

KICKER®



WARHORSE

WXA1000.4 Amplifier Owner's Manual

Manual del Propietario | **Español**
AMPLIFICADOR DEL LA WXA1000.4

Benutzerhandbuch | **Deutsch**
VERSTÄRKER DER 1000.4

Manuel d'utilisation | **Française**
AMPLIFICATEUR DE 1000.4

MODEL:

WXA1000.4

IMPORTANT SAFETY WARNING

PROLONGED CONTINUOUS OPERATION OF AN AMPLIFIER, SPEAKER, OR SUBWOOFER IN A DISTORTED, CLIPPED OR OVER-POWERED MANNER CAN CAUSE YOUR AUDIO SYSTEM TO OVERHEAT, POSSIBLY CATCHING FIRE AND RESULTING IN SERIOUS DAMAGE TO YOUR COMPONENTS AND/OR VEHICLE. AMPLIFIERS REQUIRE UP TO 4 INCHES (10CM) OPEN VENTILATION. SUBWOOFERS SHOULD BE MOUNTED WITH AT LEAST 2 INCH (5CM) CLEARANCE BETWEEN THE FRONT OF THE SPEAKER AND ANY SURFACE. KICKER PRODUCTS ARE CAPABLE OF PRODUCING SOUND LEVELS THAT CAN PERMANENTLY DAMAGE YOUR HEARING! TURNING UP A SYSTEM TO A LEVEL THAT HAS AUDIBLE DISTORTION IS MORE DAMAGING TO YOUR EARS THAN LISTENING TO AN UNDISTORTED SYSTEM AT THE SAME VOLUME LEVEL. THE THRESHOLD OF PAIN IS ALWAYS AN INDICATOR THAT THE SOUND LEVEL IS TOO LOUD AND MAY PERMANENTLY DAMAGE YOUR HEARING. PLEASE USE COMMON SENSE WHEN CONTROLLING VOLUME.

PERFORMANCE

Model:	WXA1000.4
Dynamic Power* [Watts]	2000W
RMS Power	
@ 14.4V, 4Ω stereo, ≤ 1% THD+N	250W X 4
@ 14.4V, 2Ω stereo, ≤ 1% THD+N	450W X 4
@ 14.4V, 4Ω mono, ≤ 1% THD+N	900W X 2
Length [in, cm]	15 3/8, 39.1
Height [in, cm]	2 9/16, 6.5
Width [in, cm]	9 1/8, 23.2
Frequency Response [Hz]	10Hz–20kHz
Signal-to-noise Ratio [dB]	>90, A-weighted, re: rated power
Input Sensitivity	Low Level: 125mV–5V High Level: 1V–40V
Selectable Electronic Crossover	Amp 1: Off/HP/LP Variable 10–5kHz (10X Switch), 24dB/octave Amp 2: Off/HP/LP/BP HP: 10–500Hz, 24db/octave Butterworth LP: 100–5kHz, 24dB/octave Butterworth
Diagnostic Tool	Yes (included WXAVM)

**The Dynamic Power test is used to demonstrate the instantaneous deliverable power of an amplifier, which is similar to when you play music. To perform this test, the Audio Precision™ machine generates a short burst sinewave. These signals are sent in varying on and off states to put the product under an intense load, followed by a resting state. As an example, the analyzer generates a 1kHz sinewave for 200ms on, followed by a 400ms signal attenuated 20dB. At 1kHz this works out to 10 cycles on. Of these 10 cycles, the first two are ignored and the other eight are averaged. This repeats five times and the results of the five gated signals are averaged together to give the dynamic power measurement. Much like the RMS test, the Audio Precision machine increases the input signal steadily until the THD+N value is reached, then a burst test is performed.*

FEATURES

KICKER has reintroduced the legendary Warhorse-series of amplifiers with the latest technological and material advancements. These Competition-level amplifiers are the pinnacle of performance, efficiency, and reliability, providing massive amounts of power, while maintaining thermal and electrical tolerances. Features include:

FIT+ Differential Inputs: 40V signal input capable, isolated from ground with 2.5V DC Offset, for near-universal compatibility with source units.

Start/Stop Compatibility

Die cast Aluminum end panels

Dual 8AWG Speaker Terminals

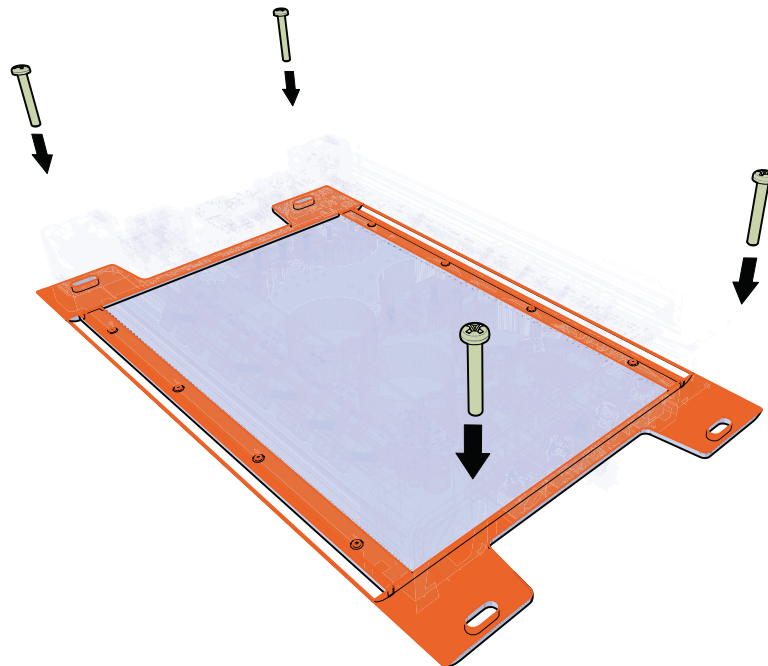
Dual 8AWG Remote Turn-On Input/Output Blocks

Adjustable 24dB/octave Butterworth Crossovers

Large heatsink for massive heat dissipation

INSTALLATION

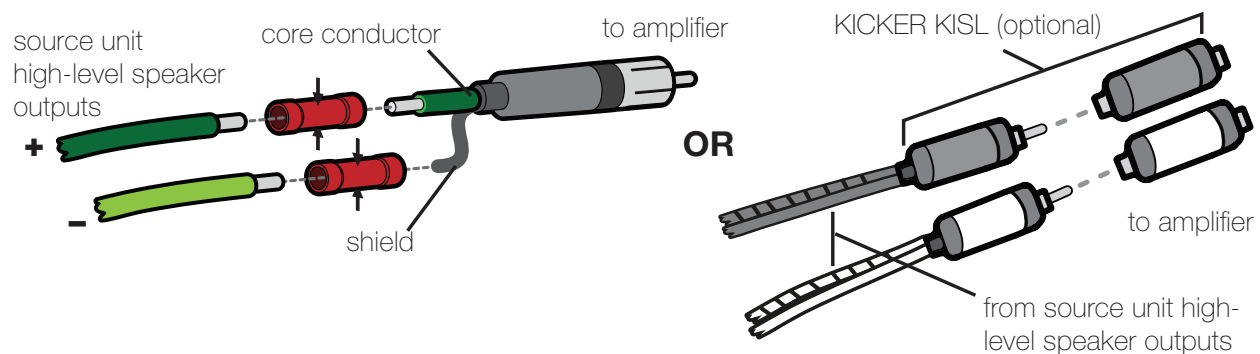
Mounting: Choose a dry, structurally sound location to mount your Warhorse amplifier that is well-ventilated. The amplifier should be mounted as close as possible to the battery network and be electrically isolated from the vehicle ground. It is important to mount the amplifier before running any wires or supplying power to the amplifier. Use the included M6 Phillips Head screws at the corner mounting points of the steel bottom plate. You are solely responsible for securely fastening the WXA amplifier in your vehicle.



Wiring: The Warhorse series are Competition-level amplifiers, and require a large, high quality +12V battery bank with the requisite number of alternators necessary to provide sustained power, especially if you are installing more than one amplifier. For a single WXA1000.4 operating at 2Ω, your electrical and charging system must be able to supply 200 Amperes of current. Make all power and ground wires as short as possible, and use a 200A fuse within 18" of each alternator, battery, and distribution block.

IMPORTANT: You are solely responsible for safely wiring your WXA amplifier. The WXA amplifier is capable of drawing more current than a standard vehicle charging system can supply. It is solely your responsibility to make sure you have adequate current available to safely run this amplifier.

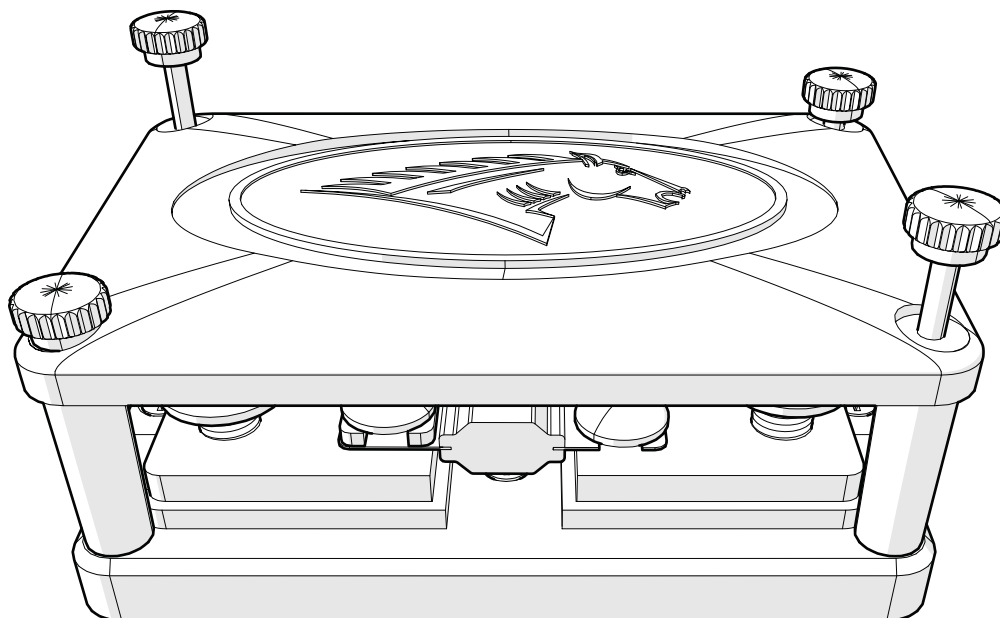
The WXA amplifier's RCA inputs will receive either high or low level signals from your source unit. A high-level signal can be run from the source unit's speaker outputs to the stereo RCA input on the end panel of the amplifier using the KICKER KISL as shown below (see KICKER.com or your local dealer). Alternatively, the signal can be delivered to the amplifier using the low-level RCA outputs on the source unit. Keep the audio signal cable away from factory wiring harnesses and other power wiring. If you need to cross this wiring, cross it at a 90 degree angle.



