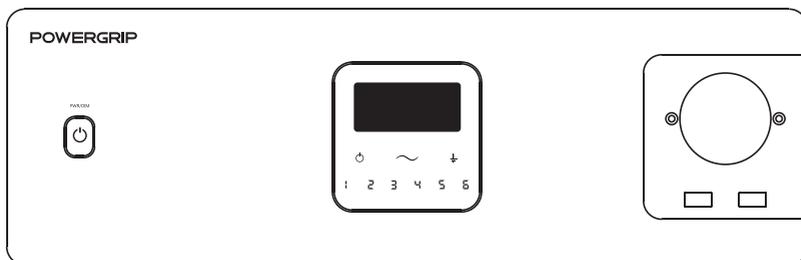


POWERGRIP

YG-1 POWER CONSOLE



OPERATION MANUAL

GENERAL DESCRIPTION

The PowerGrip YG-1 power supply console is intended to protect equipment that is connected to it against high mains voltage and power surges, as well as against various kinds of interference.

Due to the wide spread of the digital-type power supply units, there exist a multitude of high frequency interference signals that affect operation of devices with the classical power supply units. Within the PowerGrip console, different types of filters are implemented which enable the isolation of devices cancelling their adverse effect on each other, as well as elimination of the interference originating from the electrical network.

The PowerGrip console uses the filters fabricated through the Low-density core process. They ensure a minimal distortion of the sinewave and are capable of transmitting great current pulses, in contrast to the conventional power supply filters. The switching relays operate based on the Zero-cross technology, i.e. switching a load on and off is triggered when the power supply voltage sinewave crosses zero point. This allows a smooth turning on and off action even for the greatest power consumers.

The protection system consists of three levels:

- Level one: this includes the filters that ensure absorption of interference and minor surges.
- Level two: this includes the varistor protection absorbing the major voltage surges in the mains line.
- Level three protection will cut off the power console should the voltage of the mains line exceed the value of 256 Volts.

Besides, the PowerGrip console has an integrated self-testing system. In case of a malfunction, the connected devices will be de-energized, and flashing of the indicators will warn the user about some faults present.

SPECIFICATIONS

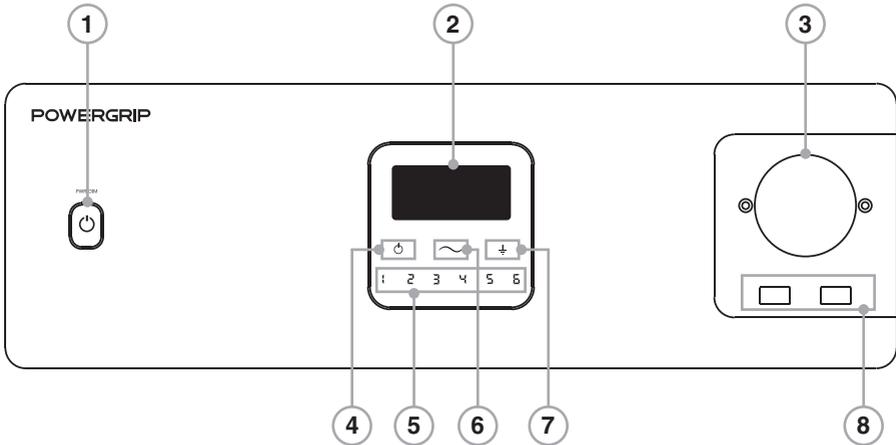
- Power supply characteristics:
190 – 256 V ~ 16 A (3680 W with 230 V)
- Number of outlet sockets: 11 programmable sockets
- Energy indicator in Joules: 6220 J
- Maximum peak current: 187000 A
- Voltage range values for an emergency power supply cut-off: $\leq 190 \pm 4 \text{ V} / \geq 256 \pm 4 \text{ V}$
- Characteristics of USB-ports: 5 V, 2 A (cumulative current value of two slots)

DELIVERY PACKAGE

- Power console unit
- 1.5 meter-long power cord
- Set of fixtures for mounting onto a rack
- User Manual

