







FULL OVERVIEW

The large, bright 8-inch touch display provides a clear overview, bringing the full range of required functions to a single control desk. As a result, control room staff can easily keep an eye on everything, even in challenging situations.



CYBER SECURITY

Ensuring the protection and security of audio, video and customer data is essential. At Commend, cyber security is one of our topmost priorities. trust.commend.com



PHYSICAL BUTTONS

The device comes with a freely configurable button to complement touch interactivity, which can be extended further with direct dialling modules. This takes user friendliness to an even higher level.



MODULAR CONTROL DESK

The device can be extended with up to 5 physical direct dialling button modules. Optional extras include a gooseneck microphone and a handset as well as an input/ output module to suit individual needs.



CUSTOMISABLE DISPLAY LAYOUT

Various available layouts allow the control desk's design to be customised to individual user preferences and applications – not just for offices but also for industrial environments.



CLEAR COMMUNICATION

The id8 loudspeaker is perfectly suited and well prepared for loud environments. The optional version with camera for bi-directional video widens the choice of convenient communication channels even further.

ID8 TD/ID8 TD CM

CALL MANAGEMENT, SIMPLY FASTER

The id8 is a control desk of the Symphony MX product family. This allows shorter call answering times than ever before. This way, the id8 makes workflows and processes more efficient while taking pressure off control room staff, thanks to the convenient direct dialling buttons. Regardless of the application scenario, the control desk provides full control of the entire security system to ensure that no emergency call goes undetected or unanswered.

Whether using a gooseneck microphone or a handset, users can rely on their message getting across in crystal clear voice quality. That's Intercom at the highest level. Of course, the id8 is also fully compatible with previous-generation Commend systems.



VARIANTS



ID8 TD The control desk solution of the Symphony MX product family



ID8 TD-B The control desk solution of the Symphony MX product family



ID8 TD CM The Symphony MX control desk solution with built-in camera



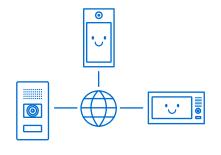
ID8 TD CM-B The Symphony MX control desk solution with built-in camera

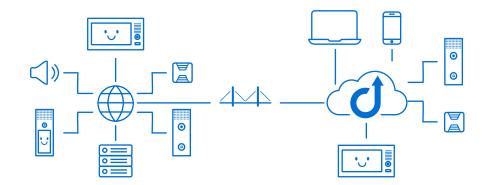
HIGHLIGHTS

- Modular control desk for indoor use, scalable from compact to industry-standard solution
- Optionally available with built-in high-resolution colour video camera
- Suitable for virtually any environment, for the desk(top) or for wall mounting
- Based on Commend's Symphony MX technology ready for Symphony Cloud
- High-quality sheet-glass front panel, available in silver or black
- Daylight-ready 8-inch multi-touch display with vivid colour rendering
- One freely configurable hardware button
- Customisable display layout to suit individual user preferences and applications
- Crystal clear sound with up to 20 kHz uHD-Voice speech quality for ideal intelligibility and compatibility
- OpenDuplex* and IVC (Intelligent Volume Control) for natural, hands-free communication
- Expansion modules, e.g. gooseneck microphone, handset or direct dialling button modules
- The entire control desk unit is powered via PoE+ (Power over Ethernet) – no external power source required
- Developed on the principle of "Security by Design" hardware and software processes are certified as per IEC/ISO 27001 to ensure maximum cyber security

CONNECTIVITY AND INTEGRATION

Symphony is our solution platform based on scalable hardware as well as powerful software functions, with the clear goal to use current and future cloud services' performance. Symphony offers the right solution for every size and requirement.





SYMPHONY MESH

Devices form an independent and intelligent communication network, even with complex action sequences no server is needed.

SYMPHONY ON-PREM

The Software Intercom Server VirtuoSIS is deployed in virtual server environments (VMWare, Hyper-V or Nutanix) and is heart piece of our hardware servers S3 and S6. With VirtuoSIS, control desk solutions can be realised, sites can be connected an the multitude of thirdparty system interfaces can be used.

