



## ASR\_Emitter II

The sovereign entrance into the class of our large integrated amplifiers. The Emitter II was developed in order to drive the most demanding loudspeakers with ease and plenty of power reserve.

A basic requirement for this unit is an over dimensioned current supply: For each channel, one separate power unit with two large, heavy and powerful PM (Philbert) transformers with energy saving circuit. In total, 3 transformers generate eight different voltages. Every voltage is rectified individually and pre-buffered. These voltages are used to supply separately the input amplifier, driver and output stages, as well as the control circuit.

The Emitter II is connected to the power supply units with a 2-meter long double shielded cable. The 30 contacts of the plug-in connector are designed individually for 16 ampere, handling capacity.

The input sockets are made out of gold plated massive brass. The insulator consists of high-quality Teflon. Massive silver wire Teflon coated is used for the music conductors. The 100 Amp speaker terminals with big lever grips allow up to three loudspeaker cables with cable spade connectors for Bi- or Tri-wiring. 4 mm standard banana plugs can be connected firmly and securely.

To avoid any possibilities of short circuits, the pole terminals are fully-isolated and spaced 50 mm apart.

A wear-resistant step switch adjusts the volume precisely with 32 relays. A micro-controller supervises the correct function of all parts of the amplifier and protects against any possible malfunctions of the Emitter or the loudspeakers.

The LED-display has a size of 35 mm and can be easily seen. It displays all changes performed manually or remotely in the Emitter. Depending on the setting, the display switches off after 10 seconds.

Under the main board double-sided with special thick copper-tin layers, there are 60 qmm mass rails, at which the two boards are mounted for the buffering electrolytic capacitors.

Inside the Emitter II there are 20 powerful MOS-FET-transistors each with 150 watt, high-grade ceramic input circuits, fast foil capacitors and electrolytic capacitors with a total of 562.000 uF.

# ASR\_Emitter II

## exclusive version

### Technical data:

- Dual-monaural-construction in a single case, mirror-symmetrical design · MOS-FET Class A/B technology
- Two separate power units with energy management circuitry · 6 relay driven high level inputs · 1 direct input
- 2 tape recording outputs · Slot for phono preamplifier or balanced input · Volume control with relay in 1dB steps
- LED display as operation indicator · Infrared remote control for all functions
- Protection circuits to ensure against overload, override, short circuit, excess temperature and DC voltage
- Signal to noise ratio on high level input: 90 dB · Rise time lower than 0,8  $\mu$ s · Distortion lower than 0,01%
- Damping factor: more than 1000 · Power consumption in standby mode: 20 VA
- Quiescent power consumption in energy- saving mode with half supply voltage of the output stage: 90 VA
- Quiescent power consumption in normal mode with higher output power capacity: 200 VA
- Dimensions of control unit: 57x47x23 cm · Dimensions of power units: 44x33x15 cm
- Weight of the amplifier: 40 kg, Exclusive 43 kg · weight of one power unit: 28 kg, Exclusive version 30 kg



### Declaration of the different devices:

The Emitter II Exclusive is an Emitter II with two Exclusive power units, shielded power cable, enlarged buffering with a total of 862.000 uF and has military ceramic input control circuits.

The two Exclusive power units are equipped with high quality components:

- high power relays are used to switch the two improved transformers to the power network.
- 8 different voltages feed the separate power supplies to the input stage.
- 56 very fast single diodes are used for rectification.
- Improved plastic foil capacitors with an enlarged filtering circuit is installed in the Emitter II Exclusive.

The Emitter II Exclusive has increased resolution and spaciousness. The reproduced sound is more precise, fuller, rounder with a softer approach to the delicate overtones. A more dynamic and defined bass is obtained.

The Emitter II can be upgraded to the Exclusive version by a qualified technician.

Upon request, the Emitter II Exclusive can be equipped with a battery power unit for the input stage with 400.000 uF additional filtering. The result: achieving an exceptionally homogenous, with an airy and relaxing sound.



The Emitter II Exclusive offers a significant improvement over the Emitter II. While all features of the Emitter II are integrated into the Exclusive version the sound is even faster and more dynamic. The audio resolution is greatly improved, as well. Furthermore, the sound is quiescent and even more relaxing, smooth and homogeneous.

Through its extremely high speed, the Emitter II Exclusive renders faithfully the three dimensional quality of good recordings into the listening room. The sound is realistic to such a degree as to allow for a vivid spatial presentation of instruments and voices. The Emitter II Exclusive is equipped with a military high grade driving chip, faster foil capacitors and electrolytic capacitors with a total of 862.000 uF and balanced inputs.

The two Exclusive power supply units achieve an essential part of these tonal improvements.

The well-constructed units are equipped with increased powerful transformers with improved magnetic core material, 56 ultra-fast rectifier diodes and 166.000 uF electrolytic capacitors.

In the Exclusive power unit 8 different voltages are generated. They are used to supply the input amplifier, driver and output stage, as well as the control circuit separately.

A special double shielded power cable, 6 x 1,5 qmm with a definite filter characteristic avoids the influence of high frequency power supply distortions and improves dynamics.

	output MOS FETs		transformers	Sine 8 $\Omega$	Sine 4 $\Omega$	Sine 2 $\Omega$
Emitter II	20x per 25 Ampere		2x500 VA	2x250 W	2x450 W	2x800 W
Emitter II <b>Exclusive</b>	20x per 25 Ampere		2x700 VA	2x280 W	2x500 W	2x900 W
Buffer capacity:	input 16V	driver 100V	output 80V	control 12V	total	driving chip
Emitter II	152.000 uF	60.000 uF	300.000 uF	50.000 uF	562.000 uF	AD843 BQ
Emitter II <b>Exclusive</b>	152.000 uF	60.000 uF	600.000 uF	50.000 uF	862.000 uF	AD843 SQ