TAGA HARMONY PF-LPS Series Power Noise Filters and Linear Power Supply Instruction Manual

Contents

TAGA HARMONY PF-LPS Series Power Noise Filters and Linear Power Supply

Specifications

- **Model:** PF-LPS Series [230-240V]
- **Functions:** Power noise filtering, linear power supply, surge and overload protection
- **Output:** Selectable DC voltage, two USB ports
- **Power Input:** IEC C14 power inlet
- **Power Cord:** Removable Schuko-IEC C13 power cord
- **Website:** www.TagaHarmony.com

FAQ

- **Q:** Can I use abrasive cleaners for cleaning the power filter?
- **A:** No, do not use strong or abrasive cleaners. Use a damp, soft cloth for cleaning to avoid damaging the product.
- **Q:** Where can I find the full technical specifications and the latest edition of the instruction manual?
- **A:** You can find the complete technical specifications and the latest manual edition on our website at www.TagaHarmony.com.

Introduction

Thank you for purchasing this TAGA Harmony power filter.
PF-LPS power filters combine 4 functions in one device: power noise filtering; linear power supply with selectable output DC voltage for various devices; two USB ports powered by the built-in linear power supply to use for powering and charging; and surge and overload protection (for all powered outputs, including DC socket and USB ports).

POWER NOISE FILTERING

- The electricity network in our homes or workplaces is exposed to different interferences for instance electromagnetic interference (EMI) generated by appliances connected to the same network (refrigerators, air conditioners, computers etc.).
- These interferences are not only produced inside your house or office but by all appliances in your building or even outside it and can differ on the time of day or week when the traffic on the electrical network changes.
- All these interferences which we call noises can get into your AC power and interfere with your system.
- This “dirty” electricity can harm the performance of your audio-video system.
- TAGA Harmony power noise filter is a great way to limit the negative noises from your electricity and to isolate your system from contaminated power.
- The contaminated electricity has also a negative impact on the internal circuits and power supplies of your equipment because the PF-LPS filter works as a buffer between the wall socket and your gear helping to increase the longevity of the connected components.

LINEAR POWER SUPPLY FOR DC AND USB OUTPUTS

- Most DC-powered electronic devices use simple, low-cost external power adapters with switchmode power supplies.
- Such adapters operate at high switching frequencies to supply power, which may cause various electrical noises to get to the connected devices, and even to inject these noises into your electricity network affecting other equipment. Such noises dramatically deteriorate the sound performance and efficiency of audio-video devices.
- The solution is to use a high-quality linear power supply utilised in the PF-LPS filters.
- The PF-LPS linear power supply offers a very significant and immediate upgrade to the sound performance of your DC-powered devices.

DC output and USB ports utilize

- High-power 100W, isolating toroidal power transformer providing up to 3A (72W) at 24V.
- 3-tier filtering network:
- I & II tier for 230V – 240V voltage : the initial filtering by the device’s power noise filtering system, and the second by the built-in isolating power transformer.
- III tier for the DC Voltage : specially-designed filtering at the end stage separate for the DC output and USB ports.

DC output

- Flexible and easy DC output configuration:
- 6 selectable DC output voltages (5V, 9V, 12V, 15V, 19V, 24V).
- Selectable DC output polarity.
- High-quality DC-output cable: 2 x 0.75 mm2 Oxygen Free Copper conductors.
- Supplied 10 DC plugs (including the one installed on the DC-output cable) in the most popular shapes and sizes allow to use with many DC-powered devices.

SURGE AND OVERLOAD PROTECTION

- The PF-LPS filters provide surge and overload protection for all outputs.
- I tier protection : the filtering and protection system with a push-to-reset circuit breaker.
- II tier, 3-level additional protection for the DC output and USB ports: the system using the built-in isolating power transformer -> step-down switching regulator -> short-circuit and thermal overload protection circuit specially designed for the DC output and USB ports.
- The voltage indicator helps to control whether the power voltage in the wall socket is stable.
- An IEC C14 power inlet and a removable Schuko-IEC C13 power cord give an option to upgrade to a premium audiophile power cable at any time.
- Thanks to the PF-LPS power filters you will be able to enjoy a better quality of your audio and video equipment.

Cleaning
Do not use strong or abrasive cleaners. Use a damp, soft cloth for cleaning.
Specifications and the latest instruction manual edition
Full technical specifications and the latest edition of the instruction manual are available on **www.TagaHarmony.com**.

Safety Instructions
EN_safety_

IMPORTANT
READ THIS SECTION CAREFULLY BEFORE PROCEEDING!

