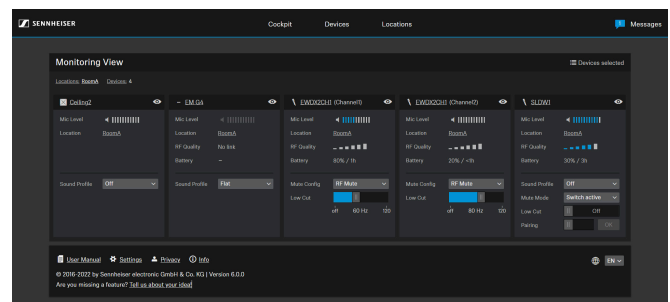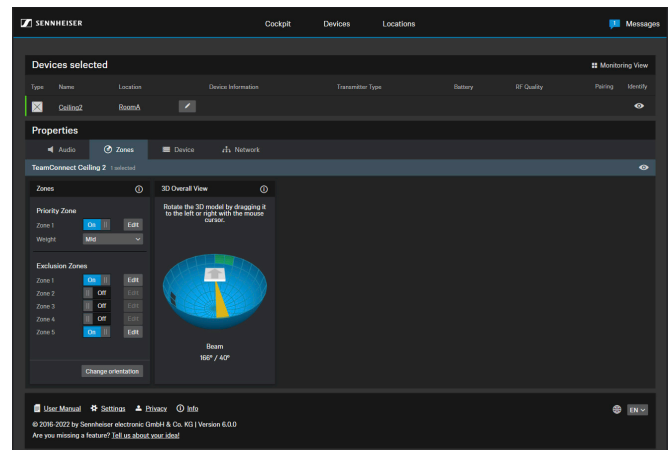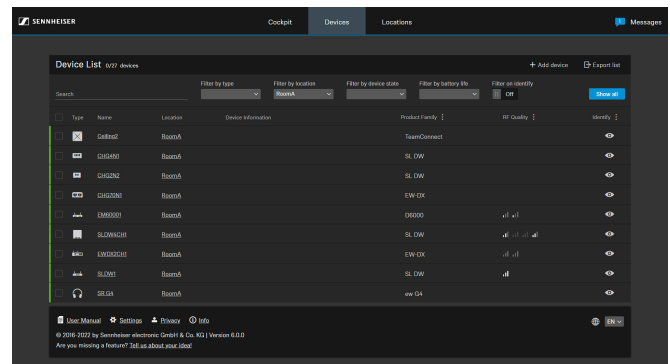# Sennheiser Control Cockpit
Control Software

KEY FEATURES

- Global system statistics – overview of the system status with key information at a glance
- Easy device identification – naming, localization and paging function for all devices
- Status monitoring of all microphones within a network (audio, wireless link quality, battery, network, settings)
- Search and filter functions – fast identification and detection of devices and settings
- Device view for seamless management and overview of many devices
- Mixed multi selection of devices of different product families
- Location view for clear overview of big installations
- Indication of which locations are currently in use
- Monitoring view for high level overview and control about all microphones in one location
- SMS / Email Push Notification on events or system warnings
- Event log – Easy tracking of past notifications and alerts
- Responsive Design – outstanding usability on any mobile device running iOS, Android or Windows
- Localized in multiple languages
- Seamless software and firmware updates
- Built-in interactive manual with search function for detailed information
- Global password protection and SSL encryption ensure a secure access and data transfer
- Notification profiles with notification and subscription preferences
- Out of range detection for SpeechLine Digital Wireless transmitters with email and SMS notification
- Advanced beam configuration for TeamConnect Ceiling 2 with a 3D real-time visualization

Sennheiser Control Cockpit is the central software for easy handling, control and maintenance of the entire Evolution Wireless Digital, SpeechLine Digital Wireless, evolution wireless G3/G4 and Digital 6000 portfolio as well as the TeamConnect Ceiling 2. The easy-to-use Sennheiser Control Cockpit provides a global overview of all network-enabled devices at all times. It shows all status information at a glance and makes setting adjustments for one or multiple devices at the same time very easy. The locations overview connects the locations of all components to their repective status information, so the user always knows the location and status of a specific device.

The software is accessible everywhere in the intranet via web browser across all platforms.