SYMPHONY CLOUD

With the Symphony Mobile Client, calls can be accepted on a smartphone or a tablet, or with the Web Client in any browser. Devices can be directly connected to Symphony Cloud, onpremise systems can use Symphony Bridge to get access to these and future services.

SIP SERVER

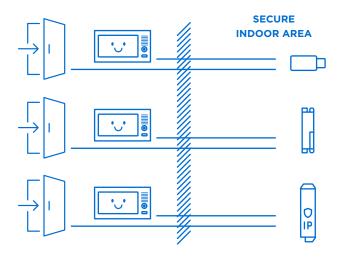
In addition to Commend servers, devices can be used with a multitude of SIP PBX systems. We continuously perform comprehensive tests with SIP servers of different manufacturers to ensure compatibility without compromises.

INTEGRATIONS

Commend solutions can be connected to leading manufacturers systems – from video management, access control and PA up to security management solutions. Using triggers, actions can be defined systemwide and sequences can be automated.

EXAMPLES OF WALL USES

Devices in publicly accessible spaces require additional safety measures to keep the network and door opener contacts secure in case of attempts of sabotage or unrightful intrusion.



VARIANT WITH EB1E1A

1 output for an electric door opener, connected to the device via USB. Protects the door opener.

VARIANT WITH EB3E2A-AUD

2 outputs for electric door openers, 3 inputs, connected to the device via USB. Protects the door opener.

VARIANT WITH IP SECURE CONNECTOR

Output for electric door opener, network protection and PoE, connected to the device via Ethernet. Protects the door opener and the network. If an attempt is made to open the device without authorisation, the IP Secure Connector disconnects the device and the network.





PASSION MEETS AUDIO

Because every word matters, high speech intelligibility is crucial in security and communication solutions. In everyday life, it enables natural and brilliant communication; in operational processes, it ensures improved efficiency and in an emergency often buys life-saving time.

HIGH VOLUME

When there is ambient noise, the Intercom station has sufficient reserves to put out the audio signal of the other party at a higher volume than any distracting background sounds.

DYNAMIC VOLUME ADJUSTMENT

IVC (Intelligent Volume Control) automatically adjusts the volume of the Intercom station's audio signal to the environment – because both, too low and too high a volume, significantly reduces speech intelligibility and the user experience.

BACKGROUND NOISE SUPPRESSION

To ensure that the other party clearly understands what is being said despite high levels of ambient noise, dynamic background noise suppression together with **beamforming** reduces interfering signal components effectively.

HANDS-FREE COMMUNICATION THROUGH OPENDUPLEX*

This technology from Commend, combined with highly sensitive microphones as well as a high volume, allows natural and hands-free communication within a unique radius of several metres.

AUDIO FUNCTIONS ADDING VALUE

- Loudspeaker/microphone surveillance constant availability of Intercom stations while greatly reducing the manual testing effort.
- Simplex mode for applications requiring controlled communication, e.g. security or industrial solutions based on the push-to-talk/release-to-listen principle.
- Audio monitoring fully automated (emergency) call triggering at defined sound pressure levels for more safety.
- Live sound pressure level continuous measurement of ambient noise with optional transfer to a management system through SNMP or HTTPS (e.g. to visualise noise volumes).
- Equalizer for fine-tuning to ambient acoustic conditions.
- Public address functions as an essential element of a holistic solution approach, announcements can be made or played back at each Intercom station as well as responded to directly.

For more information, visit: audio.commend.com

CYBER SECURITY AT COMMEND

Security is above all a question of trust. At Commend, cyber security as a core competence has always been given a very high priority. From the initial product idea through implementation and operational support, privacy and security by design (PSBD) is the uncompromising target and promise to our customers against which product features and functions must be measured.

