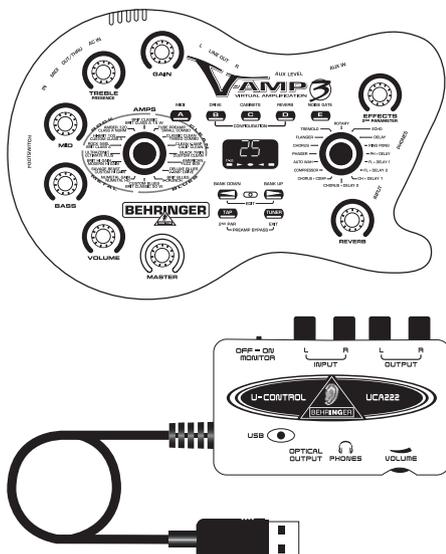


User Manual



V-AMP 3

Next-Generation Virtual Guitar Amplifier with USB Audio Interface and energyXT2.5 Recording Software

Thank you

Thank you for choosing the V-AMP 3. This powerful and versatile guitar preamp is the latest in the line of acclaimed V-AMP series processors, adding 4 new amp models over its predecessor, the V-AMP 2. With 32 amp models, 15 speaker cabinet simulations and a host of high-quality digital effects, it's like having a studio full of guitar gear in a device smaller than your computer keyboard.

In addition to the many features and applications found in the V-AMP 3, we've also included the UCA222 USB audio interface to unlock your full potential as a recording musician. This simple interface features stereo inputs and outputs, optical S/PDIF output, and dedicated monitoring via headphone output—and it requires no external power. Along with this bonus comes a ¼" TRS to stereo RCA adapter cable, low-latency drivers for Windows XP and Vista, and the multi-platform music production software energyXT2.5 Compact BEHRINGER Edition. Visit www.behringer.com to find out what this powerful software has to offer.

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Important Safety Instructions



Caution

To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user serviceable parts inside; refer servicing to qualified personnel.



Caution

To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture. The apparatus shall not be exposed to dripping or splashing liquids and no objects filled with liquids, such as vases, shall be placed on the apparatus.



Caution

This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure—voltage that may be sufficient to constitute a risk of shock.



Caution

This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.



Caution

These service instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operation instructions. Repairs have to be performed by qualified service personnel.

- ① Read these instructions.
- ② Keep these instructions.
- ③ Heed all warnings.
- ④ Follow all instructions.
- ⑤ Do not use this apparatus near water.
- ⑥ Clean only with dry cloth.

- ⑦ Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- ⑧ Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- ⑨ 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 blade 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.
- ⑩ Place the power cord so that it is protected from being walked on and sharp edges. Be sure that the power cord is protected particularly at plugs, convenience receptacles and the point where it exits from the apparatus.
- ⑪ Use only attachments/accessories specified by the manufacturer.
- ⑫ 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.
- ⑬ Unplug this apparatus during lightning storms or when unused for long periods of time.



- ⑭ 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.
- ⑮ The apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.
- ⑯ Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

Basic Operation

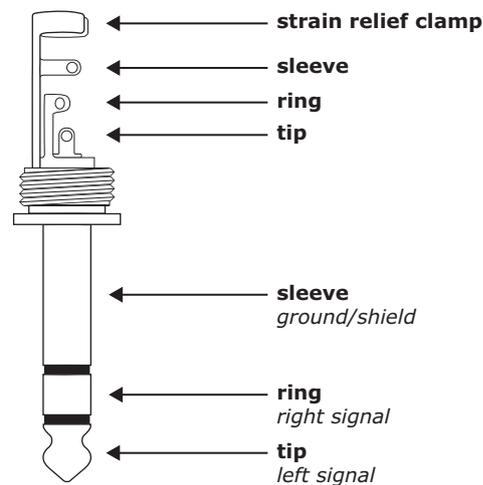
1. Plug the included power cable into the AC IN on the side of the unit. The V-AMP 3 will automatically turn on and resume the previously selected preset.
2. Plug your guitar into the INPUT using a 1/4" instrument cable.
3. Connect a monitoring system:
 - If using a pair of headphones, connect to the PHONES jack.
 - If using a guitar amplifier, connect a 1/4" cable from the V-AMP 3's LEFT LINE OUT jack to the amplifier's effects loop return jack. Use the Live 3 output configuration for best results. (See Operating Modes section for details.)
 - If plugging straight to the house PA system, connect the LINE OUT jacks to a stereo channel on the main house mixer. Use the Live 1 output configuration for best results.
 - If using the UCA222 to record or jam to a track on your computer, you may use the included 1/4" TRS-to-RCA adaptor cable to connect the V-AMP 3's PHONES jack to the UCA222 and monitor the signal with the UCA222 headphone jack.
4. Connect the optional FS112V footswitch to the FOOTSWITCH input. The footswitch allows you to scroll through the presets while playing. Pressing and holding down the DOWN button on the footswitch accesses the tuner. Tap the DOWN button again to return to normal play mode.
5. Make sure the volume control on your guitar is turned up, then turn up the MASTER knob to desired level.

NOTE: If the current preset volume is set low, there may be a considerable increase in volume when you change presets.
6. Press the TUNER button if you need to tune your guitar.
7. Press the BANK UP and BANK DOWN buttons to scroll through the banks of presets. Press the A – E buttons to select a preset in that bank.
8. Adjust the tone with the GAIN, TREBLE, MID and BASS knobs.
9. Select a new amp model by turning the AMPS knob. Hold the TAP button while turning the AMPS knob to select one of the 2nd level amps (grey lettering).
10. Add an effect by turning the EFFECT SELECT knob to the desired selection. Adjust the EFFECTS knob to determine the level of the effect. Hold the TAP button while turning the EFFECTS knob to adjust the second effects parameter. (see effects table for details)
11. Add reverb by adjusting the REVERB knob.
12. Save your settings. If you have altered a preset or made one from scratch, the preset LED will blink. In order to save this setting, first select the bank you would like to save to, then hold down one of the A – E buttons for 2 seconds. Make sure you save over a preset that you no longer want to keep.
13. Rock out and have fun!

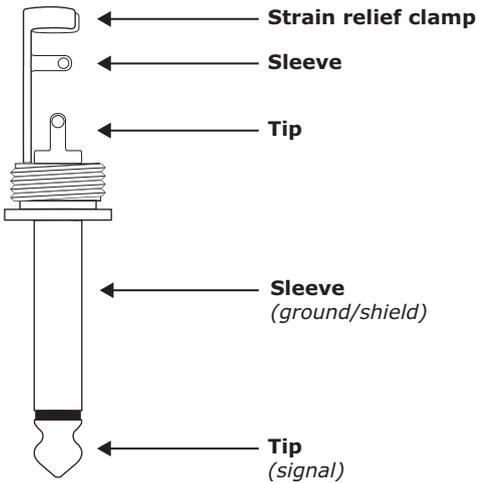
NOTE: The UCA222 will work on both PC and Mac computers without any additional software. However, we recommend that PC users install the low-latency USB ASIO driver for Windows XP/Vista, available for download on our website at www.behringer.com. Most users will benefit from the most recent version (2.8.17) of the driver, but rare computer chipsets may require the older 2.8.14 version.

Please visit www.behringer.com regularly for updates, add-ons and tips regarding your V-AMP 3.

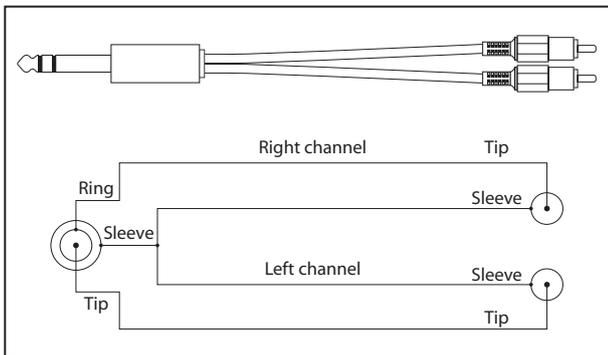
Audio Connections



1/4" TRS headphones connector



Unbalanced 1/4" TS connector

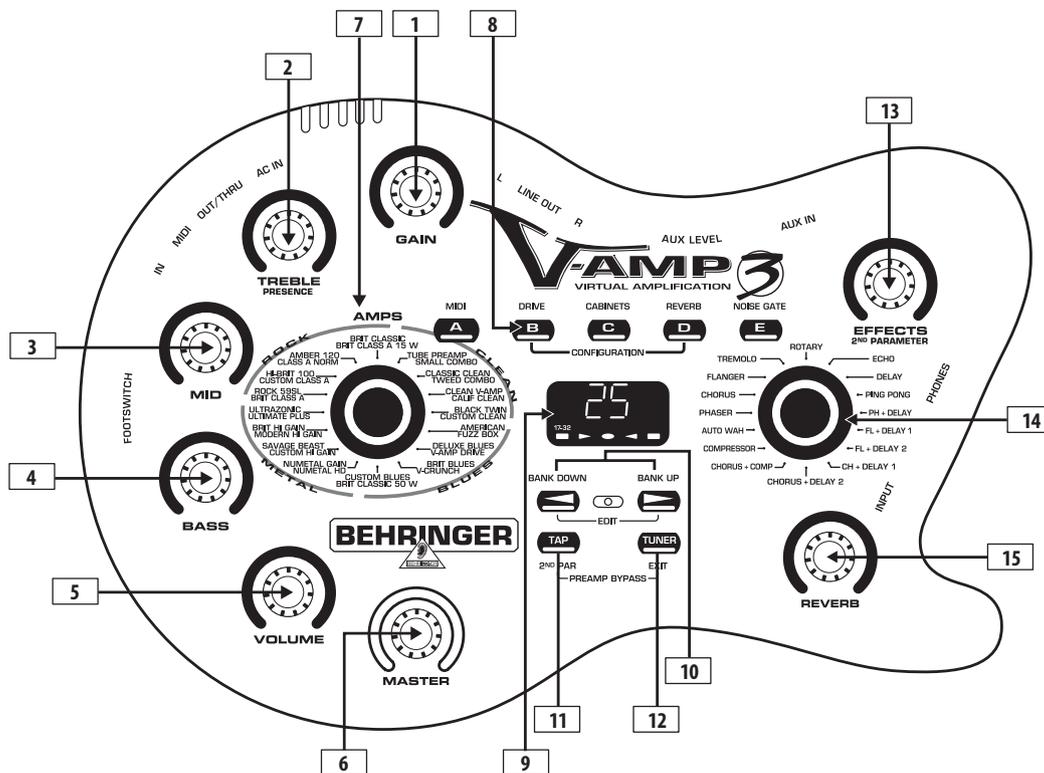


1/4" TRS to stereo RCA

Controls and Connectors

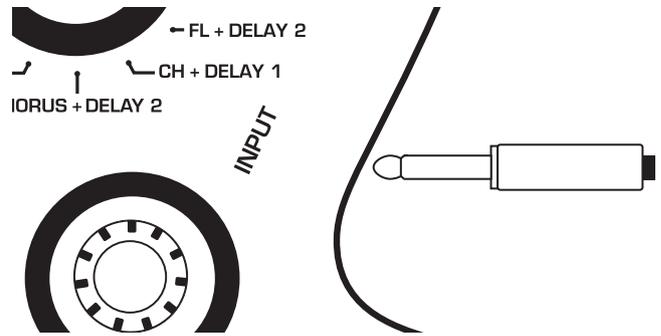
Front panel

1. GAIN – Adjusts the distortion level of an amp simulation.
 2. TREBLE – Adjusts the upper frequencies of the guitar tone.
 3. MID – Adjusts the mid range frequencies.
 4. BASS – Adjusts the low frequencies.
 5. VOLUME – Adjusts the volume level of the current preset. This will allow you to keep the volume even between various presets.
 6. MASTER – Adjusts the overall output to the PHONES and LINE OUT.
 7. AMPS – Selects the amp simulation. Hold the TAP button while turning the AMPS knob to select one of the 17-32 amp models (grey lettering).
- Each LED ring around the VOLUME, BASS, MID, TREBLE, GAIN, EFFECTS and REVERB knobs has nine LEDs. Either one LED or two neighboring LEDs (in between position) will light on each ring, indicating a total of 17 positions per knob.
 - If the TAP button is held down, the TREBLE knob functions as a PRESENCE control. This allows you to add or remove a high-end "shimmer" in the amp tone.
8. PRESET BUTTONS – Recall saved presets within a bank. These buttons also select various categories in EDIT mode and allow access to Configuration mode. (see EDIT mode and Configuration mode sections)

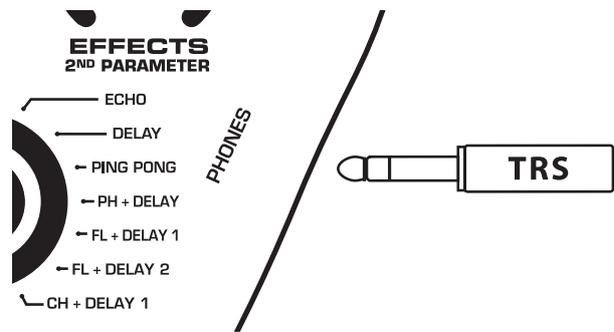


9. **DISPLAY** – Displays current bank and preset in play mode. Other LEDs give the following information:
 - **TUNER:** Displays the pitch of the instrument connected to the unit. (see **TUNING** section for more details)
 - **17-32:** Lights when one of the amp simulations 17-32 is selected.
10. **BANK UP** and **DOWN** – In play mode, use these buttons to scroll through the banks of presets. Press both buttons simultaneously to enter **EDIT** mode. After an edit category has been selected (buttons **A – E**), use the **BANK UP** and **DOWN** buttons to edit parameters.
11. **TAP** – Performs seven functions:
 - **Tap:** Tap this button to the rhythm of the music and the selected effect will adapt its parameter to the tempo.
 - **Presence:** While holding down the **TAP** button, use the **TREBLE** knob to adjust the **PRESENCE** setting of the amp simulation.
 - **2nd parameter:** While holding down the **TAP** button, use the **EFFECTS** knob to adjust the 2nd effects parameter of the selected effect.
 - **Amp models 17 – 32:** While holding down the **TAP** button, use the **AMPS** knob to select one of the second set of amps (written in grey lettering).
 - **MIDI Thru:** In **EDIT** → **MIDI** mode, press the **TAP** button to change **MIDI OUT** to **MIDI THRU**. (See the **MIDI** chapter.)
 - **Drive:** In **EDIT** → **DRIVE** mode, hold the **TAP** button while turning the **EFFECTS** knob to adjust the Wah-Wah effect's resonance character.
 - **Input Gain:** in **Configuration** mode, hold the **TAP** button while turning the **GAIN** knob to adjust the overall input gain. (See **Configuration mode**.)
12. **TUNER** – Press this button to access the tuner. During tuning mode, the output signal is muted (depending on the **VOLUME** setting). During **EDIT** mode, press this button to exit and return to play mode.
13. **EFFECTS** – Selects the effect for the current preset.
14. **EFFECTS SELECT** – Adjusts the first parameter for the selected effect. Hold the **TAP** button while turning the **EFFECTS** knob to adjust the 2nd effects parameter.
15. **REVERB** – Adjusts the amount of reverb for the current preset.

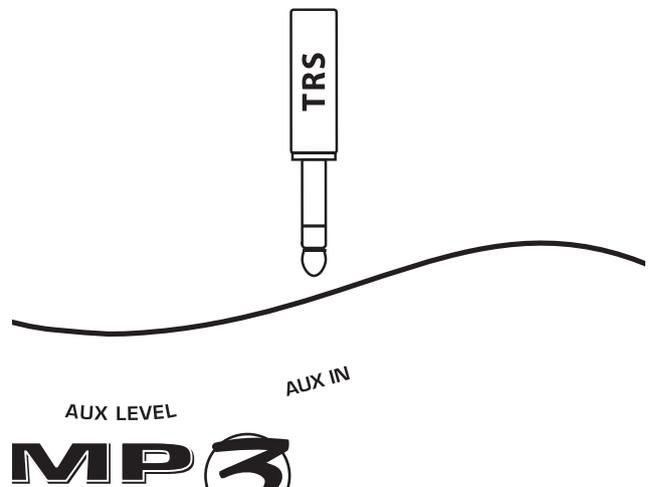
Rear/Side panel



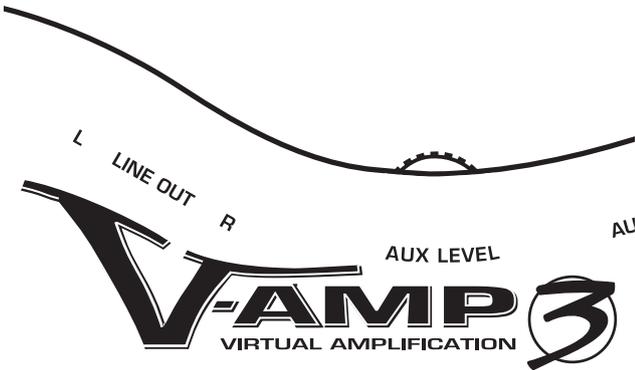
16. **INPUT** – Plug a guitar into this jack using a ¼" instrument cable.



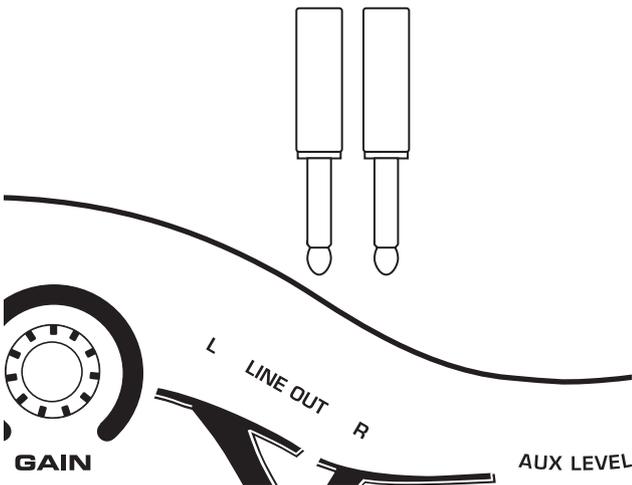
17. **PHONES** – Plug a pair of headphones into this jack using a ¼" TRS cable.



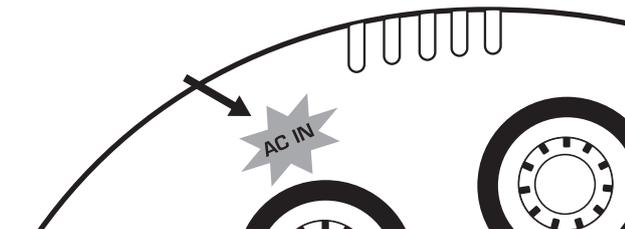
18. **AUX IN** – Plug an external sound source into this jack using a ¼" TS or TRS cable.



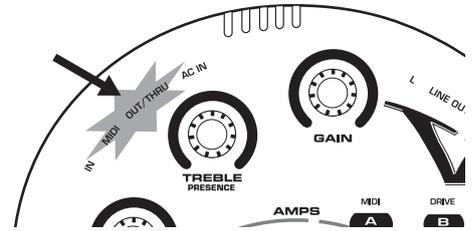
19. AUX LEVEL – Adjusts the input level of the AUX IN jack.



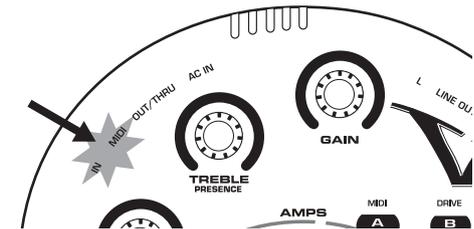
20. LINE OUT – Plug balanced or unbalanced 1/4" cables into these jacks to send the stereo signal for recording or performance applications.



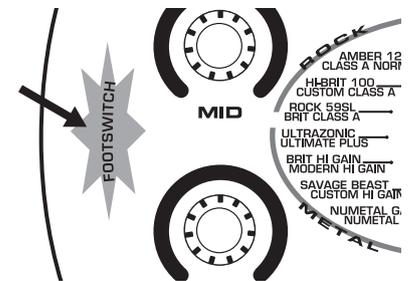
21. AC IN – Plug the included power cable into this socket. When connected to the mains, the V-AMP 3 switches on automatically.



22. MIDI OUT/THRU – Sends MIDI information from the V-AMP 3 or directly from the MIDI IN jack.



23. MIDI IN – Receives MIDI signals from a footswitch or other device.



24. FOOTSWITCH – Plug the FS112V footswitch into this jack with the 1/4" TRS cable.

Operating Modes

Configuration Mode

The V-AMP 3 offers many options that allow you to route selected parts of the signal to the LINE OUT jacks. Some features are well suited for one playing situation, but not necessary for others. In order to adapt your device to various studio and live applications, you can choose between 5 different operating modes (Configurations). Independent of the settings stored in the presets, these global operating modes determine how the LINE OUT signal is processed so that either stereo operation or unique left and right sends are possible.

Selecting a configuration

Press the B and D buttons simultaneously to enter configuration mode. The display shows the current selection. Use the BANK UP and BANK DOWN arrow buttons to select a new configuration. See table for routing options.

- When headphones are plugged into the PHONES jack, the V-AMP 3 automatically switches to Studio 1 (S1) operating mode.
- Press the TAP key and turn the GAIN knob to adjust the input sensitivity to match the output of your guitar's pickups. If the CLIP LED lights, the input sensitivity must be reduced. Only raise the sensitivity if the pickups have particularly weak output.

To exit configuration mode, press the TUNER/EXIT button.

Operating Mode	Function		Application
	LINE OUT L	LINE OUT R	
Studio 1 (S1)	Stereo operation with selected effects and speaker simulations.		<ul style="list-style-type: none"> • V-AMP 3 as practice amp, e.g. with headphones. • Recording situation: (V-AMP 3 is connected to stereo line channel on the mixing console).
Studio 2 (S2)	Left (dry signal, only compressor plus auto-wah).	Right (with modulation, delay and reverb effects).	<ul style="list-style-type: none"> • Recording situation: with the left channel connected to the recording device. The right channel is used for monitoring only (with effect). Advantage: while recording, you don't have to specify the effect used during the mix-down, but can still monitor wet signals.
Live 1 (L1)	Stereo operation + additional 3-band EQ (adjustable in CONFIGURATION mode).		<ul style="list-style-type: none"> • V-AMP 3 connected to a guitar amp with stereo input. The additional EQ (BASS, MID & TREBLE controls) allows you to match the sound to the amplifier used. The additional EQ does not affect the settings of your presets.
Live 2 (L2)	Stereo operation + additional 3-band EQ, but without cabinet simulation.		<ul style="list-style-type: none"> • Here, too, the V-AMP 3 can be connected to a guitar amp with a stereo input. The additional EQ (BASS, MID & TREBLE controls) allows you to match the sound to the amplifier used. However, since no cabinet simulation is enabled, the speaker sound is determined by the combo/cabinet used.
Live 3 (L3)	Left + additional 3-band EQ with modulation, delay and reverb effects, but without cabinet simulation	Right with cabinet and modulation, delay and reverb effects, but without additional 3-band EQ.	<ul style="list-style-type: none"> • V-AMP 3 as a stage amp, with the left output connected to a line input on the monitor amp. The additional EQ (BASS, MID & TREBLE controls) allows you to match the sound optimally to the monitor amp. The right channel (DI Out) is connected to the mixing console or stage box and is used for the FOH mix.

Studio Mode 1 and 2

When using headphones, the V-AMP 3 will automatically switch into Studio Mode 1 (S1). This stereo mode works well for both monitoring and recording with effects, amp and speaker modeling. If you are certain the tone you have selected is what you want permanently recorded, then Studio Mode 1 is a good option. This Mode does not apply the 3-band EQ to the signal, but most recording programs have advanced graphic EQ capabilities that allow you much more precise adjustments.

In addition to advanced EQ, recording programs often possess high quality effects plug-ins that can be tweaked and edited to your heart's content. In this regard, Studio Mode 2 may be a better option to allow the most editing flexibility. This configuration sends a signal with amp and speaker simulation in both channels, but only the right output has the effects, leaving the left output "dry" and ready for editing in your DAW. You may either record both outputs to separate tracks, or only record the "dry" left output while monitoring the right output.

Visit www.behringer.com for tips about integrating your V-AMP 3 with your computer system and exchanging presets and experiences with other V-AMP users.

Live Mode 1, 2 and 3

When performing live with the V-AMP 3, the most common way to get the sound to the crowd is to run the unit into an amplifier on stage, route your signal directly into a mixing board, or both.

If you chose to run the outputs directly to the main mixer, Live Mode 1 will be the best option as it includes amp and speaker simulation, effects, and the 3-band EQ. You will have no sound on stage unless the signal is sent to a monitor speaker, so make sure the venue can accommodate this setup.

Another option is to use Live Mode 2 and run the V-AMP 3 into the effects loop return inputs of 2 different guitar amps. This configuration does not feature speaker simulation and allows the amplifier's natural speaker sound to go unaltered. In this scenario, the amps would be mic'd on stage to get the sound to the house speakers, and having a dedicated monitor would be less important.

The most practical and versatile way to use the V-AMP 3 in a live setting is using Live Mode 3. This allows you to send the left output (without speaker simulation) to an amp's effects loop return to provide on-stage volume, and also send the right output (with speaker simulation) to the main mixer for inclusion in the main house mix.

Storing Presets

As soon as you make any change to a preset, be it a new amp model, effect selection, or EQ adjustment, the preset LED will flash. The flashing LED informs you that in order to keep this new sound, you must save the preset. To save the preset, simply hold the current preset button down for approximately 2 seconds. When the LED stops flashing, you have saved your current settings in that preset location.

You do not necessarily have to save an altered preset to its current location. You may select another preset in that bank, or use the BANK UP and DOWN buttons to choose another bank and save to one of those 5 presets. Again, hold the targeted preset button down for approximately 2 seconds until the LED stops flashing.

Discarding an Edited Preset/ Restoring a Single Factory Preset

If you edit a preset, but decide that you do not like your changes and would rather return to the original setting, you may simply select another preset without saving. This way when you return to that preset, it will recall the settings as they were before you started editing. This method works as long as you do not save your unwanted edit. If you do save an edit and would like to return to the original factory preset that was stored there, hold down the two arrow keys (BANK UP and DOWN) until the display reads "Pr." If you would like to keep the original factory setting for this preset, hold down the preset button for approximately 2 seconds to save.

Restoring All Factory Presets

All factory presets can be restored as follows:

- While holding buttons D and E, power on the unit. "CL" appears in the display.
- Release the D and E buttons.
- Press the arrow keys (BANK UP and DOWN) simultaneously.

This erases all saved edits and returns all presets to their factory settings. Refer to the MIDI chapter for information on saving your settings via MIDI.

Amp/Speaker Simulation

The heart of the V-AMP 3's sound lies in its amp and speaker simulation. With 32 amp simulations and 15 interchangeable speaker cabinets, you're guaranteed to find a tone to fit any situation. Not only this, but the V-AMP 3 eliminates the need to mic an actual speaker, which is difficult to do properly and creates a lot of excess noise. Any style from jazz to heavy metal can easily be accommodated, and are further enhanced by the effects and reverb options. You're sure to find many sounds that spur your creativity and allow you to explore new sonic possibilities.