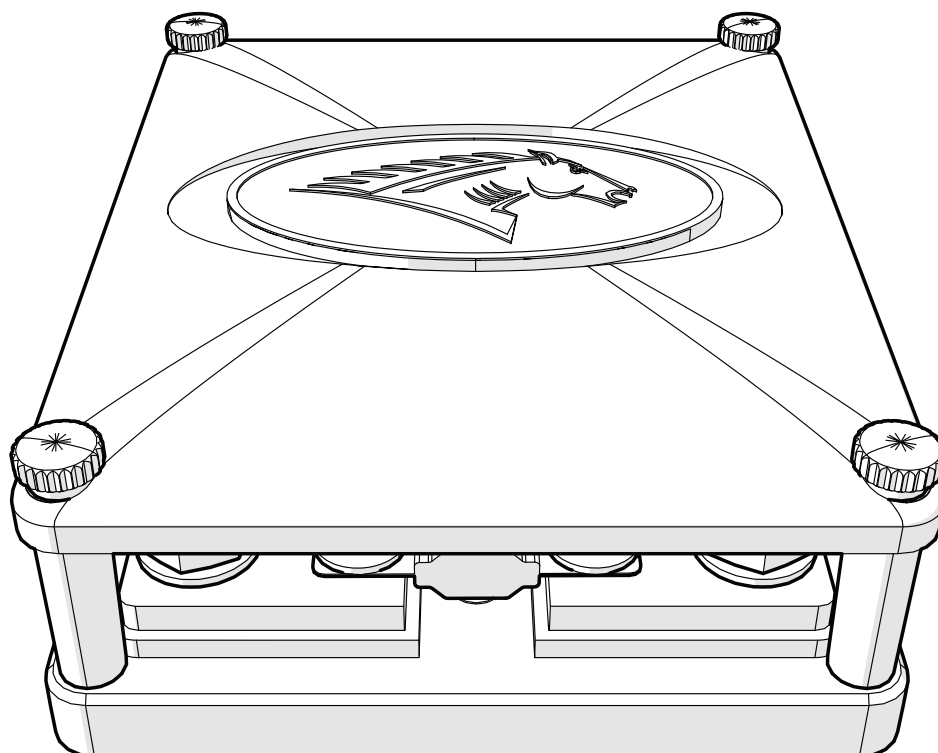
Model	External Fuse (sold separately)	Power/Ground Wire
WXA1000.4	1 x 200 Ampere	1/0 Gauge (46PKD1, 46PWB050, 46PWG050)

For multiple amplifier installations where distribution blocks are used, each amplifier should have its proper-rated fuse, or breaker, installed between the amplifier and the distribution block within eighteen inches of the block, or on the distribution block if it provides for fusing. The primary power wire should also be fused between the battery and distribution block, within eighteen inches of the battery's positive terminal, with a fuse or breaker rated at least to the sum of the individual amplifier's fuse values, but not exceeding the capacity of your wiring. KICKER recommends using the KICKER Warhorse line of power distribution accessories.

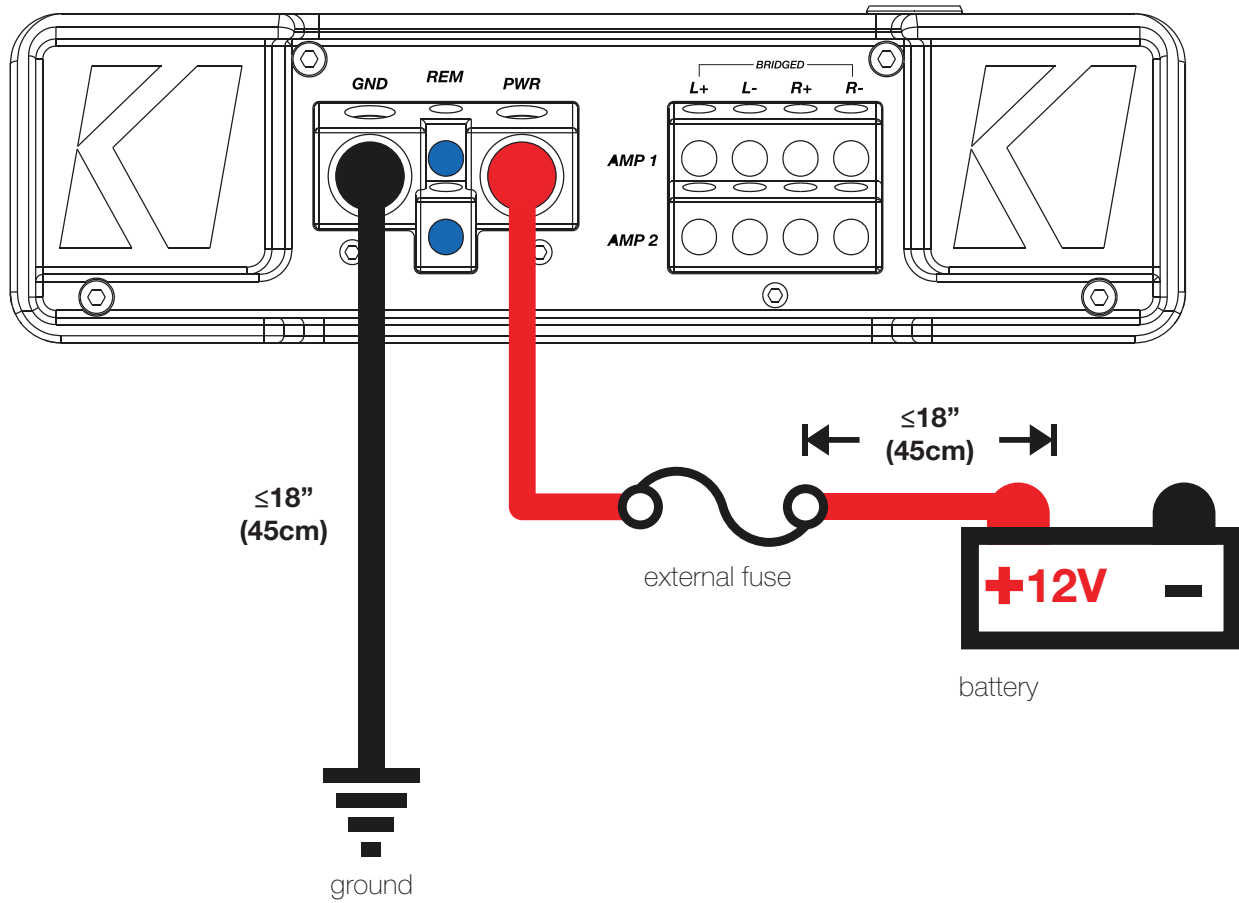
KICKER Warhorse HPFD2 2-way Fuse Block



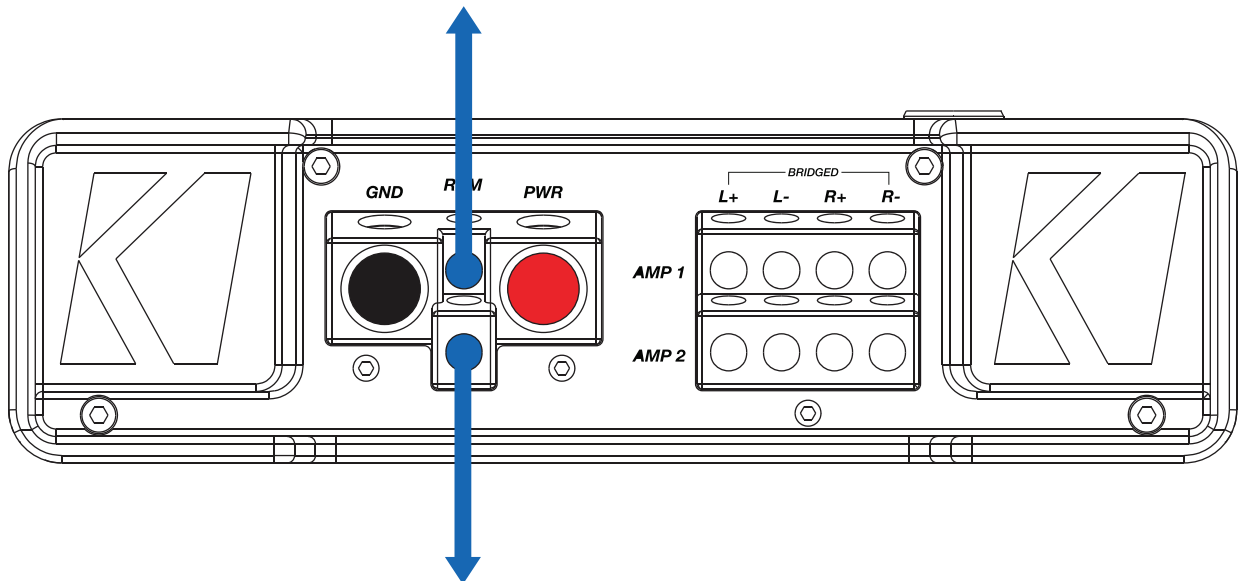
KICKER Warhorse HPFD4 4-way Fuse Block



POWER WIRING



8AWG Remote Turn-On Input and Output terminals provide solid connections and infinite configuration options for any multiple amplifier application. See Page 10.

