Triad Hybrid Amplifier Installation Guide

TS-HAMP3-1000 & TS-HAMP3-1500

Thank you for purchasing a Triad® Hybrid Amplifier. This three-channel amplifier (selectable as 70V, 100V, 4Ω or 8Ω) is designed for applications requiring stereo or mono audio outputs with various inputs and levels. Channels 1 and 2 are bridgeable to increase output power for a singular mono signal.

Control System drivers are available on the product page under the Support tab.

Package contents

- 1 × Triad amplifier
- 1 × detachable 6' IEC power cable
- 2 × amplifier mounting ears
- 4 × removable feet
- 1 × QR insert card for product documentation

Required tools

- 2.0 mm slotted flathead screwdriver
- Wire strippers

Safety and Certifications

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

Le flash de foudre avec le symbole de pointe de flèche, dans une triangle équilaterale, est prévu pour alerter l'utilisateur à la présence de la tens ion dangereuse non isolée dans la clôture du produit qui peut être de la grandeur suffisante pour constituer un risque de décharge électrique aux personnes.

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

Le point d'exclamation dans une triangle équilaterale est prévu pour alerter l'utilisateur à la présence des instructions importantes de fonctionnement et d'entretien (entretien) dans la littérature accompagnant l'appareil.

A. Read these instructions.

   Lisez ces instructions.

B. Keep these instructions.

   Conservez ces instructions.

C. Heed all warnings.

   Respectez tous les avertissements.

D. Follow all instructions.

   Suivez toutes les instructions.

E. Do not use this apparatus near water.

   Ne pas utiliser cet appareil près de l'eau.

F. Clean only with dry cloth.

Nettoyez-le uniquement avec un chiffon sec.

G. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

Ne pas bloquer les ouvertures de ventilation. Installer conformément aux instructions du fabricant.

H. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Ne pas installer près de sources de chaleur telles que des radiateurs, registres de chaleur, poêles, ou autres appareils (incluant les amplificateurs) qui produisent de la chaleur.

I. 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 bladed 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.

Ne pas contourner le dispositif de sécurité de la fiche polarisée ou de mise à la terre . Une fiche polarisée possède deux lames dont une plus large que l'autre . Une fiche de terre a deux lames et une troisième broche de mise à la terre . La lame large ou la troisième broche sont fournies pour votre sécurité . Si la fiche fournie ne rentre pas dans votre prise, consultez un électricien pour le remplacement de la prise obsolète.

J. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

Protégez le cordon d'alimentation ne soit piétiné ou pincé, en particulier au niveau des fiches, des prises et au point où il sort de l'appareil.

K. Only use attachments/accessories specified by the manufacturer.

Utilisez uniquement des fixations / accessoires spécifiés par le fabricant.

L.  Use only with the 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.

Utilisez uniquement avec le chariot, le socle, le trépied, le support ou la table spécifiés par le fabricant ou vendu avec l'appareil. Lorsque vous utilisez un chariot, soyez prudent lorsque vous déplacez l'ensemble chariot / appareil pour éviter des blessures dues au renversement.

M. Unplug this apparatus during lightning storms or when unused for long periods of time. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Débranchez cet appareil pendant les orages ou lorsqu'il n'est pas utilisépendant de longues périodes de time. Refer à un technicien qualifié personnel . Une réparation est nécessaire lorsque l'appareil a étéendommagé de quelque façon que ce cordon d' alimentation ou la prise estendommagé , du liquide a été renversé ou des objets sont tombés dans l'appareil, l'appareil a été exposé à la pluie ou à l'humidité ,ne fonctionne pas normalement , ou s'il est tombé .

N. The equipment shall be used at maximum 45 °C ambient temperature.

L'équipement doit être utilisé à une température ambiante maximale de 45 °C.

O. To reduce the risk of electrical shock, do not open the equipment. For safety reasons it is only allow to the opened by qualified service personnel.

P. **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Additionally, the apparatus shall not be exposed to dripping or splashing and no objects filled with liquids shall be placed on the apparatus.

Pour réduire les risques d'incendie ou d'électrocution, ne pas exposer cet appareil à la pluie ou à l'humidité. De plus, il ne doit pas être exposé aux gouttes ou aux éclaboussures et aucun objet contenant du liquide ne doit être placé dessus.

Q. The mains plug is used as the disconnect device and shall remain readily operable.

La prise secteur sert de dispositif de déconnexion et doit rester facilement accessible.

R. The product shall be used on open bench.

Le produit doit être utilisé sur un établi ouvert.

S. No naked flame sources, such as lighted candles, should be placed on the apparatus.

Aucune source de flamme nue, telle que des bougies allumées, ne doit être placée sur l'appareil.

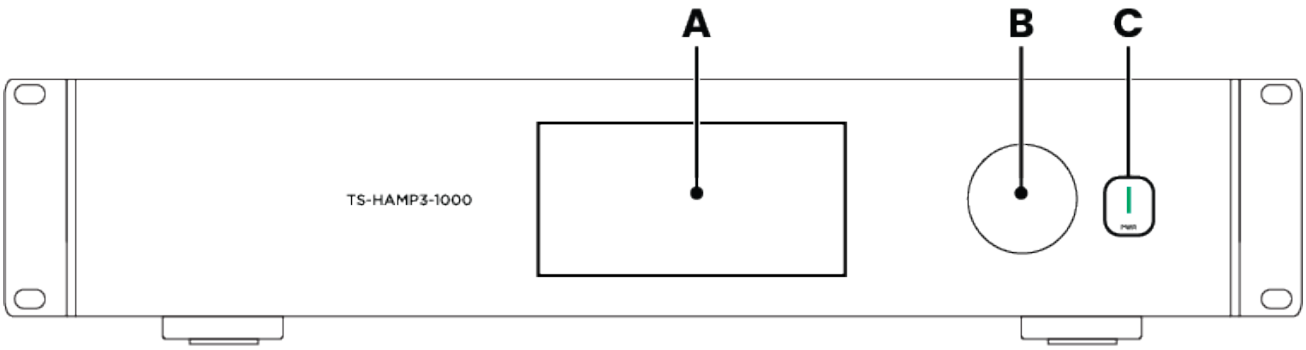
T.  The apparatus should be connected to a mains socket outlet with a protective earthing connection.

