



X-LINE

Speaker Systems

USER GUIDE

X10, X12, X212, Xs15, Xs18 and XH18

10. WARRANTY INFORMATION

NEXT products are warranted, by NEXT-proaudio, against manufacturing defects in materials or craftsmanship over a period of 5 years for the loudspeakers, and 2 years for the other components, counting from the date of original purchase. The original receipt of purchase is mandatory for warranty validation purposes, and the product must have been bought from a NEXT-proaudio authorized dealer. During the warranty period NEXT-proaudio will, at its own discretion, either repair or replace a product which prove to be defective provided that the product is returned in its original packaging, shipping prepaid, to an authorized NEXT-proaudio service agent or distributor.

NEXT-proaudio cannot be held responsible for defects caused by unauthorized modifications, improper use, negligence, exposure to inclement weather conditions, act of God or accident, or any use of this product that is not in accordance with the instructions provided by this manual and/or NEXT-proaudio. NEXT-proaudio is not liable for consequential damages.

This warranty is exclusive and no other warranty is expressed or implied. This warranty does not affect your statutory rights.

11. Contacts

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9. Technical specifications summary

X10, X12 and X212

SPECIFICATIONS	X10	X12	X212
Frequency Range (-6dB)	70Hz-20kHz	57Hz-20kHz	50Hz-18kHz
Sensitivity 1w/1m half-space	98dB	99dB	102dB
Maximum SPL (calculated)	125dB	127.5dB	133.5dB
Power (AES)	500W	700W	1400W
Impedance	8Ω	8Ω	4Ω
Dispersion (HxV)	50°-100° x 50°	50°-100° x 50°	60° x 40°
Drivers (LF/HF)	10"/1"	12"/1"	2x12"/2"
Connectors	2xNL4	2xNL4	2xNL4
Dimensions (WxHxD)cm	36.7x59.2x31	42.2x65.7x36.1	42.4x98.5x36.1
Weight	19.2kg	23.6kg	40.2kg

Xs15, Xs18 and XH18

SPECIFICATIONS	Xs15	Xs18	XH18
Frequency Range (-6dB)	35Hz-250Hz	34Hz-200Hz	38Hz-160Hz
Sensitivity 1w/1m half-space	99dB	102dB	105dB
Maximum SPL (calculated)	130dB	133dB	139dB
Power (AES)	1400W	1400W	1400W
Impedance	4Ω	8Ω	8Ω
Drivers	15"	18"	18"
Connectors	2xNL4	2xNL4	2xNL4
Dimensions (WxHxD)cm	78.6x43.6x50.6	67.7x56x78.6	79.6x61x63
Weight	47kg	54kg	55.8kg

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1. INTRODUCTION

Thank you for purchasing a NEXT X-line Speaker system. The X-line is a range of portable loudspeaker enclosures designed for a wide variety of portable sound reinforcement and club applications. This manual is intended to provide necessary information about the X-line products covered, which include the X10, X12 and X212 full-range enclosures, as well as the Xs15, Xs18 and XH18 subwoofer enclosures.

For optimum performance, it is recommended that X-line systems to be used with the NEXT LMS-242 digital signal processor. The controller provides crossover, delay, EQ and limiter functions for every possible X-line configuration. Please refer to NEXT LMS242 user's guide for further information.

2. SAFETY FIRST

General considerations

It is important that loudspeaker systems are used in a safe manner. All systems are meant to be installed and operated by qualified personnel. Please take some time to read this manual concerning safe and proper use of X-line Series loudspeakers. Always use protection gear to prevent injuries or death, and do not allow general public presence too close to the work area during equipment installation.

