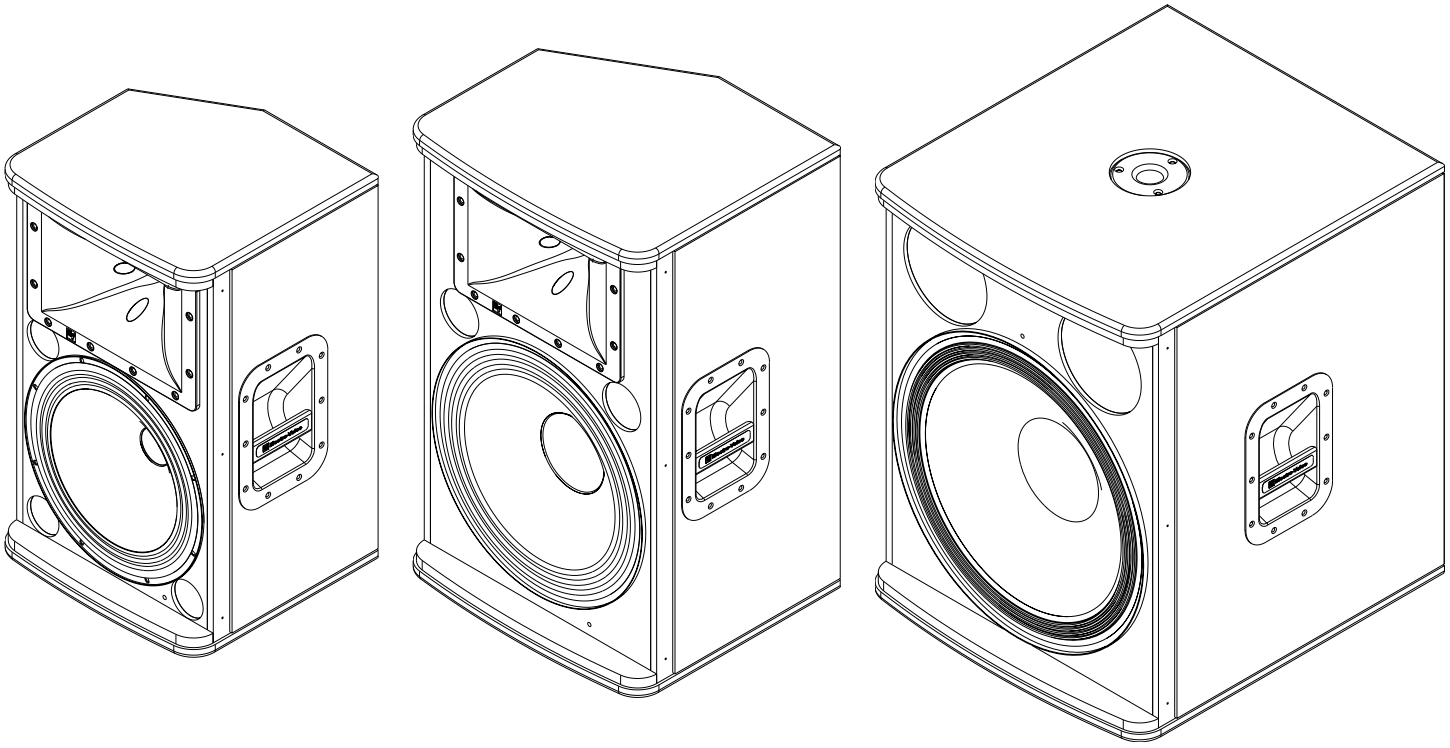
Live X

Powered Loudspeaker Owner's Manual



ELX112P
ELX115P
ELX118P

Live For Sound
www.electrovoice.com

Live X

Important Safety Instructions

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

AVIS: RISQUE DE CHOC ELECTRIQUE. NE PAS OUVRIR.

WARNING: CONNECT ONLY TO MAINS SOCKET WITH PROTECTIVE EARTHING CONNECTION.

The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

The asterisk within an equilateral triangle is intended to inform the user to necessary installation or removal instructions regarding equipment or hardware use relating to the system.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturers instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped
14. To completely disconnect AC power from this apparatus, the power supply cord must be unplugged.
15. Do not expose this apparatus to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on this apparatus.
16. The AC plug of the power supply cord shall remain readily operable.

Management of WEEE (waste electrical and electronic equipment) (applicable in Member States of the European Union and other European countries with individual national policies on the management of WEEE) The symbol on the product or on its packaging indicates that this product may not be treated as regular household waste, but has to be disposed through returning it at an Electro-Voice dealer.

FCC Information

1. IMPORTANT: Do not modify this unit! Changes or modifications not expressly approved by the manufacturer could void the user's authority, granted by the FCC, to operate the equipment.

2. NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Precautions

- If Live X loudspeakers are used outdoors on a sunny day, place the loudspeakers in a shaded or covered area. The loudspeaker amplifiers have protection circuits that temporarily shut the loudspeaker off when extremely high temperatures are reached. This can happen on hot days when the loudspeaker is in direct sunlight.

- Do not use Live X loudspeakers in an environment where temperatures exceed +40°C (104°F).

- Never expose a Live X loudspeaker to rain, water, or high moisture.

- Electro-Voice Live X loudspeakers are easily capable of generating sound pressure levels sufficient to cause permanent hearing damage to anyone within normal coverage distance. Caution should be taken to avoid prolonged exposure to sound pressure levels exceeding 90 dB.

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Live X

Description

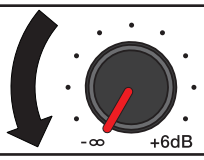
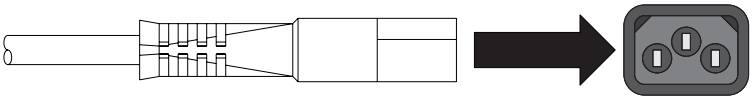
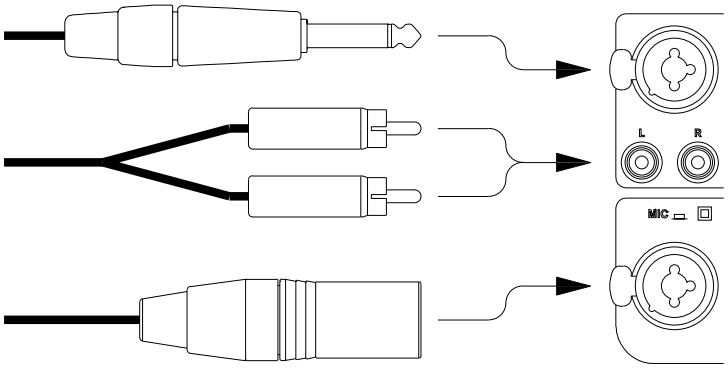
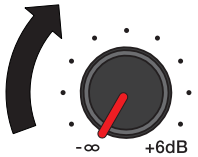
Thank you for choosing an Electro-Voice Live X powered loudspeaker system. Please take time to consult this manual to understand all the features built into your Electro-Voice system and fully utilize its performance capabilities.

