

TrueConf Weathervane User guide



Version 4.2

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1. Introduction

1.1. The Functions of TrueConf Weathervane

TrueConf Weathervane, our software for automatic speaker tracking and video stream switching, is designed to:

- Capture a video stream from a camera that is best positioned for tracking an active speaker during video conferences;
- Automate the interactions of multiple video sources.

TrueConf Weathervane is intended to be used with TrueConf Room 3.1+ (to switch between its output images) and/or a matrix switcher. Camera and switcher positions to choose between are called **presets**.

When presets are changed, TrueConf Weathervane can be controlled by the signals (turning microphones on/off) from a digital discussion system and/or command parameters sent when the application is run. In addition, you can manually direct switching through the application user interface.

1.2. TrueConf Weathervane Features

- TrueConf Weathervane is compatible with popular discussion systems by various manufacturers.
- Compatible with USB cameras, including PTZ cameras supporting VISCA and Pelco-D protocols.
- Integration with TrueConf Room PC-based room software (HTTP connection with TrueConf Room API).
- Automatic speaker tracking.
- Instant switching between multiple cameras.
- Support for up to 10 PTZ or web cameras.
- Preset camera positions (pan, tilt, zoom).
- Unlimited number of presets.
- Switch presets via command prompt parameters.
- Manual preset switching.
- Integration with the CleverMic VWC 22 matrix switcher (in Pro version).

1.3. Supported Equipment

TrueConf Weathervane is compatible with the following digital discussion systems:

- BKR;
- Sennheiser ADN;
- Beyerdynamic ORBIS;
- Beyerdynamic QUINTA;
- SHURE;
- BOSCH CCS 1000D;
- BOSCH DICENTIS.

You can find setup guides for some of these systems below:

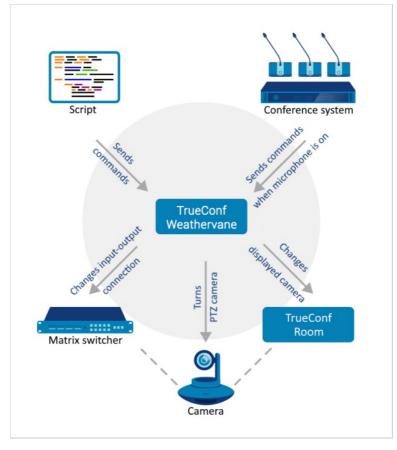
- SENNHEISER ADN;
- BKR;
- Beyerdynamic;
- BOSCH CCS 1000D.

Only CleverMic VWC 22 can be used as a matrix switcher.

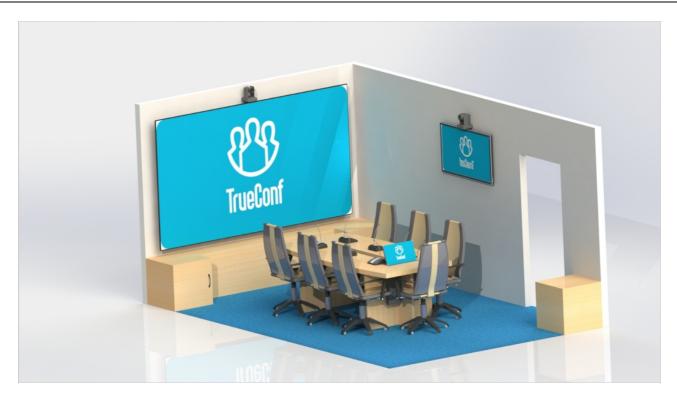
Check out the list of currently supported equipment as well as some purchasing tips on official TrueConf website.

1.4. How TrueConf Weathervane Works

Control modes and equipment handled by TrueConf Weathervane can be combined in any way you like.



The following picture gives an example of how a meeting room equipped with PTZ cameras and TrueConf Room connected via TrueConf Weathervane may look like.



2. Free and Pro Versions

Some features of TrueConf Weathervane are available free of charge (TrueConf Weathervane Free), while others are accessible only if you activate TrueConf Weathervane Pro.

2.1. Why Do You Need to Get Pro Version

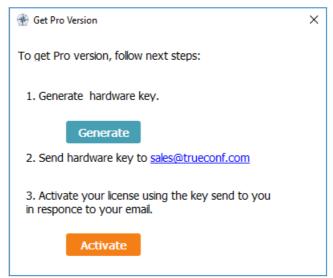
TrueConf Weathervane Pro allows you to control a matrix switcher (you can set its configuration as part of a preset).

