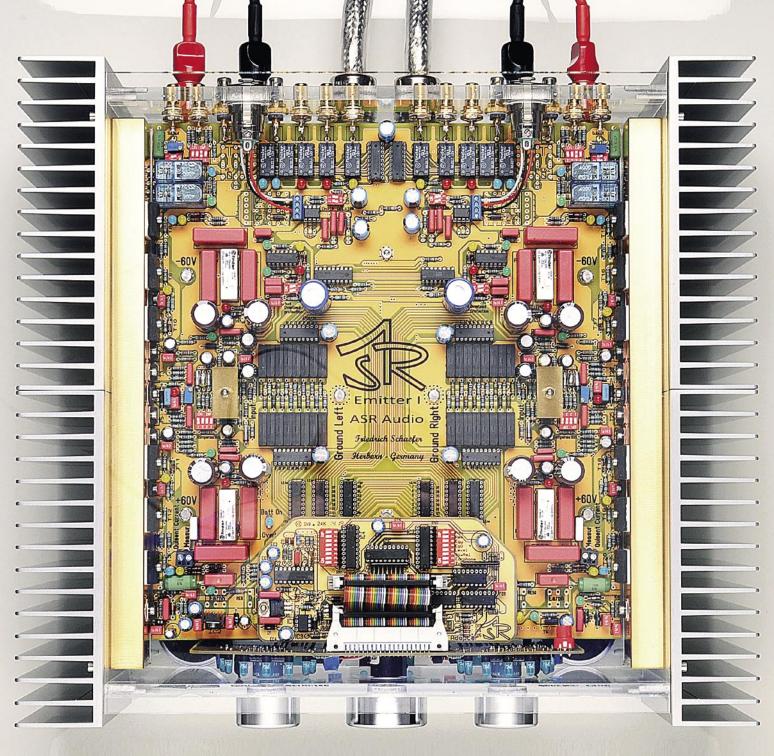
ASR Audio Systems

For passionate music lovers







Naturally brilliant

Us at ASR Audiosysteme from Herborn in central Germany successfully develop and manufacture High End Audio devices since 1980. ASR amplifiers of the Emitter series and our Basis Phono preamplifiers are among the best worldwide. How did we get there?

When we started, there was our pure love for music and the strong desire to reproduce a lifelike acoustic experience at home. We then studied in detail popular amplifiers of the time, replaced standard elements with elements of a higher quality to have an improvement in sound. Doing this, we noticed that developers and manufacturers of High End Audio equipment – probably in order to save money – made a lot of compromises.

We quickly realized that a sound optimized amplifier had to be set up in a completely new way. Our focus was on amplifying the original music as pure as possible. Our center of attention was now the hearing test.

A change of a system only makes sense if you hear the difference. Every upgrade we make to our systems improves the sound noticeably.

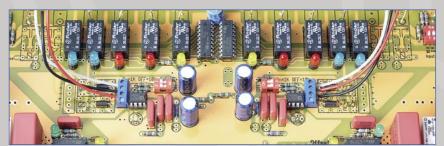
This brochure presents to you the latest generation of ASR Audio Systems amplifiers. Numbers and facts will make you understand why ASR Audio Systems amplifiers are built in an uncompromisingly complex manner. But – most importantly – hear for yourself!

Yours

Friedrich Schäfer



ASR Audio Systems Emitter I Exclusive Clear with blue display



The input relays and the balanced input with adjustable impedance. Connected via pure silver wires.



Power transistors with ceramic insulators and solid brass bar

Standard features of the ASR Audio Systems Emitter series

- audio MOSFET transistors mounted on a massive brass bar with 1 mm ceramic isolation
- massive gold plated cinch sockets with teflon insulation
- massive silver cable for all signal pathways
- big terminals for cable lugs and 4 mm bananas
- 105 µm 24k gold plated conductor tracks
- extra solid 2.4 mm circuit board
- ground connector made of 8 mm² silver cable

Standard features of the ASR Audio Systems Emitter I Exclusive and the ASR Audio Systems Emitter II Exclusive series

- one balanced stereo input
- adjustable outputs for preamplifier or subwoofer
- reinforced power supplies with Mantelschnitt transformers
- with massive chromed metal feet
- can be operated with battery power supply

The secret lies in the simplicity

The music signal of the source is the original signal, which has to be amplified to be listened to via loudspeakers. It must not be modified. Every process, every component and every point of contact are a potential danger for the weakening of the signal.

The ASR Audio Systems Emitter series sustain the signal using only high quality contacts and short distances when travelling from input to output. This is how we attain a realistic three dimensional reproduction of instruments and voices.

