

# HYPER-PRO TOP SERIES

## 1200W BI-AMP ACTIVE SPEAKERS WITH DIGITAL SOUND PROCESSING



# USER MANUAL

Please read this manual carefully and proper take care of this manual.



Dear customer,

First of all thanks far purchasing a SOUNDSATION<sup>®</sup> product. Our mission is to satisfy all possible needs of musical instrument, professional audio and lighting users offering a wide range of products using the latest technologies.

We hope you will be satisfied with this item and, if you want to collaborate, we are looking for a feedback from you about the operation of the product and possible improvements to introduce in the next future. Go to our website <u>www.soundsationmusic.com</u> and send an e-mail with your opinion, this will help us to build equipment ever closer to customer's real requirements.

One last thing: read this manual before using the product, an incorrect operation can cause damages to you and to the unit. Take care!

The SOUNDSATION Team

# TABLE OF CONTENTS

1.	UNBOXING	5
2.	ACCESSORIES	6
3.	OVERVIEW	6
4.	REAR PANEL DESCRIPTION	7
5.	DSP SOFTWARE DESCRIPTION	9
5.1	Main Screen	9
5.2	2. DSP functions navigation	9
6.	AUDIO CONNECTIONS	13
-		
1.	FIXED INSTALLATION	14
	FIXED INSTALLATION HOOKUP DIAGRAMS	
8.	HOOKUP DIAGRAMS	15
<b>8.</b> 8.1		<b>15</b> 15
<b>8.</b> 8.1 8.2	HOOKUP DIAGRAMS Examples of Input connections	<b>15</b> 15 15
<b>8.</b> 8.1. 8.2. 8.3.	HOOKUP DIAGRAMS.   Examples of Input connections   Stereo operation with a mixer.	<b>15</b> 15 15 16
<b>8.</b> 8.1 8.2 8.3	HOOKUP DIAGRAMS.   Examples of Input connections   Stereo operation with a mixer.   Bi-Amping with HYPER BASS active subs	15 15 15 16 17





## IMPORTANT SAFETY SYMBOLS





The symbol is used to indicate that some hazardous live terminals are involved within this apparatus, even under the normal operating conditions, which may be sufficient to constitute the risk of electric shock or death.



 $(\underline{1}$ 

The symbol is used in the service documentation to indicate that specific component shall be replaced only by the component specified in that documentation for safety reasons.

- Protective grounding terminal
- Alternating current/voltage
- 4 Hazardous live terminal
- **ON** Denotes the apparatus is turned on
- **OFF** Denotes the apparatus is turned off
- **WARNING:** Describes precautions that should be observed to prevent the danger of injury or death to the operator.
- **CAUTION:** Describes precautions that should be observed to prevent danger of the apparatus.

## TAKING CARE OF YOUR PRODUCT

- Read these instructions
- Keep these instructions
- Heed all warning
- Follow all instructions

#### WATER / MOISTURE

The apparatus should be protected from moisture and rain and can not be used near water; for example near a bathtub, a kitchen sink, a swimming pool, etc.

#### HEAT

The apparatus should be located away from heat sources such as radiators, stoves or other appliances that produce heat.



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#### HYPER-PRO TOP SERIES USER MANUAL

#### VENTILATION

Do not block areas of ventilation opening. Failure to do could result in fire. Always install according to the manufacturer's instructions.

#### OBJECT AND LIQUID ENTRY

Objects do not fall into and liquids are not spilled into the inside of the apparatus for safety.

#### POWER CORD AND PLUG

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two poles; a grounding-type plug has two poles and a third grounding terminal. The third prong is provided for your safety. If the provided plug does not fit into your outlet, refer to an electrician for replacement.

#### FUSE

To prevent the risk of fire and damaging the unit, please use only of the recommended fuse type as described in the manual. Before replacing the fuse, make sure the unit turned off and disconnected from the AC outlet.

#### ELECTRICAL CONNECTION

Improper electrical wiring may invalidate the product warranty.

#### CLEANING

Clean only with a dry cloth. Do not use any solvents such as benzene or alcohol.

#### SERVICING

Do not implement any servicing other than those means described in the manual. Refer all servicing to qualified service personnel only. Only use accessories/attachments or parts recommended by the manufacturer.

#### WARNING

Please remember the high sound pressure do not only temporarily damage your sense of hearing, but can also cause permanent damage. Be careful to select a suitable volume.

