

Duetto

by Commend

One device to bring together different worlds
SIP telephony and Intercom in one device



VoIP® and
SIP

Desk & Wall
mounting

Bi-directional
video

7" touch
screen

16 kHz
eHD Voice

Compact and powerful control station

The control station DUETTO delivers full Intercom power in a compact form to offer users the double benefit of advanced functions and great flexibility of use. It was designed to offer the user an ideal space-saving master Intercom station, either as a desktop device or wall-mounted terminal.

Combining the best of VoIP® and SIP technology, DUETTO incorporates support of building automation as well as integrated video communication and surveillance. All in all, Duetto serves a wide range of application environments, from reception areas and porters' offices to auto mated doors and gates and many more. Wherever video supported visitor management is needed or if available space is low but the requirements are uncompromisingly high, DUETTO is a perfect solution.

Key features and highlights

- Compact control station solution
- Big 7" IPS touch display with IPS (in-plane switching)
- Optional with integrated HD ready video camera
- OpenDuplex® for natural, hands-free communication with high volume
- Housing of robust and high-quality polycarbonate
- Applicable as desk and wall mount device
- Simple configuration via web interface
- Online functions
- VoIP® and SIP
- Modern user interface for intuitive control station operation

Key benefits at a glance

Modern video supporting Intercom station

Eye-to-eye contact makes conversation easier and helps to avoid misunderstandings. With integrated bi-directional video, DUETTO provides improved communication from the get-go. As a result, visitors feel welcome from the first time they get in touch with companies and people via an Intercom terminal.

DUETTO's video capabilities include high-quality surveillance video to help staff react quickly and correctly in sensitive situations. In addition, external video sources, such as weather or traffic cameras, can be integrated seamlessly.

Of course, DUETTO is also available without integrated video for applications where data protection regulations prohibit video transmissions.

Powerful control desk in a compact design

No longer restricted to control centres, modern control stations have found their way into the office, where they offer the operating convenience of a regular desktop device. They can be networked with other systems to integrate seamlessly into the everyday working environment.

DUETTO combines powerful Intercom functionality with flexible telephony. It also interfaces with building automation systems to offer convenient control of lighting, automated window shades, heaters and multimedia equipment. It manages emergency calls and call requests, provides status information and ensures an overview of all communication lines.

As a control station, DUETTO also allows operators to handle one phone call and one Intercom call in parallel. This enables them to take incoming emergency calls or visitor calls from a door terminal in mid-conversation.



EE 980CM

- Supports SIP and Intercom (hybrid)
- Integrated video camera

EE 980

- Supports SIP and Intercom (hybrid)

SIP-EE980CM

- Supports SIP
- Integrated video camera

SIP-EE980

- Supports SIP

Superior speech intelligibility

Whether it is used in hands-free mode or with an attached optional handset, DUETTO delivers Commend's superior audio quality. Equipped with 16kHz audio support and intelligent acoustic algorithms, DUETTO sets the standard for excellent speech intelligibility even under the most difficult conditions. These qualities are complemented by the ability to suppress background noise and focus on the speaker automatically.

Future-proof system architecture

Used as a desktop station or mounted on a wall, DUETTO adapts perfectly to any requirements and acts as a convenient all-purpose hub for IP video, SIP and Commend Intercom lines. DUETTO's talent for easy integration with other systems opens it to a wide range of additional applications.

Intuitive operation with 7" TFT touch display

The large display impresses with its excellent viewing angle of nearly 180°, a screen saver and automatic adaptation to ambient lighting. With its 7" screen, DUETTO offers plenty of space for displaying interactive on-screen elements and icons to support intuitive, targeted interaction. The display of multiple pending tasks provides an convenient overview for better planning and an important edge on information.

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Technical Specifications



Technical data

IP rating:	IP20
Microphone:	4 microphones with directivity
Loudspeaker:	special membrane type for optimal sound quality sound pressure level: 85 dB/1 W/m, 8 Ω
Amplifier:	700 mW
Handset, headset:	omnidirectional electret microphone, 50 Ω 4P4C socket
Recommended headset:	headset HS1 (headset cable: KAB-HS1-RJ)
Input:	2 digital inputs for floating contacts
Output:	2 digital open drain outputs
USB:	3 USB 2.0 ports (type A) WLAN ready
Call indication:	multifunctional LED
Display:	7" TFT touch display resolution: 800 x 480 16.777,216 colours IPS (in-plane switching)
Camera (only for EE980CM and SIP-EE 980CM):	HD ready video camera 3.1 megapixel resolution: 640 x 480 framerate: 7.7 FPS
Transmission bandwidth:	16 kHz
Operating temperature range:	0 °C to 50 °C (32 °F to 122 °F)
Storage temperature range:	0 °C to 50 °C (32 °F to 122 °F)
Relative humidity:	up to 95%, non condensing
Connection:	IP Uplink: shielded RJ45 modular jack
Power supply:	PoE (Power over Ethernet) optionally with PoE injector PA15WPOE (24 VDC)
PoE (Power over Ethernet):	IEEE 802.3af standard power consumption of the terminal device: Class 3 (6.49 W to 12.95 W)
Cabling:	min. Cat. 5
Intercom protocol:	IoIP® protocol based on UDP/IP
IP protocol:	IPv4, TCP, UDP, HTTP, RTP, RTCP, DHCP, RTSP, SIP, STUN
Data rate:	10/100 MBit/s (Full/Half Duplex)
Codecs:	G. 711 a-Law, G. 711 μ-Law G. 722 H. 264 Motion JPEG PCM
Memory extension:	MicroSD
Additional mounting material:	desk kit EEDK9 wall mount kit EESH9
Dimensions:	with desk kit: W 270 mm (10.6 in), H 142 mm (5.59 in), D 70 mm (2.76 in) with wall mount kit: W 270 mm (10.6 in), H 138 mm (5.4 in), D 38 mm (1.5 in)
Weight incl. package:	approx. 998 g (2.2 lbs)
Colour:	black

