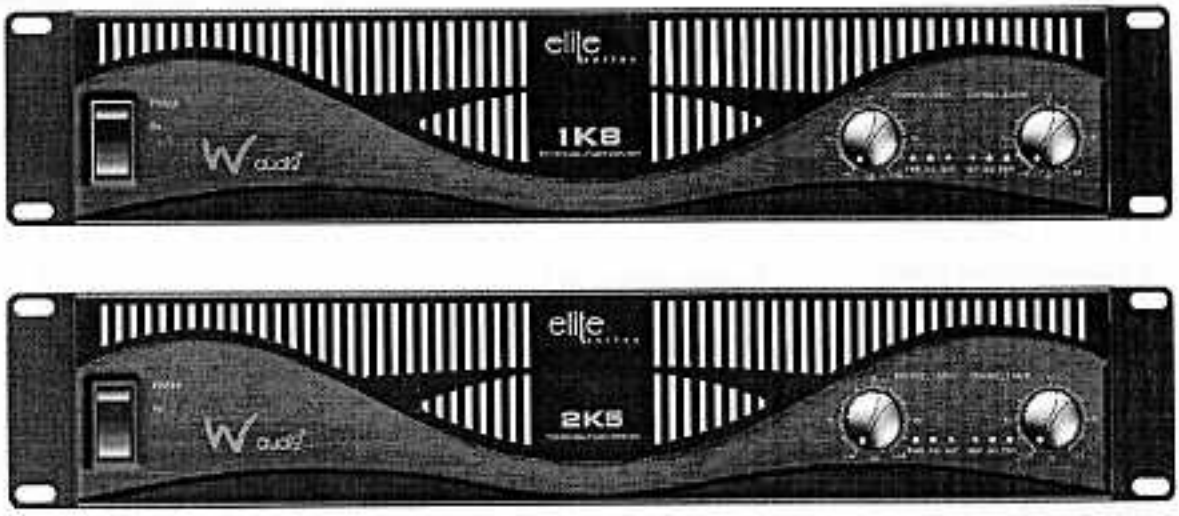
Elite IK8/2K5

Professional Power Amplifiers



User's Manual

(BOM Ref.: 24-004-1793)

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1 Explanation Of Graphical Symbols

This manual does not include all of the details of design, production, or variations of the equipment. Nor does it cover every situation which may arise during installation, operation or maintenance. The information provided in this manual was deemed accurate as of the publication date.

WATCH FOR THESE SYMBOLS:

The lightning flash 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.

The exclamation point triangle is intended to alert the user of the presence of important operation and maintenance (servicing) instructions in the literature accompanying the product.

CAUTION: To reduce the risk of electric shock, do not remove cover. No user-serviceable parts inside. Refer servicing to qualified service personnel.

WARNING: To prevent electrical shock or fire hazard, do not expose this appliance to rain or moisture. Before using this appliance, read the operation guide for further warnings.

Magnetic Field

CAUTION: Do not locate sensitive high-gain equipment such as pre-amplifiers or tape decks directly above or below the unit. Because this amplifier has a high power density, it has a strong magnetic field which can induce hum into unshield devices that are locate d nearby. The field is strongest above and below the unit.

If an equipment rack is used, we recommend locating the amplifier(s) in the bottom of the rack and the pre-amplifier or other sensitive equipment at the top.

2 Important Safety Instruction

WARNING: When using electric products, basic caution should always be followed, including the following:

1. Read safety and operating instruction before using this product.
2. All safety and operating instruction before using product.
3. Obey all cautions in the operation instructions and on the back of the unit.
4. All operation instruction should be followed.
5. This product should not be used near water (i.e. bathtub, sink, swimming pool, wet basement, etc.)
6. This product should not be located so that its position does not interfere with its proper ventilation. It should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
7. This product should not be placed near a source of heat such as a stove, radiator, or another heat production amplifier.
8. Connect only to a power supply of the type marked on the unit adjacent to the power supply cord.
9. Never break off the ground pin on the power supply cord. For more information on grounding, write for our free booklet "Shock Hazard and Grounding."
10. Power supply cords should always be handled carefully. Never walk on or place equipment on power supply cords. Periodically check cords for cuts or signs of stress, especially at the plug and the point where the cord exits the unit.
11. The power supply cord should be unplugged when the unit is to be unused for long periods of time.
12. If this product is to be mounted in an equipment rack, rear support should be provided.
13. Metal part can be cleaned with a damp rag. The vinyl covering used on some units can be cleaned with a damp rag or an ammonia-based household cleaner if necessary. Disconnect unit from power supply before cleaning.
14. Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation holes or any other openings.