2.2. How to Get Pro Version

You do not have to download any additional files to activate Pro version.

When the application is run for the first time, it is available as a free version. To switch to Pro version, you only need to receive and activate a license key within the application.

In the upper menu, select **Help** \rightarrow **Get Pro Version** and follow the prompts described in the pop-up window:



1. Generate a hardware key and save this file on your computer (click **Generate**). A hardware key is a checksum of your computer and/or virtual machine system parameters (similar to a hardware key for TrueConf Server.

The license key generated at the next stage depends a hardware key i.e. you can't use it on a different virtual machine or after changing virtual machine parameters.

2. Send your key to TrueConf sales department (sales@trueconf.com) with an activation request. Once the activation is complete, you will receive the file that contains a license key.

3. Click on the Activate button and select the file sent by our sales department.

3. How to Use TrueConf Weathervane

The use of application goes through three stages:

- **Preliminary configuration.** Set up the connection with the digital discussion system and TrueConf Room and make general settings
- **Presets configuration.** Select cameras, matrix switchers, and their configurations that will be switched between.
- Active usage. Switch between presets in response to various events.

3.1. Preliminary Settings

In the main window, select **Tools** \rightarrow **Settings** which opens the settings window.

Configuration	×
Main settings	
Presets quantity 5	
Authorization in TrueConf Terminal	
Password	Check
Confirm password	
Conference system	
 BKR Sennheiser ADN Beyerdynamic ORBIS Beyerdynamic QUINTA SHURE 	O BOSCH CCS 1000d O BOSCH DICENTIS
BKR Settings	
Serial Port (Use	Pelco-D protocol)
Save	Cancel

Enter field values:

- Presets quantity is the number of presets to switch between.
 - For your information

When a conference system is used, the number of presets should be one point greater than the number of microphones because the first preset is used when none of microphones is on, e.g. when you need to capture a general view or display a screensaver.

- **Password** and **Confirm password** are the fields where you enter the password to log into TrueConf Room as admin (if it is supposed to be used);
- **Conference system** is the menu for selecting the digital discussion system that will be used (if it is supposed to be used).

The last settings block contains data for connecting to a digital discussion system. Depending on the model you've selected, you will have to fill certain fields. The list of such fields is provided below:

• **BKR**: Serial Port;

• DKK. Serial Port	L,
	BKR Settings
	bill becange
	Serial Port (Use Pelco-D protocol)
• Sennheiser AD	N· ID·
• Semineiser AD	
	SENNHEISER Settings
	IP address
• December of the	ODDIC: Carriel a ante
 Beyerdynamic 	ORBIS: Serial port;
	Beyerdynamic ORBIS Settings
	Carial Bart
	Serial Port
• Beyerdynamic	QUINTA : IP или Serial port;
	Beyerdynamic QUINTA Settings
	Develoynamic QuiviA Settings
	Use IP address :
	O Use Serial Port :
	O Use Serial Port :
• SHURE: IP;	
,	
	SHURE Settings
	IP address
	DOOD : IP, User name and Password.
	BOSCH CCS-1000 Settings
	IP address User
	Check Password
 BOSCH DICEN 	TIS : User name and Password.
Γ	BOSCH DICENTIS Settings
	User
	Password
	Passworu

3.2. Table of Presets

The application main window features a table of presets to switch between.

Each preset includes:

*

- Matrix switcher and its configuration (Matrix)
- Camera that will be controlled or broadcast to TrueConf Room (Camera)

We guarantee that the system runs flawlessly with up to 10 cameras being used simultaneously.

- PTZ camera connection method (PTZ Control)
- PTZ camera position (Position).

