SOLTON

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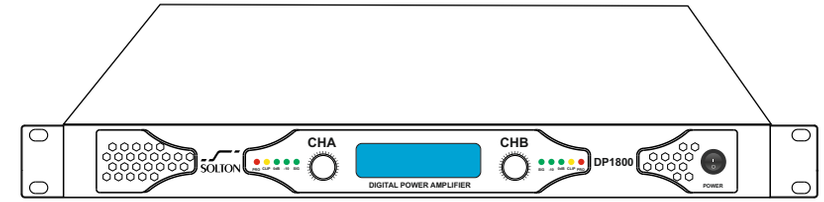
A PRODUCT OF SOLTON ACOUSTIC GERMANY

DP1800



ENGLISH

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USER MANUAL

Memo:

Contents

Important safety instructions

1. Read these instructions
2. Keep these instructions
3. Heed all warnings
4. Follow all instructions
5. Do not use this apparatus near water
6. Clean only with dry cloth
7. Do not block any ventilation openings. Install in accordance with the user manual.
8. Do not install near any heat sources such as radiators, stoves or other products(including amplifiers) that produces heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug
   A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prongs are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on, pinched or damaged in any other way.
    Pay particular attention to plugs and the point where they exit from the amplifier.
11. Only use the attachments/accssories specified by the manufacturer.

12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart /apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel.
    Servicing is required when:
    - the power supply cord or plug is damaged;
    - liquid has been spilled or objects have fallen into the apparatus;
    - the apparatus has been exposed to rain or moisture;
    - the apparatus has been dropped or suffered damage;
    - the amplifier exhibits a distinct change from its normal function or performance.
14. The amplifier may only be used in accordance with the information provided in the user manual. Before and during the usage of the amplifier please ensure that all recommendations, especially the safety recommendations as detailed in the user manual are adhered to.
    The DP Series amplifiers are designed for the amplification of pulsed audiosignals and the amplifier should only be connected to speakers with an average impedance as indicated.

Warranty

Dear customers:

Thank you for selecting SOLTON DP1800 product for audio needs. Each product has been strictly tested and inspected before leave factory to insure you deliver a good quality product with complete components.

If the product appears any operation problem, please contact our agent or our authorized service centre. All our products are warranted to be free from defects in components and factory workmanship under normal use and service for a period of one (1) year from the date of original purchase from an authorized dealer.

When failing to perform as specified during the warranty period we will undertake to repair, or at our option, replace this product at no charge to its owner, provided the unit is returned undamaged and shipping prepaid, to an authorized service facility or to the factory.

This warranty shall be null and void, if the product is subjected to:
1, Repair work or alteration by a person other than those authorized by us.
2, Mechanical damage including shipping accidents.
3, War,civil insurrection,fire,flood or natural disaster, misuse, abuse, operation with incorrect AC voltage.
4, Incorrect connections, wrong accessories, incorrect use of accessories.
5, Operation with faulty associated equipment.
6, Weather conditions and normal wear and tear.
7, Units, on which the serial number has been defaced, altered or removed.

We shall not be responsible for any incidental or consequential damages. our responsibility is limited to the product itself. and take no responsibility for any loss due to cancellation of any events, or rent of replacement equipment or costs due to third party's or customer's loss of profit, or any other indirect cost or losses however incurred.

We reserve the right to improve the specifications of its products without notice. If in any doubt, please consult your local distributor for clarification. Please contact your supplier for specific regional information, as rights and disclaimers may vary from country to country.

Sincerely yours,
SOLTON Team

Troubleshooting

When the power amps can not work as normal, please turn off the power and amplifier immediately, checking the possible problems as follows. If the problem still persists, it may have trouble. Please contact your local dealer or distributor, or contact our factory by fax or email to obtain the location of the nearest authorized service center.