15. This unit should be checked by a qualified service technician if :

    a)The power supply cord or plug has been damaged.

    b)Anything has fallen or been spilled into the unit.

    C)The unit does not operate correctly.

    D)The unit has been dropped or the enclosure damaged.

16. The user should not attempt to service this equipment. All service work should be done by a qualified service technician.

17. This product should be used only with a cart or stand that is recommended by us.
18. Exposure to extremely high noise levels may cause a permanent hearing loss. Individuals vary considerably in susceptibility to noise induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time. The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the following permissible noise level exposures.

Duration Per Day In Hours	Sound Level dBA, Slow Response
8	90
6	92
4	95
3	97
2	100
1½	102
1	105
1/2	110
1/4 or less	115

According to OSHA, any exposure in excess of the above permissible limits could result in some hearing loss. Ear plugs or protectors for the ear canals or over the ears must be worn when operating this amplification system in order to prevent a permanent hearing loss if exposure is in excess of the limits as set forth above. To ensure against potentially dangerous exposure to high sound pressure levels, if is recommended that all persons exposed to equipment capable of producing high sound pressure levels such as amplification system be protected by hearing protectors while this unit is in operation.

3 Welcome

Congratulations on purchasing one of the ELITE Series professional stereo power amplifiers from WARRIOR. The ELITE Series of power amplifiers represent a new era in affordable, tried-and-true, quality power amplification. The Series comprises two models: the 1K8, and the 2K5. They are designed to provide enormous levels of pure, undistorted power in a rugged, robust chassis - making them the choice for pro sound reinforcement.

This manual provided you with the necessary information to safely and correctly set up and operate your amplifier. Please take the time to read all instructions, warning and cautions contained in this manual so that you can obtain the best possible service from your amplifier.

3.1 Unpacking

Please unpack and inspect the amplifier for any damage that may occur during shipment. If any damage is found, notify your dealer immediately. Be sure to save the carton and all packing materials. Should you ever need to ship the unit back to one of our Distributors, one of its service centers, or the dealer, use only the original factory packing.

3.2 Introduction

The ELITE amplifier features a 2-way crossover and sub-low (low-cut) filter for each channel. Crossover frequencies are fixed at 150Hz, allowing subwoolers to be driven at extremely high sound pressure levels, and the filters cut at 40Hz to prevent low-end rumble. Using proven technology gained through years of amplifier design, this unit takes advantage of rugged TO-3P output devices mounted on massive aluminum extrusions and dissipates heat via an extremely quiet and effective 2-speed fan. ELITE amplifiers employ mammoth toroidal power transformers and offer impressive specifications and features not found on similarly priced competitive units. This amplifier is designed to drive a 2-ohm load per channel, thus achieving awesome performance levels into 4 ohm in BRIDGE mode. ELITE amplifiers are ruggedly constructed, rack-mountable pieces of gear with superb patching capability, allow superior flexibility in application. Front panel features include calibrated, detented gain (dB) controls and LED indicators for power (PWR), signal presence (SIG), and soft clipping (Distortion indication) activation on each channel, as well as a rocker mains POWER switch. The back of panel contains an IEC connector for the mains power cord, a main circuit breaker with reset, and the critical cooling fan opening. This opening should have an adequate supply of cool air and should never be blocked

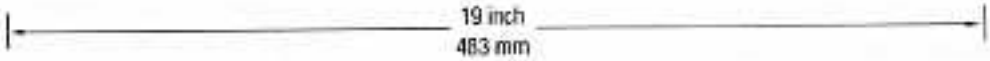
or restricted. Also on the back of panel is the input and output sections, including an input barrier strip for permanent installations. Each channel input section includes a XLR connector, THRU/LOW and HI PASS out 1/4" jacks, and the activation switches for the LOW BANDPASS filter and crossover (150Hz Xover). Channel output sections feature dual shock-proof binding posts and four-conductor Speakon connectors, as well as BRIDGE mode output.