CYBER SECURITY AS TOP PRIORITY

- Commend as well as the hardware and software development process is rigorously certified according to the standard IEC/ ISO 27001 and subject to a company-wide information security management system (ISMS)
- Commend is a member of the **Center for Internet Security** (CIS)
- Commend's Cyber Security Board ensures the handling and transparent communication of security vulnerabilities as well as the strategic hardening of Commend systems
- Commend continuously publishes software updates with security patches and improvements

PHYSICAL SECURITY

- USB and port debugging protection

NETWORK SECURITY

- Standard IEEE 802.1x for authentication (network access)
- Standard IEEE 802.1q for VLANs (network segmentation)
- Commend IP Secure Connector for automatic interruption of the network connection in the event of a tampering attempt

DATA SECURITY

- Encrypted and authenticated communication
- SIP over TLS v1.2 with secure cipher suites (> 128 bit)
- SRTP for tap-proof encryption of voice data
- X.509 client certificates for authentication and encryption
- TLS transport encryption for the protocols HTTPS, SIPS and MQTTS to protect the web interface, APIs and video

APPLICATION SECURITY

- Mandatory change of the default password during the first login
- Minimum password length: 12 characters
- Detection of brute-force attacks at login
- Documentation and securing of network ports

Information about the cyber security of other Commend products can be found in the respective data sheets and product manuals.

For more information, visit: trust.commend.com

TECHNICAL DATA

AUDIO

Microphone:	2 digital MEMS microphones
Loudspeaker:	special membrane for optimum
	sound quality, 1 × 8 Ω
Sound pressure level:	max. 95 dB at 0.5 m (1.6 ft)/89 dB at 1 m
	(3.3 ft)
Amplifier:	integrated class-D amplifier
	output power: 10 W
Audio bandwidth:	up to 20 kHz
Audio codecs:	Opus, G.722, G.711 a-law and G.711 $\mu\text{-law}$

DISPLAY

Technology:	Touch screen (IPS-TFT)
Size (diagonal):	8 in
Resolution (W x H):	1280 × 720 px
Luminance:	typically 600 cd/m²
Status indication:	multifunctional LED (red, green, blue)
Keypad:	illuminatable push-to-talk (PTT) button

CAMERA (ID8 TD CM ONLY)

Image sensor:	RGB CMOS, 1/3 in
Lens:	F2.2, fixed aperture
Camera angle:	vertical: 62°
	horizontal: 78°
	diagonal: 90°
Lighting conditions:	B/W: 1 lux; colour: 1.5 lux
Resolution (W x H):	1280 × 960 px
Frame rate:	up to 30 fps
Video streaming:	up to 6 simultaneous HTTP video streams
Video codecs:	H.264 (SIP video and ONVIF), MJPEG
	(HTTP video and ONVIF) and RTSP
ONVIF specification:	ONVIF Profile S

PROTOCOLS

Protocols

IPv4, IPv6, TLS, TCP, UDP, HTTP (RFC 2617, RFC 3310), HTTPS (RFC 2818), RTP (RFC 3550), 802.1x EAP-TLS (RFC 5216), 802.1x EAP-MD5 (RFC 2284), RTCP, RTSP (RFC 2326), DHCP, DHCPv6, SDP (RFC 2327, RFC 4566), SSDP, SIP (RFC 3261), SIP over TLS, SNMPv2c, STUN (classicstun), SMTP, DTMF Decoding (RFC 2976, RFC 2833, SIP Info), ICMPv6 (Router discovery), MQTT (ISO/IEC 20922)

CONNECTION PORTS AND INTERFACES

Network:	RJ45 port for Ethernet and PoE+
	(10/100 Mbit/s)
Cabling ¹⁾ :	min. Cat. 5, shielded
USB ²⁾ :	3 × USB 2.0 (type A) for external devices
Inputs ³⁾ :	3 inputs for floating contacts ⁴⁾
	(switches, push buttons, relay outputs etc.)
Outputs ³⁾ :	2 relay outputs ⁵⁾ , max. switching voltage:
	60 VDC, 30 VAC _{peak} ; max. switching current
	(per output): 2 A; max. switching power (per
	output): 60 W (DC), 37.5 VA (AC);
	expected electrical life: min. 10 ⁵ (30
	VDC/2 A), min. 2 × 10⁵ (30 VDC/1 A)

POWER SUPPLY

min.. off

max.