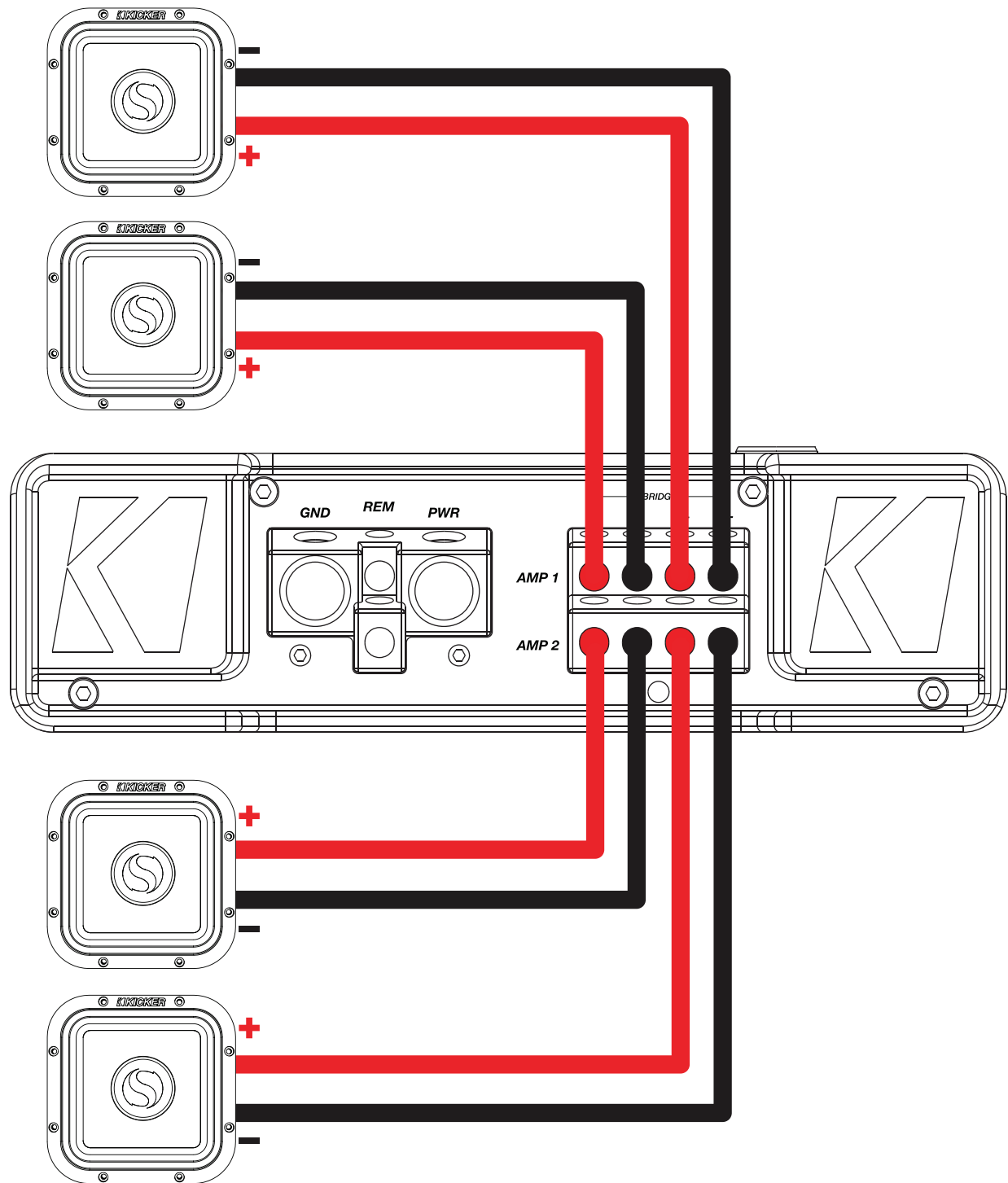


SPEAKER WIRING

KICKER strongly recommends pairing this amplifier with our ST line of high-performance speakers. See the following diagrams for some of the most common speaker wiring configurations. *Final impedance of load must be a minimum of 2Ω for stereo, or 4Ω for bridged mono.*

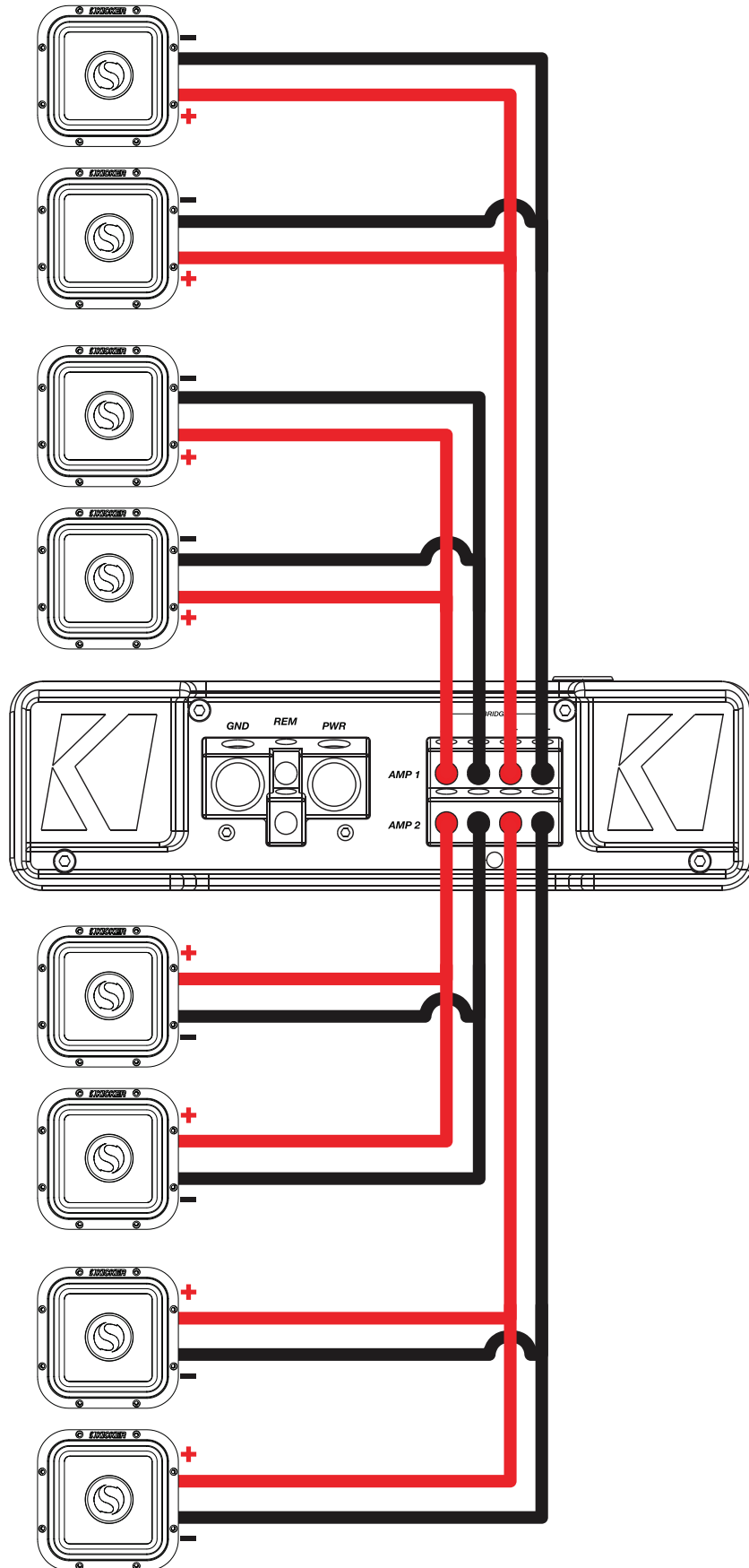
Stereo Configuration

Final impedance of load must be a minimum of 2Ω .



