# THUMP1158 THUMP1188

# **1400W Powered Subwoofer Series**

OWNER'S MANUAL

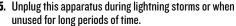


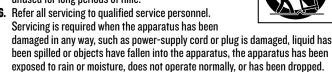




### **Important Safety Instructions**

- 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.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Minimum distance (5 cm) around the apparatus for sufficient ventilation. The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- 11. 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.
- 12. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 13. Only use attachments/accessories specified by the manufacturer.
- 14. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.





- 17. This apparatus shall not be exposed to dripping or splashing, and no object filled with liquids, such as vases or beer glasses, shall be placed on the annaratus.
- 18. Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.



This apparatus has been designed with Class-I construction and must be connected to a mains socket outlet with a protective earthing connection (the third grounding prong).



## CAUTION RISK OF ELECTRIC SHOCK! DO NOT OPEN!



PORTABLE CART

WARNING

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT

REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED PERSONNEL.



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



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

WARNING — To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

CAUTION — To prevent electric shock hazard, do not connect to mains power supply while grille is removed.

- 20. This apparatus has been equipped with a rocker-style AC mains power switch. This switch is located on the rear panel and should remain readily accessible to the user.
- The MAINS plug or an appliance coupler is used as the disconnect device, so the disconnect device shall remain readily operable.
- 22. The use of apparatus is in tropical and/or moderate climates.
- The maximum ambient temperature during use of the appliance must not exceed 45° C.
- 24. 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 his own expense.

**WARNING:** Operation of Thump115S / Thump118S in a residential environment could cause radio interference.

**CAUTION:** Changes or modifications to this device not expressly approved by LOUD Audio, LLC could void the user's authority to operate the equipment under FCC rules.

25. This apparatus does not exceed the Class A/Class B (whichever is applicable) limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

Canada ICES-003(A)/NMB-003(A)

ATTENTION — Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant las limites applicables aux appareils numériques de class A/de class B (selon le cas) prescrites dans le réglement sur le brouillage radioélectrique édicté par les ministere des communications du Canada.

26. Exposure to extremely high noise levels may cause permanent hearing loss. Individuals vary considerably in susceptibility to noise-induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a period of time. The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the permissible noise level exposures shown in the following chart.

According to OSHA, any exposure in excess of these permissible limits could result in some hearing loss. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels use hearing protectors while the equipment is in operation. Ear plugs or protectors in the ear canals or over the ears must be worn when operating the equipment in order to prevent permanent hearing loss if exposure is in excess of the limits set forth here:

Duration, per day in hours	Sound Level dBA, Slow Response	Typical Example
8	90	Duo in small club
6	92	
4	95	Subway Train
3	97	
2	100	Very loud classical music
1.5	102	
1	105	Ty screaming at Troy about deadlines
0.5	110	
0.25 or less	115	Loudest parts at a rock concert

Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan.

Apparatet stikprop skal tilsluttes en stikkontakt med jord, som giver forbindelse til stikproppens jord.

Apparatet må tilkoples jordet stikkontakt.

Apparaten skall anslutas till jordat uttag.



Correct disposal of this product: This symbol indicates that this product should not be disposed of with your household waste, according to the WEEE directive (2012/19/EU) and your national law. This product should be handed over to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority, or your household waste disposal service.

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### **Features**

#### **A True Workhorse for Gigging Professionals**

- 1400W Class-D amplifier is designed for ultra-reliable, consistent performance
- 15" High-performance woofer [Thump115S]
- 18" High-performance woofer [Thump118S]
- Built-Like-A-Tank<sup>™</sup> to conquer every gig while lightweight for easy loading
- Frequency response: 36Hz 200Hz [Thump115S]
- Frequency response: 30Hz 150Hz [Thump118S]
- Max SPL: 131 dB [Thump115S]
- Max SPL: 132 dB [Thump118S]

### **Voicing Modes**

- Flat Natural balance between deep bass and overall output
- Deep Emphasizes ultra-low frequencies.
   Great for dance, rap, and electronic music
- Punch Prioritizes highest possible output level. Great for bands and rock music
- Variable

### **Optimize for Your System**

- Variable crossover frequency
- · Polarity invert switch
- Stereo or mono summing for single or dual subwoofer deployment
- Variable level control (-6dBU to +6dBU)
- Front LED On/Off

#### Versatile I/O

- Stereo XLR inputs
- Stereo full-range XLR outputs
- Stereo high-pass XLR outputs

### **Versatile configuration options**

Integrated M20-threaded pole mount

### Weight

- 52.2 lb / 23.7 kg [Thump115S]
- 65.5 lb / 29.7 kg [Thump118S]

### **Dimensions**

- 18.5 x 18.1 x 23.0 in / 470 x 460 x 585 mm [Thump115S]
- 21.3 x 20.9 x 23.8 in / 540 x 530 x 605 mm [Thump118S]









Limited Warranty ...... 18

### Introduction

Need extra oomph in your system? The all-new 1400W 15" Thump115S and 18" Thump118S subwoofers not only deliver the massive bass you need, but they are also the perfect match for your Thump loudspeaker system.

