

Table of contents of this manual

| | | |
|------------|---|-----------|
| 1.0 | Receiving the ASR Basis Exclusive | 2 |
| 1.1 | Unpacking the ASR Basis Exclusive | 2 |
| 1.2 | Setting up the ASR Basis Exclusive | 2 |
| 1.3 | Important safety precautions | 3 |
| 2.0 | Connecting the ASR Basis Exclusive | 4 |
| 2.1 | Connecting to a preamp or an integrated amplifier | 4 |
| 2.2 | Connecting the tone arm cable | 4 |
| 2.3 | Connecting the separate battery power supply | 5 |
| 3.0 | Adjusting the ASR Basis Exclusive | 6 |
| 3.1 | Switching in unbalanced mode | 6 |
| 3.2 | Adjusting the input resistance in balanced mode | 6 |
| 3.3 | Adjusting the input resistance in unbalanced mode | 8 |
| 3.4 | Adjusting the input capacity | 10 |
| 3.5 | Settings the gain | 10 |
| 3.6 | Settings the low frequency cut OFF | 10 |
| 3.7 | Settings for common cartridges | 11 |
| 4.0 | Operating the ASR Basis Exclusive | 12 |
| 4.1 | General Operation | 12 |
| 4.2 | Monitor Leds | 12 |
| 4.3 | Battery capacity display | 13 |
| 4.4 | Option : Mono switch | 13 |
| 5.0 | Maintenance of the ASR Basis | 13 |
| 5.1 | Cleaning of acrylic material | 13 |
| 5.2 | Removal of scratches | 13 |
| 5.3 | Trouble-shooting | 13 |
| 5.4 | Battery life expectancy | 15 |
| 5.5 | Just in case: repair | 15 |
| 6.0 | The ASR Basis Exclusive technical description | 15 |
| 6.1 | Function of the the main unit | 15 |
| 6.2 | Function description of the separate battery power supply | 16 |
| 7.0 | Technical Data | 17 |

Dear music lover,

all of us at ASR would like to offer you thanks and congratulations to you for purchasing the **ASR Basis Exclusive** Phono Pre-Amplifier. We sincerely believe that your **ASR Basis Exclusive** will bring you **many years** of musical pleasure and enjoyment.

All ASR products are **handmade** with greatest care to details and with high-grade selected parts. Enjoy your records even more with this true High End-Phono-Pre-Amplifier!

While every new owner is anxious to begin listening, we encourage you to take some minutes to read this manual and familiarize yourself with the full capabilities of the ASR Basis Exclusive.

1.0 Receiving the ASR Basis Exclusive

1.1 Unpacking the ASR Basis Exclusive

Use care in unpacking your ASR Basis Exclusive. Inspect it for any shipping damage and call your dealer immediately if any is found.

! Do not plug your ASR Basis Exclusive into an AC outlet if you find shipping damage !

Provided with the ASR Basis Exclusive are the following accessories:

- a) **Phono Pre-Amplifier ASR Basis Exclusive**
main unit with one golden or chromium control knob
- b) **Battery Power Supply**
no controls on the front plate, one push button for capacity check at the backside
- c) **Repair-set** contains: 1x 3 mm Allen-wrench, replacement screws M4 x 16, replacement fuses 0,5 (1) Amp / slow blow for the battery power supply
- d) **Care-set** contains: 1x bottle of antistatic plastic-cleaner and a special cloth

1.2 Setting up the ASR Basis Exclusive

Check to make sure, your ASR Basis Exclusive has been manufactured for operation at your AC line voltage. Attempting to use your ASR Basis Exclusive at any voltage other than the specified on the battery power supply's back side may damage the unit.

Damage caused by improper operation is not covered by ASR warranty.

If the voltage specified is different from your local AC voltage, contact your ASR dealer.

Do not place the ASR Basis Exclusive main unit close to the battery power supply. Place the main unit close to your turntable and use a cable as short as possible to connect your turntable to the main unit.

1.3 Important safety precautions

To get the best performance from your ASR Basis Exclusive, and for your own safety, please read and follow these important safety instructions.

