

# Classic PSU Super-cap power supply



# User manual

P/N: 2055050159

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### Safety warning

- Read this manual carefully before operating the CLASSIC PSU;
- Please contact your Nagra dealer, should you have any questions on how to setup or the use of your CLASSIC PSU,;
- Audio Technology Switzerland SA declines any responsibility in the event of an accident caused by the non-observation of these instructions or any other form of user negligence;
- There are no user adjustments inside the CLASSIC PSU, do not attempt to open it.

## Warranty

Audio Technology Switzerland SA, certifies that this device has been inspected and tested before leaving our factory.

Every Nagra unit goes through our test laboratory. The measurement results are recorded in the "Protocol" documentation that comes with the device.

We guarantee our products against all manufacturing defects, for a period of three years, starting from the date of delivery to the customer (validated by the serial number on the device casing and the invoice from an official Nagra dealer). This warranty is only valid for the original purchaser of new equipment.

This limited warranty covers the repair and / or replacement of defective parts and labor.

The absence of a serial number invalidates the warranty.

We decline any responsibility for damage resulting directly or indirectly from the use of our products.

As we constantly strive to improve our products, we reserve the right to modify them or change their specifications without notice.



Disposal of old electrical & electronic equipment (Applicable in the European Union and other European countries with separate collection systems).

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local authority, your household waste disposal service or the shop where you purchased the product. Applicable to the following devices: CLASSIC PSU power supply.

## Congratulations

Congratulations! You have just acquired a fine piece of equipment.

The CLASSIC PSU was created by an engineering team with more than 65 years' experience designing world-class products for the professional audio, national security and military businesses.

Ever since its creation in 1951, Nagra has built devices that offer exceptional sonic performance. The company has received many awards for its technical innovations and the excellence of its products. Among the most prestigious, Nagra has been awarded three Oscars<sup>®</sup> and an Emmy<sup>®</sup>.

The professional and Hi-Fi ranges are designed by the same Research and Development department. Nagra has launched a Hi-Fi range to allow a wider public to benefit from technical advances that are often the privilege of the professionals.

The CLASSIC PSU will enhance your Nagra system and allow you to access better sonic performance and enjoy your music more.

Thank you for your confidence.

#### Package contents

Besides this manual and the CLASSIC PSU itself, the box contains:

- Mains cable\*;
- Measurement protocol showing response curve characteristics for your device, measured by the Nagra laboratory;
- Pair of "haute horlogerie" Nagra gloves

Please contact your Nagra dealer if anything is missing. If you have purchased the optional third output it is already installed inside the CLASSIC PSU.

 $\ast$  Depending on the country of purchase, the cable supplied by Nagra will feature a European, Swiss or US plug.

## Installation

### Positioning

In order to protect against the risks of fire and electric shock, please keep this device away from rain and humidity, use exclusively indoors.

The Nagra CLASSIC PSU must rest on a stable support. We recommend that you use the anti-vibration support, Nagra Classic VFS, Vibration Free Support, developed by Nagra consisting of isolated solid aluminum plates using the same silicon base damping material as the Nagra CD mechanics. Feel free to contact your Nagra dealer for more information.

it is not advised to place other Nagra units above or below the CLASSIC PSU, as it features a large transformer. It is preferable to use a separate shelf for other devices.

### Connection block



- 1. Main switch I for On /  $\boldsymbol{O}$  for Off
- 2. Fuse holder
- 3. IEC socket for mains power cable
- 4. Ground connector
- 5. 12 V outputs for Nagra DC power cables
- 6. 1/8" jack ouputs for home automation triggering external
- 7. 1/8" jack input for home automation

## Front panel



- 1. Infrared remote control receptor
- 2. LED remote-control indicator
- 3. Main selector: OFF, R stands for Remote, ON
- 4. Modulometer indicates Mains voltage
- 5. Modulometer and LED brightness selector

### Connecting the mains



Place the front panel selector in the  ${\rm OFF}$  position, marked ``O''. Insert the IEC cable into the connector on the rear of the Nagra CLASSIC PSU.

You may then push the mains switch to the  $``\mathbf{I''}$  position.

### Which output to use?

Outputs 1 to 3 are all the same. They are completely isolated from one another, so you may connect your equipment as you wish, whether it is digital or analog.

If you have purchased the optional third output, then it is active, otherwise only outputs 1 and 2 are used.

#### Connecting your Nagra gear to the CLASSIC PSU



Please note that the LEMO plug features a red dot that must be facing upwards for correct insertion into the power connector.

When inserting the cable, you will hear a click. This indicates that the plug is securely locked.

To disconnect the DC cable, hold the indicated ribbed section of the plug and pull backwards.

#### Fuse replacement



The fuse holder includes a replacement fuse (the one on the left). The fuse type is FST 5x20 mm 250 V 1.6A and for 115 V use 3.15 A.

Should the replacement fuse blow immediately following the original, contact your dealer for support.

## **Operating the CLASSIC PSU**

These are the functions available from the main selector.

- OFF The CLASSIC PSU is in standby position
- R (Remote) The CLASSIC PSU will be turned on and off by the remote control, or the input trigger, for more information see page 9
- **ON** The power on sequence will start, outputs 1 through 3 will be powered and then the **remote output** triggers, for more information about the latter see page 10

The power down sequence order is similar; first the **remote output** will shut down, then each output from 1 to 3. This allows a very smooth power on and off for the system and should avoid any annoying clicks in the speakers.

