

OWNERS MANUAL



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.



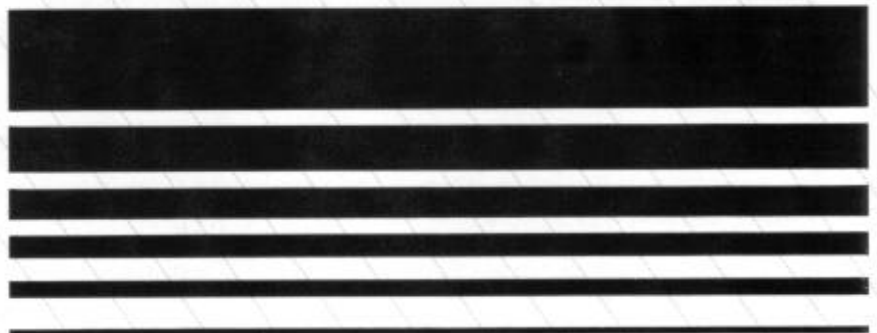
Intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

CAUTION: Risks of electrical shock — DO NOT OPEN

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



GATEKEEPER™



WARNING: TO PREVENT ELECTRICAL SHOCK OR FIRE HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. BEFORE USING THIS APPLIANCE, READ THE OPERATING GUIDE FOR FURTHER WARNINGS.

FEATURES

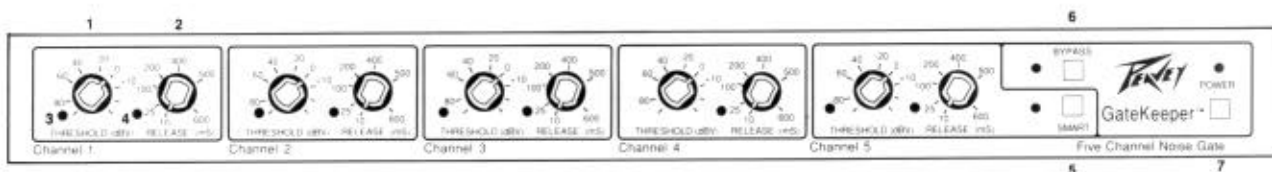
- Each channel has an adjustable gate threshold
- Each channel has an adjustable release time
- Release time is adjustable from 10 mS to 600 mS
- Threshold is adjustable from 10 dBV to constantly "on"
- A rear panel RCA jack is provided to cascade 'smart gate' functions with multiple units
- Electronically balanced Tip-Ring-Sleeve input
- Single-ended (Tip-Sleeve) output
- Mute LEDs continue to indicate in the 'bypass' mode so that the threshold can be adjusted off line

Thank you for purchasing the Peavey Gatekeeper™ intelligent gating unit. In order to read this manual you will have already unpacked the unit. Please retain the packing material for future use. When used in accordance with this manual, your unit will give years of good service.

GENERAL DESCRIPTION

Adding noise gate capability to your stage setup gives you quieting control of noisy guitar amplifiers, and other high-noise floor sources. You can also control crosstalk and leakage between players, and generally clean up many of the anomalies that can interfere with an otherwise great performance.

There is however, one drawback when using noise gates on the live stage. This comes when someone wishes to make a conversational announcement. All of the gates are set up for loud vocal levels so that this low-level speech can't be heard - the gate has to be manually adjusted, or bypassed, to allow the voice to come through, and this is often missed by the operator. The Gatekeeper solves these noise gate adjustment problems by 'listening' to all the noise gates being used, and when it sees that the other four gates are not active, it automatically opens the fifth (smart) gate so that this channel is ready to pick up information at normal speaking levels, enabling conversational level announcements to be made via channel five without readjusting the thresholds of any of the gates from live performance (singing) levels. The transition from one gate mode (regular) to another (gate five open) takes approximately two seconds in order to prevent 'gate bouncing' (where the smartgate facility is continually moving in and out). This should always be remembered when operating this unit.



