

# Instruction manual

Reference: CCI.Cam v3

## CCI.Cam

**CCISOBUS**

17510414-EN

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Competence Center ISOBUS e.V.  
Zum Gruthügel 8  
D-49134 Wallenhorst

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## 1 Introduction

### 1.1 About these operating instructions

These Operating Instructions are intended as an introduction to the operation and configuration of CCI.Cam. This software is preinstalled on your ISOBUS terminal CCI 100/200 and can only be run from there. It is only with knowledge of these Operating Instructions that accidental misuse can be avoided and fault-free operation ensured.

These Operating Instructions must be read and understood to prevent problems during operation.

### 1.2 Reference

These Operating Instructions describe the CCI.Cam Version CCI.Cam v3.

To query the version number of the CCI.Cam installed on your terminal proceed as follows:

1. Open the Info/Diagnosis menu in the main menu of the terminal.
2. Press the "Version Data" button on the touchscreen.  
→ The version number can be seen in an overview that appears.

### 1.3 About CCI.Cam

CCI.Cam allows the worker to keep an overview of his machine with up to 8 cameras and supports the worker during complex working procedures.

Enhanced functions such as cyclical camera switching and flexible configuration of the camera connections facilitates the daily work. The snapshot function allows images to be made and stored to a USB stick.

## 2 Safety

### 2.1 Identification of indications in the Operating Instructions

The safety indications in these Operating Instructions are specially identified:



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**Caution - General Hazards!**

This occupational safety symbol identifies general safety indications the non-observance of which poses a danger for life and limb. Carefully observe the indications regarding occupational safety and exert particular caution in these cases.



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**Attention!**

This attention symbol identifies all safety indications which refer to regulations, directives or working procedures which it is essential to observe. Non-observance can entail damage to, or the destruction of, the terminal as well as malfunctions.



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**Note**

The note symbol highlights operation tips and other particularly useful information.

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### 3 Commissioning

#### 3.1 Mounting the terminal

For information about installing the terminal, please refer to the chapter **4.1 Mounting the terminal** in the **ISOBUS Terminal CCI 100/200** Operating Instructions.

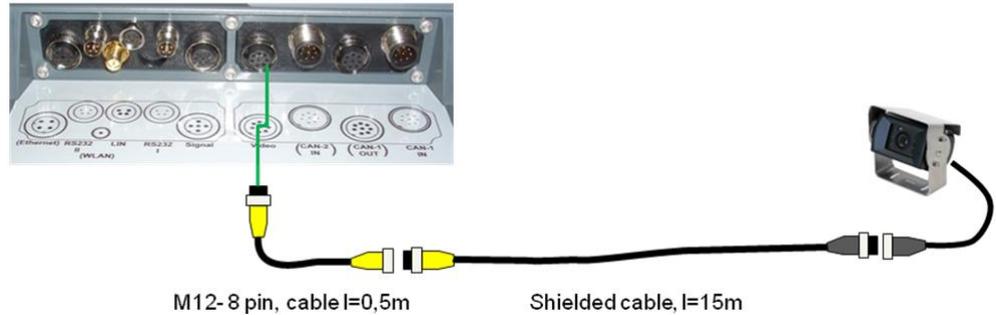
#### 3.2 Connecting the Terminal

##### 3.2.1 Connecting with ISOBUS/voltage supply

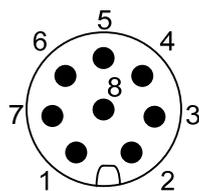
Please refer to the information in the chapter **4.2.1 Connecting with ISOBUS/voltage supply** of the **ISOBUS Terminal CCI 100/200** Operating Instructions.

#### 3.3 Connecting to a camera

A camera can be directly connected to the terminal.



