MFLA-MK3 | Dual 12" Line Array

USER MANUAL

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The MFLA-MK3 is a dual 12" line array element featuring dual 3" voice coil, 1.4" throat compression drivers, a 3000W amplifier and an integrated DSP. Low current draw and light weight relative to their output capacity means you can provide intense sound with less power and fewer boxes.

The comprehensive processing ensures consistent, undistorted high-SPL operation and maximum reliability. All the processing necessary for linear frequency response and phase coherent operation are pre-programmed into the DSP, delivering exceptional dynamic resolution and detail along with precise control.

The proprietary processing programmed into the BASSBOSS MFLA-MK3 provide the ease of plug-and-play operation and very simple and easy setups. You also get the peace of mind that comes from knowing that the integrated limiters make the system capable of operating reliably at extremely high output levels.

The MFLA-MK3 cabinet features innovations in performance and practicality. The forward output of the dual 12" woofers passes through a multi-aperture diffraction matrix that distributes mid-range energy evenly and in phase over the height of the cabinet. This matrix effectively reduces the acoustical source spacing to provide exceptional projection of mid-range frequencies. The matrix also shifts upper-midrange frequency output toward the center of the cabinet, which broadens the horizontal dispersion of the midrange frequencies.

This technology allows the MFLA-MK3 to deliver coherent midrange propagation from a symmetrical 2-way design, which not only eliminates the phase offset, (or latency,) of a 3-way system, it also allows for higher midrange SPL and lighter cabinet construction. The shorter acoustical path of this system allows the high frequency lenses to be utilized for extremely wide horizontal coverage, often even eliminating the need for front-fills.

The rear output of the woofers enters a vented enclosure that features integrated damper structures that enhance midrange clarity along with extensive bracing for minimal resonance. The vents are perpendicular to the cone movement to further improve midrange clarity, minimize cabinet frontal area and to provide for wider horizontal coverage capability, all while they do their primary duty of delivering exceptional low frequency performance. Their location also provides the secondary function of ducting cool air directly over the low-frequency driver motors for reduced thermal compression and improved reliability.

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Fixed-Point Flyware ensures absolutely consistent box-to-box alignment. The high-frequency output of an array can only remain coherent at higher frequencies if the cabinets cannot move front-to-back once the pins are inserted. The MFLA-MK3's unique precision alignment mechanism prevents movement in the direction that influences time domain alignment, front-to-back, which is critical to ensure the phase of the high-frequency signals remain coherent from box to box. This feature dramatically improves the very high-frequency propagation effectiveness of the entire array, allowing the MFLA-MK3 to deliver pristine highs at greater distances.

The MFLA-MK3 Flyware features a simultaneous compression and tension mechanism, allowing the cabinets to be flown or ground stacked using the same simple setup. The proprietary flyware design ensures there is no slack and no shifting in the box alignment once the boxes are pinned. The mechanism allows for single-handed adjustment of splay angles for ground-stacked operation or in preparation for flying.

Setting up the MFLA-MK3 Line Array

Using the Rigging System

The MFLA-MK3 Line Array has recesses on one side and sliders on the other. The sliders are located at the bottom of the cabinet. The rigging hardware includes single extensions at the bottom front and double extensions at the top front.

There are two holes just behind and below the pivot point of the cam. These holes line up with holes in the cam and are used to lock the cam into specific positions before the cabinets are flown or secured.

Bottom of Array Position

This is the upper hole and is used only for the bottom cabinet in a flown array. It keeps the cam clear of the tuning ports. For cabinets in other positions, this hole will not be used.

Transport Position

This position uses the lower hole. Use it to lock the cam above the bottom of the cabinet when moving it by hand. Push the handle down until the cam's upper edge is centered on the port in the side of the cabinet, then insert the pin into the lower hole behind the pivot.

Landing Position

This position is also aligned with the lower hole. It corresponds to a 1-degree angle, making it easy to land arrays onto carts or additional elements with minimal splay. Lift the handle near the top of the cabinet until another hole in the cam is exposed. Align this hole with the lower hole and insert the pin to lock it in place.

Correct Stacking Procedures

The sliders and grooves help you line up the cabinets before the metal parts touch, making the alignment process easier and safer. This two-stage process supports the weight and guides the parts accurately, reducing the risk of damage to the linkage and your fingers.