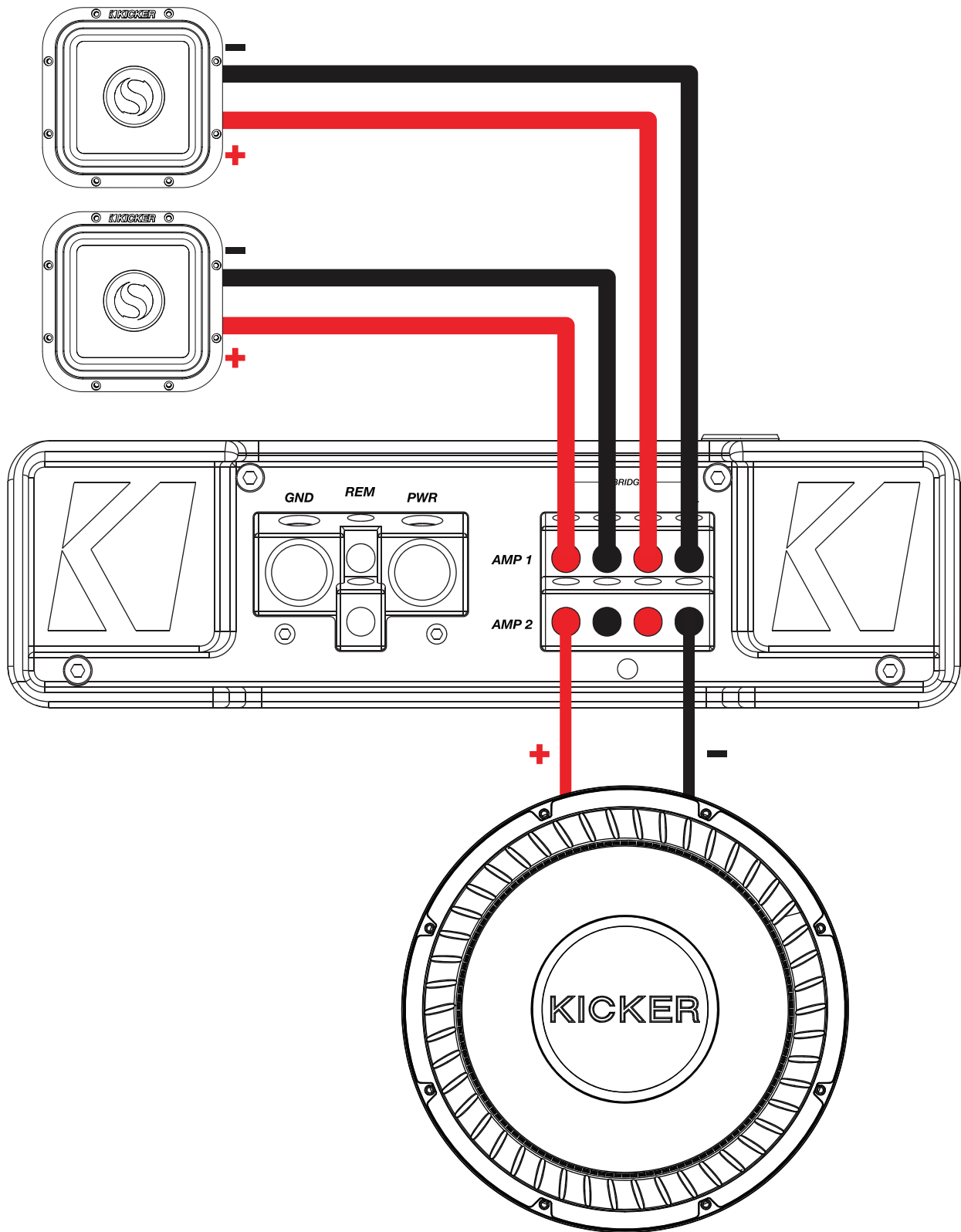
8-Speaker Configuration

Eight 4Ω speakers wired in parallel (two speakers per channel) for a final load of 2Ω per channel.

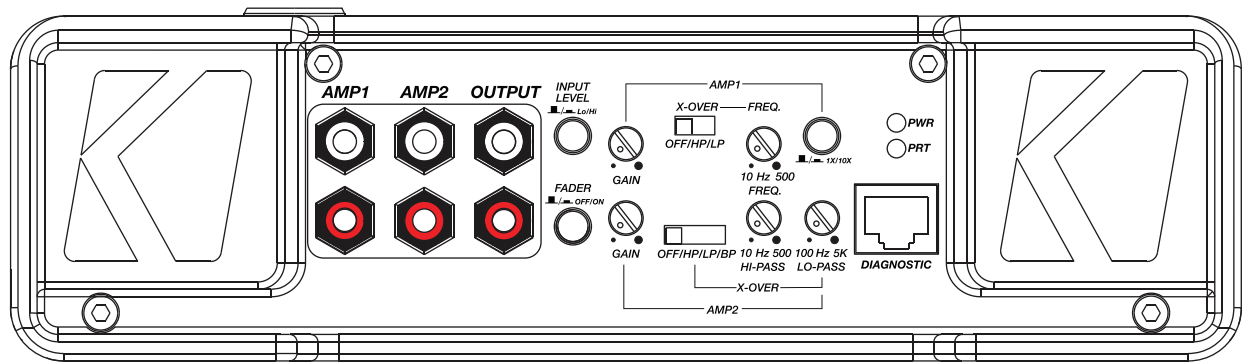


Stereo and Bridged Mono Configuration

Final impedance of load must be a minimum of 2Ω for stereo configuration, and 4Ω for bridged-mono configuration.



OPERATION



Automatic Turn-On Selection: The WXA series offers two automatic turn-on modes: +12V and DC Offset.

- Remote Turn-On: Run up to an 8 gauge wire from the Remote Turn-On Lead on your source unit to the terminal labeled REM between the amplifier's power blocks.
- DC Offset Turn-On: The DC Offset mode detects a >2.5V DC offset from the Hi-Level speaker outputs when the source unit has been turned on.

INPUT LEVEL: The RCA inputs on KICKER WXA amplifiers are capable of receiving either Hi or Low-level signals from your source unit. If the only output available from your source unit is a Hi-Level signal, simply press in the Input Level switch on the amplifier.

CROSSOVER SWITCHES WITH FREQUENCY MULTIPLIER: Use the X-OVER switches on the end panel of the amplifier to set the internal crossovers of AMPS 1 & 2 to OFF, HI-PASS, LO-PASS, or BAND-PASS (*AMP 2 only*). When the switch is set to **OFF**, a full bandwidth signal will be amplified. Set the switch to **HP** if you want the amplifier's internal crossover to serve as a high-pass filter. Set the switch to **LP** if you want the amplifier's internal crossover to serve as a low-pass filter. Set the switch to **BP** when a specific frequency range is required. Never change the crossover switches with the audio system on!

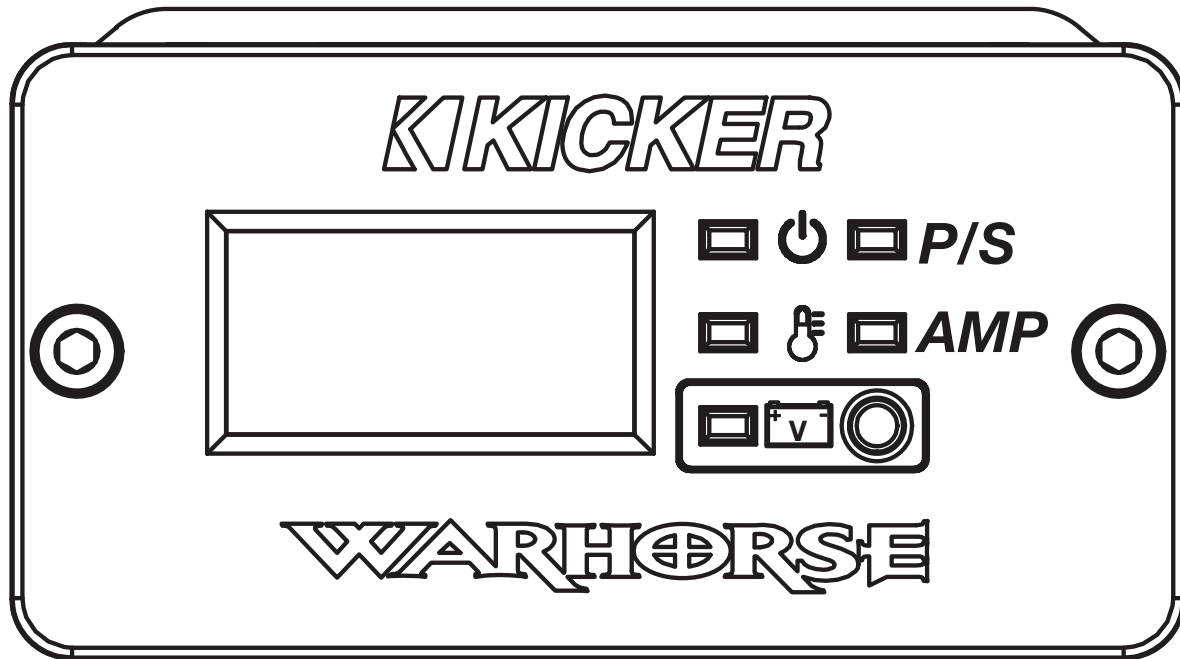
Set the **1X/10X** frequency multiplier switch to the setting that is appropriate for your application. A setting of **10X** will set the range of the **AMP 1** crossover to 100Hz–5kHz

GAIN (Input Gain Control): The input gain control is not a volume control. It matches the output of the source unit to the input level of the amplifier. Maximum power out of the amplifier is possible with the gain in the lowest position. Incorrectly setting the gain can result in distorted output or damage to, and premature failure of, your speakers. For a quick setup, turn the source unit up to about 3/4 volume (if the source unit goes to 30, turn it to 25). Slowly turn up (clockwise) the gain on the amplifier until you can hear audible distortion, then turn it down a little.

To use the preferred method of setting the input gain using a voltmeter or oscilloscope, begin by turning off the amplifier and disconnecting all speakers from it. Turn the gain knob completely off (counterclockwise) and all crossovers off. Turn off bass boost. If a remote bass accessory is connected to the amplifier, turn it completely on (clockwise). Ensure all EQ and DSP settings on the source unit such as bass, treble, fader, seating position etc are set to linear, flat, center, or off. Turn on the amplifier. Play a 0dB sine wave through your source unit and increase the volume to about 3/4 of maximum. Sine wave tracks can be downloaded for free from KICKER.com under the "Support" tab. Use the 50Hz sine wave to set the gain for a subwoofer and the 1kHz sine wave for full-range speakers. Set your voltmeter or oscilloscope to measure AC voltage. Place the voltmeter's probes on the amplifier's speaker output terminals. With the sine wave playing, slowly turn the gain knob clockwise and watch the AC voltage on the voltmeter increase. When the desired voltage is shown (reference power chart insert), or you start to see the waveform square off stop increasing the gain, turn the amplifier off, reconnect all speakers and set the crossovers to your desired setting. Your gain is now set for maximum unclipped power from the amplifier. If you increase amplitude using settings on the source unit or the bass boost on the amplifier it will introduce distortion and you will need to redo these steps.

FADER SWITCH: Depress the fader switch if you are running two sets of inputs (front and rear for example) to the amplifier. Leave the fader switch OFF if you want to drive all channels from a single stereo input.

DIAGNOSTIC TOOL (WXAVM): The Warhorse Diagnostic Tool equips you with real-time, minimum and maximum voltage readings, along with temperature, power supply, and protection LEDs connected to sensors that are continuously measuring the health of the amplifier. This allows you to monitor all factors related to the performance and status of the Warhorse amplifier. The Voltage display will always show the real-time voltage of the Warhorse amplifier. Pressing the Voltage Diagnostic Button next to the Voltage LED will show the word “HI” and then display the maximum voltage that was reached since the amplifier was turned on. Pressing the Voltage Diagnostic Button a second time will show the word “LO” and then display the minimum voltage that was reached in any given remote cycle, the minimum and maximum voltage measurements are reset every time the amplifier restarts.