#### Camera connection



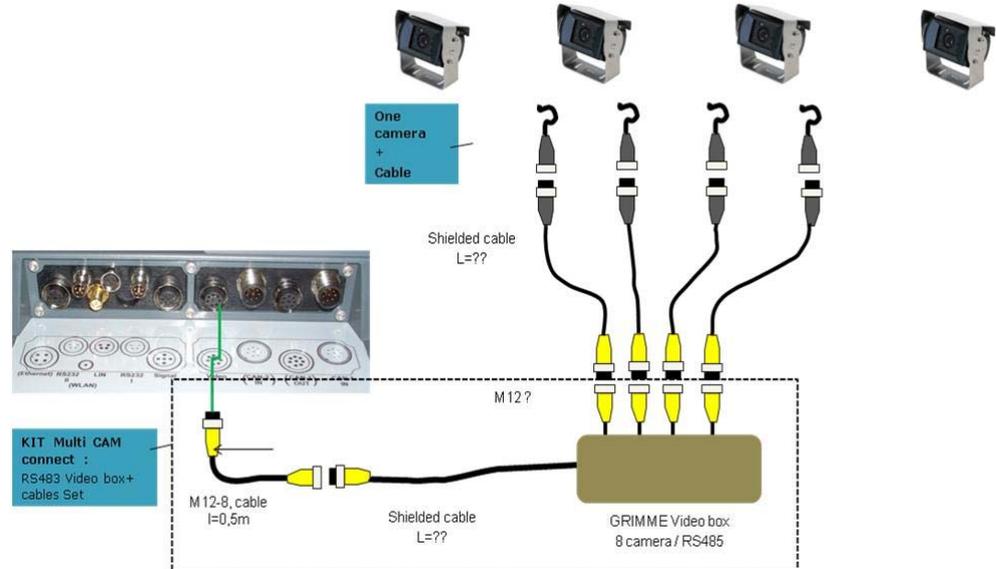
The camera connection to the terminal occurs via the "Video" interface.

Refer to the following set-up for the pin layout:

1. Video signal
2. RS485B
3. RS485A
4. +12V / +24 V
5. Mini Out
6. +12V / +24 V
7. GND
8. Shield

### 3.4 Connecting to multiple cameras

Multiple cameras can be connected to the terminal using the multiplexer <Art Nr. Multiplexer>. If more than three cameras are connected to the terminal via the multiplexer, the multiplexer requires an external voltage supply.



#### Multiplexer connection

The multiplexer is connected to the terminal similar to a camera via the "Video" interface (compare chapter 3.3).

### 3.5 Installing the software

CCI.Cam is included in the scope of delivery of the CCI ISOBUS terminal, i.e. installation is neither possible nor required.

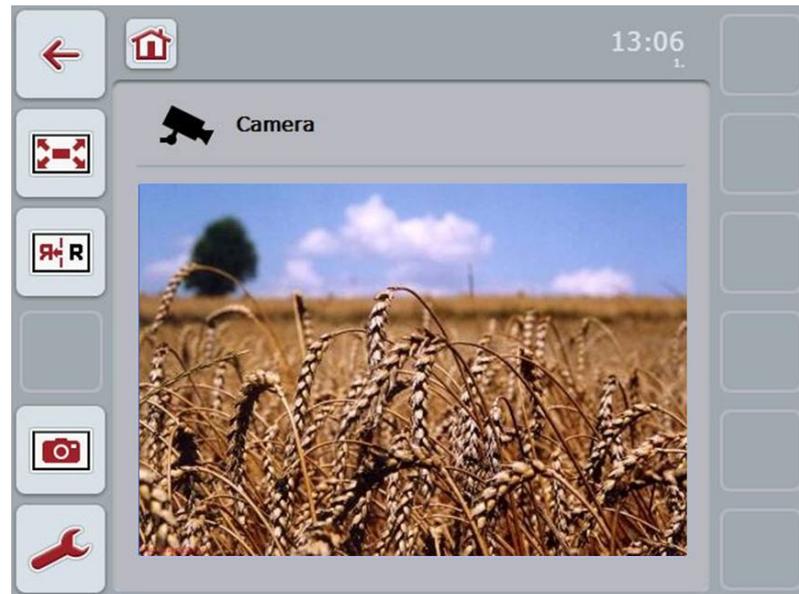
## 4 Operation

### 4.1 Programme start

CCI.Cam is activated automatically by switching on the terminal.