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

- The triangle containing a lightning symbol is intended to alert the user to the presence of uninsulated dangerous voltages within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.
- An exclamation mark in a triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE, AND OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THIS APPARATUS.
CAUTION: TO PREVENT ELECTRIC SHOCK, FULLY AND SECURELY INSERT THE POWER CABLE PLUG INTO THE POWER OUTLET, AND POWER CABLE CONNECTOR INTO THE UNIT SOCKET (IF THIS UNIT IS NOT EQUIPPED WITH AN INTEGRATED [ATTACHED] POWER CORD).
CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE THE FUSE (IF THE UNIT IS EQUIPPED WITH A USER REPLACEABLE FUSE) ONLY WITH THE SAME AMPERAGE AND VOLTAGE TYPE. IN CASE WHEN THE UNIT IS NOT EQUIPPED WITH A USER REPLACEABLE FUSE – REFER REPLACEMENT TO QUALIFIED SERVICE PERSONNEL.
WARNING: THE UNIT MAY BECOME HOT. ALWAYS PROVIDE ADEQUATE VENTILATION TO ALLOW FOR COOLING. DO NOT PLACE THE UNIT NEAR A HEAT SOURCE, OR IN SPACES THAT CAN RESTRICT VENTILATION.

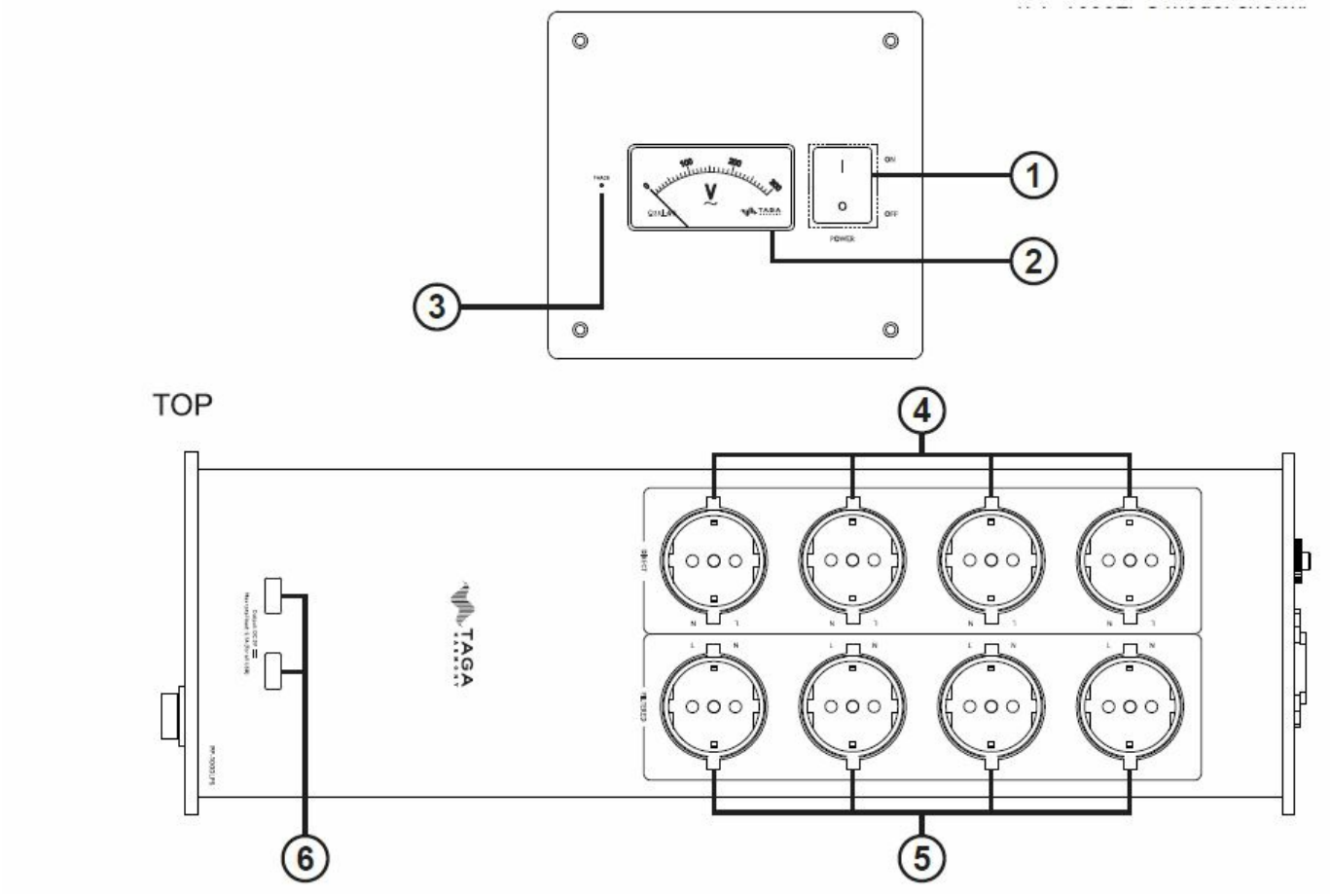
1. Read Instructions – All the safety and operating instructions should be read before the product is operated.
2. Retain Instructions – The safety and operating instructions should be retained for future reference.
3. Heed Warnings – All warnings on the product and in the operating instructions should be adhered to.
4. Follow Instructions – All operating and use instructions should be followed.
5. Cleaning – Unplug this product from the power outlet before cleaning. Do not use liquid cleaners or aerosol cleaners.
6. Water and Moisture – Do not use this product near water – for example, near a bathtub, wash bowl, kitchen sink or laundry tub; in a wet basement; or near a swimming pool; and the like. These precautions also apply to the power cord.
7. Accessories – Do not place this product on an unstable cart, stand, tripod, bracket or table. The product may fall, causing serious injury to a child or adult and serious damage to the product. Use only with a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the product. Any mounting of the product should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer.
8. Ventilation – This unit may be equipped with slots and openings in the cabinet (housing) which are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should be not placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to. For products equipped with a separate power supply unit, leave at least 5cm (2in.) of free space on all sides and the top of the power supply.
9. Power Sources – This product should be operated only from the type of power source indicated on the marking label (placed on the product and/or, if applicable, on a separate power supply unit). If you are not sure of the type of power supply in your home, consult your product dealer or local power company. For products intended to operate from battery power or other sources, refer to the operating instructions.
10. Grounding and Polarity – some units for proper operation or to take full advantage of their capabilities may require to be connected to a grounded power outlet – refer to the user manual for more information. Some units may have markings for the live (L) and neutral (N) conductors for power – to take full advantage of the capabilities of such products, it is recommended to properly connect the polarity according to the markings on the unit – refer to the user manual for more information. Connecting the polarity not by the markings will not affect the durability and reliability of the device.
11. Power-cord Protection – Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles and the point where they exit from the product.
12. Lighting – For added protection for this product during a lightning storm or when it is left unattended and unused for long periods, unplug it from the wall outlet and disconnect the antenna or system cables. This will prevent damage to the product due to lighting and power-line surges.
13. Overloading – Do not overload wall outlets, extension cords or integral convenience receptacles as this can result in a risk of fire or electric shock.
14. Object and Liquid Entry – Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Do not expose this apparatus to dripping or splashing and ensure that no objects filled with water, such as vases are placed on the apparatus.

