

USB Highspeed Port

Connect Crimson 3 to a USB 2 or USB 3 port of the DAW.

PWR

Connect the original power supply only.

MIDI

Connect MIDI devices.

Speakers A

Connect your main monitors here. In Artist Mode Speakers A will only output the DAW 1|2 mix.

Speakers B

Connect alternate speakers and use trims to match the level to Speakers A. In Artist Mode you can send the artist headphone mix to a recording booth. The Talkback signal will also be present on Speakers B.

Line Inputs

Record up to four line inputs. Line 1 has preference over Mic 1, Line 2 has preference over Mic 2. Instrument 3 has preference over Line 3, Instrument 4 has preference over Line 4. In order to monitor a stereo signal via Line 3 and 4 nothing should be connected to the instrument inputs. Line 3 will be mono on the monitoring bus if Line 4 is not connected.



SPDIF

IN: Connect a CD player or similar and toggle between a reference track and your mix, while avoiding sound differences between DA converters. Or connect a channel strip with an AD converter and record two more tracks.

NOTE: Devices connected to SPDIF IN determine the sample rate.

Sources

Mini-J: MP3 player, pads, smartphones. Boosted to pro level by default.
RCA: CD player, AV receiver and the like. Boosted to pro level by default.
Jacks: Balanced stereo/mono source. Mono source into L to monitor in mono.

Mic Inputs

Connect and record up to two microphones. NOTE: Line 1|2 has preference over Mic 1|2 when plugged in.

Instrument Input (Front)

Connect and record an active or passive instrument here. NOTE: Use mono plugs only.

Designed, developed and manufactured in Germany.

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Important Security Advices

Connections: Only use the connections as described. Other connections can lead to health risks and damage the equipment. **Water and humidity:** Do not use this device anywhere near water (for example in a bath room, a damp cellar, near swimming pools, or similar environments). Otherwise you are dealing with an extremely high risk of fatal electrical shocks! **Insertion of objects or fluids:** Be careful not to insert any object into any of the chassis openings. You can otherwise easily come into contact with dangerous voltage or cause a damaging short circuit. Never allow any fluids to be spilled or sprayed on the device. Such actions can lead to dangerous electrical shocks or fire! **Opening the unit:** Simply put: DON'T, if you are not a certified SPL technician or engineer. Really: Do not open the device housing, as there is great risk you will damage the device, or – even after being disconnected – you may receive a dangerous electrical shock! **Electrical power:** Operate the device only from power sources that can provide proper power in the range from 90 to 264 volts. When in doubt about a source, contact your dealer or a professional electrician. To be certain you have isolated the device, disconnect all power and signal connections. Make sure that the power supply plug is always accessible. When not using the device for a longer period, make sure to unplug it from your wall power socket. **Cord protection:** Make sure that your power and audio signal cords are arranged to avoid being stepped on or any kind of crimping and damage related to such event. Do not allow any equipment or furniture to crimp the cords. In cases of damage to the power supply and cord, first consider turning off the main circuit breaker before unplugging the power cord. **Power connection overloads:** Avoid any kind of overload in connections to wall sockets, extension or splitter power cords, or signal inputs. Always keep manufacturer warnings and instructions in mind. Overloads create fire hazards and risk of dangerous shocks! **Lightning:** Before thunderstorms or other severe weather, disconnect the device from wall power; do not do this during a storm in order to avoid life threatening lightning strikes. Similarly, disconnect all the power connections of other devices, antenna and phone/network cables which may be interconnected so that no damage results from such secondary connections. **Air ventilation:** Chassis openings offer ventilation and serve to protect the device from overheating. Never cover or otherwise close off these openings. Never place the device on a soft surface (carpet, sofa, etc.). Make sure to provide for a mounting space of 4-5 cm/2 inches to the sides and top of the unit when mounting the unit in racks or on cabinets. **Controls and switches:** Operate the controls and switches only as described in the manual. Incorrect adjustments outside safe parameters can lead to damage and unnecessary repair costs. Never use the switches or level controls to effect excessive or extreme changes. **Repairs:** Unplug the unit from all power and signal connections and immediately contact a qualified technician when you think repairs are needed – or when moisture or foreign objects may accidentally have reached inside the housing, or in cases when the device may have fallen and shows any sign of having been damaged. This also applies to any situation in which the unit has not been subjected to any of these unusual circumstances but still is not functioning normally or its performance is substantially altered. **Replacement/substitute parts:** Be sure that any service technician uses original replacement parts or those with identical specifications as the originals. Incorrectly substituted parts can lead to fire, electrical shock or other dangers, including further equipment damage. **Safety inspection:** Be sure always to ask a service technician to conduct a thorough safety check and ensure that the state of the repaired device is in all respects up to factory standards. **Cleaning:** Do not use any solvents, as these can damage the chassis finish. Use a dry cloth, if necessary, with an acid-free cleaning oil. Disconnect the device from your power source before cleaning.

