

## MELODY – solid-state preamplifier



## User manual

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## Safety warning

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

## Warranty

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

Every Nagra unit goes through our test laboratory. The result of the measurements is recorded in the "Protocol" documentation that comes with your device.

We guarantee our products against all manufacturing defects, for a period of three years, running 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 replacement of defective parts, excluding any other remedy.

The absence of a serial number invalidates the warranty.

We decline any responsibility for damages 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: MELODY preamplifier.

# Congratulations

Congratulations! You have just acquired one of the best-ever preamplifiers.

The MELODY was created by an engineering team with more than 60 years' experience designing world-class products for the professional audio, national security and military businesses.

Ever since its creation in 1951, Nagra builds 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® and one Emmy®.

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

This technology exists in the service of music, your music. This is why we already wish you some great moments of listening pleasure with your MELODY.

Thank you for your trust.

## Package contents

Besides the manual and the MELODY itself, the box contains:

- Mains cable\*;
- Record of measurements, response curve characteristics for your device, measured by the Nagra laboratory;
- Remote control with 2 AAA dry cells;
- Pair of "Haute Horlogerie" grade microfiber gloves.

Please contact your Nagra dealer if anything is missing.

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

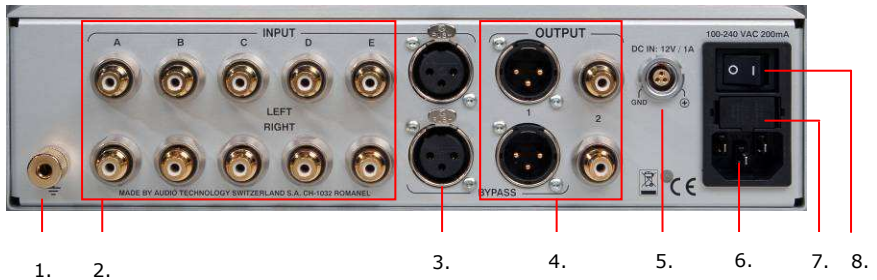
# Installation

## 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 MELODY must rest on a stable support. We recommend that you use the anti-vibration support, Nagra VFS, Vibration Free Support, developed by Nagra consisting of isolated massive aluminum plates using the same silicon base damping material as the Nagra CD mechanics.

## Connection block



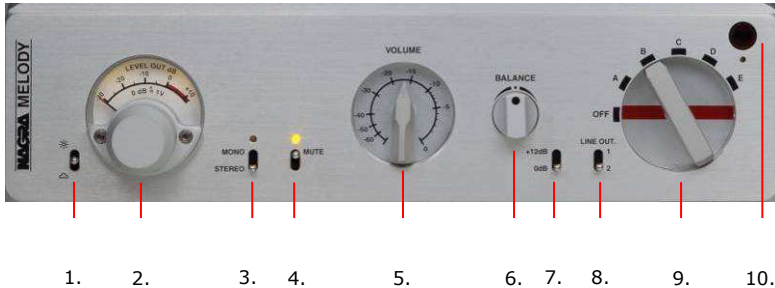
1. Ground connector
2. Input block
3. BYPASS input on XLR, this is a special input that will be routed to the XLR output when the MELODY is OFF, see **BYPASS** on page 8)
4. Output **1** is on XLR (unbalanced), Output **2** is on RCA
5. DC input on Lemo plug
6. IEC connector
7. Fuse holder
8. Mains switch

In order to obtain optimal performance from the Nagra MELODY, it is preferable to leave the device switched on for about 15 minutes before use, so that the internal components can reach their optimum operating temperature.

### Note about the Ground connector

This feature is seldom used but often handy to solve specific setup issues. Your Nagra dealer will assist you on when and how to use this connector.

## Front panel



1. LED and Modulometer intensity switch, pushed up will increase the intensity, down will reduce it, there are 7 levels of intensity
2. Nagra Modulometer indicates the output level in dB, reference 0 dB = 1 V
3. STEREO / MONO selector, in **MONO** position, the LED will light up
4. MUTE, when muted the LED will light up, push down to cancel the mute, you can also MUTE using the remote control
5. Volume adjustment potentiometer
6. Balance fine adjustment potentiometer
7. Gain selection, standard position 0 dB, upward position +12 dB
8. Line out selection, position **1** XLR, **2** RCA
9. Main selector, **OFF** is standby\* position, input selection **A** to **E**
10. IR window and remote LED

\*In standby mode the power consumption is less than 10 mW.

