND Application "Help" – Using Context Help



The SMART COMMAND application "Help" is not a regular SMART COMMAND application that is called up via the application overview and executed in an operating mode window (see Fig. 120).

This is possible, but only an explanation for using the context help is displayed (see Fig. 121).

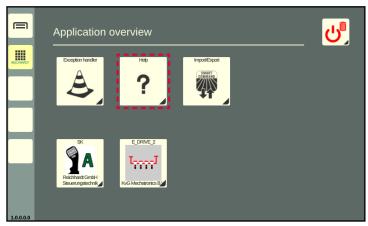


Fig. 120: Help in the application overview

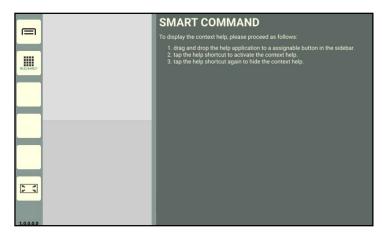


Fig. 121: Help executed in the main window of the operating mode – Explanation of context help

Context help is only available via a help shortcut in the sidebar (see Fig. 122).

It can be used to display help texts for menu items and buttons.

(The creation of shortcuts is described in chapter 5.5.1).

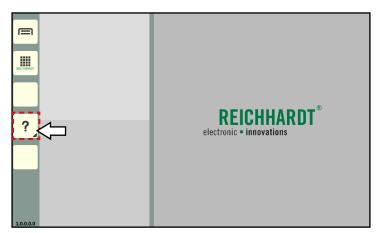


Fig. 122: Help shortcut



Display context help



Tap the Help shortcut to display all available help texts (see Fig. 123).

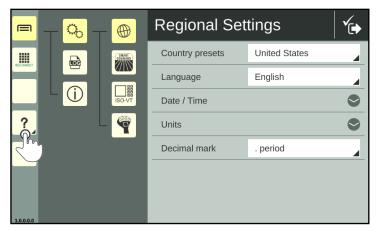


Fig. 123: Calling up context help via shortcut

Help texts are highlighted with a yellow font and dark green background underneath the relevant objects (see Fig. 124).

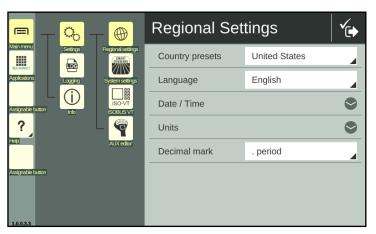


Fig. 124: Context help



SMART COMMAND APPLICATION "HELP" - USING CONTEXT HELP

Display and hide extended context help



Tap a help text within the context help to display a detailed help text (see Fig. 125).



Close the detailed help text by confirming the check mark in the window header.

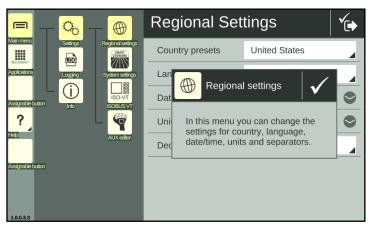


Fig. 125: Extended context help

Hide context help

When the context help is activated, tap the Help shortcut again to hide the context help again (see Fig. 126).

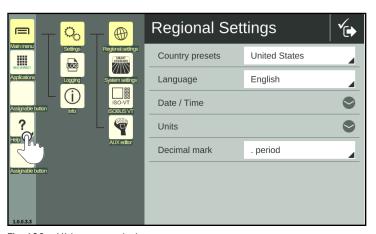


Fig. 126: Hide context help



8 SMART COMMAND "Import/Export" Application – Importing & Exporting Data



You can use the SMART COMMAND "Import/Export" application to import licenses and a logging configuration file and export error logs.

The "Import/Export" application can be called up via the application overview (see Fig. 127).

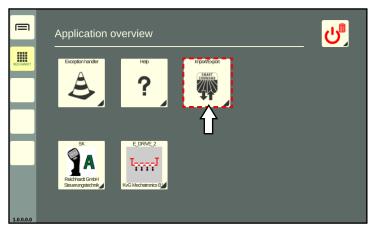


Fig. 127: Import/export symbol in application overview

"Import/Export" application in the main window of the operating mode

The "Import/Export" application is executed in the main window of the operating mode (see Fig. 128).

In the top bar of the application, there are two buttons to export and import data.



Import



Export



Fig. 128: "Import/Export" application in the main window of the operating mode

Required Components

To import/export data, you will need

- the USB connection cable (see chapter 3.2.3), which is connected to port 3 of the terminal, and
- a USB stick. The USB stick must be formatted with the FAT32 file system.



${\tt SMARTCOMMAND\,"IMPORT/EXPORT"\,APPLICATION-IMPORTING\,\&\,EXPORTING\,DATA}$

Importing Licenses and a Logging Configuration Files

Cannot be used in a small window

The "Import/Export" application cannot be used in a small window of the operating mode (see Fig. 129).

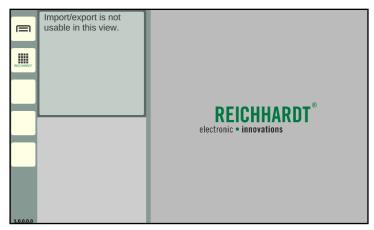


Fig. 129: "Import/Export" application cannot be used in a small window

8.1 Importing Licenses and a Logging Configuration Files

Using the "Import/Export" application on the SMART COMMAND terminal 7", you can import licenses and a logging configuration file together or individually.

The import is described below.

These files are usually provided by your dealer or by Reichhardt. To receive them, you need a device connected to the Internet (PC, tablet, smartphone) with a USB port.

Information on importing licenses

The SMART COMMAND terminal 7" comes with a SMART VT license by default. This enables the operation of ISOBUS operating masks via the terminal.

All licenses available for the terminal are displayed in the license overview ("Licenses" tab) of the system information (see Fig. 130):



If no license is available or a problem with the license occurs, it can be requested from Reichhardt and imported at the terminal.



Valid license available



No valid license available



Fig. 130: Invalid SMART VT license



Importing Licenses and a Logging Configuration Files

Information on importing a logging configuration file

By importing a logging configuration file, settings for error logging are set (see Fig. 131).

