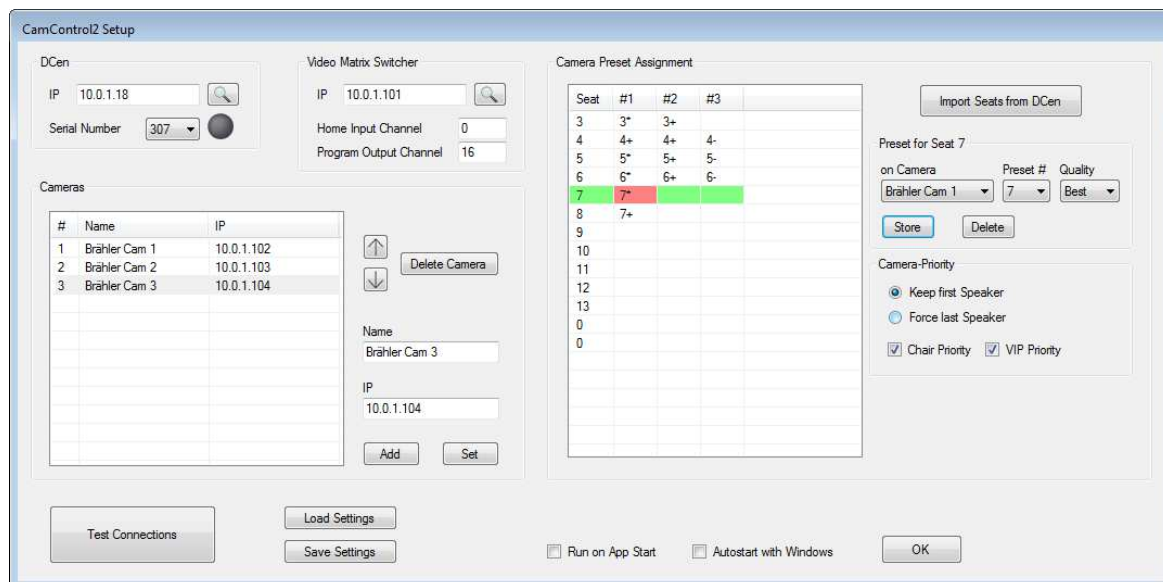# Operating instructions

brähler
SYSTEMS

DIGIMIC CamControl2
Camera control software
Article no.: S4.1370

Example application

Printed in the Federal Republic of Germany

Please contact us if you have any questions regarding this operating manual:

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Note: Changes or modifications to the equipment not expressly approved by Brähler Systems could void the user's authority to operate this equipment.

Table of contents

About this manual

Keep these operating instructions.

Symbols

In this manual the following means of presentation are used:

⚠️ Indicates notes which, if disregarded, endanger your health, the functionality of your use or the security of your data.

📖 Indicates additional information and tips.

Text Texts in bold and/or <u>underlined</u> text are texts or terms to be highlighted.

General information

📖 Please read this manual carefully and thoroughly. Pay particular attention to notes marked with the symbols listed above.

📖 All trademarks mentioned are trademarks or registered trademarks of their respective owners and are acknowledged as protected.

📖 The warranty is void if software errors are caused by improper use.

📖 DIGIMIC is a user-friendly and reliable conference system - nevertheless, it is recommended to use Brähler Systems for planning, installation and commissioning.

Important information

Safety Instructions

- Read this manual!
- Keep the manual in a safe place
- Observe the specified warnings
- Follow the instructions
- Do not use the required hardware near water
- Clean the required hardware only with a dry, clean cloth
- Install the software only according to the instructions in this manual
- Do not operate the required hardware near heat sources such as radiators, stoves or other heat-generating devices (e.g. amplifiers)
- Only use attachments and accessories that are suitable according to the manufacturer.
- Unplug the power cord of the required hardware during thunderstorms or when the hardware is not in use for a long time.
- Have all maintenance work performed by qualified personnel. Servicing is required when the required hardware has been damaged in any way, such as power cord or plug is damaged, the unit has been dropped, exposed to moisture, or does not operate normally.

Safety information

Warning!

The required hardware components are live devices - read the operating instructions of the individual devices in detail and observe the safety instructions given to avoid fire, electric shock or other hazards.

Do not open any devices! Potentially dangerous voltages are present inside. Refer all servicing to qualified service personnel.

The DIGIMIC conference system is state of the art and has been developed according to all applicable regulations. Nevertheless, the individual components of the system can lead to danger for persons, material assets and data if

- the system is not used as intended,
- the system is not set up by personnel who are familiar with the safety regulations
- the system is improperly converted or modified,
- the safety instructions are not observed.

Disposal

This symbol on the product, the instructions for use or the packaging indicates that electrical and electronic equipment should be disposed of separately from household waste at the end of its life. There is a collection system for recycling within the EU or even countries outside the EU. For more information, please contact the local authorities or the dealer where you purchased the product.

If equipment is to be scrapped, remove all components such as batteries, housings, circuit boards and cables. Dispose of all individual components in accordance with local waste disposal regulations.

DIGIMIC Digital Conference System with CamControl2

Thank you for choosing CamControl2 and the DIGIMIC conference system. You have thus invested in future-proof conference and camera technology.

DIGIMIC is an autonomous solution without PC, which configures itself completely automatically. DIGIMIC meets the requirements of studio technology and thus goes far beyond the actual standard of conference technology. The system can, of course, be linked to the PC at any time and can thus be controlled via software. Various functions can be implemented via the TCP/IP interface, such as microphone control, name management and tuning.