When you power on the V-AMP 3, it automatically loads the last selected preset. The LED ring around the AMPS knob shows which amp is currently selected. If the "17-32" LED is lit inside the display, the second amp model (written in grey) next to the AMPS LED is active. To select another amp, simply turn the AMPS knob. Hold the TAP button while turning the AMPS knob to select one of the 17-32 models. You may further edit the sound of the amp by turning the VOLUME, GAIN, BASS, MID, and TREBLE knobs. Hold the TAP button while turning the TREBLE knob to adjust the PRESENCE filter.

Each amp has an adjustable DRIVE function that acts similar to changing channels on an amp. The simulation is still the same, but when switched to distortion mode (default for most ROCK and METAL amps), the gain setting is significantly higher. This feature enables all 32 amps to produce clean or distorted tones, much like the actual amps themselves would. See 'Edit Mode' under the Presets section for details on changing an amp's DRIVE setting.

You should always select an amp model first, then change the cabinet simulation (if necessary), followed by an effect. To give you a better overview of the extensive range of amp simulations, we have compiled the following descriptions of the different types of amps.

V-AMP 3 Preset Chart

	Bank	A	Preset	B	Preset	C	Preset	D	Preset	E	Preset
Single-coil pickups	1	acoustic ambienc	1	clean reverb	2	blackface dry	3	calif.compressed	4	clean comp+CH+RV	5
	2	crunch rhythm	6	windmill rhythm	7	EL34power crunch	8	british crunch	9	british solo	10
	3	tight rhythm	11	tight hi octane	12	80s metallic	13	90s metallic	14	80s harmonics	15
	4	break da blues	16	crunch a blues	17	blisteringblue	18	american hot	19	brit rotary	20
Humbucker pickups	5	ACOUSTIC AMBIENC	21	CLEAN REVERB	22	BLACKFACE DRY	23	CALIF. COMPRESSED	24	CLEAN COMP+CH+RV	25
	6	CRUNCH RHYTHM	26	WIND MILL RHYTHM	27	EL34 POWR CRUNCH	28	BRITISH CRUNCH	29	BRITISH SOLO	30
	7	TIGHT RHYTHM	31	TIGHT HI OCTANE	32	80s METALLIC	33	90s METALLIC	34	80s HARMONICS	35
	8	BREAK da BLUES	36	CRUNCH a BLUES	37	BLISTERING BLUE	38	AMERICAN HOT	39	BRIT ROTARY	40
Single-coil pickups	9	acoustic ambienc	41	clean reverb	42	blackface dry	43	calif.compressed	44	clean comp+CH+RV	45
	10	crunch rhythm	46	windmill rhythm	47	EL34power crunch	48	british crunch	49	british solo	50
	11	tight rhythm	51	tight hi octane	52	80s metallic	53	90s metallic	54	80s harmonics	55
	12	break da blues	56	crunch a blues	57	blisteringblue	58	american hot	59	brit rotary	60
Humbucker pickups	13	ACOUSTIC AMBIENC	61	CLEAN REVERB	62	BLACKFACE DRY	63	CALIF. COMPRESSED	64	CLEAN COMP+CH+RV	65
	14	CRUNCH RHYTHM	66	WIND MILL RHYTHM	67	EL34 POWR CRUNCH	68	BRITISH CRUNCH	69	BRITISH SOLO	70
	15	TIGHT RHYTHM	71	TIGHT HI OCTANE	72	80s METALLIC	73	90s METALLIC	74	80s HARMONICS	75
	16	BREAK da BLUES	76	CRUNCH a BLUES	77	BLISTERING BLUE	78	AMERICAN HOT	79	BRIT ROTARY	80
Acoustic guitars	17	acoustic 1	81	acoustic 2	82	acoustic 3	83	acoustic 4	84	acoustic 5	85
	18	acoustic 6	86	acoustic 7	87	acoustic 8	88	acoustic 9	89	acoustic 10	90
Bass guitars	19	BASS 1	91	BASS 2	92	BASS 3	93	BASS 4	94	BASS 5	95
	20	BASS 6	96	BASS 7	97	BASS 8	98	BASS 9	99	BASS 10	100
Studio session	21	StudioRockStack	101	StudioRockStack+	102	StudioRockStack2	103	StudioRockStack3	104	StudioRockStack4	105
	22	StudioRockStaFX	106	StudioRockStaFX+	107	StudioRockStaFX2	108	StudioRockStaFX3	109	StudioRockStaFX4	110
	23	SessionCombo1	111	SessionCombo2	112	SessionCombo3	113	SessionCombo4	114	SessionCombo5	115
	24	SessionComFX1	116	SessionComFX2	117	SessionComFX3	118	SessionComFX4	119	SessionComFX5	120
Extreme sounds	25	weirdo 1	121	weirdo 2	122	weirdo 3	123	weirdo 4	124	weirdo 5	125

Amp Descriptions

CLEAN

TUBE PREAMP: Sound engineers were quick to recognize the appeal of tubes. They used tube amps to add warmth to all kinds of sounds. By default, this amp model does not use a speaker simulation, and can be used with vocals, but adding a speaker cab produces good clean tones for guitar as well.

SMALL COMBO: This model is based on one of the most simple yet effective guitar amps of all time, the Fender Champ. Being as small as it is, you can easily take it beyond its clean range, and the Champ rewards you with compression and rich distortion. Originally designed for beginners, the amp soon became a favorite of many guitar aficionados due to its amazing distortion at manageably low volume.

CLASSIC CLEAN: Back in the 80s, the Roland JC-120 was the preferred sound of Buzzy Feiten, guitarist for the Dave Weckl Band. The unique quality of this amp is the way its brilliance cuts through any mix. It is ideal for the New Wave sound of the 80s that is making a comeback today.

TWEED COMBO: This was Jeff Beck's favorite when he recorded the albums *Blow by Blow* and *Wired*. This amp was not actually designed for heavy distortion, but due to its low power, it is ideal for uncompromising overdrive. The Tweed Champ had a volume control, but no EQ control. If you want to get the most authentic sound out of this amp, keep the EQ on your V-AMP 3 in the mid position.

CLEAN V-AMP: Here we have managed to simulate the sound of a Roland JC-120 and combine it with our BRIT CLASSIC model. The result blends the brilliance of a transistor amp with the cutting power of a Marshall Plexi. The Marshall cut appears when you turn the GAIN control clockwise.

CALIFORNIA CLEAN: This model is based on the clean channel of the Mesa Boogie Mark II C. It sounds like a Fender, but has more punch in the midrange.

BLACK TWIN: This simulation was modeled on a Fender Blackface Twin from 1965. In the '60s, this amp was used by jazz, country, and even rock guitarists. The Blackface Twin was unique for being exceptionally loud while the amount of distortion remained relatively low.

CUSTOM CLEAN: This model simulates the clean channel from a Dumble, an expensive boutique amp. The clean sound really cuts through, especially when used with compressor attack settings around 2 milliseconds.

BLUES

AMERICAN: This virtual amp is modeled on the Fender Bassman 4 x 10 Combo. Originally designed as a bass amp, it soon became a standard amp of blues legends such as Steve Ray Vaughan and Billy Gibbons due to its characteristic distortion. As you would expect, it packs a solid punch in the bass range, but is still flexible enough in the mid and treble ranges.

FUZZ BOX: This sound is not actually based on any one amp, but instead simulates a particular fuzz box. Jimi Hendrix was one of the first guitarists to recognize the potential in this legendary broadband transistor distortion. The humming distortion sound of the FUZZ BOX has returned to popularity with Alternative Rock and Grunge.

DELUXE BLUES: A synthesis of a 1960 Fender Blackface Deluxe and a '50s Fender Bassman. The result is a crystal clear sound that still simulates the edge of the vintage amps. The EQ controls on this model give you even greater scope than the EQ controls on the original amp.

V-AMP DRIVE: This simulation is based on the Mesa Boogie Mark III, a more modern high-gain lead amp. This model produces a smooth and precise tone with plenty of drive, making it ideal for lead guitar work.

BRIT BLUES: Modeled on the JTM 45, the first Marshall amp ever designed. Extreme gain settings produce a highly compressed and really "dirty" sounding distortion. Combined with a 2 x 12" speaker simulation, it produces impressive Bluesbreaker sounds.

V-CRUNCH: This amp is ideal for modern blues or jazz. Its sound is subtle but crunchy and dynamic.

CUSTOM BLUES: This simulation is based on a 1965 Marshall JTM 45 Bluesbreaker, but has more flexibility of sound control. Turn the GAIN control to the left and this simulation sounds like a Marshall; turn it to the right and it builds a thick boutique distortion tone.

BRIT CLASSIC 50 W: This is also a Plexi, but we have extensively widened its sound range. The sound controls on the original Marshall Plexi 50 Watt hardly had any effect on the sound if distortion was high.

METAL

NUMETAL GAIN: This model is based on a 1994 Mesa Boogie Dual Rectifier Trem-O-Verb, featuring a modern high-gain sound that also comes over well in a band context. The tone control is post-gain, which allows you to tailor distorted sounds to great effect. This amp is perfect for heavy metal, but also for Steve Lukather sounds. The best-known user of this amp is John Petrucci of the progressive rock super group Dream Theater.

NUMETAL HD: This simulation is modeled on a Mesa Boogie Dual Rectifier head. Much like the Trem-O-Verb, this amp produces an even higher gain sound. The tone controls are most effective with the gain knob cranked.