Clear, powerful and musical Electro-Voice loudspeakers command the stage at high-profile venues and major events worldwide. Born stage-ready, the Live X series includes powered and passive models that all feature EV-engineered components in solid wood cabinets. Wherever performance matters, Live X is serious gear for serious sound.

Quick Setup

The Electro-Voice Live X powered loudspeakers are fully integrated audio systems with carefully matched electronics and transducers. These products make it easy to setup a high quality sound system quickly with a minimum amount of cables and external electronics.

To get the Live X loudspeaker into operation as quickly as possible, please observe the following steps:

Step	Illustration
1. Turn INPUT LEVEL and LOUDSPEAKER LEVEL to -∞.	
2. Connect the AC power cord from a grounded line receptacle to MAINS IN.	
3. Connect a XLR, TRS or RCA cable from an audio source to INPUT 1 or INPUT 2.	
4. Switch POWER to ON.	
5. Slowly increase INPUT LEVEL and LOUDSPEAKER LEVEL to the desired volume	

System Features

ELX112P – 12” Two-Way Powered Loudspeaker
The ELX112P is a compact, powerful and versatile choice for sound reinforcement and stage monitoring applications — lightweight and durable, with a 1000 W amp.

- DH-1K 39mm (1.5”) Titanium Diaphragm Compression Driver
- EVS-12K 305mm (12”) Woofer
- 50 Hz – 20 kHz Frequency Range; 132 dB Max SPL
- 1000 W Class D Lightweight Amplifier — Runs Cool without Fans
- Bi-Amplified Design with 24 dB/Octave Filter Slopes and Transducer Protection
- Selectable 100 Hz High Pass Filter for Use with an External Subwoofer
- Dual XLR and TRS Combo Inputs with Independent Gain Control
- Stereo RCA Input with Gain Control on Input 1
- Switchable Mic / Line Modes on Input 2
- Switchable EQ Modes for Different Applications
- XLR Parallel Output with Selectable Pre or Post Mix Option
- Front-Mounted Power LED, Selectable On or Off
- Indicator Lights for Power on and Limit
- Pole Mounts or Stacks With Live X Subwoofers
- High Frequency Waveguide with 90° X 50° Coverage Pattern
- 15mm Plywood Enclosure, Internally Braced, With Textured Paint
- 60° Monitor Angle

ELX115P – 15” Two-Way Powered Loudspeaker
A powerful step up from the ELX112P, the 15” woofer and 1000 W amplifier in the ELX115P deliver extended lower frequencies and room-filling volume.

- DH-1K 39mm (1.5”) Titanium Diaphragm Compression Driver
- EVS-15K 381mm (15”) Woofer
- 44 Hz – 20 kHz Frequency Range; 134 dB Max SPL
- 1000 W Class D Lightweight Amplifier — Runs Cool without Fans
- Bi-Amplified Design with 24 dB/Octave Filter Slopes and Transducer Protection
- Selectable 100 Hz High Pass Filter for Use with an External Subwoofer
- Dual XLR and TRS Combo Inputs with Independent Gain Control
- Stereo RCA Input with Gain Control on Input 1
- Switchable Mic / Line Modes on Input 2
- Switchable EQ Modes for Different Applications
- XLR Parallel Output with Selectable Pre or Post Mix Option
- Front-Mounted Power LED, Selectable On or Off
- Indicator Lights for Power on and Limit
- Pole Mounts or Stacks With Live X Subwoofers
- High Frequency Waveguide with 90° X 50° Coverage Pattern
- 15mm Plywood Enclosure, Internally Braced, With Textured Paint
- 60° Monitor Angle

System Features (cont')

ELX118P – 18" Powered Subwoofer
Optimized for performance with the ELX112P and ELX115P, the ELX118P adds a deep, low-frequency, amplified punch that you can hear and feel.

- EVS-18K 457mm (18") Woofer for Powerful, Engaging Bass Response
- 32 Hz – 130 Hz Frequency Range; 134 dB Max SPL
- 700 W Class D Lightweight Amplifier — Runs Cool Without Fans
- Supports Pole Mount for Full-Range Systems
- XLR and TRS Combo Input
- Switchable EQ Modes for Different Applications
- XLR Parallel Output
- Front-Mounted Power LED, Selectable On or Off
- Indicator Lights for Power on and Limit
- 15mm Plywood Enclosure, Internally Braced, with Textured Paint

Tripod and Floor Monitor Operation

Floor Monitor

Electro-Voice ELX112P and ELX115P loudspeakers may be used as a floor monitor by placing the speaker on the integral monitor angle. Make sure to:

- Place the speaker on a level, stable surface that is solid and secure.
- Route cables so that performers, production crew and audience members will not trip over the cables. Secure cables with wire ties or tape whenever possible.

See Figures 1a and 1b for optimal coverage areas in front of the loudspeaker when in monitor position.

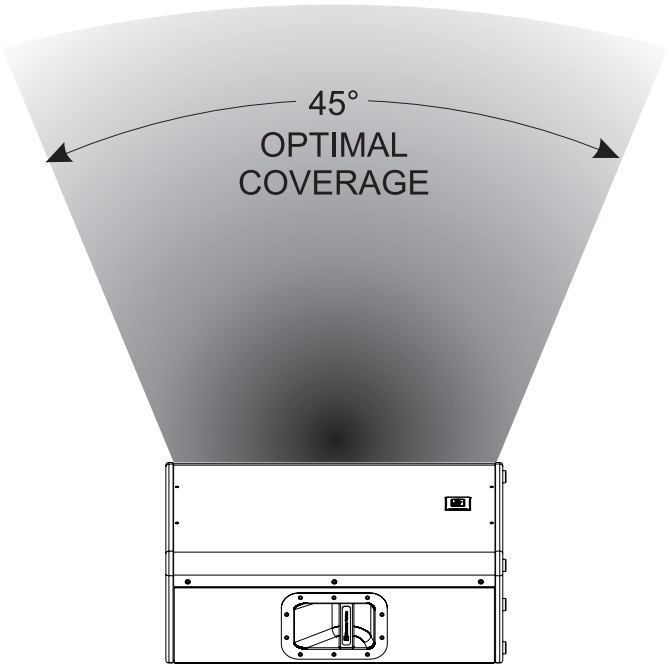


Figure 1a:
ELX112P / ELX115P Optimum Coverage (Front View)

