

SYRINCS



MA101

User manual **EN**

GERMANY

Hans-Thomann-Str.1

96138 Burgebrach

Germany

www.syrincs.de

ASIA PACIFIC

1601-02,16/F Seaview

Commercial building,21-24

Connaught Road West,

HongKong

www.syrincs.hk

CONTENTS

1	General information about this manual	1
2	For your safety	2
3	Features	3
4	Description	3
5	Installation	8
6	Technical specifications	10
7	Plug and connection assignment	11
8	Protecting the environment	13

1 General information about this manual

This user manual contains important instructions for the safe operation of the unit. Read and follow the safety instructions and all other instructions. Keep the manual for future reference. Make sure that it is available to all those using the device. If you sell the unit, please make sure that the buyer also receives this manual.




Our products are subject to a process of continuous development. Thus, they are subject to change.

Signal words used

All precautions in this manual are clearly highlighted. The following signal words are used for precautions:

DANGER	This warns of dangers that can result in severe injuries or death if the instructions are not followed.
WARNING	This warns of dangers that can result in severe injuries or death and/or cause considerable material damage if the instructions are not followed.
CAUTION	This warns of dangers that can result in reversible injuries and/or considerable material damage if the instructions are not followed.
NOTICE	This warns of dangers that can result to faults during operation and/or considerable material damage. Environmental damage may also occur if the instructions are not followed.

Symbols used

		
General warning of a dangerous location	Warning of suspended load	Notice

2 For your safety

Intended use

This device is designed as a PA system. Use the device only as described in this user manual. Any other use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons are allowed to use this device only if they are supervised or instructed by a person who is responsible for their safety.

Safety instructions



DANGER

Danger for children

Ensure that plastic bags, packaging, etc. are properly disposed of and are not in the reach of babies and young children. Choking hazard!

- Ensure that children do not detach any small parts (e.g. knobs or the like) from the product. They could swallow the pieces and choke!
- Never let children play unattended with the electrical devices.



CAUTION

Possible hearing damage

The device can produce volume levels that may cause temporary or permanent hearing impairment. Over an extended period of time, even levels that seem to be uncritical can cause hearing damage.

- Decrease the volume level immediately if you experience ringing in your ears or hearing impairment. If this is not possible, keep a greater distance or use sufficient ear protectors.



NOTICE

Operating conditions

This device has been designed for indoor use only.

- To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.

3 Features

Dual 3" Neo compression driver.

2 × 44mm Neo woofer unit.

Long term continuous power 800W.

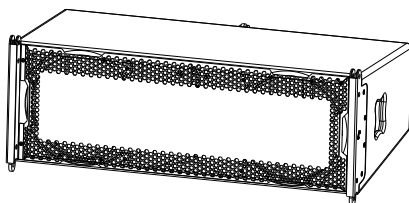
Dispersion angle 90° x 30°.

Frequency response 80Hz-18kHz (-3dB).

Sensitivity: NF 96dB, FF 101dB.

Max SPL: NF 117dB/123dB(PEAK), FF 123dB/129dB(PEAK).

Appropriate hanging frame with shackle for installation.



4 Description

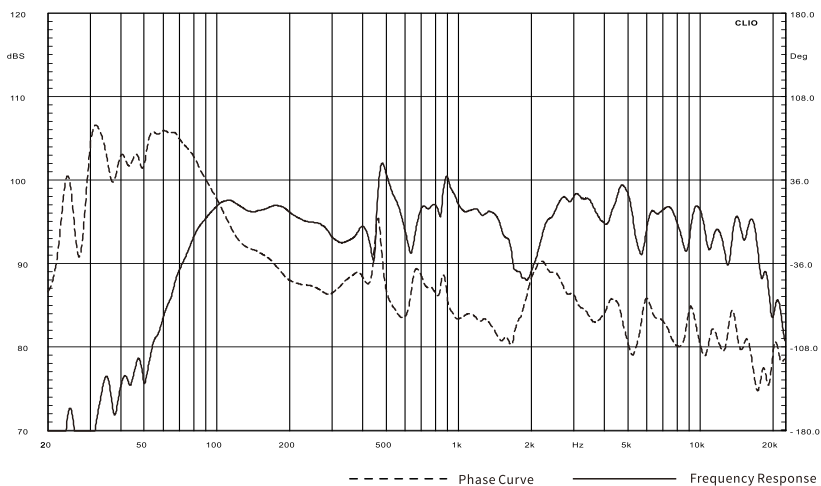
MA101 is medium size line array speaker system, utilizing appropriate frame, which can hang 12pcs MA101 speaker at its maximum in vertical direction. MA101 is two-way speaker, built-in dual 10" Neo woofer and 2 × 44mm Kapton compression driver. The Cylindrical wave segments of each cabinet will couple without gaps and sum up coherently. Splay angles between adjacent cabinets can be set in the range from 0° to 10°.