1. Setting Up the First Cabinet (Cab A)

- Place Cab A in position and secure it. Make sure there are no pins in its upper-front linkages.

2. Preparing the Next Cabinet (Cab B)

- Lock the rear linkage of Cab B in the "Transport" position.
- Place Cab B on its back, facing upwards.
- Insert the front flyware pins into the "top" linkage position (the double extensions) to provide a handhold.

3. Aligning and Stacking Cab B

- With Cab B facing upwards, bring it to the rear of Cab A.
- Align the sliders on the upward-facing Cab B with the grooves on the secured Cab A.
- Lift Cab B evenly until about half of it is above the top of Cab A.
- Rotate the front of Cab B down onto Cab A, keeping the sliders aligned.
- Cab B should land with its front approximately halfway back on Cab A.
- Slide Cab B forward until it stops, where the flyware and sliders prevent further forward motion.
- Insert the front pins into the linkage.
- If the pins don't easily go through all three pieces, lift the rear of the upper cabinet slightly while applying light pressure on the ends of the pins.

4. Repeating the Process

- Repeat this process for each additional cabinet in the stack.

The Linkage

The rigging system of your MFLA-MK3 features a fixed front hinge point, which prevents the cabinets from sliding forward or backward when adjusting their angles or lifting them. This design keeps the high-frequency devices aligned no matter the cabinet angle.

Using the Rigging Pins

1. Inserting the Pins

- Insert the rigging pins straight through the holes on each side, pressing the buttons on the ends to retract the ball-locks.
- If the pins don't easily go through all three pieces, lift the rear of the upper cabinet slightly while applying light pressure on the ends of the pins.
- Once the front pins are fully inserted, align the rear attachment points.

The Linkage (cont'd)

2. Adjusting the Rear Attachment Points

- The rear attachment points work with a central pivot point and a cam that sets the angle between cabinets.
- Both sides are connected by a handle across the back of the cabinet, which provides a mechanical advantage for lifting and setting the angle by one person.
- The mechanism locks into each successive angle, allowing you to release the handle and insert the pins at your own pace.

3. Using the Landing Position

- Raise the bar far enough to rotate the cam down to the "Landing Position."
- Insert the rigging pins to lock the cam in place. Use this position for the bottom cabinet when lowering an array onto a transport cart or when adding more cabinets to the array.
- When the upper cabinet is resting on the cart or a speaker below, insert the front pins first.
- Move the pin from the landing position hole to the appropriate hole to set the desired angle.

Setting the Angles

There are 11 positions available.

1. Maximum Splay Angle (10 Degrees)

- Lower the handle to the bottom of the cabinet to achieve the maximum splay of 10 degrees.
- Lift the handle slightly and insert the rigging pin into the "Linking" position to lock the cabinets at this angle.

2. Adjusting the Angle

- Lift the handle beyond the first pin location. You'll hear a click as it locks into each successive angle.
- Count each click to reduce the angle by 1 degree:
    - 1st click: 9 degrees
    - 2nd click: 8 degrees
    - 3rd click: 7 degrees
- Continue this way down to 0 degrees.
- Once you reach the desired angle, release the handle and insert the pins into the "Linking" hole in the flyware.

3. Using the Ratchet Mechanism

- The ratchet mechanism locks the angle, so you can release the handle and insert the pins without manually aligning the cabinets.
- If you need to increase the splay angle, lower the mechanism to the maximum 10-degree angle and work back up to the desired angle.
- Remove the rear pins, lift the back of the cabinet slightly to release pressure, rotate the handle downward, and lower the cabinet until the upper cabinet rests on the lower one.
- Lift the handle again, count the clicks to the desired angle, and reinsert the pins.

4. Angle Adjustment Tips

- Up to four cabinets can be supported on one transport cart.
- Adjust angles starting from the top cabinet in the stack.
- Always set the inter-box angles while the array segment is on the ground.

5. Stacking on a Cart or Ground-Stack Array

- Lock the cam in the "Transport" position when stacking cabinets individually.
- Insert the front pins first, then remove the rear pins from the transport position.
- Adjust the angle and insert the pins into the "Linking" position.

Rigging Frame

The rigging frame is built to support up to 12 cabinets.