L'appareil doit être raccordé à une prise de courant secteur avec une mise à la terre de protection.

U. This equipment is not suitable for use in locations where children are likely to be present.

Cet équipement n'est pas adapté à une utilisation dans des lieux où des enfants sont susceptibles d'être présents.

Front panel



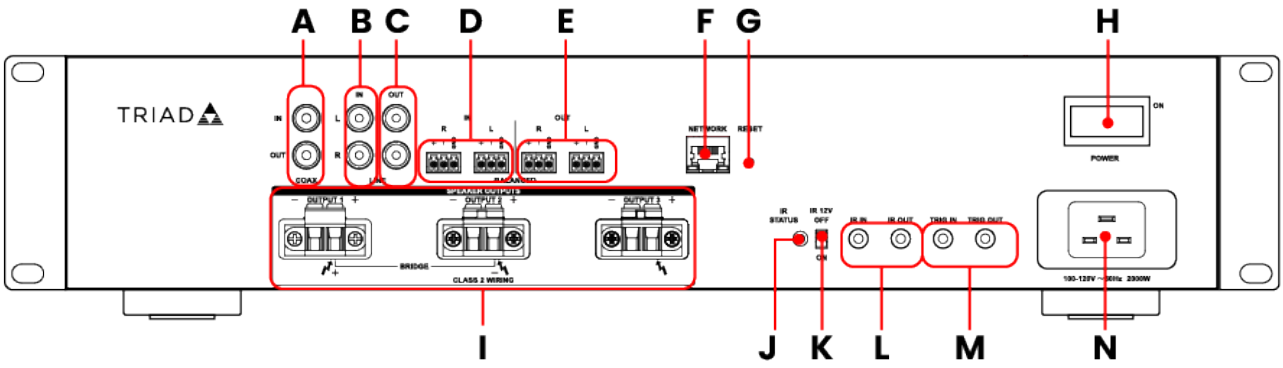
A. **Display** — Displays system information and configuration menus. Read the **Front Panel Display section** for more information.

B. **Volume adjustment/Selection knob** — Turn to adjust the volume level or change the displayed menu selection. Press to make a selection.

C. **Power LED** — Solid Blue: On or Standby mode. LED off: No power detected.

> 👉 **Note:** The amplifier's nameplate is on the bottom of the device.

Rear panel



A. **Digital input and output ports (coax)** — Connections for digital sources. The Output port passes the input signal through to additional amplifiers.

B. **Unbalanced analog input (stereo RCA)** — Unbalanced RCA input for connect line-level analog sources.

C. **Unbalanced analog loop-through (stereo RCA)** — Unbalanced RCA output to pass the analog input signal to additional amplifiers.

D. **Balanced analog inputs (phoenix)** — Balanced input for connecting balanced analog sources.

E. **Balanced outputs (phoenix)** — Balanced output that passes a balanced analog input signal through to additional amplifiers.

F. **RJ45 input** — A 10/100 Ethernet port for IP control, remote management, and web interface configuration of amplifier. This port provides an LED indicator for when it's active. It does stay active in Standby mode.

G. **Reset button** — A recessed button with the following functions:

- Quick press — Restarts the amplifier.
- Hold for 5 seconds — Resets the network settings to DHCP.
- Hold for 10+ seconds — Resets the amplifier to the factory default settings.

H. **Power switch** — Turns the amplifier on/off.

I. **Speaker output terminals (phoenix)** — Accepts up to 12 AWG speaker wire. Note the polarity when bridging speakers.

J. **IR status LED** — Illuminates when an IR signal is received.

K. **IR power on/off switch** — If on, +12V DC is applied to the IR IN port to provide power for an external IR receiver.

> **Caution:** Do not turn IR power on if there's a direct IR connection to a control system.
>
> Ne pas activer l'alimentation infrarouge s'il existe une connexion infrarouge directe à un système de contrôle.

L. **IR input/output connections** — 3.5 mm connections for an IR input or output from another device. The IR output passes the incoming signal through to additional devices.

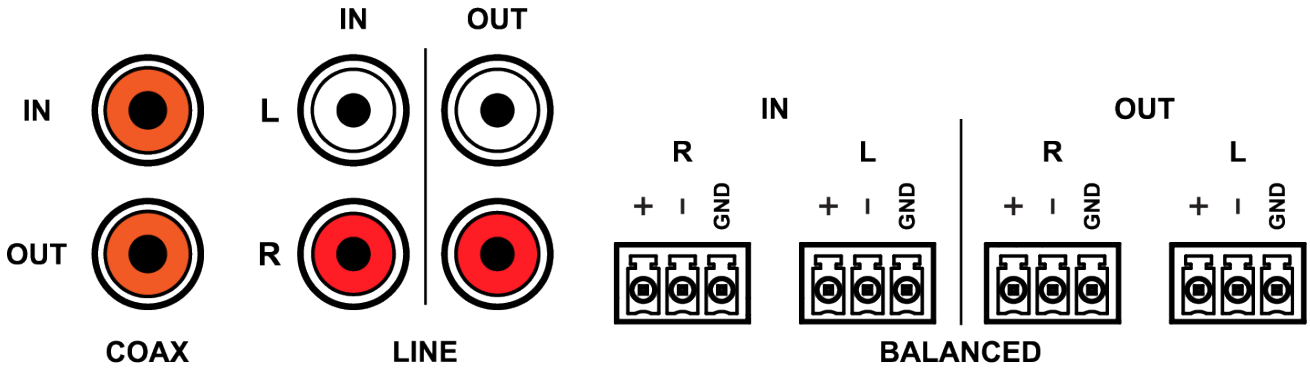
M. **12V trigger input/output connections** — 3.5 mm connection for a 12V trigger input from another device. The amplifier powers on when 4.5-15V DC is applied. When the voltage drops below 4.5V the amplifier turns off. The 12V trigger output supports other devices to be controlled from the same 12V signal.

N. **Power input** — Input for 3-prong IEC power cord.

> **Note:** The TS-HAMP3-1000/1500 requires a 20A power cable and circuit in North America.

Source connections

Balanced and unbalanced connections are available as shown. Line out connections are available to send audio signals to other equipment.



Input mode, source, and gain adjustments are made in the home screen of the web interface or front panel display menu.

Note: The input gain is only adjustable on the RCA or unbalanced inputs.

