





Dear Musician!

Thank you for purchasing the **Lehle Sunday Driver XLR!**

I have been building units that switch, split and route signals with no technical compromises and with maximum musical fidelity since 1999. Your new **Lehle Sunday Driver XLR** comprises only the very best components. Every assembly of your **Lehle Sunday Driver XLR** has been made and tested in Germany.

Your **Lehle Sunday Driver XLR** is of extremely robust design and construction, to make sure that you get absolutely years and years of enjoyment from it. If you should nonetheless have a problem, or simply a question, just mail me or a member of the Lehle team at: support@lehle.com

I wish you the very greatest pleasure and success using your **Lehle Sunday Driver XLR!**

A handwritten signature in blue ink that reads "Burkhard Georg Lehle". The signature is written in a cursive, flowing style.

Burkhard Georg Lehle

Contents

Introduction	2
Technical data	3
General description	4
Typical uses	
- Lehle Sunday Driver XLR as a preamp for mixer inputs	8
- Lehle Sunday Driver XLR as a recording preamp	10
- Lehle Sunday Driver XLR as a cable driver	11

The **Lehle Sunday Driver XLR** is a compact-format high-end preamp for all types of electrical and acoustic instruments - a preamp that enables electric guitars and basses, acoustic guitars, and also other stringed instruments (such as violins, cellos and double basses) to unfold all of their musical potential.

The XLR variant is equipped with a balanced XLR output and a ground-lift switch. On stage, it can be used as a compact DI box and as a line driver for long cable distances. In studio use its broad output range of 20 to 100,000 Hz makes it ideal as a recording preamp or as a DI box, whether as a battery-operated stand-alone unit, or integrated into existing setups.

The **Lehle Sunday Driver XLR**, with its high-quality JFET technology, provides two modes, which are selected by a switch with gold-plated contacts. In mode D for "Driver" (switcher pressed), the input signal is amplified with absolutely no modification. This eliminates the signal losses that long cable routings and/or impedance matching errors with high-impedance signals from passive pickups can cause. The signal

remains powerful and clear, retaining its dynamics and brilliance. Mode S for "Sunday" (switcher not pressed) multiplies the input impedance by four, bringing out previously inaudible details. As gain increases on the **Lehle Sunday Driver XLR**, the sound takes on an unmistakable and characteristic warmth. There is no distortion at any stage, and the signal remains clean at all times, even at the maximum gain setting of 15 dB. To exploit the dynamics to the full, the input voltage is rectified from the power supply socket, filtered, stabilized and then doubled to 18V. The **Lehle Sunday Driver XLR** is totally free of background noise, thanks to its studio-standard signal-to-noise ratio of better than -100 dB.

Technical data

Weight:	362 g (without battery)
Length:	8.8 cm
Width:	9.2 cm
Overall height:	4.2 cm
Voltage range:	9 - 20 V AC or DC, or 9V PP3 battery
Max. power battery consumption:	19 mA
Frequency response:	20 Hz - 100 kHz (in mode D)
Distortion:	0.001 % at 1kHz, 0 dBu
Impedance, Input D:	1 MOhm
Impedance, Input S:	4 MOhm
Impedance, Output:	110 Ohm
Signal-to-noise ratio:	-102 dB at 1 kHz, 0 dBu (A-weighted)
Max. level:	5.1 V RMS (approx. 16 dBu)
Max. gain:	15 dB

General description



1. Input socket

■ *Connect your instrument to this socket.*

The **Lehle Sunday Driver XLR** processes signals from electric and acoustic stringed instruments, such as electric guitars and basses, western guitars, classical guitars and all kinds of stringed instruments. This compact preamp has no trouble matching low signal levels and eliminating sound losses caused by long cables and treble pickups.

Note: In battery mode, the battery circuit is automatically activated when a cable is connected to the input socket so always pull the plug when you've finished your session or you want to take a longer break!

2. S/D-selector switch

■ *Use this switch to select the sound mode you want.*

This gold-plated-contact switch enables you to change between the two sound modes. Mode D for "Driver" (switcher pressed) selects neutral amplification with an input impedance of 1M Ω , identical to a guitar amp's input stage, efficiently eliminating sound losses caused by long cables and/or effects cascades. The signal remains strong and clear, and retains its dynamics. In mode S for "Sunday"

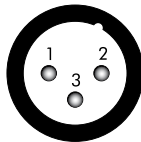
(switcher not pressed), the input impedance is multiplied by four, to 4 M Ω , making previously unheard details suddenly audible and imparting an unmistakable and characteristic warmth to the sound when the gain knob is turned up.

3. XLR output socket

■ *Connect your target device here.*

For instance, an amplifier with a balanced XLR input, a mixing console, a stage box or a sound-card.

Pin assignment of the XLR socket:



Pin 1: Shield

Pin 2: Signal in Phase

Pin 3: Signal out of Phase

4. Groundlift switch

■ *When it comes to hum noises, engage this switch.*

With this switch you can disconnect the shield from pin 1 of the XLR socket and signal ground of the **Lehle Sunday Driver XLR**.