15. Servicing – Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
16. Damage Requiring Service – Unplug this product from the wall outlet and refer servicing to qualified personnel under the following conditions:
    - when the power supply cord or plug is damaged;
    - if the liquid has been spilled or objects have fallen into the product;
    - if the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will require extensive work by a qualified technician to restore the product to its normal operation;
    - if the product has been dropped or damaged in any way;
    - if the product exhibits a distinct change in performance – this indicates a need for a service.
17. Replacement Parts – when replacement parts are required, be sure the technician has used replacement parts specified by the manufacturer or with the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
18. Safety Check – Upon completion of any service or repairs to this product, ask the service technician to perform a safety check to determine that the product is in proper operating condition.
19. Wall of ceiling mounting – The product should be mounted to a wall or ceiling only as recommended by the manufacturer.
20. Heat – The product should be situated away from heat sources such as radiators, heat registers, stoves or other products (including amplifiers) that produce heat.
21. [Refers to products equipped with vacuum tubes] Tube Cage or cover – For your safety and to protect the vacuum tubes this product may be equipped with the factory-installed vacuum tube cage or cover.
    It is not recommended to remove the cage or cover unless it is required to change the vacuum tubes. When the cage or cover is removed – do not touch the vacuum tubes – they may be hot and burn the skin!
22. Operating Environment – Operating environment temperature and humidity of the unit: +5°C to +35°C (+41°F to +95°F); less than 85% RH (cooling slots not blocked).