The output volume and precise delay adjustment per output is also available on the front panel display menu.

Speaker connections

These are scripts for the calculators

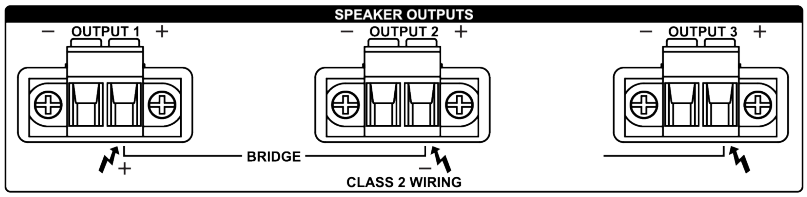
The Triad Hybrid Amplifier supports 70V, 100V, 4Ω and 8Ω speakers. Set the individual channel outputs in the **Inputs/Outputs tab**.

Use any combination of speakers where the sum of the wattage does not exceed the rated wattage of the speaker output.

Caution: The system impedance must not be not less than 2Ω.

L'impédance du système ne doit pas être inférieure à 2Ω.

Use 14 or 16 gauge stranded two-conductor speaker wire. Use burial rated wire for outdoor applications.



Continuous power output	TS-HAMP3-1000	TS-HAMP3-1500
4Ω	3000W or higher	4500W or higher
8Ω	1500W or higher	2250W or higher
4Ω per Ch	1000W or higher	1500W or higher

Continuous power output	TS-HAMP3-1000	TS-HAMP3-1500
8Ω per Ch	600W or higher	850W or higher
Power Bridged at 8Ω per Bridged Ch	1200W or higher	1700W or higher

Calculating amplifier power for 70V and 100V speakers

The system's total number of speakers and subwoofers is determined by the amplifier's power. As the number of speakers increases, the available power to each decreases. Plan the system so that each speaker can receive the highest level of wattage available.

Only satellite speakers with 70V or 100V tap settings need to be calculated. 8Ω satellite speakers and subwoofers do not require calculation.

Pro Tip: Leave 20% of headroom, using only 80% of the rated power of the amplifier.

For the TS-HAMP3-1000, this is 800W/channel.

For the TS-HAMP3-1500, this is 1,200W/channel.

Enter the number of speakers in the proper channel column and tap setting row.

Select amplifier:

Speaker tap setting (A)	CH 1 quantity (B)	CH 2 quantity (C)	CH3 quantity (D)	CH 1 total (A×B)	CH 2 total (A×C)	CH 3 total (A×D)
3.75W						
7.5W						
15W						
60W						
		Subtotal				
		Total watts				

70V speaker wiring

Use burial-rated wire for all outdoor installations. 70V systems can use a smaller wire gauge. For example:

- A 20 gauge cable run has an 11% power loss at 349.6 m (1,147').
- An 18 gauge cable run can go up to 618.43 m (2,029').
- A 16 gauge cable run can go up to 848.26 m (2,783').

8Ω speaker wiring

Use burial-rated wire for all installations. Below are common guidelines:

- For wire runs up to 30.48 m (100'), use 16 gauge wire or larger.
- For wire runs up to 60.96 m (200'), use 14 gauge wire or larger.
- For wire runs up to 91.44 m (300'), use 12 gauge wire or larger.

Use the table below for more detailed information.

Note: Using smaller wire gauges may reduce the overall performance.

Power options

When the amplifier is powered on, the power LED on the left side of the front panel illuminates solid blue. In Standby, the power LED turns off. Standby wattage is less than 0.5W.

Note: The Triad Hybrid amplifier requires a 20A circuit.

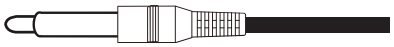
Set the power control mode on the **Configure tab in the web UI**.

12V trigger

Triad Hybrid Amplifiers are equipped with 12V DC trigger inputs and outputs for trigger control and daisy chain control for more than one amplifier.

Use a mono mini cable between the 12V trigger output of the controlling device and the **TRIGGER IN** port of the amplifier. Connect other devices to the **TRIGGER OUT** port on the amplifier using a mono-mini cable.

Specifications for the 3.5 mm (1/8") mono-mini cable:



There's a 4.5-15V constant signal during use.

Audio Sense

Audio Sense turns the amplifier on when an audio signal is detected. The amplifier enters standby mode if no signal is detected for 15 minutes. Enable Audio Sense through the web interface or front panel menu.

Sleep Mode: Deep vs. light sleep

Deep sleep puts the amplifier into a low-power state to conserve energy, while retaining the ability to quickly wake up. Deep sleep is required to meet EU standards for low power consumption when the amplifier is not in operation. Deep sleep is not enabled by default. Visit the System Settings in the Web UI to turn it on.

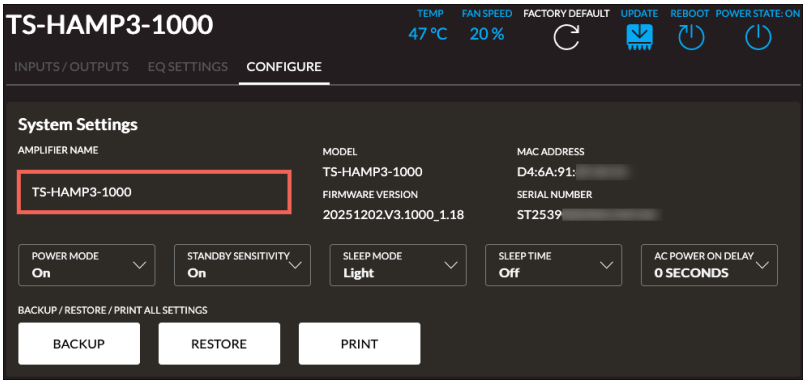
Caution: Do not enable deep sleep if you're using IP control or remote management with the amplifier.

Ne pas activer le mode veille profonde si vous utilisez la commande IP ou la gestion à distance avec l'amplificateur.

