

MESSENGER G2 SIDE-LOBE-FREE STEERABLE DIGITAL LINE ARRAY

The MESSENGER G2 line array has a very tightly controlled beam and signal pattern (stays within 3 dB from 5m to 100m) for 12/18/24/36/48 Class-D amplifier channels (depend on model), and can be shaped for specific applications or environments requiring symmetrical or asymmetrical, single, dual or triple lobe designs. The MESSENGER G2 is equipped with two line inputs, speech and background music and can be separately adapted for optimum performance.

The BGM input has sound directivity which provides an easy and quick setting while keeping the high quality music. These filters also enhances the low frequency performance of the MESSENGER G2. For speech mode, there will be 3 standard filters available for quick setup, in more demanding situations, the intelligibility can be fine tuned manually.

The ADI DSP chipset and a sampling rate of 48 kHz ensure a wide frequency response, up to 22 kHz for crystal-clear sound quality and an impressive low frequency response. With the patented algorithm and the side lobe free suppression for speech reinforcement, making the MESSENGER G2 a fully versatile steerable line array which meets the demands of today's market for pro-sound and speech reinforcement.

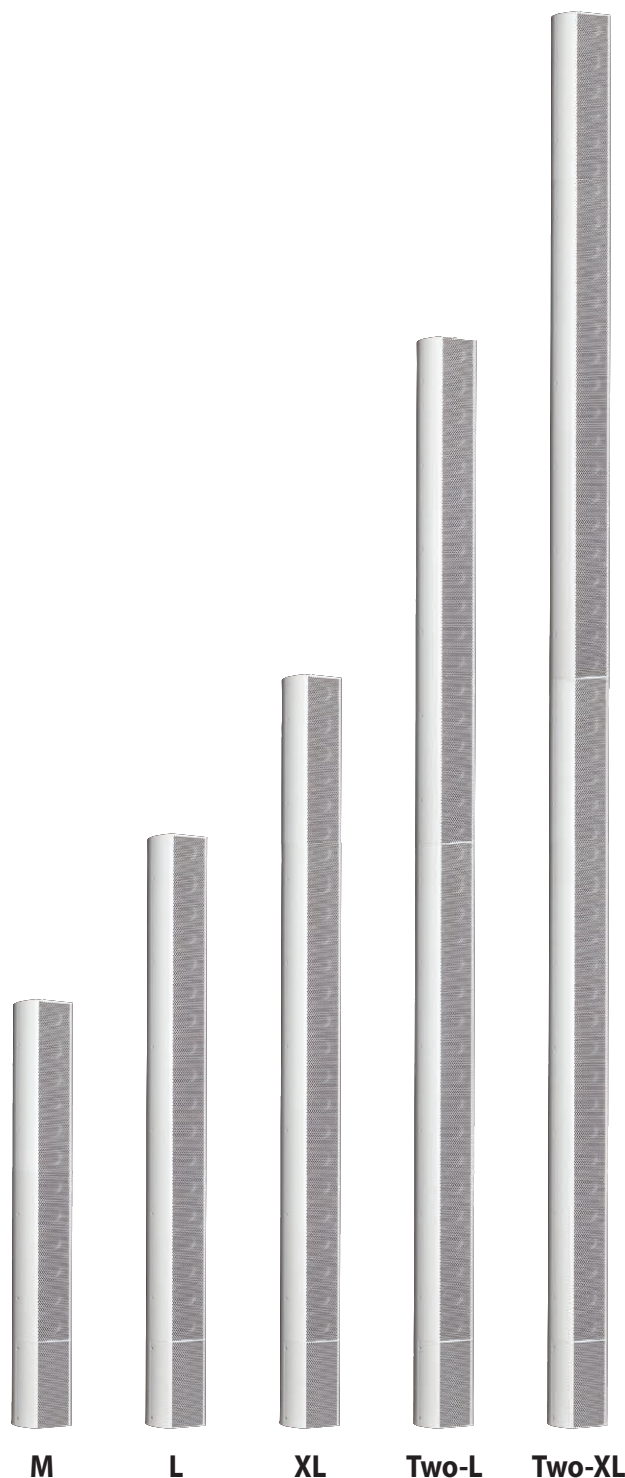
The MESSENGER G2 is entirely software controlled. The lobe control and variable acoustical centre can compensate for architectural requirements and accommodate various 4"~ 13"(1.2m ~ 4m) mounting heights.