1. **Before operating** the ASR Basis Exclusive Phono Pre-amplifier, please **read** ALL operating and safety instructions.
2. Never place the ASR Basis Exclusive or the battery power supply near **heat sources** such as radiators, fireplaces, stove, or other appliances that produce heat. Avoid placing the ASR Basis Exclusive where it will be subject to direct sunlight or low temperatures.
3. This product is equipped with a **three wire AC power cord** which includes an **earth ground** connection. To prevent shock hazard, all three connectors must always be used. If your AC outlets will not accept this type of plug, an adaptor may be purchased.

If an adaptor is necessary, be sure it is an approved type and that it is used properly, supplying an earth ground. If you are not sure of the integrity of your home's electrical system, contact an licensed electrician for assistance.
4. Before **cleaning** the ASR Basis Exclusive, always turn the unit **Off** and disconnect the AC power supply cord.
5. If you smell smoke, or an abnormal smell, immediately **turn** the ASR Basis Exclusive **OFF** and unplug the unit from the power supply and contact your ASR dealer.
6. In case the unit becomes wet unplug it immediately, and dry it completely before using again.
7. Replace fuse only with the exact type originally included.
230 Volt: 0,5 Amps slow blow 115 Volt: 1 Amps slow blow
8. The **batteries** need to be **charged** at least 1 day a month, otherwise they may be damaged. The Batteries have a **self discharging** rate from about **0,5% per** day like car batteries.

When you **don't use** the Basis please unplug the Main unit from the Basis to avoid discharging. For storage the Battery PSU can be connected to AC power all the time, that has no disadvantages. But AC power connection should be done at least **1 time a month** for at least **8 hours** !
9. The batteries should be **replaced** after about **5-7 years** with 6 pieces new 6 Volts/ 12 Ah Lead/Acid Gel types. We are using Panasonic Japan Production types.
10. **THERE ARE NO SERVICEABLE PARTS INSIDE THE ASR BASIS EXCLUSIVE !**
 - Do not attempt to repair or modify your ASR Basis Exclusive.
 - All service should be performed by qualified service personnel.
 - Do not open the unit while it is attached to the AC outlet.

2.0 Connecting the ASR Basis Exclusive

2.1 Connecting to a preamp or an integrated amplifier

ATTENTION: Before connecting cables to the inputs or outputs please switch the main unit OFF. After you made this connections you may connect the power cord to the AC outlet as last cable.

On the back panel of the main unit the output sockets (named with „Out“) are located left and right of the power supply cable. The input sockets are located left and right of the „Out“ sockets and are named with „In“. The RCA sockets for the **right channel** are marked with a **red ring**, for the **left channel** with a **white ring**.

The ASR Basis Exclusive has two outputs RCA for unbalanced and XLR for balanced connection. You can use them both also together upon your needs.

When you are using the balanced inputs you are not obliged to use the balanced out.

The preferred output is the unbalanced type, cause the balanced signal is made with a converter.

2.2 Connecting the tone arm cable

Moving Coil (MC) and **MM cartridges** can be connected to the ASR Basis Exclusive.

Balanced or unbalanced connection can be used at the inputs of the Basis Exclusive !

But we **strongly recommend** the use of **balanced connection** !

The ASR Basis Exclusive is **designed** for using the **balanced input** and has **best results** only with balanced input connection.

!! Cartridges are like microphones the only balanced sources from their construction !!.

With **unbalanced connection** at the input you don't have the full possible sound quality.

The use of the **balanced output** is not obligatory together with the use of the **balanced input**.

Definition of a Balanced connection :

A **balanced** tone arm cable must have **two conductors** and a **separate shielding**.

This shielding has to connected separately to ground and should never be connected to the plus or Minus wires- otherwise you will get heavy distortions, cause the shield will work as antenna !

Balanced cables can be connected at both the RCA or the XLR plug. Both inputs sockets are internally connected. The RCA inner pin is connected to Plus, the outer ring to Minus.

