The X-Series

Operating Guide for the XLS

The X-Series - The XLS

Playing The XLS: Suggested Settings & Effects-Loop Interface

Thank you for deciding to x-perience the X-Series from Horizon Music and Lee Jackson Amplification. Lee has created the X-Series to be very special kinds of guitar amplifiers. Being handmade from start to finish, each all-tube X-Series head and combo has its own personality and tone. Just as each player has his or her own unique style and touch.

The XLS was designed to be a pallet for cleans and gain tones, and is capable of many different tonal bases. Five (5) 12AX7 preamp tubes drive the front end of the XLS (one 12AX7 controls the effects-loop), and 2 (50Watt) or 4 (100Watt) 5881/6L6 power tubes provide an excellent overall balance of clean punch and dirty growl. To make the XLS even more versatile, Lee designed it to accept a variety of different power tubes, see Smart Tube™.

Before You Begin ×

This step is very important if you don't want to damage your new amplifier. Be sure to use good quality speaker cable, and be sure that the cables are securely connected between head and cabinet.

Connecting Speaker Cabinets

The XLS will comfortably drive one to four 4x12 cabinets. The Ohm Selector on the rear of the head needs to be set one of the following ways:

1 Cabinet = 16 Ohm

2 Cabinets = 8 Ohm

4 Cabinets = 4 Ohm.



XLS Speaker Cabinets

All Lee Jackson Cabinets are 16 Ohm and can be used with any head or power amp. The XLS cabinets offer a Horizon Speakerline Direct Box built into the rear of the cabinet. This allows connection directly to a recording console or P.A. board. The Speakerline is a special circuit that sounds like a miked 4x12 cabinet because its signal passes through working speakers. When using multiple cabinets, Ohm resistance is easily switchable by using the provided switch on the rear XLS Cab jackplate. This switch toggles between 4 and 16 Ohms.

Now, proceed with the following steps:

STEP #2

- ★ Connect Amp to power supply
- * Connect footswitch (optional)
- ★ Be sure the effects-loop switch is out or "off" (if not used)
- * Connect instrument cable
- ★ Turn the "Ready" switch on

Allow a minute or two of warm-up time, and to keep yourself occupied during warm-up, make the Channel I Level & Channel II Master are turned down.

STEP #3

* Turn the "Go" switch to "On"

Now, let's set up the XLS for your playing application and get familiar with the controls.

Setting Up Channel I

Channel I was designed as a dedicated clean channel and to stay warm and shimmering regardless of the required volume level. The Level is the only volume/preamp knob on the XLS/Channel I. Level uses a Lee-determined gain structure that is not of this world. Active Bass, Mid, and Treble e.q. provide a vast array of clean and blusey tones. Just because the gain structure is predetermined doesn't mean you can't get Channel I to overdrive, you just have to do it through the power tubes. Use the MTA™ feature, rock up the Level until a subtle overdrive ensues, and you've got that bluesy grit that Stevie and Jimi liked so much.

Suggested Settings for Channel I - Clean

As always, fear not when xperimenting. If you're still questing for your tone, it's in the XLS. Seek and you shall find.

- 1. Set Bass to 7 or 8.
- 2. Set Mid to 4 or 5.
- 3. Set Treble to 6 or 7.
- For the biggest low-end clean, leave the MTATM off, unless of course you prefer the tone while the MTATM is on.

4. Slowly bring up the Level to desired volume.

Suggested Settings for Channel I - Bluesy Grit ala Stevie Ray

One way to get a punchy blues-tone is to use strings with a wound 3rd, or G-string. Try a set of .011's. Take some time restringing. You'll have to readjust the tension on full-floating trem guitars via the spring claw.

- 1. Set Bass to 5.
- 2. Set Mid to 7.
- 3. Set Treble to 4.
- Engage the MTA[™] and set to 4 or 5.
- 5. Slowly bring up the Level to about 6 or 7.

Setting Up Channel II

Channel II ventures from the sweet singing cry of power tubes begging for mercy, to the tonal jungles of grunge and metal. When you're ready for More™, you're ready for the Tonal Frontier. You're ready for Channel II. If you can imagine it, you can get it with the XLS. One Preamp (1-12) and one More Knob™ (12-24) provide frightening amounts of gain. Use the Preamp to achieve the initial gain structure. When you're happy with the general tone, it's time to reach for More™ to tailor and shape exactly the tone you want. Active-Post/Gain tone controls allow for anything from creamy midrange rich overdrive, to mid-absent mosh/metal mania. Smart Touch™ keeps the over-all volume level just about the same regardless of where the guitar volume is positioned, allowing you to go from clean to scream anywhere on stage. MTA™ lets you get that wide-open, the sky is falling tone, at a volume level that's this side of earth-shaking. And of course Smart Tube™ allows for just about any type of power tube to be used is the XLS' power base.