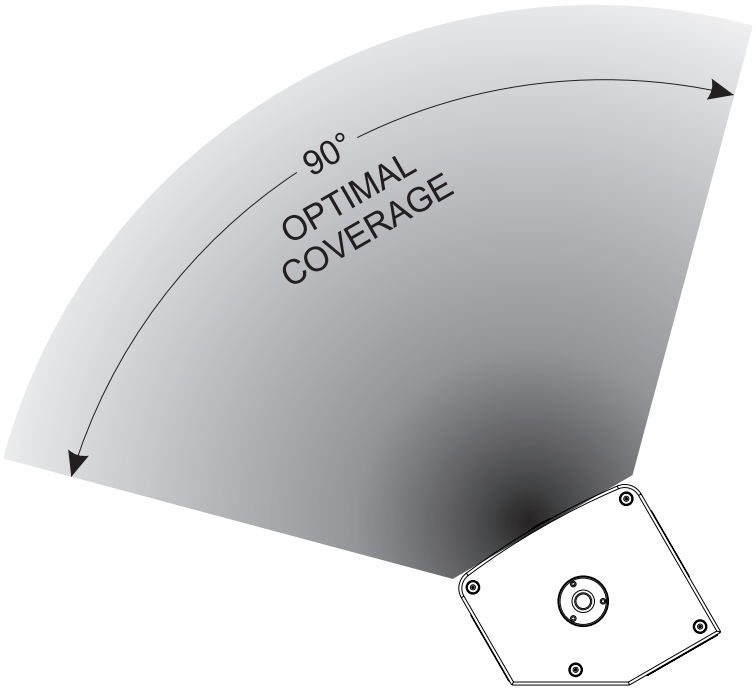


Figure 1b:
ELX112P / ELX115P Optimum Coverage (Side View)

Tripod and Floor Monitor Operation (cont')

Tripod

Electro-Voice ELX112P and ELX115P loudspeakers include 35mm (1-3/8") stand mounts to allow mounting on tripod stands or above an ELX118P. Make sure to:

- Check the specifications of the speaker stand to be certain it is capable of supporting the weight of the speaker.
- Check that the speaker stand is placed on a flat, stable surface and be sure to fully extend the legs of the stand. Do not try to make the stand "taller" and compromise its structural integrity.
- Route cables and position the stand so that performers, production crew and audience members will not trip over the stand or cables and pull the speaker system over. Secure cables with wire ties or tape whenever possible.
- Do not attempt to suspend more than one speaker on a stand designed for a single speaker.
- Unless you are confident that you can safely handle lifting the weight of the speaker onto the stand, ask another person to help you place it.

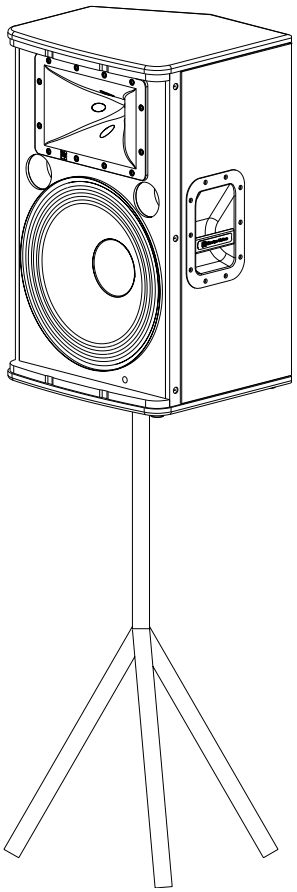


Figure 2a:
ELX112P / ELX115P on Tripod Stand

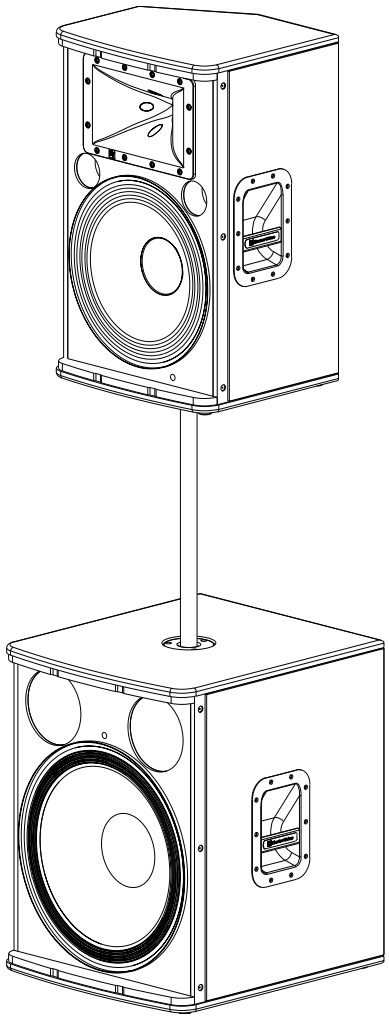


Figure 2b:
Live X Full-Range/Sub Stack with Pole Mount

Amplifier Controls

The Live X amplifier has a combination of controls and connectors to ensure the most versatile loudspeaker system. Each component below has a description on the following pages.

Figure 3a:
ELX112P / ELX115P (shown) Amplifier Panel

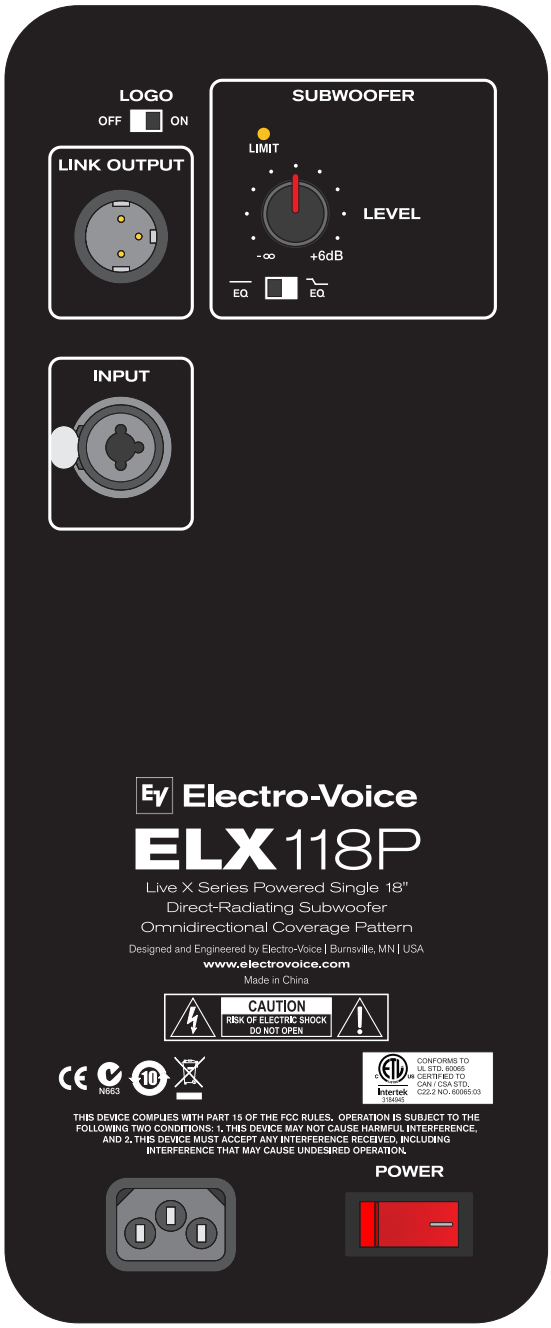
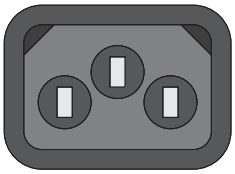