PoE:	PoE+: IEEE 802.3at/Class 4
External power supply:	PoE injector PA 25W POE-DC or
	IP Secure Connector IP-CON
Power consumption:	
ID8 TD:	idle: approx. 3.2 W (standalone)
	max.: 20.8 W ⁶⁾
ID8 TD CM:	idle: approx. 4.0 W (standalone)
	max.: 21.8 W 6)
ID8 DKHS:	min.: 0.165 W
	max.: 0.190 W
ID8 GM:	min., max: < 0.01 W
ID8 DKDD: 1 module	2 modules 3 modules 4 modules 5 modules

0.235 W 0.300 W 0.365 W 0.435 W

2.465 W

2.460 W

2.445 W

MECHANICAL PROPERTIES

0.165 W

0.885 W

IP rating:	IP20 using ID8 DK
	IP30 using ID8 SH or ID8 FB
IK rating:	IK07 (acc. to EN 62262)
Front panel:	chemically strengthened glass,
	1.8 mm (0.07 in)
Operating temperature:	-10 °C to +50 °C (+14 °F to +122 °F)
Storage temperature:	-10 °C to +55 °C (+14 °F to +131 °F)
Relative humidity:	up to 95%, not condensing
Weight incl. packaging:	approx. 1,050 g

1.670 W

DIMENSIONS (H × W × D)

Desktop:	117 × 245 × 149 mm (4.61 x 9.65 x 5.87 in)
Flush mounted:	142 × 245 × 17 mm (5.59 x 9.65 x 0.67 in) "
Surface mounted:	142 × 245 × 40 mm (5.59 x 9.65 x 1.57 in)

CERTIFICATIONS AND CONFORMITY

Device:	EN 61000-6-2, EN 61000-6-3,
	EN 55032 Class B, EN 55035,
	IEC/EN 62368-1, EN 62262 IK07,
	FCC Part 15 Class B , ICES-003 Class B

 $^{\mathfrak{v}}$ The maximum line length of Cat. 5 cabling in a LAN is 100 m (328 ft) – e.g. from switch to device.

²⁾ The maximum line length of the USB connections is 5 m (16 ft).

³⁰ The maximum line length of an input (IN1 to IN3) or an output (OUTI and OUT2) is 30 m (98 ft).

⁴⁾In the "ON" switch position, the switching resistance must be less than 1 kΩ. ⁵⁾ The relay output may only be connected to an ES1 or a SELV circuit An ES1 circuit as per IEC/EN/UL 62368-1 or a SELV circuit as per IEC/EN 60950-1 must be separated safely from a dangerous electrical circuit (e.g. 230 V or 110 V mains power), e.g. by means of double insulation. The ES1 or SELV circuit must not exceed 60 VDC or 42.4 VAC_{peak} (30 VAC_{ent}). ⁶ Condition for power draw: Full load (IkHz 0dBFS sine, 100% display brightness,

Condition for power draw: Full load (1kHz 0dBFS sine, 100% display brightness, both relays switched, both RGB LEDs active, bidirectional video call active, USB 3 × 2.5 W)

" For flush mounting, the device extends 40 mm (1.57 in) into the wall.

SYSTEM REQUIREMENTS

- Compatible SIP server or
- Serverless operation or
- Symphony Cloud (basic functionality)

CONFIGURATION SOFTWARE

- Set-Up min. version 2.4

ACCESS

The device can be accessed through IPv4 (DHCP), IPv6 (link-local) and zeroconf. For information on accessing the web interface, see the product manual.

EXTENT OF SUPPLY

Control desk

Microfibre cloth

Short reference

Device identification document

ACCESSORIES



ID8 DK – The id8 desk kit provides excellent ergonomics while keeping a sleek look and clutter free desk. It can be extended with a gooseneck microphone and attaches to more accessories' desk kits.