Tube-Driven Effects Loop, and foot-switchable Effects and Channels round out the XLS making it a must-have for the Tonal-Frontiersman.

Suggested Settings for Channel II - Vintage

- 1. Set Preamp to 4.
- 2. Set More KnobTM to 11.
- 3. Set Bass to 9.
- 4. Set Mid to 6.
- 5. Set MidFrequency to 3.
- 6. Set Treble to 7.
- 7. Set MTATM to Off.
- 8. Set Presence to 6.
- Set Master to?
 To the very brim of your courage, if you wish.

Suggested Settings for Channel II - Mosh/Metal

- 1. Set Preamp to 9.
- 2. Set More KnobTM to 12.
- 3. Set Bass to 9.
- 4. Set Mid to 3.
- 5. Set MidFrequency to 1.
- 6. Set Treble to 11.
- 7. Set MTATM to 5.
- 8. Set Presence to 1.
- 9. Set Master to 7.

To the grunge jungles you come, bearing a serious machete.

MTA^{TM}

The purpose of the MTA (Master Tube Attenuator) is to allow the power tubes to be worked xtremely hard to get that wide-open breathy crunch, but allow the player to operate the X-Series Head at any volume level, even sane ones. Even though the MTATM adjusts the volume level from 0 db to maximum volume insanity, the power tubes are still working all the time at the level of the Channel Master. Remember, this is a hotrodded amplifier and will consume power tubes faster than whimpy stock tube amps.

"To Die In The Name Of Tone," that is a power tubes quest in life.

To Use The MTATM

Engage MTA[™] switch, set to 4 or 5, and then roll up the Channel Master to get desired tone and distortion. You must use the MTA with discretion, in other words, you can't open the Channel Master to 12 and MTA to 1 or 2. If the MTA[™] and Channel Master are not properly adjusted, a squalling sound will be heard. Bring the Channel Master down until a proper balance is achieved.

Generally, by setting the Channel Master @ 6, the MTA operates best.

Interfacing With Effects

The X-Series has a Tube-Driven effects-loop in order to maintain the Tube-Tone that's sent to the effects unit. In order to achieve this tonal integrity, the Channel Master must drive the Effects-Loop, see below.

★ The benefits: 1.) Much higher signal-to-noise ratio - it's quiet.
2.) Flexibility in matching levels with cutting-edge or ancient effects because of adjustable levels on Send and Return.

To Engage Effects-Loop

Depress the Effects On/Off switch on rear panel of the XLS or with the optional footswitch.

Note: The XLS will not operate if Effects-Loop is engaged while not connected to an effect.

★ The effects-loop drive level is driven by the Master on each channel. Therefore, you must tailor the Send level (the trim pot next to "Send") to match with the effect you wish to use. Generally, once the levels are set for your playing volume, they won't need to be readjusted.

Hint

If the effects unit has Input and Output level controls, match the input levels by adjusting the Send level on the XLS and Input level on the effect so that the signal is clean and not redlining or clipping. Then use the effect Output level to control your overall volume. Note: If you hear a whistling-squeal while interfacing with effects, slowly bring the XLS "Send" level down until proper matching occurs.

Stereo Effects

Using two XLS heads in stereo creates an awesome guitar rig. To do so:

1.) Obtain two(2) XLS Heads 2.) Select the outboard effect you wish to use.

3.) Engage the Effects-Loop on each head. 3.) Take the "Send" from first XLS head to effect input. 4.) Take Effects-Return "right" to XLS "right" Return.

5.) Take the Effects-Return "left" to XLS "left" Return. Using this method, the "Send" on XLS "left" is not used.

Smart TouchTM

Lee has set up the X-Series with a SmartTouchTM input which is Touch-Sensitive. Touch-Sensitive allows the player to control tone, gain, and clean by using the guitar volume knob. You can get an excellent warm clean sound in the gain channel by turning the guitar volume down about halfway, the over-all volume level will stay just about the same regardless of where the guitar volume is positioned, allowing the player to go from clean to scream anywhere on stage.

Smart Tube™

Each type of power tube has its own character, tone, and distortion properties. With Lee's Smart Tube™ feature, you can select and xperiment with the X-Series' power base. Choose Your Taste in Tubes. (To Change Power Tubes: Disconnect amp from power supply, remove back grill, remove existing power tubes - the big ones, plug in new tubes - EL34, 6CA7, 6550, 6L6, 5881 - and slide the small recessed switch in the direction the white sticker indicates, replace grill, reconnect to power, allow 5 minute warm-up period. The X-Series Head or Combo is now re-biased and ready to rock.)

Output-Tube Protector

If a faulty speaker cable has been used, or something has caused the red LED on the rear panel to come on, the Output Fuse has blown. To replace this or any of the three rear-panel-accessible fuses, disconnect from power supply, remove fuse cover and replace blown fuse with fuse type that's indicated on the panel.

