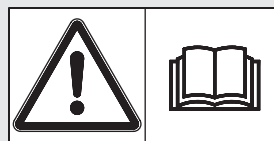


# OPERATOR MANUAL



**Please read carefully  
before using the machine!**

Store carefully for future  
use!

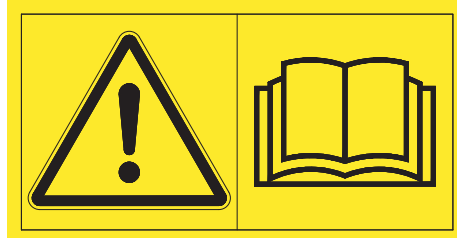
This Operator Manual should be considered as part of the machine. Suppliers of new and second-hand machines are obliged to indicate in writing that the Operator Manual has been delivered with the machine.

# DataManager

## Preface

Dear customer

By purchasing the **DataManager** software for the **QUANTRON-E, QUANTRON-E2, QUANTRON-A or QUANTRON-K control units**, you have demonstrated your trust in our product. Thank you very much! We want to justify your trust. You have purchased a powerful and reliable software. In case unexpected problems arise: our customer service is always there for you.



**Please read this operating manual as well as the operating manual of the control unit carefully before commissioning, and follow the instructions.**

Please note that damage caused by incorrect operation or improper use may not be covered by warranty claims.

### Technical improvements

**We are continuously improving our products. Therefore, we reserve the right to make any improvements and changes to our machine that we consider necessary without notice. This constitutes no obligation to make such improvements or changes on machines that have already been sold.**

We will be pleased to answer any other questions that you might have.

Yours sincerely

RAUCH

Landmaschinenfabrik GmbH

## Preface

Technical improvements

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# 1 User instructions

## 1.1 About this operating manual

This operating manual is an **integral part** of the **DataManager** software.

The operating manual contains important information regarding the **safe, proper** and economic **operation** of the hardware and software. Adhering to the instructions of the manual helps to reduce downtime and to increase the reliability of the QUANTRON control unit and the connected spreader.

The entire documentation is to be kept in an easily accessible location close to where the software is used (e.g. on the tractor).


The operating manual does not replace your **own responsibility** as operator of the **DataManager** software.

## 1.2 Notes on the depiction of information in this manual

### 1.2.1 Meaning of warnings

The warning instructions in this manual have been structured according to the degree of danger and the probability of their occurrence.

Danger signs and symbols inform the user about other construction-related and unavoidable remaining dangers that may be encountered when operating the machine. The safety warnings are structured as follows:

<b>Signal word</b>	
Symbol	Explanation
<b>Example</b>	
<b>⚠ DANGER</b>	
	<p><b>Description of the sources of danger</b></p> <p>Description of the danger and possible consequences.</p> <p>Ignoring these warnings will result in very serious or even fatal injury.</p> <p>▶ Measures to prevent the danger.</p>

**Warning severity level**

The degree of danger is indicated by the signal word. The levels are classified as follows:

**⚠ DANGER**



**Type of hazard and source of danger**

This advice warns of a danger posing an immediate threat to the health and life of persons.

Ignoring these warnings will result in very serious or even fatal injury.

- ▶ Always observe the measures described to prevent this danger.

---

**⚠ WARNING**



**Type of hazard and source of danger**

This advice warns of a possible dangerous situation for the health of persons.

Ignoring these warnings will result in very serious or even fatal injury.

- ▶ Always observe the measures described to prevent this danger.

---

**⚠ CAUTION**



**Type of hazard and source of danger**

This note warns of a potentially dangerous situation for personal health or of material and environmental damage.

Ignoring these warnings can result in damage to the product or the general area.

- ▶ Always observe the measures described to prevent this danger.

---

**NOTICE**

General information contain application tips and particularly useful information but neither warnings nor hazards.

---

## 1.2.2 Instructions and procedures

Steps that the operator must carry out are shown as a numbered list.

1. Instruction for action step 1
2. Instruction for action step 2

Instructions involving only one step are not numbered. The same applies for action steps that do not have a specific sequence.

A bullet is placed in front of these instructions:

- Handling instruction

## 1.2.3 Listings

Listings without a specific sequence are shown with bullet points (level 1) and dashes (level 2):

- Property A
  - Point A
  - Point B
- Property B





## 2 Introduction

### 2.1 Functions of the DataManager software

The **DataManager** software is used to manage the spreading files as follows:

- Browser-supported creation of (field data) files before the spreading work on an external PC
- Import function: Transmit files to the control unit of the spreader via the USB stick included in the scope of delivery.
- Export function: transmit the (field data) files recorded during the spreading work to the USB stick, via the export function of the control unit.
- Analysis and modification of the (field data) files on an external PC
- Conversion of the (field data) files stored in the database into a printable PDF document or into CSV files, which can be processed via spread sheets.

### 2.2 Scope of delivery

When accepting the software and the accessories, please check the completeness of the delivery.

Check the delivery for transportation damages or missing accessories. Have the forwarding agent confirm any transportation damages.

If in doubt, please contact your salesperson.