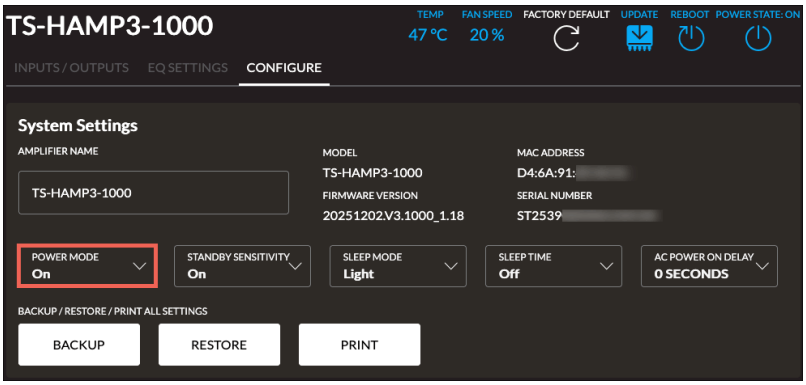
Getting started

1. Connect the speakers to the amplifier.
2. Use OvrC WebConnect or enter the IP address in a web browser to connect to the web UI (User Interface).
3. Enter the default username and password, triad/triad.
4. Create a new password in the pop-up window.

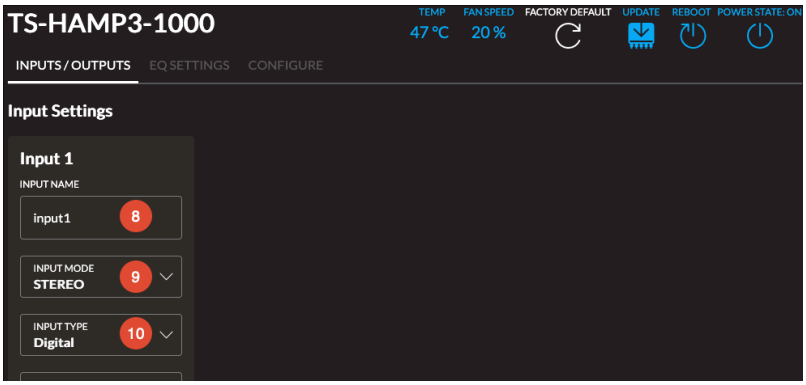
5. On the **Config** tab, enter a meaningful name for the amplifier. This is typically the name of the playback location like "patio" or "outdoor space."



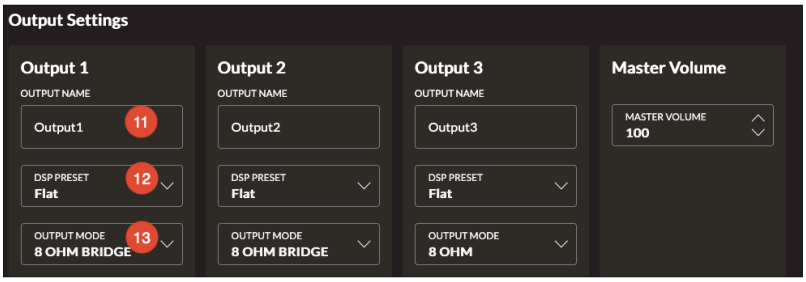
6. The amplifier's **Power Mode** is set to **Always On** by default. If desired, select **Audio Sense** or **12V Trigger**. **Learn more about power settings on the Configure tab**.



7. Go to the **Input/Outputs** tab.
8. Enter the name of the source in the **Input Name** field.
9. Set the **Input Mode** to **Stereo** or **Mono**.
10. Set the **Input Type** to **Analog Balanced**, **Analog RCA**, or **Digital**.



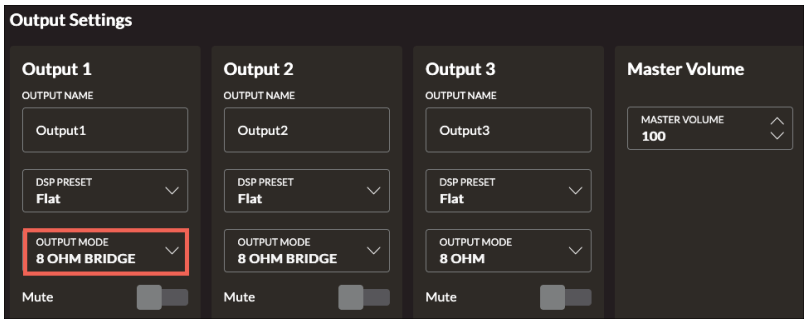
11. Enter the name of the speakers in the **Output Name** field.
12. Select the **DSP Preset** to use. If there isn't a preset that fits your needs, create a custom Preset on the EQ tab. **Learn more here**.
13. Set the **Output Mode** to match your speaker configuration **70V**, **100V**, **4Ω**, **8Ω**, or **8Ω Bridge**.



Bridging outputs 1 and 2

From the front display panel, go to **Settings** > **Outputs**. Set **IMPED** to **8ohmB** on **CH1**.

In the web UI, go to Inputs/Outputs > Output settings and set Outputs 1's Output Mode to 8 Ohm Bridge.



Note: Setting CH1/Output 1's mode to 8 Ohm Bridge automatically sets CH2/Output 2 to 8 Ohm Bridge.

Going further

Read more about each of the web UI's tabs:

- **Configure tab**
- **EQ Settings tab**
- **Inputs/Outputs tab**

The Triad Hybrid Amplifier is also configurable through the display panel. **See the Display Panel section to learn more.**

Configuring the Triad Hybrid Amplifier with the Web UI

Triad Hybrid Amplifiers are configurable using the web UI or the front panel display. The web UI is easier to navigate and has a more robust feature set than the front panel display, which is typically used when there's no network connection.

You can connect to the web UI by adding the Triad Hybrid Amplifier to OvrC, using the WebConnect feature, or by finding the amplifier's IP address and typing it into your browser's address bar.

Connecting the amplifier to OvrC

1. Connect the amplifier to the local network. There must be internet access.
2. Create a new account at www.OvrC.com, or log in to an existing account.
3. Select an existing Customer, or create a new one.
4. If there's an OvrC Pro Hub on-site, click the **Scan** button. If there is not an OvrC Pro Hub, click **Add Device** and enter the amplifier's MAC address and serial number.
5. In the Device list, click on the Hybrid amplifier's name, then go to the **Configure** tab to continue setup.

Visit **snp1.co/ovrc-ug** to learn more about OvrC.

Connecting to the amplifier's web interface

If the amp is claimed in OvrC, use the WebConnect feature to access the web interface. This feature can be used locally or remote.

