WSIL 50P / WSIL 50V

Induction Loop Amplifier Modules for barrier-free communication

Robust housing | Flexible integration | IEC 60118-4 compliant | Weather-proof IP65

Communication and security for everyone

Induction loop amplifier modules in Commend WS design have set an essential standard in the world of Intercom. They can be positioned freely next to WS Intercom stations or even stand-alone. In public areas and for vending machines, help points of building access areas, barrier-free has been a standard requirement for many years.
Take the opportunity to upgrade your system to barrier-free and provide optimum conditions for all Intercom users with the benefits of the world's leading Intercom technology.

Features and highlights

- A fully integrated, IEC 60118-4 compliant induction loop system enables wearers of hearing aids to receive Intercom audio signals in clear, uninterrupted quality.
- Flexible integration in any environments.
- Energy-efficient and power-saving technology with low heat generation.
- Functions as MLC (Metal Loss Correction) and AGC (Automatic Gain Control) for easy startup and faultless operation.
- Compatible with virtually all Intercom terminals and Intercom modules or third-party audio sources.

WSIL 50P / WSIL 50V
Technical specifications

Technical data

Input:	Input impedance 10 kΩ Sensitivity: -15 dBu for max. output overload level: +10 dBu
Output:	Drive voltage: max. 6.5 V_{rms} Drive current: 2.8 A continuous 1 kHz sine wave Loop resistance: 0.1 Ω to 1.0 Ω resistive or 1.5 Ω max. reactive impedance
Frequency response:	80 Hz to 8 kHz: -3 dB
MLC (Metall loss correction):	0 to -3 dB/octave
Operating temperature range:	–20 °C to +70 °C (–4 °F to +158 °F)
Storage temperature range:	–20 °C to +70 °C (–4 °F to +158 °F)
Relative humidity:	up to 95%, not condensing
Connection:	plugable screw terminals JST plug (type: PAP-02v-s)
Power supply:	external power supply 15 –26 VDC (max. power consumption 8 W)
Dimensions (W x H x D):	WSIL 50P: with flush mount kit: 165 x 139.5 x 13 mm (6.5 x 5.5 x 0.5 in) with surface mount kit: 165 x 139.5 x 51 mm (6.5 x 5.5 x 2 in) WSIL 50V: with flush mount kit: 160 x 134.5 x 14 mm (6.3 x 5.3 x 0.5 in) with surface mount kit: 160 x 134.5 x 50 mm (6.5 x 5.5 x 1.9 in)

Extent of supply

- Induction loop expansion module
- Induction loop and mounting material
- WS IL 50V: mounting screws
- Short reference

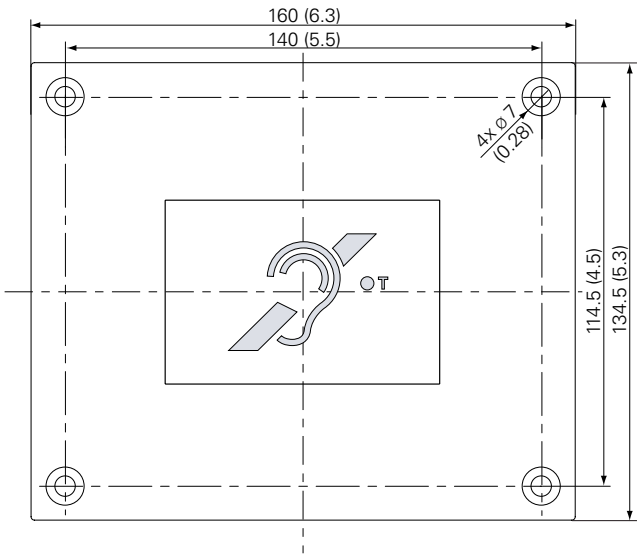
Requirements

- Power supply: 15 – 26 VDC
- External audio source
- Flush mount kit (WSEB 52x) or surface mount kit (WSSH 52x)