**The scope of delivery includes:**

- 1 CD with the **DataManager** software
- 1 USB stick (2 GB)



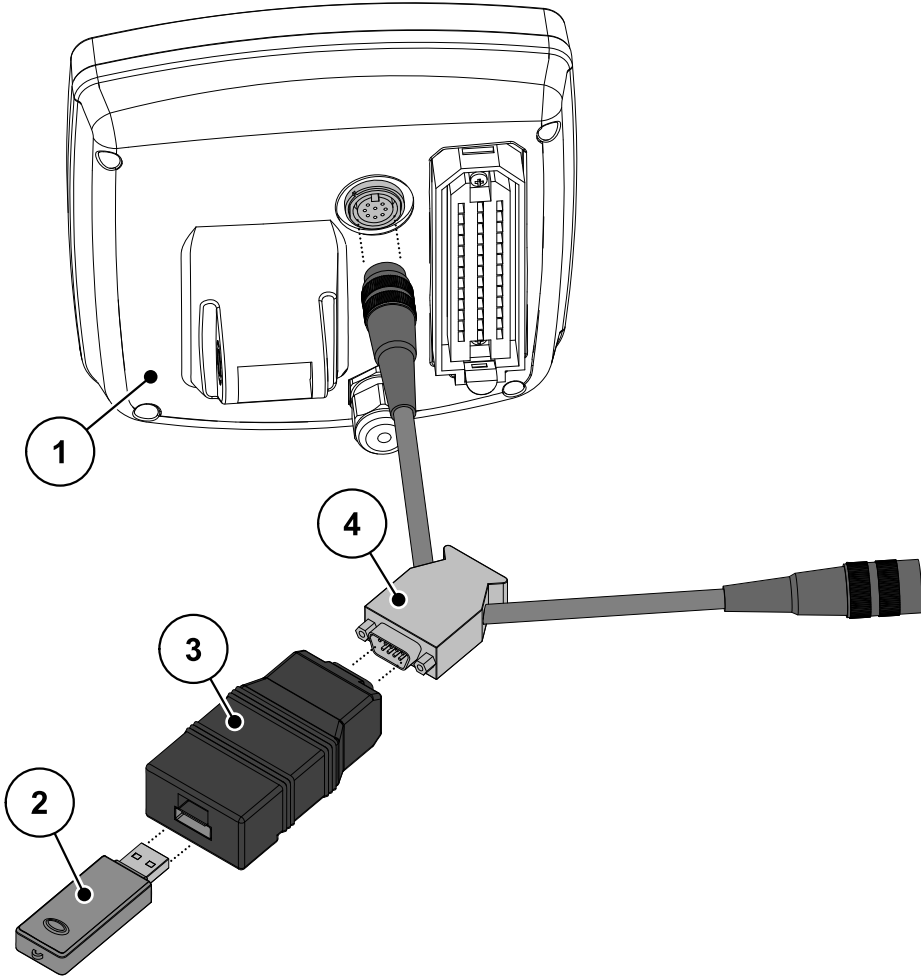
### 3 Attachment and installation

#### 3.1 Schematic connection diagram

##### 3.1.1 Connection to the QUANTRON-E or QUANTRON-K control unit

The data transmission between the USB stick and the QUANTRON control unit is implemented via the Y-cable and the USB box.

- Connect the individual elements with the QUANTRON control unit as displayed below.



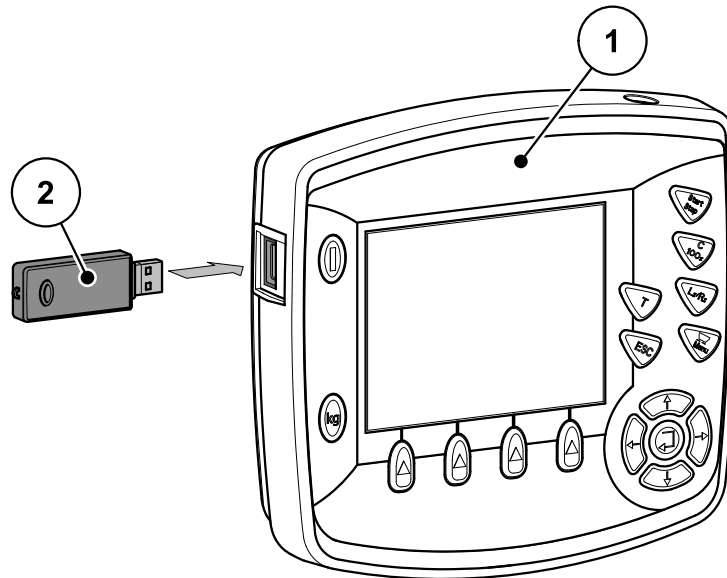
**Pict. 3.1:** Schematic connection diagram of DataManager/QUANTRON-E or QUANTRON-K

- [1] QUANTRON control unit
- [2] USB stick
- [3] USB box
- [4] Y-cable

#### 3.1.2 Connection to the QUANTRON-E2 or QUANTRON-A control unit

The data transmission is implemented directly via the USB stick.

- Remove the cover from the USB port.
- Insert the USB stick included in the scope of delivery into the USB port.