Further information on error logging can be found in chapter 9.3.

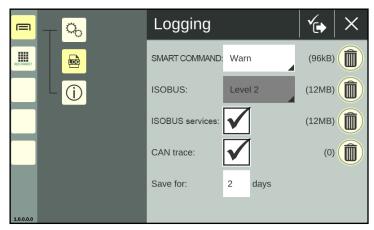


Fig. 131: Error logging

Storing files on a USB stick

License file(s)	Logging configuration file
 Request the license from your dealer/Reichhardt. You will need the hardware ID and the HSN of the SMART COMMAND terminal7". The hardware ID is displayed in the license overview of the system information (see Fig. 130). The HSN can be found on the label on the back of the SMART COMMAND terminal 7" (see Fig. 2). You will receive a zip file named "smc_license_'HSN of 	 Connect a USB stick to the PC/tablet that stores the logging configuration file. Copy the logging configuration file ("rlog_config.conf") to the USB stick.
the terminal'.zip" or an XML file with the name "smc_license.xml". Both file formats are supported.	
Connect a USB stick to the PC/tablet that stores the li- cense.	
3. Copy the license file to the USB stick.	



SMART COMMAND "IMPORT/EXPORT" APPLICATION - IMPORTING & EXPORTING DATA electronic • innovations

Importing Licenses and a Logging Configuration Files

Connecting the USB connection cable and USB stick

Attach the connection cable to connection 3 of the powered terminal (see Fig. 132 – A).

Attach the USB stick to the USB connection cable (see Fig. 132 – B).

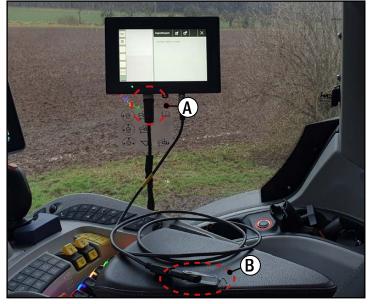


Fig. 132: Attaching the USB connection cable and USB stick to the terminal

Calling up the import screen of the "Import/Export" application



In the overview of the "Import/Export" application, tap on the import symbol (see Fig. 133).



Fig. 133: Tapping the import symbol



Importing Licenses and a Logging Configuration Files

Then select the import medium (see Fig. 134).



USB stick



Fig. 134: Selecting the import medium

The import screen will then open (see Fig. 135).

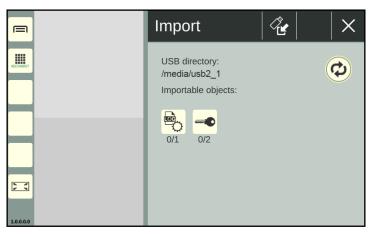


Fig. 135: Import screen

Import directory

The directory the selected files are imported from is displayed under the header "USB directory" (see Fig. 136).

By default, the files are imported from the top level of the USB stick used ("/media/usb2 $_1$ ").

License files and logging configuration files in subfolders are usually found without the need to change the directory.

If necessary, change the directory via the button with the double arrow.

The procedure is described in chapter 8.3.

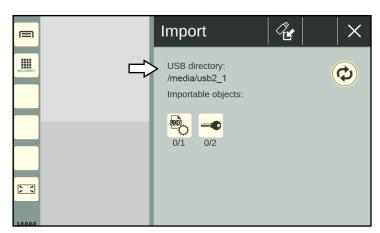


Fig. 136: Import directory



Importing Licenses and a Logging Configuration Files

Importable objects

An overview of the importable objects is provided at the bottom of the import screen (see Fig. 137).

You have the option of importing a logging configuration file and/or license files individually or together.



Logging configuration files



License files

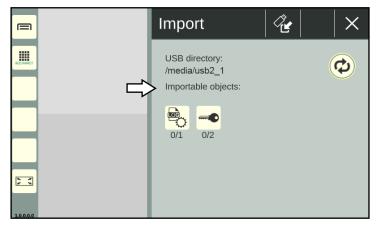


Fig. 137: Importable objects

Numbers under object icons

There are two numbers under the object icons (see Fig. 138).

- The first number indicates how many object files have been selected for the import.
- The second number indicates how many object files are available for the import.

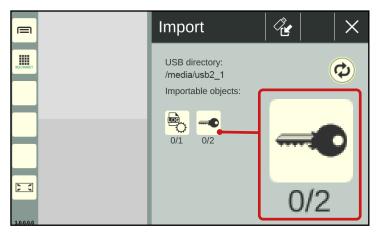


Fig. 138: Number of selected and available object files in the import screen; example: license

Displaying object files

In the import screen, tap the corresponding icon to display the object files (see Fig. 139).

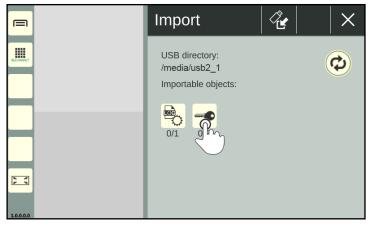


Fig. 139: Tapping the required import object; example: license



Importing Licenses and a Logging Configuration Files

An overview of the available files, that can be imported from the selected object, is then displayed (see Fig. 140).

When importing a logging configuration file, only *.conf files are recognized.

When importing licenses, both *.zip and *.xml files are recognized.

You can display information about the files in the overview and search for files.



Fig. 140: Object overview with available files; example: license

Information on object files



The info button to the right of the file name displays information about the file

This allows you to quickly check whether the file is the required file (see Fig. 141).

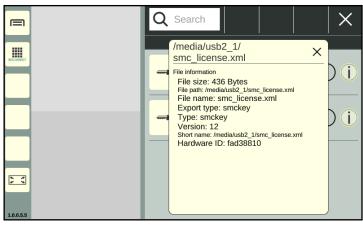


Fig. 141: Displaying information about a file

Searching object files

Via the search function, you can limit the display of files or search for specific files.

Enter the search term in the search field in the header bar.

Only the corresponding files are displayed (see Fig. 142).

The search term does not have to be at the beginning of the name.

Upper and lower case are also not relevant.