Figure 3b:
ELX118P Amplifier Panel

Amplifier Controls (cont')

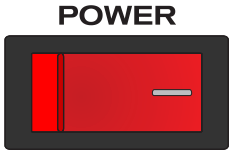


MAINS IN

AC connection is established via an IEC-connector. For 120V operation, the AC voltage must be 95V - 132V. For 230V operation, the AC voltage must be 190V - 264V.

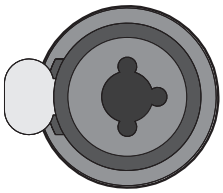
A 3m (10') AC cord with fitting IEC-plug is supplied. Extension cords can be used to lengthen the AC cable as necessary. Make certain they are 3-conductor cables of suitable gauge and they are properly grounded to avoid electrical hazards and extraneous noise.

Under high signal conditions, the Live X loudspeaker amplifier can draw 1.0 amps of current at 120V, or 0.6 amps at 230V. Be cautious of what else is plugged into the same electrical service line to avoid electrical problems and poor performance.



POWER

AC switch for switching the power ON or OFF. The switch lights after turning the power ON. If the LED is not lit upon turning the power on, make sure that the AC cord is correctly connected and the outlet is properly working.



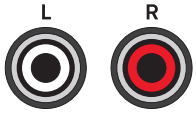
XLR/TRS INPUT

Electronically balanced input for the connection of high-level signal sources like mixing consoles or signal processors. Connections can be established using 1/4" TRS or XLR-type connectors. INPUT 2 will accept a microphone input if MIC/LINE switch is depressed.

MIC / LINE

When depressed, activates a microphone preamp for use with dynamic microphones. A pen or paperclip is needed to depress the switch to MIC mode.

CAUTION! Do not plug a line level signal into INPUT 2 when MIC/LINE is in the mic position.



RCA INPUT

Stereo unbalanced RCA inputs for connecting sources such as CD players or MP3 players. Both RCA inputs are summed and can be controlled with INPUT 1 LEVEL. The inputs can be used simultaneously with XLR/TRS INPUT 1.

INPUT LEVEL

Level control for adjusting the individual input's amplification. The level control affects the volume of the individual input section.

Amplifier Controls (cont')

FULL RANGE / WITH SUB

When switched to WITH SUB, activates a 100 Hz highpass for use with a subwoofer. Always select WITH SUB when using the ELX112P/ELX115P with a subwoofer for proper acoustic summation.

FULL RANGE EQ

The FULL RANGE EQ switch controls the tone of the loudspeaker. EQ FLAT (–) works best when the loudspeaker is used for vocal monitors or for speech. EQ MID-CUT (⌣) works best for music playback and applications that require enhanced bass and treble.

SUBWOOFER EQ

The SUBWOOFER EQ switch controls the low-frequency extension, or bass boost, of the subwoofer. EQ FLAT (–) works best when the subwoofer is used under normal applications. EQ BASS BOOST (⌒) provides additional low-frequency extension and works best for applications requiring enhanced bass performance.

LOUDSPEAKER LEVEL

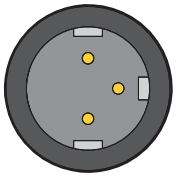
Level control for adjusting the volume of the loudspeaker. The level control affects the volume of both INPUT 1 and INPUT 2. LOUDSPEAKER LEVEL control does not affect the level of the LINK OUTPUT connector.

LIMIT

The LED lights up when the loudspeaker is operated at its limit. Short-term blinking is uncritical, because the integrated limiter keeps distortion under control. Constant lighting of the LED indicates that the sound is negatively affected. Reduce LOUDSPEAKER LEVEL or INPUT LEVEL knobs to prevent limit.

INPUT SELECT

XLR/TRS 1 allows the signal from XLR/TRS Input 1 to pass to LINK OUTPUT. INPUT 1 LEVEL does not affect the level of LINK OUTPUT. The signal from RCA INPUT is not passed to LINK OUTPUT. 1+2 is a mix of INPUT 1 and INPUT 2. 1+2 allows the loudspeaker to act as a basic two-channel mixer that can send the mix to another loudspeaker via the LINK OUTPUT connector.