FEATURES

- Triple-lobe feature for the ultimate accuracy in lobe design
- Beam steering ± 45 degrees
- Designed for high quality speech and BGM applications in reverberant acoustic environments
- Variable vertical dispersion controllable between 45 and 5 degrees
- Variable acoustic centre in 9 steps (from asymmetrical to symmetrical)
- The asymmetrical lobe has the ability to keep the sound deviation within 3 dB from 5m to 100m
- Integrated DSP control with 8 band PEQ, noise gate, delay and peak limiter
- VOX-control on priority input and ambient noise sensing function
- 24VDC input for battery backup, 20 kHz input surveillance
- Internal HF carrier loudspeaker surveillance ambient noise sensor, temperature sensor with frost protection
- Support EASE DLL for room acoustic simulations
- Audio and data transmission via Ethernet for detailed status report

MESSENGER G2 (ALL IN ONE TYPE)

M	12 Active Channels - 5.6ft (1.7m) 94 dB to 82ft (25m)
L	18 Active Channels - 7.9ft (2.4m) 94 dB to 98.4ft (30m)
XL	24 Active Channels - 10.2ft (3.1m) 94 dB to 131.2ft (40m)
2L	36 Active Channels - 15.4ft (4.7m) 94 dB to 196.9ft (60m)
2XL	48 Active Channels - 20.3ft (6.2m) 94 dB to 229.7ft (70m)



MESSINGER PRO SOFTWARE

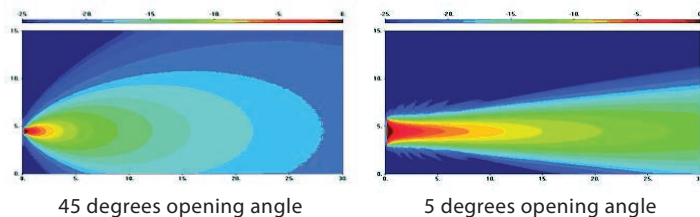
LOBE SHAPING BY MESSENGER PRO DESIGN SOFTWARE

The acoustical centre of the array can be adjusted to match exactly for the acoustic requirements of the installation, the mounting height and other environmental needs. Each driver centre of the array is separately powered and processed, therefore, all the lobe shape variations between a symmetrical and an asymmetrical arrangement can be made with the simple selection of combo-box in the MESSENGER PRO software.

DIRECTIONAL ACTIVE DSP ARRAY SYSTEM

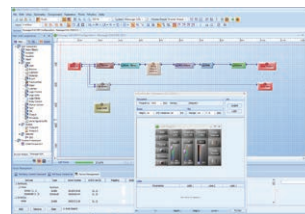
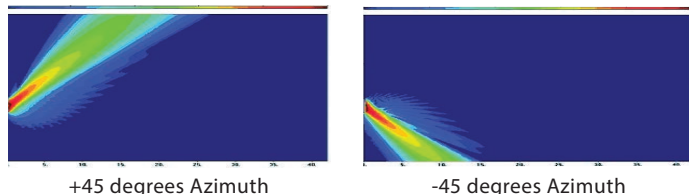
Different Opening Angles

A variety of opening angles from 45° to 5° with a single Lobe

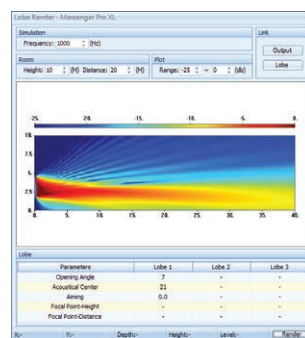


Accurate Beam Steering

A variety of opening angles from 45° to 5° with a single Lobe



MESSENGER PRO Design Software



Windows-based PC Setup

TECHNICAL SPECIFICATIONS

ELECTRICAL

- AC power input: 210 ~ 230 VAC (5%/-10%)
- Power consumption (AC)

M	211W
L	277W
XL	343W
2L	554W
2XL	686W

- DC power input: 16 VDC ~ 27 VDC
- Power consumption (DC)

M	201W
L	263W
XL	326W
2L	526W
2XL	653W

AUDIO CHARACTERISTICS

- A/D-D/A bit resolution: 24 bit
- Sampling rate: 48 kHz
- Internal processing: 32 bit (floating points)
- Frequency response: 100 ~ 22 kHz
- Max. SPL: 93 dBA ± 1 dB
- Max. input/output level: 18 dBu
- Input impedance (balanced): 10k ohm
- Output impedance (balanced): 90 ohm

INTERNAL AMPLIFIER

- Type: 24 Class-D amplifier channels
- Power rating: 70W
- Amplifier quantity: 4 x 6 pcs (6 channels per amplifier board)

DSP PROCESSING

- Component: Input, Output, PEQ, Ethernet IGMP, Audio Stream, VoIP Receive, Standard Mixer, Ducker, DNM, Limiter, Selector, Delay
- Pre-delay: 1,000 ms
- Equalizing: 8 bands PEQ
- Peak limiter: Level adjustable
- Mute: audio on/off
- Signal indicators: Clipping/Audio/Limiter/Noise-gate
- Input signal surveillance
- Input line detection: 20 kHz, 18 kHz and 20 kHz standard on-board surveillance

MECHANICAL

- Coverage angle
 - Vertical: 5, 7, 10, 15, 20, 25, 30, 35, 40, 45 degree
 - Horizontal: 145 degree (for all units)
- Lobe shaping (centered on driver): 1, 4, 6, 9, 13, 16, 19, 21, 24
- Lobe steering: -45° to 0° to 45°
- Speaker type: 4.25" (dual-cone with inverted surround, weatherproof, aluminum)



ATEIS Europe B.V.