External Power Supply – Mean Well Type GE – Manual

Introduction: This is an external switching power supply for indoor use with informational equipment only. **Installation:** Before attaching the DC plug for the first time to a unit, verify that the power supply meets your local electrical voltage. The power supply supports AC voltages from 100-240 Volts. **Security Advices:** Keep the linkage between the adaptor and its power cord tightly as well as connecting the DC plug to equipment properly. Protect the power cord from being stepped on or any kind of crimping and damage related to such event. A power cord should meet or exceed SVT, 3G-18AWG or H03VV-F, 3G-0.75mm². If the powered unit is not used for a long period of time, disconnect the equipment from power supply to avoid damages by voltage peaks or lightning strikes. **Warning/Caution:** A drop or fall can cause damages. All defects should be examined by a qualified technician. Never remove the case of the adaptor if you are not a qualified technician. Otherwise you risk dangerous electrical shocks and energy hazards! Protect openings from foreign objects or dripping liquids to prevent the risk of fire or electrical shock! Do not use the power supply in places with high moisture or near water, in places with high ambient temperature or near fire/heat sources. Please refer to power supply specifications for maximum ambient temperatures. Output current and output wattage must not exceed the rated values. Disconnect the power supply from AC power before cleaning. Do not use any liquid or aerosol cleaner, use a dry cloth only. Ensure proper air circulation in order to prevent overheating. For further information and power supply specifications go to www.meanwell.com. **Manufacturer** MEAN WELL ENTERPRISES Co., Ltd. No.28, Wuquan 3rd Road, Wugu District, New Taipei City, Taiwan, 24891, Tel: +886 2 2299 6100, Web: www.meanwell.com. **Importer** Schukat electronic Vertriebs GmbH, Daimlerstraße 26, 40789 Monheim am Rhein, Germany, Telefon: +49-2173-950-5, E-Mail: info@schukat.com, Internet: www.schukat.com, WEEE-Reg-Nr.: OE 23942637



Quickstart

Windows



Download driver and manual



Connect Crimson 3 to your audio computer and install the driver



Connect your audio equipment to **Crimson 3**

Mac OS / iOS



Download manual



Connect Crimson 3 to your audio computer (optional: install Bit accurate driver)



For more information please go to crimson3.spl.info



1 Two Microphone Preamplifiers

Crimson 3 offers two high-performance microphone preamps with individual phantom power and rumble filters. They are designed with single transistor technology (instead of an IC), otherwise known as a 'discrete' design which is usually an exclusive feature of high-end boutique preamplifiers.

48V

The phantom power is used to feed 48V to condenser microphones. For operation safety, switch 48V off when mics are plugged in and out.

Highpass Filter

This 1st order highpass filter eliminates rumble and other unwanted low frequencies. The filter cuts off at 75Hz with a 6dB slope per octave.

Mic Gain

The Mic Gain control determines the preamplification of the microphone signal. For a good recording level turn up the gain until the -6dB LED lights up. Avoid OVL from lighting up.

2 Two Instrument Preamplifiers

Crimson 3 offers two identical instrument preamps to amplify Hi-Z (high impedance) signals from instruments like guitar or bass. You can connect your instrument directly to record or play-along. These preamps can accept levels up to +22dB and are ideally suited for active instruments.

Instr Gain

The Instr Gain control sets the amount of preamplification gain of the instrument. For a good recording level turn up the gain until the -6dB LED lights up. Avoid OVL from lighting up.

Instrument Input Jack

The input jacks are located on the front panel for easy access. Note: Use mono plugs only!

3 Four Line Inputs

All four Line Inputs (rear panel) are balanced and feed the converters with unity gain level (1:1). Use these inputs to record line level signals from keyboards, channel strips or DA converters.

For a good recording level make sure the -6dB LED lights up. Avoid OVL from lighting up. Please refer to the rear panel on the last page of this overview for more information about routing priorities of mic, instrument and line inputs.

4 Analog Inputs

Crimson 3 allows to record four analog inputs at the same time (as well as two more digital inputs; see 7. Digital In). Select the input you want to hear in the analog monitoring section.

Press 1|2 to listen to the Mic or Line 1/2 inputs.
Press 3|4 to listen to the Instrument or Line 3/4 inputs.

If you record a mono vocal track, it makes sense that the voice appears in the center, so you should press Mono.
If only one mono line input is recorded, use Line Input 3, which appears in the center if nothing is connected to Line Input 4.
Instruments 3 and 4 appear in the center by default.

5 DAW Returns

Crimson 3 has four DA converters onboard to listen back to four tracks – most commonly two stereo stems – from the DAW.

Press 1|2 to listen to the main mix of DAW outputs 1/2.
Press 3|4 to listen to e.g. the headphone fx mix of DAW outputs 3/4.