ID8 DKHS - The proven Commend handset with desk kit extends your Symphony control desk and provides excellent sound quality for the control desk operator of the future.



ID8 GM - A gooseneck microphone for superior audio quality that keeps your hands free and attaches seamlessly to your device.



ID8 DKDDM(-B), ID8 DKDDS(-B) – The direct dialling button module with desk kit provides access to configurable actions and contacts as well as status information via LEDs. Available in black. 1 *DKDDM (USB-C)* may be extended with up to 4 *DKDDS (via connection boards)*.



ID8 FB - Gypsum wall/panelkit reimagined for id8; manages a seamless look for installation e.g. in a drywall.

Requires Ethernet socket MODJ8-8KUPPL.



ID8 SH - Surface mount kit made of powdercoated stainless steel; intended for subsequent installation on a wall or on thin walls.



EB1E1A – USB I/O extension module for Intercom stations with USB port.



EB3E2A-AUD – I/O extension module with audio interface port for Intercom stations with USB port, optimised for Series WS and Concerto mounting kits.



EB8E8A - I/O extension module for Intercom modules with USB port, for installation on top-hat rail.



AFIL-USB – Audio induction loop upgrade kit for transmission of Intercom audio signals to hearing aids; suitable for all Intercom stations with USB port.



IP-CON - IP security switchbox for secure connection between an Intercom station, network and door opener.



IP-BRIDGE - IP converter box with metal housing for extending the Ethernet network via 2-wire connections.



ID5 WMHS - Wall kit with handset.



ASKKAT5-3S - Cat. 5 Ethernet cable, 3 m (9.84 ft).

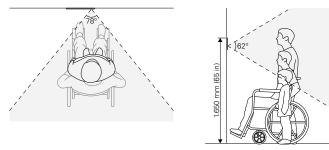
INSTALLATION INSTRUCTIONS

MOUNTING INSTRUCTIONS

- Do not place the device in areas where it may become wet or damp, and avoid overly dusty, humid and high temperature environments.
- For installing the Intercom station, the following mount kits are available separately: ID8 DK, ID8 SH, ID8 FB.
- Do not install the Intercom station on unstable walls or on surfaces, which cannot support the device's weight.
- Make sure the mount kit is not subject to torsional forces (e.g. on uneven walls).
- No water may penetrate into the surface mount kit ID8 SH or the gypsum wall/panel mount kit ID8 FB. Therefore, make sure the mounting kit is waterproof (towards the wall).
- Use moistened microfibre cloths for cleaning the Intercom station.

RECOMMENDED MOUNTING HEIGHT

The upper edge of the Intercom station approx. 1,650 mm (65 in) from the finished floor. Adapt the mounting height to the individual needs.



NOTE: ACCESSIBILITY

- For a barrier-free accessibility, it is recommended to mount the Intercom station with sufficient distance to walls or corners.
- When mounting the Intercom station ID8 TD CM, pay attention to the correct camera angle in terms of accessibility so that wheelchair users and children can be detected by the camera: 62° (vertical) x 78° (horizontal)

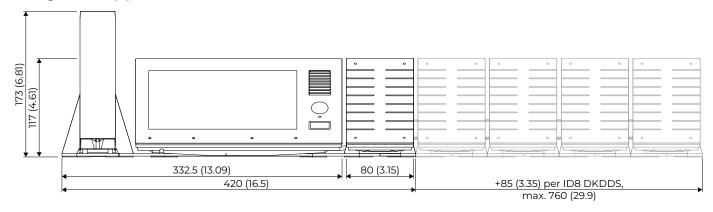
SAFETY INSTRUCTIONS

- This device shall be installed or replaced by trained and qualified personnel only.
- Only use recommended tools when installing the device.
- Observe the country-specific standards for installation, mounting and configuration.
- All connected circuits shall fulfil the following requirements:
 - Safety Extra Low Voltage (SELV) and Limited Power Source (LPS) according to IEC/EN 60950-1 or
 - ES1, PS2 circuits and Annex Q (Limited Power Source) according to IEC/EN/UL 62368-1
- Only accessories that comply with the device's technical specifications shall be used.
- Use shielded Ethernet cables only.
- Do not make any unauthorised modifications to the device.
- The front of the Intercom station is made of glass. Do not use the Intercom station when the glass is damaged.
- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 - Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/ TV technician for help.

