

# Operation Manual

Tube-Amplifier for Harmonica



## Preface

Dear harmonica player,

Many thanks for your confidence in buying the SEYDEL **Hyperamp HA1510 REV MK II**.

The Hyperamp developed together with SEYDEL and tube-amp engineers of the Haller-Amps factory ([www.haller-amps.com](http://www.haller-amps.com)) situated close to Klingenthal is an uncompromising, hand wired tube-amp, equipped with all the features a harmonica player would need.

The **Hyperamp HA1510 REV MK II** is offering special features that are not found with other amplifier models. For the second version (Mark II) we changed technical details according to suggestions of many Hyperamp MK I users:

- 1) The **Gain/Volume control** now allows to produce the beloved warm and beefy Chicago sound already at lower volumes – low or high-impedance microphones can be used and the “crunch” can be adjusted individually.
- 2) The new **AUX-IN input** on the front panel can be connected to any mp3-player or other sound sources. So it is easily possible to play along to your famous tracks without additional Hifi-equipment.
- 3) A **built-in stand/pedestal at the bottom-front can be used to angle up the amp**: therefore the player can hear his playing better and the overall sound projection is largely improved.
- 4) The built-in **spring reverb is tube-driven** as well resulting in an authentic vintage style reverb for the authentic Chicago Blues sound.
- 5) **Line-Out or additional external speaker?** Both is possible – so the new Hyperamp MK II can be used on any stage no matter how small or large it is.

Many amps originally are built for electric guitar or bass – in contrast the Hyperamp is designed from the ground up specifically for the needs of the harmonica player! That is why the special sound is created, that once helped our small instrument to become "the mother of the band" (Otis Spann, piano player of the Muddy Waters Band).

Many players are looking for their individual sound - with the adaptability for different kind of microphones/effects and speaker combinations the Hyperamp is a unique and universal voice for the harmonica player.

Have much fun with the SEYDEL-**Hyperamp HA1510 REV MK II** – we can help you to find another piece of *your* sound!

With our best thanks!

The SEYDEL-team

## **Please note!**

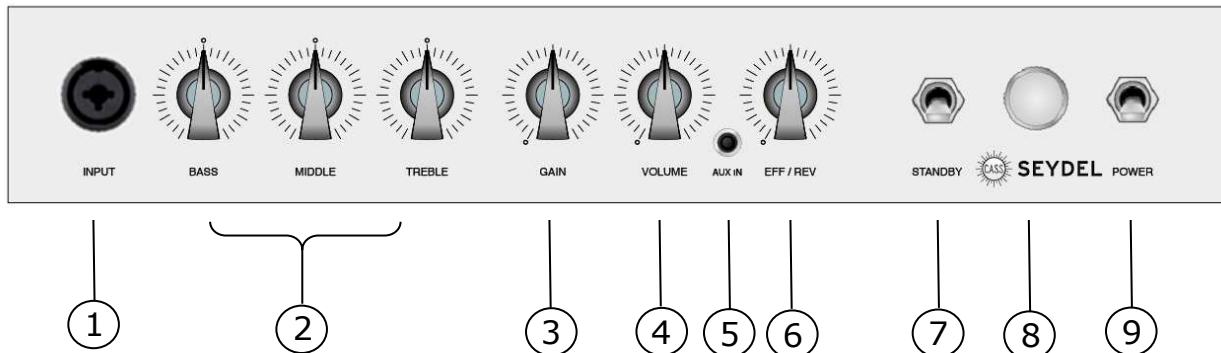
To make the device operate always reliably, please follow the advice below:

- Do not open the chassis (risk of electric shocks!).
- Avoid dust and too much humidity, direct sunlight or too low or high temperatures.
- Pay attention to ventilate the backside properly.
- Do not transport the device until 10 minutes of cooling down, avoid dropping, or rough handling (tubes!).
- Place the device always on a stable and horizontal underlay.
- Avoid operation close to running radiators.
- Pay attention not to let fluids enter the device.
- Do not run the device without a speaker connected.
- After switching on, the tubes need about half a minute to warm up – the full performance is reached not until a few minutes.
- Please replace the tubes with those of the same type only.
- Always run the device with an undamaged power cord and make sure that you choose the appropriate input voltage (115V/230V).
- Run the device with grounded circuits only.


