

Lehle Sunday Driver

Operating instructions CE

Lehle

Lehle Gitarrentechnik

Thank you for choosing the Lehle Sunday Driver!

The Lehle Sunday Driver is equally suitable for preamplification of both electric and acoustic instruments. This preamp allows electric guitars and basses, acoustic guitars, and also other stringed instruments of any type (e.g. violins, cellos and double-basses) to show their full sound coloration.

The Lehle Sunday Driver is a handy, compact-format high end preamp. Equipped with modern JFET circuitry, the lehle Sunday Driver features two alternative modes of operation: in mode "D" (Driver), the incoming signal is amplified totally neutrally, i.e., with absolutely no modification, to eliminate the signal losses which can occur as a result of long cable runs and effects cascades. The signal is kept strong and clear, and retains its full dynamics. Mode "S" (Sunday) features a quadrupled input impedance; previously hidden details now suddenly become audible and, as gain increases, the sound takes on the unmistakable, characteristic warmth that gives the Lehle Sunday Driver its name – a sound as mellow as a warm Sunday afternoon! There is no signal distortion at any time, and the signal remains clean even at the maximum gain setting of 15 dB and thanks to its studio-quality signal-to-noise ratio of more than -100 dB, the Lehle Sunday Driver is totally free of background noise. A high-quality switch featuring gold-plated contacts is used to select the required mode.

To permit exploitation of the dynamics of tube amplifiers to the full, the input voltage is rectified, filtered, stabilized and then doubled to 18V after the power-supply socket.

The compact format of the Lehle Sunday Driver opens up a large range of potential applications for this new preamp – it can be used, for example, as a cable driver for large stages, or in complex effects set-ups. In the studio, it is used, thanks to its wide transmission range of 20 to 100,000 Hz, as a recording preamp. The Lehle Sunday Driver is universally utilizable, whether operating as a battery-powered stand-alone device, or integrated into an existing pedal board – and not just Sundays, any other day, too...!

Technical data

Weight:	356 g (without Battery)
Length:	9 cm
Width:	9,2 cm
Overall height:	3,9 cm
Voltage range:	9 - 20 V AC or DC, or 9V PP3 battery
Max. power take-up:	7 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:	150 Ohm
Signal-to-noise ratio:	-103 dB at 1kHz, 0 dBU (A-weighted)
Max. level:	5,7 V RMS (approx. 17 dBU)
Max. gain:	15 dB

General Description



1 Input socket

⇒ Connect your instrument to this socket

The Lehle Sunday Driver 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 new, compact preamp has no trouble balancing out low signal levels, and eliminating sound losses caused by long cables and treble pick-ups.

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 are taking a longer break!

2 S/D-selector switch

⇒ Use this switch to select the mode you want

This gold-plated-contact switch enables you to change between the two sound modes. Mode "D" for "Driver" selects neutral amplification, and the incoming signal is amplified at the input impedance of a guitar amp, of 1 MOhm, 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", the input impedance is multiplied by four, to 4 MOhm, making previously unsuspected details suddenly audible and imparting an unmistakable and characteristic warmth to the sound when the gain knob is turned up.

3 Output socket

⇒ Connect your target device here

For instance, an amplifier, a mixer panel, a stage-box or a soundcard.

4 External power supply

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

The Lehle Sunday Driver 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 connector for the Lehle Sunday Driver's power-supply socket is included in the pack; if desired, this connector can also be soldered on to your power-pack mains cable.

The cover must be unscrewed and 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 off.

Note:

The Lehle Sunday Driver automatically switches via a gold-plated-contact relay to battery operation if power supply voltage drops below 9 Volt. So always make sure that the Sunday Driver 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.

5 Gain controller

⇒ Use the gain controller to adjust the intensity of the preamp from a slight "refresh 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, with the great advantage that, thanks to the recessed design, the setting cannot be inadvertently disturbed on stage or during transportation. The Lehle Sunday Driver 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 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 balance out sound losses that can occur when long cables or effects cascades are used.

The Lehle Sunday Driver as a booster:

A buffer starts to amplify the signal when the gain controller is turned further in the clockwise direction. Tube amplifiers, preamps and distortion pedals can thus be driven slightly beyond the limit. To make sure that the resultant overdrive distortion sounds harmonious, the Lehle Sunday Driver in "S" mode amplifies less treble as "Boost" rises. The result can range from a pleasant sound, with no shrillness, up to a silky warm, harmonious overdrive distortion on tube amplifiers.

6 Base and fixing

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

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

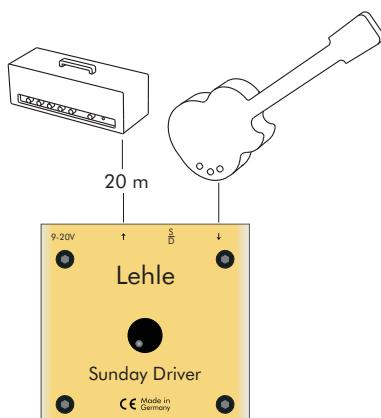
To do this, undo the four housing screws and detach the cover. Then fix the device base to a base plate using the two screws, the washers and the spacers supplied. Replace the cover and tighten the four housing screws - done!