APPEARANCE AND CONTROLS

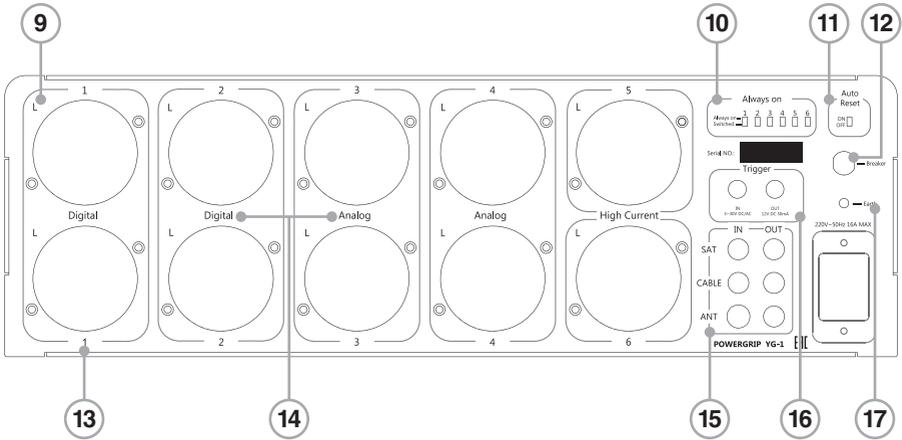
FRONT PANEL



1. **Power ON/OFF button** is intended to operate the ON and OFF action for the groups of outlet sockets. Press and keep the Power ON/OFF button to adjust brightness of the display. The brightness can be adjusted in any mode of the power console.
2. **Voltmeter** displays a current value of voltage in the mains line.
3. **Quick access socket** allows an immediate plugging of any temporary device.
4. **Complete unit shut-down indicator** gives a steady red light when console is fully de-energized. To activate this mode you should choose one or several permanently energized socket groups and turn off the automatic restart function. When part of the socket groups becomes de-energized, keep the Power ON/OFF button pressed for 4 seconds.
5. **Socket group indicator** shows the socket groups that are currently on-line.

- 6. Protection indicator** signals an activated protection from a higher (> 256 V) or lower (< 190 V) voltage values of the mains line. When this protection is activated, all the sockets are cut off and the power console stays locked for two minutes. To deactivate the voltage protection, press the **Power ON/OFF button** when the locking period is over. If you notice that indicators (4) and (6) are flashing at the same time, this means the self-testing system has detected some faults in the console operation.
- 7. Proper connection indicator** would light up when a device was plugged into a socket the correct way. Live terminal of a socket must be located to the left with the power cord going in downward direction. If the indicator does not light up, you need to reverse the power plug orientation in the socket. If the indicator still would not light up regardless of the plug position, it means that the socket is not earthed. To rectify this problem, contact a qualified electrician.
- 8. USB slots** for charging of mobile devices. The left-hand slot is optimized for plugging the Apple® gadgets; the right-hand one is suitable for any other devices. The Apple® gadgets, if connected to the right-hand slot or other devices plugged into the left-hand slot may charge up rather slowly, or may not get charged at all.

REAR PANEL



- 9. **Letter "L"** indicates the location of the live terminal in a socket when the proper connection indicator (7) is steadily lit up.
- 10. **Selector switches for permanently energized socket groups.** Select groups of sockets that will be energized immediately after the console is plugged into an electrical mains outlet. These groups will not be deactivated with the power ON/OFF button. Please note that switching over must only be done with the power plug pulled out!
- 11. **Automatic restart selector switch.** When the selector is in the ON position, in case of the protection tripping, the power console will restart automatically after two minutes. Please note that switching over must only be done with the power plug pulled out!
- 12. **Circuit breaker** is triggered when the maximum permissible value of absorbed current was exceeded or if there was a short circuit. When triggered, the circuit breaker button protrudes from the device housing. To restore the unit operation, you need to return it to initial position by pushing.
- 13. **Number of a socket group.**

14. Filter type for a certain socket group. The power console is equipped with three types of filters (See the “Connection of Devices” section).

15. Sockets for connection of coaxial lines.

16. Input port of trigger signals is designed for switching the console on and off through a signal sent from another device. The output port of trigger signals is designed for control over the peripheral devices (projection screens, amplifiers, receivers, etc.). The trigger entrance configuration for work in RS232 mode via the adapter is possible.

For obtaining detailed information on use of RS232 port for connection of management systems visit POWERGRIP.COM.

17. Earthing terminal is intended for an alternate possibility of earthing the devices.

CONNECTION OF DEVICES

The sockets of the PowerGrip console implement various types of filters so that the best possible result is achieved for specific equipment.