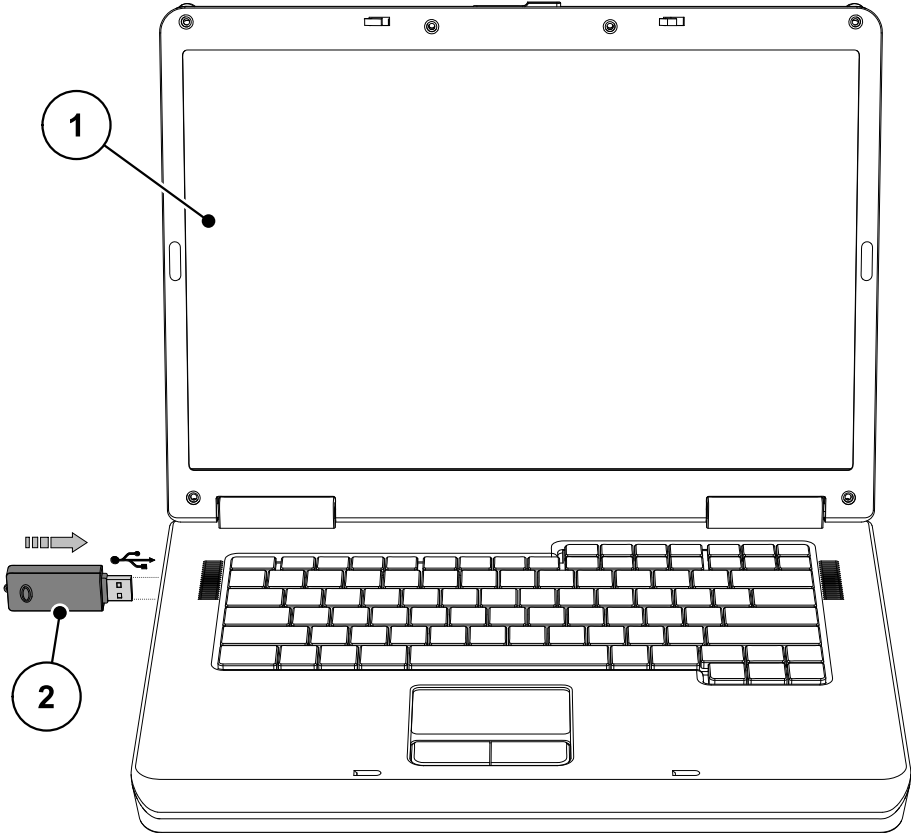


**Pict. 3.2:** Schematic connection diagram DataManager/QUANTRON-E2 or QUANTRON-A

- [1] QUANTRON control unit
- [2] USB stick

3.1.3 Connection to an external PC

For transmitting the field data files, plug-in the USB stick into an unoccupied USB port of your external PC.



Pict. 3.3: Connection of the USB stick to the external PC

- [1] External PC
- [2] USB stick

#### 3.2 Installation

##### System requirements

For operating the DataManager software, your PC must meet the following requirements:

- USB connection
- Operating system: Windows 2000/XP/7
- Microsoft Internet Explorer 7.0 or later version.

The DataManager-Street software is compatible with the following control unit only:

- QUANTRON-K control unit as of software version 1.20.00

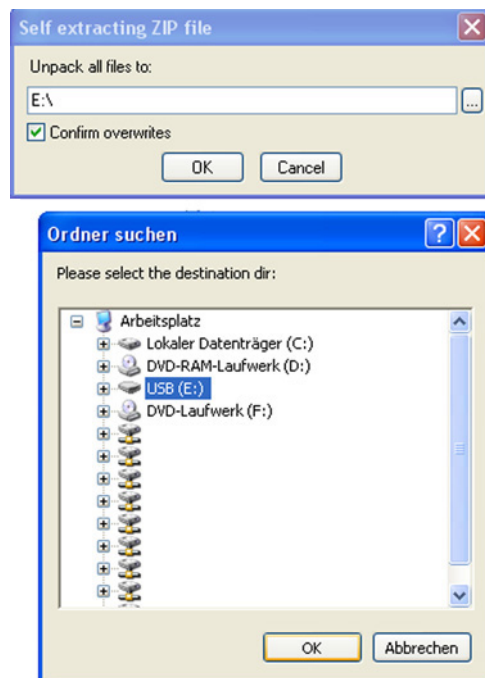
The DataManager-Field software is compatible with the following control units:

- QUANTRON-E control unit as of software version 3.40.00
- QUANTRON-A control unit as of software version 1.10.00
- QUANTRON-E2 control unit as of software version 1.20.00

##### Procedure:

The DataManager software is stored on the installation CD included in the scope of delivery. Install the software on the USB stick, as follows:

1. Switch on your PC.
2. Insert the USB stick into an unoccupied USB port on the PC.
3. Insert the installation CD into your drive.
4. Double-click on the file **2011-06-12\_DataManager\_V1\_11\_00.exe** in order to unzip it.

