

## MAGELLAN

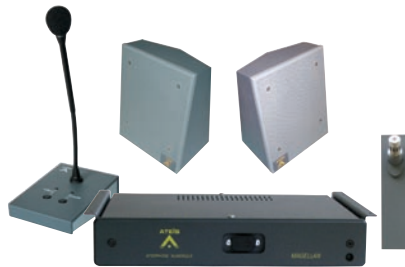
### FULL DUPLEX DIGITAL COUNTER INTERCOM



#### MAGELLAN / Intercom system

MAGELLAN is a digital counter intercom which enables a high quality full duplex connection using digital processing of the audio signal.

The MAGELLAN intercom consists of the following components:



**Client side:** A microphone (MC), one or two loudspeaker (HPU) a strip for hard-of-hearing people (optional).

**Agent side:** A microphone equipped with control keys and pilot lamps (MAS) and one or two loudspeakers (HPU). A central unit (UC) with integrated digital speech processing by DSP (Digital Signal Processor).

The agent has an intercom power button (ON/OFF) and a power boost button (+6 dB) with pilot lamps, in case levels are insufficient.

The BME induction loop for hard-of-hearing people can be adapted to all UC1 central units as an additional option.

For MAGELLAN and MAGELLAN Compact the DSP uses a program based on complex algorithms to operate the intercom functions:

- **Antilarsen function:** to avert larsen effect, an echo cancellation process is used by the program to analyse and define the disturbance signal parameters and to eliminate disturbance from the usable signal. This amounts to breaking the amplification loop on one or two channels, or on both channels simultaneously.
- **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.
- **Sound limiter:** this reduces the sound level in the speakers when clients speak too loudly or too close to the microphone.
- **Level settings and sound activity detection thresholds.**

To make the system foolproof, all settings are made using the INGPC software program installed on a laptop computer which is connected to the Central Unit via a RS232 serial connection or USB for MAGELLAN Compact.

#### MAGELLAN CHARACTERISTICS

- Power supply: 230 VAC/50 Hz/0.2 A.
- Max input level: -18 dBu.
- Distortion: <0.4% to 1 W.
- Max output power/channel: 4 Weff.
- Bandwidth: 50 Hz - 7 KHz ±3 dB
- Dynamics: >58 dB
- Conditions for use:  
 temperature of -10 °C to + 40°C,  
 relative humidity: 100%, water-tightness: IP2.

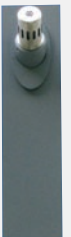
#### UC1 / Central unit

Unit fixed under the plate with a clamp.



#### MC / Client microphone

Anti-vandal design, uni-directional electret cell.  
 Sensitivity : 14 mv/Pa



#### MAS / Agent microphone

Fitted on flex attached to built-in support plate comprising the two intercom control keys.  
 Sensitivity : 8 mv/Pa



#### HPD / HPG Left or Right Agent/client loudspeaker.

Anti-vandal design, front in painted steel, fain factor: 85 dB / 1 W / 1 m.



#### MAGELLAN Features

- Full Duplex.
- Bandwidth: 8 KHz.
- Fully digital (DSP).
- Antilarsen via echo cancellation (without filtering).
- Nominal power: 4 W/8 Ohms.
- Programmable output level.
- Limiter.
- Automatic stand-by-mode.
- Anti-vandal microphones and speakers.