	TrueCon	f Weathervane	Free							_		×
File	Edit	View Tools	Help									
		Start		🗹 Trackir	ng prese	ets		L	Get T	rueConf Se	erver Fr	ee
	Preset	Matrix				Came	ra	PTZ Con	trol	Position		
	#0	-				Integrated Camera	~	Usb	~	0/0/10		÷
	#1	-				OBS-Camera	~	Usb	\sim	0/0/0		ŵ
	#2	-				SplitCam Video Driv	er 🗸 🗸	Usb	\sim	0/0/0		÷
	#3	-					~	-	\sim	0/0/0		(<u></u>)
	#4	-					~	-	\sim	0/0/0		: <u></u> ;}
	s	start preset	t mode									

All fields are optional and compatible with each other, i.e. you can combine them in any way you like. For example:

- If you don't select a PTZ camera in the **Camera** field, there is no need to fill such fields as **PTZ Control** and **Position**. The app will function correctly with a selected camera.
- If you select both a camera and a matrix switcher in a preset, both configurations will be applied when you switch to this preset—the camera you've selected will be displayed on the TrueConf Room screen while matrix switcher inputs and outputs will be adjusted according to the selected position.
- If you select a matrix switcher configuration in a preset and a PTZ camera connected to one of switcher inputs, then both configurations will be applied when you switch to this preset. The selected PTZ camera will be positioned according to the preset while matrix switcher inputs and outputs will be adjusted according to the selected position.

If the application is closed down correctly, any preset configurations that have been selected will be saved and restored when you run the app again.

3.3. Configuring Presets

3.3.1. How to Select the Positions of PTZ Cameras

When you click on the small crossed arrows icon, the PTZ camera control window opens. Here you can set the camera rotation, tilt, and zoom coordinates.

TrueConf Weathervane Free		- 🗆 X
Eile Edit View Iools Help Start Tracking prese	ts	Get TrueConf Server Free
Preset Matrix # 0 -		PTZ Control Position
#1 -	Cyt-FX4	Usb ~ 0/0/0 (*)
# 3 · · · · · · · · · · · · · · · · · ·		Cyt-FX4 ×
# 4 · • Start preset mode		ASSIGN CURRENT POSITION
		ol Pan
		- + 0 Zoom

Pan, Tilt A Zoom fields will be set according to the current position of a camera.

3.3.2. Matrix Switcher Operation

To select a matrix switcher for a preset, click on button in the right side of the desired **Matrix**. The switcher configuration window will pop up:

æ	Matrix Settin	gs					×
	Mode	Mat	rix	W	/all	1	
	Matrix	_	_	_	_		
	Output 1	1	2	3	4		
	Output 2	1	2	3	4		
	Output 3	1	2	3	4		
	Output 4	1	2	3	4		
	Wall						
		1	2	3	4	3	
	Power	1	2	3	4	4	
	COM Port	-		\sim	5		
		ОК			Cance	el	

1. Select an output type of a matrix switcher

- **Matrix** is needed for the simultaneous use of several outputs with an arbitrary permutation of input streams
- $\circ~$ Wall is needed to display one of inputs on the entire video wall
- 2. Set the connection between inputs and outputs (available only in **Matrix** mode). Outputs are arranged in rows while inputs are arranged in columns. Our example shows that input #1 does not correspond to any output, and input #4 extends to two outputs.
- 3. Select an input to be displayed to your video wall. (For **Wall** mode only)
- 4. Select active switcher outputs.

When you select **Wall** mode, it is advisable to keep all outputs on.

5. Switcher connection port (which lets the app detect a switcher). This port should be selected for each preset that involves the use of a switcher.

3.3.3. Preset Mode

When you are working with digital discussion systems, setup processes can be made even more automated thanks to **Preset mode**.

Proceed as follows:

- In the settings (Tools → Settings, see above for details), select the preferred number of camera positions (number of microphones + 1) and connect to a conference system. If you are going to use TrueConf Room, connect it as well.
- 2. Select cameras corresponding to each microphone (remember that microphones are numbered from one, while preset #0 is meant for the case when all microphones are off). If you are using a matrix switcher without TrueConf Room at this stage, you also need to select switcher configurations for each preset.
- 3. Click on the **Start preset mode** button (it is at the bottom of the screen) and wait for the application to connect with a digital discussion system.
- 4. Turn the first microphone on and TrueConf Weathervane will highlight a row corresponding to this microphone in the table.
- 5. If a PTZ camera is selected for this microphone, set it to a desired position.
- 6. Turn off your microphone. When it is done, data about the current position of the camera will be automatically saved for a selected preset.
- 7. Repeat steps 4, 5, and 6 for each microphone.
- 8. Once you've set all the presets, click Stop preset mode.