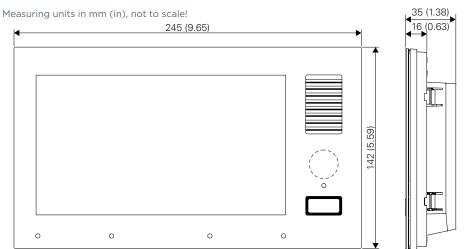
DIMENSIONS

ID8 FULL WIDTH SETUP, WITHOUT GOOSENECK MICROPHONE

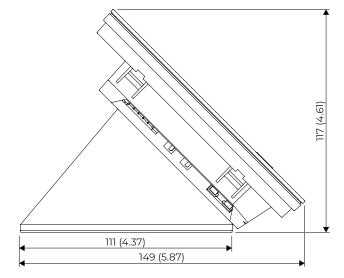
Measuring units in mm (in), not to scale!



ID8 TD/ID8 TD CM



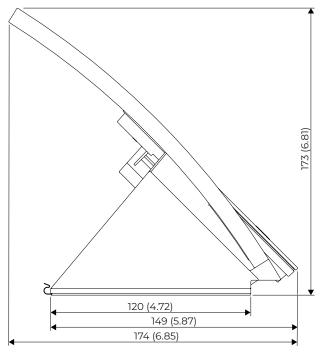
ID8 TD/ID8 TD CM WITH DESK KIT ID8 DK



Measuring units in mm (in), not to scale!

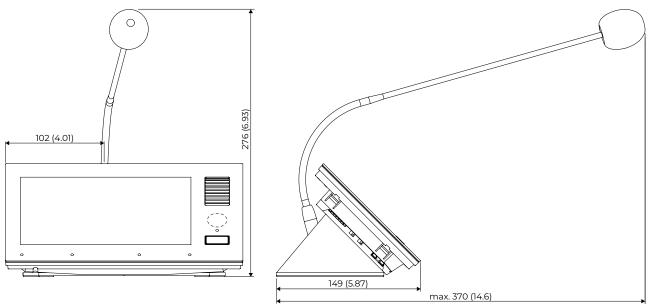
ID8 TD/ID8 TD CM WITH DESK KIT ID8 DK AND HANDSET WITH DESK KIT ID8 DKHS

Measuring units in mm (in), not to scale!



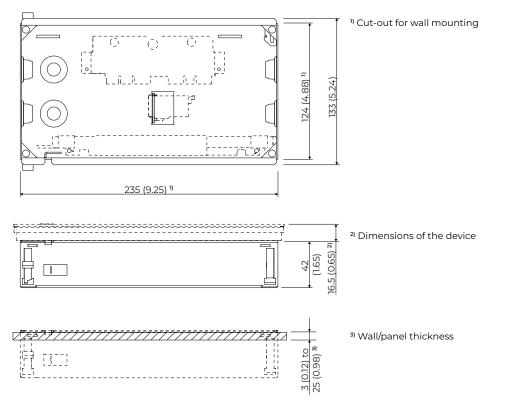
ID8 TD/ID8 TD CM WITH DESK KIT ID8 DK AND GOOSENECK MICROPHONE ID8 GM

Measuring units in mm (in), not to scale!



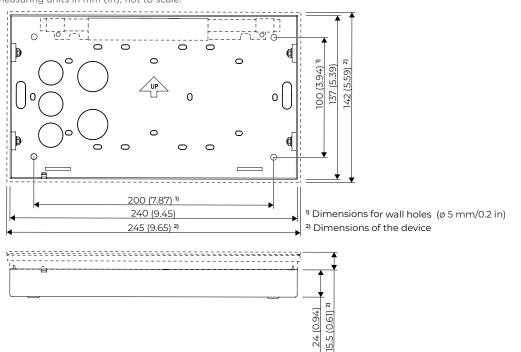
ID8 TD/ID8 TD CM WITH GYPSUM WALL/PANEL MOUNT KIT ID8 FB

Measuring units in mm (in), not to scale!