FRONT PANEL

THRESHOLD (1)

Regulates the gating action of each individual channel. By rotating this control the individual channel threshold may be varied between locked on and +10 dBV.

RELEASE (2)

Regulates the release action of each individual channel. By rotating this control the individual channel release time may be varied between 10 and 600.

MUTE/THRESHOLD (RED) LED INDICATOR (3)

Provides visual indication of the closing of an individual gate. When this red LED is illuminated, the individual gate is closed, and no signal is passed through it. When the bypass switch (10) is pushed in, all the gates are opened. The MUTE/THRESHOLD (red) LED indicator will still function, enabling gate action to be set or reset conveniently at any time during a performance. This indicator functions as a response indicator for the threshold control (5), and its action will be determined by the setting of this.

OPEN (GREEN) LED INDICATOR (4)

Provides visual indication of the release (opening) action of an individual gate. When this green LED is illuminated, the individual gate is open, and signal is passing through it. This indicator functions as a response indicator for the release and threshold controls (6), and its action will be determined by their individual settings.

SMART SWITCH (5)

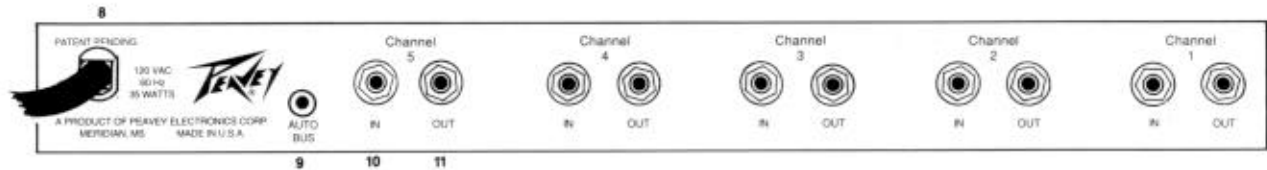
When pushed in, this switch activates the 'smart gate' function of channel #5, and a yellow LED will become illuminated. In the out position, this switch will defeat this 'smart gate' action, and the yellow LED will be off.

BYPASS SWITCH (6)

When this switch is pushed in, a red LED becomes illuminated and the gates on all five channels become opened. The MUTE/THRESHOLD indicators still function to allow for adjustment in this mode. See #8 OPEN LED.

POWER SWITCH (7)

Depress to "On" position to turn on.



**REAR PANEL
LINE CORD (8)**

For your safety, we have incorporated a 3-wire line (mains) cable with proper grounding facilities. It is not advisable to remove the ground pin under any circumstances. If it is necessary to use the equipment without proper grounding facilities, suitable grounding adaptors should be used. Less noise and greatly reduced shock hazard exists when the unit is operated with the proper grounding receptacles.

AUTO BUS (9)

If you are using two Gatekeeper units together, you may wish to connect an RCA jack-to-jack cord between the AUTO BUS sockets on them. The two units will now function as one unit and the eight noise gates will interact with the two 'smart' gates for narration purposes, etc.

INPUTS (10)

Five 1/4" Tip-Ring-Sleeve electronically-balanced jacks are provided as inputs for the Gatekeeper. (Tip = +, Ring = -, Sleeve = Ground)

OUTPUTS (11)

Five 1/4" Tip-Sleeve single-ended jacks are provided as outputs for the Gatekeeper.

INSTALLATION, CONNECTION AND OPERATION

Plug your Gatekeeper into a 115V AC receptacle by means of the power cord.

Determine which channel or signal is to be intelligently gated. Connect this to the 1/4" Tip-Ring-Sleeve electronically-balanced line level input (3) of channel five.

Up to four other signal sources may be connected to the 1/4" Tip-Ring-Sleeve electronically-balanced line level input sockets (3) of channels 1 to 4.

Connect each activated output (4) to the mixer patch point or inputs of your choice.