#### I. UNBOXING

Thank you for purchasing HYPER-PRO TOP Series active loudspeakers. Each unit has been well tested and shipped in perfect operating conditions. Carefully unpack the carton and check the contents to ensure that all parts are present and in good conditions:

- 1 Loudspeaker
- 1 Power cable

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#### ▶ 1 User manual

If anything damaged during transport, notify the shipper immediately and keep packing material for inspection. Again, please save the carton and all the packing materials. If the unit must be returned to the manufacturer, it is important that the unit is returned in the original manufacturer's packing. Please do not take any action without first contacting us.

#### C WARNING: Packaging bag is not a toy! Keep out of reach of children!!! Keep in a safe place the original packaging material for future use.

## 2. ACCESSORIES

SOUNDSATION can supply a wide range of quality accessories that you can use with HYPER-PRO TOP speaker, like mixers, Cables, Microphones, stands, etc.

All products in our catalogue has been long tested with this device so we recommend to use Genuine SOUNDSATION Accessories and Spare Parts.

Ask your SOUNDSATION dealer for any accessories you could need to ensure best performance of the product.

## 3. OVERVIEW

HYPER-PRO TOP Series speakers are part of a wider range of SOUNDSATION Pro Audio product line, of which they represent the cutting edge. 1200W peak power, selected transducers, powerful DSP, advanced housing material and anti-scratch black paint: all ingredients wisely combined to offer the best to even the most demanding professionals. HYPER-PRO series 12" and 15" woofers sound punchy and loud; the 1.35" driver lets them sound crystal clear.

With the Easy Control DSP, you take total control of your sound. Press and rotate the control knob - that's all. The graphic back-lit display shows what you what to select. Choose from 4 sound programs (MUSIC, LIVE, SPEECH, DJ), edit the sound character and simply get.

Choose, what you want to connect at the clearly arranged connection panel. With the separately controllable inputs, you decide whether want to connect a microphone, a mixer, an instrument or a player. And this twice. On both input channels, you can choose if you want to connect a cable with XLR or 6.3 jack connectors. Choose the "MIC" or "LINE" mode and set the input levels quickly with the gain controls, independently from each other.



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## **H. REAR PANEL DESCRIPTION**



HYPER-PRO TOP Series active loudspeakers have several connectors, controls, and indicators the use of which you should understand.

#### 1) POWER SWITCH

Switch up to turn the speaker on, and switch down to turn it off. Make sure the level control is down before you turn it on.

#### 2) IEC SOCKET WITH FUSE HOLDER

Plug the line cord into an AC socket properly configured for your particular model. In case of fuse burn, to prevent the risk of fire and damaging the unit, please use only of the recommended fuse type as described in "9. SPECIFICATIONS" on page 17. Before replacing the fuse, make sure the unit turned off and disconnected from the AC outlet.



C P Note: If you happen to lose the AC line-cord, always use a three-pin plug with a ground pin. The wire correspondence is as follow:

Cable	Pin	International
Brown	Live	L
Blue	Neutral	Ν
Yellow/Green	Earth	÷

#### C Always connect the earth! Pay attention to your safety!

Before taking into operation for the first time, the installation has to be approved by an expert.

#### 3) MIC/LINE IN INPUT 1 AND 2

There are 2 independent combo connectors (XLR-type connector + 1/4" Jack plug) that accept balanced or unbalanced Mic or Line level signals. There are no Line/Mic switches to adapt their gain to microphone or line level signals; you have only to adjust their level knobs - see 8) LEVEL 1 and 2 below.

#### C<sup>→</sup> NOTE: Please notice that these input connectors do not supply +48V Phantom Power, so you can use condenser microphones only if self-powered.

#### 4) BALANCED OUTPUT

This is a male XLR-type connector that produces a processed mix of both Mic/Line Inputs. Use it to daisy-chain several active speakers together.

#### 5) AUX IN

This is a 1/8" mini-jack plug that accepts an unbalanced stereo line-level signal. It is very useful in case you need to connect your mobile phone, tablet or MP3 player.

Notice that Aux Left channel in routed to Input 1, and Aux Right channel is routed to Input 2. Level Knob 1 acts on both channels but they are processed separately (Left > CH1; Right > CH2). Also notice that stereo aux, input 1 and 2 can be used simultaneously; the only limitation is the Level knob 1, which is common to input 1 and both aux stereo channels.

#### C<sup>→</sup> WARNING: Turn LEVEL knob 1 down (counterclockwise) before connecting any source, especially if you're using the LINE OUT connection.

#### 6) LCD DISPLAY

It allows the user to browse all DSP functions and edit all parameters. For a complete description of the DSP software, please refer to chapter "5. DSP SOFTWARE DE-SCRIPTION".