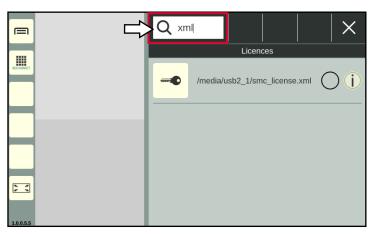


Fig. 142: Searching files



SMART COMMAND "IMPORT/EXPORT" APPLICATION - IMPORTING & EXPORTING DATA electronic • innovations

Importing Licenses and a Logging Configuration Files

Selecting object files

Select the object files to be imported by activating the radio button to the right of the file name (see Fig. 143).



Fig. 143: Selecting file



Then confirm the selection via the button with the checkmark at the top of the header bar (see Fig. 144).



Fig. 144: Confirming selection

If required, select other object files via the import.

In the import screen, the first number under all of the objects in which files have been selected to be exported, shows the number of selected files highlighted in red (see Fig. 145).

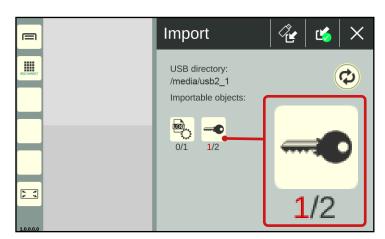


Fig. 145: Number of selected files in red



Importing Licenses and a Logging Configuration Files

Importing object files



Confirm the import of the selected object files, by tapping the import button with the green checkmark in the top header bar (see Fig. 146).

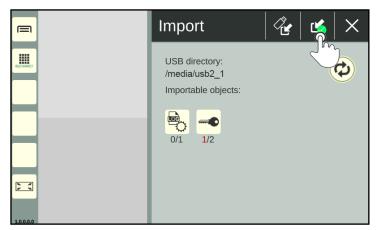


Fig. 146: Confirming and executing the import

Confirm the prompt with "Yes" (see Fig. 147).

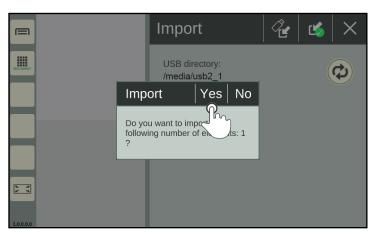


Fig. 147: Confirming the prompt



Importing Licenses and a Logging Configuration Files

Completing and verifying the import

NOTICE

The logging configuration and license activation will not take effect until the SMART COMMAND terminal 7" is restarted.

- 1. Shut down the terminal via the Delete/Exit button (see chapter 5.8),
- 2. Switch the ignition off
- 3. Remove the USB stick and the USB connection cable from the terminal.
- 4. Switch the ignition back on.

After a license import:

Open the license overview (tab "licenses") in the system information and check whether the licenses are recognized (see Fig. 148).



Valid license available



No valid license available



Fig. 148: Valid SMART VT license

After importing a logging configuration file:

The import of a logging configuration file is not necessarily reflected by changed or active settings in the logging menu.

It is possible that the settings appear unchanged or inactive.

You can tell whether logging is active by the change in the file size of the logging files in the logging menu.





If you open the logging, avoid tapping the Save button afterwards. Otherwise, the settings that were set by importing the logging configuration file will be overwritten by the settings displayed in the logging. Exit logging via the X button.

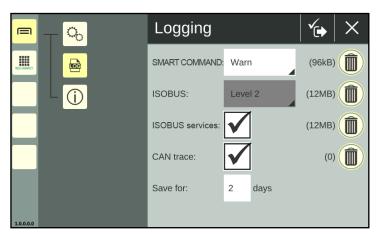


Fig. 149: Error logging



8.2 Exporting Error Reports

You have the option of exporting files from the error log. Error logging is explained in chapter 9.3.

Connecting the USB connection cable and USB stick

Attach the connection cable to connection 3 of the powered terminal (see Fig. 150 – A).

Attach the USB stick to the USB connection cable (see Fig. 150 – B).

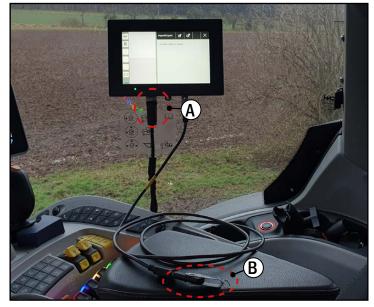


Fig. 150: Attaching the USB connection cable and USB stick to the terminal

Calling up the export screen of the "Import/Export" application



In the overview of the "Import/Export" application, tap on the import symbol (see Fig. 151).



Fig. 151: Tapping the export symbol



Exporting Error Reports

Then select the export medium (see Fig. 152).



USB stick



Fig. 152: Selecting the export medium

The export screen will then open (see Fig. 153).



Fig. 153: Export screen

Export directory

The directory to which the selected files are exported is displayed under the header "USB directory" (see Fig. 154).

By default, the files are exported to the top level of the USB stick used ("/media/usb2_1").

If necessary, change the directory via the button with the double arrow.

The procedure is described in chapter 8.3.

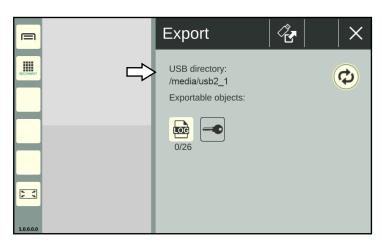


Fig. 154: Export directory

Exporting Error Reports

Exportable objects

An overview of the exportable objects is provided at the bottom of the export screen (see Fig. 155).

You can export one or more logging file(s). Objects that are colored beige can be exported. Objects that cannot currently be exported are grayed out.



Logging files



Licenses



Fig. 155: Exportable objects

Numbers under object icons

There are two numbers under the error logging icon (see Fig. 156).

- The first number indicates how many files have been selected for the export.
- The second number indicates how many files are available for the export.



Fig. 156: Number of selected and available error logging files in the export screen



Exporting Error Reports

Displaying logging files

Tap on the error logging icon to display all existing logging files (see Fig. 157).



Fig. 157: Tapping the error logging icon

An overview of the available logging files, that can be exported, is then displayed (see Fig. 158).

You can display information about the files in the overview as well as filter, sort and search for files.