Switch the power on by means of the power switch.

**GATEKEEPER™
ENGINEERING SPECIFICATIONS**

TOTAL HARMONIC DISTORTION
0.01% 20 Hz to 20 kHz (at 0 dB)

SIGNAL TO NOISE RATIO
Input/Output Noise -95 dBV

ATTENUATION
55 dB

FREQUENCY RESPONSE
20 Hz - 20 kHz +0.5 dB, -1 dB

DANGER

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
1 1/2	102
1	105
1/2	110
1/4	115

ACCORDING TO OSHA, ANY EXPOSURE IN EXCESS OF THE ABOVE PERMISSIBLE LIMITS COULD RESULT IN SOME HEARING LOSS. EAR PLUGS OR PROTECTORS IN 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 INSURE AGAINST POTENTIALLY DANGEROUS EXPOSURE TO HIGH SOUND PRESSURE LEVELS, IT IS RECOMMENDED THAT ALL PERSONS EXPOSED TO EQUIPMENT CAPABLE OF PRODUCING HIGH SOUND PRESSURE LEVELS, SUCH AS THIS AMPLIFICATION SYSTEM BE PROTECTED BY HEARING PROTECTORS WHILE THIS UNIT IS IN OPERATION.

CAUTION

THIS MIXING CONSOLE/EFFECTS DEVICE/PREAMP HAS BEEN DESIGNED AND CONSTRUCTED TO PROVIDE ADEQUATE SIGNAL (VOLTAGE) FOR PLAYING MODERN MUSIC. IMPROPER USE OF THE GAIN/EQUALIZER CONTROLS AND/OR IMPROPER USE OF INTERNAL/EXTERNAL BUSES MAY CREATE CLIPPING (SQUARE WAVES) AND POSSIBLY CAUSE SUBSEQUENT DAMAGE TO THE LOUDSPEAKER SYSTEMS. EXTENDED OPERATION OF THE GAIN/EQUALIZATION CONTROLS IN THEIR MAXIMUM POSITIONS IS THEREFORE NOT RECOMMENDED. PLEASE BE AWARE THAT MAXIMUM POWER CAN BE OBTAINED WITH VERY LOW SETTINGS OF THE GAIN/EQUALIZATION CONTROLS IF THE INPUT SIGNAL IS VERY STRONG.

IT IS COMMON PRACTICE AMONG USERS OF SOUND REINFORCEMENT EQUIPMENT TO IDENTIFY THE INDIVIDUAL CHANNELS WITH A STRIP OF TAPE PLACED ABOVE OR BELOW THE ROW OF VOLUME FADERS. MANY TYPES OR BRANDS OF TAPE HAVE A VERY STRONG ADHESIVE WHICH CAN INHIBIT THE PAINT ON THE FACEPLATE AND ACTUALLY REMOVE THE PAINT WHEN THE TAPE IS REMOVED. WE STRONGLY RECOMMEND THAT SCOTCH TAPE NOT BE USED ON PAINTED SURFACES NOR ANY OTHER TAPE THAT IS NOT ESPECIALLY DESIGNED FOR SUCH APPLICATIONS. MEDIUM OR LIGHT ADHESIVE MASKING OR MIXER LABEL TAPE IS RECOMMENDED IF TAPE IS USED. ANY TAPE LEFT ON PAINTED SURFACE FOR EXTENDED PERIODS WILL BE DIFFICULT TO REMOVE. NEVER USE CLEAR OR SCOTCH TAPE FOR THESE APPLICATIONS.

1. Read all safety and operating instructions before using this product.
2. All safety and operating instructions should be retained for future reference.
3. Obey all cautions in the operating instructions and on the back of the unit.
4. All operating instructions should be followed.
5. This product should not be used near water, i.e. a bathtub, sink, swimming pool, wet basement, etc.
6. This product should 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 producing 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 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 parts can be cleaned with a damp rag. The vinyl covering used on some units can be cleaned with a damp rag of an ammonia based household cleaner if necessary.
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 to attempt to service this equipment. All service work should be done by a qualified service technician.