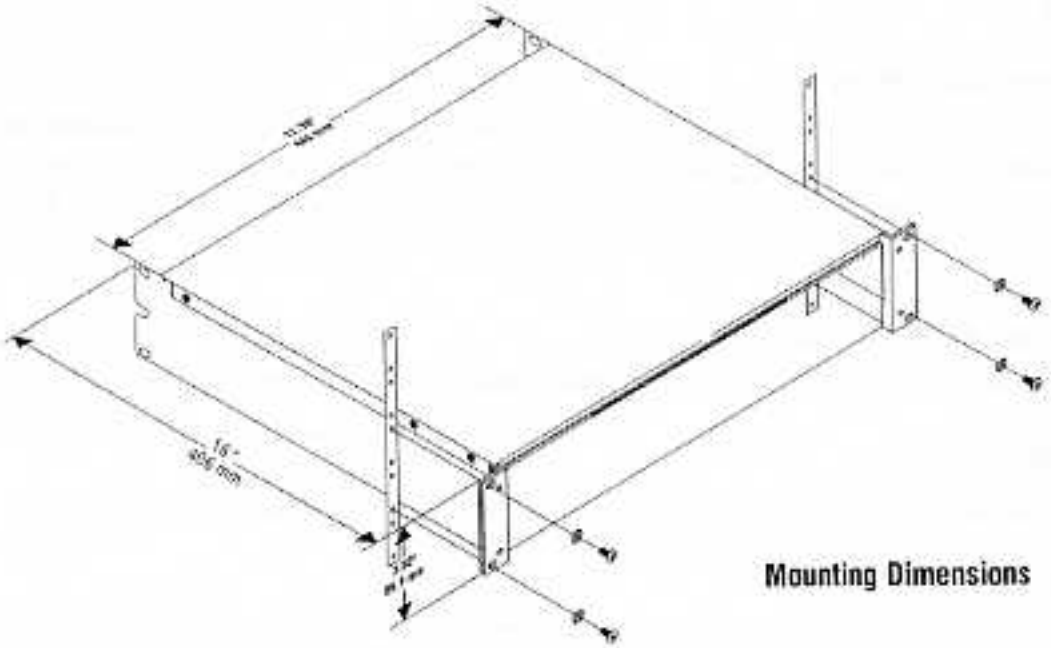
4 Installation

4.1 Mounting

ELITE professional power amplifiers are designed for standard 19 inch (483 mm) rack mounting and stack mounting without a cabinet. They are two-rack-space units of 16" (406mm) depth designed to mount in a standard 19" rack. Rear mounting ears are provided for additional support. The minimum rack depth required from the mounting surface is 17" (432mm) to allow adequate connector clearance.

You may also stack amplifier without using a rack cabinet.





Mounting Dimensions

4.2 Cooling

When using an equipment rack, mount units directly on top of each other. Close any open spaces in rack with blank panels. DO NOT block front, rear or side air vents. The side walls of the rack should be a minimum of two inches (5.1 mm) away from the amplifier sides, and the back of rack should be a minimum of four inches (10.2 mm) from the amplifier back panel.

5 Controls And Facilities

5.1 Front Panel Facilities

(1) GAIN CONTROLS(dB)

These controls are used to adjust the input gain of each channel. They determine how " loud " each channel of the power amplifier will sound for a given input signal level. Maximum input gain is achieved at the fully clockwise setting (+34dB, 50x), and this setting yields maximum mixer / system headroom. A setting of less than fully clockwise will yield lower system noise at the expense of mixer/ system headroom. Turning the control fully counterclockwise is the "off" setting (-x). It is always a good idea to power up any new installation at this setting to protest the system loudspeakers.

(2) POWER LEDS (PWR)

These indicators illuminate when the AC mains power is being supplied to the amp and both channels are operational. If either channel experiences fault conditions, exceeds safe operation temperature limits, or if the mains circuit breaker trips; both channel power LEDs will be off, indicating " shutdown ". If the BRIDGE mode is selected, the PWR indicator on the channel 1 will be remained off as a positive indication of this mode selection.

(3) SIGNAL ACTIVITY LEDS (SIG)

These indicators illuminate when the associated channel output signal level exceeds 1V RMS.

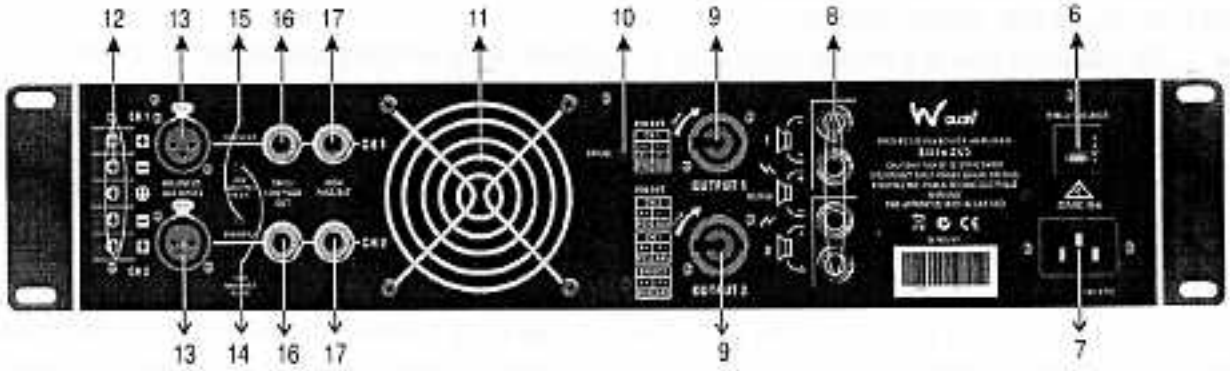
(4) CLIP LEDS

Two red indicators, one for each channel, illuminate when the channel's output signal is being overdriven.

(5) POWER SWITCH

This heavy-duty , rocker-type switch turns on the main power to the amplifier. When the mains power is applied, there is a 2 second delay in activation of the unit. This reduces/ eliminates the turn-on transients associated with the system equipment connected to the amplifier and protects loudspeakers.

5.2 Back Panel Facilities



(6) CIRCUIT BREAKER

There is one circuit BREAKER on the ELITE amplifier. This breaker is provided to limit current to the associated power transformer, and protect if from overheating and possible destruction due to the fault conditions in the unit. The trip current values has been carefully chosen to allow reasonable continuous power output performance, while still protecting the power transformer. This breaker should not be tripped unless there is a fault in the amplifier circuitry that causes excessive mains current draw. However, abnormal conditions such as a short circuit on either or both channels, or continuous operation at overload or clipping (especially into 2-ohm loads per channel or 4-ohm bridge mode) can cause the breaker to trip. If this occurs, turn the POWER switch OFF and reset the breaker, after waiting a brief period of time to allow the unit to cool down. Efforts should be made to correct the cause of the overload if possible. When tripped, the button on the BREAKER will be outward approximately 1/4" and can be reset by pushing inward and upward. A normal reset button is relatively flat. If the breaker trips instantly each time you attempt to turn the unit on, it should be taken to a qualified Service Center from our Distributor for repair.

(7) IEC MAINS CONNECTOR

This is a standard IEC power connector. An AC mains cord having the appropriate AC plug and ratings for the intended operating voltage is included in the carton.

U.S. Domestic AC Mains Cord.
The mains cord supplied with the unit is a heavy-duty, 3 conductor type with a conventional 120 VAC plug with ground pin. It should be connected to an independent circuit capable of continuously supporting at least 15 amps. This is particularly critical for sustained high-power applications. If the outlet used does not have a ground pin, a suitable grounding adapter should be used and the third wire grounded properly.

Never break off the ground pin on any equipment. It is provided for your safety.
The use of extension cords should be avoided but, if necessary, always use a 3-wire type with at least a #14 AWG wire size. The use of lighter wire will severely limit the power capability of this amplifier. Always use a qualified electrician to install any new electrical equipment. To prevent the risk of shock or fire hazard, always be sure that the amplifier and all associated equipment is properly grounded.