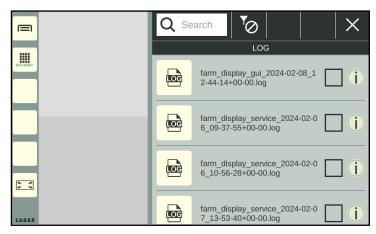


Fig. 158: Overview of existing logging files

Information on logging files



The info button to the right of the file name displays information about the file.

This allows you to quickly check whether the file is the required file (see Fig. 159).



Fig. 159: Displaying information about a logging file

Searching object files

Via the search function, you can limit the display of logging files (taking the set filter into account) or search for specific files.

Enter the search term in the search field in the header bar.

Only the corresponding logging files are displayed (see Fig. 160).

The search term does not have to be at the beginning of the name.

Upper and lower case are also not relevant.

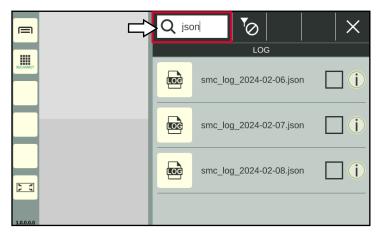


Fig. 160: Searching logging files

Filtering logging files

You can use the filter functions to set the logging files to be displayed in the overview.

Tap the button to the right of the search field at the top header bar and select the corresponding filter icon (see Fig. 161).



No filter active – all kind of loggings



CAN bus error loggings



SMART COMMAND error loggings



ISOBUS and ISOBUS services error loggings

The currently active filter is always displayed in the header bar (see Fig. 162).

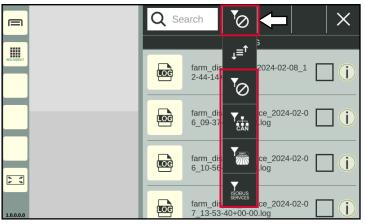


Fig. 161: Selecting a filter

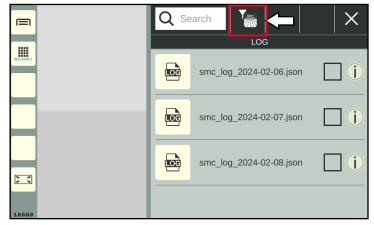


Fig. 162: Filter selected for SMART COMMAND error logging



Exporting Error Reports

Sorting logging files



You can call up the sorting function for loggings via the filter symbol in the header bar.

The following sorting functions are available (see Fig. 163):

- · Name ascending
- · Name descending
- · Date ascending
- · Date descending



Fig. 163: Selecting sort function

Selecting logging files

Select the logging files to be exported by activating the checkboxes (see Fig. 164).

If you press and hold an unselected checkbox, you can activate them all at once.

If you press and hold a selected checkbox, you can deactivate them all at once.

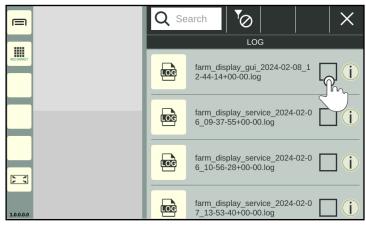


Fig. 164: Selecting logging files



Then confirm the selection via the button with the checkmark at the top of the header bar (see Fig. 165).

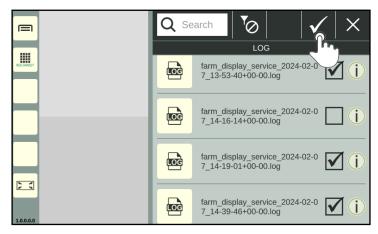


Fig. 165: Confirming selection



Exporting Error Reports

Afterwards, you have the option of adding a comment (see Fig. 166).

Enter the text using the keyboard that appears and save it using the button with the checkmark.

If you make changes to the file selection before exporting and the comment window appears again, the previously written text will be replaced.

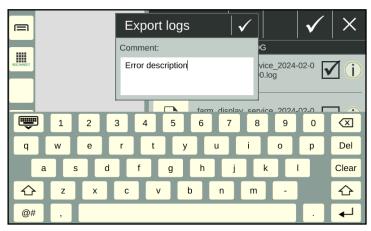


Fig. 166: Adding a comment

You will then return to the export view. There, the first number shows the number of selected logging files in red (see Fig. 167).



Fig. 167: Number of selected logging files in red



Exporting Error Reports

Exporting logging files



Confirm the export of the selected logging files, by tapping the export button with the green checkmark in the black header bar (see Fig. 168).



Fig. 168: Confirming and executing the export

Confirm the prompt with "Yes" (see Fig. 169).

The logging files are saved in the selected directory in a zip file with the following name: "smc_logging.zip".

NOTICE

Overwriting of existing logging files.

If there is already a file named "smc_log-ging.zip" in the selected folder, it will be overwritten.

To avoid overwriting files, it is recommended to create a new folder for each export.

Exported logging files are no longer available on the SMART COMMAND Terminal 7".



Fig. 169: Confirming the prompt

Changing the Export/Import Directory

8.3 Changing the Export/Import Directory



Tap the double arrow icon in the import or export screen to change the directory from which files should be imported or into which files should be exported (see Fig. 170).



Fig. 170: Tapping the double arrow icon

The import/export directory will then open (see Fig. 171).

Select the required directory by tapping.

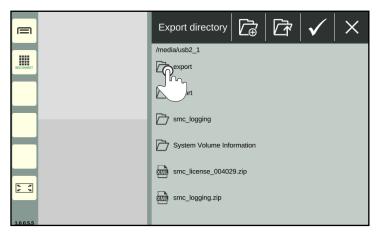


Fig. 171: Export directory



Tap the folder symbol with the arrow to navigate up one level in the directory structure (see Fig. 172).

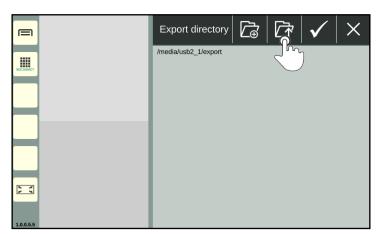


Fig. 172: Navigating up one level



SMART COMMAND "IMPORT/EXPORT" APPLICATION - IMPORTING & EXPORTING DATA electronic • innovations

Changing the Export/Import Directory

Create new folder



Tap the folder symbol with the plus sign to create a new folder in the currently selected directory (see Fig. 173).