5. External power supply

■ *Connect a power-pack for a voltage of 9 to 20 V here, when needed.*

The **Lehle Sunday Driver XLR** can be operated optionally with a 9 V PP3 (block) battery or from an external power supply, which should provide not less than 9 and not more than 20 Volts. Polarity is not important here, and both AC and DC sources can be used. The supply voltage is internally rectified, filtered, stabilized and then doubled to 18 V. A suitable connector for the **Lehle Sunday Driver XLR**'s power-supply socket is included in the pack; if desired, this connector can also be soldered to your power-pack mains cable.

The cover must be removed to permit installation of a 9V (PP3) block battery. To do this, simply unscrew the four screws holding the cover, and draw the cover and take it off.

Note: The **Lehle Sunday Driver XLR** automatically switches via a gold-plated-contact relay to battery operation if power supply voltage drops below 9 Volt.

Please always make sure that the **Lehle Sunday Driver XLR** has a charged battery if you want the extra security of knowing that it will continue to

operate trouble-free even if the power supply fails.

6. Gain controller

■ *Use the gain controller to adjust the intensity of the preamp from a slightly refreshed sound level up to a powerful boost.*

The gain control knob consists of black anodized aluminium and is recessed into the housing. It can be easily turned by placing your fingertip in the top depression. Thanks to the recessed design, the setting cannot be inadvertently disturbed on stage or during transportation, which is a great advantage. The **Lehle Sunday Driver XLR** with its JFET-based circuitry performs two functions simultaneously, reducing signal impedance, on the one hand, and boosting the signal, on the other.

The **Lehle Sunday Driver XLR** as an impedance converter:

When the gain controller is at the left-hand stop (in the 0 or seven o'clock position), it operates purely as an impedance converter. With the knob in this position, the sound is refreshed, in order to equalize sound losses that can occur when long cables or effects cascades are used.

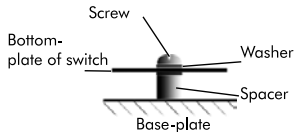
The **Lehle Sunday Driver XLR** as a booster:

A buffer starts to amplify the signal when the gain controller is turned in the clockwise direction.

Tube amplifiers, preamps and distortion pedals can thus be driven slightly beyond the limit. In S mode the **Lehle Sunday Driver XLR** amplifies less treble with increasing Boost settings to make sure that the resultant overdrive distortion sounds harmonious. The result can range from a pleasant sound, with no shrillness, up to a silky and warm overdrive distortion on tube amplifiers.

7. Base and fixing

■ You can use the fixing screws supplied with the **Lehle Sunday Driver XLR** to fix it to a base plate (or to a pedal board, for example).



Tip: in case you prefer a velcro solution for your pedalboard we recommend to write down the

serial number of the pedal before covering it for eventual support matters.

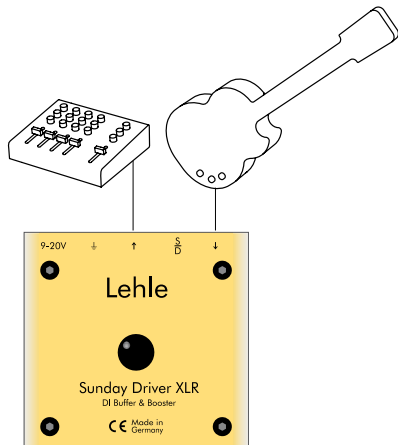
Thanks to its ready-to-go fixing system, the Lehle **Lehle Sunday Driver XLR** can be mounted without difficulty on a base plate.

To do this, undo the four housing screws and detach the cover. Then fix the device to a base plate using the two screws, the washers and the spacers supplied. Replace the cover and tighten the four housing screws - done!

Typical uses

The **Lehle Sunday Driver XLR**'s universal properties make it equally suitable for live use on stage and in the concert hall as well as for studio recording sessions. The following few pages show a number of typical applications in which the **Lehle Sunday Driver XLR** can be a useful addition to your gear!

The Lehle Sunday Driver XLR as a preamp for mixer inputs



Due to their input impedance of approx. 10 K Ω , the balanced inputs on mixers are not suitable for level-matched recording of high-impedance signals from magnetic pickups (e.g. the single coil and humbucker pickups on guitars and

electric basses). The signals from piezo pickups, like those used on acoustic instruments, are also too weak for the balanced inputs of a mixer. In a recording situation, the **Lehle Sunday Driver XLR** is again the ideal tool to turn a high-impedance instrument signal into a low-impedance instrument signal and matching it to the balanced input of a mixer. The **Lehle Sunday Driver XLR**, with its input impedance of 1 MOhm (or 4 MOhm in S mode) delivers the instrument's sensitive signal to the mixer totally genuine and complete with all its details.