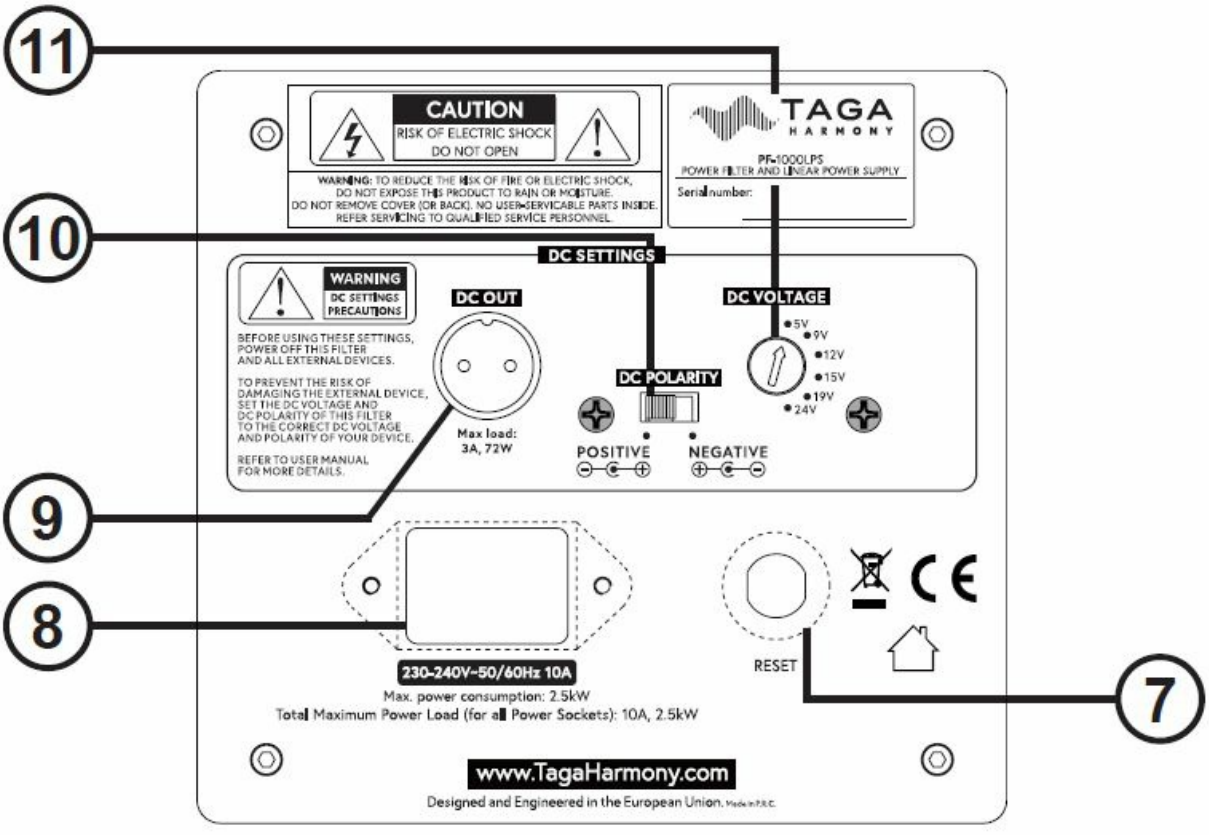
PACKAGING WARNING
The packaging may contain elements such as plastic, that should be kept away from small children. The thin foil or small elements can stick to the nose and mouth or may be swallowed and prevent breathing.