Please let the device be checked by a skilled technician if

- the power cord is damaged.
- objects or fluids entered the device.
- the device was exposed to excessive moisture.
- you determine weird action.
- the device was dropped or the chassis is damaged.

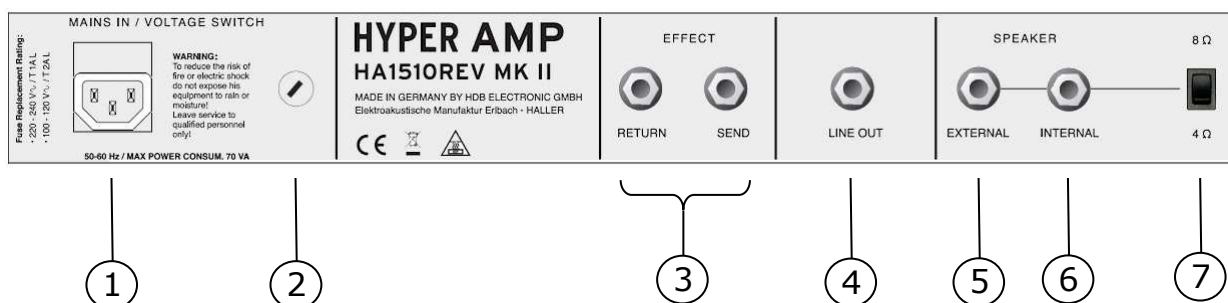
## Control elements at the front



- 1) INPUT (combined): 6,3mm guitar-connector (mono) to connect a high-impedance microphone or XLR-connector to connect a low-impedance microphone
- 2) BASS/MIDDLE/TREBLE: tone control
- 3) GAIN: controls the saturation of the preamp-tube ("crunch")
- 4) VOLUME: main volume control
- 5) AUX IN: 3.5mm stereo-headphone connector for using external sound sources (mp3-player/mobile phone/CD-player, etc.)
- 6) EFF/REV: control to add external effects (Reverb, HA1510REV only)
- 7) STANDBY: switch to mute the PA (stand-by)
- 8) Operation lamp
- 9) POWER: on/off switch

Level indicator ("Cateye"  - in the Hyperamp-logo): shows the saturation of the power-amp.

## Rear control elements



- 1) Electric supply with fuse and replacement fuse (grounded rubber connector)
- 2) Voltage switch: 115 or 230 volts
- 3) Connectors EFF RET and EFF SEND: to add an external effects circuit (the internal reverb is muted. Applying the parallel effects loop the direct signal in the amp is mixed up with the effect's signal. The disadvantage is that some effects are limited (e.g. distortion). The advantage is that the direct signal is conducted to the power amplifier as the crow flies and therefore remains unaltered.
- 4) Line-OUT: Guitar-connector 6.3mm Mono; direct connection to a DI-Box or PA
- 5) Speaker jack EXTERNAL: connection for an external speaker (please note point 7!)
- 6) Speaker jack INTERNAL: connection to the internal speaker
- 7) Switch 4 / 8 Ohm: if connecting an additional 8 Ohm speaker the impedance switch must be set to 4 Ohm. Under normal operation, without a second speaker it has to be set to 8 Ohm (as well if you disconnect the internal speaker and run the amp through an external speaker only).

## Putting into operation

- 1) Be sure that the 4 / 8 Ohm switch on the rear is set to appropriate value of the connected speaker(s).
- 2) Be sure that the power cord is connected.
- 3) Switch the volume control (4) to the very left and set the standby-switch to the lower position.
- 4) Connect a suited microphone with shielded line cable into the input jack (XLR or guitar-plug, 1).
- 5) Switch on the device (power-switch (9) in up position).
- 6) After warming-up the tubes for at least 30 seconds switch on the Standby switch (7), (position up).