The individual microphone units of the CMic series as well as the interpreter console DDol32 are almost self-explanatory in operation. Delegates and interpreters can thus concentrate on the real thing - the conversation.

With the CamControl2 software, you always get the best possible picture of your conference topics. In combination with Brähler PTZ980 cameras and the Matrix Video Switcher SDI-MS16, the software always selects the best possible setting to film speakers.

System requirements

Hardware
▪ DCen/DCen32 or DCen mini/DCen32 mini
▪ Brähler PTZ980 Camera
▪ Matrix Video Switcher SDI-MS16
▪ Commercially available Windows PC

Software
▪ Microsoft Windows 10, 32- or 64-bit Edition
▪ Microsoft . NET Framework 4.6.1 (or newer / will be installed if required)

System components
▪ CMic/CChair
▪ CMic ID/CChair ID
▪ CMic One/CChair One
▪ CMic VIS versions (audio support for the visually impaired)
▪ SMic070 and SMic133
▪ DLine/DLine32
▪ DSwitch
▪ DExt
▪ DDol32
▪ CSX4 and DIGIMIC CS
▪ Brähler microphones (TMD/01; TM58/6; etc.)
▪ System accessories (cables etc.)
▪ Country specific power cables
▪ Wireless conference system (only outside the EU)

For further information on the individual system components of the DIGIMIC family and their operation, please read the corresponding operating instructions.

Introduction

With CamControl2 you always have your conference topics optimally in the picture. The system ideally works with 3 or more cameras. You can assign several camera settings to each speaker and sort them according to their quality. The program always selects the best possible variant from the available cameras.

For optimal image transmission, the system works via the DIGIMIC central unit DCen and uses the switching on and off of the microphones. In order to prevent undesired camera movements (e.g. when positioning the camera), a so-called Home Input Channel - this shows a general intermediate image, for example the podium or an overview of the conference room. This input of the video switch is always activated if <u>no</u> microphone is switched on, or if the current live camera has to make a movement and there is no second camera that can be switched to for that long. A fixed overview camera can be connected to the Home Input Channel, or image storage that displays a fixed logo or black image.

Installation

Before you start installing the software, please read the license agreement carefully (this was handed over to you when you purchased this software).

If you already have an older version of CamControl2 installed, it must first be uninstalled.

To install the software, you need administrator rights!

There are two ways to install the software on your computer: from a CD/DVD or through a download version. The installations differ only slightly with regard to the delivered medium.

CD/DVD
Insert the CD/DVD into the CD drive of your computer. If Autostart is activated, the setup starts automatically. If no autostart is activated, you must start the setup manually. To do this, go to the CD drive folder and open the setup by double-clicking on it. Follow the instructions.

Download
Unzip the compressed file into any directory. Start the SETUP.EXE file from this directory with a double click. Follow the instructions.

An installation help - a so-called setup wizard - guides you through the further steps:
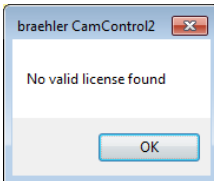
The note during the installation of "Install CamControl2 for yourself or for anyone who uses this computer" refers to using the program for all users (Everyone) or only the currently logged in user (Just me).
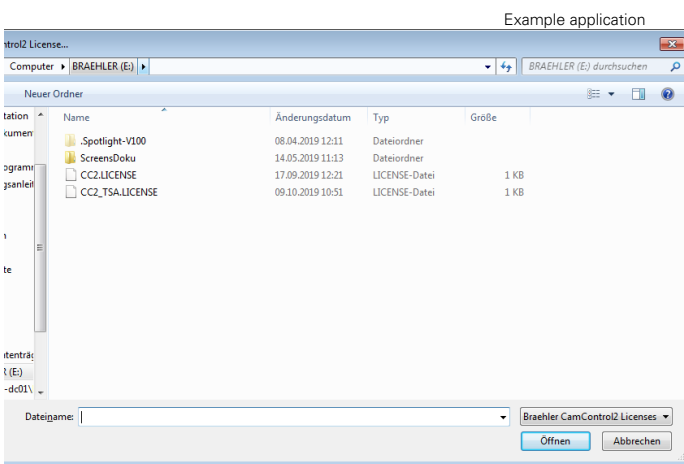
Operation

Open the program on your computer.

When you open the program for the first time, you will be notified that there is no valid license for the program.

By clicking on the "OK" button, you will reach the input field for the license key. Enter the license and click Open.
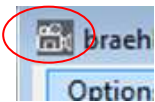
Example application

You can enter additional licenses for different DCens at any time - see page 9 of this manual. However, it is only possible to connect to <u>one</u> DCen.

If the program is licensed, the following window opens
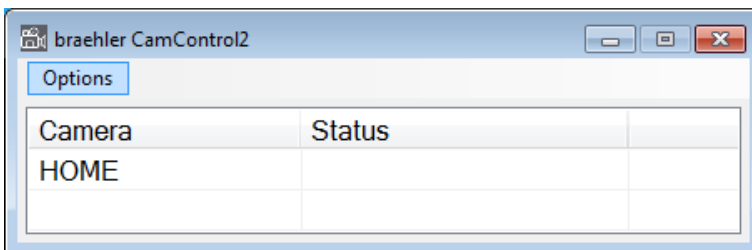
Example application

The camera icon in the upper left corner of the window shows you the status of the program:
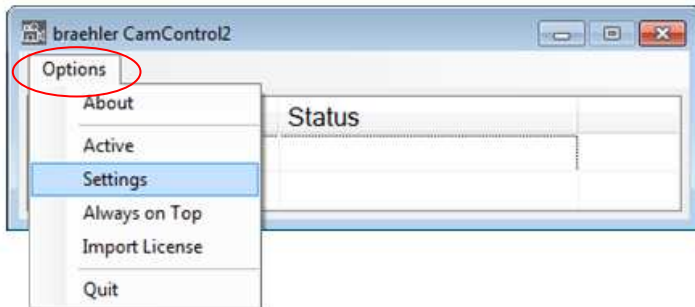
Grey: Program is not active.