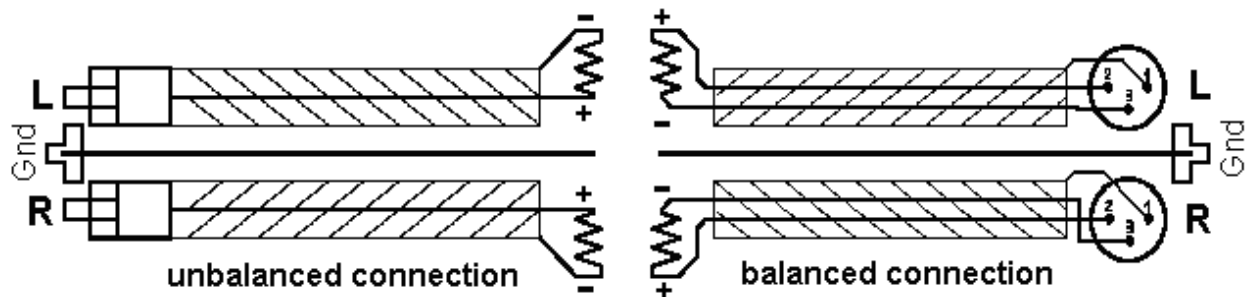
The pins on the XLR sockets are international standard: 1 = Ground, 2 = Plus 3 = Minus.

The only advantage of using XLR is that the third pin 1 can be used for ground connection of the shield. At RCA the shield must be connected separately to the big ground pole plug connector.

A tone arm cable that has already **two wires** and be converted simply by connecting the shield to ground (the black pole plug at the Basis) instead of to the outer ring at RCA what is minus.

At **balanced connections** the adjustments have to be made at both 12 Pin Dip switches left and right. The switch **Dip No. 12** has to be **OFF**.

Please connect the ground cable of your turntable to the (black) pole terminal on the back panel.



Unbalanced connection :

An **unbalanced** tone arm cable is normally coaxial with one **conductor** and a **shielding**. Cables with two inner wires can be converted simply by separating the shield from minus.

Unbalanced cables should be connected to the RCA plug. The RCA inner pin is connected to inner wire, the outer ring to the shielding.

MM cartridges **must** be connected in the unbalanced mode.

At unbalanced connections the adjustments has to be made at the left **12 pole** Dip switch.

The right **Dip** switch **No. 12** has to be **ON** to connect the **minus input** to **ground**.

Please connect the ground cable of your turntable to the (black) pole terminal on the back panel.

2.3 Connecting the separate battery power supply

The ASR Basis Exclusive is equipped with an **external ASR battery power supply**.

To connect the main unit to the Battery PSU please follow the sequence exactly :

- a) **Turn Off** the ASR Basis Exclusive and your amplifier and **disconnect** the power cord from the Battery power supply unit or AC outlet.
- b) To **connect the 16 pole male plug** at the end of the heavy silver cable please attach the connector to the female plug at the Power supply.
- c) Then please **press the spring clamps** at the female plug forward to fix the male plug .
- d) **connect** the power cord to the AC outlet.

If you want to disconnect the external ASR battery power supply, do it in the following order

- a) **Turn Off** the ASR Basis Exclusive and pre- or integrated amplifier and **disconnect** the power cord from the Battery power supply unit the AC outlet.
- c) **wait** until the Leds inside the **main unit** are **not shining** any more.
- d) Press **away the spring clamps** and disconnect the male plug from the ASR battery PSU.

Has the connection between the main unit and the battery power supply accidentally been **disconnected before** the Leds in the main unit **stopped shining**, please wait at least **two hours** before connecting the two units again.

By this you prevent the ASR Basis Exclusive from **harm** through the high current that may occur when you have **residual energy** in the capacitors.

3.0 Adjusting the ASR Basis Exclusive

The ASR Basis can be perfectly adjusted to match the needs of your cartridge.

Before you do any adjustments inside the ASR Basis Exclusive turn the unit OFF.

- a) use the enclosed (silver) 3mm Allen wrench to remove the top plate of the main unit (please mark the front- and backside of the top plate before removing it!)
- b) behind the „**Input**“ sockets of each input there are **two 12 fold** DIP switches to exactly adjust the ASR Basis Exclusive to your cartridges. Please find the drawing at page 10.
- c) the **input resistance** can be adjusted on Dip **No 1 to 10** at the **12 fold** DIP switches named „Input Resistance“.
- d) The switching between **balanced** and **unbalanced** mode is done at the **right Dip No 12**.
- e) the **gain** can be adjusted on the **6fold** DIP switches named „**Gain Adjust**“
- f) the **low frequency cut Off** can be adjusted to 2 Hz (switch to „On“) or 20Hz (switch to „Off“) on the **2 fold DIP** switches named „**Low**“ and „**2 Hertz**“

The DIP switches have **two different settings**: „On“ or „Off“; please be sure, that the switches are set correctly (when set correctly, you will hear a slight „click“)

3.1 Choosing the input mode, switching in unbalanced mode

The Basis needs to be adjusted to the input mode based on different kind of connections you use. Please read page “Connection the tone arm cable” for more info.