#### 7] DATA ENCODER

This knob with push function moves through DSP pages, select functions and changes values. Please refer to chapter "5.2. DSP functions navigation" for all details.



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#### 8) LEVEL 1 AND 2

This controls the overall signal level at the Mic-Line inputs 1 and 2. Keep in mind that central position corresponds to a 0dB gain. In case of a balanced or unbalanced line signals, it is advisable to stay in the range between  $-\infty$  and 0; in the case of balanced or unbalanced Mic signals, you should move to range 0 - MAX.

## 5. DSP SOFTWARE DESCRIPTION

#### 5.I. Main Screen

When powered on, the DSP automatically shows its main screen, where you can adjust master level and check levels through the two level meters.

LEVEL	00dB
IN1	
IN2	

#### LEVEL

By turning clockwise/anticlockwise you can adjust overall level from -60dB to +10dB.

#### INI/IN2 LEVEL METER

They show level intensity of Input 1 and 2. In case of peak limitation, please reduce Levels through Level 1/2 knobs - see paragraph 8) LEVEL 1 and 2.

#### 5.2.DSP functions navigation

By pressing DSP knob, you enter the many DSP functions. They are divided into 5 pages. You can access them by rotating clockwise/anticlockwise the knob and, once highlighted the desired parameter, by pressing it. First and last menu voices are "EXIT", which allow you to go back to main screen. Following a list of all PAGES, FUNCTIONS and VALUES.

PAGE	FUNCTION	VALUE
MAIN	LEVEL	-60dB / +10dB
1	EXIT	/
1	MODE	MUSIC, LIVE, SPEECH, DJ
1	LOCATION	NORMAL, MONITOR
2	HIGH EQ	-12dB / +12dB
2	MID EQ	-12dB / +12dB
2	LOW EQ	-12dB / +12dB
3	SUB	80Hz / 100Hz / 120Hz / 150Hz
3	DELAY	OFF, 0.1mS to 16.0mS
3	LED MODE	OFF, ON, LIMITER

# ENGLISH

4LCD DIMON, OFF4BRIGHT0 / 104CONTRAST0 / 105RESETRESET5INEQEIRMWARE VERSION	ςουης	Isation	HYPER-PRC	) TOP SERIES USER N	
4 CONTRAST 0 / 10 5 RESET RESET		4	LCD DIM	ON, OFF	
5 RESET RESET		4	BRIGHT	0 / 10	
		4	CONTRAST	0 / 10	-
		5	RESET	RESET	
		5	INFO	FIRMWARE VERSION	
5 EXIT /		5	EXIT	1	

#### MODE

Apart from the first "EXIT", first function on first page is MODE. It allows the user to browse four different frequency responses: MUSIC, LIVE, SPEECH, DJ.



To change preset, push DSP knob again (the display highlights current preset) and turn clockwise/anticlockwise to select your preferred curve. Then press DSP knob again to confirm. The display will highlight MODE again.

To exit editing process, you can rotate the DSP knob to EXIT (page 1 or 5) and press the knob again, or you can move to another parameter to be changed.

#### LOCATION

This feature is used to adapt the sound to NORMAL (that is the unit is used as FOH speaker) or MONITOR use (the speaker is placed horizontally as stage monitor).

To change it, push DSP knob (the display highlights current value) and turn clockwise/ anticlockwise to select the right position. Then press DSP knob again to confirm. The display will highlight LOCATION again.

To exit editing process, you can rotate the DSP knob to EXIT (page 1 or 5) and press the knob again, or you can move to another parameter to be changed.

#### HIGH / MID / LOW EQ

The three functions act, respectively, on 100Hz (Low-frequency shelf-filter), 2kHz (Midrange bandpass-filter), and 10kHz (High-frequency shelf-filter), by ranging from -12dB to +12dB.

HIGH MID LOW	EQ:	0dB 0dB 0dB
LOW	WG i	900



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To change them, push DSP knob (the display highlights current value) and turn clockwise/anticlockwise to increase/decrease the value. Then press DSP knob again to confirm. The display will highlight function name again.

To exit editing process, you can rotate the DSP knob to EXIT (page 1 or 5) and press the knob again, or you can move to another parameter to be changed.

#### SUB

It changes the High-Pass Filter cut-frequency. Possible values are OFF /  $80{\rm Hz}$  /  $100{\rm Hz}$  /  $120{\rm Hz}$  /  $150{\rm Hz}.$ 



Once highlighted SUB function, push DSP knob (the display highlights current value) and turn clockwise/anticlockwise to increase/decrease the value. Then press DSP knob again to confirm. The display will highlight SUB again.