Please note that when turned **ON**, the MELODY will go through a 10 second pre-heating phase. This is in order to optimize the warming-up of critical components. This will allow your MELODY to offer excellent performance for a longer period, the components being taken care of gently.

**Note 1:** When moving between the **A** and **E** inputs, a 3 second switching delay is applied to avoid any unwanted noise, this is perfectly normal.

## Connecting the mains



Place the front panel selector in the OFF position, noted **O**. Insert the IEC cable into the connector of the Nagra MELODY.

You may then push the mains switch into the **I** position.

## Connecting an optional external power supply



The Nagra Melody can also be powered by an external source like ACPS compact power supply or full frame units like the Nagra MPS.

Start by removing the IEC cable from its plug. The mains switch position is no longer relevant when an external power supply is connected.

Please note that the LEMO plug features a red dot that must be facing upwards for correct insertion into the power input connector. Place the front panel selector in the **OFF**

position. Insert the LEMO plug from the external power supply into the DC connector as shown above.

You will hear a click, indicating that the plug is securely locked in.

To disconnect the LEMO plug. Hold the fluted section of the plug as shown in the picture and pull backwards.



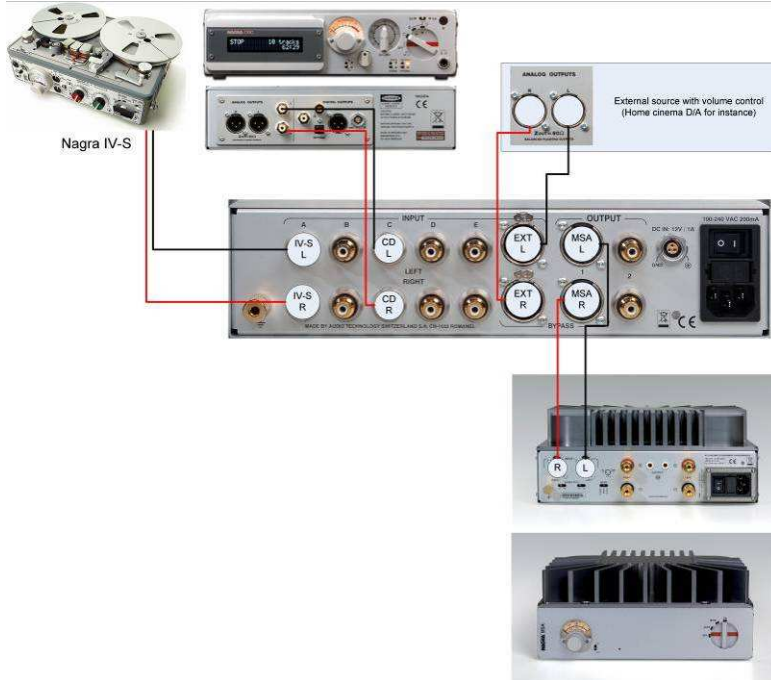
## Fuse replacement

The fuse holder includes a replacement fuse. The fuse type is FST 5x20 mm 250 V 200 mA. Should you need to replace it, only use the same fuse type.

## BYPASS

The BYPASS input is a nice feature that allows a second system, home cinema for instance, to be linked to the main amplifiers connected to your MELODY.

The BYPASS is active when the MELODY is turned **OFF**, whether it is actually connected to a power source or not. The BYPASS input will directly be connected to the XLR output (output **1**). All BYPASS XLR pins will be connected to the output XLR, so if the source is balanced, the connection will be balanced all the way through.



Here is an example of a setup using the BYPASS input.

### Warning

Please note that when in the Bypass mode, the Melody volume control is also bypassed. The signal is directly routed to the XLR output. Be careful to use a source with volume control. To avoid any damage to the speakers, adjust the volume to the minimum on the source, before turning the Melody **OFF**.



## Nagra Modulometer



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

In the case of the MELODY, the Modulometer displays the output level. 0 dB corresponds to a 1 V rms signal on the output.

Left channel - red needle

Right channel - green needle

The Modulometer allows you to make sure you adjust the volume in a consistent manner with the source and the amplifier you are using.