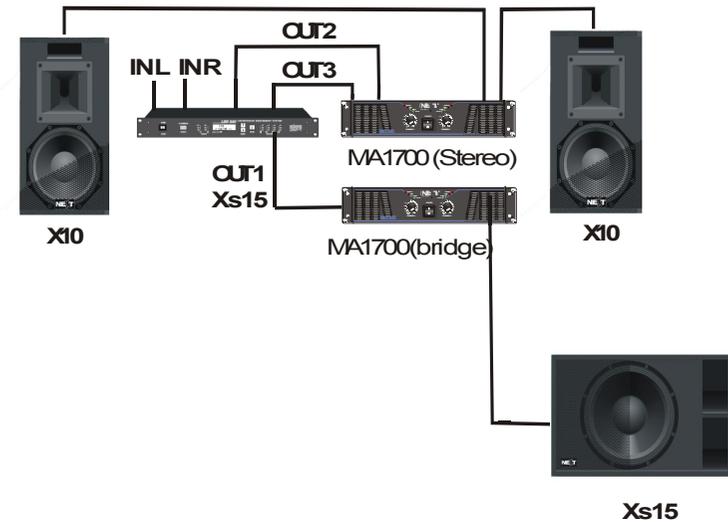
Professional loudspeakers are capable of producing extremely high sound level pressures and should be used with care. **Hearing loss is cumulative and can result from prolonged exposure to sound pressure levels above 90dB.** Never stand too close to driven loudspeakers, and use protection equipment during equipment operation.

Tripod Mounting

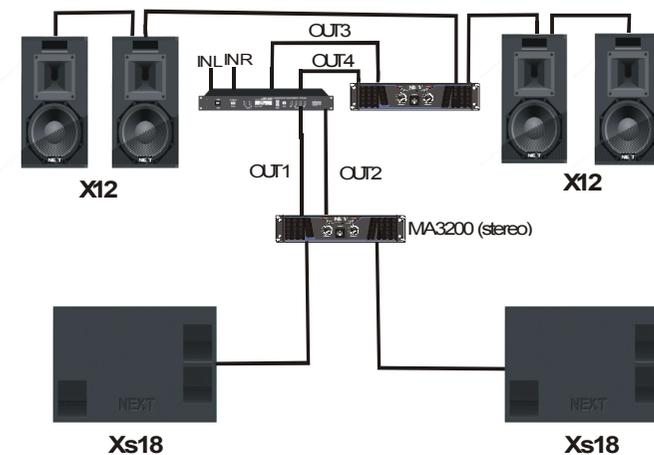
The X10, X12 and loudspeakers incorporate a pole mounting socket to make mounting on tripod stands possible. When using stands, the following precautions are should be taken:

- Ensure that the stand will support the weight of the speaker by checking the stand manufacturers rating.
- Make sure that the stand is placed on even and solid surface that can withstand the weight and that its' legs are fully extended.
- Never, ever, try to place more than one speaker on a single stand.

X10 with Xs15



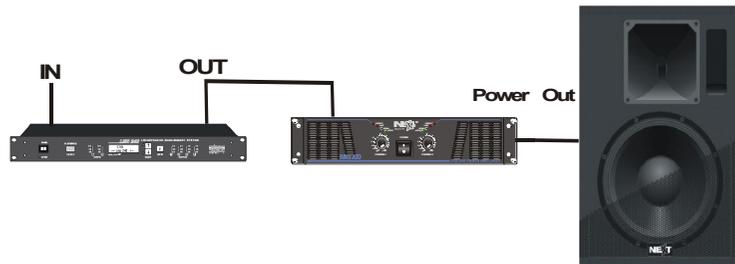
X12 with Xs18



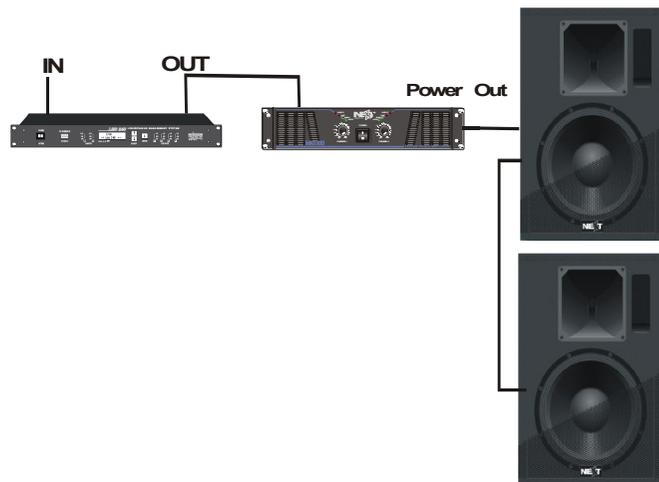
8. System Configurations

There are many different system combinations possible with the X-Line system series. Below are some typical configurations.