LINK OUTPUT

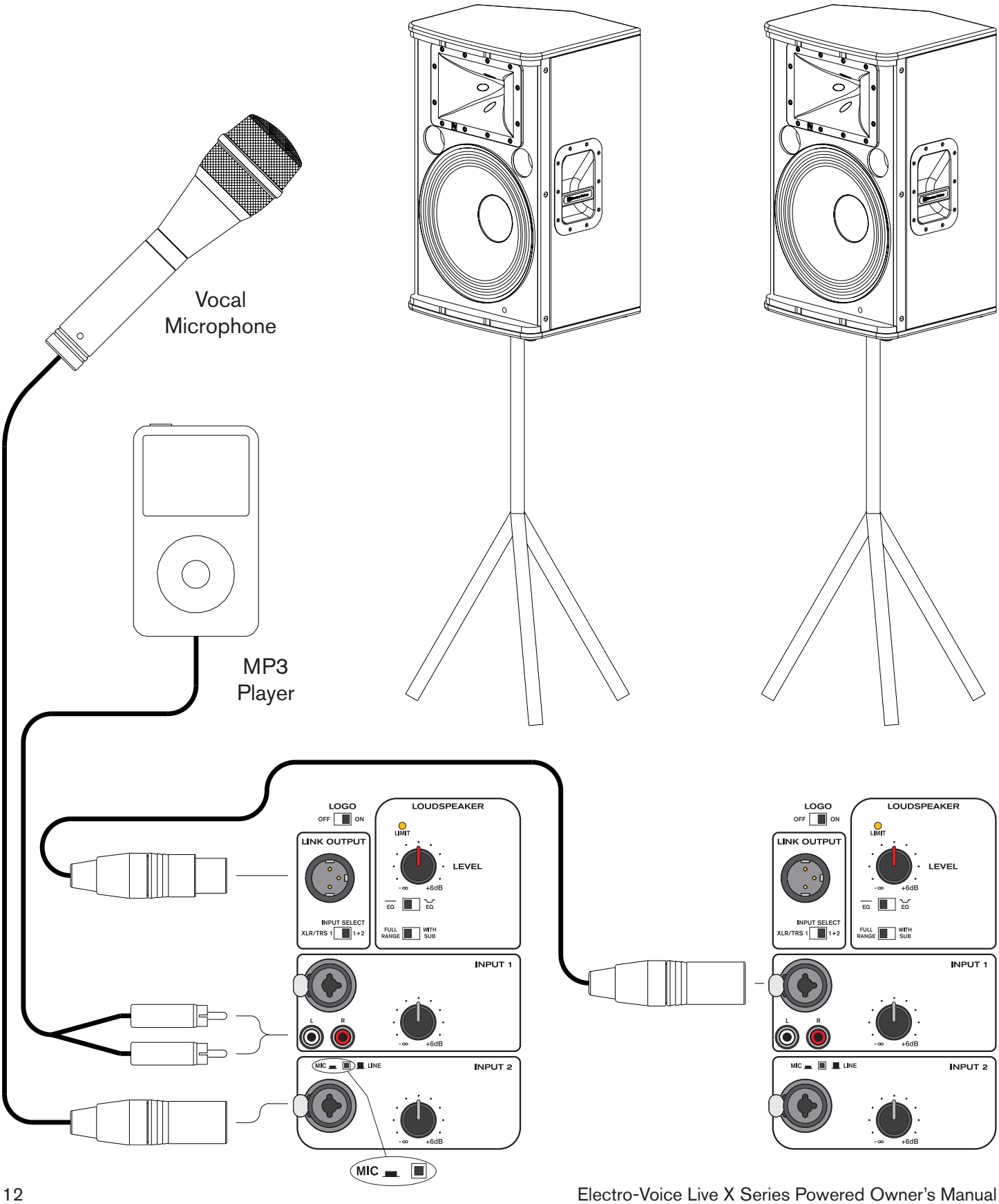
XLR output connector to send the signal to another speaker or subwoofer. The output is based on the selection made at the INPUT SELECT switch.

LOGO

The EV logo on the front of the loudspeaker lights up when the switch is set to ON.

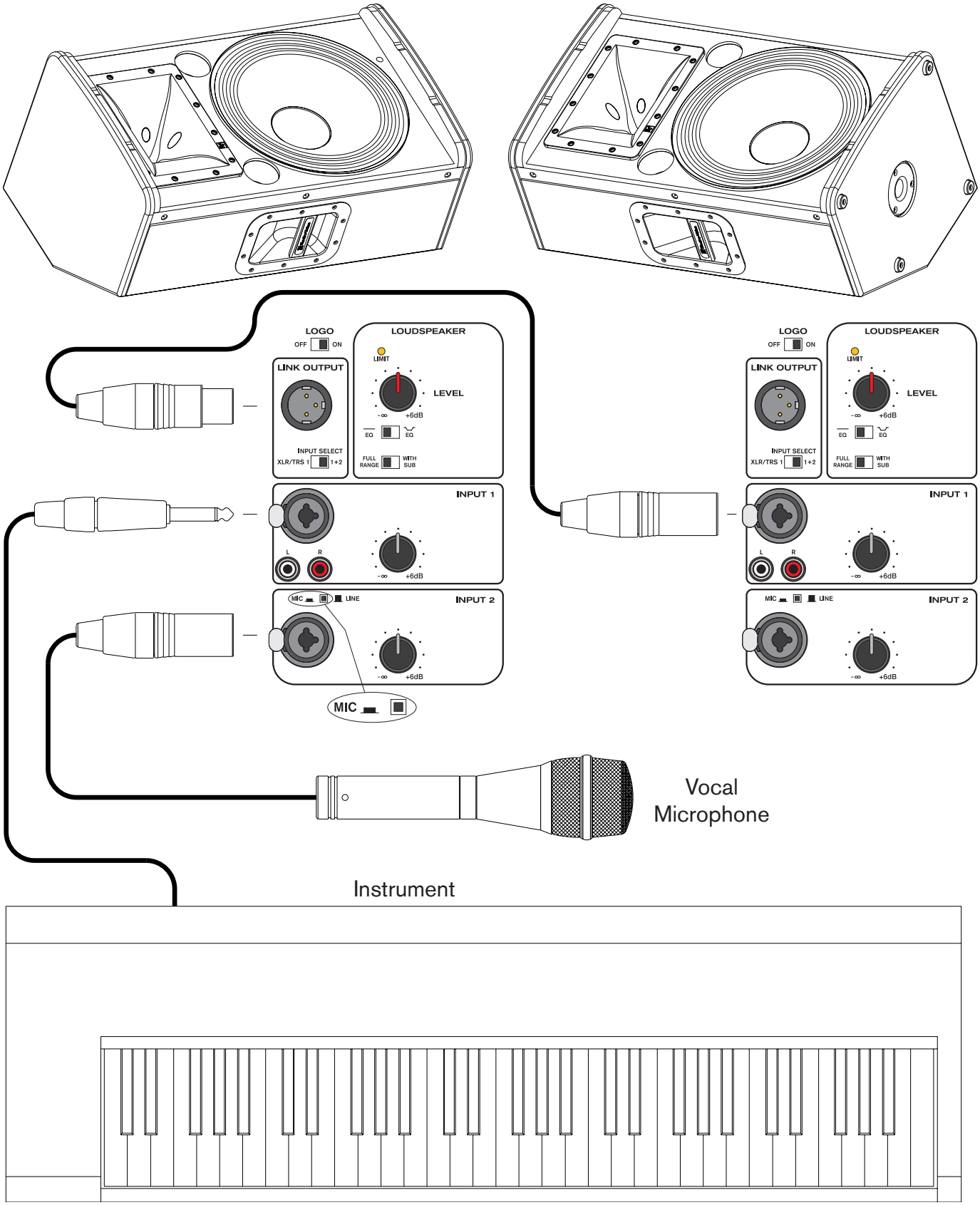
Recommended Configurations

Daisy-Chaining Full-Range Systems (Dual ELX112P's or ELX115P's)