Lifting the Rigging Frame

1. Lifting from the Center Spine

- Lift the rigging frame from the center spine to ensure balanced support.
- Lifting from both a front and rear point on the spine will allow the pitch angle of the array to be adjusted by shortening or lengthening the supports to the front and rear points.
- The frame can also be lifted from any single point along the center spine, with the pitch angle set by the relationship between the lifting point and the mass-center of the array.

2. Stabilizing Points

- Additional points with lower load-bearing capacity are on the side beams. These are for stabilizing the hang or for four-point hangs in installations.

Rigging Frame (cont'd)

Connecting the Rigging Frame

1. Positioning the Frame

- Lower the rigging frame's side beams between the upper cabinet's flyware plates.
- Push the button on the end of the pin to retract the locking balls and insert the pin into the "Linking" position holes. Release the button once the pin is fully inserted.

2. Securing the Pins

- Pull out on the pin without pressing the button to ensure it's secure.
- ***Make sure the pin is fully inserted and cannot come out unless the release button is deliberately pressed.***

3. Lifting the Frame and Cabinets

- With the pins inserted and checked, lift the frame and attached cabinets.
- If the cabinets are in a transport cart, pull the pins that secure the cart to the array once the array is in tension, and lift the cabinets out of the cart.

Adding More Cabinets to the Array

1. Positioning for Additional Cabinets

- Set the lowest cabinet's cam in the "Landing" position.
- Lift the array above the next prepared array segment.
- Move the next segment below the array and lower it until the linking pins can be inserted into the front links.

2. Securing the Pins

- Once the front pins are secured and the slack is taken up in the chain, remove the rear pins from the "Landing" position.
- The "Landing" position corresponds to the 1° angle, so if this is the desired angle, transfer the pins directly to the "Linking" position.
- If a 0° angle is desired, lift the handle on the back of the cabinet and insert the pin into the "Linking" position.
- For angles greater than 1°, lower the array to the point where the desired inter-box angle can be set, and insert the pins into the "Linking" position.

Ground Support

You can deploy the MFLA-MK3 using support from below with either the transport cart or a VSLA-equipped VS21 subwoofer. Here are the key points for effective deployment:

Minimum Height Requirements

1. Standing Audience

- The bottom of the lowest cabinet should be at least 6 feet (72"; 1.83 meters) from the floor.
- If positioned lower, the high-frequency (HF) output won't contribute effectively to far-field projection.

2. Seated Audience

- The bottom of the lowest cabinet should be at least 4 feet (48"; 1.22 meters) from the floor.
- Similar to standing audiences, positioning lower will reduce the HF output's effectiveness in far-field projection.

3. Downward Angle

- When arrays are positioned at these minimum heights, a minimal downward angle (0° to 4°) is typically sufficient.

Using the VS21 Subwoofer for Support

1. Supporting Up to Four MFLA-MK3s

- Up to four MFLA-MK3s can be deployed on a VS21 subwoofer using the VSLA bracket.
- The VS21 and MFLA-MK3 cabinets have the same width, allowing the MFLA-MK3 tops to be deployed above the VS21s using their integrated flyware.

2. Connecting the MFLA-MK3 to the VSLA Bracket

- The MFLA-MK3 flyware locks into the VSLA bracket in the same way it locks into other MFLA-MK3 cabinets or their transport carts.
- The angle of the lowest cabinet can be adjusted as needed, while the cabinets above function as they would in any other deployment.

For a Standing Audience with VS21 Subwoofers

To achieve the ideal minimum height for MFLA-MK3s for a standing audience, use a stack of three VS21 subwoofers.

1. Stacking VS21 Subwoofers

- Use three VS21 subwoofers to provide the ideal height.
- Only the topmost VS21 needs to be equipped with a VSLA bracket.

2. Securing the Stack

- Secure all the subwoofers together to ensure stability and improve bass performance.
- Although the subs have interlocking feet, securing them together is highly recommended when adding MFLA-MK3s on top.

3. Using a Strap to Secure the Stack

- Lay a large strap across the area where the subs will be stacked.
- Stack the subs on top of the strap with the VSLA-equipped subwoofer on top.
- Bring the strap up the sides and over the top of the uppermost sub, ensuring the MFLA-MK3 attachment points remain clear.
- Tighten the strap with the buckle to the side before adding the MFLA-MK3s.