Custom selectable voicing modes and a variable crossover makes optimization for your system easy. Stereo inputs plus High-Pass and Full-Range outputs offer plenty of configuration flexibility.

Integrated top corner handles are our most ergonomic design yet making transport easier than ever. Add Thump subwoofers to your system and really bring the rumble to your next gig.

#### **How to Use This Manual:**

After this introduction, a getting started guide will help you get things set up fast. The hookup diagrams show some typical Thump subwoofer setups.



This icon marks information that is critically important or unique! For your own good, read and remember them...it is a good idea to pay special attention to these areas in the Owner's Manual marked with the "VERY IMPORTANT" hand icon.



There's an illustration of a microscope, so, of course, you're going to get more detailed information when you see this little guy. There are explanations of features and practical tips listed here.



It's a good idea to pay attention to text displayed next to a note icon, as this icon draws attention to certain features and functions relating to the usage of the Thump subwoofer.

(i.e., insurance claims, tech support, return authorization, make dad proud, etc.)	

Please write the serial numbers here for future reference

### **Purchased at:**

### **Date of purchase:**

### **Getting Started**

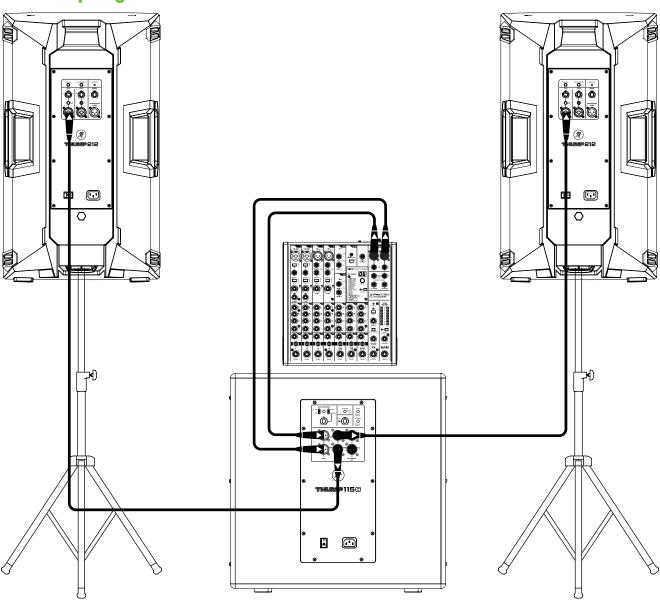
The following steps will help you set up the Thump quickly.

- 1. Make all initial connections with the power switches OFF on all equipment. Make sure the master volume, level and gain controls are all the way down.
- Connect the outputs from the mixing console (or other signal source) to the inputs of the Thump subwoofer, then connect the high pass outputs from the subwoofer to the inputs of the loudspeakers.
- 3. Make sure the subwoofer's and loudspeaker's gain knobs are set to "U" (unity gain).
- 4. Push the line cord securely into the subwoofer's / loudspeaker's IEC connectors and plug the other ends into grounded AC outlets. The subwoofer/loudspeaker may accept the appropriate voltage as indicated near the IEC connector.
- 5. Kick out the jams.
- 6. Turn the mixer (or other signal source) on.
- 7. Turn the subwoofer on.
- 8. Turn the loudspeakers on.
- 9. Start the signal source and raise the mixer's main L/R fader up to a comfortably loud listening level.

### **Things to Remember:**

- Never listen to loud music for prolonged periods. Please see the Safety Instructions on page 2 for information on hearing protection.
- As a general guide, the mixer (or other signal source) should be turned on first, Thump subwoofer(s) next, and loudspeakers last. As such, the loudspeakers should also be turned off first, followed by the Thump subwoofer(s), then the mixer. This will reduce the possibility of any turn-on or turn-off thumps and other noises generated by any upstream equipment from coming out of the speakers.
- Save the shipping boxes and packing materials! You may need them someday. Besides, the cats will love playing in them and jumping out at you unexpectedly. Remember to pretend like you are surprised!
- Save your sales receipt in a safe place.

### **Hookup Diagrams**



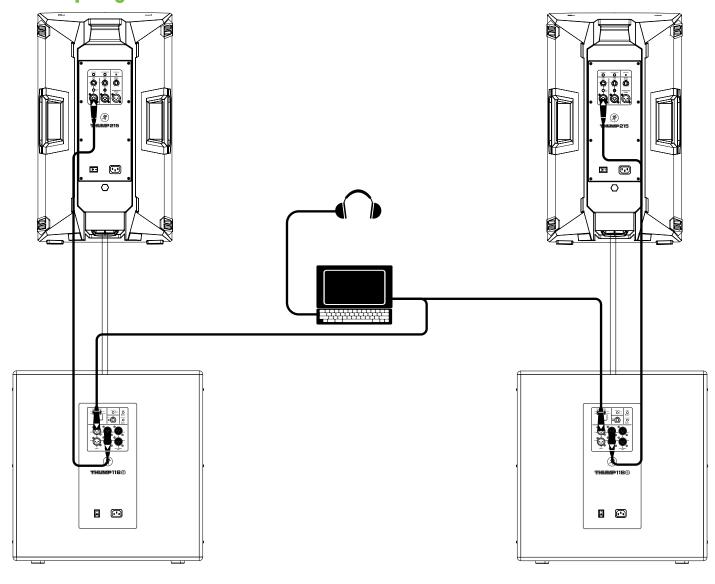
In this example, a ProFX10v3 mixer is connected directly to an Thump115S subwoofer which, in turn, is connected to a pair of Thump212 loudspeakers. It is the perfect setup for a small club or... a totally happenin' karaoke house party!