As a result, the software allows you to manage even huge setups with hundreds of devices with very low efforts.

download at
www.sennheiser.com/control-cockpit-software

Sennheiser Control Cockpit
Control Software

WORKFLOWS

KEY WORKFLOW AREAS	WORKFLOWS
SETUP	Language selection via browser setting or language selector
	Password settings for secured access to Sennheiser Control Cockpit
	Adding device automatically (discovery via mDNS)
	Adding device manually via IP address, IP range or listed in CSV file
	Configure location settings such as location name
	RF: Multi-Room-Mode Setup
	RF: Adjust RF power settings
	RF: Walk test mode to test & verify RF robustness
	Audio: Choose sound profile or adjust custom EQ
	Audio: Adjust output level and gain settings
	Audio Mix: Adjust input level and sensitivity of audio channels
	Audio: Minimize the risk of feedback from the loudspeakers with TCC2 TruVoicelift
	Audio: Avoid amplification of background noise with Noise Gate
	Zones: Configure Priority and Exclusion Zones with the beamforming technology
	Audio: Automatic AEC Reference Input Gain: automatically adjusts Dante input gain according to level and noise floor of far-end audio
	Network: Configure IP mode and address
	Network: Configure device discovery mode (mDNS)
	Network: Configure DANTE network settings
	Notification: Define recipients and way of communication (Email/SMS)
	Notification: Subscription profiles to type of alerts or notifications, time range and locations of interest
	Notification: Setup of messaging services for email and SMS distribution via provider
	Device: LED configuration (color and brightness)
MONITORING	Device: Access to all information on any devices via the web browser from any location
	Battery management: Filtering and sorting battery status information such as remaining battery life, time-to-full charge or battery health
	Searching and filtering for fast access to devices or status information
	Global dashboard statistics of RF devices and batteries in use, batteries being charged
	Location based operation: Sortable and searchable location list with device overview
	Location based operation: Operator's view for easy monitoring and control of relevant key properties during events
	Status information of live values such as audio, RF, battery, real-time location usage and meta information such as name, location and serial information
	Permanent monitoring of battery status indication while operation and charging
	Easy identification of devices, locations and status information
	Software based device list filtering on hardware identification
	Display of on-screen and push notification or alerts in case of events
	Email and/or SMS notification (configurable) in case of relevant events or alerts
	Battery management: Indication of wireless charging process
	Management and monitoring of SpeechLine Digital Wireless, evolution wireless G3 and G4, Digital 6000 devices as well as TeamConnect Ceiling 2 simultaneously

Sennheiser Control Cockpit
Control Software

WORKFLOWS

KEY WORKFLOW AREAS	WORKFLOWS
MONITORING	Messages overview as log of alerts, notifications and events with time stamp, device and location flag
	Search and sort function for messages
	Monitoring of beam position with a 3D visualization mode (horizontal and vertical vector)
	Customized display of values and status information in the Device List
	Monitoring of the MobileConnect Manager online status
CONTROL	Two-way device identification via button-press on device or remotely via software
	Full remote access to all hardware settings via software
	Single or multi device selection to change common properties
	Location based Mute: Easy un/muting of transmitter groups within definded locations
	Remote reset of audio settings
	Remote reset to device factory defaults
	Remote device restart trigger
	Remote trigger of pairing process
	Remote pairing between receivers and transmitters placed in network chargers
	Remote shutdown of SL DW transmitters
	Automatic shutdown of SL DW transmitters after a set time
	Switch to enable or disable remote locking of the Power Button on SL DW portable transmitters
	Switch to enable or disable remote locking of the Pairing Button on SL DW portable transmitters
	Encryption of the communication between the transmitter and the receiver
	Extension of the available frequency spectrum with Link Density mode
ASSISTANCE	Easy to follow workflow assistance to quickly solve problems
	Integrated and searchable online manual
	Contextual advice and assistive information to easily identify and perform assistance
	Remote trouble shooting (e.g. unmuting a muted mic) instead of walking to every room for inspection
	On-screen notification in case of events or updates providing contextual support recommendation
	Email and/or SMS notification in case of relevant (configurable) events or alerts
	Being informed and notified to prepare before failure instead of fixing when battery runs low
	Remote initiation of pairing process to prepare a spare microphone in case of empty batteries
	Integrated demo mode for seamless try-out of software functionality
MAINTENANCE	Instant notification in case of available updates
	Seamless update procedures of software and (multiselected) device firmware
	Batch update of multiple devices at once
	Service relevant information such as battery health for continuous reliable operation

Sennheiser Control Cockpit
Control Software

SERVER SYSTEM REQUIREMENTS

Recommended for Host PC	Client
• Intel i5 Dual Core processor or similar	Browser:
• 4 GB RAM	• Google Chrome (latest version)
• at least 1 GB hard disk space	• Mozilla Firefox (latest version)
• Gigabit LAN interface	• JavaScript must be activated
• Windows 10 (64 Bit) or higher	
• IPv4 network	