Typical uses

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

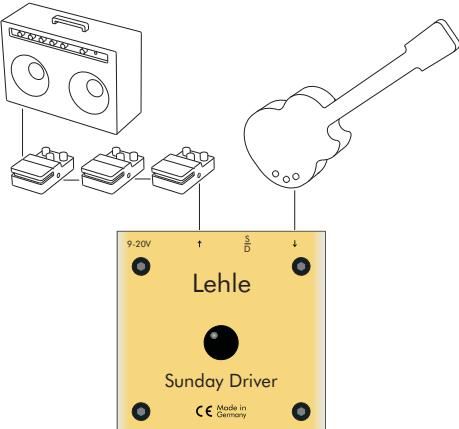
Live

Long cable runs and complex effects cascades on stage or in the concert hall can cause sound losses from the signal. Where electric guitars are used with tube amplifiers, an additional boost is often necessary, to generate a harmonious distortion. The Lehle Sunday Driver is designed to perform both tasks perfectly.



The Lehle Sunday Driver as a cable driver

The use of long connecting-cable runs on stage involves the danger of significant and audible losses of sound quality. You can eliminate such losses by positioning the Lehle Sunday Driver as a cable driver in the signal path directly after your instrument. The Lehle Sunday Driver has a low-impedance output, which is thus insensitive to sound losses caused by over-long cable runs. The full sound quality stays in the signal even at cable runs of 20 meters and more.

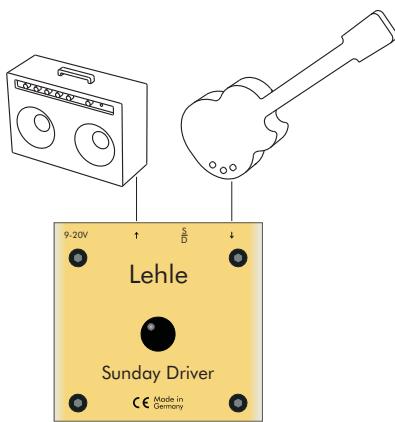


The Lehle Sunday Driver as a line-driver

Electric guitarists and bassists like to use a large range of effects switched one after the other, to get exactly the sound they want. There is, however, a danger here that the signal will lose clarity, treble and pressure significantly due to the array of effects. With long cable runs and the large number of contact crossings on connectors and sockets, these sound losses can even occur if the effects pedals are equipped with a True Bypass. It's easy to get an idea of how much sound you're losing - firstly connect your instrument directly to the amplifier, and then via the effects rig up. This sound loss can be eliminated by positioning your Lehle Sunday Driver as a line-driver before the effects cascade in the signal path.

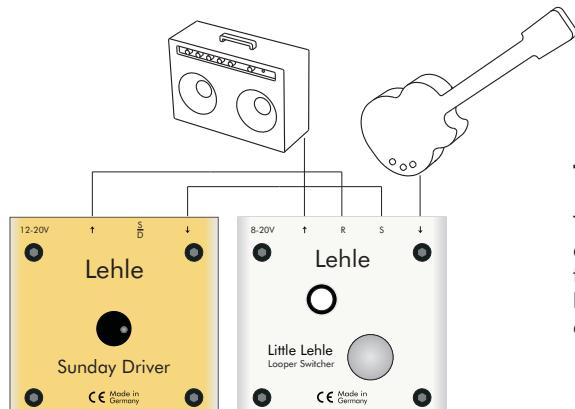
Notes:

- ⇒ The sound characteristics of some effects (e.g. Treble Booster, Fuzz, Vintage Chorus and Vintage Echo) may be modified by positioning the Sunday Driver before them in the line. The remedy in such cases is to use one or more Little Lehle II or Lehle D.Loop SGoS, so that the effects can be switched passively and without loss into the signal path, thus retaining their true sound characteristics.
- ⇒ Hum loops occurring between individual effects from the effects cascade, or also in conjunction with an amplifier, can be eliminated by using a Lehle P-Split II, which, thanks to the Lehle LTHZ high end transformer, causes electrical isolation of the signal.



The Lehle Sunday Driver as a booster

The Lehle Sunday Driver can be used as a booster to provide your sound with rather more pressure and presence on stage. Experience demonstrates that electric guitars and basses can sound significantly better in combination with the amplifier connected if the signal is boosted slightly. With a low gain setting, the sound generated is pleasant, with absolutely no shrillness, whereas an increasing gain level results in a silky-warm, harmonious overdrive distortion. Please also take a look at Section 5: the Lehle Sunday Driver as a booster.