 Power LED

Green - Amp on
Off - Amp off

P/S (Power Supply)

Off - System Normal
Red - Amp in P/S Protection Mode

 Temperature LED

Off - Amp off
Green - Amp on & temperature is < 65C
Orange - Amp on & temperature is 65C–85C
Red - Amp in thermal protection mode

AMP
(Class D Protection)

Off - System Normal
Red - Amp in Class D Protection Mode

 Voltage LED

Off - System Normal, no over or under voltage
Red, PWR LED ON – UVP warning, Supply voltage is 6.5 > 10.5V DC
Red, PWR LED OFF – UVP or OVP Supply voltage is < 6.5V DC or > 16V DC

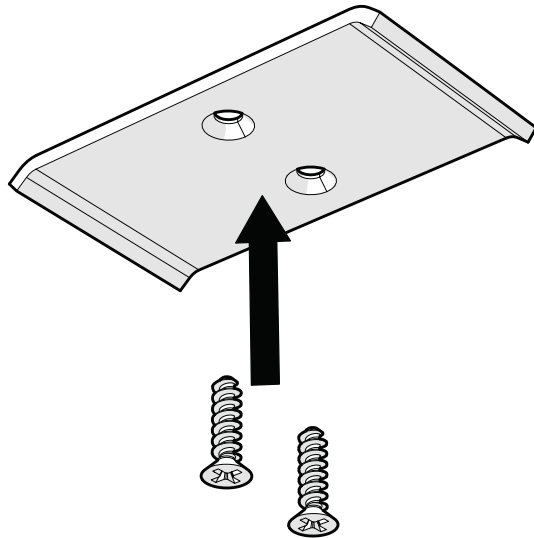
WXAVM DIAGNOSTIC TOOL INSTALLATION

The WXAVM Diagnostic Tool may be mounted to a surface using the magnetic brackets, or flush mounted so only the face of the tool is displayed.

SURFACE MOUNT

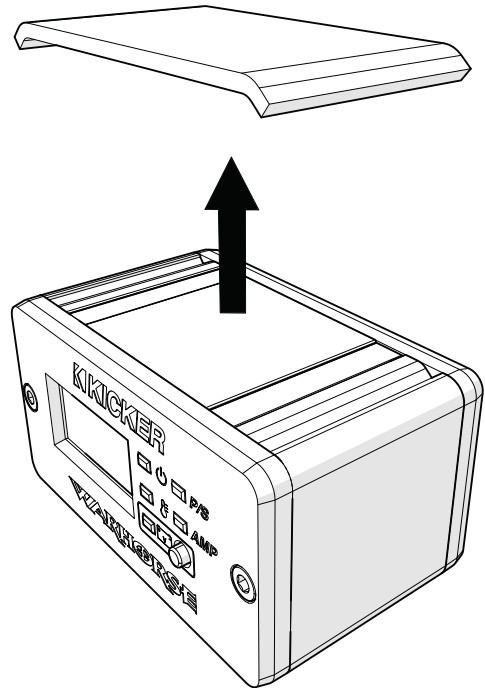
1

Surface-mount the WXAVM magnetic bracket using the supplied screws.



2

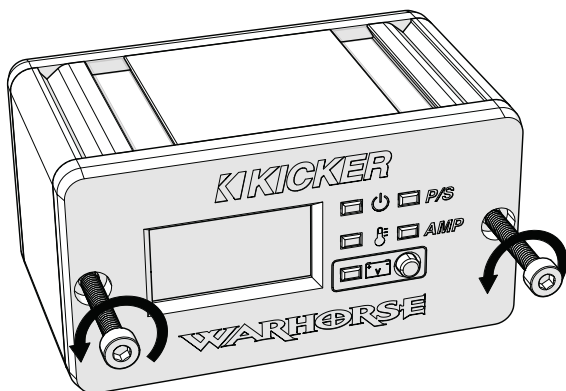
Slide the WXAVM into the magnetic mounting bracket.



FLUSH MOUNT

1

Remove the screws securing the WXAVM to the housing and slide it out.

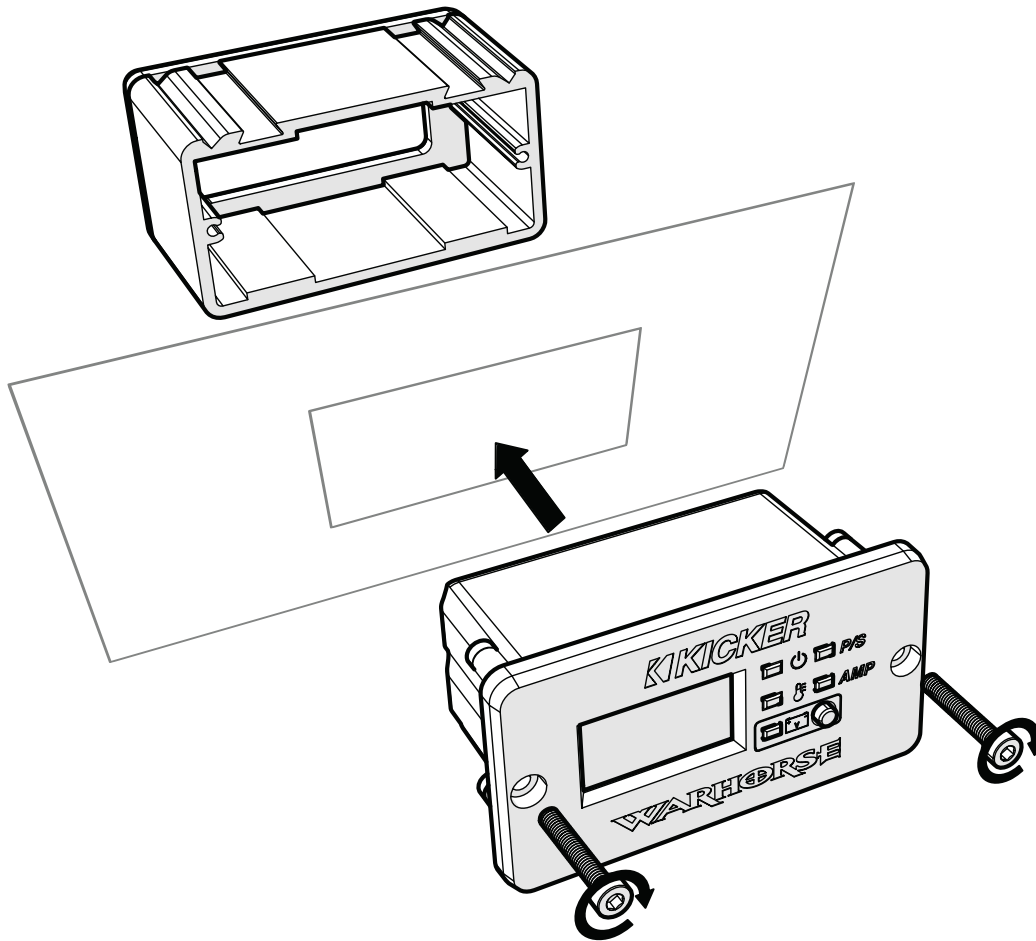


2

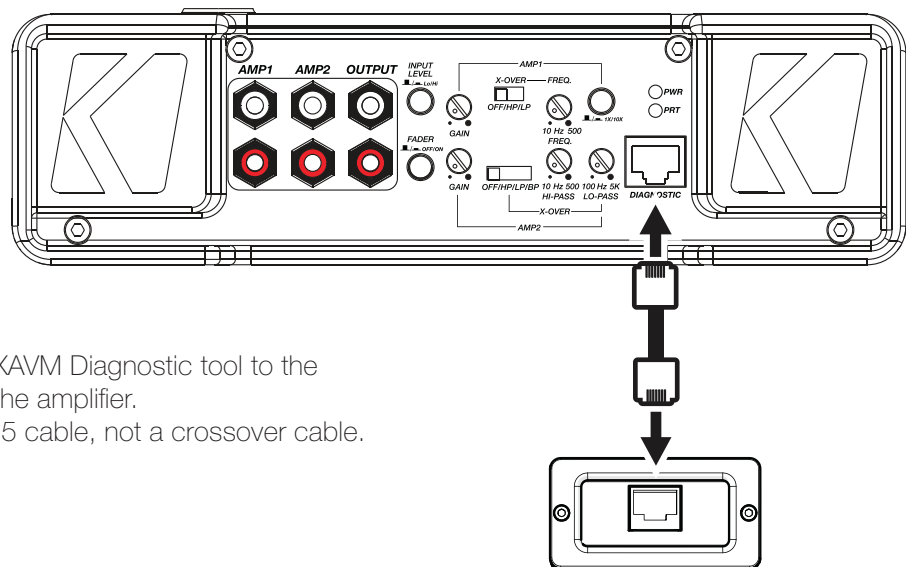
Cut a 26mm x 58mm rectangular hole in the desired mounting surface.

3

Place the WXAVM outer housing directly behind the desired mounting surface, slide the WXAVM through the mounting hole cutout into the outer housing, and secure them using the screws from Step 1.



WXAVM WIRING



Connect the cable to the WXAVM Diagnostic tool to the WXAVM Diagnostic port on the amplifier.

NOTE: This is a normal RJ-45 cable, not a crossover cable.

TROUBLESHOOTING

If your Warhorse amplifier does not appear to be working, check the obvious things first such as blown fuses, poor or incorrect wiring connections, incorrect setting of crossover switch and gain controls, etc. If the WXAVM Diagnostic tool is connected, check the status LEDs to determine where the fault may lie. Depending on the state of the amplifier, the vehicle's charging system, and the speakers, one or more LEDs may show fault.

WXAVM - Your included WXAVM diagnostic tool can be used to troubleshoot common failure modes of the WXA amplifiers. Please refer to page 11 for more information on the WXAVM.

In all instances of difficulty, *please make sure that the PWR and GND terminals are connected and have proper voltage.*

Power LED off, no output - With a Volt Ohm Meter (VOM) check the following: ❶ +12 volt power terminals (should read +12V to +16V) ❷ Remote turn-on terminal (should read +12V to +16V) ❸ Check for reversed power and ground connections ❹ Ground terminal, for proper conductivity.

Power LED green, no output - Check the following: ❶ RCA connections ❷ Test speaker outputs with a "known" good speaker. ❸ Substitute source unit with a "known" good source unit. ❹ Check for a signal in the RCA cable feeding the amplifier with the VOM meter set to measure "AC" voltage.

Temperature LED red - ❶ Amplifier is very hot = thermal protection is engaged. Test for proper impedance at the speaker terminals with a VOM meter. Also check for adequate airflow around the amplifier.

AMP LED red - ❶ Short circuit protection is engaged. Check for speaker wires shorted to each other. Check for shorted voice coil. Check for damaged speakers or speaker(s) operating below the minimum recommended impedance.

Voltage Protection LED red - ❶ Voltage to the amplifier is not within the 10–16 volt operating range. Have the vehicle's charging and electrical system inspected.

No or low output - ❶ Check the balance control on source unit ❷ Check the RCA (or speaker input) and speaker output connections. ❸ Check for reversed polarity at the speaker(s)

Alternator noise-whining sound with engine's RPM - ❶ Check for damaged RCA (or speaker input) cable ❷ Check the routing of RCA (or speaker input) cable ❸ Check the source unit for proper grounding ❹ Check the gain settings and turn them down if they are set too high.

Ground Noise - KICKER amplifiers are engineered to be fully compatible with all manufacturers' head units. Some head units may require additional grounding to prevent noise from entering the audio signal.

CAUTION: When jump starting the battery, be sure that connections made with jumper cables are correct. Improper connections can result in blown amplifier fuses as well as the failure of other critical systems in the vehicle.

If you have more questions about the installation or operation of your new KICKER product, see the Authorized KICKER Dealer where you made your purchase. For more advice on installation, click on the SUPPORT tab on the KICKER homepage, **www.kicker.com**. Choose the TECHNICAL SUPPORT tab, choose the subject you are interested in, and then download or view the corresponding information. Please E-mail support@kicker.com or call Technical Services (405) 624-8583 for unanswered or specific questions.



ELECTRONICS LIMITED WARRANTY

When purchased from an Authorized KICKER Dealer, KICKER warrants this product to be free from defects in material and workmanship under normal use for a period of TWO (2) YEARS from date of original purchase with receipt. If this product is identified as "Refurbished" or "B Goods", the warranty is limited to a period of THREE (3) MONTHS from the date of original purchase. In all cases you must have the original receipt. Should service be necessary under this warranty for any reason due to manufacturing defect or malfunction during the warranty period, KICKER will repair or replace (at its discretion) the defective merchandise with equivalent merchandise. Warranty replacements may have cosmetic scratches and blemishes. Discontinued products may be replaced with more current equivalent products. This warranty is valid only for the original purchaser and is not extended to owners of the product subsequent to the original purchaser. Any applicable implied warranties are limited in duration to a period of the express warranty as provided herein beginning with the date of the original purchase at retail, and no warranties, whether express or implied, shall apply to this product thereafter. Some states do not allow limitations on implied warranties; therefore, these exclusions may not apply to you. This warranty gives you specific legal rights; however you may have other rights that vary from state to state.

WHAT TO DO IF YOU NEED WARRANTY OR SERVICE:

Defective merchandise should be returned to your local Authorized Stillwater Designs (KICKER) Dealer for warranty service. Assistance in locating an Authorized Dealer can be found at www.KICKER.com or by contacting Stillwater Designs directly. You can confirm that a dealer is authorized by asking to see a current authorized dealer window decal.

If it becomes necessary for you to return defective merchandise directly to Stillwater Designs (KICKER), call the KICKER Customer Service Department at (405) 624-8510 for a Return Merchandise Authorization (RMA) number. Package only the defective items in a package that will prevent shipping damage, and return to:

Stillwater Designs, 3100 North Husband St, Stillwater, OK 74075

The RMA number must be clearly marked on the outside of the package. Please return only defective components. The return of functioning items increases your return freight charges. Non-defective items will be returned freight collect to you. For example, if a subwoofer is defective, only return the defective subwoofer, not the entire enclosure. Include a copy of the original receipt with the purchase date clearly visible, and a "proof-of-purchase" statement listing the Customer's name, Dealer's name and invoice number, and product purchased. Warranty expiration on items without proof-of-purchase will be determined from the type of sale and manufacturing date code. Freight must be prepaid; items sent freight-collect, or COD, will be refused.

WHAT IS NOT COVERED?

This warranty is valid only if the product is used for the purpose for which it was designed. It does not cover:

- o Damage due to improper installation
- o Subsequent damage to other components
- o Damage caused by exposure to moisture, excessive heat, chemical cleaners, and/or UV radiation
- o Damage through negligence, misuse, accident or abuse. Repeated returns for the same damage may be considered abuse
- o Any cost or expense related to the removal or reinstallation of product
- o Speakers damaged due to amplifier clipping or distortion
- o Items previously repaired or modified by any unauthorized repair facility
- o Return shipping on non-defective items
- o Products with tampered or missing barcode labels
- o Products with tampered or missing serial numbers
- o Products returned without a Return Merchandise Authorization (RMA) number
- o Products purchased from an UNAUTHORIZED dealer
- o Freight Damage
- o The cost of shipping product to KICKER
- o Service performed by anyone other than KICKER



HOW LONG WILL IT TAKE?

KICKER strives to maintain a goal of one week turnaround for all electronics (amplifiers, crossovers, equalizers, etc.) returns. Delays may be incurred if lack of replacement inventory or parts is encountered. Failure to follow these steps may void your warranty. Any questions can be directed to the KICKER Customer Service Department at (405) 624-8510. Contact your International KICKER dealer or distributor concerning specific procedures for your country's warranty policies.

Note: All specifications and performance figures are subject to change. Please visit www.KICKER.com for the most current information.

INTERNATIONAL WARRANTY

Contact your International KICKER dealer or distributor concerning specific procedures for your country's warranty policies.

WARNING: KICKER products are capable of producing sound levels that can permanently damage your hearing! Turning up a system to a level that has audible distortion is more damaging to your ears than listening to an undistorted system at the same volume level. The threshold of pain is always an indicator that the sound level is too loud and may permanently damage your hearing. Please use common sense when controlling volume.

Our goods come with guarantees that cannot be excluded under the **Australian Consumer Law**. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

GARANTÍA INTERNACIONAL

Versión Español

Comuníquese con su concesionario o distribuidor KICKER internacional para obtener información sobre procedimientos específicos relacionados con las normas de garantía de su país.

ADVERTENCIA: Los excitadores KICKER son capaces de producir niveles de sonido que pueden dañar permanentemente el oído. Subir el volumen del sistema hasta un nivel que produzca distorsión es más dañino para el oído que escuchar un sistema sin distorsión al mismo volumen. El dolor es siempre una indicación de que el sonido es muy fuerte y que puede dañar permanentemente el oído. Sea precavido cuando controle el volumen.

La frase "combustible para vivir la vida Livin' Loud™ a todo volumen" se refiere al entusiasmo por la vida que la marca KICKER de estéreos de automóvil representa y a la recomendación a nuestros clientes de que vivan lo mejor posible ("a todo volumen") en todo sentido. La línea de altavoces y amplificadores KICKER es la mejor del mercado de audio de automóviles y por lo tanto representa el "combustible" para vivir a todo volumen en el área de "estéreos de automóvil" de la vida de nuestros clientes. Recomendamos a todos nuestros clientes que obedezcan todas las reglas y reglamentos locales sobre ruido en cuanto a los niveles legales y apropiados de audición fuera del vehículo.

INTERNATIONALE GARANTIE

Deutsche Version

Nehmen Sie mit Ihren internationalen KICKER-Fachhändler oder Vertrieb Kontakt auf, um Details über die Garantieleistungen in Ihrem Land zu erfahren.

WARNUNG: KICKER-Treiber können einen Schallpegel erzeugen, der zu permanenten Gehörschäden führen kann! Wenn Sie ein System auf einen Pegel stellen, der hörbare Verzerrungen erzeugt, schadet das Ihren Ohren mehr, als ein nicht verzerrtes System auf dem gleichen Lautstärkepegel. Die Schmerzschwelle ist immer eine Anzeige dafür, dass der Schallpegel zu laut ist und zu permanenten Gehörschäden führen kann. Seien Sie bei der Lautstärkeeinstellung bitte vernünftig!

Der Slogan "Treibstoff für Livin' Loud" bezieht sich auf die mit den KICKER-Autostereosystemen assoziierte Lebensfreude und die Tatsache, dass wir unsere Kunden ermutigen, in allen Aspekten ihres Lebens nach dem Besten ("Livin' Loud") zu streben. Die Lautsprecher und Verstärker von KICKER sind auf dem Markt für Auto-Soundsysteme führend und stellen somit den "Treibstoff" für das Autostereoerlebnis unserer Kunden dar. Wir empfehlen allen unseren Kunden, sich bezüglich der zugelassenen und passenden Lautstärkepegel außerhalb des Autos an die örtlichen Lärmvorschriften zu halten.

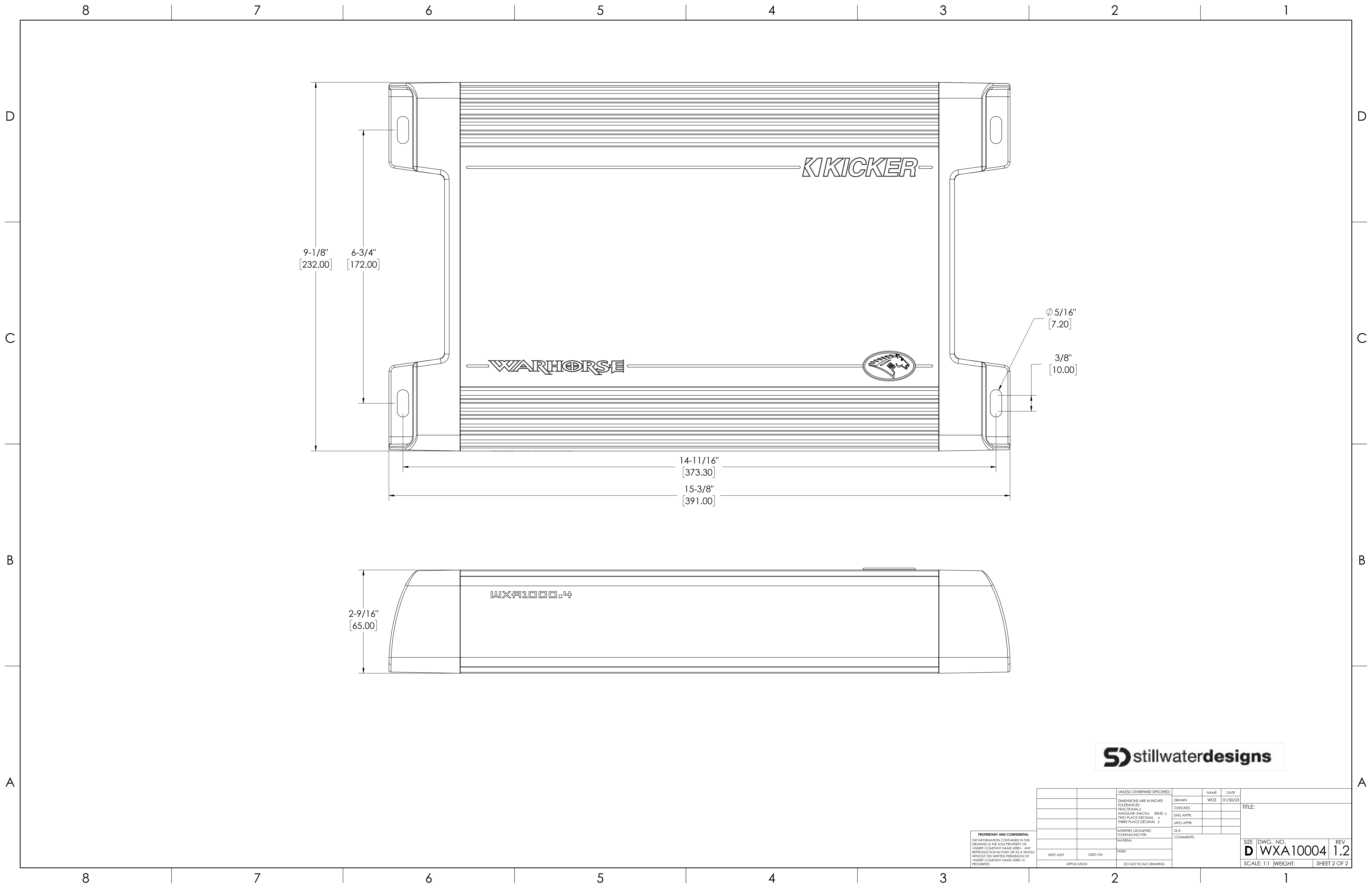
GARANTIE INTERNATIONALE

Versión Française

Pour connaître les procédures propres à la politique de garantie de votre pays, contactez votre revendeur ou distributeur International KICKER.

AVERTISSEMENT: Les haut-parleurs KICKER ont la capacité de produire des niveaux sonores pouvant endommager l'ouïe de façon irréversible ! L'augmentation du volume d'un système jusqu'à un niveau présentant une distorsion audible endommage davantage l'ouïe que l'écoute d'un système sans distorsion au même volume. Le seuil de la douleur est toujours le signe que le niveau sonore est trop élevé et risque d'endommager l'ouïe de façon irréversible. Réglez le volume en faisant preuve de bon sens!

L'expression "carburant pour vivre plein pot" fait référence au dynamisme de la marque KICKER d'équipements audio pour véhicules et a pour but d'encourager nos clients à faire le maximum ("vivre plein pot") dans tous les aspects de leur vie. Les haut-parleurs et amplificateurs KICKER sont les meilleurs dans le domaine des équipements audio et représentent donc pour nos clients le "carburant pour vivre plein pot" dans l'aspect "installation audio de véhicule" de leur vie. Nous encourageons tous nos clients à respecter toutes les lois et réglementations locales relatives aux niveaux sonores acceptables à l'extérieur des véhicules.





49WXA1000.4

4 x 250 Watt 4-Channel Full Range Amplifier, RoHS Compliant

Specifications

Electrical Parameters

Power (@14.4V, <1%THD+N)	4Ω Stereo	250W x 4
Power (@14.4V, <1%THD+N)	2Ω Stereo	450W x 4
Power (@14.4V, <1%THD+N)	4Ω Bridged	900W x 2
Dynamic Power (@14.4V, <10%THD+N)	4Ω Bridged	2000W
Lowest Rated Impedance		2Ω Stereo / 4Ω Bridged
Signal to Noise Ratio (CEA)	1W	>-70dB
Signal to Noise Ratio	Rated Power	>-90dB
Channel Separation (Rated Power)	1000Hz	>55dB
CMRR	1000Hz	-40dB
Input Impedance		>20kΩ
Frequency Response		10Hz - 20kHz
Variable HiPass Filter (Amp 1)	24dB / octave BW	10Hz - 5kHz (10X Switch)
Variable LoPass Filter (Amp 1)	24dB / octave BW	10Hz - 5kHz (10X Switch)
Variable HiPass Filter (Amp 2)	24dB / octave BW	10Hz - 500Hz
Variable LoPass Filter (Amp 2)	24dB / octave BW	100Hz - 5kHz
Variable BandPass Filter (Amp 2)	24dB / octave BW	10Hz - 5kHz
Standby Current (Remote Off)		<2mA
Idle Current (Remote On)		<3A
Current Draw (Rated Power)		<200A
Efficiency (Rated Power)		>75%
Low Level Input Sensitivity		125mV - 5V
High Level Input Sensitivity		1V - 40V
Under Voltage Protection		6.5V (warning at 10.5V)
Over Voltage Protection		16V (warning at 15.25V)

What's in the box?

49WXA1000.4

WXAVM Diagnostic Tool - 19.75ft RJ45 cable included

WXA1000.4 Amplifier Owner's Manual

Hardware Pack - 3mm and 5mm hex key & mounting hardware

Physical Materials

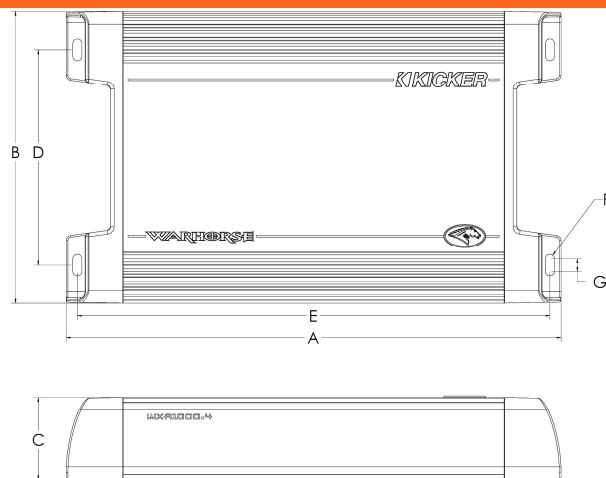
Heat Sink	Anodized Extruded Aluminum
End Caps	Powder Coated Cast Aluminum
Bottom Panel	Powder Coated Stamped Steel
WXAVM	Powder Coated Aluminum Housing



Features

- **FIT+ Differential Inputs** - near universal compatibility with source units
- **Variable Electronic HP/LP/BP Filter** for speaker protection
- **Fully Start/Stop Compliant** - operational down to 6.5V
- **1/0AWG Power & Ground Terminals**
- **8AWG Speaker Terminals**
- **Included WXAVM Diagnostic Tool**