PORT REQUIREMENTS

Application layer

Port	Protocol	Service	Product
8181	HTTP	Web UI	Sennheiser Control Cockpit
443	HTTPS	Web UI (optional)	Sennheiser Control Cockpit
80	HTTP	Sennheiser Control Cockpit update service	Sennheiser Control Cockpit
22	SCP/SSH	SCP Firmware update & certificate management	TeamConnect Ceiling 2, SpeechLine Digital Wireless Multi-Channel Receiver
22	SCP/SSH	SCP Firmware update	Evolution Wireless Digital EW-DX EM 2

Transport layer

Port	Protocol	Service	Product
45	UDP|TCP	SSC Sound Control Protocol	TeamConnect Ceiling 2
69	UDP	tftp (firmware update)	TeamConnect Ceiling 2
5353	UDP	mDNS (Multicast 224.0.0.251)	TeamConnect Ceiling 2, Digital 6000
6970	UDP	SSC Sound Control Protocol	Digital 6000
8133	UDP	All IP-Communikation	evolution wireless G4
8137	UDP	mDNS (Multicast 224.0.0.225)	evolution wireless G4
45	UDP|TCP	SSC / Firmware Update	SpeechLine Digital Wireless
5353	UDP	mDNS	SpeechLine Digital Wireless
57811	UDP	SSC / Firmware Update	SpeechLine Digital Wireless Rack Receiver
57811	UDP	SSC / Firmware Update	Network-enabled chargers CHG 2N/4N/70N
45	UDP|TCP	SSC Sound Control Protocol	Evolution Wireless Digital EW-DX EM 2

SPECIFICATIONS

Language support	Compatible Sennheiser products
• English	• Evolution Wireless Digital
• German	• SpeechLine Digital Wireless
• French	• TeamConnect Ceiling 2
• Spanish	• evolution wireless G3
• Chinese	• evolution wireless G4
	• Digital 6000
	• MobileConnect Manager

Sennheiser Control Cockpit
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ARCHITECT'S SPECIFICATION

A software shall enable the user to set up, control and monitor all components of wireless microphone systems like Evolution Wireless Digital, SpeechLine Digital Wireless, evolution wireless G3 & G4, Digital 6000 as well as the Team-Connect Ceiling 2 ceiling microphone array via a network, thus allowing to manage even large installations with hundreds of devices.

The software shall be installed and running on a server with Windows 7 or higher. The user interface shall be browser-based and shall be accessible across all platforms from any device (e.g. smartphone, tablet, and computer) in the intranet using a web browser. The software shall have a responsive design so that the layout and sizing automatically adapts to any smartphone, tablet or computer screen size. Password protection shall be available in order to protect the system from unauthorized access.

The user interface shall provide a dashboard view that displays the number of available microphone links together with link status information, the number of the devices in use together with battery status information.

The user interface shall feature a device list view, which displays all devices in the network in list form with key information. For easy asset management, each row in the list shall provide detailed device information such as device type and name, location, link activity, last online status, battery health, battery status, charging cycles, firmware version, product family, serial number, and shall feature "Identify", "Pairing" and "Delete" buttons for identifying the paired device within the network, pairing new devices or deleting devices from the network. It shall also feature check boxes for selecting and editing multiple devices of one or several product families at a time. The device list shall feature different filtering possibilities including a live search with instant filtering.

The software shall allow the user to edit audio settings, system settings and network settings of one device or multiple devices at a time. Audio settings shall include at minimum the following functions: Sound Profile selection or EQ setting, Low Cut, audio level indication, XLR audio output level setting, audio beam configuration and Audio Reset. System settings shall include but not be limited to: Firmware Info (with possibility of firmware update and firmware upload), Display Brightness, Mute Switch, Auto Lock, RF Sync, RF Power, Out of Range Detection with email and SMS notification, Walk Test, LED color and brightness configuration and Factory Reset. Network settings shall include at minimum the following: IP Settings.

The user interface shall also feature a locations list view which provides an overview of locations and shows the locations of all devices in the network, the number of devices per room as well as device type information. Via the locations list the user interface shall feature a clearly structured monitoring view for each location, which allows the user to monitor the most important status information of all devices in that location at a glance.

A message and notification system with user-definable notification profiles shall inform the user about relevant updates or critical events, such as battery warnings or newly discovered devices, for designated locations and time ranges. Multiple SMS and/or email recipients shall be configurable.

The software shall be the Sennheiser Control Cockpit.