Controls and Displays

FRONT



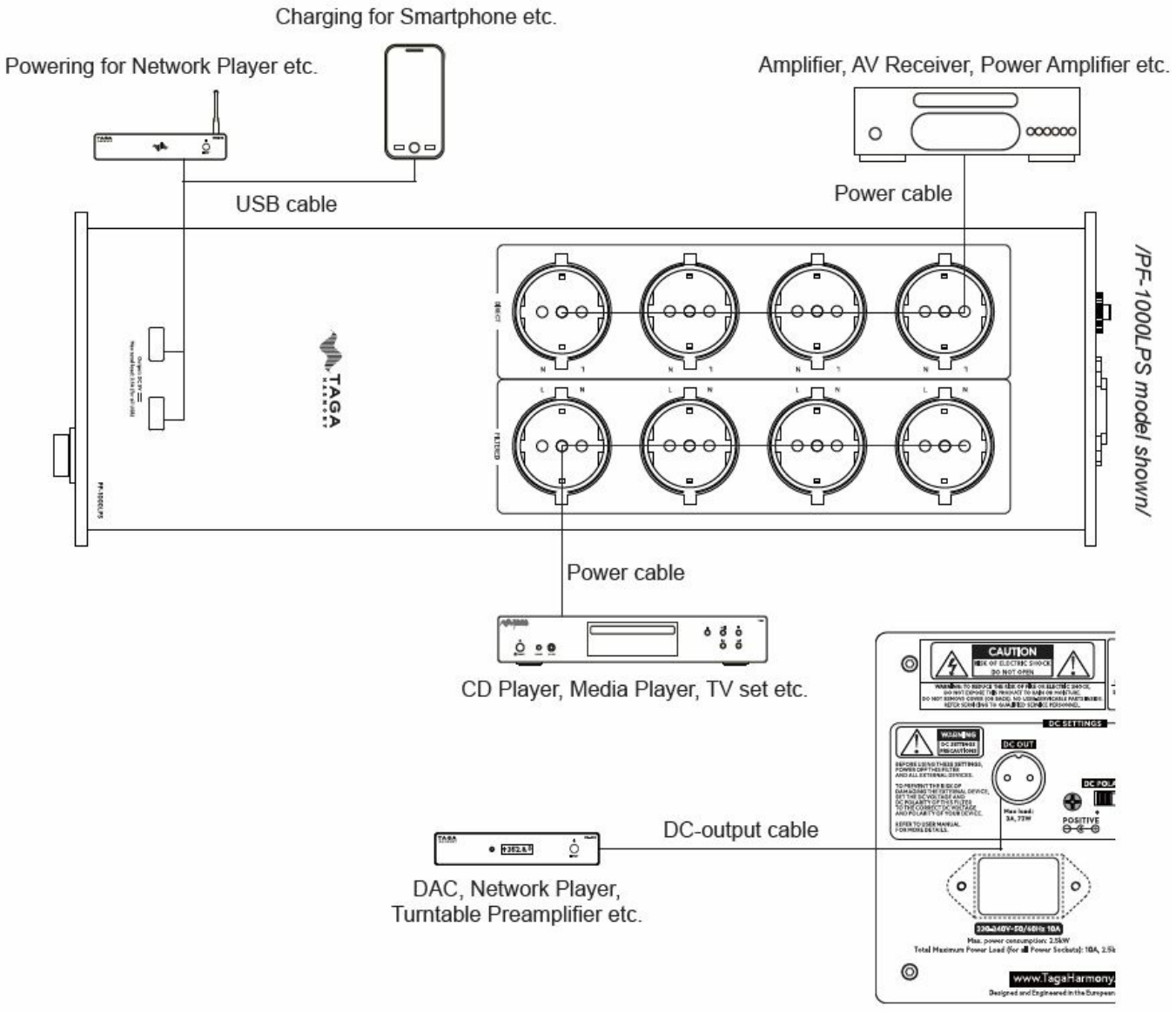
REAR



1. Power Switch [ON (I) and OFF (0)]
2. Voltage Indicator Display

3. Phase LED Indicator
4. 230V – 240V Power Sockets – DIRECT Output (non-filtered)
5. 230V – 240V Power Sockets – FILTERED Output
6. USB-A Ports
7. Reset Button
8. Power Cable Input
9. DC Output Socket
10. DC Polarity Selector
11. DC Voltage Selector

Hooking Up the Filter



- Make sure the filter is turned off (the Power Switch is in the down-off position and the Power Cable is removed from the wall outlet).
- Total maximum power load (wattage rating): the total maximum power consumption for all connected devices to 230V – 240V Power Sockets, DC Output Socket and USB-A ports of the filter should not exceed the maximum power load for this filter.
- The total maximum power load for this filter is given in Kilowatts (kW) or Watts (W) and is printed on the filter

under the Power Cable Input.

- It is also available in the specifications on **www.TagaHarmony.com**.
- TAGA Harmony is not liable for misuse of the filter.

CONNECTING 230V – 240V POWERED DEVICES

- Using power cables connect your audio-video equipment to the power sockets. Follow the below recommendations:
- FILTERED SOCKETS (these sockets are filtered. Electrical noises are filtered and limited) – connect here your audio-video sources (CD/DVD/BluRay/Media Player, Radio/TV Tuner, Turntable, Preamplifier, Active Speakers etc.) and video display devices (TV Set, Video Projector etc.).
- DIRECT SOCKETS (these sockets are not filtered) – connect here your amplification audio equipment (Integrated/Power Amplifier, AV/Stereo Receiver, Active Subwoofer and similar).
- **Note!** Check „Operation" for other useful operating instructions.
- The user is fully responsible for checking the specifications of external devices and using equipment compatible with the voltage supported by the filter.
- TAGA Harmony is not liable for damage to the filter and external devi- ces in case of using devices with incompatible voltage.
- We recommend using Schuko plugs in all power cables.

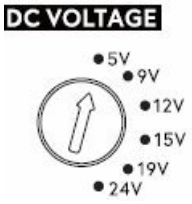
CONNECTING DC POWERED DEVICES

Maximum power load for the DC Output: the maximum power consumption for the connected DC-powered device to the filter should not exceed the maximum power load for the DC Output.
The maximum power load for the DC Output is given in Kilowatts (kW) or Watts (W) and is printed on the filter under the DC Output Socket.
It is also available in the specifications on **www.TagaHarmony.com**.

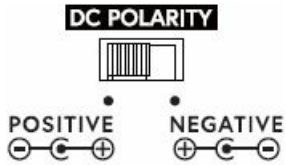
DC OUTPUT SOCKET SETTINGS
BEFORE CONNECTING DC POWERED EXTERNAL DEVICES,
POWER THEM OFF AND CONFIGURE THE DC OUTPUT SETTINGS
AS PROVIDED BELOW:

- Check the voltage (V) of your DC powered device and using a flat-head screwdriver, turn the DC VOLTAGE selector until the arrow will point to the same value as your device voltage.

Note! If the voltage compatible with your device is not available, the device cannot be used with the filter!



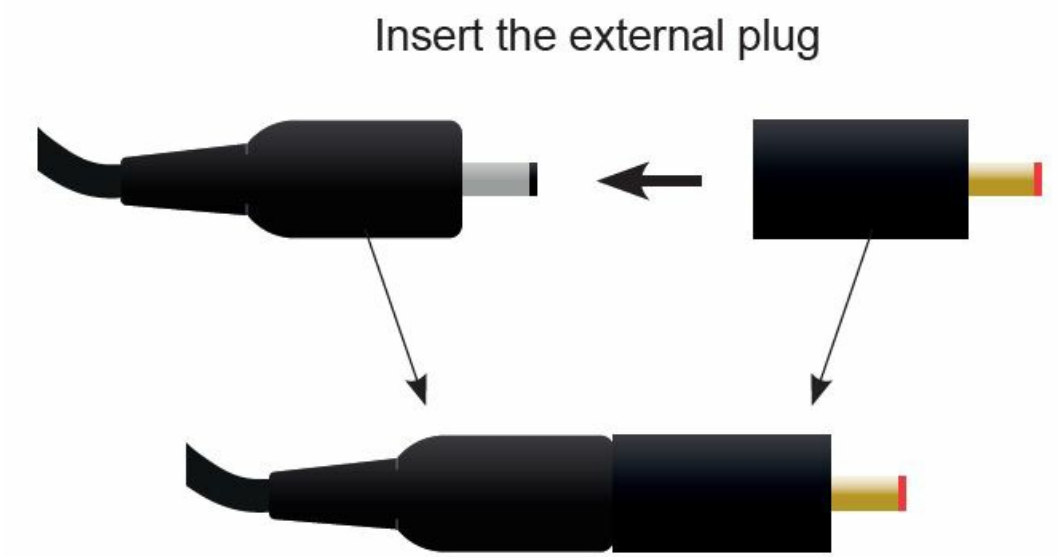
- Check the polarity of your DC powered device and set the DC POLARITY selector to the correct setting consistent with the polarity of your device.