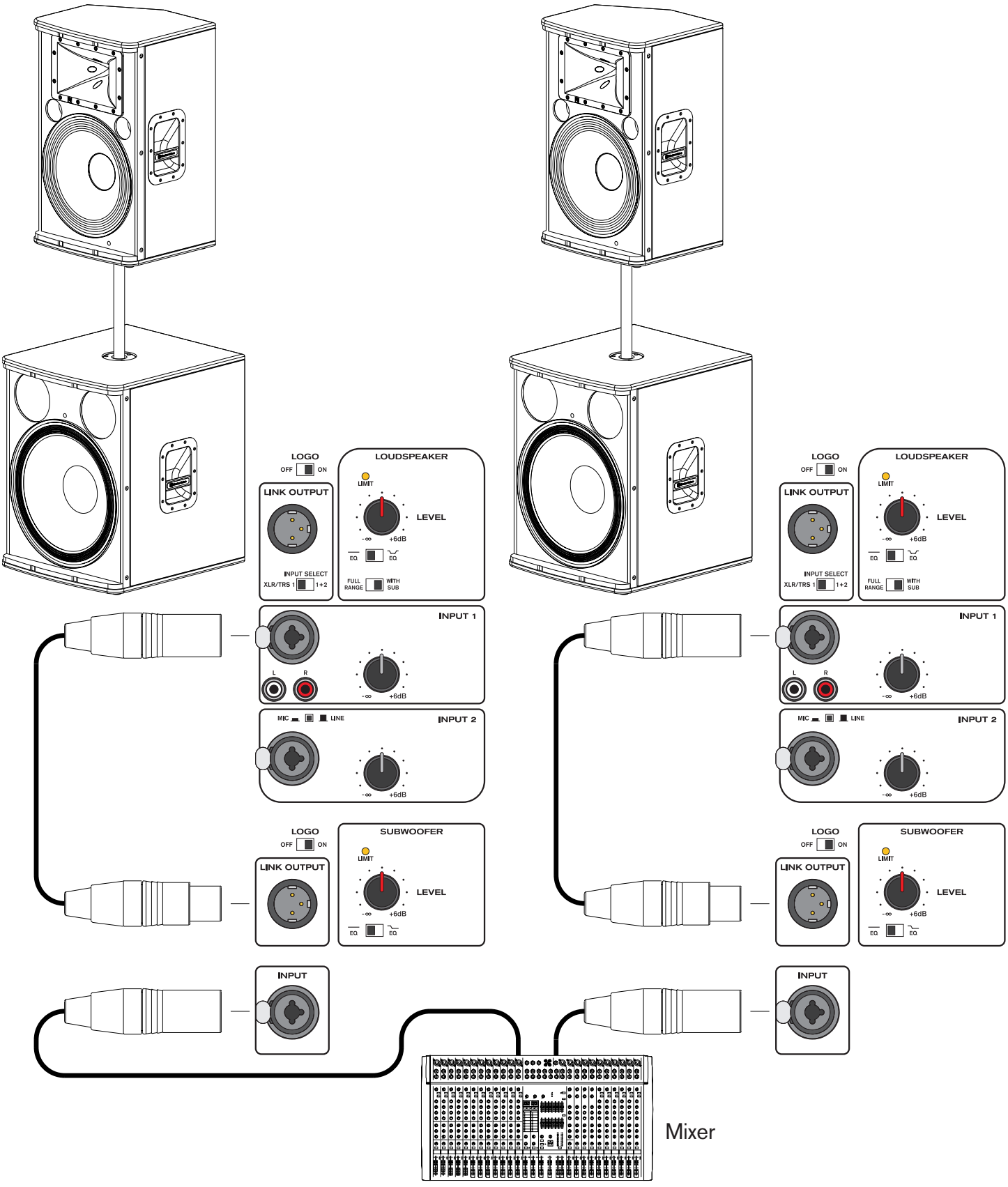
Recommended Configurations (cont')

Using Full-Range Systems as Monitors (Dual ELX112P's or ELX115P's)

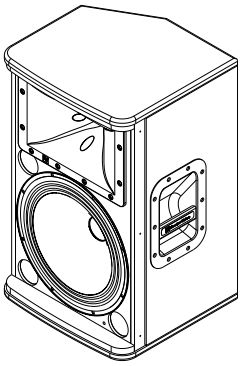
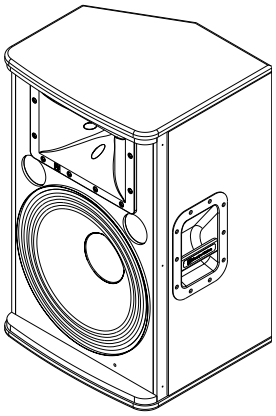
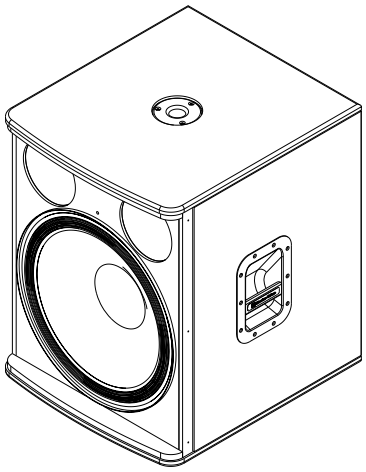


Recommended Configurations (cont')

Stacking Full-Range Systems w/Subwoofers (Dual ELX112P's or ELX115P's, Dual ELX118P's)



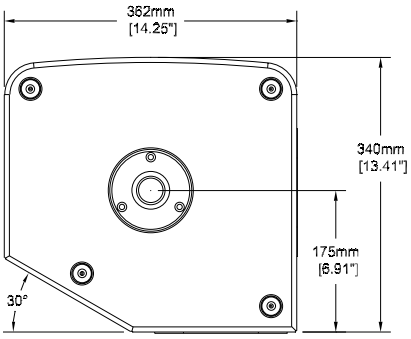
Specifications

Model (Part Number)	ELX112P (120V - F01U170820) (230V - F01U170817)	ELX115P (120V - F01U170821) (230V - F01U170818)	ELX118P (120V - F01U170822) (230V - F01U170819)
			