To exit editing process, you can rotate the DSP knob to EXIT (page 1 or 5) and press the knob again, or you can move to another parameter to be changed.

#### DELAY

It activates a delay function and allow the user to range from 0.1mS (about 0.4m) to 16.0mS (about 5.55m).

It is very useful in case you have many speakers placed at different distance from audience and you need to align their delay without using and external DSP unit.

To change value, push DSP knob (the display highlights OFF or current value) and turn clockwise/anticlockwise to increase/decrease the value. Then press DSP knob again to confirm. The display will highlight DELAY again.

To exit editing process, you can rotate the DSP knob to EXIT (page 1 or 5) and press the knob again, or you can move to another parameter to be changed.

#### LED MODE

This option can change LED operation to OFF (always off), ON (always lit), and LIMITER (it only flashes when the overall signal overloads the amplifier and the limiter intervenes to avoid damages).

To change value, push DSP knob (the display highlights ON or current value) and turn clockwise/anticlockwise to increase/decrease the value. Then press DSP knob again to confirm. The display will highlight LCD DIM again.



To exit editing process, you can rotate the DSP knob to EXIT (page 1 or 5) and press the knob again, or you can move to another parameter to be changed.

#### LCD DIM



It adjusts LCD back-light intensity from OFF (0) to 10.

To change value, push DSP knob (the display highlights current value) and turn clockwise/anticlockwise to increase/decrease the value. Then press DSP knob again to confirm. The display will highlight LCD DIM again.

To exit editing process, you can rotate the DSP knob to EXIT (page 1 or 5) and press the knob again, or you can move to another parameter to be changed.

#### BRIGHT

It adjusts LCD brightness from 0 to 10 (default value is 5).

To change value, push DSP knob (the display highlights current value) and turn clockwise/anticlockwise to increase/decrease the value. Then press DSP knob again to confirm. The display will highlight BRIGHT again.

To exit editing process, you can rotate the DSP knob to EXIT (page 1 or 5) and press the knob again, or you can move to another parameter to be changed.

#### CONTRAST

It adjusts LCD contrast from 0 to 10 (default value is 5).

To change value, push DSP knob (the display highlights current value) and turn clockwise/anticlockwise to increase/decrease the value. Then press DSP knob again to confirm. The display will highlight CONTRAST again.

To exit editing process, you can rotate the DSP knob to EXIT (page 1 or 5) and press the knob again, or you can move to another parameter to be changed.

#### RESET





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It restores factory DSP values. To do this, push DSP knob. Once done, the display will highlight RESET again. To exit editing process, you can rotate the DSP knob to EXIT (page 1 or 5) and press the knob again, or you can move to another parameter to be changed.

#### 

It shows the DSP firmware version of the speaker. To see it on the display, push DSP knob. Then press DSP knob again to exit and go back to INFO function.

To exit editing process, you can rotate the DSP knob to EXIT (page 1 or 5) and press the knob again, or you can move to another parameter to be changed.

## 6. AUDIO CONNECTIONS

You will need several cables for the various connections to and from the speaker. See the pictures below that show the internal wiring of these cables. Be sure to use only high quality cables.

You can, of course, also connect unbalanced equipment to balanced inputs. Use either mono and stereo jack, making sure ring and collar are connected together (or pins 1 & 3 in the case of XI R connectors).

#### Balanced use of XLR connectors



1= Ground/Shield 2= Hot (+) 3= Cold (-)



INPLIT

In case of unbalanced use Pins 1 and 3 will be jumped



### Unbalanced use of 1/4" jack TS connector



Balanced use of 1/4" jack TRS connector Headphones connection with 1/4" TRS connector



# 7. FIXED INSTALLATION

The installation of HYPER-PRO TOP speakers has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming demolition. The installation must always be secured with a secondary safety attachment (e.g. an appropriate catch net). This secondary safety attachment must be constructed in a way that no part of the installation can fall down if the main attachment fails.

When rigging, de-rigging or servicing the unit, staying in the area below the installation place, on bridges, under high working places and other endangered areas is forbidden. The operator has to make sure that the safety measure and the unit's technical installation is approved by an expert before taking into operation for the first time and after changes before taking into operation another time.

IMPORTANT: Overhead rigging requires extensive experience, including (but not limited to) calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the projector. If you lack these qualifications, do not attempt the installation yourself, but instead use a professional structural rigger. Improper installation can result in bodily injury or property loss.

If the unit shall be lowered from the ceiling or high joists, professional trussing systems have to be used. The speaker must never be fixed swinging freely in the room.