3.4. Getting Started

1. Launch TrueConf Weathervane.

If you use TrueConf Room and PTZ cameras controlled under VISCA protocol, it is crucial that TrueConf Weathervane be launched before TrueConf Room.

- 2. Launch TrueConf Room and/or a matrix switcher.
- 3. Connect a digital discussion system if you are going to use it.
- 4. Configure presets following the previous examples.

Further steps may be different, depending on which control mode you would like to use.

This section will describe various control modes. They are compatible with each other, e.g. camera switching can be initiated by turning on/off the microphone of a digital discussion system, but the camera can also be switched by a timer through its own program.

3.4.1. Switch Cameras Manually

When you click on a preset in TrueConf Weathervane main menu, the application will switch to a selected preset. You can use this method to test connection of cameras and system general view as well as to make one-time changes in automatic operation.

3.4.2. Conference System Integration

Once you've connected to a conference system, the **Start** button is activated in the upper left corner of TrueConf Weathervane main menu. When you click on it, TrueConf Weathervane switches to conference system tracking mode.

When you turn on (activate) any microphones in this mode, the application will switch to a corresponding preset.

Check the box Tracking preset if you want to highlight an active preset.

3.4.3. Program control

TrueConf Weathervane supports switching presets by changing command line parameters. The preset number can be determined through -p or -preset parameters (these parameters do similar tasks). For example, the command

```
WeatherVane.exe -preset 1
```

activates preset #1.

Thanks to this feature, you can configure automated presets switching using a third-party program or a script.

4. Connecting BKR conference system to Weathervane

4.1. BKR discussion system description

BKR discussion system is a set of audio equipment that consists of the control unit and microphone consoles.

Conference system control unit is designed for discussion system setup and conference control. See WCS020 control unit on the figure below:



4.2. Connection

4.2.1. How to connect BKR control unit

This guide describes how to connect BKR control unit to the computer with TrueConf Weathervane software installed.

First we should organize a data transmission channel from BKR control unit to the computer that transmits information about active microphones. Data transmission channel allows you to activate necessary cameras and set their positions in order to ensure seamless videoconferencing.

BKR control unit transmits necessary information through Rs485 interface. No.3 port is used for data transmission (see the figure below). You are free to use plug pins No. 1 or 2.



Rs-485 - USB adapter (see the figure below) can be enter to input information to the computer:



4.2.2. BKR discussion system setup

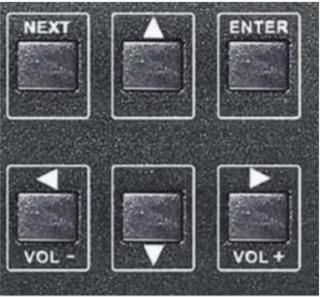
- To ensure microphone interaction with the control unit, set the same **Link-IP** and **Link-ID** values for the microphone and control unit. This will allow you to use several control units simultaneously.
- Unique ID **Unit-ID** is set for each microphone corresponding to the preset number. BKR control unit will pass this ID to the computer after the microphone has been activated.
- Control unit microphone has two modes:
 - StandBy (the microphone is not connected to the control unit);
 - Connected (the microphone is connected and transmits sound to the control unit).

Please note that you can set up microphones in **StandBy** only.

Upon pressing On button the microphone connects to the central control unit. If connection is successful the microphone goes into **Connected** mode.

To set up the microphone, first activate one microphone and then turn on BKR control unit. In this case the microphone will go to **StandBy** mode and will be ready for setup.

• The microphone can be set up from the BKR control unit menu. Press**ENTER** twice, and information will be transmitted to the microphone in **StandBy** mode.



4.2.3. Order of Configuration

4.2.3.1. How to set microphone Link-IP and Link-ID

For convenience we offer to set all values to **1** for the only control unit.

- 1. Turn the microphone on (check the battery first).
- 2. Turn on central control unit.
- 3. On the central control unit:
 - Press NEXT twice to open SYSTEM menu
 - Press ENTER
 - Press UP and DOWN to set Link-IP
 - Press **RIGHT**
 - Press UP and DOWN to set Link-ID
 - Press ENTER twice
 - Make sure that set values are displayed in the upper part of the microphone screen (parameters

values C-IP and C-ID)

• Turn off the microphone.

4.2.3.2. How to set up microphone unique number (UNIT-ID)

Unique number shall be set for each microphone (starting with **1** for the first microphone, **2** for the second one, etc.).