Yellow: Program searches and connects to the network or to the connected and   selected system components (DCen central unit, video switcher and cameras).
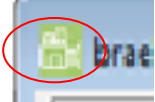
Green: Program is active and working

Options

By clicking on the "Options" button, various options are displayed.


About

By clicking on the "About" button, you will receive information about your program - such as which versions you are currently using or for whom the license was issued.

Example application

Active

The "Active" button starts the program. When you click the "Options" button again, you will see a check mark in front of "Active" - it symbolizes that the program is activated. Clicking the "Settings" button is <u>not</u> possible when the program is active. By clicking the "Active" button again, the selection is removed.
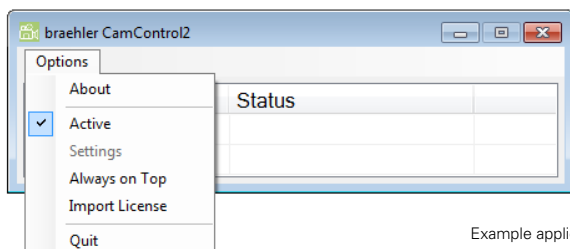
Example application

Settings

Under the menu item "Settings" you can make all settings - for example, to select the DCen central unit and the cameras or to adjust individual camera positions to specific seats. (Detailed instructions for the individual menu items can be found starting on page 10 of this manual).

Always on Top

By clicking the "Always on Top" button, the CamControl2 working window is given priority over other open windows. It always remains at the top and can be viewed at any time. This allows you to view the status of the individual cameras at any time - for example, which camera is sending the live image.

import license

With the button "Import License" you can import licenses for other DCens. Click on it to open the window for entering the license key (page 8 of this manual). You may have to restart the program after selecting a new license to activate it.

Several DCens can be licensed - but the program can only work with <u>one at a</u> time.

Quit

You can close the program by clicking the "Quit" button.

Settings

Under the menu item "Settings" you can make all settings for the operation of the program.