Freq. Response (-3 dB):	60 Hz - 18 kHz[1]	56 Hz - 18 kHz[1]	42 Hz - 100 Hz[2]
Freq. Range (-10 dB):	50 Hz - 20 kHz[1]	44 Hz - 20 kHz[1]	32 Hz - 130 Hz[2]
Max. Measured SPL[3]:	132 dB	134 dB	134 dB
Coverage (Horiz. x Vert.):	90° x 50°		Omnidirectional
Power Rating:	1000W		700W
LF Transducer:	(1) EVS-12K, 305mm (12") Woofer	(1) EVS-15K, 381mm (15") Woofer	(1) EVS-18K, 457mm (18") Woofer
HF Transducer:	DH-1K, 39mm (1.5") Titanium Diaphragm Compression Driver		N/A
Crossover Frequency:	1.7 kHz		100 Hz
Connectors:	(2) XLR/TRS Combo Jacks, (1) Stereo RCA, (1) XLR Link Output		(1) XLR/TRS Combo Jack, (1) XLR Link Output
Enclosure Material:	9-ply, 15mm Plywood, Internally Braced, with Texured Paint		
Grille:	18GA Steel with Black Powdercoat		
Dimensions (H x W x D):	607mm x 362mm x 340mm (23.89" x 14.25" x 13.41")	708mm x 432mm x 382mm (27.89" x 17.02" x 15.05")	661mm x 507mm x 574mm (26.02" x 19.98" x 22.60")
Net Weight:	16.8 kg (36.9 lbs)	22.5 kg (49.5 lbs)	31.3 kg (68.9 lbs)
Shipping Weight:	20.7 kg (45.5 lbs)	27.2 kg (59.8 lbs)	38.0 kg (83.6 lbs)
Accessories:	TSS-1, Aluminum Tripod Stand TSP-1, Tripod Kit, Includes (2) Tripod Stands and Carrying Case ASP-1, Steel Subwoofer Stand		ASP-1, Steel Subwoofer Stand

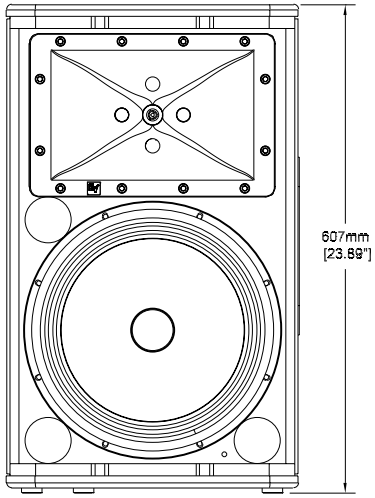
[1] Full Space Measurement, EQ (—) Mode, Full-Range Mode.
[2] Half Space Measurement, EQ (⌐‾) Mode
[3] Max SPL is measured at 1m using broadband pink noise at maximum amplifier output.