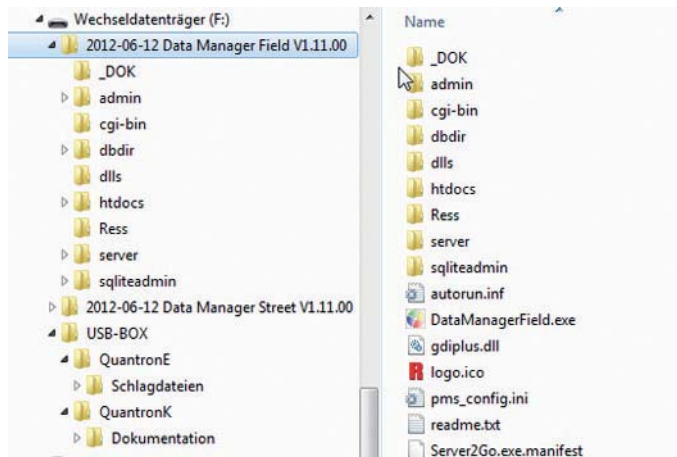


**Pict. 3.4:** Installation of the software: Unzip the file on the USB stick.

5. Enter the path to the USB stick and confirm with OK.

The installation process displays a progress bar.

- ▷ When unzipping the file **2011-06-12\_DataManager\_V1\_11\_00.exe**, 3 directories are automatically created on the USB stick:
  - 2011-06-12 Data Manager Street V1.11.00
  - 2011-06-12 Data Manager Filed V1.11.00
  - USB-BOX
  - Link files for a quick start of the DataManager-Field or DataManager-Street.



**Pict. 3.5:** Directory structure on the USB stick

- ▷ **When the progress bar shows 100%, the software has been successfully installed on the stick.**

### ▲ CAUTION



#### **Risk of data loss or damages to the USB stick**

If you remove the USB stick from the PC while the writing or reading process is still active, or if you fail to securely log out the USB stick, there is a risk of data loss or destruction of the storage medium.

- ▶ Before removing the USB stick, wait until the data transfer has been completed.
- ▶ Only remove the USB stick after you have logged it out securely on the PC.





## 4 Operation of DataManager

### 4.1 DataManager-Field

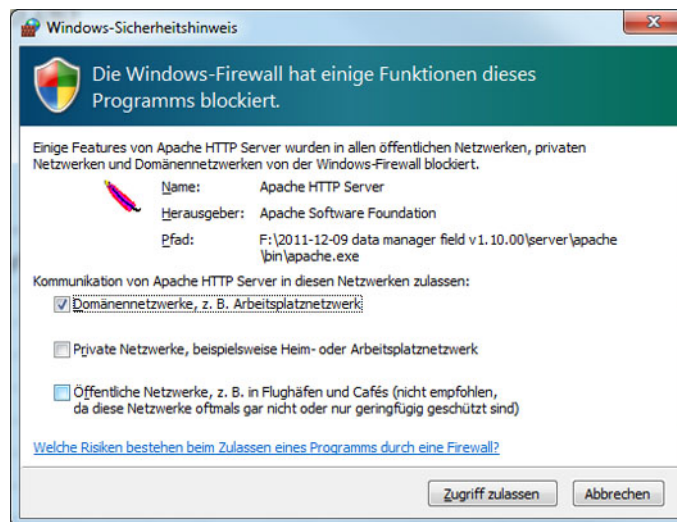
#### 4.1.1 Start the DataManager-Field

##### Preconditions

- The USB stick is connected to the PC.
- The DataManager software has been installed on the USB stick.

1. On the USB stick, change over to the DataManager-Field directory.
2. Start the DataManager by double-clicking on the **DataManagerField.exe** file.

If your Windows firewall blocks the installation of the software, a window appears. Confirm by clicking on **Allow access**.



**Figure 4.1:** Windows safety notice window (depending on operating system)

▷ **The user interface is displayed via your browser.**

### 4.1.2 User interface

The user interface displays the buttons with the various software functions. Below, all field data files currently present in the database are displayed in a table.

#### NOTICE

The exact display of the user interface depends on the currently selected settings of your browser.

ID	Field data name	Application rate	ha	Time	kg calculated	Date	Start time	Stop time	Fertilizer type	Manufacturer	Choice
1	Endiger Weg	200	0.00	0	0.00	00.00.0	00.00	00.00	TEST		<input type="checkbox"/>
2	Harderer Weg	400	0.00	0	0.00	00.00.0	00.00	00.00	TEST		<input type="checkbox"/>
3	Erdbeerhurst	300	0.00	0	0.00	00.00.0	00.00	00.00	TEST		<input type="checkbox"/>

