

# 4-CHANNEL POWER AMPLIFIER WITH PILOT TONE

# RCS

BA-4120DP  
**480 W**  
4 x 120 W

BA-4240DP  
**960 W**  
4 x 240 W

Balanced inputs for programs, **priority** and **pilot tone module**



## Description

These 19" 4-channel power amplifiers are **fully monitored** and ideal for the use in professional audio applications with 100 V, 70 V and 25 V line systems.

The devices are manufactured in state-of-the-art production processes using high-quality components such as toroidal transformers.

They have been designed for continuous operation. They are absolutely short circuit and open circuit proof and are equipped with all relevant protection devices.

Please consider the following features:

- All the amplifiers of the "DP" series have four electronically balanced audio inputs for programs and four further inputs (with **priority**) for priority announcements, etc.
- Each power amplifier can be equipped with 4 **pilot tone modules** (FD-20) which monitor the performance of the amplifier.
- The amplifiers have electronically balanced inputs and outputs on screw-type connectors. Possible hum pick-up from ground loops is avoided through the balanced inputs and outputs.
- The screw-type connectors substantially facilitate the wiring for signal input. Time consuming fitting of the input cables with XLR connectors is eliminated.
- The multicoloured LED indicators located on the front panel continuously indicate the operating status of the amplifier including protection functions and possible dangers.

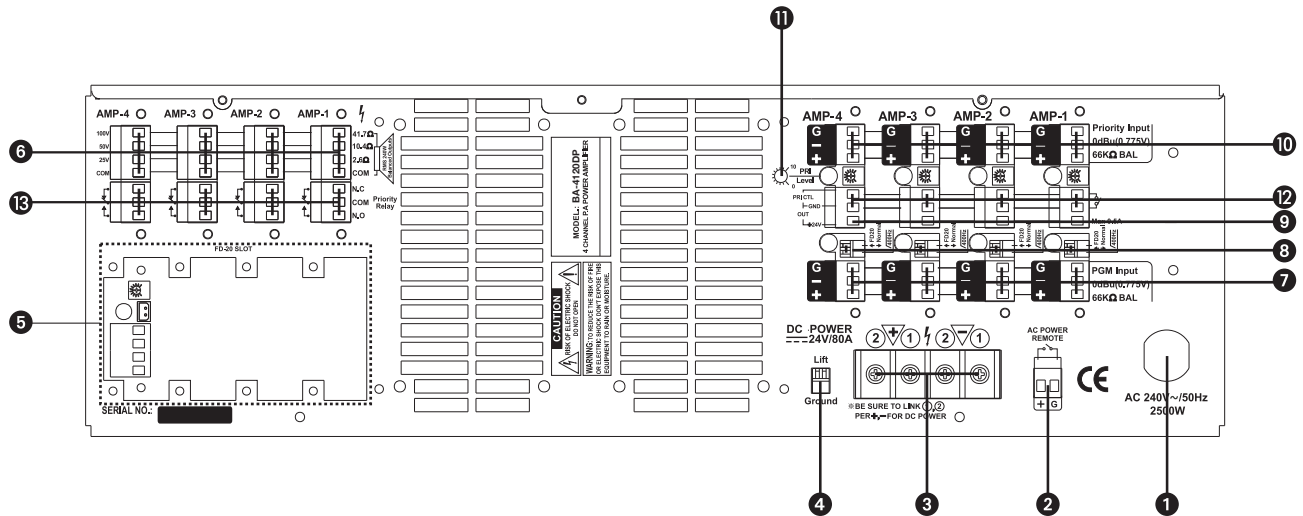
- By means of a "Power Remote" contact the amplifier can be switched on, even if the power switch is in the off position.
- All models feature soft start and a special circuit which suppresses unpleasant switch-on noise.
- A groundlift switch is provided to disconnect signal ground from chassis ground (shielding), in order to avoid any hum pick-up.

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## Model designations

- 4-Channel Power Amplifier, ..... **BA-4120 DP**  
4 x 120 W RMS, 3 RU, prepared for FD-20
- 4-Channel Power Amplifier, ..... **BA-4240 DP**  
4 x 240 W RMS, 3 RU, prepared for FD-20

## Rear view



- 1 IEC power inlet (cold condition)
- 2 Remote switch-on via "Power Remote"
- 3 24 V DC power supply terminal
- 4 Groundlift switch
- 5 Integrated pilot tone module FD-20 (optional)
- 6 Speaker outputs, 25 V, 50 V and 100 V
- 7 Input on screw-type connectors
- 8 Volume control for program
- 9 Switches for high-pass filter (400 Hz) and FD-20 module
- 10 24 V (500 mA) output for switching external relays or similar units
- 11 Balanced input for priority signal
- 12 Volume control for priority signal
- 13 Mute level control -8 dB to -20 dB
- 14 Contact for priority enable
- 15 Change-over contact for priority

Technical data	BA-4120 DP	BA-4240 DP
Output power	4 x 120 W (RMS)	4 x 240 W (RMS)
Input sensitivity	0 dB (0.775 V), 66 kohms, balanced	0 dB (0.775 V), 66 kohms, balanced
Output impedance	25 V, 50 V, 100 V	25 V, 50 V, 100 V
Frequency response	35 - 20000 Hz (better than -3 dB)	35 - 20000 Hz (better than -3 dB)
Signal-to-noise ratio	better than 100 dB	better than 100 dB
THD at 1 kHz	better than 0.5%	better than 0.5%
Input filter	400 Hz /-3 dB	400 Hz /-3 dB
Power consumption	1300 W	2500 W
Current consumption (230 V)	3 A at 1/8 power current draw 6.8 A at rated power current draw	5 A at 1/8 power current draw 11.8 A at rated power current draw
AC power supply	230 V, 50 - 60 Hz	230 V, 50 - 60 Hz
DC power supply	24 V (emergency power supply)	24 V (emergency power supply)
Dimensions (W x H x D in mm)	483 x 133 x 440; 3 RU	483 x 133 x 440; 3 RU
Weight	approx. 26.5 kg	approx. 29.6 kg

## Description

This pilot tone module serves to monitor the performance of amplifiers. It is installed in the slot provided on power amplifiers of the "DP" series. The generator produces a 20 kHz test signal. Apart from the test of the power amplifier functioning, the speaker line is checked for short circuit faults.

Evaluation and switching to a backup amplifier is performed by the FS-381 amplifier switcher.

## FD-20 Pilot Tone-Module



**Pilot Tone-Module** for power amplifiers of the "DP" series

**FD-20**