- 1. Turn on the microphone.
- 2. Turn on central control unit.
- 3. On the central control unit:
 - Press NEXT three times to choose UNIT SET menu;
 - Press ENTER;
 - Press UP and DOWN to choose necessary UNIT-ID value;
 - Press ENTER twice;
 - Make sure that set values show up in the upper part of the microphone screen (**U-ID** parameter value)
 - Turn off the microphone.

Then turn the microphone on and make sure it is connected to the BKR system.

When the microphone is connected, **DeleGate** message will be displayed on the screen, while red light will be activated on the corresponding channel of the BKR control unit.

4.2.3.3. How to set up interface for output data

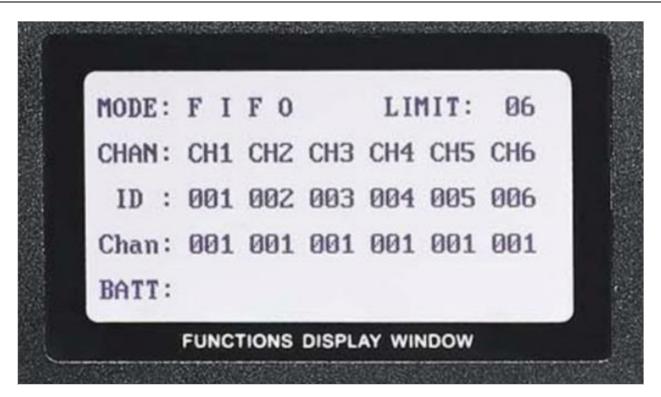
Pelco-D protocol should be set up for successful system operation.

- 1. Turn on the control unit.
- 2. Press **NEXT** four times to choose **PTZ SET** menu.
- 3. Press ENTER.
- 4. Press UP and DOWN and choose Pelco-D item.
- 5. Press ENTER twice.

4.3. Checking the settings

4.3.1. Microphone operation check

- 1. Turn on the control unit.
- 2. Turn on the microphone. The number of connected microphone will appear on the screen of the control unit, while the red light will be activated.



4.3.2. Checking external interface operation

In order to check RS-485 operation, BKR output unit should be connected to PC using USB<->COM adapter.

Any software for data reading from COM port shall be installed on PC. We recommend *Terminal 1.9b*.

Checking external interface operation:

- 1. Connect USB<->COM adapter to PC USB port.
- Proceed to Device Manager → Ports(COM & LPT) define the number of COM port that corresponds to the adapter.
- 3. Launch BKR unit.
- 4. Launch the *Terminal* software.
- 5. Choose the necessary Com port in the *Terminal* program:
 - make sure that port parameters are correct (BaudRate: 9600, Data bits: 8, Parity: None, Stop bits: 1); set **HEX** data display mode;

press Connect.

- 6. Turn on the BKR microphones. Data string received from the BKR control unit shall appear in the *Terminal* software window:
- FF XX 00 07 00 YY ZZ (7-8 bytes, first byte FF).
- XX camera number (default 00);
- YY preset number (parameter Unit-ID set for the camera);
- ZZ check sum.

Example of data line: FF 00 00 07 00 03 0A (where **Unit-ID** = 3).

If accepted data differ from the required format, make sure that data format **Pelco-D** is set in the BKR control unit. If data format is set correctly invalid data may be caused by improper connected data wires that connect BKR control unit and USB<->COM adapter. In this case, switch the cables.

5. Connecting Bosch conference system to Weathervane

5.1. Introduction

Application TrueConf Weathervane 4 supports an integration with BOSCH CCS 1000 D VCS and permits the auto-aiming PTZ-camera on speaker during the video conferencing, held by this VCS.

Read our guide to learn how to connect BOSCH CCS 1000 D to your computer and setup interaction with TrueConf Weathervane.

To learn more about VCS setting details, you may ask the manufacturer

5.2. VCS structure

BOSCH CCS 1000 D VCS consists of control unit and microphone remotes. Also, it has web interface for setting it via browser after connecting.



Control unit is the main device of VCS. You can connect to an Ethernet network, control the microphone settings and the progress of the conference with the help of this unit.



5.3. Connection BOSCH CCS 1000 D to PC

Connect BOSCH CCS 1000 D to Ethernet network via input on the back panel of control unit. Connect the PC which will be used for controlling the VCS to the same network.