When you use unbalanced cable you have to switch the right Dip **No. 12** to **ON**.

Otherwise hum or popping noises may occur. This Dip switch is marked with “**Unbalanced**”.

With balanced cable please switch the **No. 12** to **Off**, otherwise you won't get out the full quality of the balanced connection.

!! Balanced Cable Dip No. 12 right OFF, unbalanced cable Dip No. 12 ON !!

3.2 Adjusting the input resistance in balanced mode

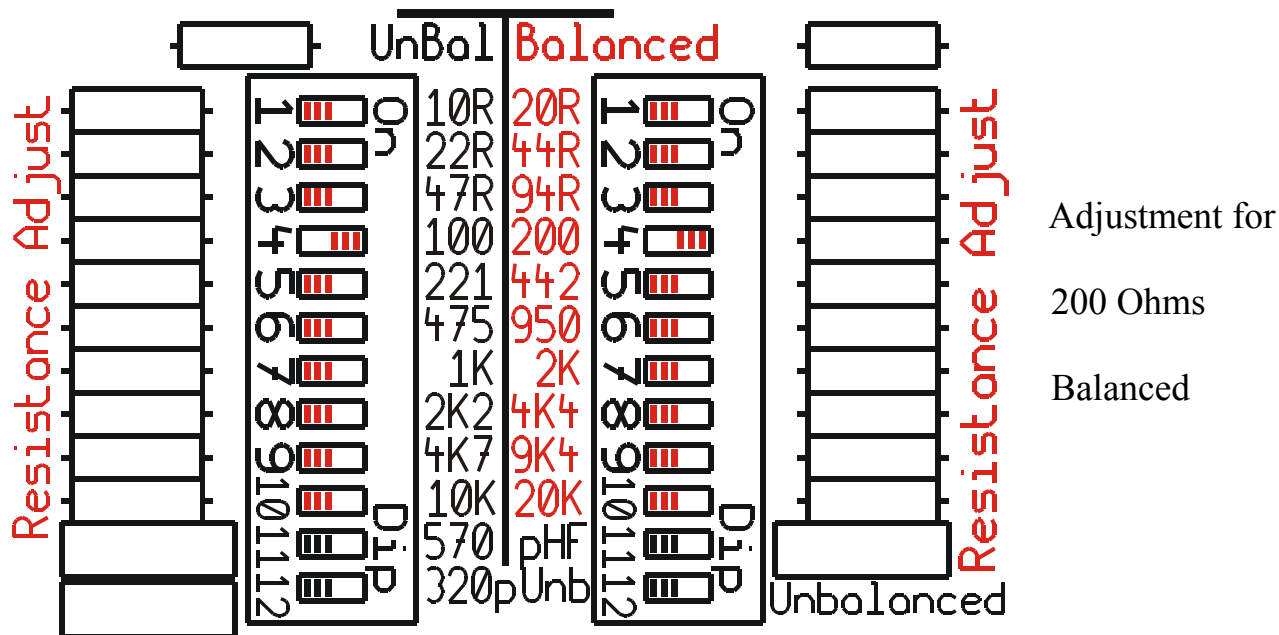
Adjustment of the **input resistance** (from 10 ohms to 20 kilo ohms) can be easily made on the switches No. 1-10 on the 2 pieces 12 fold DIP switches named „**Resistance Adjust**“.

In **balanced mode** both the Dip switches marked with “**Unbalanced**” and “**Balanced**” **No. 1 to 9** per input channel **must be adjusted** in the **same way** to get the same load resistance for both the positive and negative input !

Please set the DIP switches **exactly** the **same** for the **right** and the **left** channel.

The chart at the **right half** between the two rows of Dip switches shows the resistance values for balanced mode.