To access the web interface without OvrC, enter the IP address into a web browser. The IP address is displayed on the front panel after powering the amplifier on.

The default login credentials are:

- **Username:** TRIAD
- **Password:** triad

You must change the password after the initial login. The username cannot be changed at this time.

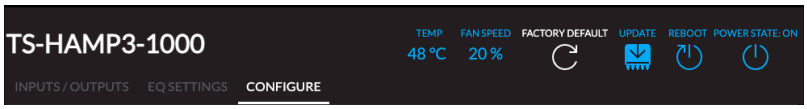
How to reset the password

Press and hold the **Level Adjustment/Selection Knob** for 10 seconds after the amplifier is powered on to reset the password.

General UI info

The following information and buttons at the upper right of the UI are preset on each tab:

- **Temp:** Displays the amplifier CPU's current operating temperature, which is typically between 30° to 50° Celsius. If the temperature exceeds 55° the amplifier will throttle its performance to moderate the temperature to ensure long term reliablity.
- **Fan Speed:** Shows the current percentage of the cooling fan's total speed. The fans self-adjust depending on the current operating temperature, ideally between 0 and 25%.
- **Factory Default:** Click to return the amplifier to the factory default settings.
- **Update:** Click to manually update the amplifier's firmware. The latest firmware files are available on the product page, or by using OvrC's firmware update feature.
- **Reboot:** Click to restart the amplifier. This is typically done if the amplifier freezes, goes into thermal protection mode, or possible required for a firmware update.
- **Power State:** Toggles the amplifier's current power state. On or Off



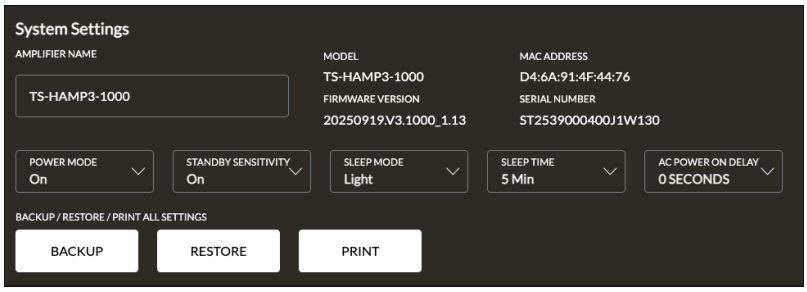
Configure tab

The default tab that displays system information such as the Model number, MAC Address, Firmware Version, Serial Number, and general settings. Click **Apply** at the bottom of the page to save changes.

System Settings

- **Amplifier Name:** Enter a meaningful name for the amplifier. This is typically the name of the playback location like "patio" or "outdoor space."
- **Power Mode:** By default, the amplifier is always on. Use the drop-down to make one the following selections.
    - On: The amplifier does not turn off unless you use the power switch.
    - 12V Trigger: The amplifier turns on when it receives a 12V input. **Learn more**.
    - Audio Sense: The amplifier turns on when it detects an audio signal from the connected source. **Learn more**.
- **Standby Sensitivity:** Set to **On** to turn the amplifier on when Audio Sense is selected as the Power Mode. Setting Standby Sensitivity to **Off** disables Audio Sense.
- **Sleep Mode:** Select whether the amplifier drops the network connectivity when it's turned off.
    - Light: Network connectivity continues when the amplifier turns off (recommended).
    - Deep: Network connectivity is dropped when the amplifier turns off. This is not recommended if the amplifier is in use with a control system or OvrC.
- **Sleep Time:** If the Power Mode is set to Audio Sense, this is the time it takes for the amplifier to go into standby after it does not detect a source signal.
- **AC Power On Delay:** The number of seconds it takes for the amplifier to fully power on after it receives the initial "on" signal (12V or Audio Sense). Use this field to avoid sudden draw surges when a large amount of equipment is powered on simultaneously or to power the amp on in a particular order compared to the rest of the equipment.
- **Backup:** Backs up the current amplifier configuration.

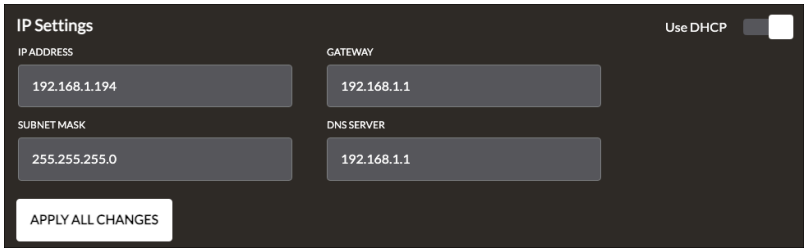
- **Restore:** Use to restore a configuration file.
- **Print:** Prints the current amplifier settings.



IP Settings

Disable **Use DHCP** to manually set the **IP Address**, **Subnet Mask**, and **DNS Server**, and **Gateway Address**.

Pro Tip: Use DHCP or a MAC reservation in the router to avoid IP conflicts or loss of connection if the IP scheme changes.



Credentials

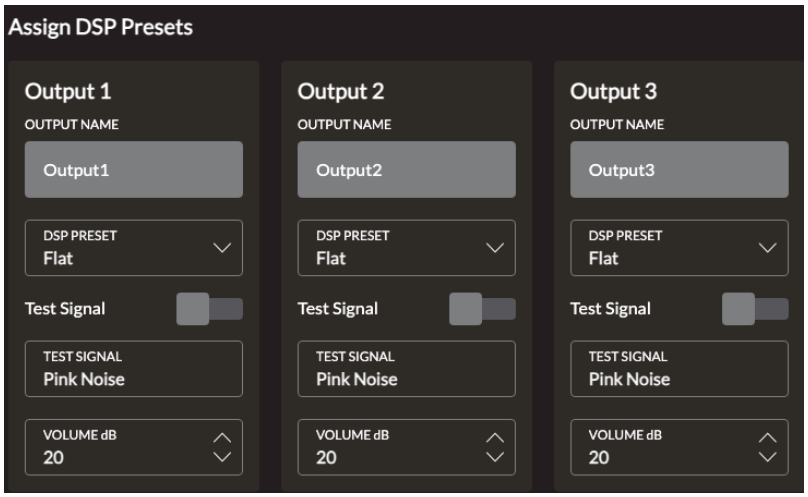
At this time you can only change the **Password**, not the User Name.