This securing method can also be used with ZV28s or Kraken subwoofers, as long as the topmost subwoofer is a VSLA-equipped VS21.

Using the Transport Cart as the Base

The MFLA-MK3 transport carts come equipped with four heavy-duty locking casters. Here's how to use them for system deployment:

1. Locking the Casters

- Lock the casters with the front wheel locks facing forwards and the rear wheel locks facing backwards.
- ***Do not rely solely on the wheel locks to secure the array; always use additional methods such as cargo ratchet straps to secure the cart if it's to be the base of the array.***

2. Removing the Wheels

- The cart's wheels can be removed, and the cart frame can be used as a base.
- The frame can be bolted, clamped, or strapped to a secure platform before stacking the array on the frame. Use this method for art-cars and parade floats.
- Removing the wheels also allows the base to be used above subwoofers that don't have flat surfaces.

3. Securing the Cart on Subwoofers

- If the base is a stack of subwoofers without a VS21, secure the transport cart to the top of the subwoofer stack.
- Secure all the subwoofers together with a large strap laid on the ground before stacking them. This allows all subs to be secured by a single strap.
- With the wheels removed or attached, place the transport cart or frame on the subwoofers and secure the entire group together before adding the MFLA-MK3 to the stack.
- The MFLA-MK3s don't need to be individually strapped because their flyware secures them to the transport cart. Therefore, ensure the transport cart is secure to maintain the array's stability.
- To reduce or eliminate rattling caused by subwoofer vibrations, use rubber O-rings (10mm [3/8"] diameter) on the flyware pins. Rubber bands can be used as a temporary solution.

Connecting the Array

1. Power Connections

- Each cabinet has a power inlet, power outlet, and a power linking cable.
- Once the cabinets are linked by the flyware, connect the power cables from one cabinet to the next.
- Choose which cabinet will be powered first in the array, then connect its outlet to the next cabinet's inlet. Continue this pattern up or down the array.
- Power connection limits:
    - Up to 5 cabinets per 120V/20A circuit.
    - Up to 7 cabinets per 240V/16A circuit.
    - Up to 8 cabinets per 208V/20A circuit.

2. Signal Connections

- Each cabinet has an XLR female input connector and an XLR male outlet connector for analog signal.
- Chain the signal to each successive box via short XLR cables.
- The connection between the input and output connectors is a direct, hard-wired pass-through.
- Set all input attenuators in all the cabinets to the same level.

3. Ethernet Connections

- Each cabinet has two Ethernet ports.
- Chain multiple cabinets on the same run for remote control.
- Connect an Ethernet cable between the first cabinet in the chain and a host computer running ControlBASS software, either directly or via a router.

Quick Start Guide

Read and follow the instructions related to the operation and linking of the flyware and ensure all elements are secure and stable.

1. Ensure the cabinet is secure and stable.
2. Connect signal via the XLR-F input.
3. Connect the XLR-M connector to additional subs or tops.
4. Connect the mains power and verify the “Ready” LED is lit.

BASSBOSS systems are easy to set up quickly. The best possible results are achieved consistently because of the integrated nature of the designs. All BASSBOSS loudspeakers are complete, integrated systems, featuring the cabinet, transducer, amplifier and a comprehensive suite of processing. Setup is particularly easy because the products integrate with each other.

Provided the cabinets are physically aligned, any BASSBOSS sub can be combined with any BASSBOSS top and their outputs will be phase-coherent. This means no cancellations and no gaps in the response at the crossover frequency, regardless of which preset is selected.

The on-board BASSBOSS processing allows for the following:

Any BASSBOSS powered subwoofer can be combined with any other BASSBOSS Powered subwoofer and their outputs will sum coherently. (i.e.: in phase with each other.)

Any BASSBOSS powered subwoofer or combination of BASSBOSS powered subwoofers can be combined with any BASSBOSS powered top and their outputs will sum coherently through the crossover region.

HOWEVER only one model of top should be used at a time. An assortment of different tops cannot be stacked together and still achieve coherence and clarity.