Failure	Reason	Solutions
No Sound	■ Poor contact on the loudspeaker connection terminals	■ Made it tightly connected
	■ Audio input terminals wrong connections or bad contact	■ Made it tightly connected
	■ Poor contact between power plug and the AC outlet	■ Confirm that the AC outlet works by plugging in any other device
	■ Level controls are turned down	■ Turn upproperly
	■ Pre-amps Level controls are turned down	■ Turn upproperly
	■ Pre-amps is faulty	■ Check and completed it
Sound turned down suddenly	■ Input signal level is too high or overload cause protection have been started.	■ Properly turn down the input level control
Distortion	■ Input signal level is too high	■ Properly turn down input level or amps volumn knob
Only a channel with sound	■ Loudspeaker connections are not complete	■ Completed it
	■ Inputs and outputs connections are not complete	■ Completed it
	■ the volume on left/right channel is not balanced	■ Properly adjust the inputs level or amps`volumn knobs on same scales.
The displayed parameters flashing	■ “T”value flash means temperature too high or too low.	■ Improved the working and cooling facilities
	■ “AC”value flash means the voltage is too high or too low.	■ Connect it to the stable voltage resource
	■ “P”value flash means the power is overloaded.	■ Properly adjust the input level

Announcements

1. Read the information for use (user manual)
When shipping the DP-series amplifiers always use the original shipping carton and packing materials. For maximum protection repack the unit as it was originally packed at the factory.

2. Environments
Use this amplifier only in an altitude of 2000m the following non-tropical climates.
Used in ambient temperatures of 0 C ~ 70 C.°
When you move this unit from a cold place to a hot place, please power on and sufficiently preheated before the operation.

3. Ventilation
Slots and openings in the cabinet are provided for ventilation to ensure reliable operation of the amplifier and to protect it from overheating.
These openings must not be blocked or covered.This amplifier should not be installed unless proper ventilation is provided.

4. Water and Moisture
Do not expose this device to rain or moisture. Do not use this amplifier near water(for example, swimming pools and fountains).
Do not place any objects containing liquids, such as bottles or glasses on the top of the unit
Do not splash liquids on the unit.IP-20 equipment. No protection against splashing water.

5. Cleaning
Unplug this amplifier from the wall outlet before cleaning. Do not use liquid or aerosol cleaners.

6. Lightning
For added protection of this amplifier during lightning storms or unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the amplifier due to lightning and power-line surges.

7. External objects and liquids with the apparatus
Never push objects of any kind into this amplifier through openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock.
Never spill liquid of any kind on the amplifier.

8. Accessories
Do not place this amplifier on an unstable cart, stand, tripod, bracket or table. The amplifier may fall, causing serious injury and serious damage to the product. Any mounting of the amplifier should follow the manufacturer instructions and should use a mounting accessory recommended by the manufacturer.

9. Connecting
When you connect the amplifier to other equipment, turn off the power and unplug all of the equipments from the supply source. Failure to do so may cause an electric shock and serious personal injury.

10. SoundVolume
Reduce the volume to minimum before you turn on the amplifier to prevent sudden high levels of noise which may cause hearing or speaker damage.

11.Servicing
Do not attempt to service this amplifier yourself. As opening or removing covers may expose you to dangerous voltage or other hazards, the amplifier may only be opened by qualified personnel. Please refer to your distributor.

Features

The DP series has been designed as a powerful two channel power amplifier featuring light weight, compact, high power output and high efficiency.
The DP adopt high-performance digital power management technology and advanced vector switch mode power supply with optimum flexibility and maximum control and security which is ideal for clubs, multi-purpose hall, high fidelity audio-visual venues, small/medium scale of indoor/outdoor shows.

- Rugged 1U rackmount chassis.
- Class D circuit design.
- Advanced SMT process and seal technology.
- Low working temperature,good cooling inside.
- Advanced CPU Intelligent digital display technology,intuitive,real-time control.
- High-performance digital power management technology and advanced vector switch mode power supply.
- Built-in temperature compensation technology, high temperature still maintain a stable working state; DC, short circuit, overheat protection, Intuitive power and protection instructions

⚠NOTE

- When used the machine in a dusty or smoky environment, please regularly cleaned the impurities in the air outlet. It will make your equipment more stable and durable.
- When connecting the device, turn the volume knob of the unit to the minimum position to avoid the noise generated and possibility to damage the loudspeaker.
- Long-term placement of the machine: do not placed on the uneven ground or table, it will influence service life, should choose to put on flat desktop or platform, or mount it in a rack case.
- Do not place any objects containing liquids, such as bottles or glasses on the top of the unit. Do not splash liquids on the unit. Clean only with dry cloth.