New folders can only be created when exporting files and not when importing.

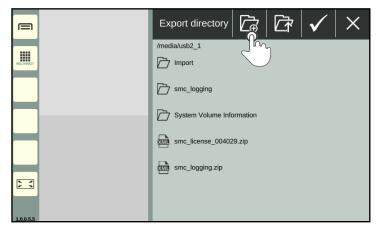


Fig. 173: Creating a new folder



Enter a designation for the folder, and confirm it with the checkmark (see Fig. 174).

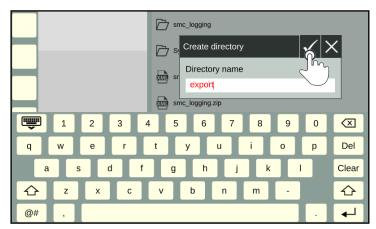


Fig. 174: Creating and confirming the designation for the folder

The created folder then appears in the directory (see Fig. 175).

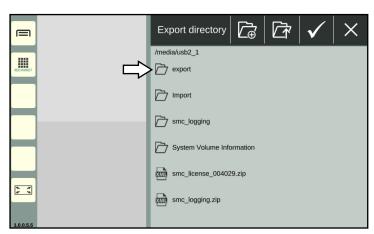


Fig. 175: New folder created



9 Troubleshooting

Different types of errors and problems can occur on the SMART COMMAND terminal 7" that must be treated in different ways.

1. SMART COMMAND-specific warning messages

There are SMART COMMAND-specific warning messages that indicate SMART COMMAND exceptions, which are processed and managed via the SMART COMMAND "Exception handler" application. More information is provided in chapter 9.1.

2. ISOBUS warning messages

ISOBUS warning messages are reported by ISOBUS devices and displayed across the entire screen when an error occurs. They must be processed immediately. More information is provided in chapter 9.2.

3. Error logging

The option to log system errors and send the generated log files to Reichhardt customer service for fault analysis. More information is provided in chapter 9.3.

9.1 SMART COMMAND "Exception Handler" Application



SMART COMMAND exceptions are displayed and managed via the SMART COMMAND "Exception handler" application.

Exceptions show information, unscheduled system states, and system errors of the SMART COMMAND terminal 7".

The exception handler can be called up via the application overview and executed in any window of the operating mode (see Fig. 176).

The operating options in a small window are less detailed than in the main window.

Chapters 9.1.1 to 9.1.5 describe the application in the main window.

The use of the application in a small window is briefly described in chapter 9.1.6.

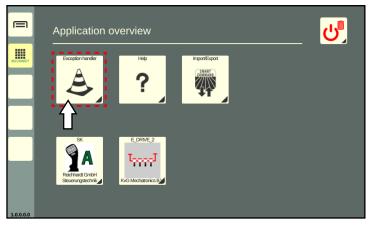


Fig. 176: Selecting the exception handler in the application overview



9.1.1 Flashing Warning Message Symbol

If an unscheduled system state occurs or if system-relevant information is available, these are displayed by exception symbols.

Flashing symbol on the "Application overview" button in the sidebar and on the exception handler in the application overview



If there are new exceptions, a flashing exception symbol for messages with the highest severity, is displayed on the button for calling up the application overview in the sidebar (see Fig. 177).



A flashing exception symbol is also displayed on the exception handler in the application overview (see Fig. 177).



Fig. 177: Warning message symbol on the application overview button and on the exception handler in the application overview

Flashing symbol on the exception handler shortcut



If a shortcut for the exception handler has been created in the sidebar, a flashing exception symbol for messages with the highest severity is displayed there (see Fig. 178).

The exception symbol is then not displayed on the button for calling up the application overview.



In this case, the exception symbol is also displayed on the exception handler in the application overview (see Fig. 178).



Fig. 178: Warning message symbol on shortcut in the sidebar and on the exception handler in the application overview



9.1.2 Exception Symbols and Severity of Exceptions

The exceptions are split by differing degrees of severity. These are described in the following.

Icon	Designation/severity	Description
STOP	Extremely serious warning: Critical system state that requires immediate action; can cause personal injury.	If ignored, extremely serious warnings can result in personal injury and property damage. They thus require immediate action. Work must be interrupted until the cause of the fault has been resolved.
	Serious warning: System error or adverse system state that severely restricts its use. Action must be taken.	Serious exceptions require the user to take action as the system can otherwise not be used as intended until the cause of the error has been resolved.
<u> </u>	Warning: System message that requires action	Warnings indicate a vehicle state that requires the user to take action as it can impair the intended use of the system.
0	Notice: System message	Notices inform the user about processes and system states that can have a significant impact on the use of the system.



9.1.3 Overview of Active Exceptions



Open the exception handler via the application overview or the short-cut (see Fig. 179).



The tab with the exception handler symbol is displayed by default in the application. An overview of all the active exceptions is displayed here.



Fig. 179: Exception handler in SMART COMMAND

In this tab, all of the exceptions that have occurred since the system started and that have not been processed yet are listed underneath one another with the following content (see Fig. 180):

- 1 Exception symbol,
- (2) error source /error ID,
- 3 exception description,
- 4 time of the event.



You can use the button with the checkmark to confirm and close the selected exception or all exceptions (see chapter 9.1.4).

If the error persists, an exception can be displayed again. This may be the case in particular after restarting the SMART COMMAND terminal 7".

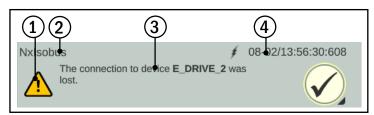


Fig. 180: Information about the exception

Management options/exception handler tab

The selected tab is displayed at the top of the black header bar of the application. The following tabs are available:



Current exceptions (since last restart)



Exception handler setup (see chapter 9.1.5)



9.1.4 Acknowledging and Removing a Current Exception

Acknowledging and hiding exceptions

Acknowledging individual exceptions:



Tap the button with the checkmark after the exception to acknowledge it (see Fig. 181).

Acknowledging all of the exceptions for a severity level:



Press and hold the button after one of the exceptions to hide all of the exceptions of this severity level at once.