- 7) Choose the desired volume by turning the GAIN (3) and the VOLUME control (4) to the right.
- 8) Choose the desired sound by adjusting the tone controls (2).
- 9) Add the desired Effect/Reverb-fraction to the sound by using the EFF/REV control (6).

## **Safety instructions**

- 1) The Amplifier can produce very high volumes that may harm your hearing.
- 2) Depending on the sensitivity of the connected microphone and the chosen volume there is danger for feedback ("squealing" or "skirling") that may harm your ears or damage the speaker.
- 3) To replace the fuse always disconnect the power cord. Use only fuses with the same value as the supplied ones.
- 4) The tubes can get hot! Danger of burns, if grabbing in the amp's upper back!
- 5) Make no attempts to repair. The manufacturer then does not accept any liabilities!
- 6) Let the chassis be opened only by a technician.
- 7) Use effect-pedals only with the EFF RET and EFF SEND jacks at the back side.

## Amplified Harmonica Playing

For playing harmonica amplified the so-called bullet microphones are very popular. These high-impedance microphones often feature a non-linear frequency response - therefore they have unique tone characteristics. The technology used really can be called "out of primitive times". The functional principle ranges from dynamic elements to crystal and ceramic capsules. They are connected to the 6.3mm guitar jack (1) of the Hyperamp.



Besides the different sounds these microphones share a common feature – they are more or less nodular and therefore can be held with both hands. The hands cover the harmonica and they "seal" the microphone and harmonica together (so-called "cupping"). Playing the harmonica, the microphone reaches its dynamic limit and a

compressed and often distorted sound is developed. This is amplified by the Hyperamp. Often an additional distortion is desired. You can watch the magic eye indicator in the amp's logo – it then shows a very small bar.

The produced sound is also the result of a good sounding harmonica and a developed playing technique (breathing/embouchure/resonance) and also depends on the microphone used and the "cupping"-technique. You might further adjust the amount of "crunch" using the Gain control (3) – then set the overall volume (4)



The Hyperamp is equipped with a very effective tone control for bass, middle and treble. Depending on the type of microphone certain frequency ranges can be adjusted. At the beginning it is a good idea to adjust all controls to 12 o'clock position. Then you can try to add or subtract bass or treble. Mostly the trebles are attenuated, due to the fact that the harmonica is loud in this frequency range.



**Please note:** The efficiency of the tone-controls strongly depends on the microphone's frequency response: if a microphone does not record much bass and treble frequencies the tone control of the amp cannot add more of it. Please use e.g. a singing microphone with a good linear frequency response in order to get the best results using the tone control of the amp. Additionally the amp can be placed at ear level which helps a lot to play with less volume (and feedback).

The middle-control is suited to damp or remove feedback at high volumes. Feedback might occur with all microphone-amplifier-speaker combinations. The amplified sound is recorded by the microphone and re-amplified – the sound is "looped" and as a result of this a nasty squealing sound is produced. Feedback often can be prevented by lowering the volume or by adding fewer effects. Many microphones have a volume control, or on/off switch. It is good for the musician not to stay right in front of the speaker's sound cone. If required you can also turn the amp out of your direction a little bit. You might also angle up the amp with the built-in pedestal in order to improve the sound projection of the speaker. Then the volume can be reduced as well which helps a lot to prevent feedback.

To apply low impedance microphones (e.g. standard dynamic microphones for singing) the Hyperamp features a second input option (XLR-jack (1)). Microphones are available for many purposes – often a harmonica player selects a model which is suited in design and sound from his personal point of view.

By the use of an additional speaker, volume and sonority of the amp can be enhanced (see "Control elements on the backside", point 6). Through the line-out socket (direct injection) on the rear panel the signal can be directed to the DI-box or a mixer without changing the sound of the amp on stage.