Dimensions

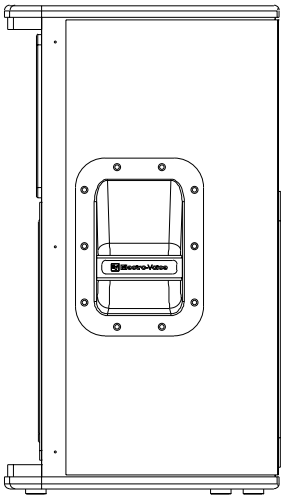
ELX112P



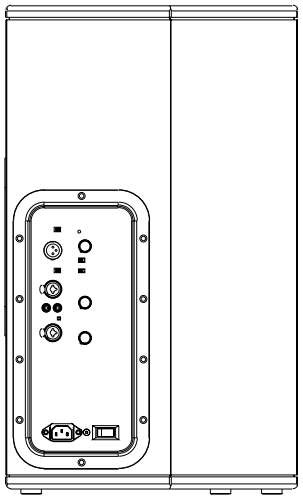
Bottom View



Front View

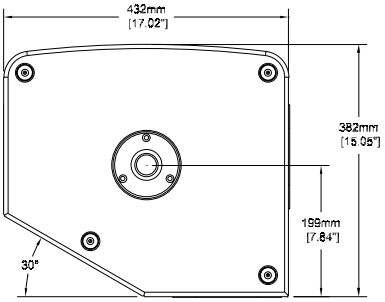


Right View

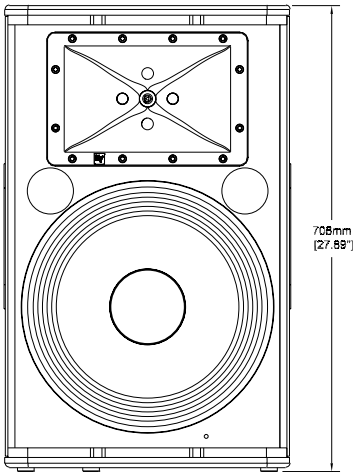


Rear View

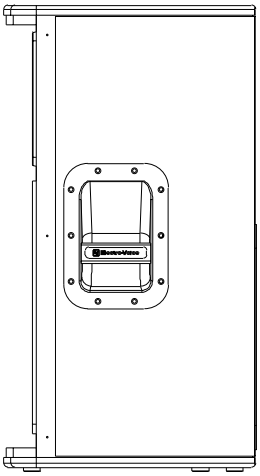
ELX115P



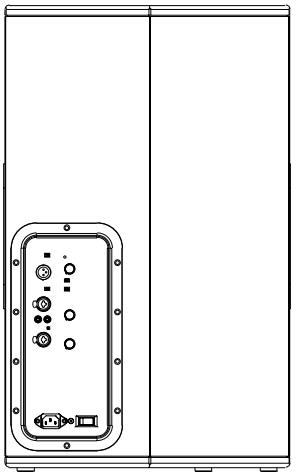
Bottom View



Front View

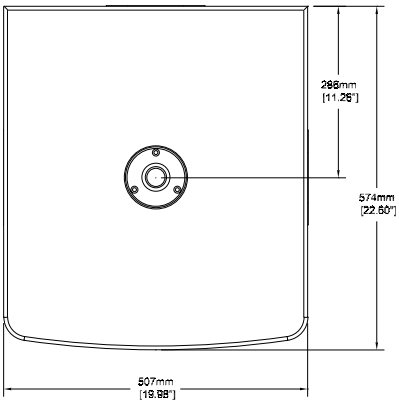


Right View

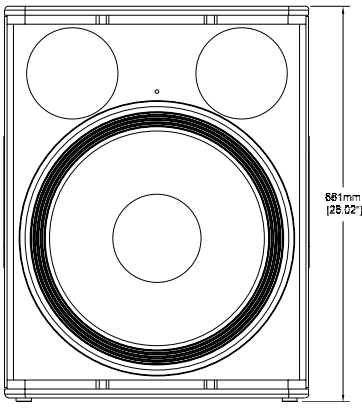


Rear View

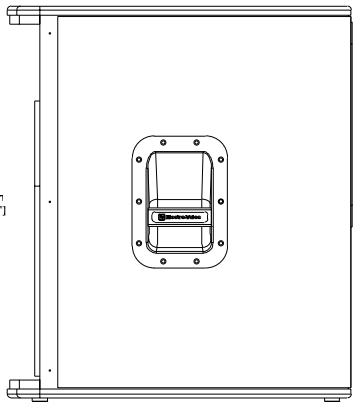
ELX118P



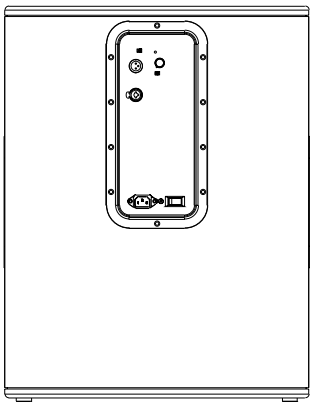
Top View



Front View



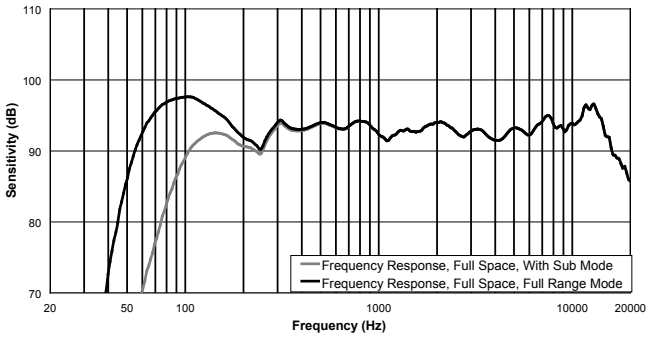
Right View



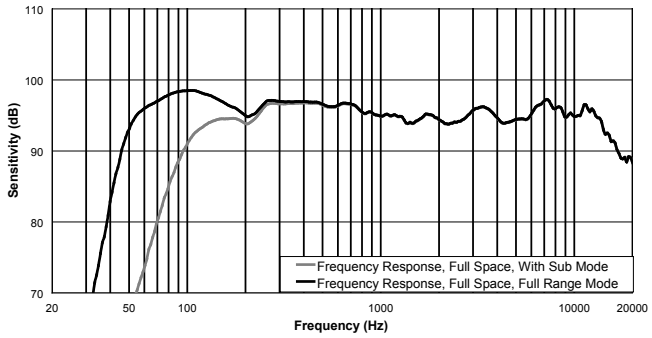
Rear View

Frequency Response Graphs

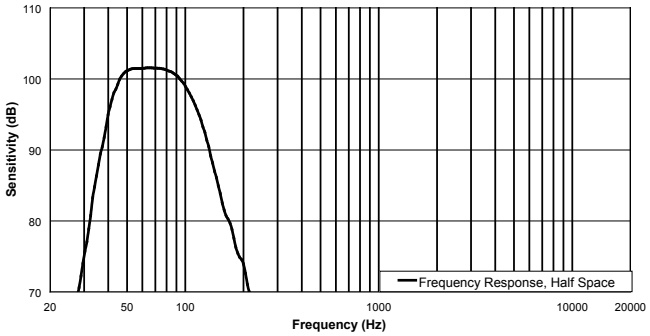
ELX112P



ELX115P



ELX118P



Live X Model Reference Table

System Model	Coverage	Finish	Voltage	Part No.
ELX112P (120V)	90° x 50°	Black	120V	F01U170820
ELX112P (230V)	90° x 50°	Black	230V	F01U170817
ELX115P (120V)	90° x 50°	Black	120V	F01U170821
ELX115P (230V)	90° x 50°	Black	230V	F01U170818
ELX118P (120V)	Omnidirectional	Black	120V	F01U170822
ELX118P (230V)	Omnidirectional	Black	230V	F01U170819

Warranty Information

Visit www.electrovoice.com/warranty for warranty information.

Troubleshooting

Problem	Possible Cause(s)	Action
1. No Sound	Amplifier	Connect a known working test speaker to the amplifier outputs. If there is no sound, check that all the electronics are on, the signal routing is correct, the source is active, the volume is turned up, and so on. Correct/repair/replace as necessary. If there is sound, the problem is in the wiring.
	Wiring	Verify that you have connected the correct wire pairs to the amplifier. Play something at low level through the amplifier (for example, from a CD player or tuner). Connect the test speaker in parallel with the malfunctioning line. If the sound level has gone or is very weak, the line has a short in it (possibly a severe scrape, pinch, or staple puncture). If the sound level is normal, the wire is open (possibly a cut wire or a missed connection). Using the test speaker, move down the line and test each connection/junction until you find the problem and correct it. Observe proper polarity.
2. Poor Low-Frequency Response	WITH SUB switch activated	Set the FULL RANGE / WITH SUB switch to the FULL RANGE position.
3. Intermittent output such as crackling or distortion	Faulty Connection	Check all connections at amplifier and speakers to ensure they are all clean and tight. If the problem persists, it may be in the amplifier or wiring. See Problem 1 above.
4. Constant noise such as buzzing, hissing, humming	Defective source or other electronic device	If the noise is present but no program material is playing, the likely cause is the signal chain in the electronics. Evaluate each component as necessary to isolate the problem.
	Poor system grounding or ground loop	Check and correct the system grounding, as required.
	Incorrect gain structure	Verify level controls of the source are properly structured. Verify MIC/LINE switch is in the correct position.
5. No sound produced with microphone connected to input 2	Microphone requires phantom power	Use a dynamic microphone that does not require phantom power. If using a microphone that requires phantom power, an external phantom power source will be needed.
	MIC / LINE switch is in LINE position	Set the MIC/LINE switch to the MIC position.
6. Sound is distorted. LIMIT LED is constantly on or flashing regularly	Excessive input level	Reduce the input level or loudspeaker level knobs to prevent limit.
	Line level source connected to INPUT 2 with MIC/LINE switch in MIC position	Set the MIC/LINE switch to the LINE position.
7. Sound is distorted. LIMIT LED is not blinking	Source input (mixing console/preamp) is overdriven	Verify level controls of the source are properly structured.
8. Microphone produces acoustic feedback when input level is amplified.	Incorrect gain structure	Reduce the microphone levels at the mixing console or input source. If the microphone is connected directly to the speaker reduce the input level on the speaker. Positioning the microphone close to the sound source will increase gain-before-feedback.
	EQ switch is in the EQ (⌒) position	Set the EQ switch to the EQ (–) position for vocal applications.
	Microphone position is too close to the front of the speaker	Whenever possible setup the speakers so the microphone is behind them. If using the speakers in a monitor position aim the speaker to the back of the microphone.
If these suggestions do not solve your problem, contact your nearest Electro-Voice dealer or Electro-Voice distributor.		

Notes

Electro-Voice

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www.electrovoice.com

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Part Number LIT000505 Rev 5

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Other Internatonal locations. For customer orders, Contact Customer Service at:
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For warranty repair or service information, contact the Service Repair department at:
800/685-2606

For technical assistance, contact Technical Support at: **866/78AUDIO**

Specifications subject to change without notice.