CP CAUTION: Speakers may cause severe injuries when crashing down. If you have doubts concerning the safety of a possible installation, do not install the unit!



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## 8. HOOKUP DIAGRAMS

#### 8.I. Examples of Input connections



# 8.2.Stereo operation with a mixer







## 8.3.Bi-Amping with HYPER BASS active subs





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#### HYPER-PRO TOP SERIES USER MANUAL

# 9. SPECIFICATIONS

	HYPER-PRO TOP 12A	HYPER-PRO TOP 15A
Speaker Type	Bi-Amped Active Speaker	Bi-Amped Active Speaker
Acoustical data		
Frequency Response	52Hz - 20kHz / -10dB	45Hz - 20kHz / -10dB
Max SPL	124 dB	130 dB
HF	1.35" Compression driver	1.75" Compression driver
Coverage	90° x 60°	90° x 60°
LF	12" woofer (2.5" voice coil)	15" woofer (3" voice. coil)
Amplifier		
Amp Class	Class-D + Class-AB	Class-D + Class-AB
Power	300W + 50W RMS (1000+200W Peak)	300W + 50W RMS (1000+200W Peak)
AC Mains	220/240V – 50/60Hz	220/240V – 50/60Hz
Max Consumption	365W	370W
Fuse	T3.15A-250V	T3.15A-250V
DSP		
EQ modes	High (10kHz, ±12dB), Mid (2kHz, ±12dB), Low (100Hz, ±12dB)	High (10kHz, ±12dB), Mid (2kHz ±12dB), Low (100Hz, ±12dB)
Presets	Music, Live, Speech, DJ	Music, Live, Speech, DJ
High-Pass Filter Cut	80Hz / 100Hz / 120Hz / 150Hz	80Hz / 100Hz / 120Hz / 150Hz
Digital Master Level	-60dB / + 10dB (70 steps)	-60dB / + 10dB (70 steps)
Display	Graphic back-lit display	Graphic back-lit display
Connections		
Input	2 x COMBO (XLR + 1/4" Jack, balanced)	2 x COMBO (XLR + 1/4" Jack, balanced)
Output	1 x XLR (Mix output, balanced)	1 x XLR (Mix output, balanced)
Mechanics		
Housing material	Polypropylene	Polypropylene
Grille material and thickness	Steel, 1.2mm	Steel, 1.2mm
Flyable	4 x M8 (1 each side)	4 x M8 (1 each side)
Handles	2 on sides; 1 on top	2 on sides; 1 on top
Pole Mount	Standard D36 mm	Standard D36 mm
Stage Monitor Use Angle	30°and 45°	30°and 45°
Speaker Size (WxHxD)	413 x 677 x 410 mm	480 x 762 x 437 mm
Packing Size (WxHxD)	430 x 690 x 430 mm	490 x 460 x 770 mm
Net Weight	14.7kg	20kg

NOTE: Our products are subject to a process of continual further development. Therefore modifications to the technical features remain subject to change without further notice.



## IO. WARRANTY AND SERVICE

All SOUNDSATION products feature a limited two-year warranty. This two-year warranty is specific to the date of purchase as shown on your purchase receipt.

The following cases/components are not covered from the above warranty:

- · Any accessories supplied with the product
- Improper use
- Fault due to wear and tear
- Any modification of the product effected by the user or a third party

SOUNDSATION shall satisfy the warranty obligations by remedying any material or manufacturing faults free of charge at SOUNDSATION's discretion either by repair or by exchanging individual parts or the entire appliance. Any defective parts removed from a product during the course of a warranty claim shall become the property of SOUNDSATION.

While under warranty period, defective products may be returned to your local SOUND-SATION dealer together with original proof of purchase. To avoid any damages in transit, please use the original packaging if available. Alternatively you can send the product to SOUNDSATION SERVICE CENTER – Via Enzo Ferrari , 10 – 62017 Porto Recanati - Italy . In order to send a product to service center you need an RMA number. Shipping charges have to be covered by the owner of the product.

For further information please visit www.soundsationmusic.com



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#### HYPER-PRO TOP SERIES USER MANUAL

## II. WARNING

PLEASE READ CAREFULLY - EU and EEA (Norway, Iceland and Liechtenstein) only



This symbol indicates that this product is not to be disposed of with your household waste, according to the WEEE Directive (2202/96/EC) and your national law.

This product should be handed over to a designated collection point, e.g., on an authorized one-for-one basis when you buy a new similar product or to an authorized collection site for recycling waste electrical and electronic equipment (WEEE).

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, approved WEEE scheme or your household waste disposal service.





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