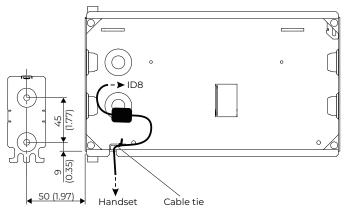
ID8 TD/ID8 TD CM WITH SURFACE MOUNT KIT ID8 SH

Measuring units in mm (in), not to scale!



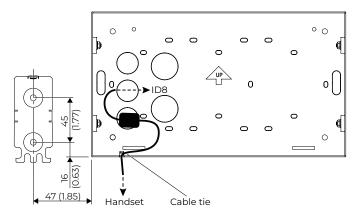
WALL KIT WITH HANDSET ID5 WMHS (WITH ID8 FB)

Measuring units in mm (in), not to scale!

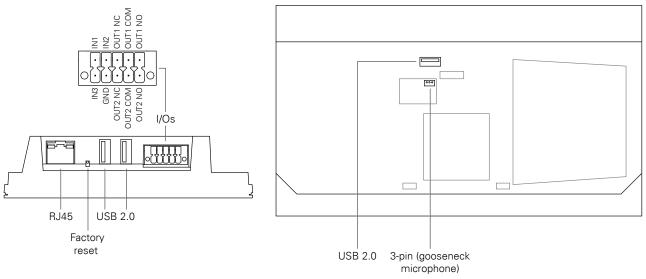


WALL KIT HANDSET ID5 WMHS (WITH ID8 SH)

Measuring units in mm (in), not to scale!

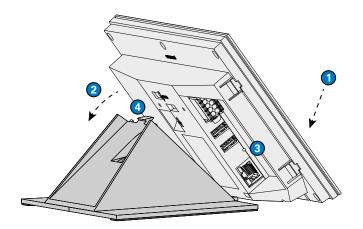


CONNECTIONS



MOUNTING

DESK MOUNTING WITH ID8 DK



(*Optional:*) Mount the gooseneck microphone ID8 GM. Put the device onto the desk kit, lower end first.

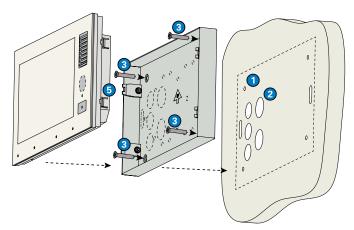
(Optional:) Connect the cable of the gooseneck microphone ID8 GM to the device.

Press the device onto the desk kit so that it snaps in place.

3 Connect the cables.

To unmount the device, push firmly onto plastic tongue 4 and gently remove the device upwards.

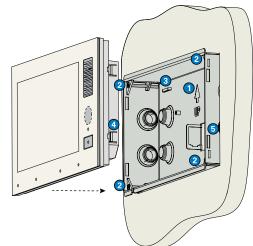
WALL MOUNTING WITH ID8 SH



- Drill four holes in the wall (see "Dimensions") and insert the supplied dowels.
- 2 Cut out one of the provided cable entries depending on cable supply and guide the required cables through those entries (Ethernet and USB or I/O cables, if needed).
- Install the surface mount kit to the wall using the supplied mounting screws. The arrow "UP" must point upwards.
 - (Optional:) Mount the audio induction loop kit AFIL-USB on the mounting points (see short reference "AFIL-USB").
- Ocnnect the cables to the device.
- Insert the device into the mounting kit and press until the 4 locking latches on the right and left side of the device lock in.

To unmount the device, push firmly onto the locking latches (5) and gently remove the device upwards. If necessary, use a tool (i.e. a screwdriver) to push the locking latches in.