SAVAGE BEAST: Engl is well known for amps that really cut through. The Savage 120 in particular has built up a large following among guitarists. For some time now, Ritchie Blackmore has been a major endorser of this German company, and Randy Hanson, the best Hendrix since Jimi, also swears by this amp. The unique feature of the Savage is its extreme power and is therefore highly popular with heavy metal guitarists. Silent Force/Sinner guitarist Alex Beyrodt has been an enthusiastic Engl user for years. An amp for making yourself heard!

CUSTOM HI GAIN: This sound goes back to a 1969 50-Watt Marshall Plexi modified by Jose Arrendondo. Arrendondo was none other than Eddie Van Halen's guitar technician. The unique features of this amp are its fine mid-range sounds and its ability to produce the ultimate in gain without making the sound muddy. Warning: highly addictive!

BRIT HI GAIN: Compare this model with a Marshall JCM 800. Although the original was renowned mainly for its distorted sounds, this amp also sounds very good with low gain settings. It's good at reproducing Steve Ray Vaughan's and Michael Landau's guitar tone. In distortion mode, it sounds like Gary Moore in his early days, but it's also good for heavy metal.

MODERN HI GAIN: Modeled after a Soldano SLO, the tone control is post-gain here as well, allowing the extremely distorted sound to cut through the mix. The MODERN HI GAIN sound is ideal for playing Grunge, but is also used by guitarists such as Steve Vai and Joe Satriani. If you're playing a Les Paul-style guitar, MODERN HI GAIN sounds best when you turn down the volume control on the guitar a little.

NEW! ULTRAZONIC: This is a new, aggressive, in-your-face hi-gain sound similar to the crunch channel of the Bugera 333XL. Detuned, palm-muted, fast rhythm guitar riffs are as clear and articulate as can be.

ULTIMATE PLUS: Those who find the ULTRAZONIC too tame will find enough gain here for an overdose, and nearly endless sustain.

ROCK

NEW! ROCK 59SL: This is modeled on the sound of a Marshall 1959SLP, which stands out for its extremely dynamic rock sound, dishing out fat clean tone as well as solid crunch. This new amp model captures the liveliness and responsiveness of the real thing.

BRIT CLASS A: This simulation is modeled on the Vox AC 30. This amp was originally designed in the '60s when guitarists wanted amps with enhanced brilliance, a feature that Vox successfully implemented by means of "revolutionary" bass and treble controls. Brian May and U2's The Edge are probably the best-known users of this sound.

NEW! HI BRIT 100: This is new model provides an assertive rhythm guitar sound based on the Hiwatt Custom 100, which is most suitable for punchy power chords. Think of Pete Townshend's ingenious guitar work on The Who's "Pinball Wizard" to get an idea.

CUSTOM CLASS A: The model for this simulation is the Budda Twin-master. This Class A amp is renowned for its warm sound combined with irresistible tube distortion. Although the original amp does not have a mid control, we have given the capability of tailoring the midrange to suit your taste.

NEW! AMBER 120: Another new model, this time of the vintage distortion sound typical of the Orange OD120. It is worth digging into the tone controls of the Amber 120. If you crank the gain, the preamp tone controls greatly influence the sound.

CLASS A NORM: This amp is characterized by its mild distortion and highly dynamic response. It is modeled on the Matchless Chieftain, a very expensive hand-made amp.

BRIT CLASSIC: Based on a 1959 Marshall Plexi 100 Watt, this amp provides a remarkable range of clean and crunch sounds thanks to its two channels which can be run in parallel. It was used by many famous guitar players like Jimi Hendrix, Eric Clapton, and Jeff Beck, to name a few.

BRITISH CLASS A 15 W: Another Vox model, based on the first channel of an AC 15 from 1960. Unlike the AC 30, this amp had only one 12" speaker and produced a warmer sound. Tip: to make this simulation sound as authentic as possible, leave the BASS and MID controls in middle position and adjust the TREBLE control only.

PREAMP BYPASS: In this setting, no amp simulation is selected. This makes it possible, for example, to play through an external guitar preamp and only use the effects or the speaker simulation. To activate the PREAMP BYPASS, press TAP and TUNER simultaneously.

Fender™, Vox™, Marshall™, Mesa Boogie™, Gibson™, Soldano™, Matchless™, Dumble™, Budda™, Tweed™, Engl™, Roland™, Bugera™, Hiwatt™, Orange™ and the names of musicians and groups are registered trademarks belonging to the respective owners and are in no way associated with BEHRINGER.

Speaker Descriptions

The sound of any guitar combo depends largely on the type and combination of speakers used. In the past 50 years there has been widespread experimentation to find out what type of speaker is best suited to any one specific guitar sound and in what way the sound is modified when a certain speaker is combined with others.

- When you select an amp simulation, an appropriate speaker simulation is automatically activated (see graphic table below). Otherwise, the authenticity of the sound could be affected by an unsuitable cabinet – especially if you are using headphones. Naturally, you can combine the amp simulations with other cabinets according to taste.

The character of a loudspeaker depends on many different variables.

The following table shows a list of all speaker cabinets on the V-AMP 3.

Cabinets	
-	BYPASS (NO SPEAKER SIMULATION)
1	1 x 8" VINTAGE TWEED
2	4 x 10" VINTAGE BASS
3	4 x 10" V-AMP CUSTOM
4	1 x 12" MID COMBO
5	1 x 12" BLACKFACE
6	1 x 12" BRIT '60
7	1 x 12" DELUXE '52
8	2 x 12" TWIN COMBO

Cabinets	
9	2 x 12" US CLASS A
10	2 x 12" V-AMP CUSTOM
11	2 x 12" BRIT '67
12	4 x 12" VINTAGE 30
13	4 x 12" STANDARD '78
14	4 x 12" OFF AXIS
15	4 x 12" V-AMP CUSTOM

AMPS 1-16	Category	Speaker simulation	Cabinet #
TUBE PRE	Clean	-	-
CLASSIC CLEAN	Clean	2x12" TWIN COMBO	8
CLEAN V-AMP	Clean	4x12" V-AMP CUSTOM	15
BLACK TWIN	Clean	2x12" TWIN COMBO	8
AMERICAN	Blues	4x10" VINTAGE BASS	2
DELUXE BLUES	Blues	1x12" BLACKFACE	5
BRIT BLUES	Blues	4X12" VINTAGE 30	12
CUSTOM BLUES	Blues	4X12" VINTAGE 30	12
NUMETAL GAIN	Metal	4x12" V-AMP CUSTOM	15
SAVAGE BEAST	Metal	4x12" V-AMP CUSTOM	15
BRIT HI GAIN	Metal	4X12" VINTAGE 30	12
ULTRAZONIC	Metal	4x12" V-AMP CUSTOM	15
ROCK 59SL	Rock	4x12" V-AMP CUSTOM	15
HIBRIT 100	Rock	4x12" V-AMP CUSTOM	15
AMBER 120	Rock	4X12" VINTAGE 30	12
BRIT CLASSIC	Rock	4x12" V-AMP CUSTOM	15

AMPS 17-32	Category	Speaker simulation	Cabinet #
SMALL COMBO	Clean	1x8" VINTAGE TWEED	1
TWEED COMBO	Clean	1x8" VINTAGE TWEED	1
CALIF CLEAN	Clean	4x12" V-AMP CUSTOM	15
CUSTOM CLEAN	Clean	1x12" BLACKFACE	5
FUZZ BOX	Rock	4x12" OFF AXIS	14
V-AMP DRIVE	Rock	4x12" V-AMP CUSTOM	15
V-CRUNCH	Rock	4x12" V-AMP CUSTOM	15
BRIT CLASSIC 50 W	Rock	2x12" V-AMP CUSTOM	10
NUMETAL HD	Metal	4x12" V-AMP CUSTOM	15
CUSTOM HI GAIN	Metal	4x12" V-AMP CUSTOM	15
MODERN HI GAIN	Metal	4x12" V-AMP CUSTOM	15
ULTIMATE PLUS	Metal	4x12" V-AMP CUSTOM	15
BRIT CLASS A	rock	2x12" BRIT '67	11
CUSTOM CLASS A	rock	4X12" VINTAGE 30	12
CLASS A NORM	rock	2x12" BRIT '67	11
BRIT CLASS A 15 W	rock	1x12" BRIT '60	6

Effects Processor

A great complement to the selection of amps and speaker cabinets is the built-in multi-effects processor. You may select from 16 high-quality effects such as chorus, flanger, delay, auto wah, and many others. These effects can be used to thicken up your guitar tone in a subtle way, or create extreme and experimental sounds that push your creative limits. The standard operating mode of the multi-effects processor is stereo, but other options are available (see Configurations section).

You can adjust up to 3 parameters for each available effect. Two of these parameters are adjusted using the EFFECTS knob with or without the TAP button held down. Tempo-based parameters are adjusted by pressing the TAP button at least twice in sync with the music. The following table displays the parameter controls for each effect.