Through FEA (Finite Element Analysis) to optimize the magnetic system and copper ring, dual 10" LF driver can realize super low distortion and maximum cleanness, besides overheat protection for compression driver and perfect circuit protection for reliability. MA101 adopts multi-functional structure design, suitable for live performance and fixed installation. The cabinet is made of 15mm, 13 layers birch plywood and weather resistant polyurethane finish. The cabinet is included appropriate flying frame, which can be installed and hanged conveniently according to different environment.

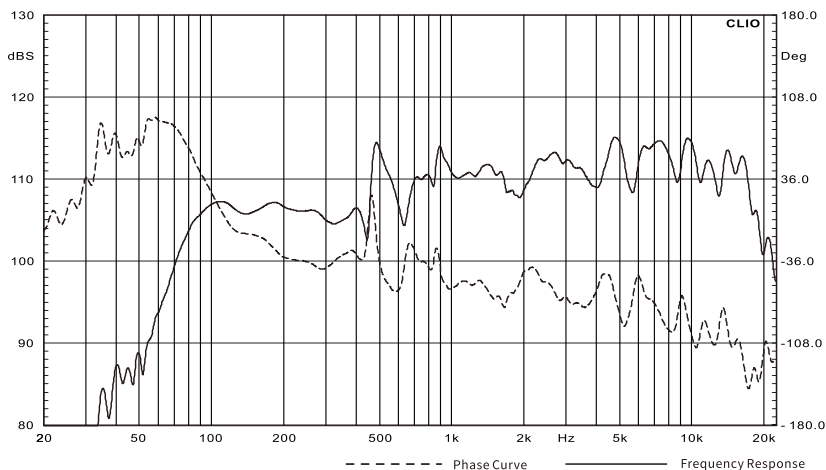
Application

- Religion Place ■ Auditorium ■ Multi-function hall ■ Theater
- All kinds of living performance ■ Sports events ■ Mobile performance