System requirements

- GE 800 (min. PRO 800 5.0) with G8-IP (min. 6.1) and G8-IP-32 (min 6.1)
- GE 300 (min. PRO 800 5.0) with G8-IP (min. 6.1)
- IS 300 (min. PRO 800 5.0)
- VirtuoSIS (min. PRO 800 5.0)
- Configuration software min. CCT 800 5.0

Line length in LAN

- The maximum line length of Cat. 5 cabling in a LAN is 100m (328ft)
- e.g. from switch to the SIP station.

Extent of supply

- Control station EE980/EE 980CM/SIP-EE980/SIP-EE 980CM
- Short reference
- Optional:**
 - Handset "EEHSS9"
 - Desk kit "EEDK9"
 - Wall mount kit "EESH9"
 - PoE injector "PA15WPOE"

Compatibility SIP PBX

Basically, the SIP station can be used with any SIP server. The following SIP server types have been tested explicitly by Commend and therefore a proper functionality can be confirmed:

Manufacturer ¹⁾	Type	Version
Cisco	Cisco Call Manager Cisco Unified Communication Manager	Version 9.x
3CX	3CX for Windows	Version 12
Starface	Starface free	Version 5.8
FreeSWITCH	FreeSWITCH	Version 1.2.0

¹⁾ The listed products and company names are brand names or registered trademarks of their respective owners.

Bandwidth for audio and video transmission

Attention: Under certain circumstances, the required bit rates for video transmission can be higher than the given values!

The following tables show the required bit rates per direction for the respective bandwidths:

Audio transmission for VoIP and SIP (G.722 codec)

Format/resolution	QVGA	VGA
Bit rate	1 MBit/s	3 MBit/s

Video transmission for VoIP (MJPEG and HTTP)

Format/resolution	QVGA	VGA
Bit rate	1 MBit/s ¹⁾	3 MBit/s ¹⁾

¹⁾ Applies for a frame rate of 5 fps

Video transmission for SIP (H.264 standard and RTP)

Format/resolution	QVGA	VGA
Bit rate	0.8 MBit/s ²⁾	2 MBit/s ²⁾

²⁾ Applies for a frame rate of 10 fps

Attention: The data for video transmission applies only to the DUETTO series versions EE 980CM and SIP-EE 980CM!