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Specifications

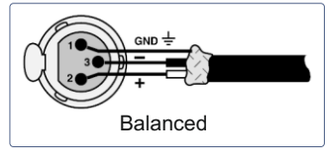
Model	DP1800
1KHz,0.01% THD+N	
Rated power,stereo 8Ω per ch	2x 600W
Rated power,stereo 4Ω per ch	2x 900W
Frequency response (Rated power@8 Ω,1%THD+N)	20Hz~20KHz(±0. 5dB)
THD+N (Rated power ,8Ω/1KHz)	<0.05%
Damping Factor(10-400Hz/8Ω)	⩾650
Sensitivity(Rated power,8ohm)	1.0V
Impedance(balanced/unbalanced)	> 20K/> 10K
S/N(A weighted,rated power,8Ω)	⩾103dB
Classtalk	⩾60dB
Intermodulation Distortion(IMD)	<0.1%
Total Harmonic Distortion(THD)	<0.08%
Slew Rate	> 25V/μs
Output Circuit	Class D
Working modes	Stereo/Parallel
Working temperture	0° C~70°C
Display	2.5"LCD
Thermal dissipation	3-fans, front-to-rear airflow, temperature controlled speed
Input connectors	2x Neutrik XLR3
Output connectors	2x Speakon NL4MP
Power requirement	220V AC 50Hz ± 10%
Construction	Black painted steel chassis with black painted steel&aluminum front
Dimensions(HxWxD mm)	44 x 330 x 483
Net Weight	3.7 KG
Gross Weight, Packed	4.7 KG

Note: Specifications subject to change without notice

Connectors and wiring

Signal input

XLR: Pin 1 = Ground
Pin 2 = Positive
Pin 3 = Negative



connector wiring

Always use symmetrical (balanced) shielded cable to connect the amplifier.

Power Outputs

Both SPEAKON connectors are connected to channel A and channel B outputs.
The pin configuration of the SPEAKON connectors is as follows:

CH A, SPEAKON OUT 1:	Pin1+	Channel 1 signal	Pin2+	Channel 2 signal
CH A, SPEAKON OUT 1:	Pin1-	Channel 1 ground	Pin2-	Channel 2 ground
CH B, SPEAKON OUT 2:	Pin 1+	Channel 2 signal		
CH B, SPEAKON OUT 2:	Pin 1-	Channel 2 ground		

⚠ WARNING

SPEAKON connectors marked with the lightning flash indicate high voltages that are potentially life threatening

Wiring to these terminals requires installation by an instructed person or the use of ready -made leads or cords. Custom wiring should only be made by qualified personnel. To prevent electric shock,do not operate the ampli?er with any of the con-ductor portion of the speakerwire exposed.

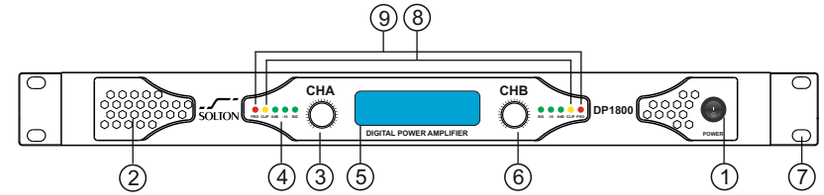
⚠ NOTE

For reasons of safety and performance, use only high-quality fully in sulated speaker cables of stranded copper wire.
Use the largest wire size that is economically and physically practical, and make sure the cables are no longer than necessary.

⚠ NOTE

When connecting speaker cabinets in parallel, always use all the contacts in both SPEAKON connectors. If not, this may cause permanent damage to the connectors and considerably reduce performance.

Front panel functions



① POWER switch
Switch to open or turn on the power of amplifier

② Cooling air inlet vents
Air vents front and rear must not be obstructed.

③ CHA Gain control
Rotary knob to adjust the output level.

④ Signal-LEDs
Indicate the presence of output signals.

⑤ Character LCD
Indicated real-time working status of the amps.

⑥ CHB Gain control
Rotary knob to adjust the output level.

⑦ Fixing holes
Use four screws and washers mount the amps to the front rack rails.