X10, X12 or X212 Stand-alone Full-range speaker



Depending on the amplifier, 2 units can be linked in parallel, this is possible with any of the NEXT MA Series power amplifiers.



- Place cables so that they do not present a trip hazard which could pull the system over and cause injuries.
- When used outdoors, take preventive measures because of dynamic forces like wind. (i.e. add some weight to the base of the stand).
- Do not attempt to move the stand while mounted with the enclosures
- Do not attempt to move the enclosures while connected
- Do not operate the systems under rain or moisture.
- Do not expose the systems to extreme heat or cold conditions to prevent component damage.
- Isolate the immediate area to the stand to prevent injuries from a possible fall.
- When using a pole mount with a sub-woofer enclosure, observe similar precautions.

Stacking

- Always ensure that the floor or structure is leveled and can withstand the weight of the complete stack.
- Do not stack speakers too high, especially outdoors where winds could topple the stack.
- Be aware that speakers working at very high power levels generate vibrations that can drag the systems. Take additional measures to prevent this.
- Place cables in a way that they do not present a trip hazard.
- Do not attempt to move the enclosures while connected
- Do not operate the systems under rain or moisture.
- Do not expose the systems to extreme heat or cold conditions to prevent component damage.
- Isolate the immediate area to the stack to prevent injuries from a possible fall.

Rigging and Suspension

WARNING: Suspending the system should only be carried by qualified personnel following safe rigging practices. Secure fixings to the building structure are vital. Seek help from architects, structural engineers or other specialists if you have doubts.

X-line Series enclosures are designed for portable applications, but can be suspended by means of the threaded inserts provided or using compatible NEXT-proaudio wall Brackets. The X10, X12 and X212 enclosures are fitted internally with steel corner reinforcement brackets to ensure that each cabinet is strong enough to be hung from its top.

The common practice of using commercially available eye bolts for suspension should only be undertaken with great caution. Eye bolts are strongest along the thread axis. Angling the enclosure will result in an angle pull and it is important to use eye bolts that are safe in these circumstances. Only forged shoulder eye bolts should be considered and it is important that the thread length is at least 30mm. A flat washer should be inserted between the eyebolt and the enclosure. **Formed eye bolts (i.e. those which are formed from a steel rod bent into an eye) should be avoided.** In case of portable suspended use always perform a visual inspection for component damage and/or deformation, including the cabinets. **If you find any signs of damage or deformation DO NOT USE THE AFFECTED COMPONENT. REPLACE IT IMMEDIATELY.**

3. UNPACKING

Every Next X-line Series loudspeaker is built to the highest standard and is thoroughly inspected before it leaves the factory. After unpacking the system, examine it carefully for any signs of transport damage and inform your dealer if any such damage is found. It is suggested that you retain the original packaging so that the system can be repacked for transport if necessary. Please note that Next-proaudio and its distributors cannot accept any responsibility for damage that occurs to any returned product using non-approved packaging.

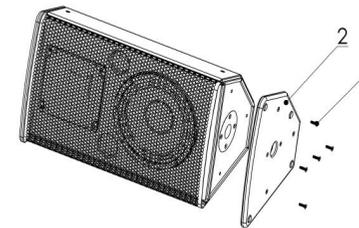
4. GENERAL OVERVIEW

The X-line X10, X12, Xs15, Xs18 and XH18 are ideally suited for applications that require very compact size, high output and ease of transportation. They also make ideal fill-in speakers for use with larger X-line systems and their very small size is particularly useful in situations that require visually discrete solutions.