For connection of the devices equipped with digital power supply units the power console implements a multi-level filter, indicated as **DIGITAL** (applied in the first and second groups of socket outlets). Digital power supply units are mainly used in the DVD and Blu-ray players, satellite tuners and outside-mounted units (adapters). These devices are recommended for plugging into the first or second group sockets, which will ensure a reliable isolation of interferences emitted by digital power supply units. If you cannot identify by yourself what type of power supply unit a device is equipped with, please consult the manufacturer.

For connection of the devices equipped with the classical power supply units the power console implements the filters indicated as **ANALOG** (applied in the third and fourth groups of sockets). This type of filter is made by the Low-density core method ensuring the most accurate transmission of energy to the power transformers of the devices and assisting in an effective elimination of interferences originating from the electricity mains line. This filter functions equally well with classic power supply units having low power consumption (used in CD-players), and with powerful toroidal transformers of AV-receivers.

Sockets 5 and 6 are designated for connection of equipment with high power consumption. They ensure a direct transfer of current without any inducers. This also allows plugging of the powerful terminal amplifiers separately from the other devices.

SAFETY INSTRUCTIONS

The PowerGrip power console must be connected directly to a fixed earthed electrical mains outlet. Avoid connecting the power console in series (the so-called "daisy-chained connection") to the other electrical devices, such as power protection devices, surge protectors or uninterruptible power supply units. Do not use extension cords and T-adapters for plugs. Failure to comply with these requirements may result in injury or damage to the equipment, which automatically entails a termination of the warranty. If you do not know which power supply outlets are adequately earthed, please contact a qualified electrician.

Despite the fact that the PowerGrip console is designed to accept considerable power surges and spikes, we recommend you to disconnect the console from the wall outlet during a severe thunderstorm. However, in such case you need not switch off the equipment that is connected to the power console.

Prevent the console from contact with water and its penetration inside the device casing. Should any water enter the casing, immediately disconnect the power console from the wall outlet. This device is intended for indoor use only. Never operate the power console in the premises with high humidity.

In case of any malfunctions of the power console or its complete breakdown, do not attempt to rectify this problem yourself. This can cause serious injuries or even death. Do not disassemble the power console; doing this automatically entails the termination of the warranty. Without delay, disconnect the console from the mains and contact the service center.

Do not seek assistance of any third-party service centres: the power console must be repaired only by the service centre experts. The manufacturer shall not be responsible for the operation of the power console and rectification of the consequences of any unauthorized tampering if the repairs were carried out at an unauthorized service centre.

To change the on / off delay scenario:

- a) Unplug your console, press and hold the power button, and plug in your console. Hold down the power button until you see the start-up scene selection menu.
- b) Select the start-up scenario number by short pressing (see the start-up scenario table).
- c) Press and hold the power button until the shutdown scenario selection menu is displayed.
- d) Select the shutdown scenario number by short pressing (see the shutdown scenario table).
- e) Press and hold the power button until the display shows the utility voltage value.

		Group number				
		2	3	4	5	6
Scenario number	On0	1	1	1	1	1
	On1	1	1	1	5	1
	On2	2	2	2	2	2
	On3	0,5	2	0,5	2	0,5
	On4	0,5	0,5	0,5	0,5	0,5
	On5	5	5	5	5	5
	On6	5	5	5	10	5
	On7	5	5	5	15	5
	On8	5	5	5	15	15
	On9	1	1	1	15	1

**START-UP
SCENARIO
TABLE**

Delay
in seconds
before
enabling
groups

		Group number				
		2	3	4	5	6
Scenario number	OF0	1	1	1	1	1
	OF1	1	1	1	5	1
	OF2	2	2	2	2	2
	OF3	0,5	2	0,5	2	0,5
	OF4	0,5	0,5	0,5	0,5	0,5
	OF5	5	5	5	5	5
	OF6	5	5	5	10	5
	OF7	5	5	5	15	5
	OF8	5	5	5	15	15
	OF9	1	1	1	15	1

**SHUTDOWN
SCENARIO
TABLE**

Delay
in seconds
after
turning off
groups

POWERGRIP

Power Console

Model: YG-1

Designed & Engineered in Russian Federation

Assembled in Taiwan

Manufacturer: AO «Barnsly Import»

Office 10, 3 bld.1, Signalny Proezd, Moscow 127106, Russia

www.powergrip.com