**Figure 4.2:** DataManager-Field user interface (example)

- [1] Table with field data files
- [2] Buttons

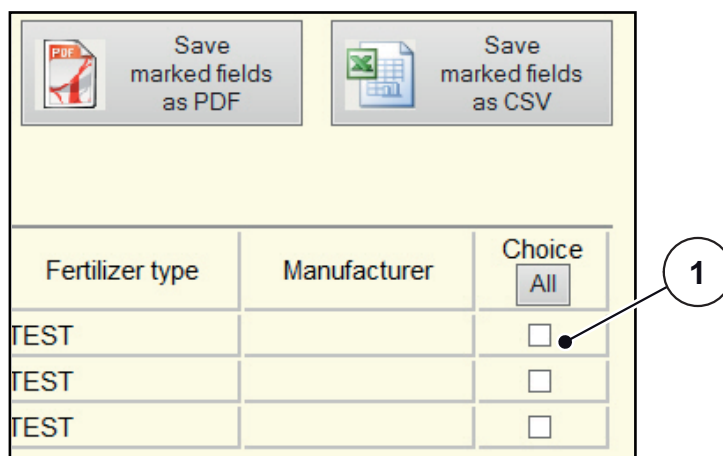
**Meaning of the buttons:**

Button	Meaning	Description
Delete marked fields	Delete the field data files marked in the table.	
Import fields from the stick	Transmit all field data files from the USB stick into the DataManager table.	<a href="#">Page 16</a>
Create new field	Create a new field data file via a separate input field.	<a href="#">Page 16</a>
Modify marked fields	Manual editing of the field data files marked in the table.	<a href="#">Page 18</a>
Export marked fields to the stick	Transmit the field data files marked in the table to the USB stick.	<a href="#">Page 19</a>
Save marked fields as PDF	Export the field data files marked in the table into a PDF document.	<a href="#">Page 20</a>
Save marked fields as CSV	Export the field data files marked in the table into a CSV document.	<a href="#">Page 20</a>

**NOTICE**

You can mark a field data file by checking the respective line in the right **Choice** column.

- In order to select all field data files, press the **All** button.
- Press the **None** button in order to unselect all field data files. See [figure 4.3](#).



**Figure 4.3:** Mark field data files

[1] Choice column: Selection of one or more field data files

4.1.3 Import field data files from the USB stick

Export field data files from the QUANTRON control unit

**NOTICE**

Follow the instructions of the operating manual of the control unit.

Import field data files from the USB stick

1. Insert the USB stick into an unoccupied USB port of the PC.
2. On the USB stick, change over to the DataManager-Field directory.
3. Start the DataManager by double-clicking on the **DataManagerField.exe** file.
4. Click the **Import fields from the stick** button.
  - ▷ After the import has been completed successfully, the following message appears: **[Number of] field lists have been imported.**
  - ▷ **The field data files appear with the ID ascending from the last number in the table of the DataManager.**

4.1.4 Create a new field data file

1. Click the **Create new field** button.
  - ▷ The input field appears in the browser.

The screenshot shows a data entry form with the following fields and callouts:

- 10: ID (value: 4)
- 9: Field data name
- 8: Fertilizer type
- 7: Manufacturer
- 6: Application rate
- 5: ha
- 4: Time
- 3: Start time Date - Time
- 2: Stop time Date - Time
- 1: Save and continue button
- 2: Cancel current process button

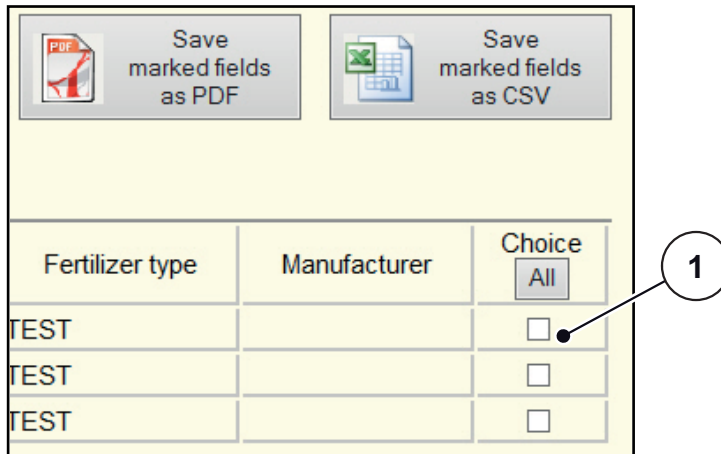
Figure 4.4: Input field for field data file

No.	Meaning	Description
1	Save and continue	Save the data entered and returning to the user interface
2	Cancel current process	Return to the user interface without saving
3	Start time Date - Time Stop time Date - Time	Input and/or display of start time/date Input and/or display of stop time/date
4	Time	Duration of recording the field data file
5	m	Processed surface
6	Application rate	Indication of the set application rate
7	Manufacturer Manufacturer	Name of the fertiliser manufacturer
8	Fertiliser type	Fertiliser name
9	ID	Unique number for the field data file; attributed automatically, cannot be edited
10	Field data name	Unique name of the field data file

2. In the fields [6] to [9], enter the respective data for the new field data file.
3. Press the **Save and continue** button.
  - ▷ You will return to the user interface.
  - ▷ **The field data file appears in the table of the DataManager.**

### 4.1.5 Edit field data files

1. Select your desired number of field data files by checking the respective check boxes in the last column of the table.
  - ▷ A check mark is placed at the end of the selected file.