5.3.1. System detection by PC

Since a PC and BOSCH are connected to the network separately, in order to start, it needs to detect the IP address for connection to BOSCH by PC - so to speak, "find" the VCS in the network.

There are several ways to initiate the search.

Way 1

Use BOSCH DNS-SD driver. It is available on the official BOSCH website

Find the lines started with **Windows PC DNS-SD driver to discover CCSD-CU on hostname**by following the link above and install the suitable to your OS version (**x32** или **x64**).

After the installation, open console (press Win+R and runcmd) and enter the command:

ping ccs1000d.local

The information about system IP address appears below.

Way 2

Use Advanced IP Scanner ∟ .

Download the software, launch scanning and find the **BOSCH Security System BV**among devices. The right IP will appear in **IP** column.

Way 3

Use traffic scanner software (e.g., Wireshark ^[]) and find the IP by MAC address.

MAC address of the VCS is mentioned on the back panel of control unit.

If you failed with previous methods, please, try to connect the VCS to the PC directly with the help of Ethernet-cable.

5.3.2. Setting the video conference system via browser

After IP address identification, you can open VCS control panel. Just enter the IP address into address field of browser.

Authorization page will appear. Enter **admin** login, that is set by default. Leave empty the password entry field.

Bosch Conference App ×						θ	-		
O По Не защищено 192	/#/login							☆	
ервисы 🔱 WebHome < Projects	TerminalRemoteAPI <	QtWorkSpaceSetup	🖾 Bugzilla	Main Page		10	📒 Др	утие зак	18,0
CS 1000 D	igital I	Discussi	on S	Syste	m		BC	SCI	ł
									-
		_	_	_					
Place lavia	_	-	-	-					
Please login					ī	ī	ī		
Please login Username:		Langu	age:			i			
-		Langu Engl	-						
Username:			-					•	

After authorization, the main menu appears . You can find the needed settings section here:

- Prepare discussion for setting the conference parameters;
- System settings for changing the IP address;
- etc.

CCS 1000 D Digital Discu	ussion System
Anage discussion	O Power
Prepare discussion	Logging
OO Manage recorder	System info
System settings	Logout

5.4. Connection to TrueConf Weathervane

In setting window TrueConf Weathervane (menu item **Tools** \rightarrow **Settings** in section **Conference system** choose **BOSCH CCS 1000**.

Below, the BOSCH parameters entry fields appear - the IP address of VCS and authorization data (in case you didn't change the login an the password during the web setting, you need to enter **admin** login and leave empty the password entry field).

Use **Check** button under the IP entry field to check the connectivity with the VCS.

BOSCH CCS-10	00 Settings		
IP address	199.101.100.231	User	admin
✓ Success	Check	Password	

6. Connecting Bosch conference system to Weathervane

6.1. About Beyerdynamic conference systems

Beyerdynamic conference system is a set of audio equipment that consists of a central control unit and microphone units.

Beyerdynamic Orbis is a wired microphone system. The RS-232 interface is used to connect to a computer.



Beyerdynamic Quinta is a wireless microphone system. To connect to a computer, you can use both RS-232 interface and Ethernet connection.



Central control unit is the primary device of the conference system, which is designed to configure the system and manage the conference.

Beyerdynamic Orbis control unit:



Beyerdynamic Quinta control unit:



6.2. Connecting and setting

6.2.1. Connecting the central control unit

Let's take a look at the required steps to connect the Beyerdynamic control unit to TrueConf Weathervane.

First of all, you need to create a channel for data transfer from the control unit to the computer which transmits information about active microphones. This allows you to activate necessary cameras and set their positions in order to ensure seamless video meetings.

The connection is established with a standard cable to a special connector on the back of the central unit. When using the RS-232 interface, connection to the computer is performed via special Serial port \rightarrow USB adapter.

6.2.2. Setting the Beyerdynamic Orbis conference system

This conference system does not require special adjustment. It is ready for use once it is switched on.

6.2.3. Setting the Beyerdynamic Quinta conference system

This wireless microphone system does not always initially establish connection with wireless microphone units. The reason is that the central unit can be configured for different types of rooms (**Room Combining**), which are marked as **A**, **B**, **C**, and **D**. If the central unit settings differ from those in the microphone units, the connection between the central control unit and the microphone unit will not be established.