Effect #	Effect	EFFECT Control	EFFECTS control with TAP push button	TAP push button
1	ECHO CC49, val 1	Mix CC54	Feedback CC53	Delay Time CC50+51
2	DELAY CC49, val 0	Mix CC54	Feedback CC53	Delay Time CC50+51
3	PING PONG CC49, val 2	Mix CC54	Feedback CC53	Delay Time CC50+51
4	PHASER/DELAY 1 CC55, val 1 + CC49, val 0	Delay Mix CC54	Mod. Mix CC59	Delay Time CC50+51
5	FLANGER/DELAY 1 CC55, val 5 + CC49, val 0	Delay Mix CC54	Mod. Mix CC59	Delay Time CC50+51
6	FLANGER/DELAY 2 CC55, val 5 + CC49, val 2	Delay Mix CC54	Mod. Mix CC59	Delay Time CC50+51
7	CHORUS/DELAY 1 CC55, val 3 + CC49, val 0	Delay Mix CC54	Mod. Mix CC59	Delay Time CC50+51
8	CHORUS/DELAY 2 CC55, val 3 + CC49, val 2	Delay Mix CC54	Mod. Mix CC59	Delay Time CC50+51
9	CHORUS/COMPRESSOR CC55, val 4 + CC44, val 1	Sense CC45	Mod. Mix CC59	Modulation Speed CC58
10	COMPRESSOR CC44, val 1	Sense CC45	Attack CC46	-
11	AUTO WAH CC44, val 2	Depth CC45	Speed CC46	-
12	PHASER CC55, val 1	Mix CC59	Feedback CC58	Modulation Speed CC56
13	CHORUS CC55, val 4	Mix CC59	Depth CC57	Modulation Speed CC56
14	FLANGER CC55, val 6	Mix CC59	Feedback CC58	Modulation Speed CC56
15	TREMOLO CC55, val 2	Mix CC59	-	Modulation Speed CC56
16	ROTARY CC55, val 0	Mix CC59	Depth CC57	Modulation Speed CC56

Wah Wah

By using a MIDI pedal, such as the BEHRINGER FCB1010, you can access an additional Wah Wah effect. You may adjust the sweepable filter characteristic by entering EDIT mode, selecting the DRIVE menu and turning the EFFECTS knob while holding the TAP button.

Effects Descriptions

The following is a brief description of the various effects available on the V-AMP 3:

REVERB: Reverb is still the most important effect for mixing and live performance. That's why we at BEHRINGER make a point of giving you 9 different reverb programs, allowing you to use the most suitable reverb program for any situation. The reverb effect can be added separately to all the other effects.

ECHO: Echo is a delayed repetition of the input signal. The main difference from the DELAY effect is that the high-frequency content of the repeated signals steadily decreases. This simulates a tape delay used in the pre-digital era, producing a vintage sound. In addition, the reflections are routed in turn to the left and right channels, creating a stereo effect.

DELAY: This algorithm repeats the input signal, with different tempo settings producing interesting delay effects. U2's The Edge has impressively demonstrated the potential of this effect.

PING PONG: A delay effect that alternates between the left and right channel/speaker.

PHASER: The principle behind the phaser is that a second, phase-shifted signal is added to the audio signal, creating a wave-like effect. This makes the sound richer and, above all, livelier. Depending on how you set it, the phaser can be used to produce slightly modulated or other worldly effects.

FLANGER: This effect is similar to a phaser in the fact that it produces wave-like modulation to the guitar tone. Create psychedelic effects by mixing it heavily, or use a subtle mix to thicken up the tone.

CHORUS: This effect adds a slightly modulated off-key element to the original signal, thus creating a pleasant floating effect through variations in pitch.

PHASER & DELAY: Phaser and delay combined.

FLANGER & DELAY: The input signal is delayed and processed with a pronounced wave-like effect. It is particularly effective for highlighting single notes, but can also be used to make solos more interesting.

CHORUS & DELAY: This algorithm combines signal delay with the popular chorus effect.

CHORUS & COMP: Incredible sustain effects can be produced with the compressor. This is especially useful for sustaining individual guitar notes. Combined with chorus, it can make the audio signal extremely dense.

COMPRESSOR: A compressor limits the dynamic range of the guitar tone, thus producing audible and creative sound effects. Pronounced use of the compressor (using the EFFECTS control) allows rhythm sounds to really "pop."

AUTO WAH: The legendary wah-wah effect owes its fame mainly to Jimi Hendrix. The auto-wah alters its filter frequency automatically depending on the signal's magnitude, rather than being controlled by the position of a pedal. The effect causes a guitar's note to make a distinct vowel sound, and is more pronounced the harder the strings are plucked or strummed.

TREMOLO: Simulates the classic Fender Tremolo where the volume rapidly shifts up and down to a constant tempo. The tremolo effect has returned to popularity with trip-hop.

ROTARY: This is the quintessential simulation of the classic organ effect normally produced by speakers rotating at slow or fast speed inside a heavy speaker cabinet. This effect uses the physical principle of the Doppler effect to modulate the sound.

NOISE GATE: Noise gates are used to remove or reduce noise or other interference. Guitar signals in particular are very sensitive to interference. Not only do guitarists often use high-gain settings, but guitar pickups can amplify unwanted interference that can be painfully apparent during breaks in the music. And how does a noise gate work? It simply mutes the signal during breaks, eliminating any interference at the same time.

Separate Reverb Effect

The reverb effect is independent of the multi-effects processor and can be added to the mix signal at any time. To edit the REVERB function, enter EDIT mode (press BANK UP and DOWN simultaneously) and press button D. Use the arrow keys to select one of the 9 reverb types available:

Reverb #	Reverb Type	Quality
1	Tiny Room	Classic room simulation featuring various room sizes from bathroom to cathedral
2	Small Room	
3	Medium Room	
4	Large Room	
5	Ultra Room	Special effect transforming guitar signals into heavenly pad sounds
6	Small Spring	Simulations of typical spring reverbs
7	Medium Spring	
8	Short Ambience	Simulates the early reflections of a reverberant room
9	Long Ambience	

Tuner

Press the TUNER button to activate the built-in tuner.

Tuning your guitar

The chromatic tuner automatically recognizes the frequencies of all the standard guitar notes. For the A-string this means a frequency of 220 Hz. When you plug your guitar into the device and play an open string, the tuner will recognize and display the note. Since the tuner uses an auto-chromatic scale, it can also recognize semi-tones, which are shown with a "b" in the display. It may happen, however, that a note is displayed as "A" but is actually slightly out of tune. This is shown by at least one of the four red or yellow LEDs at the foot of the display lighting up. In certain cases even two of the LEDs may light up, which indicates that the pitch of the note played lies between the pitches represented by the two LEDs. When the circular tuner LED in the middle lights up, this means the note played is in tune.

Setting reference pitch "A"

To give you maximum freedom for tuning your guitar, you can change the preset reference pitch "A." To activate this function, switch on the tuner by pressing the TUNER button and switch to EDIT mode by pressing the two arrow keys simultaneously. The display will show "40," which means 440 Hz. Use the arrow keys to raise or lower the reference pitch by up to 15 Hz. The display only shows the last two digits as the first digit is always 4. For example, if you start with a reference pitch of 440 Hz and press the right arrow three times, the display will read "43," i.e. 443 Hz. To quit EDIT mode, press either the TUNER or the TAP button. Any changes will be stored automatically. The tones for the other strings on your guitar will automatically be adjusted to the new reference pitch.

MIDI

MIDI connections

The MIDI standard (Musical Instrument Digital Interface) was developed in the early '80s to enable different makes of electronic instruments to communicate with each other. Over the years, the range of MIDI applications has constantly expanded, and today it is standard practice to network entire recording studios using the MIDI standard. The heart of such a network is a computer with sequencer software that controls not only all the keyboards but also affects other peripheral devices. In such a studio setup you can control the V-AMP 3 in real time from a computer. For live performances in particular, you can also use a MIDI foot controller to control both effect parameters and preset changes.

The MIDI connectors are international-standard 5-pin DIN connectors. To connect your device to other MIDI equipment you will need dedicated MIDI cables. They are commercially available in various standard lengths.

MIDI IN: This receives MIDI controller data. The receiving channel can be adjusted in EDIT mode by pressing the A button and then using the arrow keys.

MIDI OUT/THRU: This sends data to a computer or any other device. You can transmit both preset data and parameter changes. If set to MIDI THRU, the V-AMP 3 does not send its own MIDI information, but passes on the signal received at the MIDI IN connector. The TAP LED lights when the V-AMP 3 is set to MIDI THRU (see the Edit mode section for details).