Fertilizer type	Manufacturer	Choice
TEST		<input type="checkbox"/>
TEST		<input type="checkbox"/>
TEST		<input type="checkbox"/>

**Figure 4.5:** Mark field data files

[1] Choice column: Selection of one or more field data files

2. Click the **Modify marked fields** button.
  - ▷ The input field for the first field data file will appear in the browser.
3. In the fields [6] to [9] (see [4.1.4: Create a new field data file, page 16](#)) enter the respective data for the field data file.
4. Press the **Save and continue** button.
  - ▷ The first field data file will be saved.
  - ▷ The input field for the subsequent marked field data file appears.
5. Continue with editing all marked field data files as described in steps 4 and 5. Once the last marked file has been edited, press the **Save and continue** button.
  - ▷ **All field data files have been edited.**
  - ▷ **You will return to the user interface.**

#### 4.1.6 Export field data files

##### Export field data files to the USB stick

###### Precondition:

- The USB stick is connected to the PC.
- 1. On the USB stick, change over to the DataManager-Field directory.
- 2. Start the DataManager by double-clicking on the **DataManagerField.exe** file.
- 3. Select the desired field data files by checking the respective check boxes in the last column of the table (see [figure 4.5](#)).

##### ▲ CAUTION



###### Risk of data loss

When exporting the field data files from the DataManager, the existing field data files on the USB stick are overwritten.

- ▶ Ensure that no important field data files are stored on the USB stick before overwriting them.

- 
- 4. Click on the **Export marked fields to the stick** button.
    - ▷ After the export has been completed successfully, the following message appears: **[Number of] fields have been exported.**
    - ▷ You will return to the user interface.
  - ▷ **The field data files have been transferred to the USB stick.**

##### Import into the QUANTRON control unit

###### Precondition:

- DataManager-Field has been closed. See [4.3: Close the software, page 29](#).
- 1. Securely log out the USB stick.
- 2. Remove the USB stick from the PC.

##### NOTICE

Follow the instructions of the operating manual of the respective control unit.

---

### 4.1.7 Conversion of the field data files

#### Save field data files as PDF

1. Select the desired field data files by checking the respective check boxes in the last column of the table.
2. Press the **Save marked fields as PDF** button.
  - ▷ A window for saving the file will appear.
3. Enter a storage location for the PDF file and save it there.
  - ▷ **The PDF file has been saved.**

#### Save field data files as CSV

1. Select the desired field data files by checking the respective check boxes in the last column of the table.
2. Press the **Save marked fields as CSV** button.
  - ▷ A window for saving the file will appear.
3. Enter a storage location for the CSV file and save it there.
  - ▷ **The CSV file has been saved.**



## 4.2 DataManager-Street

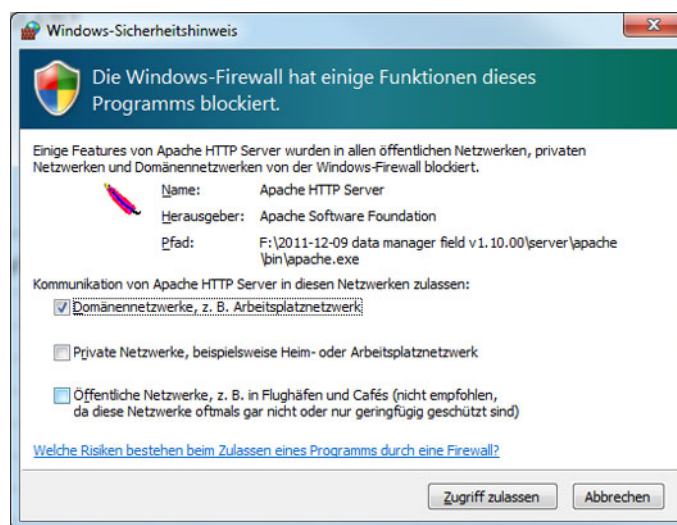
### 4.2.1 Starting DataManager-Street

#### Preconditions

- The USB stick is connected to the PC.
- The DataManager software has been installed on the USB stick.

1. On the USB stick, change over to the DataManager-Street directory.
2. Start the DataManager by double-clicking on the **DataManagerStreet.exe** file on the USB stick.

If your Windows firewall blocks the installation, a window appears. Confirm by clicking on **Allow access**.



**Figure 4.6:** Windows safety information window (depending on the operating system)

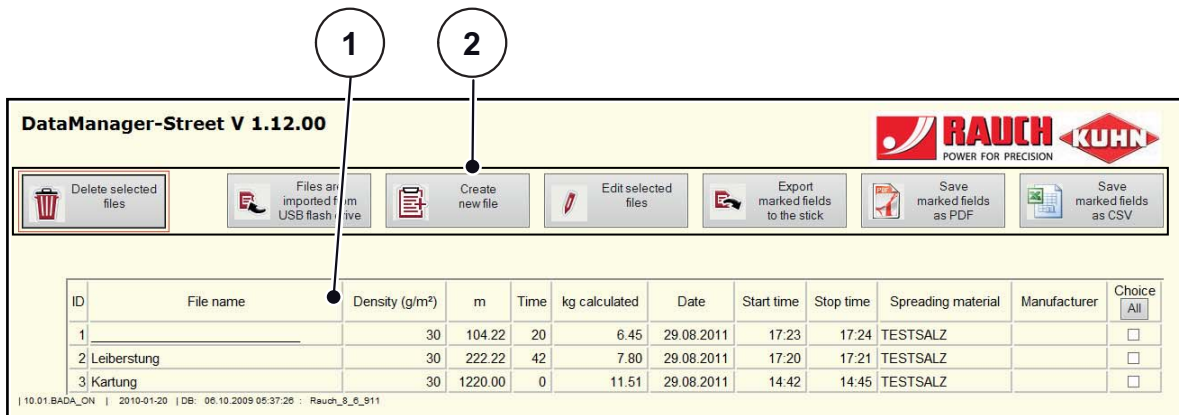
▷ **The user interface is displayed via your browser.**