EQ Settings tab

Use this page to assign presets to each channel, adjust the channel volume, and fine-tune EQ presets for each output channel to create the best possible sound for the environment.

Assigning DSP Presets

Each output channel can have a separate DSP preset assigned. Enable the **Test Signal** toggle to produce pink noise on the output.



Using the DSP Preset Editor

The DSP Editor provides options to import/export all the presets, or a single preset at a time.

Copy DSP Presets

Use the drop-downs to copy the EQ settings of one preset to another pre-existing preset.

Edit DSP Presets

These settings are used to change presets or create new ones.

To edit a preset, select it from the **Select DSP Preset to Edit** drop-down. The Parametric EQ Settings change based on the selected preset.

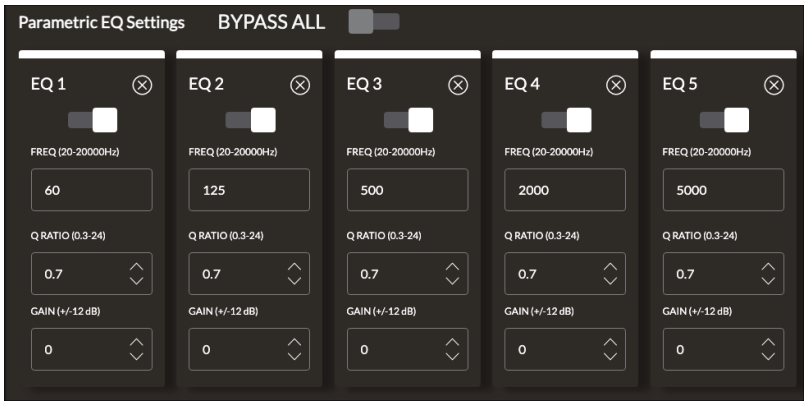
To create a new preset, select a preset to base it on from the **Select DSP Preset to Edit** drop-down, then enter a new name in the **Edit DSP Preset Name** field.

Use the **Reset** button to return the selected preset to its original factory setting.

Parametric EQ Settings

Triad Hybrid Amplifiers provide up to 10 bands of adjustable parametric EQ to adjust the sound to the environment. Use the **Bypass All** toggle to hear how the settings affect the flat (no EQ) sound.

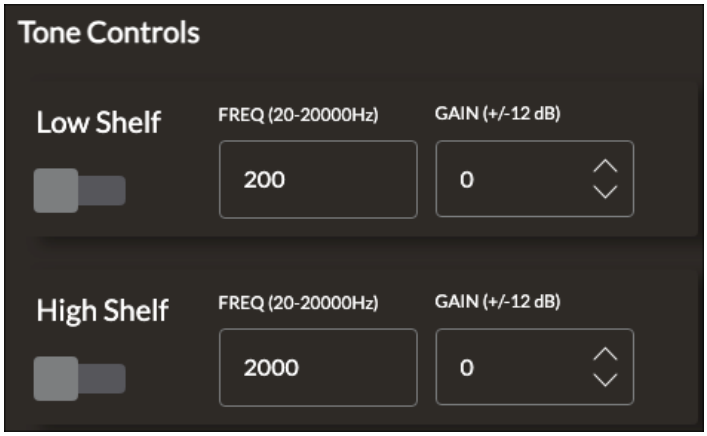
To **bypass a single EQ band**, use the toggle at the top of it's tile. Click the **X** to hide the EQ band.



Click **Add Equalizer Control** to add another EQ band to the configuration.

Tone Controls

Use the Tone Controls to make adjustments to the **Low Shelf** or **High Shelf** of the entire output. In the **FREQ** field, enter the frequency at which the shelf starts. The **Gain** value determines how much the frequency is boosted (High Shelf) or cut (Low Shelf).

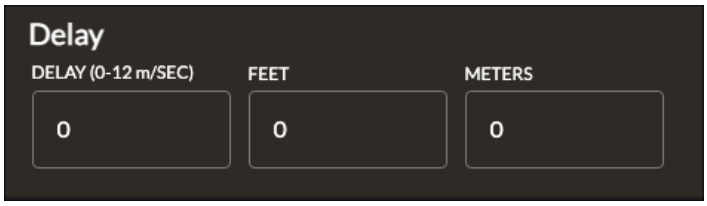


Crossover

The Crossover settings allow you to filter out frequences above (**Low Pass Filter**) or below (**High Pass Filter**) the selected frequency. These settings ensure there is no frequency overlap when one channel is using speakers and the other has a sub.

Delay

Use Delay to align the output between two speakers at different distances from the listener.



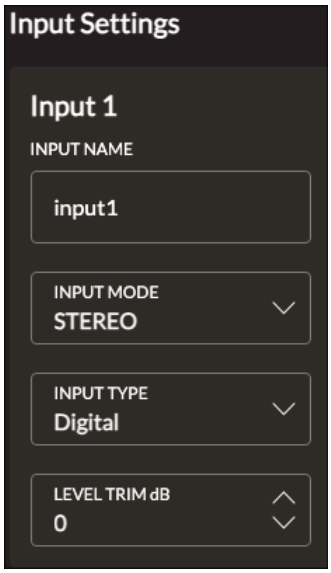
Limiter

Set the Limiter Level to attenuate audio peaks a threshold between 0 and -5dB to protect speakers from being overdriven.

Inputs/Outputs tab

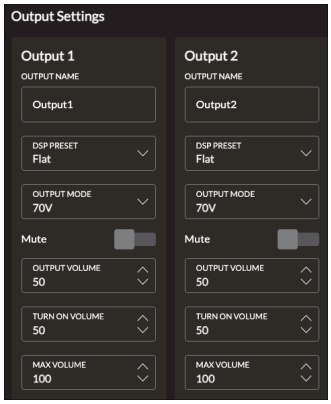
Use this tab to configure the sources (inputs) and speakers (outputs).

Input Settings



- **Input Name:** Enter the name of the source.
- **Input Mode:** Set the audio signal to Stereo or Mono.
    - Stereo: The amplifier sends the stereo source's left channel to Output 1 and right channel to Output 2.
    - Mono: The amplifier sums both sides of a stereo source to mono so both outputs play the same audio. This is recommended for 70V and landscape speaker systems.
- **Input Type:** Set whether the input is an Analog Balanced, Analog RCA or Digital source.
- **Level Trim dB:** Use this field to adjust the volume level of the input source. This does not affect the output gain.