Outboard Processing Warning

Third-party outboard processing (Drive Racks, etc.) are not recommended and are not necessary with BASSBOSS MK3 series powered loudspeakers. Outboard processing will not improve, and will very likely degrade the sound quality, reliability and output capacity. Using external processing inappropriately can cause driver damage that is not covered by warranty.

The internal processing can accomplish everything an external processor could accomplish, but without degrading the sound quality and without putting components at risk. Before considering using an outboard processor, contact BASSBOSS customer service with your use-case scenario for assistance in setting up the internal processing to achieve your goals.

Setup Procedure

Once the cabinet is in the desired location, signal cables should be connected via the XLR-F input. It’s recommended to run balanced signal cables to minimize the chance of noise and ground-loop hum. The incoming signal should be unprocessed because all the necessary processing is done in the built-in DSP. The signal should be run directly from the outputs of a mixer or controller.

The XLR-M connector provides a full-range, unprocessed, pass-through connection to additional cabinets. This output can be connected to additional subs or tops. Up to 12 cabinets can be connected on a single output from a mixer or controller.

Connecting the mains power. The power connector is a Neutrik PowerCON TOP waterproof type. The power connector inserts with the silver tab rotated counter clockwise from vertical, at about the 10:00 position, and once inserted, rotates clockwise to the 12:00 position to lock in place. Once locked, this connector is waterproof.

This connector also serves as the power switch. To disconnect and remove the connector, pull back on the silver tab to unlock it and rotate it counter clockwise. Once rotated to the insertion angle, the connector can be removed.

When connecting and disconnecting, no force should need to be applied. If the connector doesn’t insert and rotate smoothly, either it’s in the wrong position or it’s damaged and should be replaced.

Always use a grounded outlet. The supplied power cord includes a standard grounding NEMA 5-15 (Edison) 120-Volt US wall plug. In unfamiliar locations it’s recommended to verify the correct wiring of outlets before powering your system.

It’s highly recommended to connect all signal and power cords to the speakers before plugging the power cords into mains outlets. When your speaker is powered on, you’ll see all the indicator lights turn on and then show the system’s current status.

Operation & Controls

There are 2 controls on the amplifier.

1: Input

This knob adjusts the input level from -72dB to -0dB. To avoid distortion and clipping, make sure the input signal doesn't exceed +22dB and the output doesn't reach clipping before you achieve the desired sound level.

While the amplifier has built-in limiters and safety features to protect itself and the speaker, it can't protect the speaker from distorted incoming signals. The amplifier will simply amplify the clipped signal, which can do the same damage as clipping an amplifier. Since it's essentially impossible for these amplifiers to clip, signal-level clipping is the most common cause of damage to these speakers.

If you hear distortion, lower the *input level* right away.

2: Preset Select

Pressing the Preset Select button cycles through presets 1-8, and pressing it again after preset 8 returns to preset 1. Each preset includes all necessary low-pass and high-pass filters at the selected frequencies and all the necessary alignments to maintain phase coherence in the crossover range when used with other BASSBOSS powered speakers.

Presets help you fine-tune the balance between the subwoofers and top speakers. More details on the different combinations are on page 7.

Indicator LEDs

Indicator LEDs – Left side, bottom to top:

Ready: Indicates that power is on and the system is ready to play.

Signal: Indicates the presence of input signal.

-12dB: Indicates there is 12dB of headroom remaining before reaching maximum output.

-6dB: Indicates there is 6dB of headroom remaining before reaching maximum output.

Limiting: Indicates one of the channels is reducing the incoming signal level to prevent overdrive.

Overheat: Indicates the amplifier is reducing output to prevent shut-down from overheating.

Protect: Indicates the amplifier is shut down due to a condition that could cause further damage.

The Protect LED also is engaged when the system has been muted via the software.

Comm Link: Indicates communication is active on the LAN connection(s).

Indicator LEDs, Right Side, Bottom to top:

Presets 1-8 - The illuminated LED indicates the corresponding preset is loaded.

How to Use the Presets

Setting the low-pass filter frequency on the subwoofer to match the top cabinet's high-pass filter frequency and balancing their levels will achieve the smoothest sound across the frequency range.

There are no incompatible combinations.

Selecting high numbered presets on subs with low-numbered presets on tops will result in increased system output in the overlap range, which can be helpful in some situations but can also result in a "boomy" sound.