DUETTO

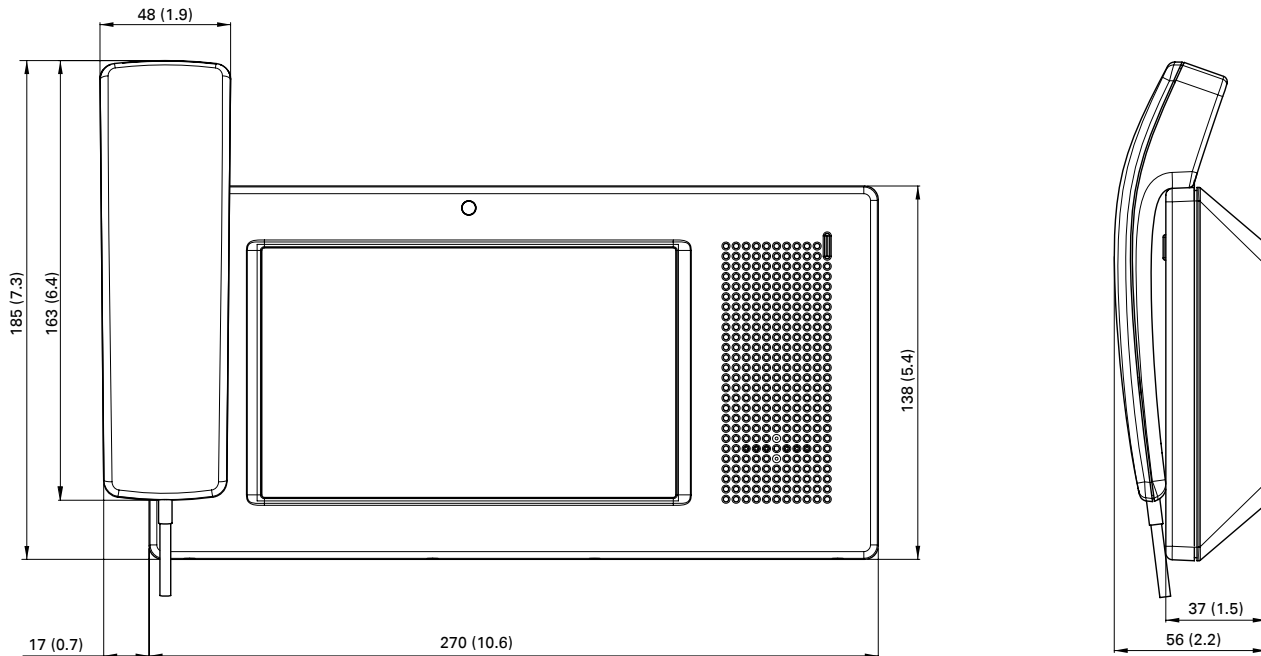
Installation Instructions

Mounting instructions

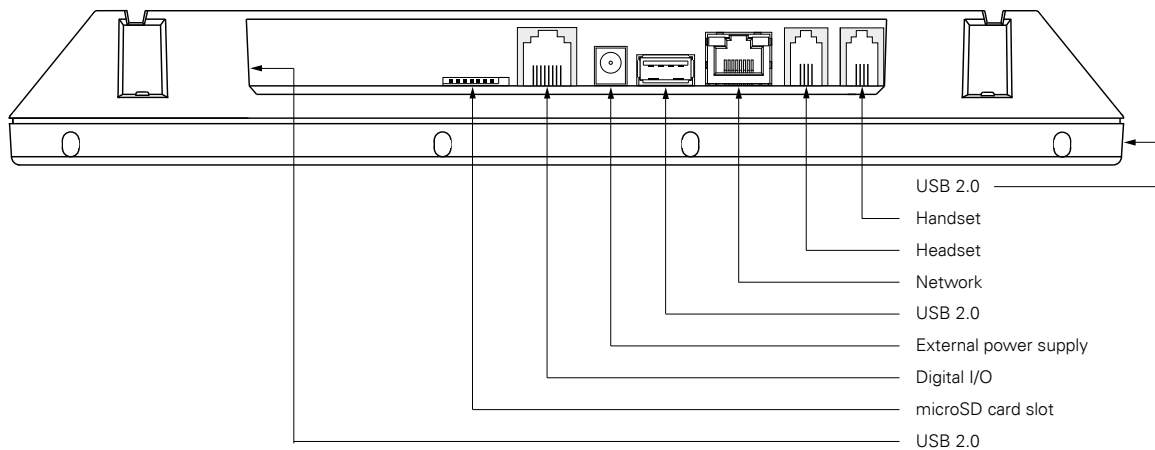
- Do not expose the station to extreme temperatures (see "Technical Data").
- Observe the country specific standards for installation, mounting and configuration.
- The station may only be opened by authorised service engineers.
- The station must stand on its own, not e.g. in a shelf or under a filing tray.

Dimensions

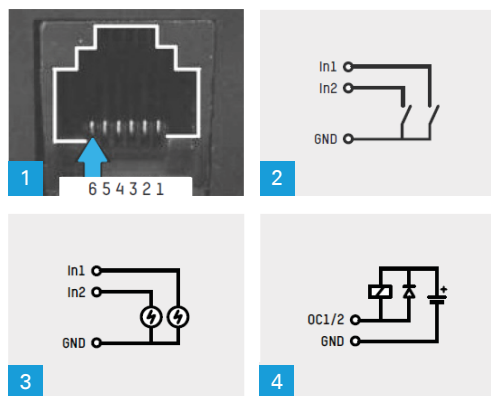
Measuring units in mm (in), not scale!



Connection (bottom view)



Connector pin assignment and connection options of the inputs/outputs



1 Connector pin assignment of the jacket "digital I/O":

- 6: Input 1
- 5: Input 2
- 4: INGND, reference point for inputs
- 3: OCGND, reference point for outputs
- 2: Output 1
- 1: Output 2

2 Use of internal reference/standard: The digital inputs are designed for floating contacts (e.g. relay contacts, push buttons, switches, etc).

3 Use of external reference: External power supplies are used (0 to 24 VDC).

Note: Max. cable length: 2 m.

4 The digital outputs are designed as open drain outputs.

Attention: For use of the digital output with inductive loads, a suppression (flyback) diode must be used in parallel to the load! Otherwise, the digital output can be damaged!

Quality tested. Reliable. Smart.

COMMEND products are developed and manufactured by Commend International in Salzburg, Austria.

The development and manufacturing processes are certified in accordance with **EN ISO 9001:2008**.



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A strong worldwide network

COMMEND is represented all over the world by local Commend Partners and helps to improve security and communication with tailored Intercom solutions.

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