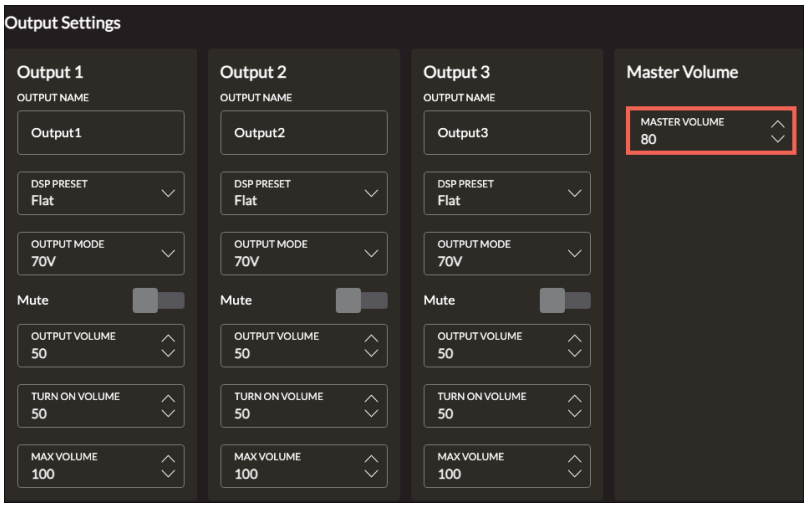
Output Settings



- **Output Name:** Enter the name of the speakers attached to the Output. For example: sats, sub, surface mount, etc.
- **DSP Preset:** Select a DSP Preset to use for the connected speakers. Each preset can be modified in the EQ Settings tab.
- **Output Mode:** Select the type of speakers attached. 4 Ohm, 8 Ohm, 8 Ohm Bridge, 70V, or 100V.
- **Mute:** Toggle Mute on or off. This setting is controllable with a control system. For example, when using Control4 select the amplifier as the volume endpoint of a Room in Composer Pro.
- **Output Volume dB:** Set the volume for the output channel.
- **Turn on Volume dB:** Set the output's volume level for the amplifier to use when it's initially powered on.
- **Max Volume dB:** Set the maximum possible volume for the output. This keeps end users from turning the volume up too high when using the front panel's volume knob or a control system.

Master Volume

The master volume sets the maximum volume across all outputs. To avoid damage, the default value is 80.

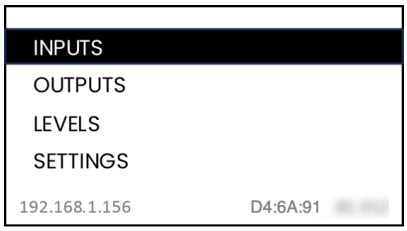


Using the Display Panel

By default, Hybrid amp's Display Panel shows the current input and output volume, IP address, and the amp's MAC address by default.

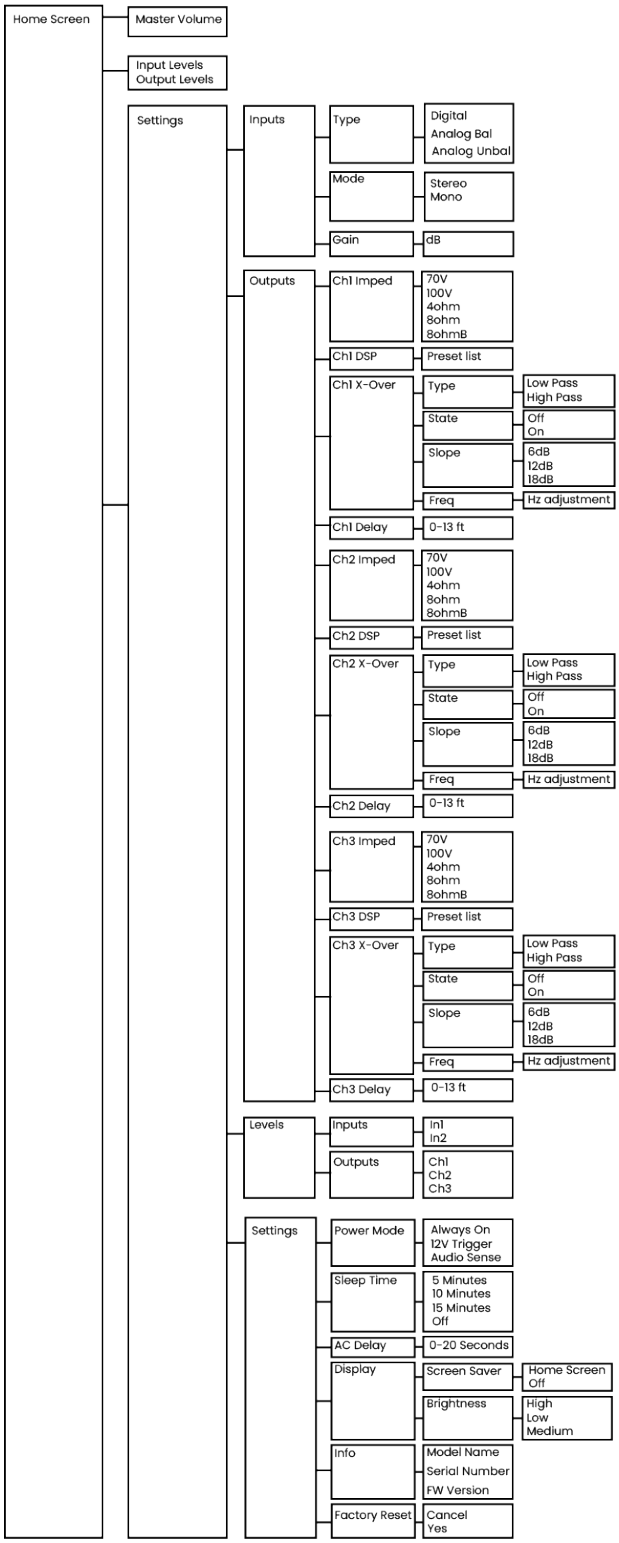
To access the Main Menu and Settings, turn the **Level Adjustment/Selection Knob** until you see the gear icon in the upper left outlined. Then press the knob.