## Gain selection

In order to accommodate a wide range of amplifier/speaker combinations, the MELODY's internal gain can be adjusted by a toggle switch on the front panel.



The gain can be changed while the unit is **ON** and playing. 12 dB amplification is a 4x multiplication, so be aware of the sound level when you change gain.

This switch changes the internal gain of the unit; this is not an additional stage. So the sound quality is not affected by the gain you select. This switch is placed on the front panel, as we consider you can change it from one source to another, or depending on the music style you are playing, at any time. So we do not recommend any particular position for a given set-up. Feel free to experiment.

## 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. In total there are 7 different levels.

## Balance fine adjustment



The balance is often regarded as not mandatory by many manufacturers. At Nagra, we believe it is useful to adjust some minor left/right impairments, typical of LP cutting.

This is the reason the MELODY Balance setting is intended for fine adjustments that will affect Left/Right balance by just 6 dB. So this is perfectly normal that the volume does not go completely to the left or right channel.

# Remote control

The MELODY comes with a new remote control. The RCU III.



## Using a “universal remote” with the MELODY

Code	Function
16	Volume Up
17	Volume Down
26	Balance Right
27	Balance Left
13	Mute
12	Standby

The MELODY responds to IR (Infra Red) signals coded in Philips RC-5 format. The MELODY is allocated a system number 16 for preamplifiers.

Should you wish to program your universal remote control, please use this table.

## Changing remote type

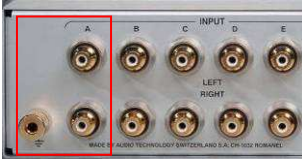
If you wish to use a Nagra RCU or RCU II remote control, you need to open the Melody (as per instructions on Page 11). On the right hand side of the front panel, you will find a selector.



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

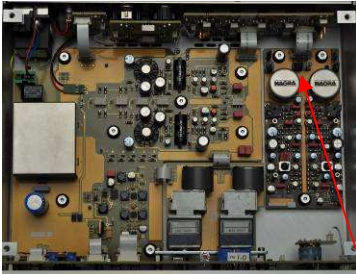
## Phono input settings (optional)

This option may be purchased and installed at Nagra factory, or you can have it installed later on by your dealer.



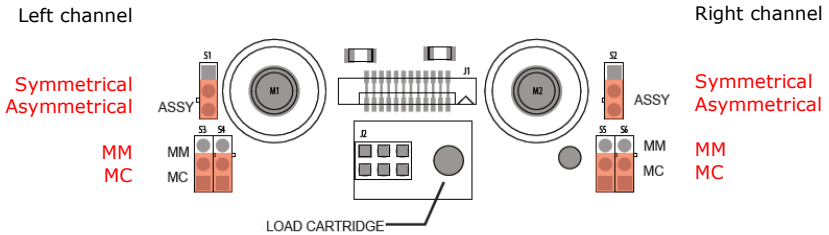
With the optional phono module, Input A becomes the phono input. Simply connect your turntable to the input A and use the ground connector on the left.

### Accessing phono settings



To access phono settings, you need to open the Melody. Always start by turning the unit **OFF** from the Mains switch on the back, or simply remove the IEC or Lemo connector. Open the Melody with the provided 2.5 mm Hex key, you have 6 screws to remove. The module is on the right hand side of the Melody.

You always have to adjust Left and Right channels separately.



### MM or MC cartridge

The Melody phono option is preset to operate with an MC (moving coil) cartridge. In order to use an MM (moving magnet) cartridge, internal jumpers must be moved.

### MM input impedance

By default, the input impedance of the BPS when set to MM is 47 K Ohms and 100pF. Taking into account the capacity of the cable that links the tone-arm to the BPS, the overall impedance from the cartridge will be in the range of 100 to 200 pF, this is the optimum load for most MM cartridges.

### Cartridge load matching

The BPS is supplied with various load circuits, allowing its input impedance to be matched as closely as possible to the recommended value for your cartridge (this value should be indicated in your cartridge's specifications).

N°	Load value
1	100 pF
2	100 Ohms
3	220 Ohms
4	330 Ohms
5	470 Ohms
6	1000 Ohms

Insert the load circuit and secure the screw using the black Allen key.

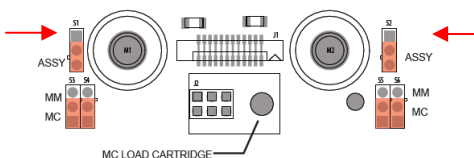
If the exact value recommended for your cartridge is not provided, select the closest value above.