When the subwoofer levels are to be run higher than tops levels, (which is almost always) the effective crossover moves higher in frequency. If you intend to run your system "bass-heavy" it's recommended to run lower-numbered presets on the subs and higher-numbered presets on the tops to avoid an excessively "boomy" sound.

Selecting low-numbered presets on subs with high-numbered presets on tops may result in a lack of "punch" in certain combinations. This is most likely when not enough level is available from the subwoofer(s).

When not enough output is available from the sub(s), using a preset combination with overlap can help provide a little more bass level but it does limit the maximum level of the tops due to the added demand for low-frequencies from the tops.

It's recommended that you try several, if not all, combinations when first setting up to determine which combination works best in each environment. You will likely choose different combinations for wood floors, concrete floors and outdoors.

Experiment with different combinations to dial in your preferred combination in different environments.

Pre-Installed Onboard Presets

High-pass filters with included phase compensation.

Preset 1:	**60Hz Butterworth 24dB/octave high-pass filter**
Preset 2:	**60Hz Linkwitz-Riley 24dB/octave high-pass filter**
Preset 3:	**70Hz Butterworth 24dB/octave high-pass filter**
Preset 4:	**70Hz Linkwitz-Riley 24dB/octave high-pass filter**
Preset 5:	**80Hz Butterworth 24dB/octave high-pass filter**
Preset 6:	**80Hz Linkwitz-Riley 24dB/octave high-pass filter**
Preset 7:	**90Hz Butterworth 24dB/octave high-pass filter**
Preset 8:	**90Hz Linkwitz-Riley 24dB/octave high-pass filter**

Additional presets are accessible through software. See "How to Use the Presets" section for more information. Additional presets will be available for download at the software link as they are developed.

Instructions on linking to your computer for remote monitoring and control:
www.bassboss.com/software

To be notified when new presets are released register your gear at: www.bassboss.com/support

Power Distribution

Connect no more than one 5000W or two 2500W subwoofer amplifiers to a single 20A circuit. If you need to share circuits, don't exceed two BASSBOSS single-driver subwoofers or one double-driver subwoofer, along with one or two top speakers, on the same circuit.

Although amplifiers for tops and subs may be specified to have the same "power" capacity, in practice, amplifiers used for tops applications tend to draw significantly less current. Subwoofers draw far more current than tops due to the demands for bass level and the duration of the notes.*

All MK3 amplifiers can operate on mains supply from 100 to 250VAC. To connect to voltages other than 120V, a different mains connector plug must be used. Contact your salesperson for information about purchasing cables for alternate voltages.

Pass-through Power connections can be used to power additional cabinets. With optional True 1 TOP cables, power can be linked between subs and tops. Do not connect equipment that will draw more than 15A on a single power outlet. Contact your salesperson for information about linking power cables.

*Avoid powering all subwoofers on the same circuit. Instead, use separate circuits for each subwoofer and top speaker combo to help prevent overloading a single circuit and tripping a breaker.

Troubleshooting

If, after following the previous instructions for setup, (see page 5) you have no output from the loudspeaker:

Verify that the green Ready LED is lit. If NOT lit, check the following:

1. Is the power cord plugged into a live outlet?
2. Is the Neutrik powerCON connector rotated into the locked position?

If the green Ready LED is lit, check the following:

1. Is the red Protect LED illuminated? The unit may be in protect mode or set into mute via software.
2. Is the signal cable connected to the input?
3. Is the signal cable connected to an operating output at the other end?
4. Is there signal flowing to the input? Check the integrity of the cable against a different cable.
5. Is the volume knob turned all the way down or at a very low level?
6. Is the signal flowing to the input full-range?

   Filters in the signal may remove the operating frequencies of the loudspeaker receiving them.