Setting central unit DCen

Setting Matrix Video Switcher

Settings Camera positions in terms of seats and priorities

List of cameras

Tests the connections between CamControl2 and the connected hardware

Example application

Save and open settings

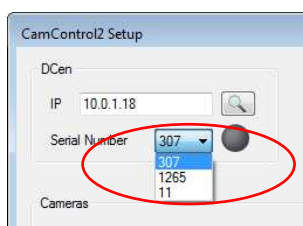Automatic program start

Okay button
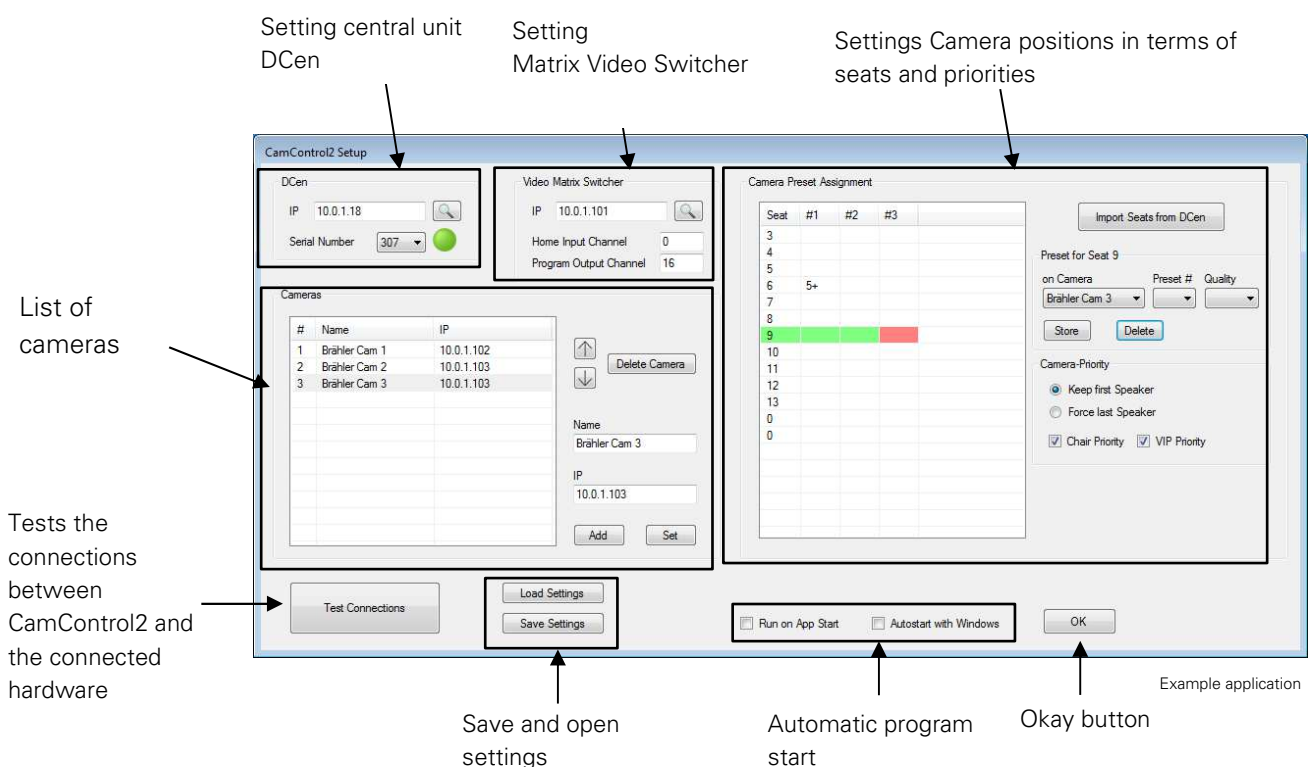
Settings Central Unit DCen

Use the "DCen" field to determine which of your DCens the CamControl2 program should work with.
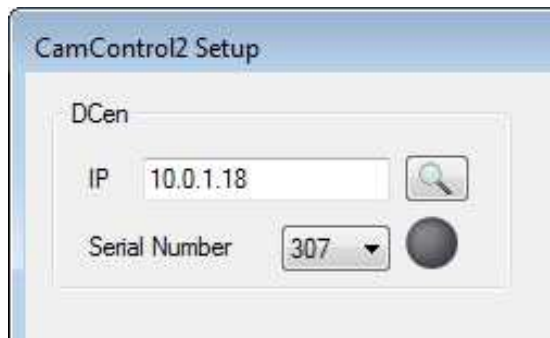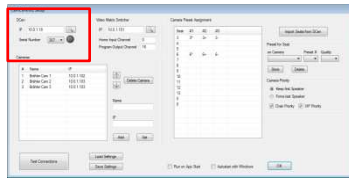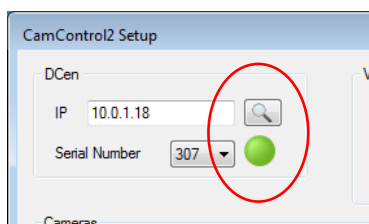
Example application

Click on the arrow under "Serial Number" - all licensed DCens will be displayed.

Example application

Select your DCen and then click on the magnifying glass button. The system automatically searches for the IP address of the DCs. If the DCen is found and the connection is activated, the dot will light up green (next to "Serial Number").
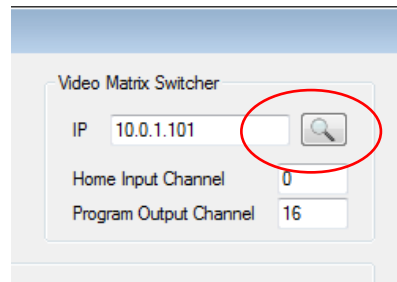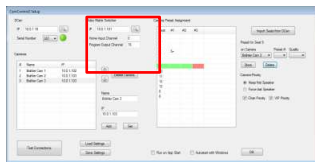
Example application

In some cases it may happen that a newly licensed DCen is not automatically displayed under "Serial Number". In this case close the program and open it again. The program has now registered and licensed your DCen. Your DCen is displayed under "Serial Number".

Setting Video Matrix Switcher

In the "Video Matrix Switcher" field, establish a connection between your Video Switcher and the CamControl2 system.
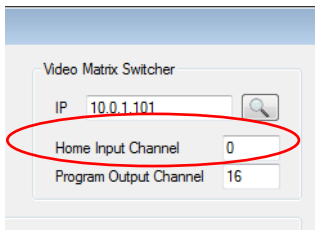

Example application

Click on the magnifying glass next to the IP address field. The software automatically searches for the video switcher used and establishes a connection. The device now works together with the software.

 If the IP address of the Video Switchers is known, it can of course also be entered manually via the keyboard.

Home Input Channel

The "Home Input Channel" becomes active when no microphone is switched on or to avoid camera movement.
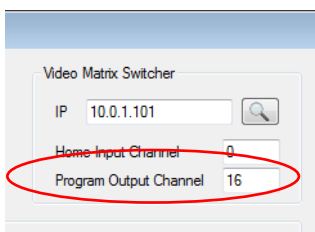

Example application

Use your cameras and your video switcher to determine which camera image should be used as the image for "idle". In the "Home Input Channel" field, set the corresponding channel of your Video Switch.

The system automatically switches to the selected camera image if all microphones are switched off or a camera movement is shown.

Program Output Channel

The recordings of several cameras are fed in via the video switcher - but only one recording is shown live (e.g. on a screen above the podium). With "Program Output Channel" you can determine which output of the Video Switchers is used to send the picture.
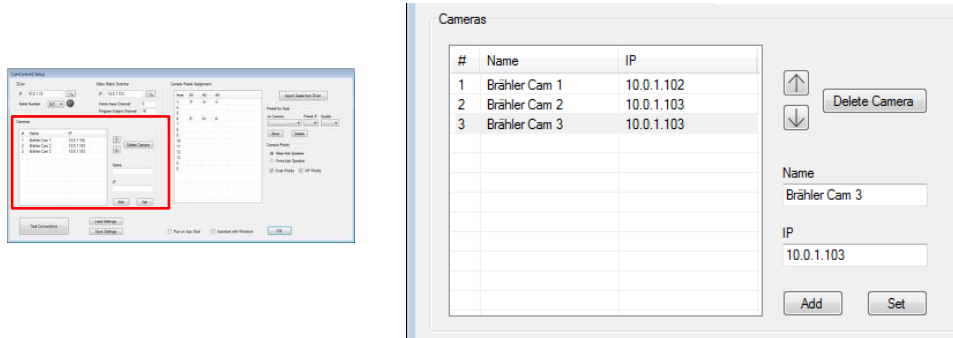

Example application

Set the desired output channel in the "Program Output Channel" field.