WSIL 50P / WSIL 50V
Installation instructions

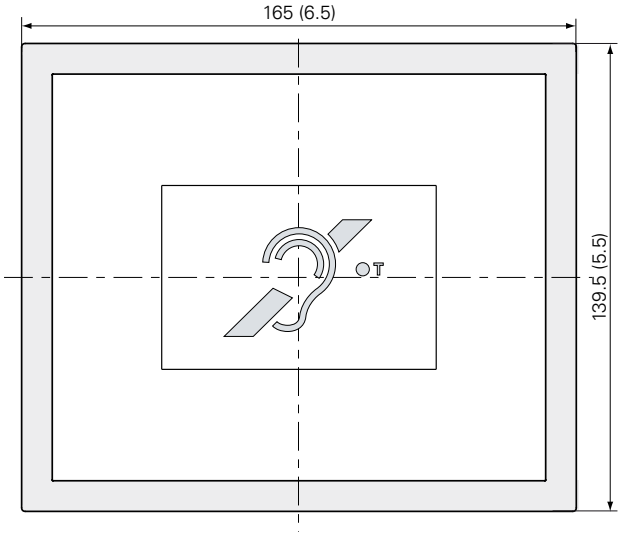
Dimensions WSIL 50V

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



Dimensions WSIL 50V

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

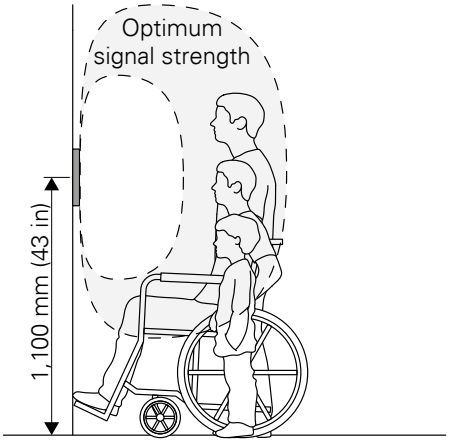


Mounting instructions

- Do not expose the station to extreme temperatures ("Technical data", see TE | 1).
- For flush mounting, the flush mount kit WSFB 52V is required (available separately).
- For surface mounting, the surface mount kit WSSH 52V is required (available separately).
- Observe the country specific standards for installation, mounting and configuration.
- When opening the station, ESD precautions must be observed.
- The Induction loop amplifier modules may only be opened by authorised service engineers.
- The requirements of the standard IEC 60118-4 are met by the installation at the specified height and at the correct distance from a single person when properly commissioned.
- Metal structures significantly affect the performance of the induction loop system. The magnetic field generated by an induction loop system induces a current in surrounding metal structures, which weakens the magnetic field and may cause losses. Examples of metal structures:
  - Lightweight floor construction with a (usually profiled) metal sheet under a thin reinforced concrete slab.
  - Grinders, beams, constructional metal work
  - Metal cladding and walls
  - Metal box construction (elevators, lifts)

Recommended mounting height of the induction loop

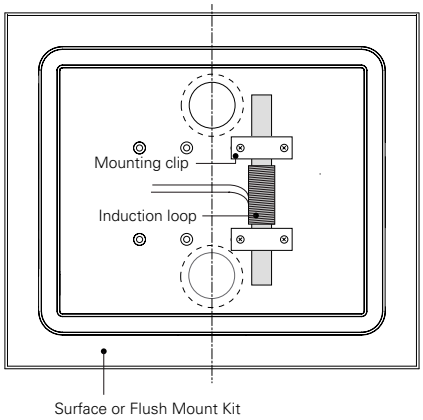
With a mounting height of approx. 1,100 mm (43 in), AFIL signals are ideally transmitted for children, wheelchair users and standing adults. A distance of approx. 500 mm (20 in; arm's length) is recommended between the Intercom station and the inductive hearing aid. If required, adjust the mounting height to the respective requirements and local regulations.



Quick start

Follow the instructions for the installation of the Induction Loop Amplifier Module:

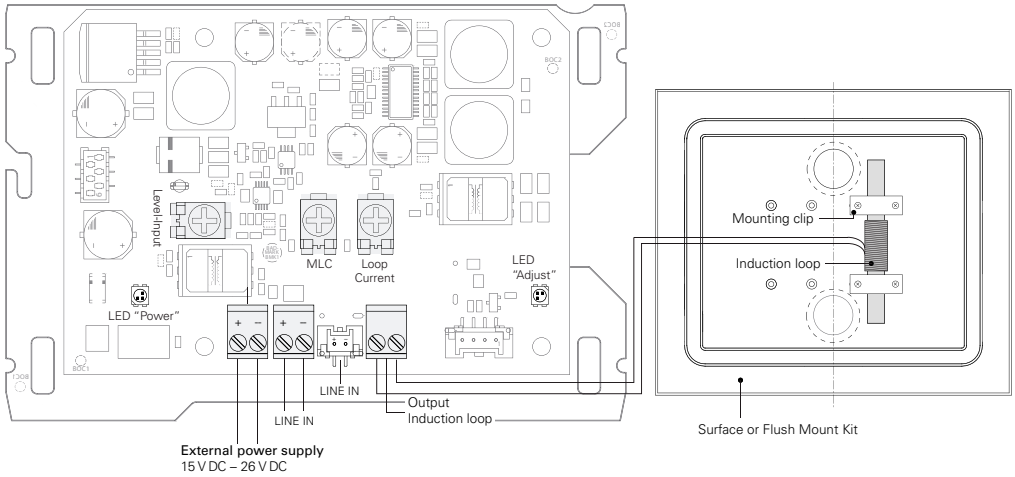
– Mount the flush mount kit or surface mount kit (see respective short reference)
– Mount the induction loop on the surface mount box as shown in the following picture.



Note:
It is mandatory to install the induction loop on the right side of the housing, as shown in the connection diagram. Otherwise disturbing hum may occur. For the installation use the attached mounting clips and screws (included extent of supply).

Carry out the connection of the induction loop signal input and power supply

– Connect the loop cable (polarity does not matter) via the screw terminals as shown in the following picture.
– Connect the signal input with a twisted pair of shielded cable. The cable can be connected via the screw terminal or the JST plug (type: PAP-02v-s) as shown in the following picture.
– Connect power supply (15 – 26 VDC) as shown in the following picture.



– Switch on the external power supply and check if the green "Power" LED illuminates.
– The potentiometers "Level-Input", "MLC" and "Loop Current" are preset at factory delivery.
– Test the system performance with a loop receiver or a field strength meter. Adjust the power if necessary. Consider the respective standards when doing so.
  – Level-Input: Adjust the level of the input signal. The LED lights up green when the input level is sufficient.
  – Loop Current: Adjust the signal strength of the induction loop.
  – MLC: Metallic surfaces may reduce the transmission of higher frequencies. Adjust a sound that is too muffled by reducing low-frequency signal components.
– Mount the induction loop amplifier module (see short reference surface/flush mount kit).

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**.

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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