Turn the **Level Adjustment/Selection Knob** to move through the menus, and press it to make selections.



To go back to the Home screen from any menu, press and hold the **Level Adjustment/Selection Knob** for 3 seconds, then release.

Display Panel Menu Map



EQ Presets

The Triad Hybrid amplifier comes preloaded with user-selectable EQ Presets for many Triad and Episode speakers and popular music genres.

To edit, or create a new preset, go to the EQ Settings tab.

To set a Preset, go to the **Inputs/Outputs** tab , scroll down to the **Output Settings**, and use the **DSP Preset** drop-down. Click the name to see the specific DSP settings.

Troubleshooting

Amplifier going into Protection mode

The Hybrid amplifier has two protection indicators.

Indicator	Possible causes/check points	Resolution
Red Protect LED is blinking	High temperature	Self heals: Allow the unit to cool down to restore normal conditions.
	High current (exceeding rated power) causing the speaker protect limiter to activate, which reduces power.	Self heals: Reduce the input music level to release the internal limiter.
	Firmware is updating (Channel 2 blinking)	Allow the update to finish
Red Protect LED is solid	Speaker terminal short (Channel 2 lights up if either terminal detects a short).	Verify the speaker output is configured correctly (Speaker Out).
	Failed jumping to a partition after a firmware update.	Contact Tech Support for firmware recovery.

No audio output

If the **Level Meter**, green LED illuminates or web UI shows activity, then the amplifier detects an audio input signal. Verify the speaker output is configured correctly (Speaker Out).

If the speaker output is configured correctly, verify the source inputs are configured correctly.

Distorted audio at normal volume

Distortion can occur if the LEVEL adjustment is set too high to compensate for low source volume. This sounds like steady hissing or humming behind the music, signal clipping, or distortion of highs and lows.

Re-adjust the volume levels by starting at the baseline settings and re-adjusting the final volume until a comfortable listening level is achieved with no distortion, while using the source volume or inline control.

Inline volume "thump"

If you hear a "thumping" sound the amplifier and source volume levels are set too high. Calibrate the inline volume controls so they are one or two adjustment levels away from their maximum settings when the audio is at a normal listening level. This leaves on to three settings above normal use if a little extra volume is needed.

Specifications

Product Specifications	TS-HAMP3-1000	TS-HAMP3-1500
Circuit Requirements	North America: 20-Amp (110 - 120V / 60Hz), International: 10-Amp (230-240V / 50Hz)	North America: 20-Amp (110 - 120V / 60Hz), International: 10-Amp (230-240V / 50Hz)
Channels	3	3
Power Output	500W per channel @ 8Ω	750W per channel @ 8Ω
	1000W per channel @ 4Ω	1500W per channel @ 4Ω
	2000W per channel @ 2Ω	3000W per channel @ 2Ω
	1000W per channel @ 70V	1500W per channel @ 70V
	1000W per channel @ 100V (230VAC only)	1500W per channel @ 100V (230VAC only)
Network Standby Power	1.14W	1.14W
Deep Sleep Standby	0.4W	0.46W

Product Specifications	TS-HAMP3-1000	TS-HAMP3-1500
Power		
Sensitivity Input	2Vrms, max power	2Vrms, max power
Impedance Input	RCA Analog input: 20kΩ Balanced Analog input: 101Ω Digital Coax Input: 101Ω	RCA Analog input: 20kΩ Balanced Analog input: 101Ω Digital Coax Input: 101Ω
Signal to Noise Ratio	96dB A-weighted @ 2Vrms	96dB A-weighted @ 2Vrms
Total Harmonic Distortion (THD)	<1%, 22kHz BW at 1W and Full Power	<1%, 22kHz BW at 1W and Full Power
Frequency Response	± .5dB at 1/8th power (20Hz to 20kHz)	± .5dB at 1/8th power (20Hz to 20kHz)
Inputs	AC Power: 100-240VAC auto-switch-ing, 3-prong IEC C20 AC Inlet Network: RJ-45 jack, 10/100Mbps	AC Power: 100-240VAC auto-switch-ing, 3-prong IEC C20 AC Inlet Network: RJ-45 jack, 10/100Mbps

Product Specifications	TS-HAMP3-1000	TS-HAMP3-1500
	Digital Audio: Coax RCA	Digital Audio: Coax RCA
	Bal. Analog Audio: 3x3 position Phoenix-style pluggable screw term Block	Bal. Analog Audio: 3x3 position Phoenix-style pluggable screw term Block
	Analog RCA: White jack (L Ch), Red jack (R Ch)	Analog RCA: White jack (L Ch), Red jack (R Ch)
Outputs	Spkr. Output: 4pos Phoenix-style pluggable screw term block(12-18AWG)	Spkr. Output: 6pos Phoenix-style plug-gable screw term block(12-18AWG)
	Dig. Audio Loop Through: Coax RCA	Dig. Audio Loop Through: Coax RCA
	Bal. Analog Audio Loop Through: 3x2 position	Bal. Analog Audio Loop Through: 3x2 position
	Phoenix-style pluggable screw term block Analog RCA Loop Through:	Phoenix-style pluggable screw term block Analog RCA Loop Through:

Product Specifications	TS-HAMP3-1000	TS-HAMP3-1500
	White jack (L Ch), Red jack (R Ch)	White jack (L Ch), Red jack (R Ch)
12V Trigger	3.5mm mono jack input + 3.5mm mono jack output	3.5mm mono jack input + 3.5mm mono jack output
IR	3.5mm mono jack input + 3.5mm mono jack loop out	3.5mm mono jack input + 3.5mm mono jack loop out
Color	Black	Black
Dimensions (W x H x D)	17" × 3.5" × 16.5"	17" × 3.5" × 16.5"
Rack Spacing	2U	2U
Weight	15.5 lbs	16.7 lbs

Technical Support

For chat and telephone, visit **snp1.co/techsupport** • Email: **TechSupport@SnapOne.com**. Visit **snp1.co/tc** for discussions, instructional videos, news, and more.

Warranty and Legal Notices

Find details of the product's Limited Warranty and other resources such as regulatory notices and patent and safety information, at **snapone.com/legal** or request a paper copy from Customer Service at **866.424.4489**.

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