

Elite Acoustics Engineering A4-8 MKII 80W Lithium Battery Powered Acoustic Amplifier with 4 Channels, Mixer, Effects, and Bluetooth® *Quick Start Guide V1.00*



WHAT IS IN THE BOX

Your A4-8 MKII package contains the following:

- (1) Speaker
- (1) 12V AC Power Supply Adapter

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NOTE: Due to continuous development and improvements of our products, features and specifications are subject to change without notice. All weights and measures are approximate. Revision Date - July 10, 2019.

QUICK START

1. Battery Switch [37] is set to Connect. (Battery Switch is set to Disconnect position to preserve battery life for transit or storage.)
2. Make sure the SPEAKER VOLUME [3] control is down before you turn the POWER [38] on.
3. Connect the input of your microphone to the MIC IN [18]. Or you can connect a ¼" line input from an instrument [17]. You can also connect an additional mono or stereo [20]. All EQ knobs (21) should be set to 12 o'clock (FLAT EQ), Notch Filter knob (19) should be also in the 12 o'clock. MUTE switch (13) and Phase switch (15) is out. EFX send level (14) should be at minimum.
4. Turn on the POWER [38] switch, battery meter should be all GREEN (indicate battery is fully charged)
5. EFX MIX knob (8) should be set to 12 o'clock. EFX should be bypassed until you are ready to test EFX. Monitor EQ (6) should be set to 12 o'clock "FLAT EQ"
6. Turn up GAIN [12] until there is a solid green light showing "signal"[CHAN 1 meter] at desired level, without a red "peak"[CHAN 1 meter] light, indicating too much signal. Some MIC or INPUTs can distort the Speaker even with Gain Knob (12) at Minimum. Press the PAD switch (16) to reduce the input signal level to avoid distortion if input signal level is too high.
7. Adjust the SPEAKER VOLUME [3] to a comfortable level.
8. If you want to test Bluetooth® streaming, Connect device to Bluetooth® [40]
9. Recommended Monitor EQ (6) setting for Bluetooth playback - High and Mid (12 o'clock) Low (1 - 2 o'clock)
10. Note if you are using an iPhone or iPad via Bluetooth®, set the volume on your device about halfway. Maximum volume will distort. The Monitor Sigle (GREEN) LED is a good indication of a good input level from your Bluetooth or AUX inputs.
11. Use Channel 1 for your Acoustic Guitar and Channel 2 for your vocal.
12. when you are getting a good sound without CHAN EQ or EFX, time to start playing with the CHAN EQ and EFX - start with these recommended setting and adjust to achieve the tone you prefer.
13. Acoustic Guitar EQ setting recommendations.
Low Volume - High (1 o'clock) Mid (12 o'clock) Low (1 o'clock)
14. Acoustic Guitar EQ setting recommendations.
Medium Volume - High (2 o'clock) Mid (11 o'clock) Low (2 o'clock)
15. Acoustic Guitar EQ setting recommendations.
High Volume - High (12 o'clock) Mid (9 o'clock) Low (12 o'clock)
16. Set you vocal EQ FLAT to start and adjust EQ as you need.
17. Release the EFX mute switch (11)
18. Set EFX send level knob (14, 24, 31) on each channel to about 3 o'clock.
19. Select R2 - Reverb - Dark Cavern.
20. Turn EFX Parameter Knob (9) to 12 o'clock.
21. Turn Mix Knob (11) to 5 o'clock. Slowly turn it CCW to achieve the level of EFX you prefer.

Top Panel View



Power LED:

BLUE [1]: Indicate unit is ON

+48V LED [2]: Indicates Phantom Power is on -- for Both Chan 1 and Chan 2.



Monitor Output Controls

Speaker Volume [3]: Control speakers' volume level

Mono [4]: Changes speaker output to Mono sound

Monitor Equalizer [6]: Adjust Speaker High, Mid, and Low Frequency response

Peak LED [5]: RED indicate Signal Clip

Signal LED [5]: GREEN indicate Signal

Aux Input/Level [7]: Connect audio source with 1/8" jack from MP3/CD player.