Sending/receiving MIDI SysEx data

The V-AMP 3 can receive system-exclusive data from other MIDI devices provided that the MIDI function (button A) has been activated in EDIT mode. However, this means that all presets on your device will be overwritten automatically. You can also transmit MIDI data from your V-AMP 3 to other devices (total dump) by switching to EDIT mode and holding the MIDI button (A) until the display reads "d." The total dump function

MIDI IMPLEMENTATION CHART			
Function	Transmitted	Received	Remarks
MIDI Channel	1-16	1-16	-
Mode	N	N	-
Note Number	N	N	-
Velocity	N	N	-
After Touch	N	N	-
Pitch Blender	N	N	-
Control Change	-	-	-
1	N (request only)	Y	Wah Pedal
7	N (request only)	Y	Volume Pedal
12	Y	Y	Amp Gain (0-127)
13	Y	Y	Amp Treble (0-127)
14	Y	Y	Amp Mid (0-127)
15	Y	Y	Amp Bass (0-127)
16	Y	Y	Amp Vol (0-127)
17	Y	Y	Presence (0-127)
18	Y	Y	Reverb Mix (0-127) *2
19	Y (skipped on request)	Y	Amp Type (0-32) with default cabinet *3
20	Y (skipped on request)	Y	Fx Type (0-15) with defaults *1
21	Y	Y	Fx off/on (0/127)
22	Y	Y	Reverb Send off/on (0/127)
23	Y	Y	Cabinet Type (0-15) *5
24	Y	Y	Reverb Type (0-8) *4
25	Y	Y	Noise Gate Level (0-15)
26	Y	Y	Drive off/on (0/127)
27	Y	Y	Wah off/position (0/1-127)
44	N (request only)	Y	pre Effect Type (0-2) *6
45	Y	Y	pre Effect Par 1 *6
46	Y	Y	pre Effect Par 2 *6
47	N (request only)	Y	pre Effect Par 3 *6
48	N (request only)	Y	pre Effect Par 4 *6

MIDI Implementation Chart

can be useful for transferring all the stored data from your device to a MIDI sequencer and storing it there.

To exchange individual presets with other devices, such as another V-AMP 3 or a PC:

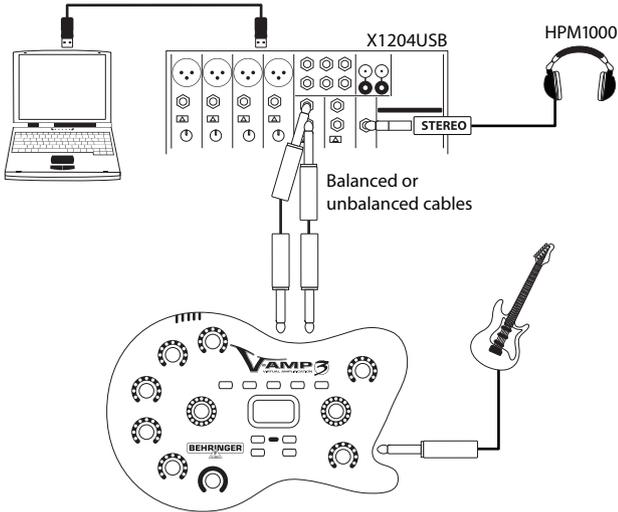
- Switch the transmitting V-AMP 3 to EDIT mode by pressing the BANK UP and DOWN buttons simultaneously.

MIDI IMPLEMENTATION CHART			
Function	Transmitted	Received	Remarks
49	N (request only)	Y	Delay Type (0-2) *7
50	Y	Y	Delay Time hi (0-117) *8
51	Y	Y	Delay Time lo (0-127) *8
52	N (request only)	Y	Delay Spread (0-127)
53	Y	Y	Delay Feedback (0-127)
54	Y	Y	Delay Mix (0-127) *9
55	N (request only)	Y	post Fx Mode (0-6) *10
56	Y	Y	post Fx Par 1 *10
57	Y	Y	post Fx Par 2 *10
58	Y	Y	post Fx Par 3 *10
59	Y	Y	post Fx Mix (0-127) *11
60	N (request only)	Y	Assign Effects Control (0-15) *1
61	N (request only)	Y	Amp Type (0-32) w/o cabinet change *3
64	N	Y	Tap (Value > 63)
80	N	Y	Request Controls (Value = 80)
81	N (request only)	Y	'Set Pos (0-15), Set Character (32-127)
82	Y	Y	'Tuner Bypass Volume (0-127)
83	Y	Y	'Tuner Center Frequency (25-55)
84	Y	Y	Configuration (0-4=S1,S2,L1,L2,L3)
85	Y	Y	Live EQ Treble (0-127)
86	Y	Y	Live EQ Mid (0-127)
87	Y	Y	Live EQ Bass (0-127)
Program Change	Y (0-124)	Y (0-124, 127)	127=Tuner
System Exclusive	Y	Y	see SysEx Documentation
System Common	N	N	-
System Real Time	N	N	-
Running Status	Y (2s Timeout)	Y	

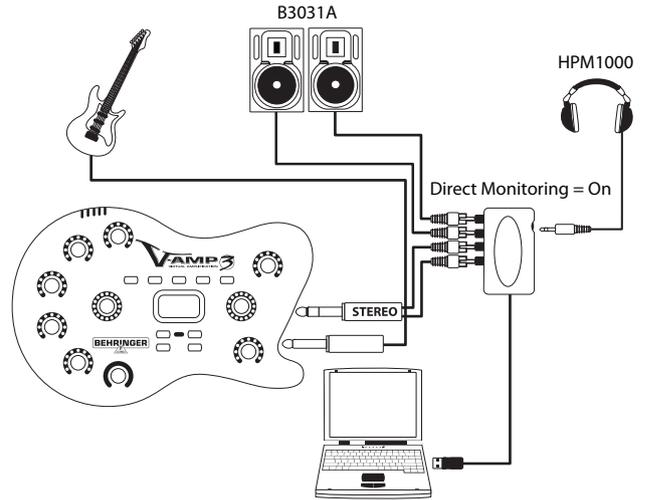
- Activate the MIDI function and briefly tap the MIDI button. The preset data is transmitted and first filed in the temporary buffer of the receiving V-AMP 3.
- Store the new information in the preset position of your choice using the store function.

Application

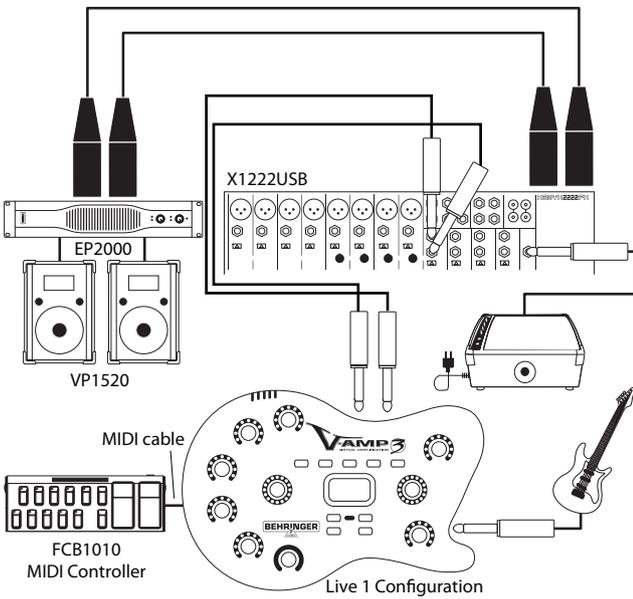
Studio Recording



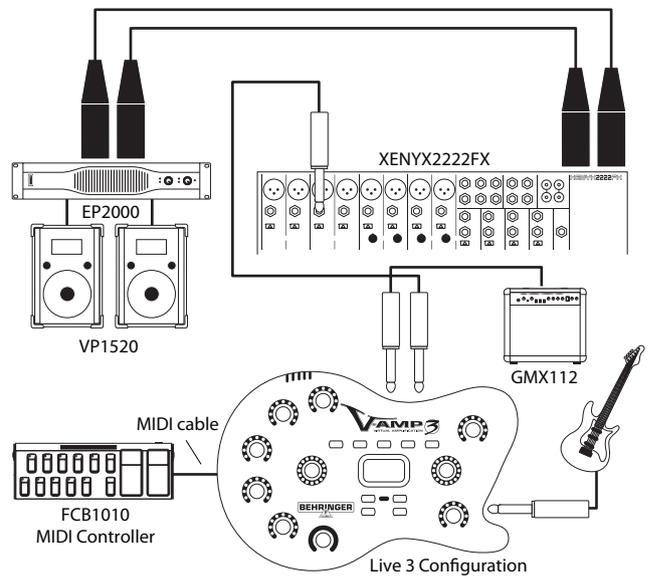
Latency-free home recording using UCA222



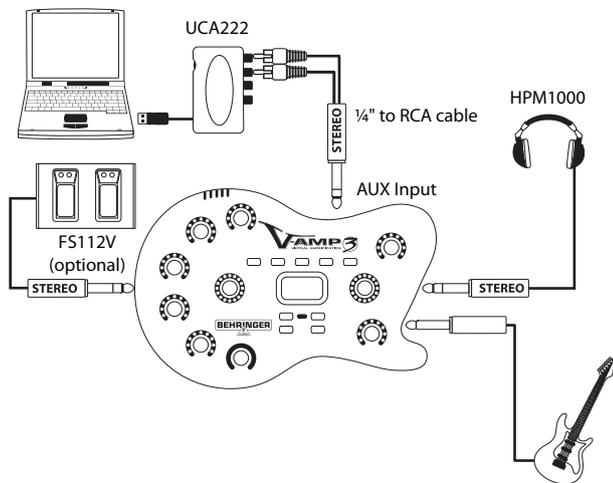
Live performance without a guitar amplifier



Live performance with a guitar amplifier



Jamming with a PC using UCA222



Shipment

Your V-AMP 3 was carefully packed at the factory, and the packaging was designed to protect the unit from rough handling. Nevertheless, we recommend that you carefully examine the packaging and its contents for any signs of physical damage that may have occurred during transit.