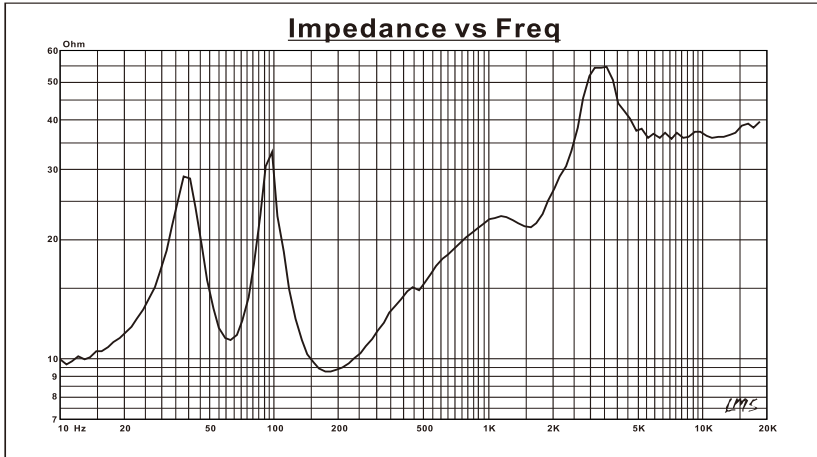
Frequency Response/phase Curve-NF



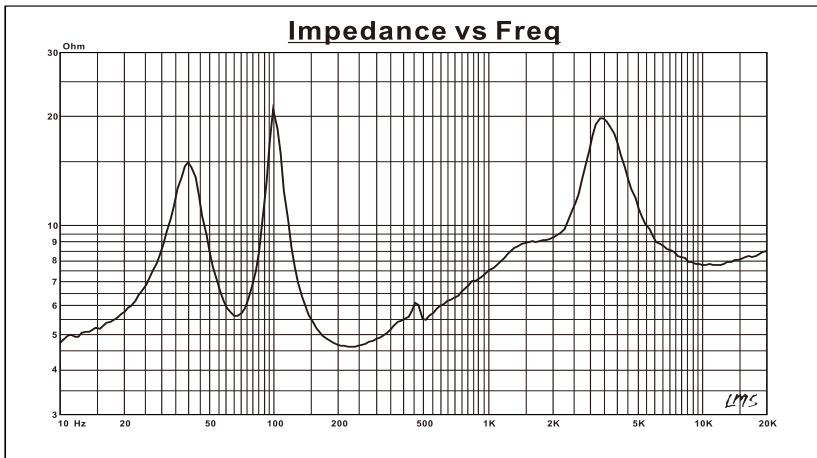
Frequency Response/phase Curve-FF



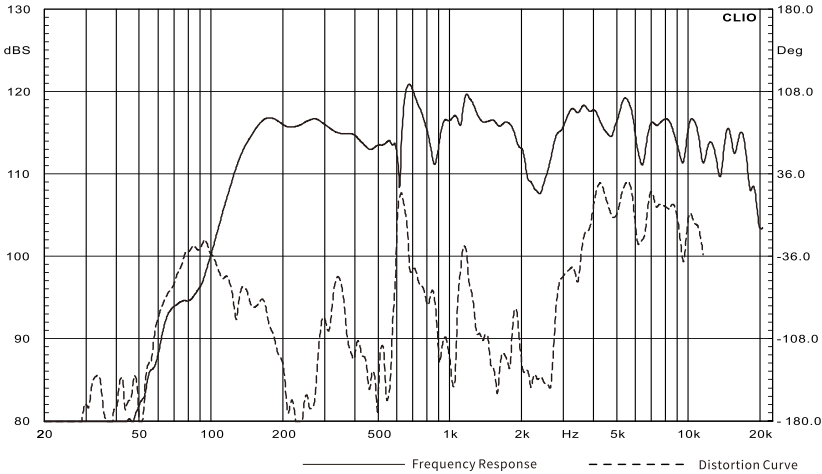
Impedance Curve-NF



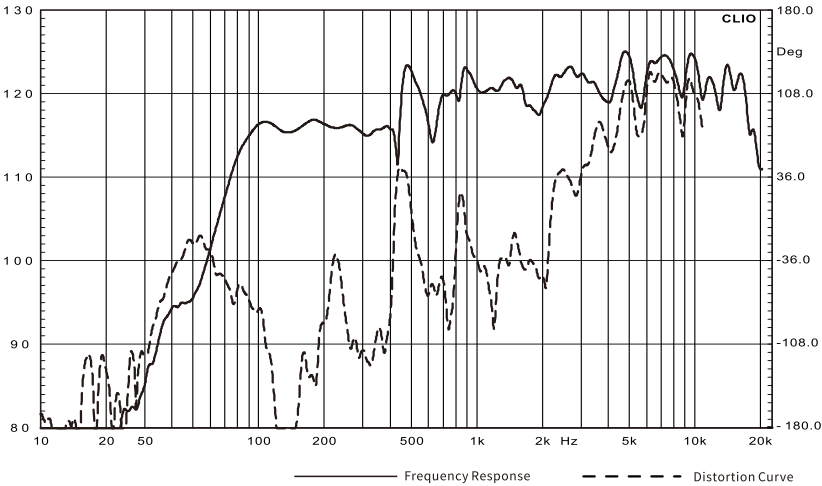
Impedance Curve-FF



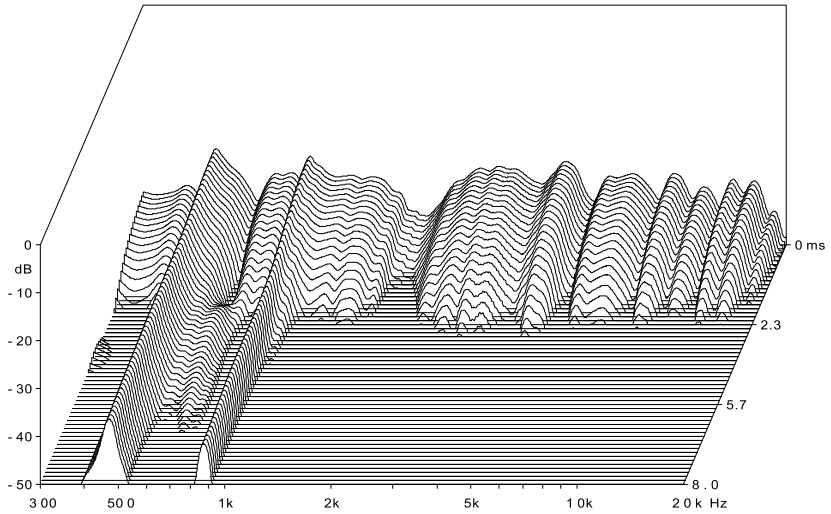
Harmonic Distortion-NF



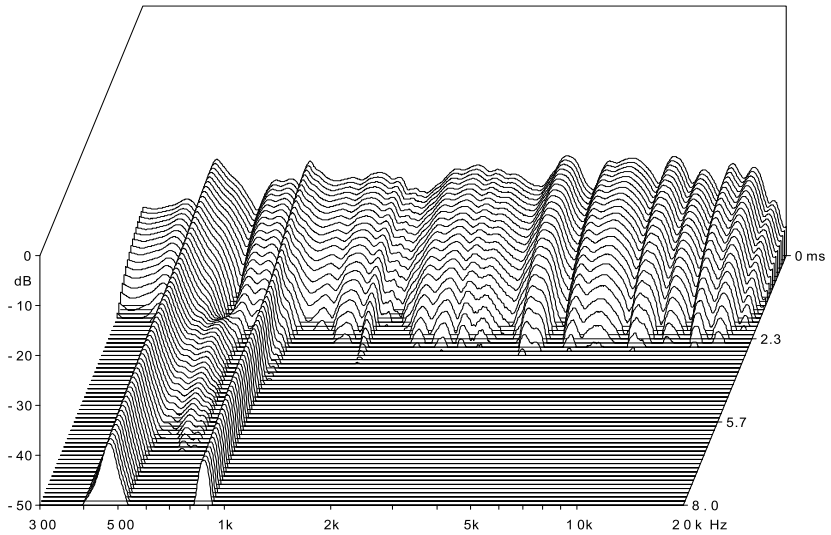
Harmonic Distortion-NF



Waterfall-NF



Waterfall-FF



5 Installation

Unpack the device and check carefully that there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the product against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.

Create all connections while the device is off. Use the shortest possible high-quality cables for all connections.



WARNING

Risk of injury caused by falling objects

Make sure that the installation complies with the standards and rules that apply in your country. Always secure the device with a secondary safety attachment, such as a safety cable or a safety chain.



NOTICE

Possible property damage by magnetic fields

Loudspeakers produce a static magnetic field

→ Therefore maintain an appropriate distance to devices that can be adversely affected or damaged by an external magnetic field.



NOTICE

Use of stands

→ When mounting the device onto a stand, ensure that the stand is in a safe and stable position and that the weight of the device does not exceed the maximum permissible load capacity of the stand.

We recommend you to set up the speakers in a way that their sound signals can reach the audience unobstructed. It will often be helpful to mount the speakers on tripods. Thus, the sound will be evenly spread with maximum range throughout the audience area.

Always use high grade cables to connect your equipment. Otherwise you won't reach maximum sound quality.

For optimum results both impedance and power rating of the speaker must match the requirements of the amplifier /input signal. Consider the technical specifications of the speakers connected, the overall impedance of the connected loudspeakers shall not be less than the minimum output impedance of the amp. The amps max, RMS output power should be 50% above the power handling capacity of the connected speakers.

If you notice distortion, the amp or the speaker is over loaded during operation. This may destroy permanently the amp or the speaker. Pls reduce the volume as soon as you notice distortion.

MA101 speaker includes appropriate flying frame, which can be installed or hanged conveniently according to different environment.

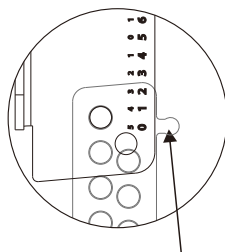
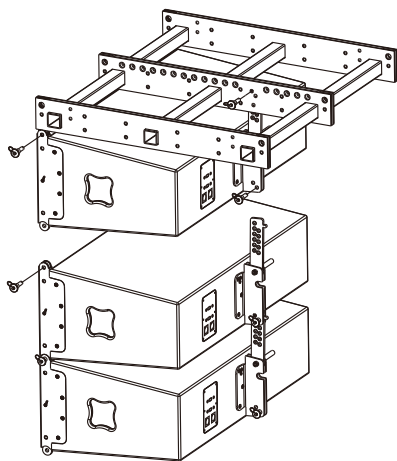
Hanging system includes MA101 frame, front hanging plate, rear hanging plate and lockpin.

The rear hanging plate is fixed on cabinet to choose splay angle between adjacent speakers quickly.

MA101 frame is soldering steel frame, which can hang 12pcs MA101 speaker at its maximum.

Installation Reference

1: Hanging



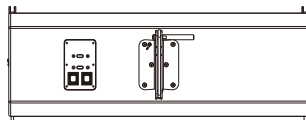
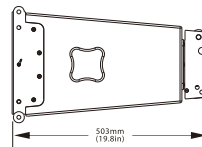
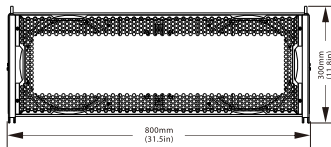
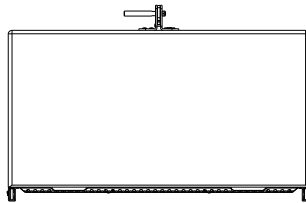
The outstanding point of rear hanging plate indicates the present angle.



Warning: Make sure the mounting accessories safety factor not less than 5:1 or meet the local standard during installation.

6 Technical specifications

Configuration	2 × 44mm Neo compression driver Dual 10" woofer
Power handling	400 W (RMS)
Sensitivity(1w/1m)	NF:96dB FF:101dB
Impedance	8 Ω
Maximal sound pressure level	NF:117dB/123dB(PEAK) FF:123dB/129dB(PEAK)
Frequency range	50Hz -18kHz(-3dB)
Beam angle	90° × 30°
Dimensions (W × H × D)	800mm × 503mm × 300mm
Weight	23.0kg



7 Plug and connection assignment

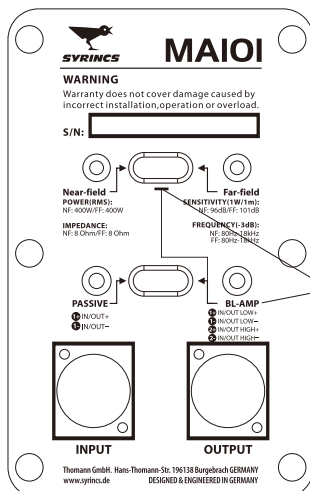
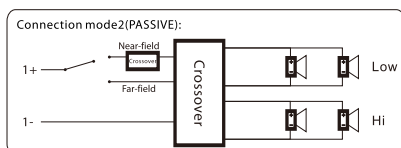
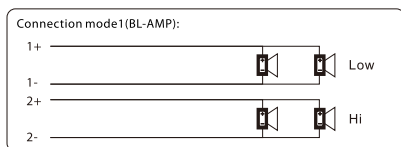
Installation

This chapter will help you select the right cables and plugs to connect your val-uable equipment in such a way that a perfect sound experience is ensured.

Please follow these tips, because special care is required when dealing with sound and light: Even if a plug fits into the socket, an incorrect connection may result in a destroyed power amp, a short circuit or just in poor transmission quality!

MA101 has two Speakon NL4 socket and amplifier connection. Two parallel connection socket is convenient to connect with another speaker.

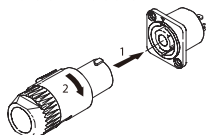
Terminal Plate



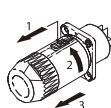
▲ Note:
When using external crossover, please ensure that the switches are to the middle position.

NL4 Connection

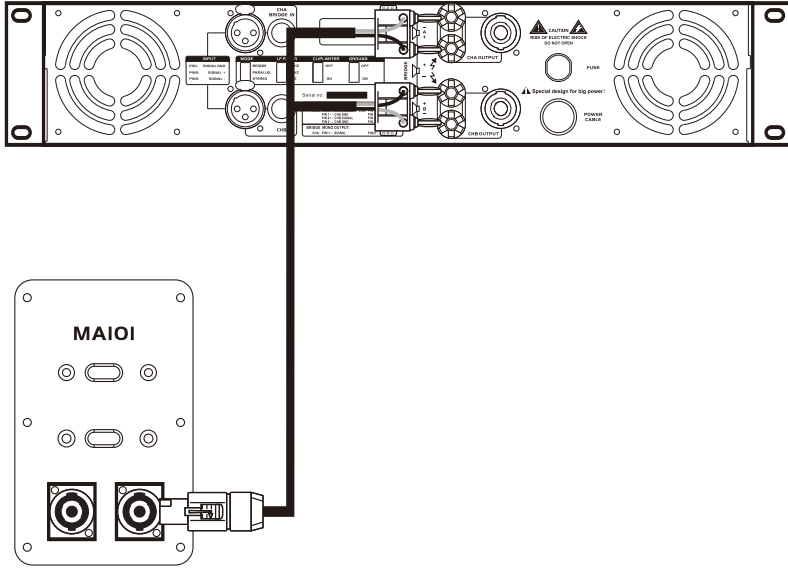
1: Connection



2: Disconnection



System Connection Demonstration



- ⚠ Note:** The output impedance of speaker and amplifier should be matched.
- ⚠ Note:** The polar of speaker and amplifier should be correctly connected.

8 Protecting the environment

Packaging



For the packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling. Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) in its currently valid version. Do not dispose with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.