Fig. 181: Confirmation button after current exception



Confirm the prompt with the checkmark (see Fig. 182).

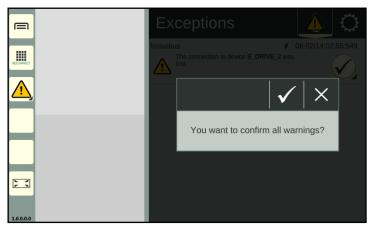


Fig. 182: Hiding all of the messages of a severity level

Acknowledges exceptions

Exceptions are usually closed after they have been acknowledged.

If all of the exceptions of the highest severity level have been acknowledged, the warning symbol for the next (low-er) severity level will flash.

Exceptions that have been acknowledged but that are still active in the system, are grayed out at the bottom of the overview of current exceptions.



9.1.5 Setup for Exception Handler



In the black top bar of the exception handler, tap on the tab with the gearwheel to open the setup for the exception handler (see Fig. 183).

Here you can change the way in which exceptions are displayed by activating and deactivating setup options.

The following setup options are available:



Diagnostic mode

- ON: Also exceptions only for service purposes are displayed .
- OFF: Exceptions that are exclusively for service purposes are not displayed.

This option is deactivated by default.



Warning audio

- ON: A warning tone is issued in the event of warnings, serious warnings, and extremely serious warnings.
- OFF: A warning tone is issued in the event of serious warnings and extremely serious warnings.

This option is activated by default.



Info audio:

- ON: A warning tone is issued in the event of notices.
- OFF: No warning tone is issued in the event of notices.

This option is activated by default.

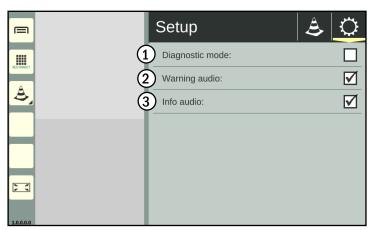


Fig. 183: Exception handler setup



9.1.6 Exception Handler in a Small Window

If you execute the exception handler in a small window, the number of current messages (that have not been acknowledged yet) will be sorted based on the severity level (see Fig. 184).



You can use the checkmark to acknowledge the messages in order of their severity and when they occurred.

It is not possible to call up the exception handler setup.



By tapping the arrow buttons you can scroll through the full description of the exception.



Swiping is not possible.

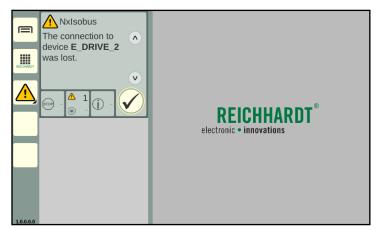


Fig. 184: Exception handler in a small window

ISOBUS Exceptions



9.2 ISOBUS Exceptions

Exceptions from ISOBUS devices can be displayed at any time (see Fig. 185).

These exceptions are displayed across the entire screen and must be processed immediately.

Displaying exceptions

- The ISOBUS device that is reporting the error is displayed on the left of the screen. If several devices are available, you can select the corresponding ISOBUS device by tapping it.
- The error of the selected ISOBUS device is displayed on the right of the screen.

If changes to the function assignment of AUX-N operating devices occur due to a problem with an ISOBUS device, these may also be listed.

Acknowledging exceptions



Tap "ACK" to acknowledge and close the displayed exception.

If there are other exceptions, these are then displayed.

The exception screen closes automatically if all of the exceptions, that have occurred, have been acknowledged.

Closing ISOBUS exceptions



Tap the X in the top right of the exception screen, to hide it and return to the SMART COMMAND interface.

If all of the exceptions have not been acknowledged, the next exception is acknowledged when the X is tapped.

The X must be tapped as often as necessary until all of the exceptions are acknowledged.

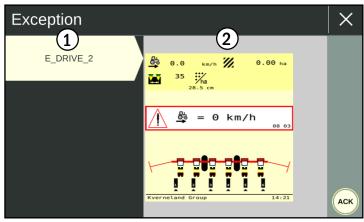


Fig. 185: ISOBUS exception



9.3 Error Logging - Recording Errors in SMART COMMAND

NOTICE

Logging must only be used after consulting Reichhardt customer service.

You can use logging to record errors when using the SMART COMMAND 7" terminal.

These error logs can be exported using the "Import/Export" application and then sent to Reichhardt customer service (see chapter 9.3.3 and chapter 8.2).



Open logging via the main menu.

Confirm the displayed message by tapping (see Fig. 186).

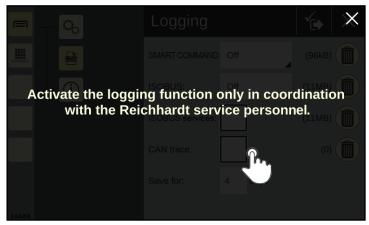


Fig. 186: Confirming logging message

Logging is then displayed (see Fig. 187).

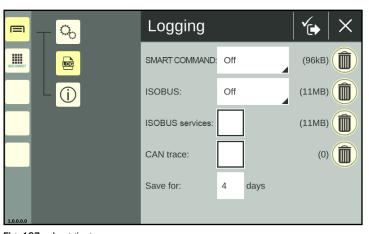


Fig. 187: Logging



9.3.1 Activating Logging

Implement the logging settings based on the specifications provided by Reichhardt customer service to record possible SMART COMMAND, ISOBUS, ISOBUS services and/or CAN bus errors.

The individual logging options are explained in the following.

From the time when logging is activated, the SMART COMMAND terminal 7" creates internal logging files that are expanded on a permanent basis. If the SMART COMMAND terminal 7" is shut down, logging will be continued once it is switched back on again. New log files are created.

If a system error occurs during the logging process, you can export the logging files for the relevant period of time using the "Import/Export" application.

If Reichhardt customer service has sent you a logging configuration file, you can skip the remaining contents of this chapter.

Store the file on a USB stick, which is connected to port 3 at the bottom of the terminal, using the USB connection cable. The USB stick must be formatted with the FAT32 file system.

Then import the file using the "Import/Export" application (see chapter 8.1).