### Nagra Modulometer

The Nagra Modulometer was inherited from the second recorder developed by Nagra back in 1952, the Nagra II. The Modulometer is a precision modulation meter that displays the necessary information to perform the best possible recording.



In the case of the CLASSIC PSU, the Modulometer indicates the mains power voltage.

Depending on your country, the nominal voltage will vary from 100 to 240 V. Should the voltage be below minimum or above maximum, this should raise concerns about a mains power problem in your area. The CLASSIC PSU only displays the voltage, it does not affect it.

### LED and Modulometer intensity adjustment

This two-way toggle switch allows you to adjust the LED and Modulometer backlight intensity. Pushing the toggle UP will increase the intensity, pushing it down will lower the intensity all the way to complete extinction. There are 7 different levels.

### Remote control

#### Factory settings for the remote control

The Nagra CLASSIC PSU is factory set to be device number 6 with Nagra remote control code (RCU and RCU II).

#### Changing device number (for dealers)

If you wish to use another device number, turn the CLASSIC PSU Off and unplug the mains cable. Then open the top plate. The selector is on the front panel board, on the right-hand side.

**0** position is for Philips RC 5 format –**1** to **6** is to use Nagra RCU and RCU II device number, simply turn the selector to the number you wish the CLASSIC PSU to respond to.



#### Using a "universal remote" with the CLASSIC PSU

Place the selector shown above on the **0** position. The CLASSIC PSU will respond to IR signals coded in Philips RC-5 format. The CLASSIC PSU is allocated a system number 7 for "Reserved". Function 12 "Standby" is available to turn the unit On and Off.

NB An alternate, in position "9", the Classic PSU bears RC-5 system number "11".

### Starting the CLASSIC PSU using the trigger input



On the **R** position, you can start the CLASSIC PSU using the REM (for REMote) input. Please note that both the tip and the sleeve of the 1/8'' Jack should be connected to the ground.

Signal on the ring	CLASSIC PSU		
Connected to the ground	Off		
Open or connected to max 12 V	On		

Whenever you connect a jack on the REM connector, it will override the Infra Red remote control.

#### Using the trigger outputs



See the following picture for cabling of the 1/8" jack.

CLASSIC PSU	Tip and ring
AMP On	Connected
AMP Off	Open

The outputs will be activated at the end of the powering sequence, to avoid any clicks that sometimes occur at start-up. When powering down, these outputs will be turn off first.

### Case cleaning

Clean the CLASSIC PSU casing using a soft, non-fluffy, slightly damp cloth. Do not use any cleaning products which could have a corrosive effect.

### Technical specifications

Compatibility	Nagra VPS, Jazz, Melody preamplifiers, Classic DAC, HD DAC, Classic PREAMP, Nagra CD players			
Output type	1 to 3, 12 V DC, 1.5 A GND contact - command	Lemo pin 2-3 Lemo pin 1		
Linear noise	30 µV maximum	No load 10 Hz - 500 kHz		
Home automation	20 µV maximum	10 Hz - 500 kHz Full load 10 Hz - 500 kHz		
input output	1x 3.5 mm jack connectors 3x 3.5 mm jack connectors	Input command Output switching by relay		
Mains power	100, 115, 120, 127 230 or 240 VAC	±10%		
Power consumption	consumption Maximum 100 W			
Dimensions	280 x 350 x 76 mm	Excluding connectors		
L x W x H	12 x 13.7 x 3 inches	Excluding connectors		
Weight	7.5 Kg (15.4 lbs.)	With third option		

Specifications may change without notice

## EU Declaration of conformity



Apparatus	model / Product					Nagra Classic PSU	
Type / Batch / Serial number			80550500xx				
Company n Postal addr				AUD	IO TE	CHNOLOGY SWITZERLAND SA Chemin de l'Orio 30A	
Postcode &					103	32 ROMANEL-SUR-LAUSANNE	
Country				SWITZERLAN			
Phone num	ıber				+41 21 643 72 40		
E-mail addr	ess					info@nagraaudio.com	
This dec	laration of conformi	ty is is	sued under t	he sole respo	nsibil	lity of the manufacturer.	
						ude a <u>color</u> image of sufficient	
	necessary for the identif				ay men	ade a color, image of sumclenc	
power supp	Classic PSU is an external a bly dedicated to the feed ratuses (+12VDC).			NOMA CLASSIC PSU		÷	
The object of	f the declaration describe	d above	is in conformity	with the relevant	t Unior	harmonisation legislation:	
Y	lirective /30/EU	•	Low Voltage Directive 2014/35/EU		•	RoHS 2 Directive 2011/65/EU + C.D. Directive (EU) 2015/863	
Referencest	o the relevant harmonise	d stand	ards used, includ	ing the date of th	e stand	dard, or references to the other	
	cifications, including the	date of	the specification				
EN 55032:2	2015/AC:2016			EN 60065:2014	\$+COR:	1:2015+COR2:2016+A11:2017	
EN 61000-4	1-2						
EN 61000-4	1-3						
EN 61000-4	I-4 level 1 (500V)						
EN 61000-4	I-4 level 2 (1000V)						
	I-5 level 2 (1000V)			-			
			·····				
The coefficient in	ody (where applicable) :					Number	
The notified b	boy (where applicable) :					Number	
performed:							
and issued th	ne certificate.						
Signed for an	id on behalf of:					Gaule	
Romanel 2018/06/29				T. Frank / R&D Manager			
Place of issue	i i i i i i i i i i i i i i i i i i i			Name / Function		· · · · · · · · · · · · · · · · · · ·	

Nagra – Classic PSU