WALL MOUNTING WITH ID8 FB



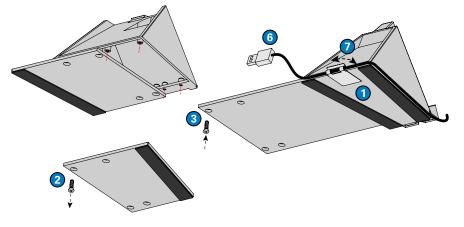
Make sure the arrow on the mounting frame point upwards.
Install the mounting box to the wall as shown at "Dimensions". Press the 4 claw clamps on the sides of the mounting box outwards and tighten them using the corresponding screws (TX10). (*Optional:*) Mount the audio induction loop kit AFIL-USB on the mounting points (see short reference "AFIL-USB"). (*Optional:*) Mount the various accessories (e.g. EB3E2A-AUD) on the mounting points (see corresponding reference). (*Optional:*) Place the CAT. crimp jack MODJ8-8KUPPL in the sheet metal flap and fixate using cable ties. Mount the CAT. crimp jack onto the open end of a CAT. cable.

Onnect the required cables (Ethernet and USB or I/O cables, if needed). Fixate the cables to the sheet metal bridges using cable ties, if needed.

Insert the device into the mounting box and press until the 4 locking latches on the right and left side of the device lock in.

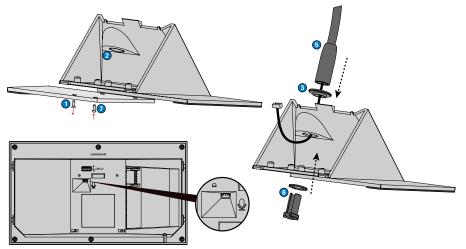
To unmount the device, push firmly onto the locking latches 0 and gently remove the device. If necessary, use a tool (i.e. a screwdriver) to push the locking latches in.

DESK MOUNTING WITH ID8 DKHS



- Remove the protection film from the adhesive strip and stick the cable clip on the desk kit in a way that the cut-out border forms a line with the housing (see illustration above).
- 2 Remove one of the bottom plates from the desk kit ID8 DK by unscrewing the 4 torx screws (see illustration above).
- Install the desk kit ID8 DKHS to the desk kit ID8 DK using the same screws.
- 4 Put the device onto the desk kit, lower end first.
- **5** Press the device onto the desk kit so that it snaps in place.
- 6 Connect the cable of handset HS-USB1 to the device.
- Bend open the cable clip, guide through the USB cable of the handset and bend back the cable clip so that the USB cable is fixed.

DESK MOUNTING WITH ID8 GM



- For easier access, remove one of the bottom plates of the ID8 DK by unscrewing the 4 torx screws (see illustration above).
- 2 Remove the break-away on the desk kit ID8 DK by pushing and twisting.
- 3 Place the cover disk on the outside of the opening.
- Guide the cable of the gooseneck microphone through the opening from above.
- Guide the cable of the gooseneck microphone through the toothed washer and hollow adjustment screw.
- O Push the adjustment screw from below through the opening on the desk kit and through the cover disk. Screw the adjustment screw into the thread on the bottom of the gooseneck microphone. Hold the gooseneck microphone firmly and fasten the adjustment screw using a 13mm (0.51 in) wrench.
- Ø Mount the bottom plate using the 4 torx screws.
- (3) Connect the cable of the gooseneck microphone to the rear of the device. If necessary, use a tool (i.e. a screwdriver) to gently push the plug in. Make sure the pinholes match the position of the pins.
- O Put the device onto the desk kit, lower end first. Press the device onto the desk kit so that it snaps in place.

NOTE:

To prevent overextension and avoid premature wear, the gooseneck must not be bent more than 90°.

Commend products are developed and manufactured by Commend International in Salzburg, Austria. Our development and manufacturing processes are **certified** in accordance with **EN ISO 9001:2015**. Since mid-2020 Commend International GmbH has been **EN ISO 27001:2013 certified** throughout.



For reasons of technical further development, the design and/or specifications of products are subject to change without prior notice. All errors excepted.