### 4.2.2 User interface

The user interface displays the buttons with the various software functions. Below, all files currently present in the database are displayed in a table.

#### NOTICE

The exact display of the user interface depends on the currently selected settings of your browser.



**Figure 4.7:** DataManager-Street user interface (example)

- [1] Table with files
- [2] Buttons

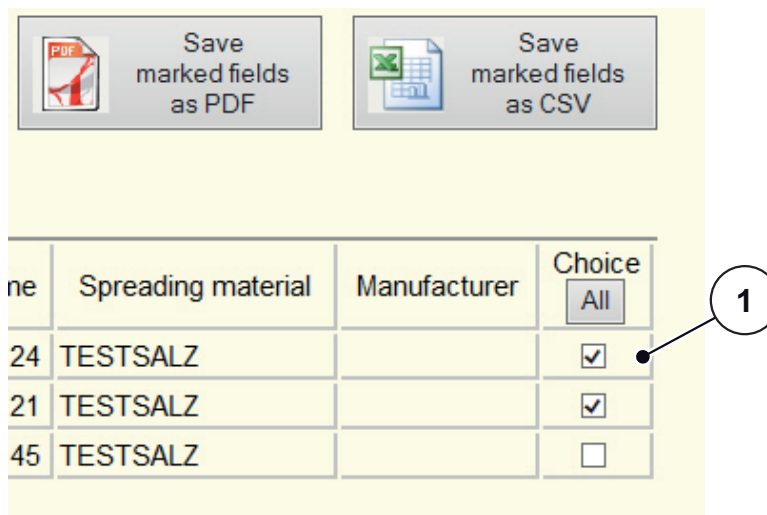
**Meaning of the buttons:**

Button	Meaning	Description
Delete selected files	Delete the marked files in the table.	
Import files from USB-flash drive	Transmit all files from the USB stick into the DataManager table.	<a href="#">Page 24</a>
Create new file	Create a new file via a separate input field.	<a href="#">Page 25</a>
Edit selected files	Manual editing of the files marked in the table.	<a href="#">Page 26</a>
Export selected files to USB flash-drive	Transmit the files marked in the table to the USB stick.	<a href="#">Page 27</a>
Save marked files as PDF	Export of the files marked in the table into a PDF document.	<a href="#">Page 28</a>
Save marked files as CSV	Export of the files marked in the table into a CSV document.	<a href="#">Page 28</a>

**NOTICE**

You can mark a file by checking the respective line in the right **Choice** column.

- In order to select all files, press the **All** button.
- Press the **None** button in order to unselect all files. See [figure 4.3](#).



**Figure 4.8:** Mark files

[1] Choice column: Selection of one or more files

### 4.2.3 Import files from the USB stick

#### Export files from the QUANTRON-K control unit

**NOTICE**

Follow the instructions of the operating manual of the control unit.

---

#### Import files from the USB stick

1. Insert the USB stick into an unoccupied USB port of the PC.
2. On the USB stick, change over to the DataManager-Street directory.
3. Start the DataManager by double-clicking on the **DataManagerStreet.exe** file on the USB stick.
4. Click the **Import files from USB flash drive** button.
  - ▷ After the import has been completed successfully, the following message appears: **[Number of] files have been imported.**
  - ▷ **The files appear with the ID ascending from the last number in the table of DataManager.**