From a technical point of view the ASR Audio Systems Emitter is a power amplifier with an input selector and a volume control – which is the shortest available path for the signal. We deliberately abstained from using a preamplifier to keep the signal's way as short as possible.

Turning the input selector activates the chosen input using a relay. The last chosen input is turned off, except for the direct input: here the sound has a high signal fidelity due to a missing relay. The signal directly heads for the level control - bypassing a missing relay.

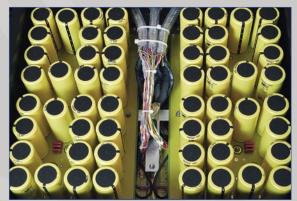
To minimize the loss in quality the best components are placed closely on the signal's pathway.

The few inevitable hurdles are kept at a minimum, thus the music signal can flow smoothly.

By the way, our relays switch signal and mass simultaneously. This allows the music signal to remain untouched by any other equipment that is linked to the chosen input. This puts an end to ground loops and crosstalk.



Back panel of the ASR Audio Systems Emitter I Exclusive Clear with WBT™ Nextgen RCA silver sockets for the direct input (Dir) and for input 4



ASR Storage capacitors at the bottom of the ASR Audio Systems Emitter II Exclusive amplifier



Proportions of the ASR Audio Systems Emitter II Exclusive



It takes 10 times as much amplifier power to audibly double the volume, hence there's not much difference in an amplifier with 40 watts and 60 watts.

It takes approximately thirty times as much power to listen to the 35 hertz impulse of a bass drum than it takes to listening to a female singing voice.

The more damped a room, the more amplifier power this passive room needs. An undamped, echoing room seems to be louder as the sound is strengthened by echos. These undesired reflections distort the music.

Making the right adjustments it's best to meet halfway between dampening and reflection.

RMS power of the ASR Emitter per channel

impedance	8 ohms	4 ohms	2 ohms
Emitter I Basic	140 w	250 w	450 w
Emitter I Exclusive	160 w	290 w	520 w
Emitter II Basic	250 w	450 w	800 w
Emitter II Exclusive	280 w	500 w	900 w

Sensations come easily

One watt per square meter of the surface of the listening room or half the power a loudspeaker can handle?

There are a million opinions on the amount of power one really needs. Music does not always need to be listened to in full concert volume – except for the special occasion when you need to do so. This is the point when small amplifiers soon overheat because too much power is needed. When the amplifier comes to its limit, distortion increases immediately which again limits the listener's enjoyment. Therefore our philosophy is: more is more.

An ASR Emitter rarely overexerts. ASR Emitters are stable up to 2 ohms impedance. They are compatible with any kind of speakers. The maximal power requirement is determined by the dynamic range of the recording, which is this difference between the faintest and the loudest passage. Do you remember the title *school* by *Supertramp* which begins with a harmonica followed by singing – all very calm. Very sudden all the other instruments join which brings a lot of movement to the music.

Often this build up is the icing of those titles. For the quiet part less than 1 watt is needed. When the instruments joined the amplifier all of a sudden had to supply 100 watts for minutes! Those attacks require the amplifier to have sufficient reserves for conveying a perfect reflection of the music.

The energy required is generated by the generously dimensioned power supplies with capacities of 957,520 microfarads built in the Emitter II Exclusive and 606,440 microfarads built in the ASR Emitter I Exclusive.

When using the ASR Audio Systems battery power supply unit, the capacity for the most important amplifier input stage increases by 380% with the ASR Emitter II and by as much as 600% with the ASR Emitter I.



ASR Audio Systems Emitter II Exclusive with white display



ASR Emitter II Exclusive battery version with 2 AC trafo and 1 battery power supply units





ASR battery power supply unit ASR AC trafo power supply unit



Standard features

- active filter technology in the power supply unit
- 3 transformers per power supply unit
- · ASR energy management
- · separate rectifier for every voltage
- · low-loss Neozed high-load fuses
- power supply unit housing made of firm steel-sheet
- power cable ASR Magic Cord
- double-shielded connecting cable with Harting plug

Dimensions and weight

	width	depth*	height	weight
Emitter I Basic PSU		42 cm 32 cm		
Emitter I Exclusive PSU		42 cm 32 cm		
Emitter II Basic PSUs		47 cm 32 cm		
Emitter II Exclusive PSUs		47 cm 32 cm		
battery PSU	46 cm	32 cm	16 cm	28 kg

* Depth of the power supply units plus 10 cm when plugged in

Power derives from balance

In conventional amplifiers, the often distorted mains voltage is brought into the amplifier housing and thus into the neighbourhood of the sensitive electronics. The power transformers literally fights against the often strongly disturbed mains voltage: they may hum, vibrate and emit strong electromagnetic fields.