- Check the power plug shape type in your DC powered device (at the device side) and use a compatible plug for the DC-output cable. Check “DC-output Cable Configuration” for more details.
- **Note!** Never change the above-mentioned settings while the filter or the connected DC-powered device is turned on.
- The user is fully responsible for checking the specifications of external devices and setting the correct DC VOLTAGE and DC POLARITY for the DC Output Socket (DC OUT).
- TAGA Harmony is not liable for damage to the filter and external devices in case of incorrect setting of the above-mentioned.

DC-output Cable Configuration
The filter comes with the DC-output Cable that allows using different plugs provided in the set.
Select a plug that is compatible with your DC powered device and mount it on the cable plug.

Mounting the plug



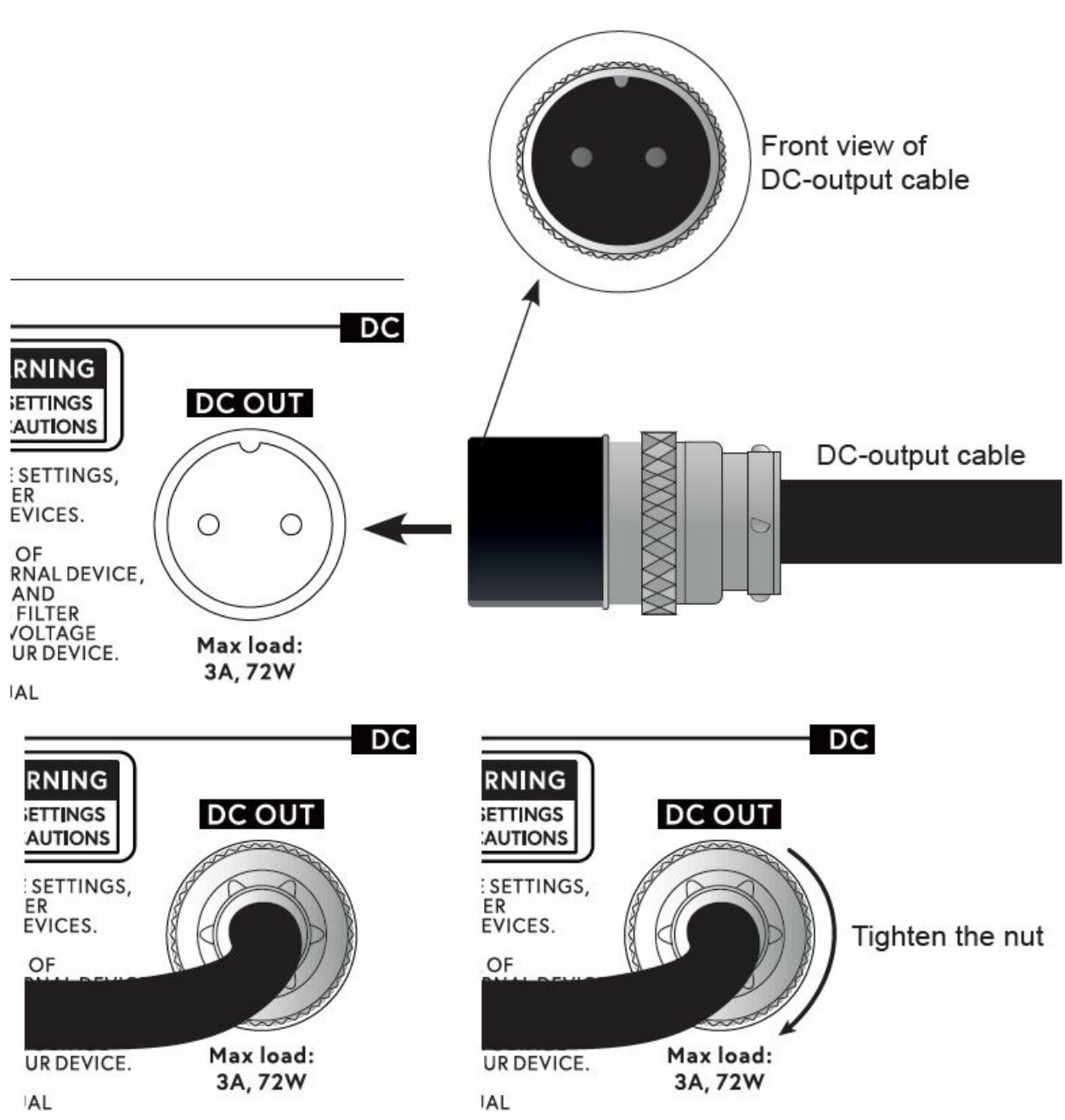
Supplied plugs

Size of tip Type

- DC 5.5 x 2.1 x 11 mm (installed on the DC-output Cable)
- DC 3.5 x 1.35 x 9.5 mm
- DC 2.5 x 0.7 x 9 mm
- DC 4.0 x 1.7 x 10 mm
- DC 4.0 x 1.35 x 10 mm
- DC 4.8 x 1.7 x 10 mm
- DC 5.0 x 3.0 x 10 mm
- DC 5.5 x 2.5 x 11 mm

- DC 6.3 x 3.0 x 11 mm
- USB C

Connecting the DC-output Cable to the filter



Connect the DC-output cable to your DC powered device.

- The user is fully responsible for checking the specifications of external devices and using the correct plug for the DC-output Cable.
- TAGA Harmony is not liable for damage to the filter and external devices in case of using incorrect plugs.
- **Note!** Never remove the DC power cable while the filter or the connected
- DC-powered devices are turned on.

CONNECTING DEVICES TO USB PORTS

Using USB cables connect compatible equipment to the USB-A Ports.

- The USB-A Ports are only intended for powering or charging devices that are compatible with the USB-A Charging Ports technical data printed on the filter:
- Output: DC – direct current and voltage provided in Volts.
- Max total load: – maximum total load when all USB-A Charging Ports are used simultaneously.
- [Maximum load for a single USB-A Port = the Max total load divided by the number of devices being powered/charged].
- The total load generated by all devices connected to the charger must not exceed the Maximum total load.
- The number of devices that may be powered/charged simultaneously is limited to many USB-A Ports this filter is equipped with.
- Never connect more than 1 device to a single USB-A Port.
- Use only a recommended USB cable for your device and replace faulty cables immediately.
- The user is fully responsible for checking the specifications of external devices and using them compatible with this filter.
- TAGA Harmony is not liable for damage to the filter and external devices in case of connecting incompatible devices.

Note! Charging may lower the efficiency of the power noise filtering – we recommend not charging any devices during critical listening.

Your filter is ready for operation

Operation

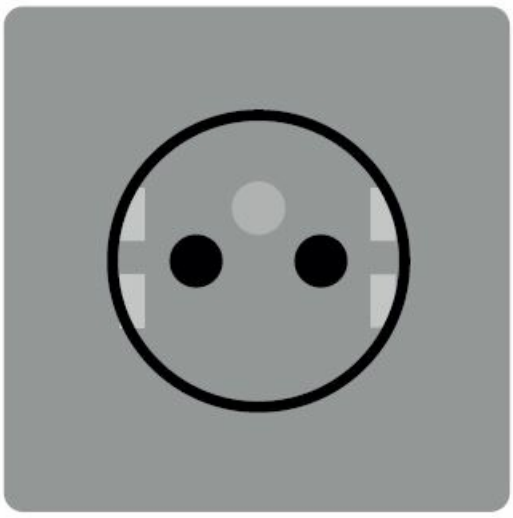
This unit requires a single-phase 3-conductor electrical outlet.

1. Plug the Power Cable to the filter and into the electrical outlet.
2. Turn on the filter (the Power Switch should be in the upper ON position).
3. Phase LED Indicator – the indicator will illuminate when the phase is incorrect.

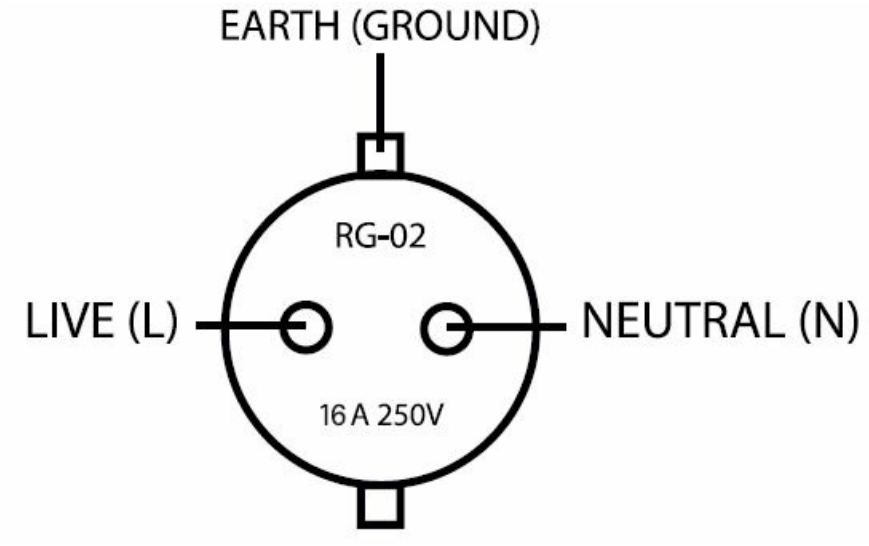
INCORRECT PHASE
At the date of this instruction manual, there is no unified standard in most Eu- ropean Union countries determining the position of the Live L) and Neutral (N) wires in an electrical outlet.
The term „incorrect phase” is an expression used in this manual only concerning this device to determine the L and N positions in the output power sockets of the power filter.
If the Phase is incorrect perform the following steps:

- Schuko type electrical outlet. Make sure the filter is turned off (the Power Switch is in the down-off position and the Power Cable is removed).
- Remove the power plug from the outlet, reverse the plug by 180 degrees and put it into the outlet.
- Turn on the filter – the Phase LED Indicator should switch off – the Phase is correct.

- Electrical outlet with a ground pin. Make sure the filter is turned off (the Power Switch is in the down OFF position and the Power Cable is removed).
- Contact a qualified electrician to reverse wiring connection in your electrical outlet.
- Turn on the filter – the Phase LED indicator should switch off – the Phase is correct.



- Due to risk of electric shock refer any changes related to electrical equipment to qualified personnel.
- The Power Sockets in your filter may have additional markings related to the female contacts: L – LIVE | N – NEUTRAL.
- If not then check the below figure showing the Power Sockets wiring (for the correct Phase).



- If your audio-video equipment has the phase marking for the power cable input make sure to connect correctly the equipment power cable plug to the power filter.
    - Turn on your audio-video equipment and enjoy your system.
    - SURGE AND OVERLOAD PROTECTION SYSTEM
- Reset – the filter is equipped with a surge and overload protection system for all outputs.
- If the protection system is activated (no power):
    - Disconnect the filter from the power.
    - Disconnect all external devices from the filter.
    - Wait at least 15 minutes until the filter's internal systems cool down.
    - Power on the filter.
    - Press the Reset button to restore filter operation.

      Note! If the filter operation cannot be restored, contact the TAGA Harmony service centre.
- The surge and overload protection system operates within the parameters provided in the filter's specifications. However, it does not provide 100% protection against all types of surges and overloads.
- TAGA Harmony is not liable for any damage to external devices caused by surges and overloads.
- Voltage indicator – whenever the power filter is turned on and connected to a properly working electrical outlet the voltage indicator will display approximate current voltage in Volts.

  Note! Indications of the voltage indicator are highly approximate and should not be taken into account for the professional assessment of the power line quality.

POWER CABLES AND PHASE

- The Live (L) and Neutral (N) wires in various power cables may be internally connected between the cable plug and the connector differently.
- If the Phase LED Indicator changes its status after the factory-provided Power Cable is swapped for another one, it is not a malfunction but a symptom that the new power cable has a different internal connection as abovementioned.
- If the Phase LED Indicator will illuminate then perform the steps required when the phase is incorrect and which are described in the point "Phase LED Indica- tor" in this chapter.
- When you want to turn off the power filter we recommend turning off your audio-video equipment first.
- This power filter is not an uninterruptible power supply unit (UPS).

- It will not operate when the input power source fails (no power or too low voltage).

We strongly advise to contact a professional installer or dealer in order to install TAGA Harmony products.
We recommend using high-quality TAGA Harmony cables and other installation accessories.

Kit Content

- Power Filter 1 EA
- Power Cable 1 EA
- DC-output Cable 1 EA
- DC plugs 9 EA
- Instruction Manual 1 EA

EU declaration of conformity

- Your product is marked with the symbol shown on the left.
- As its manufacturer, hereby we declare that the product is in compliance with the following EU directives and regulations:
- 2014/30/EU (EMC) & 2014/35/EU (LVD) & 2011/65/EU (RoHS)
- The full text of the EU declaration of conformity is available from the manufacturer.

Disposal of the product

Disposal of old electrical & electronic equipment (applicable in the European Union and other countries with separate collection systems)
This symbol on the product or on its literature and packaging indicates that this product shall not be treated as household waste. Instead, it shall be handed over to the appropriate collection point for the recycling of electrical and electronic equipment. By ensuring that this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health, which could be caused by inappropriate waste handling of this product.
The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local government office, your household waste disposal service or the shop where you purchased the product.

CONTACT

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Documents / Resources

	TAGA HARMONY PF-LPS Series Power Noise Filters and Linear Power Supply [pdf] Instruction Manual PF-LPS Series, PF-LPS Series Power Noise Filters and Linear Power Supply, Power Noise Filters and Linear Power Supply, Noise Filters and Linear Power Supply, Filters and Linear Power Supply, Linear Power Supply, Power Supply, Supply

References

- Home - TAGA Harmony
- User Manual