Setting cameras

In the field "Cameras" you insert the cameras of your DIGIMIC system. Enter the name and IP address of the cameras one by one and click "Add". The cameras are now displayed in the left part of the window.

To change the position and therefore the #number of the camera, select the corresponding camera by clicking on it. Click on the arrows (up/down) to change the position. To delete the selected camera, click the "Delete Camera" button.

To change the camera, click on the desired camera, enter your changes (Name/IP) and click on "Set". The changes are displayed in the left part of the window.

The cameras of Brähler Systems GmbH are all equipped with the same IP address at the factory. Change the IP address of your cameras to be able to use multiple devices and connect to your network. For more information on the cameras and your settings (e.g. changing the IP address), please refer to the "DIGIMIC PTZ980" manual.

Camera Preset Assigment

The CamControl2 system works together with the DCen central unit. The seat numbers stored in the DCen are used by the software and the camera settings are adjusted accordingly. The system registers when the microphones are switched on or off and switches to the corresponding camera settings.

Under "Camera Preset Assigment" you define the camera positions for the individual seats.
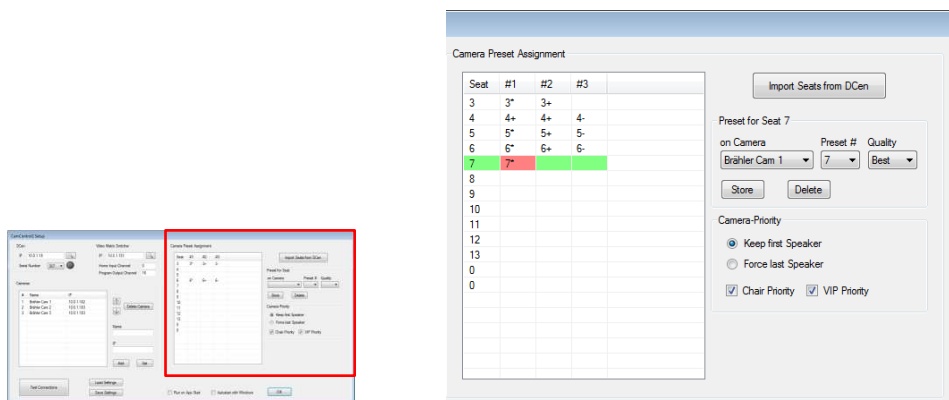
Example application

In the run-up to a conference, each camera must be aligned with each seat and stored accordingly. This is the only way to ensure optimum use. It makes sense to assign the corresponding number of the camera position to the respective seat number - this makes later CamControl2 assignment easier.

Example: Seat 5 receives camera position 5 for all connected cameras - seat 6 receives camera position 6 etc.

Click the "Import Seats from DCen" button in the "Camera Preset Assignment" field. The system automatically adopts all seat numbers that are stored in the DCen. Select the seat to be edited by clicking on it. Use the "on Camera" field to select the desired camera.
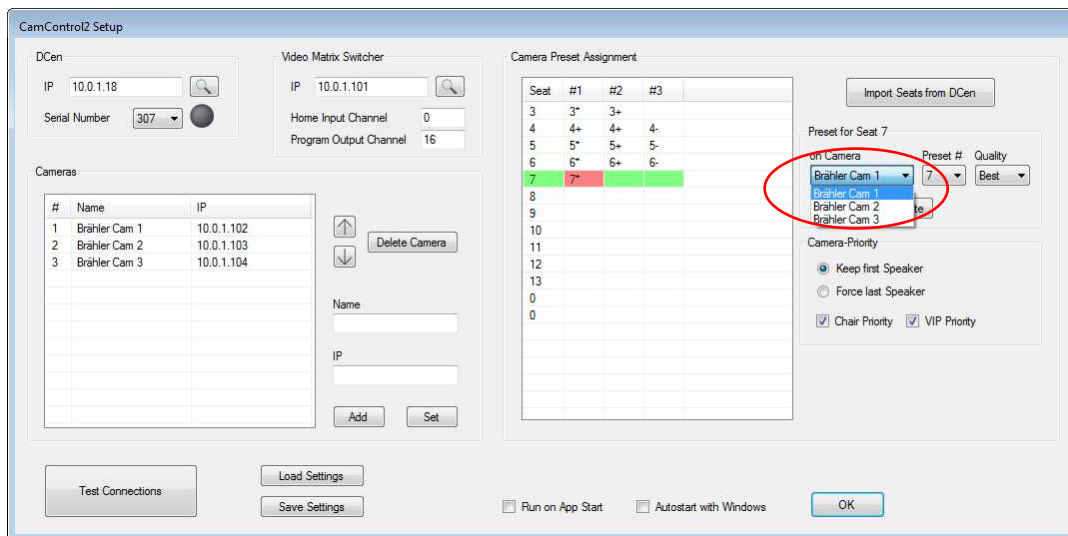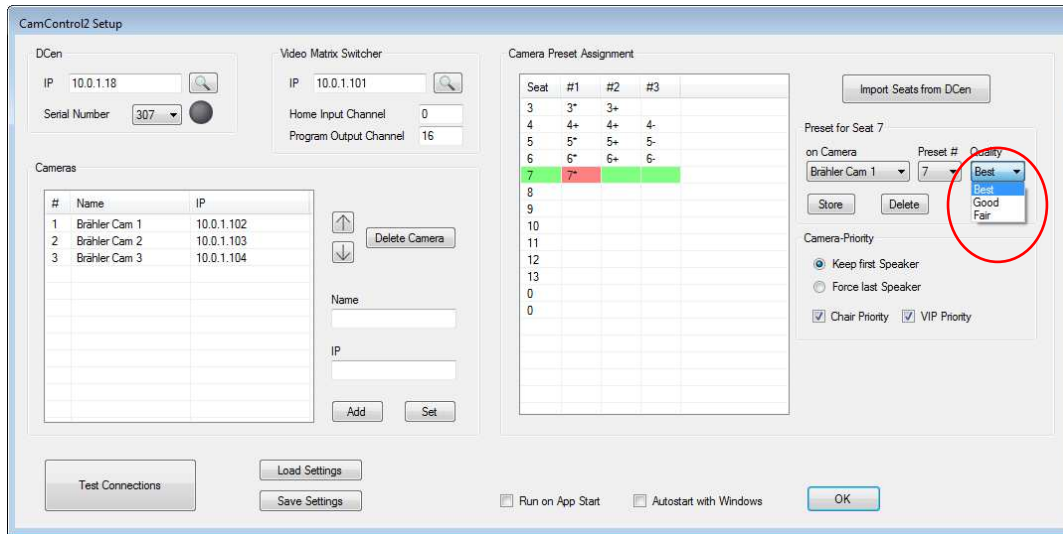