For example for 94 Ohms you have to switch Dip No. 3 at the left and the right Dip switch marked with “**Unbalanced**” and “**Balanced**” to ON. For 2 k for example put both Dips No. 7 to ON.



Possible adjustments on the **left** and **right** 12 fold DIP switches „Input Resistance“

The following chart shows you on the left column the value you get when you switch On the Dip switches shown in the right columns.

| Value | Dip No | 10 | 09 | 08 | 07 | 06 | 05 | 04 | 03 | 02 | 01 |
|------------|--------|----|----|----|----|----|----|----|----|----|----|
| 10 Ohms | | -- | -- | -- | -- | on | on | on | on | on | on |
| 15 Ohms | | -- | -- | -- | -- | -- | -- | -- | on | on | -- |
| 20 Ohms | | -- | -- | -- | -- | -- | -- | -- | -- | -- | on |
| 30 Ohms | | -- | -- | -- | -- | -- | -- | -- | on | on | -- |
| 44 Ohms | | -- | -- | -- | -- | -- | -- | -- | -- | on | -- |
| 70 Ohms | | -- | -- | -- | -- | on | on | -- | on | -- | -- |
| 94 Ohms | | -- | -- | -- | -- | -- | -- | -- | on | -- | -- |
| 100 Ohms | | -- | -- | on | on | on | on | on | -- | -- | -- |
| 150 Ohms | | -- | -- | -- | -- | -- | on | on | -- | -- | -- |
| 200 Ohms | | -- | -- | -- | -- | -- | -- | on | -- | -- | -- |
| 250 Ohms | | -- | -- | on | on | -- | on | -- | -- | -- | -- |
| 442 Ohms | | -- | -- | -- | -- | -- | on | -- | -- | -- | -- |
| 950 Ohms | | -- | -- | -- | -- | on | -- | -- | -- | -- | -- |
| 2 K Ohms | | -- | -- | -- | on | -- | -- | -- | -- | -- | -- |
| 4,4 K Ohms | | -- | -- | on | -- | -- | -- | -- | -- | -- | -- |
| 9,4 K Ohms | | -- | on | -- | -- | -- | -- | -- | -- | -- | -- |
| 20 K Ohms | | on | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Value | Dip No | 10 | 09 | 08 | 07 | 06 | 05 | 04 | 03 | 02 | 01 |

Normally for the adjustment a value of about 5x to 10x the internal resistance of the generator (the cartridge) should be used.

Most common MC cartridges have values between 4 to 25 Ohms, so we recommend resistance values between 20 and 250 Ohms.

We know from experience that when you are using an adjustment with a **lower input resistance** the soundstage is **deeper** and is more **precise**, but the **dynamic** gets **lower**.

With a **higher input resistance** the overall performance is **brighter** and has more **dynamic**, but definition and precision are decreased.

Higher values than **500 ohms** makes only **small changes** in the sound characteristic.

You can easily find out the perfect setting for you: make an adjustment and listen to the system.

! The best adjustment is the one you like best !

We don't recommend higher values than 9,4 K Ohms in balanced mode, cause this may cause higher noise and maybe unstable operation of the input stage.

By using **combinations** of Dip switches you can get additionally values for the resistance.

Formula for the Calculation : $1/R \text{ total} = 1/R1 + 1/R2 + 1/R3 \dots$

Example: 44 and 94 Ohm combined (47 k is fix): $1/Rt = 1/44 + 1/94 + 1/47000 = 1/0,033 = 30 \text{ Ohms}$
The result gives 30 Ohms when you switch Dip No 2 and 3 to ON at both Dip Switches.

3.3 Adjusting the input resistance in unbalanced mode

Adjustment of the **input resistance** (from 5 ohms to 47 kilo ohms) can be easily made on the switches No. 1-10 on the 2 pieces 12 fold DIP switches named „Resistance Adjust“.

MM Cartridges with 47 K load can only be used in unbalanced mode !