Simply connect the L/R outputs of a ProFX10v3 mixer directly to the A and B inputs of the Thump115S subwoofer. Then the High-Pass Outs of the subwoofer are connected to the channel 1 inputs of a pair of Thump212 loudspeakers.

The gain knob on both loudspeakers should be set to Line. Additionally, the Mic/Line switches should be disengaged [Line]. Here you will want to set the subwoofer's High Pass Mode to your preferred choice.

### **Small Club System**

### **Hookup Diagrams continued...**



Perhaps you're a DJ playing bumpin' tunes in the middle of the night to a crowd that's groovin' and dancin' to your fine selection.

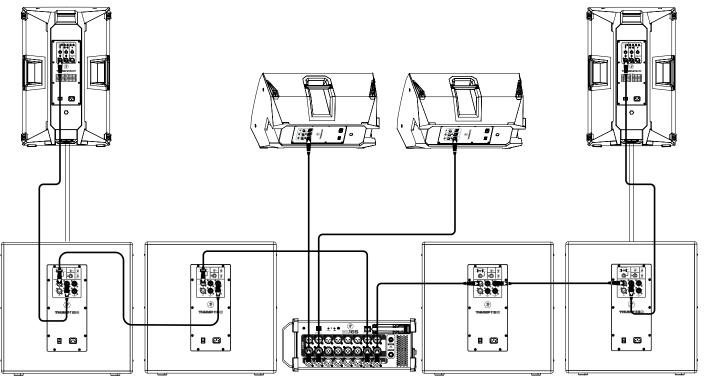
In this example, a laptop is connected to the inputs of two Thump118S subwoofers.

The High-Pass Out of each subwoofer is then connected to the input of each Thump215 loudspeaker. Additionally, a set of Mackie MC-450 headphones is connected to the phones jack of the laptop.

The gain knob on both loudspeakers should be set to Line. The Mic/Line switches should be disengaged [Line], as well. Additionally, you will want to set the subwoofer's High Pass Mode to either Flat or Deep.

### **DJ System**

### **Hookup Diagrams continued...**

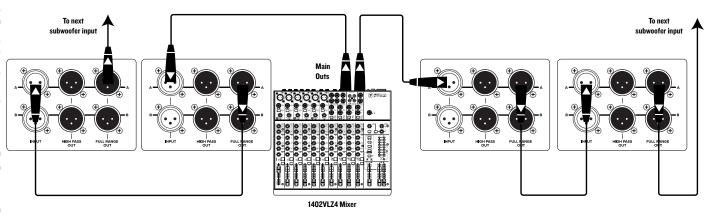


Here's how to set up a large club system. In this example, the L/R outputs of a DL16S mixer are connected directly to the channel A inputs of a pair of Thump118S subwoofers. The Full Range Out of each subwoofer is then connected to the inputs of an additional pair of Thump118S subwoofers.

From here, the High Pass Out of the two outer Thump118S subwoofers are connected directly to the inputs of a set of Thump215XT loudspeakers. The Voicing Modes of these PA loudspeakers may be set to Live (or Club) and the Subwoofer's High Pass Mode set to Deep. Talk about beefy low end!

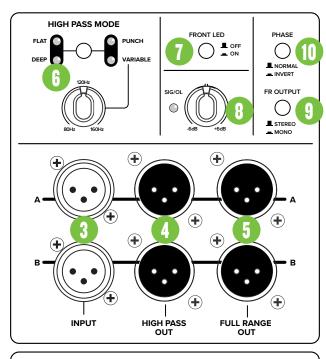
Outputs 1 and 2 from the mixer may be used as aux sends; these are connected directly to the channel 1 inputs of a pair of Thump215 loudspeakers to be used as monitors for the band. The gain knob on all Thump loudspeakers in this example should be set to Line. Lastly, all Mic/Line switches should be disengaged [Line].

### **Hookup Diagrams continued...**



Thump115S and Thump118S subwoofers may be daisy-chained via the male XLR connector labeled "FULL RANGE OUT". Simply plug the signal source (i.e., mixer output) into the ch. A input jack(s), and patch that subwoofer's full range out jack to the next subwoofer's input jack, and so on, daisy-chaining multiple subwoofers. See above for visual representations of daisy-chaining.

### **Thump115S and Thump118S Subwoofers: Rear Panel Features**





### 1. Power Connection

This is a standard 3-prong IEC power connector. Connect the detachable power cord (included in the packaging with the subwoofer) to the power receptacle, and plug the other end of the power cord into an AC outlet.



Make sure that the AC power is matched to the AC power indicated on the rear panel (below the IEC receptacle).