### Symmetric or asymmetric for MC

For moving coil cartridges, operation is possible in symmetric or asymmetric mode, through the input transformer. In the absence of hum problems, the asymmetric mode should be selected (this is the default setting).

You can switch mode by moving the S1 and S2 jumpers as per the following diagrams:

Symmetrical      Up  
Asymmetrical    Down



### Phono module gain adjustment

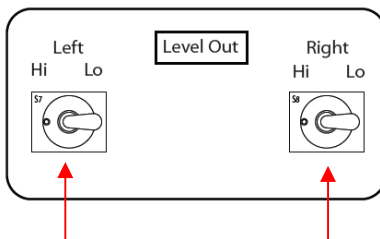
The gain of your phono module is adjustable through two toggle switches. Please check your cartridge manual to know the best sensitivity and maximum output level your cartridge delivers. Refer to the following table for best match.

#### MC cartridge

Gain position	Maximum level
High	0.67 mV
Low	4.4 mV

#### MM cartridge

Gain position	Maximum level
High	2.2 mV
Low	16 mV



## Case cleaning

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

## Technical specifications

Input impedance	> 75 K Ohms	
Output impedance	47 Ohms on RCA 100 Ohms on XLR	
Frequency response	10 Hz - 50 kHz	(+0 / -1 dB)
Signal to noise ratio	> 100 dB (ASA A)	Ref 1 V
Dynamic range	> 110 dB	Gain at +12 dB
Minimum input level to reach 0 dB (meter)	0.25 V rms	Gain at + 12 dB
Maximum input level to reach 0 dB (meter)	> 25 V rms	Gain at 0 dB
Total harmonic distortion (THD)	<0.02 %	@ 1 kHz, 1 V rms without load
Crosstalk	> 75 dB	
MELODY consumption	230 V 30 mA 12 V 140 mA	Standby <10 mW
Power supply	115 V or 230 V AC	Factory set
Dimensions	310 x 254 x 76 mm	12.2 x 10 x 3 inches
Weight	3.2 Kg – 7 pounds	MELODY unit alone
Phono option		
Sensitivity High	MM 2.2 mV rms MC 0.67 mV rms	Ref. 1 V rms output
Low	MM 16 mV MC 4.4 mV	Ref. 1 V rms output
Signal to noise ratio	> 75 dB (ASA A)	Ref. 1 V rms
Crosstalk	> 70 dB	@ 1 kHz
Distortion	< 0.02 %	@ 1 kHz, 1 V rms without load
Bandwidth	20 Hz – 50 kHz	+ 1 / 0 dB

## Déclaration de conformité

### Declaration of conformity

**FABRICANT:** AUDIO TECHNOLOGY SWITZERLAND SA, 1032 Romanel, SUISSE  
**MANUFACTURER:** AUDIO TECHNOLOGY SWITZERLAND SA, 1032 Romanel, SWITZERLAND

**APPAREIL:** Nagra MELODY

**MODEL:** Nagra MELODY

NORMES APPLICABLES:

APPLICABLE NORMS:

Champ électromagnétique rayonné Radiated electromagnetic field	EN 55022 Cl. B EN 55022 Cl. B
Perturbations conduites sur secteur Disturbance voltage on mains terminal	EN 55022 Cl. B EN 55022 Cl. B
Immunité aux champs électromagnétiques Immunity to electromagnetic fields	EN 61000-4-3 EN 61000-4-3
Immunité aux décharges électrostatiques Immunity to electrostatic discharges	EN 61000-4-2 EN 61000-4-2
Immunité aux transitoires électriques rapides en sables sur câble d'alimentation Immunity to burst on mains line	EN 61000-4-4 level 2 (1000V) EN 61000-4-4 level 2 (1000V)
Immunité aux transitoires électriques rapides en sables sur câbles d'entrées/sorties Immunity to burst on input/output signal line	EN 61000-4-4 level 1 (500V) EN 61000-4-4 level 1 (500V)
Immunité aux ondes de choc Immunity to surge	EN 61000-4-5 level 2 (1000V) EN 61000-4-5 level 2 (1000V)

Cheseaux 4ème trimestre 2012  
Cheseaux 4th quarter 2012

Nagra R&D team