Example application

The next step is to select the camera position in relation to the selected seat (this process is facilitated by appropriate numbering). To do this, click on "Preset#" and the corresponding camera position.
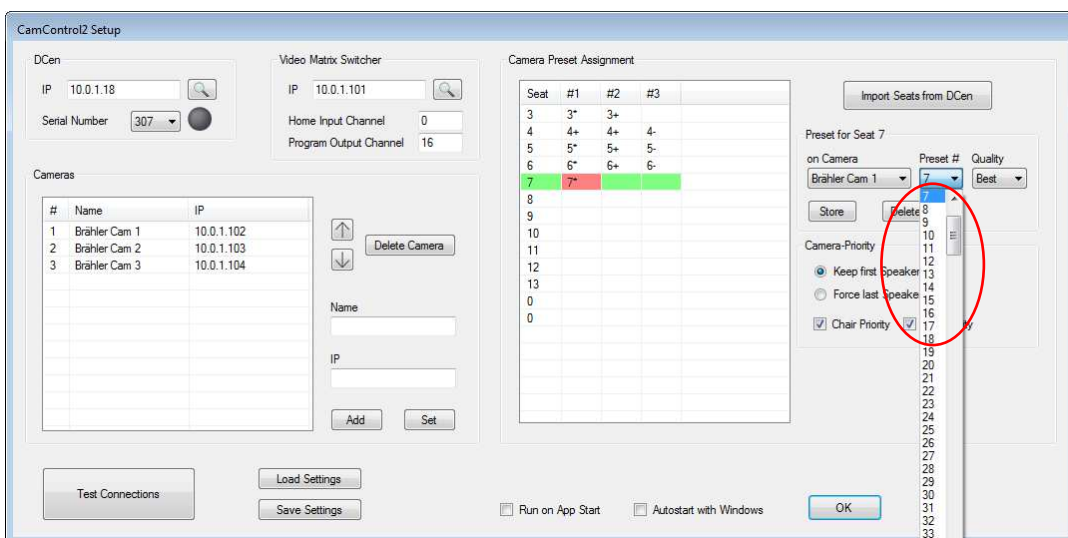
Example application

You can also define the quality of the camera image - i.e. how well the speaker is taken into the picture by this camera. To do this, click on one of the three options mentioned under "Quality".

The system always selects the best possible picture during transmission. This means that the system checks whether the camera with the best setting is available and controls it accordingly. If the camera is not available, the system selects the best one from the other available cameras.
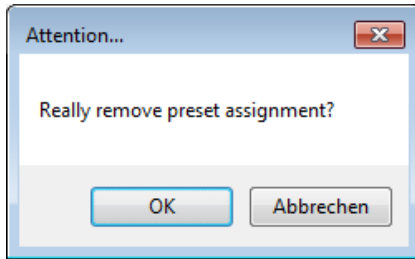
Settings:

Best   The best setting variant - the system prefers this camera setting.

Good   If the "Best" setting is already blocked, the system uses a camera with the "Good" setting.

Fair   If all cameras with the settings "Best" and "Good" are already occupied, the last option is a camera with the setting "Fair".

With the button "Store" you save your settings. Changes are possible at any time. To do this, click on the desired field, change your entry and save it with "Store".
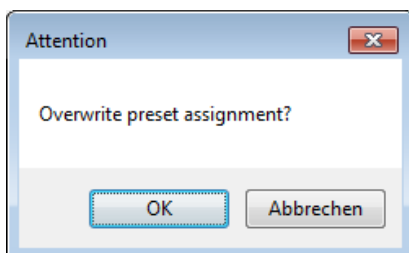
To avoid unintentional overwriting of settings, an extra window is opened. You must also confirm the change. Check your entries. Press "okay" to confirm the change - the previous entry is overwritten. With "Cancel" you return to the menu without making any changes.

Use the "Delete" button to delete the settings. Click on the desired field and then click on "Delete".

If you want to delete entries, this is also requested in advance in a separate window. Press "OK" to delete your setting - "Cancel" to return to the menu without saving.

The "Delete" function only deletes the selected assignment (marked red). Each camera position must be deleted separately for each seat number.

It is not possible to change (delete, edit) the seats using the CamControl2 software - changes to the seats must be made using the DCen central unit or appropriate software (DCen ConfigTool, DCen Weaver etc.).