6.2.3.1. Checking the Microphone

The procedure for checking and configuring microphones is as follows:

- 1. Turn on the power of the central unit using the tumbler on the rear panel.
- 2. Take a microphone unit and press the activation button
- 3. Make sure that the green LED on the back of the microphone is active, indicating that the battery is charged. If the lights are red, the microphone unit battery needs to be charged.
- 4. After pressing the activation button, it will blink red first (attempt to establish connection with the

central control unit) and then white (connection established successfully).

- 5. If the activation button blinks white, turn off the microphone by pressing and holding the activation button and proceed to the next microphone (step 2).
- 6. If the activation button blinks red anyway (connection to the central unit cannot be established), change the settings of the central unit Room Combining required for the connection (step 7).
- 7. Press and hold the volume knob on the central unit for 5 seconds. The main menu will be displayed on the central unit screen.
- 8. Turn the knob to select **Room Combining** and press it. When the mode selection submenu appears, press the knob again. You will see a menu for selecting **A**, **B**, **C**, and **D** room types. By rotating the knob, you can change the current selection, which is highlighted in brackets. By pressing the knob you can activate or deactivate the current position. The active positions are indicated by a check mark:

Lasen Ary St. Long Ok

- 9. To deactivate current active positions, select the desired position by rotating the knob and deactivate it by pressing the knob. The position will be unchecked.
- 10. Activate and deactivate each of the possible positions one by one. When the position is active, pay attention to the microphone unit. If its activation button blinks red, the selected position in the center unit **Room Combining** does not fit in with the microphone unit settings. Blinking white button indicates that the connection has been established and the correct setting has been found. If the button stops blinking at all, the microphone unit has been turned off by timeout without being able to establish connection with the central unit. It should be switched on again by pressing the activation button. Please note that microphones can establish connection in several **Room Combining** modes. Therefore, you should check each one individually and set the possible **Room Combining** settings for each microphone.
- 11. Check all microphones in the same manner by going to step 2.
- 12. To complete the central unit configuration, select positions **A**, **B**, **C** and **D** in **Room Combining** where all microphones can be connected to the central unit.

6.2.3.2. Configuring the microphone modules

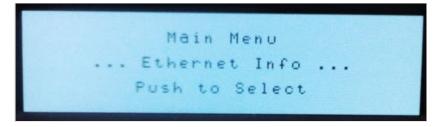
If during the previous **Room Combining** settings it turns out that it is impossible to select a single position that would fit all microphones, you need to change the **Room Combining** settings stored in the microphone modules. This can be done as follows:

- 1. Press and hold the volume knob on the central unit for 5 seconds. The main menu will be displayed on the central unit screen.
- Turn the knob to select **Room Combining** and press it. The mode selection submenu will be displayed. By turning the knob, select the module configuration mode and then press the knob again. You will see a configuration menu that allows you to select **Room Combining** settings and send them to the microphone unit.
- 3. Select the required position and send the settings to the microphone unit.

6.2.3.3. How to identify IP address

To access the central control unit of the Beyerdynamic Quinta via Ethernet, you need to identify the IP address assigned to the device. To do this:

- 1. Press and hold the volume knob on the central unit for 5 seconds. The main menu will be displayed on the central unit screen.
- 2. Turn the knob to select **Ethernet Info** and press the knob. You will see information with parameters automatically assigned to the device:



6.3. Setting TrueConf Weathervane software

To configure the TrueConf Weathervane software, go to **Tools** \rightarrow **Settings** menu and select the required conference system in the **Conference system** section.

For the Beyerdynamic Orbis conference system, please specify the Serial port through which data will be exchanged with the device in the settings window:

æ	Configuration		?	\times
1	lain settings			
	Presets quantity	4		
-/	uthorization in Terminal			
	Password •••	Check		
	Confirm password			
	Conference system			
	 BKR Sennheiser ADN 			
	 Beyerdynamic ORBIS Beyerdynamic QUINTA 			
	0 / / /			
E	eyerdynamic ORBIS Settings			
s	erial Port COM1 -			
	S	ave Cancel		

When selecting a Beyerdynamic Quinta conference system, please specify how you want to connect the device to your computer:

- via Serial port: in this case select the appropriate port.
- via Ethernet: enter the IP address assigned to the central unit of the conference system.