7. If you're connected via LAN, check the level and filter settings in the software.

Specifications

Acoustical

Loudspeaker Description:	Horizontally Symmetrical Dual 12", Self-powered, Vented Line Array element with Pressure-Phase Distributed midrange loading and isophasic high-frequency wave guides.
Frequency Response (±3 dB):	60 – 19,000 Hz (preset dependent)
Maximum Measured SPL:	143 dB
Max calculated SPL (Peak):	146 dB
Nominal Dispersion (°H x °V):	120 x 10

Electrical

Amplification:	3200W Class D: 2400W LF, 800W HF
Processing:	Integrated comprehensive DSP with 8 local presets (Additional presets accessible via software)
Electrical Connectors, Amplifier:	Neutrik Powercon True 1 TOP in and through
Electrical Connector, Mains:	NEMA 5-15 (Edison)
Voltage Operating Range:	100-240V. Auto-sensing, auto switching universal supply
Current Draw, Nominal:	5A @120volts, 2.5A @240V (average with music program)
Display:	LEDs for Power on/ready, Signal, -12dB, -6dB, Limiter Active, Thermal, Protect and LAN Link Active. Eight LEDs indicating selected preset
Signal Input Connector:	XLR-F
Signal Output Connector:	XLR-M (Direct pass-through, unprocessed)
LAN Connectors:	EtherCON RJ45 (x2)

Physical

Enclosure Type:	CNC machined 15mm multi-ply laminate with extensive bracing and dado joinery. External flyware and linking mechanism.
Transducer, LF:	2 x 12 in. diameter (300mm) Neodymium motor woofer with 3.5 in. (88mm) voice coil, waterproof cone
Transducer, HF:	2 x 1.4 in. (36mm) exit compression drivers with 3 in. (76mm) voice coils mounted to isophasic wave guides
Flyware:	Integrated line array flyware, adjustable in one degree increments from 0 to 10 degrees.
Exterior Finish:	Rugged, weatherproof, black, textured, bonded high-pressure polyurea coating, UHMWPE sliders
Grille:	Perforated, powder coated steel
Handles:	2 Integrated Handles
Dimensions (HxWxD):	16.125 in. x 40.5 in. x 20.375 in. (Including Flyware)
Net Weight:	104 lbs. (47 kg)
Shipping Weight:	110 lbs. (49.9 kg)

Optional

IP Connections:	IP-65 rated signal connections and isolated DSP
Flight Case:	Multi-box Touring Cases for up to 5 cabinets.
Array Frame (Bumper Bar):	Standard Rigging Frame with multiple lifting points
Covers:	Multi-box soft covers for up to 4 cabinets when on a rolling cart
Transport Dolly:	Ground Support Rolling Cart - provides array angle adjustment when used for ground support deployment
Online Information:	bassboss.com/mfla

Our proactive philosophy causes specifications to be subject to change whenever improvements are made.

Warranty

WARRANTY INFORMATION | Our fully-transferable warranty covers all BASSBOSS products.

STANDARD CABINET WARRANTY

BASSBOSS loudspeaker cabinet integrity, including all joinery, fasteners, handles and wood, is warranted against defects in materials and workmanship for a period of six (6) years from the date of purchase. This warranty does not cover items that are intended to wear and can be replaced if worn or damaged. Examples of items not covered by this warranty are cabinet feet, grilles and the finish or coating applied to the cabinet.

ENHANCED COMPONENT WARRANTY

BASSBOSS amplifiers and electronic components are covered against failures due to defects in materials and/or workmanship for a period of three (3) years from the date of purchase.

TRANSDUCER WARRANTY

Transducers are covered against failures due to defects in materials and/or workmanship for two (2) years from the date of purchase.

WARRANTY SUPPORT

Warranty support is a service, and part of that service includes helping you prevent failures and minimize repair and shipping costs. Please contact BASSBOSS immediately if you observe an issue.

Please do not ship products without obtaining a return authorization number (RMA) by contacting BASSBOSS at bassboss.com/support. **If you need to ship your speaker for service, BASSBOSS technicians will provide assistance on shipping and packaging requirements specific to your service needs.**

WARRANTY LIMITATIONS

During the warranty period, if your loudspeaker malfunctions or fails due to any defect in components or manufacturing, the failed parts will be repaired or replaced. This warranty does not extend to damage resulting from improper installation, misuse, neglect or abuse. Warranty coverage and eligibility will be determined upon inspection by BASSBOSS personnel. This warranty does not cover labor other than that authorized and performed by BASSBOSS personnel. Service will be performed upon the return of the failed unit, together with its original sales receipt or other proof of purchase, to BASSBOSS or an Authorized Service Facility. Purchaser is responsible for all costs of shipping and handling. Cosmetic damage is specifically excluded from this warranty. This warranty is rendered void if service, repairs and/or modifications are attempted or made by anyone not specifically authorized by BASSBOSS to perform said services. ***Please contact BASSBOSS or your local BASSBOSS dealer before attempting any repairs and before shipping parts in for service.*** This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