Effects Controls

Effects Mix [8]: Amount of effect being applied to Input, Dry and Wet mix. There is no EFX if knob is completely on DRY position.

Rate/Decay [9]: Controls the duration of the effect

Effects Knob Selector [10]: Select effect of choice



Metering

Chan 1 Signal, Clip and Mute LED

Chan 2 Signal, Clip and Mute LED

Chan 3 Signal and Clipping LED

Use Signal and Clip LEDs to monitor the input signals to help prevent distortion.



BLUETOOTH® FUNCTION

- To turn ON/OFF Bluetooth® function
PRESS/HOLD down **MODE** button for approximately 5 seconds
Both LEDs will flash at the simultaneously
- To pair device to the speaker system
Bluetooth® needs to be turned ON
QUICK TAP the **MODE** button once
Both Flashing LED: indicate Bluetooth® is ready to be paired
Flashing Blue LED only: indicate Bluetooth® is connected

Extend the Bluetooth Antenna to increase range for Bluetooth.



Channel 2

Gain [22]: Gain level control

Mute [23]: Mute channel

EFX Send Level [24]: How much output effect is being sent out

Phase [25]: Change in phase of waveform

PAD [26]: Attenuate if needed

Line In [27]: 1/4" TRS inputs Balanced

Mic In [28]: XLR for Microphone Input Balanced

Equalizer [29]: Controls Low, Mids, and High



Channel 3/4

Gain [30]: Gain level control

EFX Send Level

[31]: How much output effect is being sent out

Left/Right Input [32]: 1/4" TRS Input



Monitor Output: Connect with extra speakers/monitors

Monitor Right Output [33]: Connect to another speaker using 1/4" TRS

Foot Switch[36] : Connect up to 3 Foot Switches Footswitch #1 is for EFX bypass. #2 is for Mute Chan #1 and #3 is for Mute Chan #2. "FootSwitch controller is optional and not included."



Output Source [34]: Assigns Main Output or Channel 1/2 Direct Output

Main Output [35]: XLR Left/Right Output

Main Output Level control



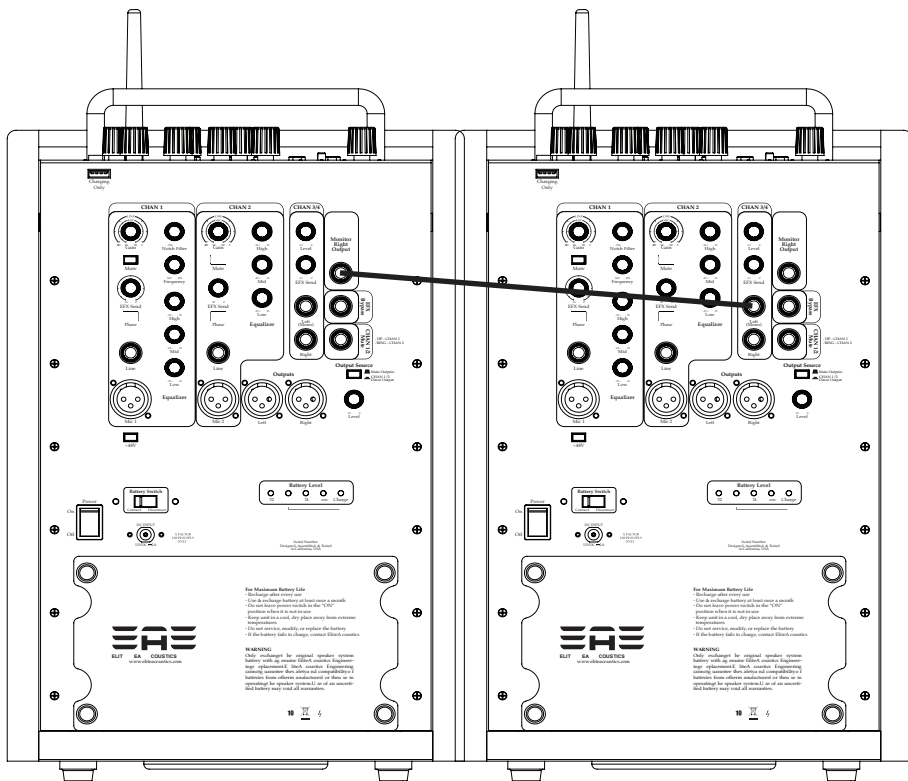
Battery Switch[37] : Built in Slide Switch to preserve battery life.

Connect: Enable battery power when using unit

Disconnect: Disable battery power when storing unit to preserve battery life

CONNECTING TO ANOTHER SPEAKER FOR STEREO

The Monitor Right Output (33) allows you to add a secondary active monitor while preserving the stereo image. The Monitor unit will play the Left Channel content and the secondary monitor will play the Right Channel. If stereo imaging is not desired, simply engage the Mono button on the A4-8's top panel. Note that the Monitor Right Output (33) will not drive a passive speaker; it is a Line-level output that can drive amplifiers or active monitor systems. Connect Master Speaker Right output (33) to Secondary speaker Chan 3/4 Line input (32). Set Secondary Speaker Gain (30) to 3 o'clock. Then set Secondary Monitor Level (3) to balance the Left (Master speaker) and Right (Secondary speaker) channels. EQ on Secondary Speaker should be FLAT and EFX (11) should be bypassed.



CONNECTING TO ANOTHER ACTIVE SPEAKER (HOUSE PA) FROM DIRECT OUTPUTS OR MAIN MIX OUTPUTS

The XLR output jacks can be used for MAIN MIX outputs (separate from the Monitor Speaker Output) or Direct Outputs for Chan 1 "Left" (35) and Chan 2 "Right" (35) with Level Control. Switch (34) control Main (Switch Out) or Direct Out (Switch pressed in).

EFFECTS

R1 BRIGHT CAVERN
R2 DARK CAVERN
R3 BRIGHT HALL
R4 DARK HALL
R5 BRIGHT ROOM
R6 DARK ROOM
R7 BRIGHT PLATE
R8 DARK PLATE
R9 AMBIENCE1
R10 AMBIENCE2
E1 ECHO
E2 REPEAT ECHO
ER1 ECHO/REV1
ER2 ECHO/REV2
CHO CHORUS
FLANGE FLANGE

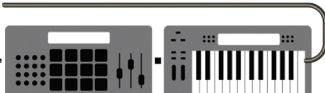
INSTR/LINE IN



A4-8

Live-Performance Studio Monitor
with 4 Channels, Mixer, Effects,
and Bluetooth®

LEFT / RIGHT INPUT



DIR OUT/MAIN RIGHT OUTPUT



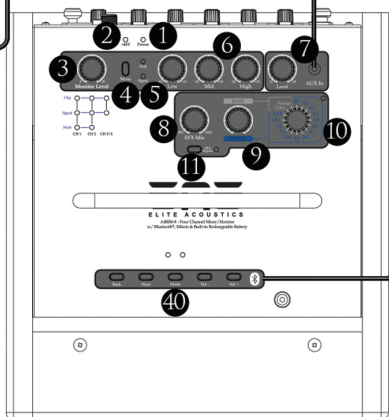
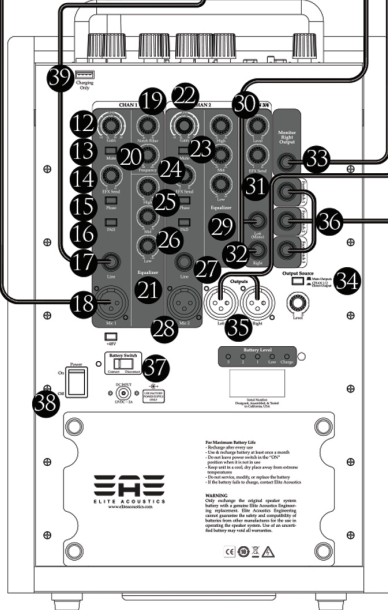
MIC IN



FOOT SWITCH



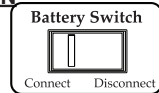
AUX



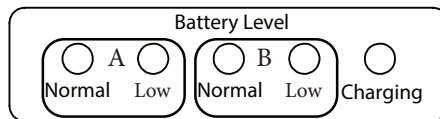
EAE BATTERY & RECHARGING INFORMATION

1. To fully charge a unit –

- Set Battery Switch to “CONNECT”
- Turn Power Switch OFF
- Connect “AC” adaptor to Power Jack.
- (Bi Color) “Charge” LED should be lit, Charge time can vary from 5 to 6 hours
- Once it is fully charged LED “Bi Color” will turn off.



- When unit is powered with “AC” adaptor, Battery Switch should be in “DISCONNECT” position if Battery is already fully charged.
- Battery Switch should be on “DISCONNECT” when unit is packed for transit or unit is in storage. Make sure battery is fully charged before UNIT is put into storage. We recommend fully drain and then fully charging the battery at least once each month.



- Battery Meter -
- .
- A: Normal (GREEN), Low (RED), B: Normal (GREEN), Low (RED). Charge LED (Bi-color) RED/YELLOW.
- Normal- GREEN LEDs indicate Battery is charged ~80% or MORE.
- LOW - RED LEDs indicate Battery is less than ~10% Charged.
- When Both “Normal” and “Low” LEDs are on at the same time, the battery level is lower than ~25%
- CHARGE LEDs (Bi-color LED) - Both Color “ON” while it is CHARGING, both color “OFF” when fully charged.

FOR MAXIMUM BATTERY LIFE

- Battery Type: LifePO4 - Lithium Iron Phosphate.
- Charge Battery when is LOW or Depleted.
- Use & recharge battery at least once a month
- DO NOT leave power switch in the “ON” position when it is not in use. Doing so after a long period of time will damage the battery
- If unit is always plugged in, it is recommended to put Battery Switch in Disconnected position, but make sure to recharge unit monthly.
- Keep unit in a cool, dry place away from extreme temperatures
- Do not service, modify, or replace the battery
- If the battery fails to charge, contact Elite Acoustics Engineering

HOW TO DEAL WITH ACOUSTIC FEEDBACK

Simply put, the annoying shrilling howl of growing and untamed feedback is the result of “in-phase” frequencies getting together and being reinforced by the sound system and environment.

Phase Switch – since the purpose of the Phase Switch is to reverse the polarity, the first line of defense is to change the phase, which can sometimes be a cure all by itself. This has the effect of changing the phase relationship between the amplified signal and live sound, which can break up some “in-phase” reinforcing components. On the other hand, it’s preferred if we can leave the phase set to provide the most natural and balanced sound.

Notch Filter – Another way to prevent “in-phase” reinforcement is to simply find and “notch” out the offending frequency. The approach is straight forward; with the Notch set to full “cut” (counter clockwise), slowly rotate the Notch Frequency to align with and cancel the offensive tone.

Phase and Notch – probably the most widely used approach is to start without the notch filter engaged, and to bring up the gain and or volume to encourage feedback. Changing the Phase will change the frequency of the feedback. Leave the Phase set to whichever setting produces the higher pitched note. Next, use the aforementioned Notch technique to hone in on and prevent the feedback. Keep in mind, fighting feedback in this manner may or may not appeal to your taste in overall tone. It’s certainly fair to experiment and try it the other way around, i.e., Phase switch to stop HF tone and Notch to cutout the LF tone. After all, Live Sound is an Art and when it’s all said and done tone is King.

ABOUT EQ AND PHASE SETTINGS

High – used to add sibilance and crispness to your sound, with the knob at 12:00, there is no boost or cut to the high frequency content.

Mid – Helps control the clarity of your overall mix and should be adjusted to suit lower or higher volume performance levels. Boosting the mids helps speech clarity and intelligibility at lower volumes while cutting the mids produces a more natural sound at higher volumes. The Mid frequency selection knob allows for a range extending from high LF to low HF. When set to 12:00 the Mid frequency peak is around 1.2k Hz, with +/- 12dB of boost or cut depending on the setting of the Mid knob. Here again, with Mid set to 12:00 the mid control is effectively out of the circuit.

Low – In general, lower volumes can benefit from LF boost to help bring out the bass at these lower settings, but it is usually left flat or even slightly cut for high playback levels.

Notch – When it comes to the mechanics, Notch filtering is very much like the adjustable mid frequency described above. However, the frequency range is much lower, and the filter itself is much tighter, hence the term “notch.” When used in “cut” mode, this is very effective in managing feedback, which is explained in some detail in our Feedback section. However, the notch can be set to cut or boost to allow for the full range of possibilities. Many times feedback is not an issue, and the artist can take advantage of a particular notch setting to effectively tweak a final mix to accommodate specific room or instrumentation considerations.

Phase – Use the phase setting that best supports your overall sound and system integration considerations. For example, Phase can be set to facilitate the best bass response at low volumes, and it can also be effective as a feedback deterrent, which will be reviewed in our Feedback section.

DIGITAL EFX

EFFECTS

R1 BRIGHT CAVERN
R2 DARK CAVERN
R3 BRIGHT HALL
R4 DARK HALL
R5 BRIGHT ROOM
R6 DARK ROOM
R7 BRIGHT PLATE
R8 DARK PLATE
R9 AMBIENCE1
R10 AMBIENCE2
E1 ECHO
E2 REPEAT ECHO
ER1 ECHO/REV1
ER2 ECHO/REV2
CHO CHORUS
FLANGE FLANGE

16 DIGITAL EFX PROGRAMS

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- There are 16 total Digital EFX programs
- R1 to R10 - REVERB
- E1 and E2 - ECHO
- ER1 and ER2 - Echo and Reverb
- CHO - Chorus
- FLange - Flanger
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- Program select Encoder (10) is for program change.
- Parameter knob (9) to change rate or delay time for the program that is set.
- Mix knob (8) is to fine turn the amount of EFX you want in output mix.
- EFX can be bypassed by Pressing the bypass switch (9)
- EFX send levels for each channel is set by on the rear panel (14, 24, and 31) that correspond to each channel.
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TIPS

- Distorted Sound
- 1) Check input level to make sure input Signal Light is in GREEN and not CLIPPING RED. Reduce Input by turn down GAIN knob (12, 22, 30), input Gain can also be reduced by Pressing "PAD" (16, 26), some MIC or PRE-AMPs have very high output level, using the PAD switch for those devices and will help you reduce the chance of distortion. Make sure all EQ knobs are set to Middle. (FLAT)
- 2) Check Monitor Signal Light is also GREEN and not Clipping. Reduce Speaker Level by turning Monitor Knob (3), make sure EQ is set to middle (FLAT)
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- No Sound
- 1) Check LED signal lights. Green means there is Signal on the input.
- 2) Make sure MIX knob is at 12 o'clock position.
- 3) Make sure Channel is un-muted.
- 4) Make sure +48V is on when using a Condenser Mic. Make sure to MUTE when turning on +48V to prevent loud POP sound.
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- Battery not Holding Charging
- 1) Power unit off and charge the unit for 24 hours with Battery switch in Connected position. If problem still persist, contact info@eliteacoustics.com for battery replacement instructions.
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SYSTEM SPECIFICATIONS

Speakers:

Woofer = 8"

Tweeter = 1" Silk-Dome

Optimized front ports for extended low-frequency response

Frequency response 70Hz - 20k Hz

Cabinet: MDF or Plywood.

Amplifier:

Ultra High-Efficiency Class D 80W Bi-AMP

EQ Controls:

Low +/- 12dB @ 50Hz (shelving)

Mid +/- 12dB @ 200Hz – 4k Hz (resonant)

High +/- 12dB @ 10k Hz (shelving)

Notch +/- 12dB @ 80Hz – 400 Hz (high-Q resonant)

Battery:

Built-in Lithium Iron Phosphate (LifePO4) type, rechargeable [11000Ah]

Typical recharge time ~ 5.5 hours

Play time ~ 4 to 6 hours

Power Supply:

DC 12V, 5000 mA

Physical:

Dimensions: 9.0"L x 9.0"W x 14.5"H

Weight: 24 lbs

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- **Nominal output level (1 kHz):** Right Channel Link out: -10 dBu Main/Direct Output: +4dBu
- **Channel controls: CH1 & 2:** EFX Send Level knob, Gain knob, Mute switch, Phase, Pad Notch Filter, Frequency, & EQ(Channel 1 EQ includes Mid Frequency) **CH3/4:** Level Knob & EFX Send Level
- **EFX Effect controls:** Dry/Wet knob, Decay/Rate knob, 16 different effects(Bright/Dark Cavern, Bright/Dark Hall, Bright/Dark Room, Bright/Dark Plate, Ambience1, Ambience2, Echo, Repeat Echo, Echo/Rev1, Echo/Rev2, Chorus, Flange)
- **Master controls:** Volume Knob, Mono Switch, Equalizer (Low, Mid, High knob), Effect Mix, Decay/Rate, Effects
- **Stereo Inputs:** 1/4" Left/Right input jacks
- **Phantom Power:** +48V
- **Aux in control:** Level knob
- **Indicators:** signal clip, power, +48V, EFX Bypass, Bluetooth®
- **Connectors: CH1 & 2:** Input jacks (XLR type, 1/4" TRS phono type), **CH3/4:** Left/Right stereo input (1/4" TRS phono type), AUX in: input jacks (1/8" jack), Right channel output: line out jack Right (XLR type), DC in jack
- **Power Switch**
- **Other features:**
 - Playback from Bluetooth device
 - USB charging dock
 - Optimized front ports for extended low-frequency response
 - Rechargeable Battery can be recharged from Car battery when using DC car adaptor cord that is optional.
 - Built-in pole-mount, 35mm receptacle on bottom of unit
- **Accessories:** AC cord, AC adaptor, Optional DC cord for the car, Owner's manual

CAR ADAPTOR "OPTIONAL"

- Unit can operate normally when plug into the Car Adaptor.
- Battery can also be charged by using the Car Adaptor.
- It is not recommended that you leave the unit plugged in while car is not running.



Legal Notice: CALIFORNIA PROPOSITION 65 WARNING
WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS.

1. THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
2. THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.

WARRANTY (USA ONLY)

Contact the Distributor in your area for service and warranty info.

Elite Acoustics Engineering Inc. warrants this product to be free of defects in material and workmanship (excluding battery) for a period of 1 year from the date of original retail purchase. Elite Acoustics Engineering Inc. warrants the Speaker's Battery for 90 days from the date of original retail purchase. This warranty is enforceable only by the original retail purchaser. To be protected by this warranty, the purchaser must complete and return the enclosed warranty card within 14 days of purchase. During the warranty period EAE shall, as its sole and absolute option, either repair or replace, free of charge, any product that proves to be defective on inspection by EAE or its authorized service representative. To obtain warranty service, contact Elite Acoustics Engineering Technical Support via email: RMA@eliteacoustics.com. PRE-AUTHORIZATION MUST BE OBTAINED BEFORE SENDING ANY PRODUCT TO AN ELITE ACOUSTIC ENGINEERING SERVICE CENTER. All inquiries must be accompanied by a description of the problem. All authorized returns must be sent to the EAE repair facility postage prepaid, insured and properly packaged. EAE reserves the right to update any unit returned for repair. EAE reserves the right to change or improve the design of the product at any time without prior notice. This warranty does not cover claims for damage due to abuse, neglect, alteration, or attempted repair by unauthorized personnel and is limited to failures arising during normal use that are due to defects in material or workmanship in the product. Any implied warranties, including implied warranties of merchantability and fitness for a particular purpose, are limited in duration to the length of this limited warranty. Some states do not allow limitations on how long an implied warranty lasts, therefore above limitation may not apply to you. In no event will EAE be liable for incidental, consequential, or other damages resulting from the breach of any express or implied warranty, including among other things, damage to property, damage based on inconvenience or on loss of use of the product, and, to the extent permitted by law, damages for personal injury. Some states do not allow the exclusion of limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. This warranty only applies to products sold and used in the United States of America. For warranty information in all other countries please refer to your local distributor.

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