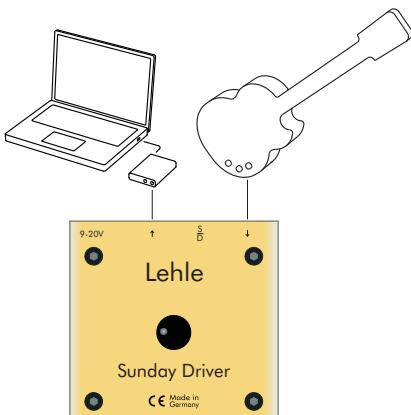


The Lehle Sunday Driver as a switch-in booster

The addition of a Little Lehle II enables you to effectively use the Lehle Sunday Driver as a switch-in booster. This combination is interesting in a number of ways, particularly, for example, if you want to increase volume for your solo at the push of only one button. With gain turned up, you can also boost a tube amplifier, to increase its distortion level. Take a look, too, at Section 5: the Lehle Sunday Driver as a booster.

In the studio

The Lehle Sunday Driver gives top performances not only on stage and in the concert hall, but also in the recording studio. Its wide 20 to 100,000 Hz transmission range and extremely good signal-to-noise ratio makes it the ideal recording preamp.

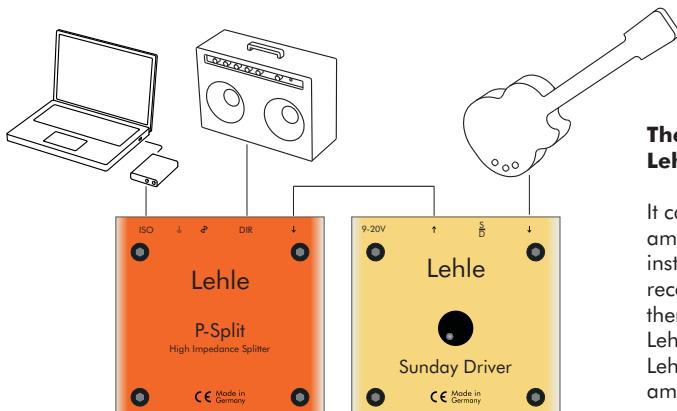


The Lehle Sunday Driver as a recording preamp

PCs featuring either integrated or external sound cards, and even Digital Audio Workstations (DAWs), in many cases lack the high-impedance instrument input necessary for direct recording from an instrument. Connecting the instrument to the standard Line input of such devices generally fails, because the instrument's signal level is too low. The result is significant sound discoloration, due to the incorrect input impedance of the Line input. Here, you can use the Lehle Sunday Driver to amplify your instrument's sensitive signal via the Sunday Driver's high-impedance input to make the signal low-impedance and thus compatible with your sound card or DAW, while all the time retaining your instrument's original sound.

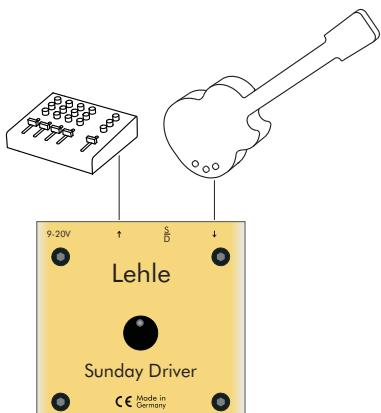
Tip:

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 as a recording preamp combined with the Lehle P-Split II

It can be useful during a recording session to hear your instrument via an amplifier simultaneously, while recording. This enables you to play your instrumental part with your accustomed sound, while your "dry" signal is recorded, a technique that has positive benefits for performance feel, and therefore also for the recording. Combination of the Lehle P-Split II and the Lehle Sunday Driver makes this method possible - connect the output from the Lehle Sunday Driver to the input of the Lehle P-Split II; then connect your amplifier to the DIR socket and the sound card or DAW to the ISO output.



The Lehle Sunday Driver as a preamp for mixer inputs

Due to their input impedance of around 10 KOhm, the Line inputs on mixers are not suitable for level-matched recording of high-impedance signals from magnetic pick-ups (e.g. the single-coil and humbucker pick-ups on guitars and electric basses). The signals from piezo pick-ups, like those used on acoustic instruments, are also too weak for the Line inputs of a mixer. As in the case of recording, the Lehle Sunday Driver is again an ideal tool here, for making a high-impedance instrument signal into a low-impedance instrument signal and amplifying it adequately for the Line input of a mixer. The Lehle Sunday Driver, with its input impedance of 1 MOhm (or 4 MOhm in "S" mode) amplifies the sensitive signal of such instruments so that their sound arrives at the mixer totally true to the original and complete with all its details.

Tip:

In "S" mode and with a gain setting of between 11 and 12 o'clock or more, instruments with piezo pick-ups, which can otherwise often sound very harsh and shrill, take on a pleasantly warm and silky tone.