Disconnecting the plug's ground pin is dangerous. Don't do it!

#### 2. Power Switch

Press the top of this rocker switch inwards to turn on the subwoofer. Press the bottom of this rocker switch inwards to turn off the subwoofer.



As a general guide, the mixer (or other signal source) should be turned on first, subwoofers next, and loudspeakers last.

As such, the loudspeakers should also be turned off first, followed by the subwoofers, then the mixer. This will reduce the possibility of any turn-on or turn-off thumps and other noises generated by any upstream equipment from coming out of the speakers.

### 3. XLR Inputs

Balanced XLR female connectors are provided for the left and right inputs. Connect the full-range line-level signal from the mixer (or other signal source) to these input jacks.

If you are connecting a single subwoofer output, or LFE (low-frequency effects) output to the subwoofer, you may use either the A or B input connector.



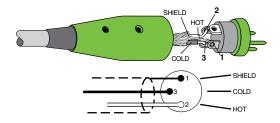
NEVER connect the output of an amplifier directly to the input of the subwoofer. This could damage the input circuitry of the active subwoofer.

### **XLR Balanced Input Connector:**

Pin 1 = Shield (ground)

Pin 2 = Positive (+ or hot)

Pin 3 = Negative (- or cold)



### 4. High Pass Outputs

Typically, full-range loudspeakers are connected to the high pass outputs to "split" the work with the subwoofer. The subwoofer handles all of the low frequencies and the loudspeakers handle the rest. As a result, it is more efficient and a bit louder.

Balanced XLR male connectors are provided for the line-level Ch. A and B high pass outputs. The subwoofer's crossover splits the input signals into two frequency bands. The low frequency range goes to the internal amplifier that powers the subwoofer. The high frequency range is sent to these line-level output jacks.

The level control and polarity setting have no effect on the high pass outputs. The outputs are separate and maintain the stereo separation of the input signals.

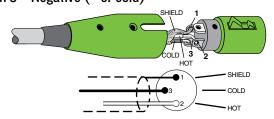
They are wired as follows, according to standards specified by the AES (Audio Engineering Society):

### **Balanced XLR Output Connector**

Pin 1 - Shield (ground)

Pin 2 - Positive (+ or hot)

Pin 3 - Negative (- or cold)



See the previous page to learn more about daisy-chaining subwoofers.

### Thump115S and Thump118S Subwoofers: Rear Panel Features continued...

### 5. Full Range Outputs

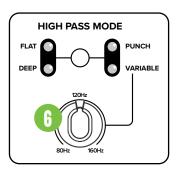
Connect the full range outputs to the inputs of another powered subwoofer, powered loudspeakers, or to an amplifier powering passive loudspeakers. Balanced XLR male connectors are provided for the line-level A and B full range outputs.

The signal at these outputs is a direct copy of the input signals. These outputs allow you to daisy-chain multiple subwoofers and/or send the full range signals to other loudspeakers. It's a great way to add side fills, too!

It is wired the same as the high pass outputs as seen on the previous page.

### 6. High Pass Mode

The high pass mode allows you to optimize the behavior of the Thump subwoofer and loudspeakers connected to its high pass outputs. These modes are sequentially accessible, cycled by pressing the High Pass Mode button.



Proprietary DSP is employed to transform the subwoofer and attached top boxes into an acoustically optimized 3-way system. These modes shape the output of the subwoofer while simultaneously controlling the gain and high pass of the signal

sent to the top boxes. There are three separate options, depending on intended use case:

- Flat [Default] This factory default setting delivers nice, balanced bass, suitable for all music types.
- **Deep** Deep trades a bit of output for much deeper bass extension. This mode pairs well with electronic music, or for use with electronic keyboards.
- **Punch** Punch has opposite shaping of Deep. It delivers a higher peak SPL at the expense of LF extension, while still maintaining musicality. Optimized for use with live music.
- Variable The Variable High Pass Mode allows you to select a customizable high pass frequency for your top boxes, adjustable between 80 Hz to 160 Hz.



The High Pass Mode knob is active while in "Var" mode, but is fully bypassed when any High Pass Mode is engaged.

### 7. Front LED Switch

There is a single horizontal LED located near the bottom-front of each Thump subwoofer. Here is where you decide if you want the front LED on or off.

- On [Default] The LED illuminates in all its glory.
- Off The LED does not illuminate; it is turned off and the Thump operates in 'stealth' mode.

### 8. Gain Knob and Sig/OL LED

The gain knob adjusts the sensitivity of the inputs. This allows signals from the outside world to be adjusted to run through each channel at optimal internal operating levels. There is -6 dB of gain with the knob fully down (off), ramping up to +6 dB of gain fully up (max).

The accompanying dual-colored LED will illuminate green when the input signal is present, indicating signal.

Thump subwoofers have a built-in limiter that helps to prevent the amplifier outputs from clipping or overdriving the transducers. The LED illuminates red when the limiter is activated. It's okay for it to blink red occasionally, but if it blinks frequently or lights continuously, turn down the gain knob until it only blinks occasionally.



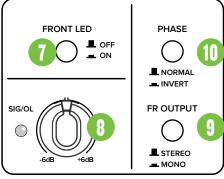
**Excessive limiting may lead** to overheating, which in turn trips the thermal protect circuitry

and interrupts the performance. See 'Thermal Protection' on page 13 for more information.

### 9. FR Output Switch

This switch allows you to choose whether the A and B inputs are sent out separately [switch out] or as a mono sum of both inputs [switch in] via the

SIG/OL full range outputs.



This is useful and saves the hassle of additional cable runs when connecting multiple (mono) subwoofers. Instead of running two cables from the first subwoofer to the next one, simply engage the switch and the signals from both inputs are combined on either full range output.

### Thump115S and Thump118S Subwoofers: Rear Panel Features continued...

### 10. Normal/Invert Switch [Phase]

This switch reverses the polarity of the signal going into the subwoofer amplifier by 180°. It has no effect on the signal at the outputs.

There is no right or wrong setting for this switch. Listen to the overall blend of the subwoofer with the rest of the system and select the switch position that gives you the best sound for your audience. In fact, your system may vary when positioned differently and in alternate venues. Don't be afraid to experiment with the position of the polarity switch. See the next page for more information.

#### 11. Fan On / Off

One of our favorite things about the Thump Series is the Summer cool-off / Winter warm-up feature. Is it hotter than the blazes out where you are? We've got you covered!

Simply press this switch to turn the fan on and off. The subwoofer begins acting like a fan, blowing out cool air!

The LED will illuminate green when engaged (fan on).

### 12. Fan Speed

Want more? Of course you do! Here you're able to select the speed setting of the fan from 1 (the lowest setting) to 5 (the highest setting).

Quickly press this button to what setting you would like, up to five times. The LED will flash green the number of the current setting.

### 13. Mist Level

A subwoofer fan with multiple speeds is a nice feature, but when a mister is thrown in...? Oh, all bets are off!

When the mist level switch is engaged, a light spray of water is dispersed to keep the band and crowd nice and refreshed throughout the performance. The LED will illuminate green when engaged (mist on).

### 14. Heat On / Off

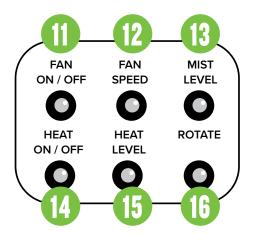
The fan feature is nice... but what if it's 40° below with 20 feet of snow outside and a wind chill factor of the frozen tundra? Yeah, we've got you covered there, too!

Just like with the fan, simply press this switch to turn the heat on and off. The LED will illuminate green when engaged (heat on).

### 15. Heat Level

If the temperature is the aforementioned "frigid", we're pretty confident that you're going to want to crank the heat... perhaps not, but we'd bet on it!

This works similarly to that of the fan speed with settings ranging from 1 (low heat) to 5 (cranked heat). Quickly press this button to what setting you would like, up to five times. The LED will flash green the number of the current setting.



### 16. Rotate [Thump Series Loudspeaker Series]

Last, but absolutely not least... the fan AND heater are both rotatable (although the one switch controls whichever one is engaged, of course).



Please note that the rotate function only works with the Thump Series Loudspeaker Series and only when mounted on the T100 tripod or SPM400 pole mount. These Thump

subwoofers may NOT be pole mounted or flown.
Operators are standing by!

### **The Ins and Outs of Polarity**

Thump subwoofers include a switch that allows you to quickly invert the polarity of the subwoofer's output relative to the input signal it is receiving from the mixer or other sound source. But what exactly does that mean? A subwoofer works by literally pumping air as the woofer cone moves in and out with respect to the cabinet in which it is housed. It does so according to the low-frequency portion of the signal it receives from the sound source.

The woofer cone is simply following the waveform as seen in the sine wave in Figure 1. As the sine wave rises, the woofer cone pushes out. Likewise, as the sine wave falls, the woofer cone pulls into the cabinet. A musical signal is much more complex, of course, but the same principle applies. Movement of the woofer cone causes air pressure changes that we perceive as sound.

When the normal/invert [phase] switch is engaged, the original waveform is simply reversed 180° [see Figure 2]. Again, the subwoofer cone follows the waveform. However, this time the woofer cone starts by pulling into the cabinet followed by the woofer cone pushing out. If you have ever experimented with a subwoofer polarity switch, you may not have noticed any changes to the sound regardless of its position, especially if you are listening to just the subwoofer. This is normal, as our ears perceive them both at the same time.

The normal/invert [phase] switch comes into play when the subwoofer is paired with a loudspeaker. Ideally, the woofer cones of the subwoofer and full range loudspeaker would work together by pushing and pulling in unison. Thump subwoofers are designed to be used in a broad range of applications. The flexibility provided by the polarity switch is necessary to ensure that you are receiving the best possible sound from your system, regardless of your setup.

### **Placement**

Thump subwoofers are designed to sit on the floor or stage as the main PA. They are not designed to be pole-mounted or suspended.

A socket is provided on top for mounting loudspeakers. The SPM400 is a great pole-mount option. See the hookup diagrams starting on page 5.



Thump subwoofers have no rigging points and are not suitable for rigging. NEVER attempt to suspend a Thump by its handles.

Check to make sure that the support surface (e.g. floor, etc.) has the necessary mechanical characteristics to support the weight of the subwoofer(s).

When pole-mounting loudspeakers, be sure that they are stabilized and secured from falling over or being accidentally pushed over. For stacked scenarios, it is highly suggested that straps are utilized. Failure to follow these precautions may result in damage to the equipment, personal injury, or death.

As with any powered components, protect them from moisture. Avoid installing a Thump subwoofer in places exposed to harsh weather conditions. If you are setting them up outdoors, make sure they are under cover if you expect rain.

### **Polarity Waveforms**

Figure 1: Normal [0°]

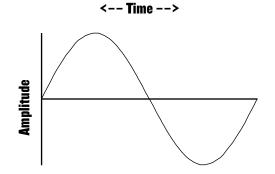
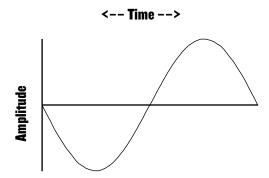


Figure 2: Invert [180°]



### **Protection Circuitry**

Thump subwoofers employ a built-in limiter for less distortion at peak levels. Additional protection includes automatic thermal shutdown should the amp overheat. However, with Class-D amp technology, which is highly-efficient, this should never be a problem.



The protection circuits are designed to protect the subwoofers under reasonable and sensible conditions. Should you choose

to ignore the warning signs [e.g. excessive distortion], you can still damage the speaker in the subwoofer by overdriving it past the point of amplifier clipping. Such damage is beyond the scope of the warranty.

### Limiting

The driver has its own compression circuit which helps protect it from damaging transient peaks. The compressor is designed to be transparent and is not noticeable under normal operating conditions.

### **AC Power**

Be sure the Thump subwoofer is plugged into an outlet that is able to supply the correct voltage specified for your model. It will continue to operate at lower voltages, but will not reach full power. Be sure the electrical service can supply enough amperage for all the components connected to it.

We recommend that a stiff (robust) supply of AC power be used because the amplifiers place high current demands on the AC line. The more power that is available on the line, the louder the speakers will play and the more peak output power will be available for a cleaner, punchier bass. A suspected problem of "poor bass performance" is often caused by a weak AC supply to the amplifiers.



Never remove the ground pin on the power cord or any other component of the Thump subwoofer. This is very dangerous.

#### **Overexcursion Protection**

A subsonic filter circuit just prior to the power amplifier prevents ultra-low frequencies from being amplified. Excessive low-frequency energy can damage the woofer by causing it to "bottom out," also know as overexcursion, which is equivalent to a mechanical form of clipping.

#### **Thermal Protection**

All amplifiers produce heat. Thump subwoofers are designed to be efficient both electrically and thermally. In the unlikely event of the amplifier overheating, a built-in thermal switch will activate, muting the signal.

When the amplifier has cooled down to a safe operating temperature, the thermal switch resets itself, and the subwoofer resumes normal operation.

If the thermal switch activates, try turning down the level control a notch or two to avoid overheating the amplifier. Be aware that direct sunlight and/or hot stage lights may be the culprit of an amplifier overheating.

### **Care and Maintenance**

Your Thump subwoofer will provide many years of reliable service if you follow these guidelines:

- Avoid exposing the subwoofers to moisture.
   If they are set up outdoors, be sure they are under cover if rain is expected.
- Avoid exposure to extreme cold (below freezing temperatures). If you must operate the subwoofers in a cold environment, warm up the voice coils slowly by sending a low-level signal through them for about 15 minutes prior to high-power operation.
- Use a dry cloth to clean the cabinets. Only do this when the power is turned off. Avoid getting moisture into any of the openings of the cabinet, particularly where the drivers are located.

### **Appendix A: Service Information**

If you think your Thump subwoofer has a problem, please check out the following troubleshooting tips and do your best to confirm the problem. Visit the Support section of our website (www.mackie.com/support) where you will find lots of useful information such as FAQs and other documentation. You may find the answer to the problem without having to part with your subwoofer.

### **Troubleshooting**

### No power

- Our favorite question: Is it plugged in? Make sure the AC outlet is live [check with a tester or lamp].
- Our next favorite question: Is the power switch on?
   If not, try turning it on.
- Make sure the line cord is securely seated in the line cord socket and plugged all the way into the AC outlet.
- Is the power LED on the front panel illuminated?
   If not, make sure the AC outlet is live. If so, refer to "No sound" below.
- The internal AC line fuse may be blown. This is not a user serviceable part. If you suspect the AC line fuse is blown, please see the "Repair" section next.

#### No sound

- Is the level knob for the input source turned all the way down? Verify that all the volume controls in the system are properly adjusted. Look at the level meter to ensure that the mixer is receiving a signal.
- Is the signal source working? Make sure the connecting cables are in good repair and securely connected at both ends. Make sure the output level control on the mixing console is turned up sufficiently to drive the inputs of the speaker.
- Make sure the mixer does not have a mute on or a processor loop engaged. If you find something like this, make sure the level is turned down before disengaging the offending switch.
- Has it shut down? Make sure there is at least six inches of free space behind each Thump subwoofer.

#### **Poor sound**

- Is it loud and distorted? Make sure that you're not overdriving a stage in the signal chain. Verify that all level controls are set properly.
- Is the input connector plugged completely into the jack? Be sure all connections are secure.

### **Poor bass performance**

- Check the polarity of the connections between the mixer and the subwoofers. You may have your positive and negative connections reversed at one end of one cable, causing one subwoofer to be out-of-phase with the other.
- Poor bass performance may be the result of bad AC power. See the section titled 'AC Power' on page 13 for further details.

#### **Noise**

- Make sure all connections to the subwoofers and loudspeakers are good and sound.
- Make sure none of the signal cables are routed near AC cables, power transformers, or other EMI-inducing devices.
- Is there a light dimmer or other SCR-based device on the same AC circuit as the Thump subwoofer?
   Use an AC line filter or plug the subwoofer into a different AC circuit.

#### Hum

- Try disconnecting the cable connected to the input jack. If the noise disappears, it could be a "ground loop," rather than a problem with the Thump subwoofer. Try some of the following troubleshooting ideas:
  - Use balanced connections throughout your system for the best noise rejection.
  - Whenever possible, plug all the audio equipment's line cords into outlets which share a common ground. The distance between the outlets and the common ground should be as short as possible.

#### Other Issues

- Please email or call Technical Support if you are having any other issue not listed here:
  - o mackie.com/support-contact
  - o 1-800-898-3211

### Repair

For warranty service, refer to the warranty information on page 18.

Non-warranty service is available at a factory-authorized service center. To locate the nearest service center, visit www.mackie.com/support/service-locator. Service for Thump subwoofers living outside the United States may be obtained through local dealers or distributors.

If you do not have access to our website, please call our Tech Support department at 1-800-898-3211 (normal business hours, Pacific Time), to explain the problem. They will tell you where the nearest factory-authorized service center is located in your area.

### **Appendix B: Technical Information**

### **Thump Subwoofer Specifications**

#### **Acoustic Performance**

Frequency Range (-10 dB): 36 Hz - 180 Hz (Thump115S) 30 Hz - 150 Hz (Thump118S)

Frequency Range (-3 dB): 46 Hz - 150 Hz (Thump115S) 40 Hz - 120 Hz (Thump118S)

Maximum SPL Peak: 131 dB [Thump 115S] 132 dB [Thump 118S]

### Safety Features

Input Protection Peak and RMS limiting, power supply and amplifier thermal protection

Display LEDs Defeatable front power

#### **Transducers**

Low Frequency: 15 in / 381 mm woofer with ferrite [Thump 115S]

18 in / 457 mm woofer with ferrite [Thump 118S]

#### **Physical Properties**

Thump115S:

Height: 18.5 in / 470 mm

Width: 18.1 in / 460 mm

Depth: 23.0 in / 585 mm

Weight: 52.2 lb / 23.7 kg

Thump118S:

 Height:
 21.3 in / 540 mm

 Width:
 20.9 in / 530 mm

 Depth:
 23.8 in / 605 mm

 Weight:
 65.5 lb / 29.7 kg

#### **Power Amplifiers**

System Power Amplification

Rated Power 1400 watts peak

Low Frequency Power Amplifier

Rated Power: 1400 watts peak
Rated THD < 1%
Cooling Convection
Design: Class D

#### **Mounting Methods:**

Thump subwoofers are designed to sit on the floor or stage. They are NOT designed to be pole-mounted or suspended. The cabinet has no rigging points and is not suitable for rigging. Never attempt to suspend a Thump subwoofer by its handles.

### **System Processing**

Phase Normal / Invert
FR Output Stereo / Mono
High Pass Mode Flat, Deep, Punch, Variable

### **Options**

 Thump115S Cover
 P/N 2055238

 Thump118S Cover
 P/N 2055239

 SPM400 Loudspeaker Pole Mount
 P/N 2051055

#### Input/Output

Input Type: 2x Female XLR Balanced Differential (Stereo Left / Right)

Input Impedance: 10 kΩ Balanced
Full Range Outputs: 2x Male XLR Balanced
(Parallel with Inputs − Mono)

Full Range Impedance:  $300\,\Omega$  Balanced High Pass Outputs: 2x Male XLR Balanced