This means that transformers can disturb the very fine signals in the audio circuits. We got rid of this turbulence by evacuating the power supply units of the ASR Emitter into separate cabinets.

Emitter I has one power supply unit for both channels while Emitter II has two separate power supplies for the two channels.

An energy management system in the Emitter switches the transformers in the power supply units depending on the power requirement between energy-saving and full-power operation.

To provide the required high performance at all times, the power supply units of the ASR Audio Systems Emitter Exclusive are equipped with especially large and powerful Philbert Mantelschnitt transformers.

The advantages compared to conventional transformers are higher pulse power, high efficiency and low magnetic field leakage.

In order to provide perfect working conditions for the electronics with a fully clean power supply, the input stages of the ASR Emitter Exclusive battery are supplied from a battery power supply unit. Electricity from batteries represents the purest and cleanest form of power supply. With current from batteries the transistors amplify audio signals with the highest precision.

In addition, batteries are much better able to provide power even when suddenly needed. When the other amplifier stages need high power from a sudden musical impulse the input stage is still supplied independently and constantly with clean electricity.

This is an ideal condition to listen to music!

When the helicopters are approaching at *Pink Floyd*, or when at *Tchaikovsky's 1812* cannons are fired:

the ASR Emitter will be ready.

The battery power is sufficient for about 100 operating hours. When the batteries are empty the amplifier is automatically being fed by its own charging voltage until the battery if fully refilled.



ASR Audio Systems Emitter II Exclusive WBT™ Nextgen silver sockets for direct input (Dir) and input 4 with WBT™ Nextgen silver speaker binding posts made from massive silver







ASR Audio Systems Magic Cords and Active Magic Cords are made for hi-fi and high-end devices with IEC socket



ASR Audio Systems Emitter amplifiers are a sound investment

When deciding in favour of an ASR Audio Systems amplifier you probably made a one-in-a-lifetime decision.

ASR High End amplifiers inspire the enjoyment of music.

If your desire is to make music audible in a room, it requires an amplifier and loudspeakers, never mind which source the signal is coming from.

Our devices are of a very high quality and their configuration options are multiple. This allows a flexible usage. We built them in a clear and logical way and in a service-friendly design which guarantees that they can be maintained easy for many years to come.

For our older models we created modifications (to bring them more up to date). New units can be delivered with diverse extras. We invite you to look those up in our price list.

Should you be interested in more technical details like the number of Schottky rectifiers, the performance data of the Mantelschnitt transformers or other details of the ASR Audio Systems amplifiers, we have our technical data sheets ready for download here: www.asraudio.de.







ASR Audio Systems Mini Basis Exclusive HV - optional available with balanced output and WBT™ Nextgen RCA sockets in copper or silver



ASR Audio Systems Basis Exclusive HV with high capacity storage capacitors



2 balanced inputs, 2 unbalanced inputs 1 balanced output, 1 unbalanced output with connection cable to the battery power supply unit (battery pack)



Standard features of the Basis Exclusive

- two balanced inputs and one balanced output
- high smoothing capacities
- · acrylic non-conductive housings
- power cable ASR Magic Cord
- automatic shutdown to protect the battery charge

Standard equipment of the Basis Exclusive

- Mantelschnitt transformer
- high smoothing capacities
- high quality audio ics
- · acrylic non-conductive housing
- · power cable ASR Magic Cord

Dimensions and weight

	width	depth	height	weight		
Basis Exclusive	43 cm	37 cm	12 cm	10 kg		
Basis Exclusive HV	43 cm	37 cm	14 cm	12 kg		
PSU 46 cm /42 cm 15 cm 28 kg * Depth of the power supply units plus 10 cm when plugged in						
Mini Basis	27 cm	35 cm	11 cm	5 kg		
Mini Basis Exclusive		35 cm	11 cm	6 kg		
Mini Basis Exclusive HV		35 cm	13 cm	7 kg		

Rigorously implemented: Basis Phono preamplifiers

The vinyl is more popular than ever. And there is a reason for that: the analog signal carries even more information than digital high resolution audio files in 24 Bit / 192 kHz. As a matter of fact the information pressed into the record's grooves comes very close to the original master tapes.

The ASR Basis Phono preamplifiers carefully prepare the delicate signal that has been traced by premium performance cartridges for the next amplifier stage.

The construction of the ASR Basis Phono preamplifier was based on two attributes. First of all the traced signal is very low and needs to be amplified a thousand times before the final amplifier can process it. This amplification factor is preferably gained using totally clean electricity coming from a battery pack. A high storage capacity filters the last bit of instability in the electrical current so that the tiny signal can be processed.

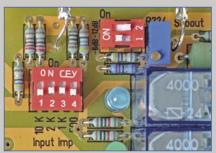
This a perfect solution to eliminate hum and noise.