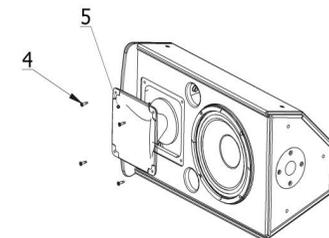
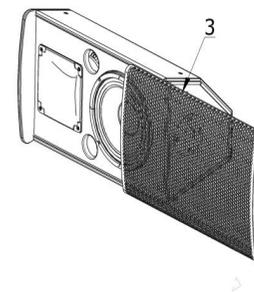
The X212 is the most powerful X-line solution, intended for more demanding situations, where higher power is needed, like (but not limited to) small to medium live venues.

7. X10 and X12 Grille removal

The X-line models X10 and X12 use an asymmetric horn in the horizontal plane varying from 50° to 100°. This means that its' assembly position must be configured according to its' pretended usage. To achieve this, we have to disassemble the grille in order to reach the horn. Follow the instructions below to achieve this.



- 1 – Remove the screws on the bottom.
- 2 – Gently remove the bottom.
- 3 – Slide the grille out.
- 4 – Remove the screws retaining the horn
- 5 – Carefully remove the horn, place it on the desired position and reverse the process.



6. CONNECTIONS

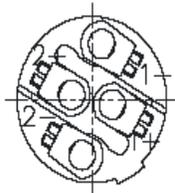
Each connector panel has two Neutrik Speakon connectors wired in parallel. The second connector allows use of a short link lead to power another parallel loudspeaker if required. The connectors are wired as follows:

X10, X12 and X212



4 pole Connector 2+ (live) and 2- (Ground)

Xs15, Xs18 and XH18



4 pole connector 1+ (live) and 1- (Ground)

4.1 X10 Full-range system



The X10 is a 2-way passive system, designed to provide exceptional club sound reinforcement and stage monitoring from a very compact enclosure. It features a powerful 10" low frequency driver and a 1" HF compression driver mounted on a constant directivity 50°-100° H x 50° V asymmetric horn. Depending on the application, the HF horn can be rotated to allow the multi-angle enclosure to be used in either its vertical or horizontal orientation. To rotate the horn for horizontal use, remove the grille (see below), unscrew the horn and rotate it 90 degrees.

The enclosure also contains 14x M6 threaded inserts for a variety of mounting configurations. It is also provided with a top hat fitting underneath for use with a tripod or as a pole socket for mounting above an X-line subwoofer.

The use of a NEXT LMS242 digital signal processor with every X-line systems is recommended but optional. Please take into consideration that using them without a proper signal processing unit may result in poor sound quality and/or damage to the components.

Applications:

- Theatres and houses of worship;
- Night clubs;
- Compact voice reinforcement;
- Front and under balcony systems;
- Portable or installed audio-visual reproduction.
- General applications requiring high quality sound reproduction with a compact enclosure;

4.2 X12 Full-range system



The X12 is a 2-way passive system, designed to provide exceptional club sound reinforcement and stage monitoring from a very compact enclosure. It features a powerful Neodymium 12" low frequency driver and a 1" HF compression driver mounted on a constant directivity 50°-100° H x 50° V asymmetric horn. Depending on the application, the HF horn can be rotated to allow the multi-angle enclosure to be used in either its vertical or horizontal orientation. To rotate the horn for horizontal use, remove the grille (see below), unscrew the horn and rotate it 90 degrees.

The enclosure also contains 14x M6 threaded inserts for a variety of mounting configurations. It is also provided with a top hat fitting underneath for use with a tripod or as a pole socket for mounting above an X-line subwoofer.

The use of a NEXT LMS242 digital signal processor with every X-line systems is recommended but optional. Please take into consideration that using them without a proper signal processing unit may result in poor sound quality and/or damage to the components.

Applications:

- Theatres and houses of worship;
- Night clubs;
- Live club performance;
- Floor monitor.