Safety Information

Important information regarding safety and the use of your loudspeakers:

To prevent potentially dangerous exposure to high levels of acoustic pressure, never stand in the immediate vicinity of loudspeakers driven at a high level without hearing protection. Professional loudspeaker systems are capable of causing sound pressure levels detrimental to human health. When a transducer capable of producing high sound levels is being used, it is necessary to wear ear plugs or protective earphones to prevent hearing damage.

Even seemingly non-critical sound levels (from approximately 95 dB SPL) can cause hearing damage if people are exposed to it over a long period. Anyone exposed to these levels should use appropriate hearing protection devices. System and venue owners and operators are encouraged to make hearing protection devices available to all customers and staff members.

In order to prevent accidents when setting up the loudspeakers or loudspeaker stands, make sure they are standing on a firm surface. Ensure that all additional hardware, fixings and fasteners used for installation or mobile deployment are of an appropriate size and load safety factor.

Only use included, factory installed, internally secured M10 fly points when supporting cabinets. (Not all models include these features.) Only use appropriately load-rated hardware. Never hang loudspeakers from handles. Never drill or screw into cabinets to attach lifting points.

Pay attention to the manufacturers' instructions and to the relevant safety guidelines. Regularly check the loudspeaker housings and accessories for visible signs of wear and tear, and replace them when necessary. Regularly check all load bearing bolts in the mounting devices.

Caution: Loudspeakers produce a static magnetic field even if they are not connected or are not in use. Therefore make sure when erecting and transporting loudspeakers that they are nowhere near equipment and objects which may be impaired or damaged by an external magnetic field. A distance of 3 feet (1m) should be maintained between loudspeakers and sensitive equipment such as CRT monitors or magnetic storage media.

Never attempt to carry out any operations, modifications or repairs that are not expressly described in this manual. Contact your dealer or BASSBOSS support if the product is not functioning properly.

The audio system must comply with current local standards and regulations regarding electrical systems.

For installation purposes, BASSBOSS strongly recommends that this product be installed by a qualified, professional installer who can ensure correct installation and certify that it is installed in compliance with the regulations in force.

Important Notes

Shielded data cables must be used.

To minimize the occurrence of noise and interference, always use shielded signal cables. Avoid routing signal or data cables close to equipment that produces high-intensity electromagnetic fields such as transformers, power cables and loudspeaker wires.

Do not coil excess power cable. Do not coil or wrap power cables and signal or data cables together.

WARNING

This is a class A product. In a domestic environment, this product may cause radio interferences, in which case the user may be required to take corrective measures.

FCC Compliance Notice

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 when the equipment is operated in a commercial environment.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

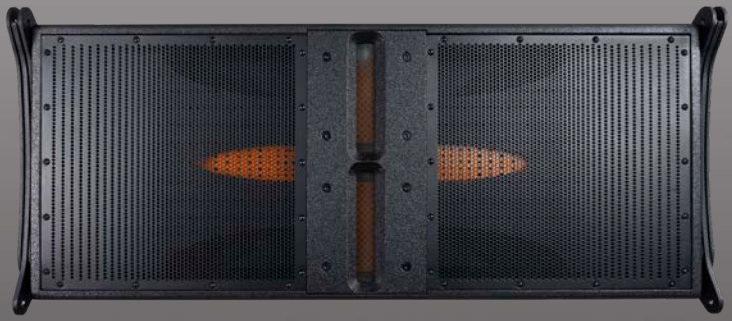
Manufacturer

True Lee Loudspeakers | BASSBOSS 2028 E Ben White Blvd. #240-8220 Austin TX 78741

We declare, under our sole responsibility, that to the best of our knowledge to which this declaration relates, our products are in conformity with the applicable requirements.

Product: MFLA-MK3 Line Array Loudspeaker Intended use: Professional Audio Loudspeaker

MFLA-MK3 | Dual 12″ Line Array



Need more assistance?
We're here to help.

bassboss.com/support