## Jamming at home by using the AUX-IN input

Any external sound source can be connected using a 2x 3.5mm stereo headphone cable (small stereo headphone jack on each side). **The maximum volume of the AUX-INPUT is fixed so please start with a low volume on your mp3-player, mobile phone or CD-player!** Then you can adjust the volume of the microphone so that it fits the volume of the play along track. We suggest to add a little bit of reverb to the microphone making the mix sound much more alive. The AUX-IN signal is completely un-effected by other settings of the amp like tone controls, gain, volume or reverb. The maximum volume depends on the output volume of the external sound source. Before you plug-in an external sound device please set the Hyperamp to Standby-mode.

## Technical data - Hyperamp HA 1510 REV MK II

<i>Output:</i>	15VA an 4 / 8 Ohm (switchable) *
<i>Speaker:</i>	10" Jensen P10R 8 Ohm "SPECIAL DESIGN"
<i>Power amplifier:</i>	Class A (2 x EL84)
<i>Level indicator:</i>	EM84 (magic eye), at the front
<i>Input (combined):</i>	Guitar socket 6.3 mm (mono), -10 dBu at 1 MOhm or XLR-socket, -30 dBu at 200 Ohm
<i>Effects:</i>	parallel, with Level-(Reverb-) control **
<i>Line-output:</i>	Guitar socket 6.3 mm (mono)
<i>Sound control:</i>	3 bands
<i>Controls at the front:</i>	INPUT, BASS, MIDDLE, TREBLE, GAIN, VOLUME, EFFECT/REVERB, Standby-switch, operation light, On/Off-switch
<i>Controls at the rear:</i>	Electric supply with fuse and replacement fuse, sockets EFF RET and EFF SEND, LINE-OUT, socket for ext. speaker EXTERNAL, socket for int. speaker INTERNAL, Impedance switch 4 / 8 Ohm

*Tube assembly:* 1 x EZ81, 2 x EL84, 2 x ECC81, 2 x ECC83, 1 x EM84

*Spring reverb:* Accutronics, 3 springs (tube-driven)

*Dimensions (in mm):* 484 x 480 x 260 mm / 19 x 18.9 x 10.2 inch

*Weight:* ~14.5 kg / ~32 lbs

\* Through a second speaker jack an external 8 Ohm speaker can be connected, the impedance switch then has to be turned to 4 Ohm. In normal action without an additional speaker it is set to 8 Ohm.

\*\* Applying the parallel effects loop the direct signal in the amp is mixed up with the effect's signal. The disadvantage is that some effects are limited (e.g. distortion). The advantage is that the direct signal is conducted to the power amplifier as the crow flies and therefore remains unaltered. The EFF/REV-control adjusts the amount of reverb. If an external effect-pedal is connected to the EFFECT RETURN jack, the internal spring reverb is switched off.

## Warranty

The manufacturer guarantees that the device is free of faults in material or manufacturing faults. This warranty applies for the date of purchase until the period valid by law (according to German law). This warranty does not cover products that are damaged from false handling, transport, omission, accident, false usage or modification, that were not approved explicitly by the manufacturer. This warranty excludes all warranties getting beyond, neither verbalized nor recommended. The manufacturer is not liable for accident, loss or damage, which is done deliberately, un-deliberately, carelessly or otherwise. Furthermore the manufacturer is not liable for wilful damage to property, loss of ownership or time loss or any kind of impairment that results from faults in material or manufacturing process of a product.

The tubes are consumables and are not covered by this warranty.

Things not mentioned explicitly here are excluded from the warranty.

All modifications done to technically improve the device, can be done without any announcement on the part of the manufacturer.

## Conformance declaration

For SEYDEL-Hyperamp HA1510REV MK II

We declare that, if operation conditions and environment are those recommended in this manual, the product is in accordance with the following norms or standard documents:

EN 61000-3-2, EN 61000-3-3, EN55013, EN 55020, EN60065 after the requirements and guidelines 89/336/EWG und 73/23/EWG.



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