THIS LIMITED WARRANTY VALID ONLY WHEN PURCHASED AND REGISTERED IN THE UNITED STATES OR CANADA. ALL EXPORTED PRODUCTS ARE SUBJECT TO WARRANTY AND SERVICES TO BE SPECIFIED AND PROVIDED BY THE AUTHORIZED DISTRIBUTOR FOR EACH COUNTRY.

Ces clauses de garantie ne sont valables qu'aux Etats-Unis et au Canada. Dans tous les autres pays, les clauses de garantie et de maintenance sont fixées par le distributeur national et assurées par lui selon la législation en vigueur.

Diese Garantie ist nur in den USA und Kanada gültig. Alle Export-Produkte sind der Garantie und dem Service des Importeurs des jeweiligen Landes unterworfen.

Esta garantía es válida solamente cuando el producto es comprado en E.U. continentales o en Canada. Todos los productos que sean comprados en el extranjero, están sujetos a las garantías y servicio que cada distribuidor autorizado determine y ofrezca en los diferentes países.

ONE-YEAR LIMITED WARRANTY/REMEDY

PEAVEY ELECTRONICS CORPORATION ("PEAVEY") warrants this product, EXCEPT for covers, footswitches, patchcords, tubes and meters, to be free from defects in material and workmanship for a period of one (1) year from date of purchase, PROVIDED, however that this limited warranty is extended only to the original retail purchaser and is subject to the conditions, exclusions and limitations hereinafter set forth:

PEAVEY 90-DAY LIMITED WARRANTY ON TUBES AND METERS

If this product contains tubes or meters, Peavey warrants the tubes or meters contained in the product to be free from defects in material and workmanship for a period of ninety (90) days from date of purchase; PROVIDED, however, that this limited warranty is extended only to the original retail purchaser and is also subject to the conditions, exclusions and limitations hereinafter set forth.

CONDITIONS, EXCLUSIONS AND LIMITATIONS OF LIMITED WARRANTIES

These limited warranties shall be void and of no effect if:

- The first purchase of the product is for the purpose of resale; or
- The original retail purchase is not made from an AUTHORIZED PEAVEY DEALER; or
- The product has been damaged by accident or unreasonable use, neglect, improper service or maintenance, or other causes not arising out of defects in material or workmanship; or
- The serial number affixed to the product is altered, defaced or removed.

In the event of a defect in material and/or workmanship covered by this limited warranty, Peavey will:

- In the case of tubes or meters, replace the defective component without charge;
- In other covered cases (i.e., cases involving anything other than covers, footswitches, patchcords, tubes or meters), repair the defect in material or workmanship or replace the product, at Peavey's option; and provided, however, that, in any case, all costs of shipping, if necessary, are paid by you, the purchaser.

THE WARRANTY REGISTRATION CARD SHOULD BE ACCURATELY COMPLETED AND MAILED TO AND RECEIVED BY PEAVEY WITHIN FOURTEEN (14) DAYS FROM THE DATE OF YOUR PURCHASE.

In order to obtain service under these warranties, you must:

- Bring the defective item to any AUTHORIZED PEAVEY DEALER or AUTHORIZED PEAVEY SERVICE CENTER and present therewith the ORIGINAL PROOF OF PURCHASE supplied to you by the AUTHORIZED PEAVEY DEALER in connection with your purchase from him of this product. If the DEALER or SERVICE CENTER is unable to provide the necessary warranty service you will be directed to the nearest other PEAVEY AUTHORIZED DEALER or AUTHORIZED PEAVEY SERVICE CENTER which can provide such service.