Main Level Control: Rotating Knob

#### Disclaimer

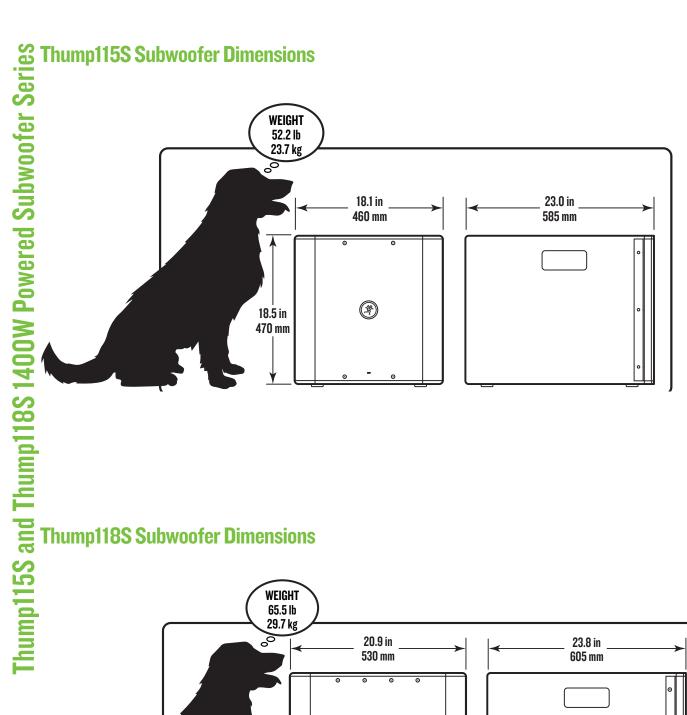
Since we are always striving to make our products better by incorporating new and improved materials, components, and manufacturing methods, we reserve the right to change these specifications at any time without notice.

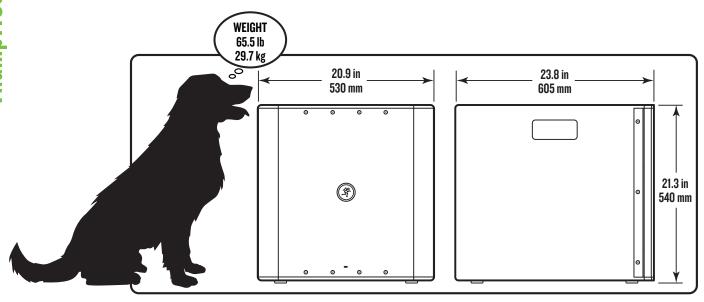
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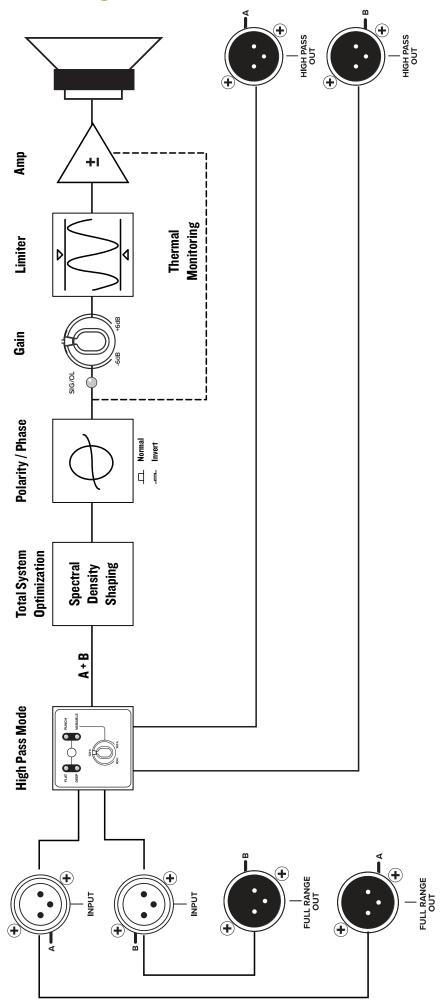
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### **Line Input Power**





### **Thump Subwoofer Block Diagram**



### **Limited Warranty**

### Please keep your sales receipt in a safe place.

This Limited Product Warranty ("Product Warranty") is provided by LOUD Audio, LLC ("LOUD") and is applicable to products purchased in the United States or Canada through a LOUD-authorized reseller or dealer. The Product Warranty will not extend to anyone other than the original purchaser of the product (hereinafter, "Customer," "you" or "your").

For products purchased outside the U.S. or Canada, please visit www.mackie.com to find contact information for your local distributor, and information on any warranty coverage provided by the distributor in your local market.

LOUD warrants to Customer that the product will be free from defects in materials and workmanship under normal use during the Warranty Period. If the product fails to conform to the warranty then LOUD or its authorized service representative will at its option, either repair or replace any such nonconforming product, provided that Customer gives notice of the noncompliance within the Warranty Period to the Company at: www.mackie.com or by calling LOUD technical support at 1.800.898.3211 (toll-free in the U.S. and Canada) during normal business hours Pacific Time, excluding weekends or LOUD holidays. Please retain the original dated sales receipt as evidence of the date of purchase. You will need it to obtain any warranty service.

For full terms and conditions, as well as the specific duration of the Warranty for this product, please visit www.mackie.com.

The Product Warranty, together with your invoice or receipt, and the terms and conditions located at www.mackie.com constitutes the entire agreement, and supersedes any and all prior agreements between LOUD and Customer related to the subject matter hereof. No amendment, modification or waiver of any of the provisions of this Product Warranty will be valid unless set forth in a written instrument signed by the party to be bound thereby.

### Need help with the subwoofer?

- Visit www.mackie.com/support to find: FAQs, manuals, addendums, and other documents.
- Email us at: www.mackie.com/support-contact
- Telephone 1-800-898-3211 to speak with one of our splendid technical support chaps (Monday through Friday, normal business hours, Pacific Time).



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