Here Configuration				?		×
Main settings						
Presets quantity	4					
-Authorization in Terminal						
Password	•••		Check			
Confirm password	•••					
Conference system BKR Sennheiser ADN Beyerdynamic ORBIS New Provide the system Beyerdynamic QUIN						
-Beyerdynamic QUINTA Se	tings				_	
Use IP address : Use Serial Port :	COM	192.168.6 3	3202	🌻 Checkin	g IP	
	Save	Can	icel			

If you have entered an IP address, the program will check the connection to it and display the corresponding message:

• in case the check is successful:

•	if there's a	connection	error:

192.168.63201	✓ Success
192.168.63202	× Invalid IP

After you have finished entering the required values, save them by clicking the **Save** button in the settings window.

7. Connecting Sennheiser conference system to Weathervane

7.1. About SENNHEISER ADN CU1 conference system

SENNHEISER ADN CU1 is a audio equipment kit. It consists of central unit and microphone remotes that are part of conference system.

Control unit is the main device of the conference system, which is designed to configurate the VCS and to manage the conference.

SENNHEISER ADN CU1 image is shown on the picture:



7.2. Connecting the central control unit

Let's take a look on necessary operations to connect SENNHEISER ADN CU1 control unit to the system with the help of software TrueConf Weathervane.

First of all, you need to create a channel for data transfer from the control unit to the computer which transmits information about active microphones. This allows you to activate necessary cameras and set their positions in order to ensure seamless video meetings.

SENNHEISER ADN CU1 unit transmits the information via Ethernet. Basic cable must be placed into the input on the back panel of a control unit. Please, note that there are similar inputs on the back panels, designed to connect the microphones, so you cannot use them for Ethernet connection.

7.3. Setting the conference system

To make the system work, you need to configure the Ethernet network and microphone modules.

Central unit of a conference system is a full-value PC, so you need a monitor, a keyboard and an optical mouse to configure it. Please, use the SENNHEISER software manual guide during applying changes in *Conference Manager*. Image of *Conference Manager* software is shown on the picture:

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See See	100 %					Start Initialization

7.3.1. The first run of Conference Manager and connecting to the central unit

During the first run, you need to connect to the central unit. For this purpose, choose **Connect** item in **Global Menu**, choose the ID of central unit in the dropdown list and press **OK**.

7.3.2. Setting the network configuration

To configure the Ethernet network, open **Settings** and choose **Network**. Enter the IP address and subnet mask in the dialog box.

Obtain an IP address aut	omatically
Use the following IP address	ess:
IP address:	192 . 168 . 1 . 145
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	192.168.1.1

7.3.3. Setting the microphone modules configuration

Once you plugged the microphone modules to the central unit, they will be detected automatically. Though, it sometimes requires to use force scanning. For this purpose, press **Scan** button in the **Microphone unit(s)** window in the right bottom corner of *Conference Manager* window.

Notifications about plugged and found microphone modules will appear in the center of the window. Each of these modules has numerical ID. Please, note that ID must begin with**1** and increase gradually (**1**, **2**, **3** etc). These IDs will match the numbers of camera positions (presets) of TrueConf Weathervane software. ID can be changed, if necessary. Choose the microphone in a *Conference Manager* workplace and set the the ID in the Properties panel.

To save the settings, choose **Save** command in **Global Menu** of *Conference Manager*. We recommend to enable auto loading of saved configuration so the conference could be started with needed configuration once the central unit is switched on.

7.4. Setting TrueConf Weathervane software

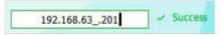
To set the TrueConf Weathervane software, choose **Settings** item in **Tools** menu.

Image of the setting window is shown on the picture:

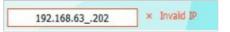
Here Configuration		?	×
Main settings			
Presets quantity	20		
Conference system BKR Sennheiser ADN			
SENNHEISER Settings			
IP address	192.168.63201		
	Save Cancel		

It needs to choose Sennheiser ADN conference system and set the IP address of the central unit.

Once you enter the IP address, the software will check the connectivity to the IP address. If the checking is successful, the entry field will be highlighted in green.



If the IP address is unreacheable, the entry field will be highlighted in red.



Press in the setting window **Save** button afterwards.

We're all set. Good luck with work!