Device connection

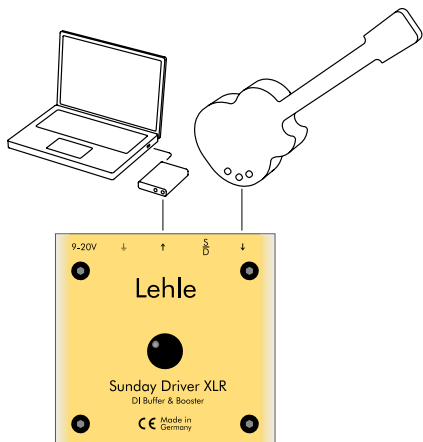
Input (1) → Instrument
Output (3) → Mixer input, PC,
Stagebox etc.

What to do:

1. Connect your instrument to the Input socket (1) of the **Lehle Sunday Driver XLR**.
2. Connect your recording preamp to the Output socket (3) of the **Lehle Sunday Driver XLR**.
3. Switch the S/D selector (2) in the D position for "Driver".
4. Adjust the Gain controller (5) so that the signal is optimal for your recording equipment.
5. Done!

Tip: In S mode and with a gain setting of 11 - 12 o'clock or higher, instruments with piezo pickups, which can sometimes sound very harsh and shrill, take on a pleasantly warm and silky tone.

The Lehle Sunday Driver XLR as a recording preamp



PCs featuring either integrated or external sound cards, and even Digital Audio Workstations (DAWs), often lack the high-impedance instrument input needed for direct recording from an instrument. Connecting the instrument to the standard

balanced input of such devices generally fails, because the instrument's signal level is too low. The result is a significant sound discoloration, due to the incorrect input impedance of the balanced input. The **Lehle Sunday Driver XLR** can be used to change your instrument's sensitive high-impedance signal into a balanced low-impedance signal and thus compatible with your sound card or DAW, while at all times retaining your instrument's original sound.

Device connection

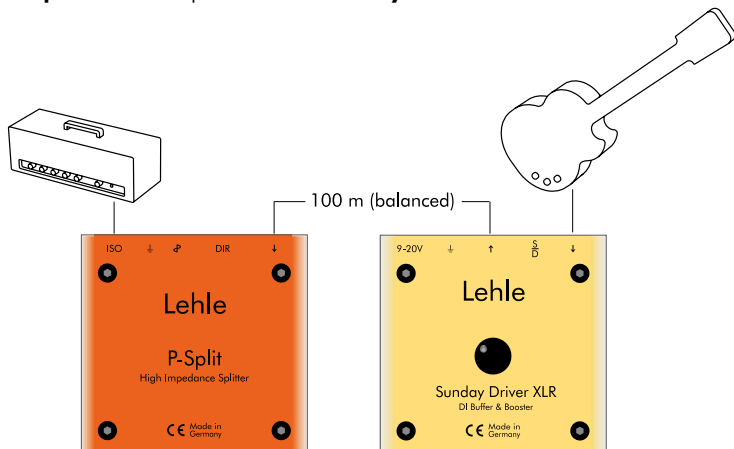
Input (1) → Instrument
Output (3) → Mixer input, PC,
Stagebox etc.

What to do:

1. Connect your instrument to the Input socket (1) of the **Lehle Sunday Driver XLR**.
2. Connect your recording preamp to the Output socket (3) of the **Lehle Sunday Driver XLR**.
3. Switch the S/D selector (2) in the D position for "Driver".
4. Adjust the Gain controller (5) so that the signal

is optimal for your recording equipment.
5. Done!

Tip: If you want to re-amp a signal recorded dry, connect the **Lehle P-Split II** to your sound card or DAW for the mix, reduce the volume on the sound card or DAW a little, and connect the ISO output of the **Lehle P-Split II** to an amplifier.



The Lehle Sunday Driver XLR as a cable driver

The use of long cable runs on stage or in a recording studio involves the danger of significant and audible loss of sound quality. You can eliminate this tone loss by positioning the **Lehle Sunday Driver XLR** as a cable driver in the

signal path directly after your instrument in combination with a **Lehle P-Split II** directly before the amp. The output of the **Lehle Sunday Driver XLR** must be connected to the input of the **Lehle P-Split II** by using a balanced cable. The **Lehle P-Split II** transforms the balanced signal of the **Lehle Sunday Driver XLR** into an unbalanced signal, which is identical to that signal coming from the instrument. The signal sustains the full sound quality even at cable runs of 100 meters (approx. 300 ft).

Lehle P-Split II:

Input → Output (3) of the
Lehle Sunday Driver XLR

ISO socket → Mixer input, PC,
Stagebox etc.

Lehle Sunday Driver XLR:

Input (1) → Instrument
Output (3) → Input of the
Lehle P-Split II

What to do:

1. Connect your instrument to the Input socket (1) of the **Lehle Sunday Driver XLR**.
2. Connect the Output socket (3) of the **Lehle Sunday Driver XLR** with the Input socket of the **Lehle P-Split II**.
3. Connect your amplifier to the ISO socket of the **Lehle P-Split II**.
4. Switch the S/D selector (2) of the **Lehle Sunday Driver XLR** in the D position for "Driver".
5. Turn the Gain controller (5) to the left (7 o'clock position).
5. Done!

Pin assignment of the balanced signal path between **Lehle Sunday Driver XLR** and **Lehle P-Split II**:

