



# MAGELLAN UC-AEC System



# Dull-Duplex Digital Counter Intercom System with Acoustic Echo Cancellation and Induction loop

MAGELLAN UC-AEC is a digital counter intercom system which allows clear and simple speech at information booths, point of sales, and receiving desks wherever glass disrupt conversation between people. This system provides Full Duplex and excellent communications through obstructions. MAGELLAN UC-AEC is the best intercom solution for applications requiring perfect voice transmission even in the most difficult acoustic conditions. The combination of this system with the induction loop antenna enables the hard of hearing people reception.

#### **BENEFITS OF THIS SYSTEM**

- Clear and simple communications through glass obstructions
- Full Duplex conversations
- Anti-larsen and echo cancellation functions
- Automatic variation of the amplification level according to ambient noise levels
- Independent levels adjustments for agent and client sides

#### **AGENT SIDE**

- A Microphone: MASv2, Desktop agent microphone or MAPv2, Build-in agent microphone. These microphones are equipped with system control keys and LED status indicators:
  - Control keys: ON/OFF and over-amplification (6 dB: double noise level)
  - LED status indicators: ON/OFF, 6 dB, BME
- A Central Unit for Acoustic Echo Cancellation. Main component
  of the system, the central unit UC-AEC integrates a digital speech
  processing by DSP (Digital Sound Processor). This unit is delivered
  with fixing material, cables and power supply.
- An antivandal proof wall or desk mount loudspeaker, HPU.



#### **CLIENT SIDE**

- An antivandal proof microphone, with unidirectional electret cellule, MC or MCU.
- An antivandal proof wall or desk mount loudspeaker, HPU.
- A quadratic induction loop antenna for hard hearing people, BME.





## **MAGELLAN UC-AEC System**

### Dull-Duplex Digital Counter Intercom System with Acoustic Echo Cancellation and Induction loop

#### MAGELLAN UC-AEC SYSTEM CONSISTS OF THE FOLLOWING COMPONENTS



#### **UC-AEC**

The central unit is installed under the desk on agent side. It is delivered with microphone and loudspeaker connection cables, its mounting flange, and an external power supply with a mounting flange.

Communication with PC for the configuration of the system is provided via Ethernet connector, located on the UC-AEC front panel. The level of the field created by the magnetic loop is adjustable using a front panel potentiometer, in case that the default level setting is not appropriate.



#### MC or MCU

Vandal-proofed unidirectional microphones, to be mounted on the customers side.



#### BME

The BME frame is a magnetic hearing loop which ensures accessibility for hearing impaired persons with compatible hearing aid (T position). This new high-performance loop, in the form of a frame, meets the requirements of the new EN 60118-4 standard for the hearing impaired, effective as of March 2009.



#### HPL

Loudspeaker unit to be mounted on customer side.



#### MASv2 or MAPv2

Fitted on flex atached to built-in support plate comprising the two intercom control keys.

#### **FEATURES**

Full Duplex

Natural two-way communication in both directions.

Fully Digital (DSP)

The central unit integrates a Digital Signal Processor.

Anti-larsen and echo cancellation functions

To avert larsen and echo effects caused by the Full Duplex communication, an echo cancellation process is used by the program to analyze and define the disturbance signal parameters and to eliminate disturbance from the usable signal.

 Automatic variation of the amplification level according to ambient noise levels

The DSP measures the noise level in the hall via the client or agent microphone, and automatically adapts the gain of each channel to maintain good audibility.

Limite

This reduces the sound level in the speakers when client speaks too loudly or too close to the microphone.

Automatic standby mode

The system goes automatically into standby mode (programmable parameter) and wakes from sleep when it detects voice activity. It differentiates speech and background noise.

#### Antivandal client microphones and speakers

Client microphones and speakers are suitable for outdoor applications and sensitive areas.

■ Programmable output levels

Independent levels adjustments for agent and client sides.

 To make the system foolproof, all settings are made using the embedded web server incorporated into the central unit UC-AEC.
 The embedded web server is accessible via any internet browser.

#### **SPECIFICATIONS**

Power supply: 230 VAC/50 Hz/0.2A

Max input level: -18 dBu

■ Distortion: <0.4% to 1W

Max output power/channel: 4 weff

■ Bandwidth: 50 Hz ~ 7 kHz, ±3 dB

Conditions for use

■ Temperature of -10 °C ~ +40°C

• Relative humidity: 100%

Water-tightness: IP23