5. Amplification

All the systems are designed to be used with professional power amplifiers and NEXT-PROAUDIO recommends the following **Next Amplifiers**:

- X10** - Next MA1700 (stereo, 400W at 8 ohm*)
- X12** - Next MA2300 (stereo, 600W at 8 ohm*)
- X212** - Next MA2300 (stereo, 875W at 4 ohm*)
- Xs15** - Next MA1700 (bridge, 1250W at 8 ohm*, one unit)
Next MA3800 (stereo, 1000W at 8 ohm*, one unit per channel)
- XH18** - Next MA1700 (bridge, 1250W at 8 ohm*, one unit)
Next MA6000 (stereo, 1400W at 8 ohm*, one unit per channel)

Important advice:

Care should be taken to avoid amplifier clipping. It is important to understand that a low power amplifier driven into clipping is more likely to damage a loudspeaker than a higher power amplifier used within its ratings. This is because music signals have a high peak-to-average "crest" factor. When an amplifier is severely overdriven, its output waveform is "clipped" (its peaks are squared off) – reducing the crest factor. In extreme cases, the waveform can approach that of a square wave, causing extreme distortion. An amplifier is normally capable of producing far more power under these conditions than its undistorted rated power output. On the other hand, use of very high power amplifiers with outputs greater than those recommended is discouraged.

Care should be taken to avoid switch-on surges, which can result in momentary power peaks in excess of specified ratings. When powering up a sound system it is important to switch on the amplifiers last, after the mixer and control electronics have stabilised. When powering down the system, reverse the sequence and switch off the amplifiers first.

*Specified power ratings are given considering the specific load conditions. For more detailed information about MA series amplifiers' characteristics, please refer to the amplifiers' user manuals or specsheets, or visit www.next-proaudio.com.

4.6 Mounting Configurations

Vertical alone



Vertical (more than one)



Horizontal Alone



Horizontal (more than one)



4.3 X212 Full-range system



The X212 is a 2-way passive system, designed for all kinds of applications, from club sound reinforcement to outdoor live applications like small to medium venues. It features 2 powerful neodymium 12" low frequency drivers and a 2" HF compression driver. The enclosure also contains 14 M6 threaded inserts for a variety of mounting configurations.

The use of a NEXT LMS242 digital signal processor with every X-line systems is recommended but optional. Please take into consideration that using them without a proper signal processing unit may result in poor sound quality and/or damage to the components.

Applications:

- Theatres;
- Night clubs;
- Live club performance;
- Small to medium live outdoor performances

4.4 Xs15 Sub-bass system



The Xs15 sub-bass system can be used with the X8, X10 and X12 in order to extend and increase the total low frequency output power. The Xs15 is a Bass-reflex subwoofer and provides a powerful bass from a long excursion neodymium 15" driver with 100mm voice coil and it will extend the frequency response of the complete system to below 40Hz. This cabinet is made with 18mm birch plywood.

Depending on the type of Mid/High speaker, using an active crossover, this sub-woofer system can reproduce sound signal frequencies between 20Hz to 80Hz (24 dB/octave). The Xs15 is also provided with a top hat fitting to be used as a pole socket to mount an X8, X10 and X12 above the enclosure.

The use of a NEXT LMS242 digital signal processor with every X-line systems is recommended but optional. Please take into consideration that using them without a proper signal processing unit may result in poor sound quality and/or damage to the components.

Applications:

- Theatres;
- Night-Clubs;
- Live club performance;
- Portable or installed audio-visual reproduction.

4.5 Xs18 / XH18 Sub-bass system



The Xs18 and XH18 subwoofer systems can be used with the X10, X12 and X212 in order to extend and increase the total low frequency output power. The Xs18 is a Band-Pass subwoofer enclosure while the XH18 is a horn loaded subwoofer enclosure and both provide a powerful bass from a long excursion 18" driver with 100mm voice coil and they will extend the response of the complete system to below 30Hz. Both cabinets are made with 18mm birch plywood. Both the Xs18 and the XH18 are provided with a top hat fitting to be used as a pole socket to mount a X10 or X12 above the enclosure.

The use of a NEXT LMS242 digital signal processor with every X-line systems is recommended but optional. Please take into consideration that using them without a proper signal processing unit may result in poor sound quality and/or damage to the components.

Applications:

- Theatres;
- Night clubs;
- Live club performance;
- Portable or installed audio-visual reproduction.
- Live outdoor performances