Secondly cartridges generate the signal inductively and therefore are a perfectly balanced source. This is why we decided on balanced inputs for the Basis Exclusive model. In this way the signal can be amplified without any loss perfectly linear. In the second amplifier stage the signal is filtered and equalized following the RIAA curve.

Tip: the Basis Exclusive has two balanced inputs where input impedance, input capacity and gain can be adjusted separately for both inputs.

The philosophy of ASR Audio Systems is applied to all Basis preamplifiers. Sound and Emotion are the key factors. We apply the same high standards of production as we do in the Emitter series.

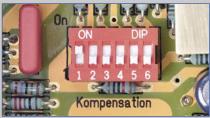
All Basis models are handmade just like the Emitter amplifiers.



Input impedance (right channel)



Adjustable output for amplifiers or subwoofers (left channel)



Compensation (left channel)



Protection circuit (right channel)

All illustrations show details from the circuit board.

ASR Emitter technology in detail

Loosening the four screws the acrylic top plate of the ASR Audio Systems Emitter can easily be removed. Now the default settings can be optimized.

Input sensitivity

Choosing the input impedance allows the fine tuning to the types of cable used in this application. The setting ranges from 500 ohms to 22 kilo ohms. The chosen value applies to all RCA inputs.

It therefore should be set to meet the source with the highest output impedance.

For the standard adaptation please choose the input impedance 10 times the value of the output impedance of your source.

Decreasing the value, the current in the connecting cable increases. This can lead to a softer sound with a more precise sound staging. The influence of the cable capacities and inductivities decrease. The impact of high frequency interferences which can cause distortions are diminished.

Please experiment!

Preamplifier output (Sub)

Here you can connect a power amplifier or a subwoofer. The output can be lowered in two steps (- 6 dB and - 12 dB). You can further adjust the output via the screw on the blue trimmer to achieve a precise adjustment. Active subwoofers and power amplifers sound best when their

input level adjustment is fully turned up to Maximum.

This requires an exact adjustment of the incoming signal.

Compensation

This setting regulates the high frequency compensation of the output stage. By modifying the setting the sound can be perfectly tuned to the cable and loudspeakers.

A low compensation usually ensures a higher resolution of fine details whereas higher compensation rates seemingly gives a more precise sound stage.

A higher level of compensation is indicated when speakers with low impedance and high-capacity cables are used.

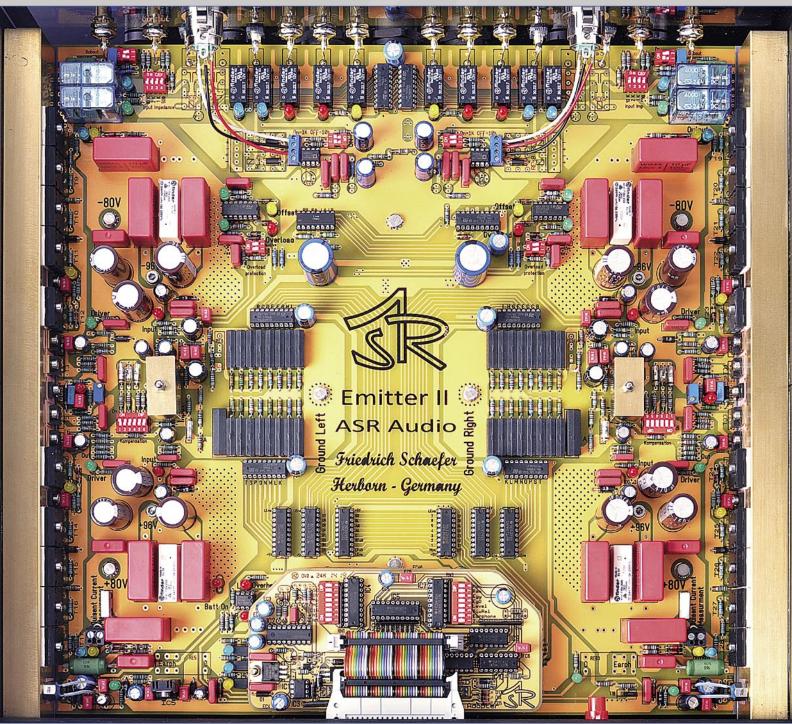
Choose the setting that best matches your sense of sound perception.

Protection circuits

ASR Audio Systems Emitter are equipped with several circuits that protect the device and the speaker. This increases the operational reliability. The overload protection can be configured with switches.

Setting with remote control

You can adjust the balance, power mode, brightness, display mode, input level of the source devices with the ASR Audio Systems Corian remote control.



ASR Audio Systems Emitter II Exclusive