Speaker Cabinets

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Trouble Shooting & Fuse Replacement

No Sound:

- 1.) Be sure effects-loop is disengaged
- 2.) Be sure Instrument cable is connected
- 3.) Be Sure "Go" Switch is on
- 4.) Be sure speaker cables are connected
- 5.) Check MTA's volume position

Replaced Fuses and Still No Sound or Power

(Seek Professional Assistance)

There is a 5A fuse located inside the chassis on the Main Board. Disconnect from power supply, remove rear screen, remove chassis screws, and carefully slide chassis out, locate and replace fuse, reverse process to reinstall.

Squeaking, Hissing, Squalling:

The XLS is designed to be the quietest (in terms of unwanted noise) guitar amplifier made. Anytime you hear a strange noise, investigate immediately. High-pitched squeaking/hissing noises are usually Effects-Loop related matching problems.

- 1.) Be sure your using good cable for effects-loop connection
- Double check the Send level, no redlining should be occurring on effect, adjust levels until noise goes away and proper matching occurs
- 3.) If using the MTA and a squalling occurs, be sure Channel Master isn't wide open

Xperiment

Long before the XLS was available to you, Lee was building this amplifier for players like Paul Gilbert, George Lynch, Zakk Wylde, and Steve Vai. What got all of these players to the top was their ability to experiment with their talent and their gear. The X-Series provides the best tonal foundation that a player could ask for.

SmartTouch™, The Touch-Sensitive Input allows for expression not capable on other amplifiers and the SmartTube™ biasing provides maximum tonal flexibility. Use the XLS dry, right out of the box without effects. Or create a monster rig by adding outboard effects such as delay, chorus, e.q. and reverb. Spend some time adjusting the parameters until you establish your own unique signature sound and tone. Keep Rockin'.

Creating The Monster-Rig

There are many options when it comes to guitar-rig technology, but a rather simple rig that won't cost an arm and a leg is as follows:

2 - XLS Heads (XLS-Right, XLS-Left)

- 1 Alesis Quadraverb®/Intelliflex®/Or Comparable Multi-Effect Processor
 1 Aphex® Aural Exciter/Or Comparable Exciter
- 1 Stereo Graphic EQ/Lots of good units-(choose a quiet one)

 Use Horizon Cable, HCG/Studio or HBGS/Concert for the best signal connection.

 Use Horizon 12 Gauge Speaker Cable to connect cabinets.

Run "Right" Channel first.

- Run "XLS-Right" Send into either Input on Aural Exciter
 (Exciter Settings: Drive @ 9:00 o'clock, Frequency @ 4:00 o'clock, Mix @ 8:00 o'clock).
- Take Aural Exciter "Out" to Quadraverb® "In",
 (Quadraverb Settings: Configuration EQ-Delay-Pitch).
- 3. Take Quadraverb® Right "Out" to Right/EQ "In."
- 4. Right/EQ "Out" to "XLS-Right" "Return." XLS-Left "Send" is not used.
- 5. Now run the "Left" Channel through the chain.
- 6. Drive up to eight (8) 4x12 Cabinets, four (4) each stereo channel.

Now, starting at the beginning of the chain, dial in each component one at a time. Go through the chain and adjust "Right" settings, then turn "Right" Channel off, and go through "Left" Channel. Start with exciter and leave the other units in "bypass" until ready to use. Repeat steps until you achieved monster-rigdom.

Horizon 5 Year Transferable Warranty

Horizon Music & Lee Jackson Amplification Warranty the XLS-500, XLS-1000, and XLS Speaker Cabinets, for normal, non-abusive use, to be free from defects due to materials and/or workmanship for a period of Five (5) Years from original date of purchase. This Warranty is transferable to secondary owner(s). Manufacturer reserves the right to determine abusive use.

Power Tubes, Preamp Tubes are Warranted for a period of Ninety (90) Days from original date of purchase.

Lee Jackson Speakers are Warranted against defects in materials and/or workmanship, for normal, non-abusive use for a period of Three (3) Years from the original date of purchase.

Celestion Speakers are Warranted for normal, non-abusive use for a period of Ninety (90) Days from original date of purchase

This Warranty is transferable, and a photocopy of the original, dated sales receipt must accompany Warranty claim. To make warrantee claim, go to the nearest Horizon/Lee Jackson Amplification Service Center near you.

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	XLS Owner's Copy
Date Of Purchase:	Dealer's Name & Address:
XLS Amp Serial Number:	XLA/XLS Cabinet Serial Number:
Your Name & Address:	

	Music/Lee Jackson Dealer Copy
	Dealer's Name & Address:
XLS Amp Serial Number:	XLA/XLS Cabinet Serial Number:
XLS' Owner's Name & Addres	55:

IMPLIFICATION