OR

- Ship the defective item, prepaid, to:

PEAVEY ELECTRONICS CORPORATION
International Service Center
Highway 80 East
MERIDIAN, MS 39301

including therewith a complete, detailed description of the problem, together with a legible copy of the original PROOF OF PURCHASE and a complete return address. Upon Peavey's receipt of these items:

If the defect is remedial under these limited warranties and the other terms and conditions expressed herein have been complied with, Peavey will provide the necessary warranty service to repair or replace the product and will return it, FREIGHT COLLECT, to you, the purchaser.

Peavey's liability to the purchaser for damages from any cause whatsoever and regardless of the form of action, including negligence, is limited to the actual damages up to the greater of \$500.00 or an amount equal to the purchase price of the product that caused the damage or that is the subject of or is directly related to the cause of action. Such purchase price will be that in effect for the specific product when the cause of action arose. This limitation of liability will not apply to claims for personal injury or damage to real property or tangible personal property allegedly caused by Peavey's negligence. Peavey does not assume liability for personal injury or property damage arising out of or caused by a non-Peavey alteration or attachment, nor does Peavey assume any responsibility for damage to interconnected non-Peavey equipment that may result from the normal functioning and maintenance of the Peavey equipment.

UNDER NO CIRCUMSTANCES WILL PEAVEY BE LIABLE FOR ANY LOST PROFITS, LOST SAVINGS, ANY INCIDENTAL DAMAGES OR ANY CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT, EVEN IF PEAVEY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

THESE LIMITED WARRANTIES ARE IN LIEU OF ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE; PROVIDED, HOWEVER, THAT IF THE OTHER TERMS AND CONDITIONS NECESSARY TO THE EXISTENCE OF THE EXPRESS, LIMITED WARRANTIES, AS HEREINABOVE STATED, HAVE BEEN COMPLIED WITH, IMPLIED WARRANTIES ARE NOT DISCLAIMED DURING THE APPLICABLE ONE-YEAR OR NINETY-DAY PERIOD FROM DATE OF PURCHASE OF THIS PRODUCT.

SOME STATES DO NOT ALLOW LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THESE LIMITED WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

THESE LIMITED WARRANTIES ARE THE ONLY EXPRESS WARRANTIES ON THIS PRODUCT, AND NO OTHER STATEMENT, REPRESENTATION, WARRANTY OR AGREEMENT BY ANY PERSON SHALL BE VALID OR BINDING UPON PEAVEY.

In the event of any modification or disclaimer of express or implied warranties, or any limitation of remedies, contained herein conflicts with applicable law, then such modification, disclaimer or limitation, as the case may be, shall be deemed to be modified to the extent necessary to comply with such law.

Your remedies for breach of these warranties are limited to those remedies provided herein and Peavey Electronics Corporation gives this limited warranty only with respect to equipment purchased in the United States of America.

INSTRUCTIONS — WARRANTY REGISTRATION CARD

1. Mail the completed WARRANTY REGISTRATION CARD to:

PEAVEY ELECTRONICS CORPORATION
POST OFFICE BOX 2898
MERIDIAN, MISSISSIPPI 39302-2898

- a. Keep the PROOF OF PURCHASE. In the event warranty service is required during the warranty period, you will need this document. **There will be no identification card issued by Peavey Electronics Corporation.**
2. IMPORTANCE OF WARRANTY REGISTRATION CARDS AND NOTIFICATION OF CHANGES OF ADDRESS.
 - a. Completion and mailing of WARRANTY REGISTRATION CARDS — Should notification become necessary for any condition that may require correction, the REGISTRATION CARD will help ensure that you are contacted and properly notified.
 - b. Notice of address changes — if you move from the address shown on the WARRANTY REGISTRATION CARD, you should notify Peavey of the change of address so as to facilitate your receipt of any bulletins or other forms of notification which may become necessary in connection with any condition that may require dissemination of information or correction.
 3. You may contact Peavey directly by telephoning (601) 483-5365.
 4. Please have the Peavey product name and serial number available when communicating with Peavey Customer Service.



Features and specifications subject to change without notice.

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