- ◆ **If the unit is damaged, please do NOT return it to BEHRINGER. Instead, notify your dealer and the shipping company immediately. Otherwise, claims for damage or replacement may not be honored.**
- ◆ **Always use the original packing carton to prevent damage during storage or transport.**
- ◆ **Make sure that no children are left unsupervised with the unit or its packaging.**
- ◆ **Please ensure proper disposal of all packing materials.**

Online Registration

Please do remember to register your new BEHRINGER equipment right after your purchase by visiting www.behringer.com (alternatively www.behringer.de) and kindly read the terms and conditions of our warranty carefully.

Should your BEHRINGER product malfunction, our goal is to have it repaired as quickly as possible. To arrange for warranty service, please contact the retailer from whom the equipment was purchased. Should your BEHRINGER dealer not be located in your vicinity, you may directly contact one of our subsidiaries. Corresponding contact information is included in the original equipment packaging (Global Contact Information/European Contact Information). Should your country not be listed, please contact the distributor nearest you. A list of distributors can be found in the support area of our website (www.behringer.com/support).

Registering your purchase and equipment with us helps us process your repair claims quicker and more efficiently.

Thank you for your cooperation!

Specifications

AUDIO INPUTS

INSTRUMENT INPUT	¼" TS connector, unbalanced
Input impedance	1 Mohms
Max. input level	+9 dBu
AUX IN STEREO	¼" TRS stereo connector
Input impedance	15 kohms

AUDIO OUTPUTS

ANALOG LINE OUTPUTS L/R	¼" TS connector, balanced
Output impedance	2.2 kohms
Max. output level	+20 dBu
HEADPHONES CONNECTOR	¼" TRS stereo connector, unbalanced
Max. input level	+15 dBu/100 ohms (+23 dBm)

MIDI

Type	5-pin DIN connector IN, OUT/THRU
------	----------------------------------

DIGITAL SIGNAL PROCESSING

Converter	24-bit delta-sigma, 64/128 x oversampling
Dynamics A/D	104 dB @ preamp Bypass
Dynamics D/A	92 dB
Sample rate	31.250 kHz
DSP	100 Mips
Delay time	max. 1,933 msecs.
Latency (Line In to Line Out)	approx. 5 msecs.

DISPLAY

Type	2-digit 7 segment LED display
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POWER SUPPLY

Mains voltage	USA/Canada 120 V~, 60 Hz
	UK/Australia 240 V~, 50 Hz
	Europe 230 V~, 50 Hz
	China/Korea 220 V~, 50/60 Hz
	Japan 100 V~, 50/60 Hz
Power consumption	13 W
Mains connection	external power supply unit

DIMENSIONS/WEIGHT

Dimensions (H x W x D)	79 x 267 x 180 mm
	3.1" x 10.5" x 7"
Weight	0.8 kg
	1.6 lb.

Legal Disclaimer

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Limited Warranty

§ 1 Warranty

- 1 This limited warranty is valid only if you purchased the product from a BEHRINGER authorized dealer in the country of purchase. A list of authorized dealers can be found on BEHRINGER's website www.behringer.com under "Where to Buy", or you can contact the BEHRINGER office closest to you.
- 2 BEHRINGER* warrants the mechanical and electronic components of this product to be free of defects in material and workmanship if used under normal operating conditions for a period of one (1) year from the original date of purchase (see the Limited Warranty terms in § 4 below), unless a longer minimum warranty period is mandated by applicable local laws. If the product shows any defects within the specified warranty period and that defect is not excluded under § 4, BEHRINGER shall, at its discretion, either replace or repair the product using suitable new or reconditioned product or parts. In case BEHRINGER decides to replace the entire product, this limited warranty shall apply to the replacement product for the remaining initial warranty period, i.e., one (1) year (or otherwise applicable minimum warranty period) from the date of purchase of the original product.
- 3 Upon validation of the warranty claim, the repaired or replacement product will be returned to the user freight prepaid by BEHRINGER.
- 4 Warranty claims other than those indicated above are expressly excluded.
PLEASE RETAIN YOUR SALES RECEIPT. IT IS YOUR PROOF OF PURCHASE COVERING YOUR LIMITED WARRANTY. THIS LIMITED WARRANTY IS VOID WITHOUT SUCH PROOF OF PURCHASE.

§ 2 Online registration

Please do remember to register your new BEHRINGER equipment right after your purchase at www.behringer.com under "Support" and kindly read the terms and conditions of our limited warranty carefully. Registering your purchase and equipment with us helps us process your repair claims quicker and more efficiently. Thank you for your cooperation!

§ 3 Return authorization number

- 1 To obtain warranty service, please contact the retailer from whom the equipment was purchased. Should your BEHRINGER dealer not be located in your vicinity, you may contact the BEHRINGER distributor for your country listed under "Support" at www.behringer.com. If your country is not listed, please check if your problem can be dealt with by our "Online Support" which may also be found under "Support" at www.behringer.com. Alternatively, please submit an online warranty claim at www.behringer.com BEFORE returning the product. All inquiries must be accompanied by a description of the problem and the serial number of the product. After verifying the product's warranty eligibility with the original sales receipt, BEHRINGER will then issue a Return Materials Authorization ("RMA") number.
- 2 Subsequently, the product must be returned in its original shipping carton, together with the return authorization number to the address indicated by BEHRINGER.
- 3 Shipments without freight prepaid will not be accepted.

§ 4 Warranty Exclusions

- 1 This limited warranty does not cover consumable parts including, but not limited to, fuses and batteries. Where applicable, BEHRINGER warrants the valves 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.
- 2 This limited warranty does not cover the product if it has been electronically or mechanically modified in any way. If the product needs to be modified or adapted in order to comply with applicable technical or safety standards on a national or local level, in any country which is not the country for which the product was originally developed and manufactured, this modification/adaptation shall not be considered a defect in materials or workmanship. This limited warranty does not cover any such modification/adaptation, regardless of whether it was carried out properly or not. Under the terms of this limited warranty, BEHRINGER shall not be held responsible for any cost resulting from such a modification/adaptation.
- 3 This limited warranty covers only the product hardware. It does not cover technical assistance for hardware or software usage and it does not cover any software products whether or not contained in the product. Any such software is provided "AS IS" unless expressly provided for in any enclosed software limited warranty.
- 4 This limited warranty is invalid if the factory-applied serial number has been altered or removed from the product.
- 5 Free inspections and maintenance/repair work are expressly excluded from this limited warranty, in particular, if caused by improper handling of the product by the user. This also applies to defects caused by normal wear and tear, in particular, of faders, crossfaders, potentiometers, keys/buttons, tubes, guitar strings, illuminants and similar parts.
- 6 Damage/defects caused by the following conditions are not covered by this limited warranty:
 - improper handling, neglect or failure to operate the unit in compliance with the instructions given in BUGERA user or service manuals;
 - connection or operation of the unit in any way that does not comply with the technical or safety regulations applicable in the country where the product is used;
 - damage/defects caused by acts of God/Nature (accident, fire, flood, etc) or any other condition that is beyond the control of BEHRINGER.

- 7 Any repair or opening of the unit carried out by unauthorized personnel (user included) will void the limited warranty.
- 8 If an inspection of the product by BEHRINGER shows that the defect in question is not covered by the limited warranty, the inspection costs are payable by the customer.
- 9 Products which do not meet the terms of this limited warranty will be repaired exclusively at the buyer's expense. BEHRINGER or its authorized service center will inform the buyer of any such circumstance. If the buyer fails to submit a written repair order within 6 weeks after notification, BEHRINGER will return the unit C.O.D. with a separate invoice for freight and packing. Such costs will also be invoiced separately when the buyer has sent in a written repair order.
- 10 Authorized BUGERA dealers do not sell new products directly in online auctions. Purchases made through an online auction are on a "buyer beware" basis. Online auction confirmations or sales receipts are not accepted for warranty verification and BEHRINGER will not repair or replace any product purchased through an online auction.

§ 5 Warranty transferability

This limited warranty is extended exclusively to the original buyer (customer of authorized retail dealer) and is not transferable to anyone who may subsequently purchase this product. No other person (retail dealer, etc.) shall be entitled to give any warranty promise on behalf of BEHRINGER.

§ 6 Claim for damage

Subject only to the operation of mandatory applicable local laws, BEHRINGER shall have no liability to the buyer under this warranty for any consequential or indirect loss or damage of any kind. In no event shall the liability of BEHRINGER under this limited warranty exceed the invoiced value of the product.

§ 7 Claim for damage

This limited warranty is the complete and exclusive warranty between you and BEHRINGER. It supersedes all other written or oral communications related to this product. BEHRINGER provides no other warranties for this product.

§ 8 Other warranty rights and national law

- 1 This limited warranty does not exclude or limit the buyer's statutory rights as a consumer in any way.
- 2 The limited warranty regulations mentioned herein are applicable unless they constitute an infringement of applicable mandatory local laws.
- 3 This warranty does not detract from the seller's obligations in regard to any lack of conformity of the product and any hidden defect.

§ 9 Amendment

Warranty service conditions are subject to change without notice. For the latest warranty terms and conditions and additional information regarding BEHRINGER's limited warranty, please see complete details online at www.bugera-amps.com.

*BEHRINGER Macao Commercial Offshore Limited of Rue de Pequim No. 202-A, Macau Finance

Centre 9/J, Macau, including all BEHRINGER group companies



www.behringer.com