Camera Priority

In the "Camera Priority" field, you specify the mode after which the camera live image changes. You have two options: "Keep first Speaker" and "Force last Speaker".
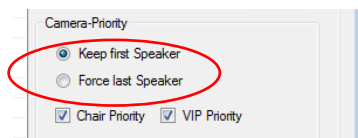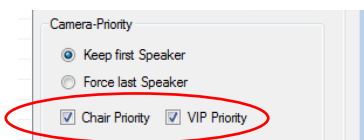
Example application

With the "Keep first Speaker" setting, the system continues to transmit the camera image of the first speaker when another speaker speaks. Only when this person turns off his or her microphone does the system switch to the next speaker.

If "Force last Speaker" is set, the camera image switches directly to the last speaker added.
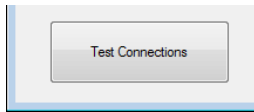
Priority

Example application

Click on the "Chair Priority" or "VIP Priority" field to assign special priority to the corresponding speakers. A check mark symbolises that the function is activated.

If priority is enabled, the camera automatically switches to a Chairman/VIP as soon as the latter switches on his microphone.

test connection

In the lower area of the "Setting" window you have the possibility to test all connections between your software and your hardware. Click on the "Test Connections" button. The system checks all connections (DCen, video switchers, cameras). Possible errors are displayed as follows:

If no DCs are connected or active, this is indicated as follows. Check the connection.
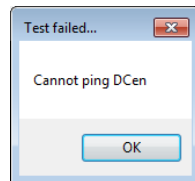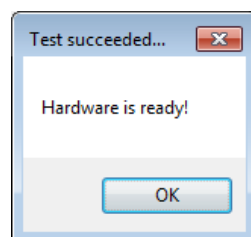
If the connection between the system and the cameras is faulty, this is indicated as follows. Check the connection.
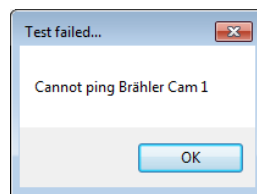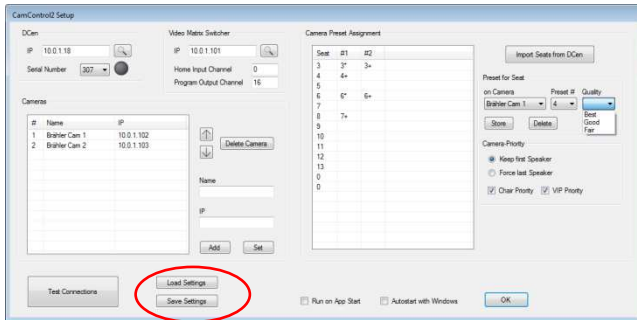
Example application

If DCen, cameras and video switchers are correctly connected and ready for operation, you will be notified as follows.

Saving settings

Example application

The system saves your entries automatically. The next time you open it, your last entries are called up. Nevertheless, it is useful to save settings for individual conferences.

To save a conference click on the button "Save Settings" in the lower part of the window. A window opens in which you can save your settings on your computer as usual. Use the "Load Settings" button to load a saved conference back into the system. (A separate window will open where you can access files on your computer)

Program start

Once you have made all settings, the program can be started. Click the "OK" button to do this. The window is closing. Then click on "Options" again in the control window.
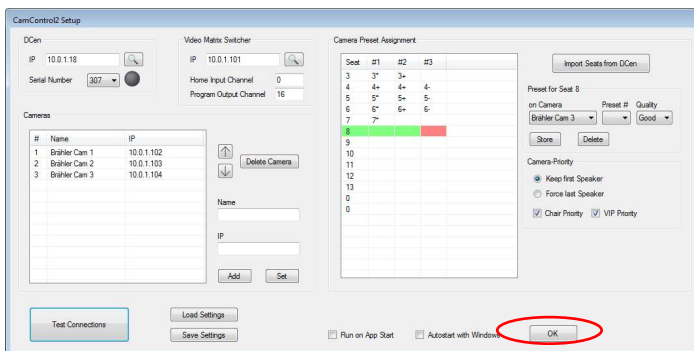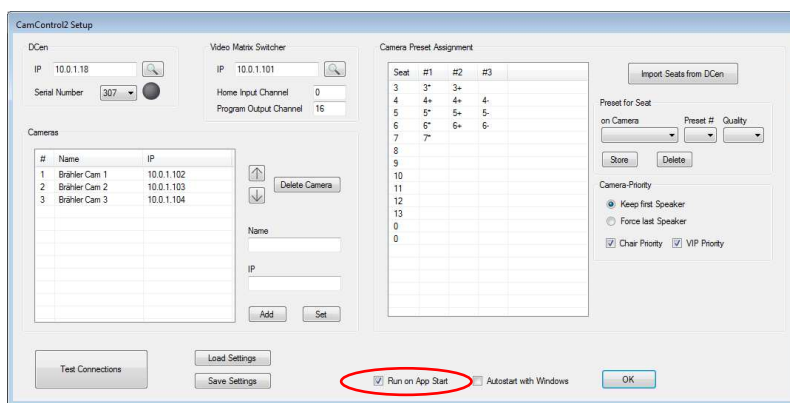

Example application
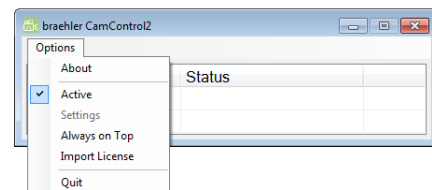
In the window that opens, click on the "Active" function. The program starts (a check mark symbolises the active state). Changes are not currently possible. To make changes, the program must first be deactivated and the "Settings" menu must be opened again.