Celsiusstraat 1 - 2652 XN Lansingerland (Rotterdam Region), Netherlands
Tel: +31 (0)10 2088690 | www.ateis-europe.com | info@ateis-europe.com

TECHNICAL SPECIFICATIONS

MECHANICAL

• Dimension

M	12 Loudspeakers 1700 mm
L	18 Loudspeakers 2400 mm
XL	24 Loudspeakers 3100 mm
2L	36 Loudspeakers 4700 mm
2XL	48 Loudspeakers 6200 mm

• Weight (net/shipping)

M	27/35 kg
L	38/47 kg
XL	48/58 kg
2L	76/94 kg
2XL	96/116 kg

• Mounting: 1 set of wall bracket

• Color: RAL9016

ENVIRONMENTAL

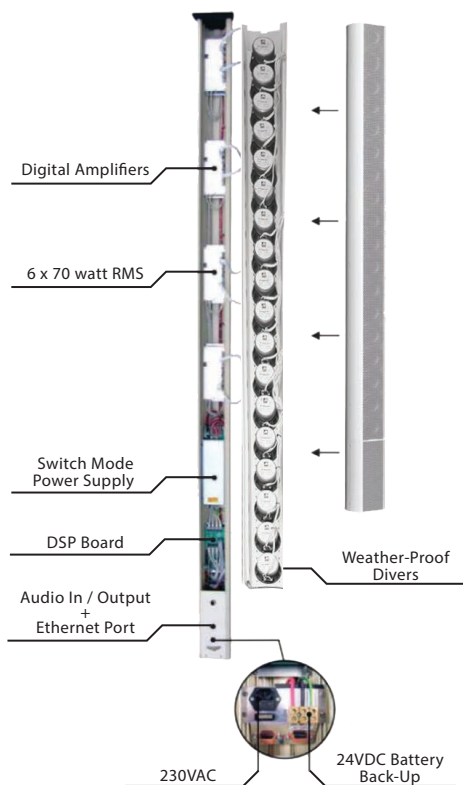
• Temperature range: 0 °C ~ +40 °C (+32 °F ~ +104 °F)

• Operating environment: -10 °C ~ +55 °C (+14 °F ~ +131 °F) relative humidity, non-condensing

ORDERING INFORMATION

• MESSENGER G2 (All in One Type)

MESSENGER-M	DIGITAL LINEAR SPK ARRAY-M all in one(G2)
MESSENGER-L	DIGITAL LINEAR SPK ARRAY-L all in one(G2)
MESSENGER-XL	DIGITAL LINEAR SPK ARRAY-XL all in one(G2)
MESSENGER-2L	DIGITAL LINEAR SPK ARRAY-2L all in one(G2)
MESSENGER-2XL	DIGITAL LINEAR SPK ARRAY-2XL all in one(G2)



ARCHITECTS & ENGINEERS SPECIFICATIONS

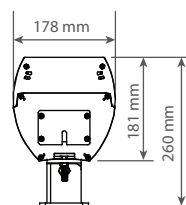
The MESSENGER G2 has a very tightly controlled beam, which can be shaped as required for specific applications or environments requiring symmetrical or asymmetrical, single, dual or triple lobe design. The availability of highly integrated DSP control with 8 bands of EQ, noise gate and etc, providing 24 channels of precise controls by means of additional process channels, and results in a very powerful array where, where the SPL stays within ± 3 dB over a distance of 100 m.

The MESSENGER G2 offers a Q factor of up to 72 (10V by 145H) or even higher with smaller vertical opening angles up to 5 degrees. MESSENGER G2 is completely software controlled, this lobe control/variable acoustical center can compensate for architectural requirements and can be easily adapted for specific types of application. Its flexible mounting height of between 4 and 13.1 ft above ground level which ensures the array can be securely positioned out of reach. Each MESSENGER G2 is equipped as standard with a 24 VDC battery input, amplifier and loudspeaker-element surveillance based on internal HF-carrier detection.

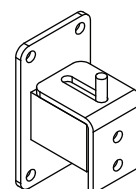
The MESSENGER G2 is an ideal use in airports, museums, sport stadia, shopping areas, railway stations, exhibition centers, houses of worship, churches, and also in life-safety applications where special requirements are necessary for Voice Evacuation systems.

APPEARANCE AND DIMENSIONAL DIAGRAM

TOP VIEW



MOUNTING BRACKET



FRONT VIEW SIDE VIEW REAR VIEW