4.2.4 Create new file

1. Click the **Create new file** button.
  - ▷ The input field appears in the browser.

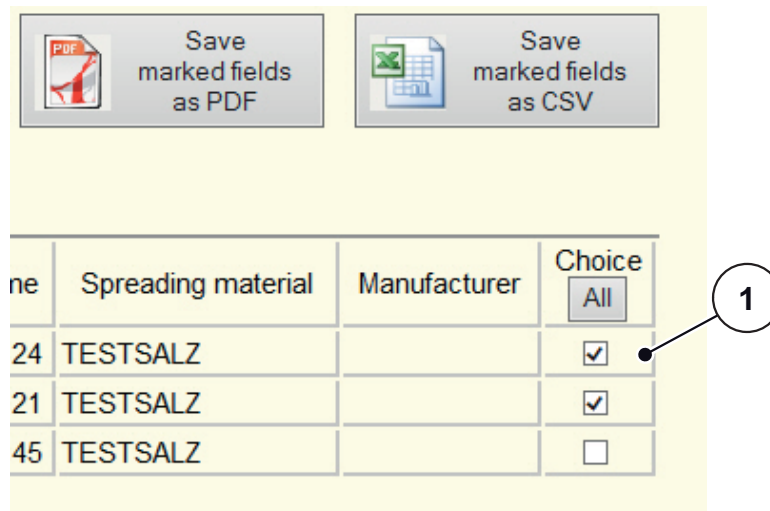
Figure 4.9: Input field for files

No.	Meaning	Description
1	Save and continue	Save the data entered and returning to the user interface.
2	Cancel current process	Return to the user interface without saving.
3	Start time Date - Time Stop time Date - Time	Input/display of start time/date Input/display of stop time/date
4	Time	Duration of recording the file
5	m	Distance processed
6	Density (g/m <sup>2</sup> )	Indication of the set spreading density
7	Manufacturer	Name of the spreading material manufacturer
8	Spreading materiel	Name of the spreading material
9	File name	Unique name of the file
10	ID	Unique number of the file; attributed automatically, cannot be edited.

- In the fields [6] to [9], enter the respective data for the new file.
- Press the **Save and continue** button.
  - ▷ You will return to the user interface.
- ▷ **The file appears in the table of the DataManager.**

### 4.2.5 Edit files

- Select the desired number of files by checking the respective check boxes in the last column of the table.
  - ▷ A check mark is placed at the end of the selected file.



**Figure 4.10:** Mark files

[1] Choice column: Selection of one or more files

- Click the **Edit selected files** button.
    - ▷ The input field for the first file will appear in the browser.
  - In the fields [6] to [9] (see [figure 4.1.4](#)), enter the respective data for the file.
  - Press the **Save and continue** button.
    - ▷ The first file is saved.
    - ▷ The input field for the subsequent marked file appears.
  - Continue with editing all marked files as described in the steps 4 and 5.
    - Once the last marked file has been edited, press the **Save and continue** button.
- ▷ **All files have been edited.**
  - ▷ **You will return to the user interface.**

## 4.2.6 Export files

### Export files to the USB stick

#### Precondition:

- The USB stick is connected to the PC.
- 1. On the USB stick, change over to the DataManager-Street directory.
- 2. Start the DataManager by double-clicking on the **DataManagerStreet.exe** file on the USB stick.
- 3. Select the desired files by checking the respective check boxes in the last column of the table (see [figure 4.5](#)).

#### ▲ CAUTION



#### Risk of data loss

When exporting the files from the DataManager, the existing files on the USB stick are overwritten.

- ▶ Ensure that no important files are stored on the USB stick before overwriting them.

- 
- 4. Click on the **Export marked files to USB flash drive** button.
    - ▷ After the export has been completed successfully, the following message appears: **[Number of] files have been exported.**
    - ▷ You will return to the user interface.
  - ▷ **The files have been transferred to the USB stick.**

### Import into the QUANTRON-K control unit

#### Precondition:

- DataManager-Field has been closed. See [4.3: Close the software, page 29](#).
- 1. Securely log out the USB stick.
- 2. Remove the USB stick from the PC.
- 3. Via the USB box and the Y-cable, connect the **USB-Stick** with the QUANTRON K control unit (see [3.1.1: Connection to the QUANTRON-E or QUANTRON-K control unit, page 7](#)).

#### NOTICE

Follow the instructions of the operating manual of the control unit.

---

### 4.2.7 Conversion of the files

#### Save files as PDF

1. On the USB stick, change over to the DataManager-Street directory.
2. Start the DataManager by double-clicking on the **DataManagerStreet.exe** file on the USB stick.
3. Select the desired files by checking the respective check boxes in the last column of the table.
4. Press the **Save marked fields as PDF** button.
  - ▷ A window for saving the file will appear.
5. Enter a storage location for the PDF file and save it there.
  - ▷ **The PDF file has been saved.**

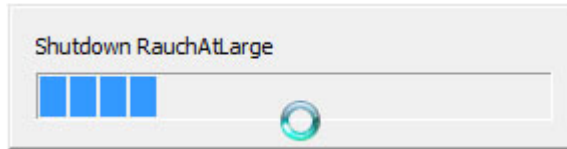
#### Save files as CSV

1. On the USB stick, change over to the DataManager-Street directory.
2. Start the DataManager by double-clicking on the **DataManagerStreet.exe** file on the USB stick.
3. Select the desired files by checking the respective check boxes in the last column of the table.
4. Press the **Save marked fields as CSV** button.
  - ▷ A window for saving the file will appear.
5. Enter a storage location for the CSV file and save it there.
  - ▷ **The CSV file has been saved.**



### 4.3 Close the software

1. Close the user interface.
  - ▷ A progress bar appears on the screen.
  - ▷ The software is shut down.



**Figure 4.11:** Close the DataManager (depending on operating system)

#### ⚠ CAUTION



#### Risk of data loss

The programme manages the data until it has been shut down entirely.

- ▶ Never remove the USB stick as long as the progress bar is displayed.

2. Wait until all windows (user interface and progress bar) have been closed.
  - ▷ **The software has been shut down.**
  - ▷ **You can now remove the USB stick from the PC.**



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POWER FOR PRECISION

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