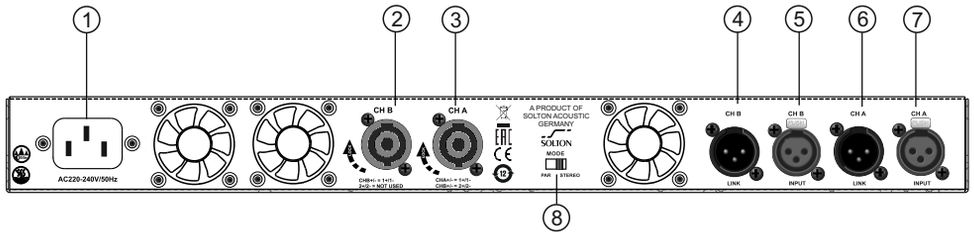
⑧ Clip-LEDs
Red indicates clipping

⑨ Protect-LEDs
When the amps overload,overheat,short circuit or faults and illuminated red.

◆ Display Parameters

- "**MOD**" mode, working modes; "**ST**" is stereo; "**PARA**" is parallel
- "**T**" is temperature, internal real-time operating temperature.
  1, When the temperature continues to rise above 75℃, the value will flash to remind you now the operating temperature is too high;
  2,When the temperature continues to rise upto 95℃, the amplifier will stop working and it will work as normal till the temperature drop to a normal level.
- **"AC" is AC power**
  1,When the input voltage lower than 190V or higher than 245V,the value will flash to remind that the voltage is too low or too high;
  2,When the input voltage lower than 175V or higher than 255V, the amplifier will stop working.
- **"P" is power**
  1,When the amps turned on and No signal input,the value is power consumption (powered on);
  2,When the amps turned on and have signal input,the value is sine wave output power (average value@8ohm,A weighted) in real time.
  3,When the amps works in a overloaded status, the value will flash to remind you and suddenly it will automatically deduct 50% input level to protect your system and it can come back to work as normal when you adjust the input back to normal level.

Rear panel functions



① AC power cable, connected to ~ 220V/50H z.

② CHB Output/SPEAKON speaker connectors
NEUTRIK Speakon NL4MP for connecting Stereo or Mono Mode speaker, connecting mode is: 1+ = CH-B POS; 1- = CH-B NEG

③ CHA Output/SPEAKON speaker connectors
NEUTRIK Speakon NL4MP for connecting Stereo or Mono Mode speaker, connecting mode is: 1+ = CH-A POS; 1- = CH-A NEG
2+ = CH-B POS; 2- = CH-B NEG

④ CHB Link Output
NEUTRIK NC3MAV connector connected in parallel to the female for linking the channel to another input.

⑤ CHB Input Signal XLR
Balanced Input Signal XLR

⑥ CHA Link Output
NEUTRIK NC3MAV connector connected in parallel to the female for linking the channel to another input.

⑦ CHA Input Signal XLR
Balanced Input Signal XLR

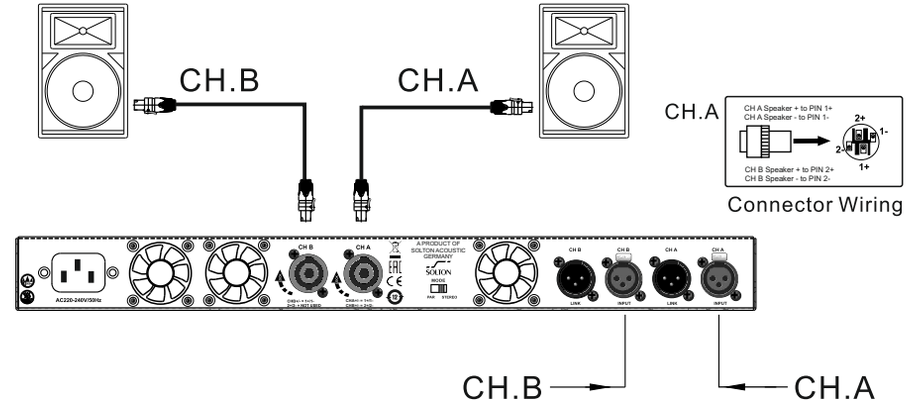
⑧ Mode Switch
Sets amplifier to Stereo or Parallel input mode.

Connection mode

» **Note: Before connecting with the audio signal, please turn off the amplifier. As an additional** prevention, voltage adjustment knob should be turned into a minimum level.

1, Stereo mode

Under stereo mode, two channels work independently. Gain control knob is used to adjust its own output voltage respectively. The minimum impedance loading is 4 ohms each channel.



2, Parallel mode

Under Parallel mode, the audio signal was directed input from channel A and output at channel A and channel B. One-channel input, two channel outputs operation.