Automatic program start

For smooth operation, the CamControl2 program can automatically switch to active status as soon as the program is started. You have two options: App-Start and Windows-Start.
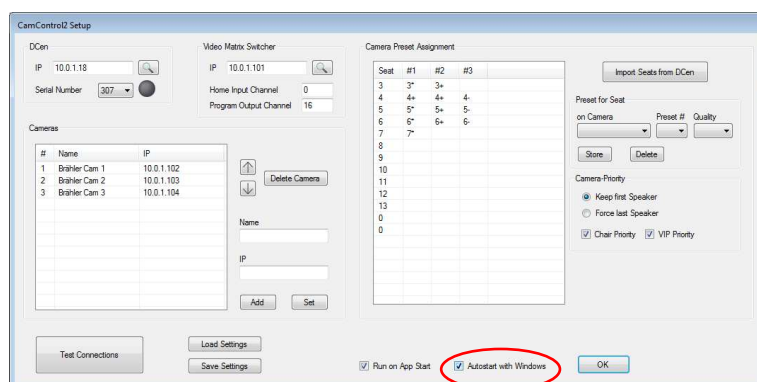
Run on App Start

Example application

Check the box next to "Run on App Start". The program is now automatically set to "Active" by clicking "OK". It is not necessary to click on the "Active" field under "Options". Active" is also automatically activated when the program is restarted.
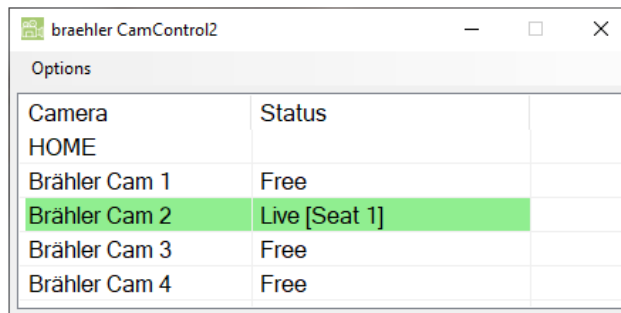
Autostart with Windows

Example application

By clicking on the "Autostart with Windows" function, the program starts automatically when your computer boots up. It is not necessary to click on the "Active" function under "Options".

Status

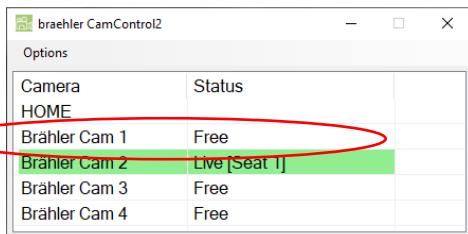The status of the individual cameras is displayed in the control window at all times.

	braehler CamControl2	— □ ✕
Options		
Camera	**Status**	
HOME		
Brähler Cam 1	Free	
Brähler Cam 2	Live [Seat 1]	
Brähler Cam 3	Free	
Brähler Cam 4	Free	

Example application

Under "Camera" you will find a list of the individual cameras - under "Status" you will see the respective status of the camera.
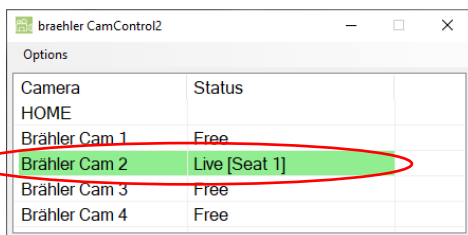
Free

	braehler CamControl2	— □ ✕
Options		
Camera	Status	
HOME		
Brähler Cam 1	Free	
Brähler Cam 2	Live [Seat 1]	
Brähler Cam 3	Free	
Brähler Cam 4	Free	

Example application

Free means that the camera is currently free and can be used at any time to take the next speaker into the picture.
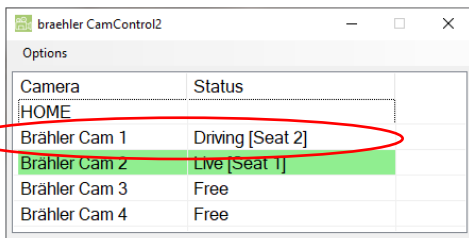
Live

	braehler CamControl2	— □ ✕
Options		
Camera	Status	
HOME		
Brähler Cam 1	Free	
Brähler Cam 2	Live [Seat 1]	
Brähler Cam 3	Free	
Brähler Cam 4	Free	

Example application

Live means that the camera is currently focused on a speaker and recording it. The image is sent as a live image to a monitor/screen. The seat number currently being recorded is shown in brackets [Seat ...].
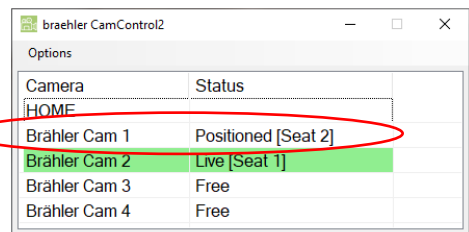
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Driving

Example application

With "Driving" you can see that the corresponding camera is currently repositioning itself. The seat to which the camera will be repositioned is shown in brackets [Seat ...].

Positioned

Example application

Positioned" indicates that the camera is pointed at a specific seat [Seat ...] because the microphone is on. However, due to the priority control, another camera is switched live.

Home

If the system uses the "Home Input Channel" (e.g. because all microphones are switched off), the "Home" line is highlighted in green to indicate the live status.