6 Three Stereo Sources

As a true monitor controller Crimson 3 offers further monitoring-only inputs. They cannot be recorded and are therefore called Sources. Three different connector types are supported:

1. Jack: to connect a balanced stereo source like a balanced CD player or DA converter
2. RCA: to connect an unbalanced stereo source like a CD player or an AV receiver or similar
3. Mini-J: to connect an iPhone, iPad or MP3 player

By default sources 2 and 3 are boosted to professional level for better comparison with all other signals. The boost can be deactivated with the DIP switches on the bottom of the Crimson 3 (Dip 1 and 2 = RCA, 3 and 4 = Mini-J). Set each pair upwards to ON for deactivation.

7 Digital In

When judging the mix it is a good idea to compare it with a reference track from a CD. Crimson 3 makes that comparison easy and trustworthy by using the same high-performance built-in DA converter for both SPDIF IN and DAW 1|2 and thereby avoiding sonic differences between different DA converters.

Use the SPDIF switch to toggle between the reference track and your mix. The Digital In is fully functional even with no DAW connected.

Furthermore you can use the Digital In to record two more tracks. Two of our SPL channel strips would be a perfect match, but bear in mind that one of them should be equipped with the optional AD converter module.

8 Two Stereo Speaker Sets

You can connect two stereo speaker sets and toggle between them with the A to B switch.

Speakers B can be trimmed precisely to match Speakers A. Two trimmers on the rear provide a super fine trim range of +/-5dB.

In Artist Mode, Speakers B outputs can be used to drive an external headphone amplifier with a dedicated headphone mix. Alternatively this output can be used to feed an AD converter with unity gain.

9 Dim/Talk Switch

The Dim switch reduces the monitoring level by -20dB.

In Artist Mode, the built-in Talkback Mic is activated with this switch.

10 Headphone Amplifiers

Crimson 3 is equipped with two independent high-quality headphone amplifiers, Phones 1 and Phones 2. They offer a lot of output power and can drive headphones from 20 Ohm to 600 Ohm. Be reasonable with high listening levels to protect your hearing.

11 Phonitor Matrix

The Phonitor Matrix creates a speaker-like listening experience on headphones. When listening to speakers sound coming from one side is also perceived with the ear on the opposite side. The Phonitor Matrix calculates the time and level differences with their specific frequency responses to deliver a speaker-like listening experience on headphones.

The super-stereo-effect is eliminated and reverb and delay effects as well as EQ and panorama adjustments are perceived correctly on headphones. The headphone mix therefore translates well to speakers

By using the switch you can activate or deactivate the Phonitor Matrix. With the Crossfeed control at the front you adjust the level difference to best suite your control room speaker setting.

12 Monitor Mix

With the Monitor Mix control you create a monitor mix fast and easily. No need to fiddle with gain controls or faders, just blend between the inputs (mic, line, instrument) and the DAW/Sources/Digital In.

The analog monitoring of all analog inputs and sources is absolutely latency-free, it is as real-time as it gets.

13 Volume

The big volume knob controls the level of the speakers. It is important to note that the volume is controlled in a fully analog way, which is an advantage over digitally controlled options due to the fact that bit resolution, and thus audio quality, shrinks when lowering the volume – something that does not happen in the analog domain.

14 Artist Mode

The Artist Mode is used for recording other artists who may need dedicated headphone mixes and a talkback to guide them through the recording.

Monitoring options for the artist are:

- Mic, Line, Instrument inputs monitoring in real-time
- DAW 1|2 to listen to the current mix
- DAW 3|4 for a more sophisticated mix with effects (reverb, etc.)
- Any source as playback for rehearsal or play-along

The engineer/producer focuses on the mix. DAW 1|2 is therefore fixed to Phones 1 and Speakers A without the need of engaging the respective switches.

- The engineer/producer can check the artist's headphone mix by disengaging Artist Mode
- The engineer/producer can send the mix to the artist by simply pressing Speakers A to B

Tip: Use Speakers B to connect a headphone amplifier with more headphone outputs when you record more artists at the same time.

IMPORTANT:

Artist Mode is deactivated as factory setting. DIP switch 5 on the bottom of the Crimson 3 is off. This makes sense if loudspeakers are connected to the Speakers B. Otherwise, in case of accidentally activating Artist Mode, the output signal of the DAW is routed to Speakers B at full level, which results in a disturbingly loud playback.

If you intend to use the Artist Mode, activate it by sliding the DIP switch 5 into ON position.

15 Talkback

Thanks to the built-in Talkback Mic, you don't have to fiddle with an extra mic, cable or preamplifier.

In Artist Mode only: press the Talk button and speak into the Talkback Mic – leave about 15" to 20" distance. The artist will hear you on Phones 2 and Speakers B. Speakers A will be dimmed automatically to avoid feedback.

You control the amplification of the Talkback Mic signal with the TB Gain potentiometer at the front.

New Crimson 3 Features

Phonitor Matrix

The Phonitor Matrix creates a speaker-like listening experience on headphones. All instruments appear at the correct position within the stereo image. Effects – e.g. reverb and delay – will have the correct assertion in the mix – just like you intend when mixing on speakers.

Built-in Talkback Mic

With the built-in Talkback Mic communicating with the artist works like a breeze.