In order to change the main view of the CCI.Cam, proceed as follows:

1. Open the start menu in the main menu of the terminal and press on the button with the Video icon or press the Workingset button on the terminal again.



CCI.Cam is divided into four areas:

#### 4.1.1 Main view (one camera)

Shows the camera image of the only connected camera.

#### 4.1.2 Main view (multiple cameras)

Shows the camera image of one of the connected cameras. Facilitates switching between the images from different cameras.

#### 4.1.3 Settings

Setting or changing the time interval.

Switch to assignment.

#### 4.1.4 Assignment

Assignment of cameras and quick-select buttons.

### 4.2 Main view (one camera)

This is the main view if only one camera is connected to the terminal. The image from this camera is displayed in the main view.



You have the following operating options:



Select full-screen mode



Mirror image



Take a snapshot



Switch to the settings:

Press the "Settings" button (F12) on the touchscreen.

You can find more information about this menu item in chapter 4.4.

#### 4.2.1 Select full-screen mode

To select the full-screen mode, proceed as follows:

1. In the touch screen, press the "Full-screen mode" button (F8), on the scroll wheel or in the touchscreen directly on the display of the camera images.  
→ The view immediately switches to full-screen mode.




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**Note**

In full-screen mode, the camera image fills the entire screen.

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**Note**

In full-screen mode, the "Mirror image" (F9) and "Snapshot" (F11) functions are only available via the corresponding function buttons.

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**Note**

To exit the full-screen mode, touch any area in the touchscreen, any function button or press the scroll wheel.

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#### 4.2.2 Mirror image

To mirror the image along the vertical axis, proceed as follows:

1. Press the "Mirror image" button (F9) on the touchscreen.

#### 4.2.3 Take a snapshot

To take a snapshot, proceed as follows:

1. Connect a USB stick to the terminal.
2. Press the "Take a Snapshot" button (F11) on the touchscreen.




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**Note**

The snapshot will be automatically saved to the USB stick in the "CAMCAP" folder. The filenames follow the convention <img>\_<JJJJ\_MM\_TT>\_<consecutive number>JPEG.

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### 4.3 Main view (multiple cameras)

This is the main view when multiple cameras are connected to the terminal. The images from the selected cameras are displayed in the main view.



You have the following operating options:

-  Select full-screen mode (compare 4.2.1)
-  Mirror image (compare 4.2.2)
-  Take a snapshot (compare 4.2.3)
-  Switch to the settings (compare 4.2)
-  Switch the automatic camera switching on or off
-  Display camera image
-  Display additional cameras

### 4.3.1 Switch the automatic camera switching on or off

If you do not want to display the camera images manually, you can switch on the automatic camera switching. The display will then automatically switch to the different camera images at regular intervals.

To switch the automatic camera switching on or off, proceed as follows:

1. Press the "Switch on automatic camera switching" button (F10) on the touchscreen or "Switch off automatic camera switching" (F10) if this is already switched on.




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**Note**

You can change or set the interval for the camera images (compare 4.4.1).

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### 4.3.2 Display camera image

To display the image from a specific camera, proceed as follows:

1. Press the button with the desired camera on the touchscreen.
  - The display switches to the image from this camera.

### 4.3.3 Display additional cameras




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**Note**

The button with this function only appears if there are more than five cameras connected.

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To display additional cameras, proceed as follows:

1. Press the "Display Additional Cameras" button (F6) on the touchscreen.
  - The additional cameras are displayed on the buttons (F3 – F5).




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**Note**

The "Camera 1" (F1) and "Camera 2" (F2) buttons are always displayed. These buttons are the quick-select buttons for the images of the two most important cameras.

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### 4.4 Settings

Use the "Settings" (F12) button in the main view to get to the "Settings" submenu.



You have the following operating options:



Enter time interval



Reset settings



Switch to assignment:

Press the "Assignment" button on the touch screen.

You can find more detailed information about the camera assignment in chapter **Fehler! Verweisquelle konnte nicht gefunden werden..**

## 4.4.1 Enter time interval

To enter the time interval for the automatic camera switching, proceed as follows:

1. Press the "Time interval" button on the touch screen or turn the scroll wheel or press the "Up" (F4) and "Down" (F5) buttons until the name is highlighted in white and then press the scroll wheel or "OK" (F6) on the touchscreen.
2. Enter the new value for the time interval on the touchscreen using the digit field or the slider.
3. Confirm your input with "OK".



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**Note**

Values between 1 and 10 seconds are valid for the time interval value range.

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## 4.4.2 Reset settings

To reset the settings for the time interval, proceed as follows:

1. Press the "Reset" button (F1) on the touchscreen.



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**Note**

The time interval is immediately reset to factory settings, there is no warning message.

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**Note**

The factory setting for the time interval is 2 seconds.

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### 4.5 Assignment

You can access the "Assignment" submenu via the "Assignment" button in the "Settings" submenu. This submenu displays a list of 8 quick-select buttons "Camera 1-8" and the "Connection 1-8" cameras assigned to the multiplexer connection.

This submenu facilitates the flexible assignment of cameras to the quick-select buttons independently of the connection assignment on the multiplexer. This makes it possible to set the two most important cameras to the quick-select buttons "Camera 1 and 2" which are always displayed without having to modify the connection on the multiplexer. In addition, the automatic camera switching of the camera sequence set here follows automatically.



You have the following operating options:



Assign camera



Reset assignment

## 4.5.1.1 Assign camera

To assign a quick-select button to a multiplexer connection, proceed as follows:

1. Press on one of the "Camera 1-8" buttons on the touchscreen or turn the scroll wheel until the desired button is highlighted in white and then press on the scroll wheel.

Once the button is highlighted you can, alternatively, also press the "OK" (F6) button.

→ A list of the available connections is opened.

2. Select a connection from the list. Press the button with the number of the connection.
3. Confirm your selection with "OK" or press on the button with the connection number again.

## 4.5.1.2 Reset assignment

To reset the assignment of the cameras, proceed as follows:

1. Press the "Reset" button (F1) on the touchscreen.



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**Note**

The assignments are reset immediately, there is no warning message.

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**Note**

The assignment of the camera whose image is currently being displayed cannot be reset.

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## 5 Troubleshooting

### 5.1 Terminal errors

The following overview shows possible terminal errors and how to solve them:

Error	Possible cause	Solution
The terminal does not switch on	Terminal is not correctly connected	Check ISOBUS connection
Connected machine software is not displayed	<ul style="list-style-type: none"> <li>• Bus terminator missing</li> <li>• Software is loaded, however is not displayed</li> <li>• Connection error when uploading the software</li> </ul>	<ul style="list-style-type: none"> <li>• Check resistance</li> <li>• Check whether the software can be manually started from the terminal start menu</li> <li>• Check physical connection</li> <li>• Contact the machine manufacturer's customer service</li> </ul>

### 5.2 Diagnosis

#### 5.2.1 Function ... check

#### 5.2.2 ... test

### 5.3 Error messages




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**Note**

The error messages shown on the terminal depend on the connected machine. A detailed description of the possible error messages and troubleshooting can be referred to in the machine Operating Instructions.

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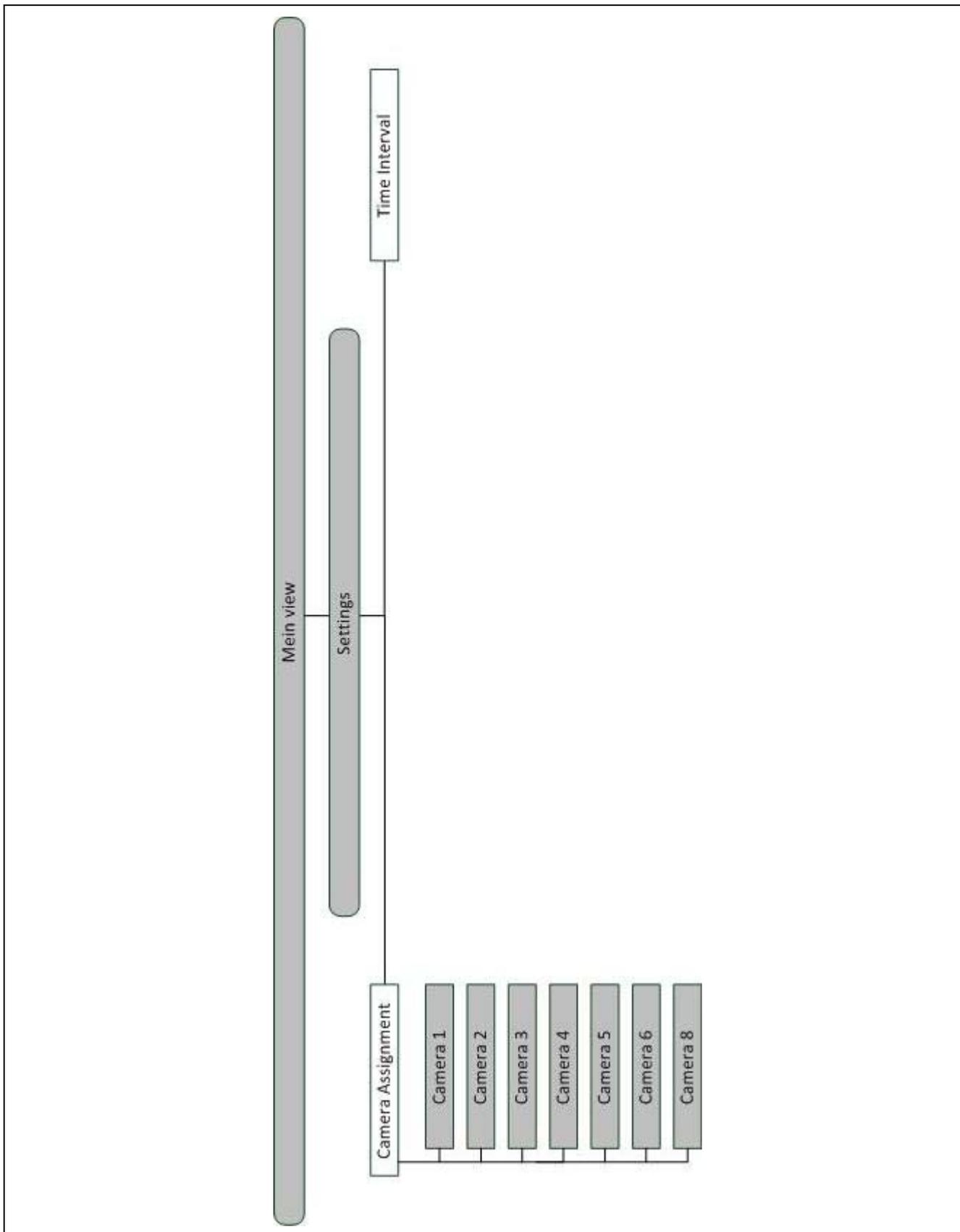

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**Note**

If the machine cannot be operated, check whether the "stop switch" is pressed. The machine cannot be operated until the switch has been released.

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## 6 Menu structure



**7 Glossary**

<b>Operating mask</b>	The operating mask is comprised of the values and operating elements shown on the screen. The touchscreen can be used to directly select the elements shown.
<b>CCI</b>	<b>Competence Center ISOBUS e.V.</b>
<b>ISOBUS</b>	Data bus for a regional or municipal technical application which is in compliance with the standard ISO 11783.
<b>Multiplexer</b>	Device for switching between video signals which facilitates operating multiple cameras over one video input.
<b>Snapshot</b>	Records the currently displayed image
<b>Terminal</b>	CCI 100 or CCI 200 ISOBUS Terminal
<b>Touchscreen</b>	Touch-sensitive screen which is used to operate the terminal.
<b>Full-screen mode</b>	The camera image fills the entire screen.
<b>Cyclical camera switching</b>	Automatic switching from one camera to the next.

## 8 Buttons and icons



CCI.Cam



Snapshot



Automatic camera switching



Display camera image



Time interval



Reset



Full-screen mode



Mirror image



Settings



Display additional cameras



Camera assignment



Select from a list

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