SMART COMMAND - Activating the logging of SMART COMMAND errors and selecting the logging level

The "SMART COMMAND" option is used to specify whether and which SMART COMMAND errors should be recorded.

Select the logging level stipulated by customer service (see Fig. 188).

The following logging levels are available:

- Off: No log is created
- Critical
- Err
- Warn
- Info
- Debug
- Trace

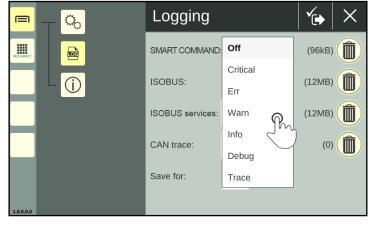


Fig. 188: Specifying the logging level for SMART COMMAND errors

New log files are created at the start of each new day. New log files are also created every time the SMART COMMAND terminal 7" is restarted.

A log is created

The amount of data generated varies depending on the selected logging level and the duration of the recording.

At least 500 MB of free memory should be available on the terminal for logging. If this is not the case, an exception appears in the SMART COMMAND exception handler.

You can free up memory by deleting old logging files (see chapter 9.3.2) or exporting them (see chapter 9.3.3).



ISOBUS - Activating the logging of ISOBUS errors and selecting the logging level

The "ISOBUS" option is used to specify whether or which ISOBUS errors are to be recorded.

Select the logging level stipulated by customer service (see Fig. 189).

The following ISOBUS logging levels are available:

- · Off: No log is created
- Level 0
- Level 1

A log is created

• Level 2

New log files are created every time the SMART COMMAND terminal 7" is restarted.

The amount of data generated varies depending on the selected logging level and the duration of the recording.

At least 500 MB of free memory should be available on the terminal for logging. If this is not the case, an exception appears in the SMART COMMAND exception handler.

You can free up memory by deleting old logging files (see chapter 9.3.2) or exporting them (see chapter 9.3.3).

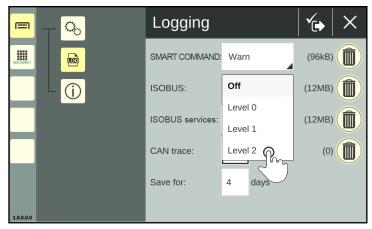


Fig. 189: Specifying the logging level for ISOBUS errors

ISOBUS services - Activating the logging of ISOBUS services errors

Activating the checkbox behind "ISOBUS services" activates the recording of ISOBUS services errors. At the same time, the "ISOBUS" option is deactivated (see Fig. 190).

New log files are created every time the SMART COMMAND terminal 7" is restarted.

The amount of data generated varies depending on the duration of the recording.

At least 500 MB of free memory should be available on the terminal for logging. If this is not the case, an exception appears in the SMART COMMAND exception handler.

You can free up memory by deleting old logging files (see chapter 9.3.2) or exporting them (see chapter 9.3.3).

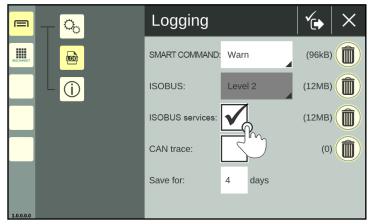


Fig. 190: Activating ISOBUS services logging

TROUBLESHOOTING

Error Logging - Recording Errors in SMART COMMAND



CAN trace - Activating CAN BUS logging

Activating the checkbox after "CAN trace" activates the logging of CAN bus errors (see Fig. 191).

New log files are created every time the SMART COMMAND terminal 7" is restarted.

The amount of data generated varies depending on the duration of the recording.

At least 500 MB of free memory should be available on the terminal for logging. If this is not the case, an exception appears in the SMART COMMAND exception handler.

You can free up memory by deleting old logging files (see chapter 9.3.2) or exporting them (see chapter 9.3.3)

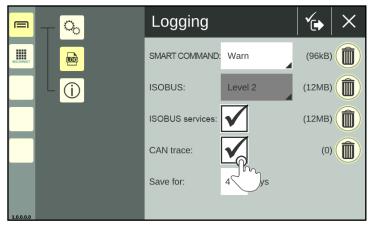


Fig. 191: Activating CAN trace logging

Save for - Setting the storage times for logs on the terminal

Via "Save for", you can specify how long you would like the logs to be stored in the SMART COMMAND terminal 7" (see Fig. 192).

When this time expires, the log files are automatically deleted and can no longer be exported.

If you have been creating logs for 4 days, for example, but "Save for" is set to "3", then the files for the first day have already been deleted.

Generally, setting the duration to 1-2 days is recommended to reduce the amount of data. In this case, it must be assumed that you will export the data within one day of the error occurring.

Only full days can be specified. Decimal points cannot be used. The decimal point will be ignored by the system.

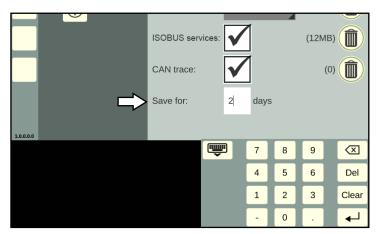


Fig. 192: Set storage time



Saving logging settings



Save the logging settings by tapping the symbol with the checkmark in the top bar of the logging interface (see Fig. 193).

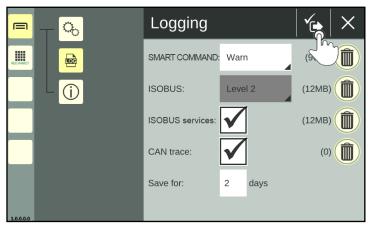


Fig. 193: Saving logging settings

The SMART COMMAND terminal 7" must then be restarted (see Fig. 194).



Confirm the prompt with the checkmark.

The SMART COMMAND terminal 7" will then be terminated automatically.

Error logging will start once the SMART COM-MAND terminal 7" has been restarted.

If you press X, the settings will be discarded.

Whether logging is active is indicated by the change in the file size of the logging files in the logging menu.

Logging SMAR Stop? ISOB A restart of SMART COMMAND is required. With tapping OK the application will shut down. Restart SMART COMMAND afterwards if necessary. Save for: 2 days

Fig. 194: Confirming the prompt and restarting the SMART COMMAND terminal 7"

9.3.2 Deleting Logging Files

You can delete logging files that are no longer required in order to create more storage space.



Tap on the trash can icon behind the respective logging option (see Fig. 193) to then delete it from the terminal (see Fig. 195).

Recordings that are currently active will not be removed.



Fig. 195: Deleting logging files



9.3.3 Exporting Error Logs

Use the "Import/Export" application to select and export the error logs (see Fig. 196 and Fig. 197).

(The export of the logging files via the "Import/Export" application is described in detail in chapter 8.2).

The individual logging files are saved in a zip file ("smc_logging.zip") in the selected folder.

Send this file to customer service.

Exported logging files are automatically deleted from the terminal.



Fig. 196: Exporting error logs

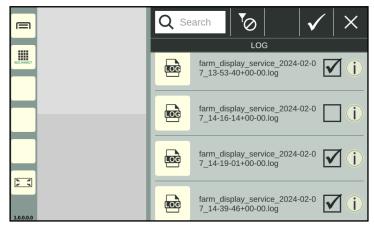


Fig. 197: Error logs selected

9.3.4 Deactivating Logging

Implement the following settings to deactivate logging (see Fig. 198):

• SMART COMMAND: "Off"

• ISOBUS: "Off"

· ISOBUS services: deactivate

· CAN trace: deactivate

The value for "Save for" is irrelevant if all of the logging settings are deactivated.

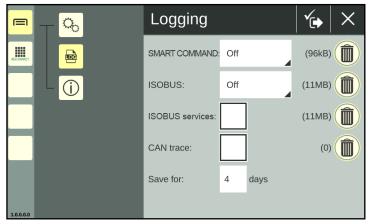


Fig. 198: Deactivating logging



10 Technical Data

This section contains the technical data of the SMART COMMAND terminal 7".

Processor core

Туре	Property
Overview	i.MX 8DualXPlus, dual core CPU, integrated GPU & Co processor
CPU	2x Cortex A35 @ 1.2 GHz
GPU	Vivante GC7000lite high-performance graphics processor
Memory	4 GB
RAM	1 GB 32 bit LPDDR4 @ 1200 GHz

Display

Туре	Property
Туре	IPS-type with viewing angles of >88° in all directions
Surface	Toughened glass with AG coating.
Size and resolution	7" WVGA, 800x480 pixels
Contrast ratio*	1000:1
Brightness*	800 cd/m ²
Legibility	Improved legibility on the display due to optical-bonding technology.
Color resolution	24 bit
Dimming	Yes, in stages, 1-100%
Ambient light sensor	Yes, enables automatic dimming.

User interface

Туре	Property
Touchscreen	Projected capacitive screen with up to 10-point multi-touch. Calibrated to support interactions when wearing gloves and not sensitive to drops of water.
Status LED	RGB LED
Speaker	Yes. Max. 75 dB at distance of 10 cm from front.

Interfaces

Туре	Property
CAN	2 connections, ISO 11898 2.0B. Configurable bit rate.
USB	1x USB 2.0 high speed
Ethernet	1x 10/100BASE-T
Power supply	Range 9-36 VDC. Switch on from 6 VDC.
Input signal	Detecting an input signal to switch on and shut down.

^{*} Average values

TECHNICAL DATA



Mechanics

Туре	Property
Housing material	Valox 357x
Dimensions	201 x 135 x 40 mm (W x H x D)
Weight	650 g
Assembly	3-point RAM mount (5 mm threaded holes)
Connections	3x DIN M12 for power & CAN, Ethernet and USB 2.0

Environment

Туре	Property
IP class	IP65, IP66 and IP67
EMC conformity	2014/30/EU, ISO 14982:2009, ISO 13766-1:2018, EN 12895:2015, ISO 13766-2:2018.
Vibrations	IEC 60068-2-64. Random, 0.02 g²/Hz 5-2000Hz 3x3 h
Impact strength	IEC 60068-2-27. ±25 g /6 ms±3 x3, 15000 total impacts
Temperature range	Operation: -30°C to +70°C, Storage: -40°C to +85°C

Operating system

Туре	Property
System	User-defined Linux system
Turn on time	Cold start 6-7 seconds

Software framework and tools

Туре	Property
CAN network	Fieldbus access, simple configuration of J1939 and CANopen networks.
ISOBUS	Universal terminal



Pin arrangement of power M12 connector (connector 1) – power and CAN M12

Suitable plug: Bushing, 8-pin, A-coded with shielding.

Pin no.	Signal
1	Power supply
2	Ground
3	-
4	Ignition voltage
5	CAN1 high
6	CAN1 low
7	CAN2 high
8	CAN2 low

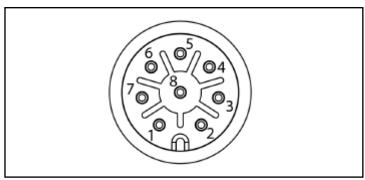


Abb. 199: Pin arrangement of power and CAN M12 connector (connector 1) of the SMART COMMAND terminal

Pin arrangement of Ethernet M12 connector (connector 2) – Ethernet M12

Suitable plug: Pin, 4-pin, D-coded.

Pin no.	Signal
1	TX+
2	RX+
3	TX-
4	RX-

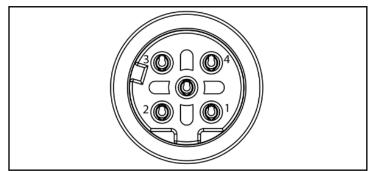


Abb. 200: Pin arrangement of Ethernet M12 connector (connector 2) of the SMART COMMAND terminal

Pin arrangement of USB M12 connector (connector 3) – USB M12

Suitable plug: Pin, 5-pin, A-coded with shielding.

Pin no.	Signal	
1	VBUS	
2	Data-	
3	Data+	
4	Shielding ground	
5	Ground	

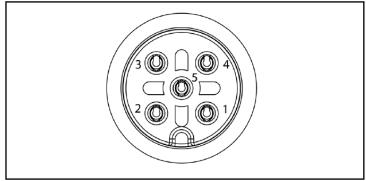


Abb. 201: Pin arrangement of USB M12 connector (connector 3) of the SMART COMMAND terminal