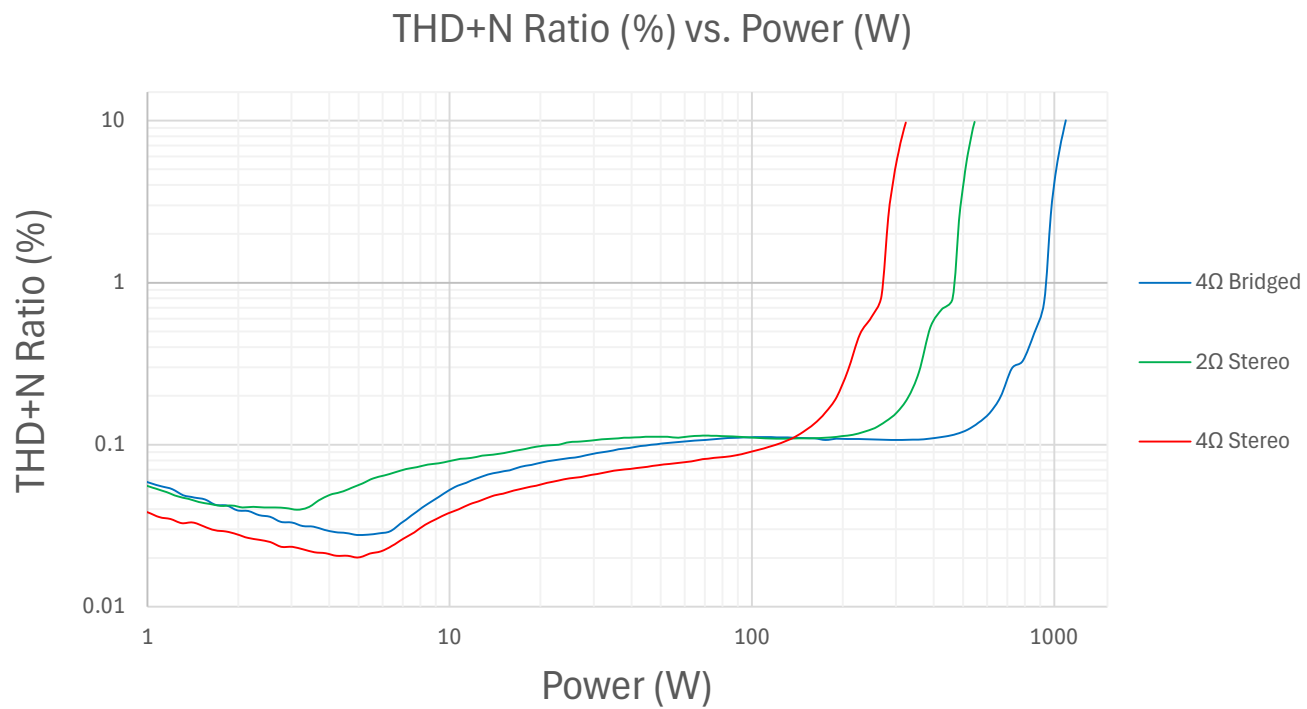
Unit Dimensions



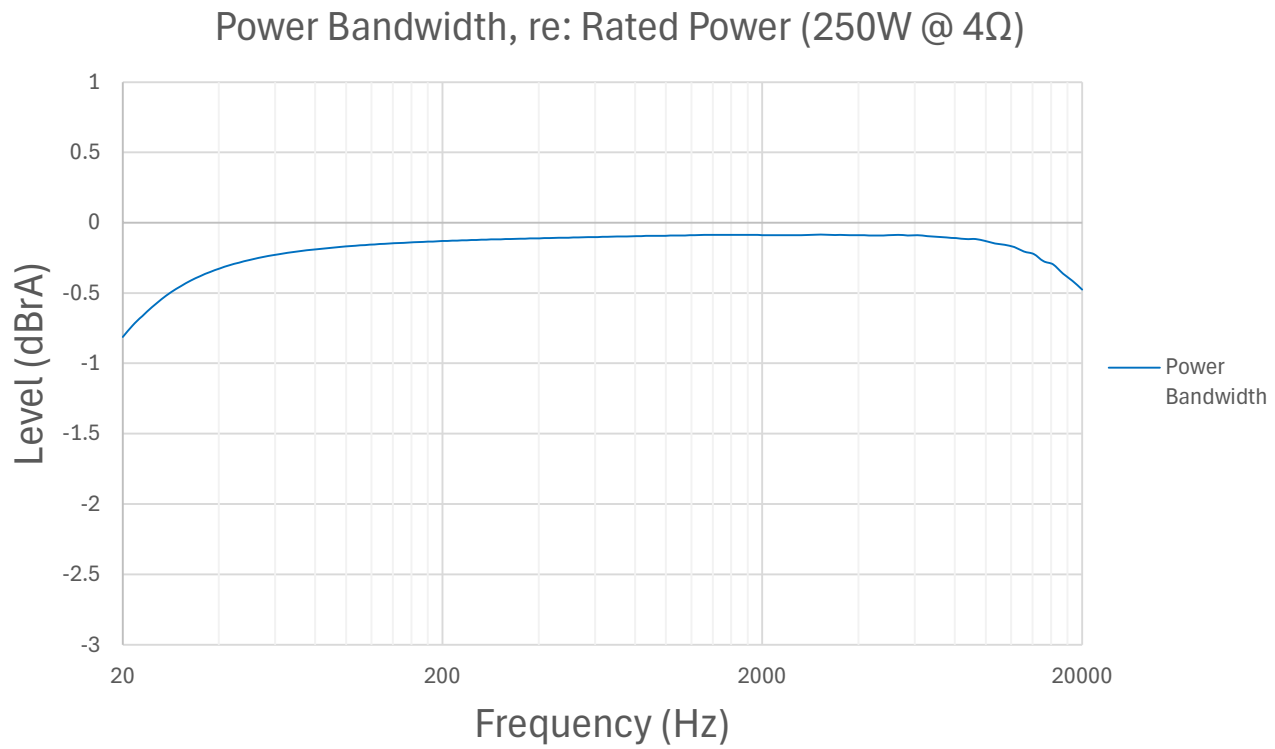
A - Overall Length	15-3/8"	391.0mm
B - Overall Width	9-1/8"	232.0mm
C - Overall Height	2-9/16"	65.0mm
D - Mounting Holes Location - Width	6-3/4"	172.0mm
E - Mounting Holes Location - Length	14-3/4"	375.0mm
F - Mounting Hole Diameter	5/16"	7.2mm
G - Mounting Hole Width	3/8"	10.0mm

Technical Graph Data

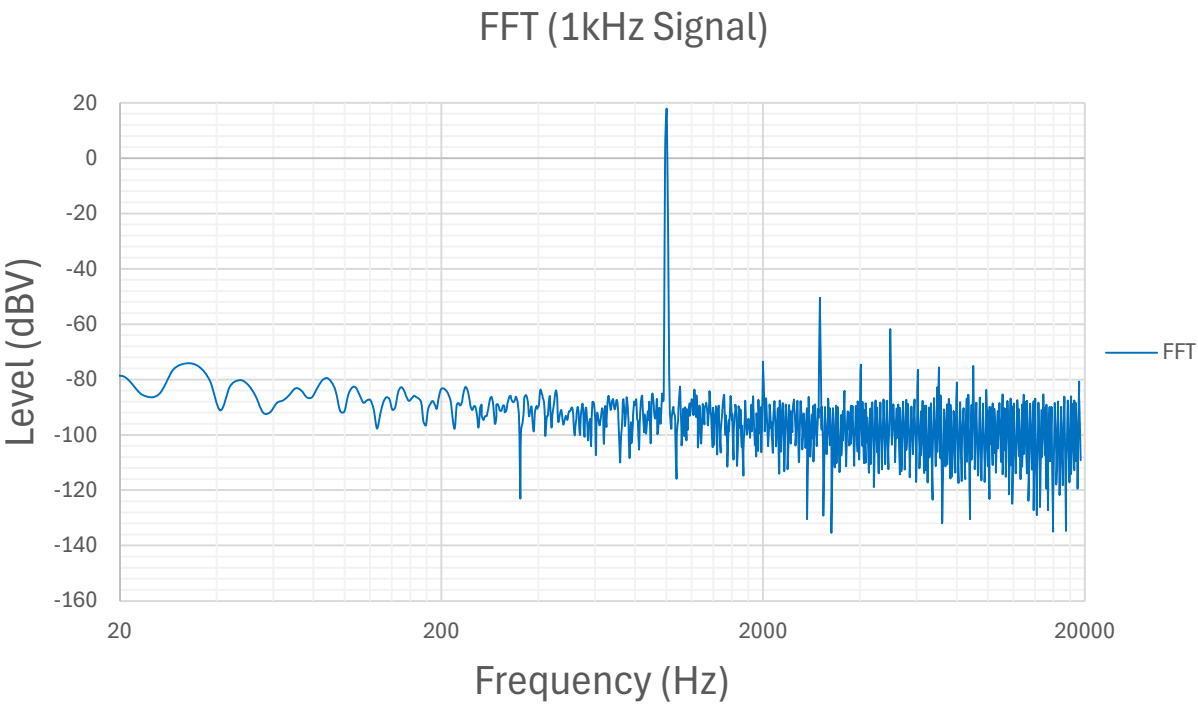
AMP1 and AMP2 - THD+N vs. Power (W) @14.4VDC



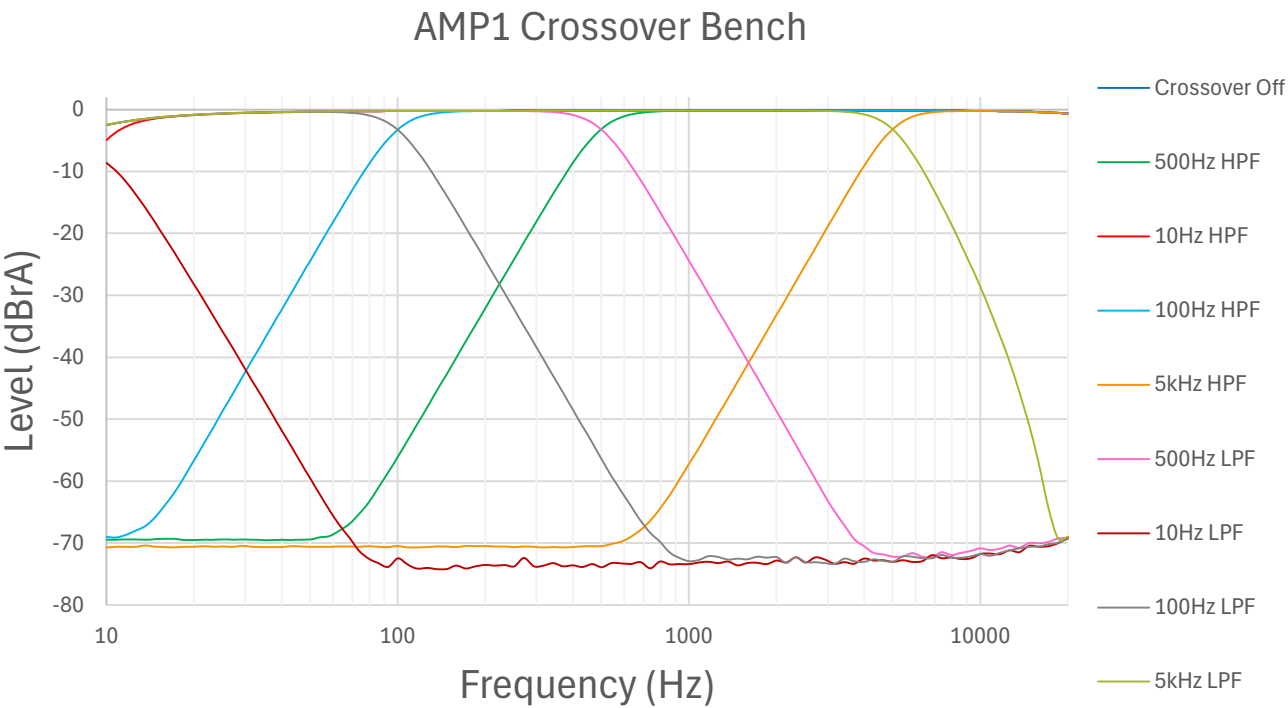
AMP1 and AMP2 - Power Bandwidth (4Ω) @14.4VDC



AMP1 and AMP2 - FFT



AMP1 Crossover Bench



AMP2 Crossover Bench