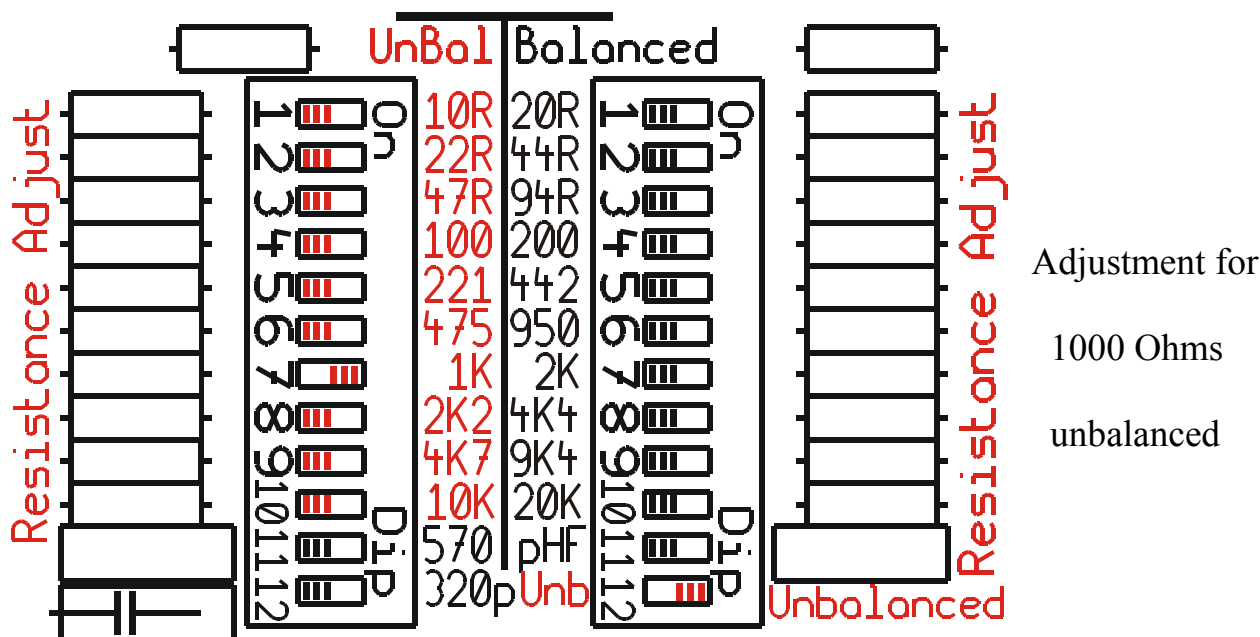
In **unbalanced mode** only the left Dip switches **No 1 to 10** per input channel **must be adjusted**.

At the right Dip switch only the switch No. 12 has to be switched ON.

That shortens the negative input to ground.

The column at the left half between the two rows of Dip switches marked with “Unbalanced” shows the resistance values for **unbalanced** mode.

For example for 100 Ohms you have to switch Dip No. 4 at the left and the right Dip switch 12 to ON. For 1 k for example put Dip No. 7 at the left and the right Dip switch 12 to ON.



Possible adjustments on the **left** 12 fold DIP switch „Input Resistance“ in unbalanced mode

The following chart shows you on the left column the value you get when you switch On the Dip switch shown in the right columns.

| Value | Dip No | 10 | 09 | 08 | 07 | 06 | 05 | 04 | 03 | 02 | 01 |
|--------------|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 5 Ohms | | -- | -- | -- | -- | on | on | on | on | on | on |
| 10 Ohms | | -- | -- | -- | -- | -- | -- | -- | -- | -- | on |
| 15 Ohms | | -- | -- | -- | -- | -- | -- | -- | on | on | -- |
| 22 Ohms | | -- | -- | -- | -- | -- | -- | -- | -- | on | -- |
| 32 Ohms | | -- | -- | -- | -- | -- | -- | on | on | -- | -- |
| 47 Ohms | | -- | -- | -- | -- | -- | -- | -- | on | -- | -- |
| 70 Ohms | | -- | -- | -- | -- | -- | on | on | -- | -- | -- |
| 100 Ohms | | -- | -- | -- | -- | -- | -- | on | -- | -- | -- |
| 150 Ohms | | -- | -- | -- | -- | on | on | -- | -- | -- | -- |
| 221 Ohms | | -- | -- | -- | -- | -- | on | -- | -- | -- | -- |
| 470 Ohms | | -- | -- | -- | -- | on | -- | -- | -- | -- | -- |
| 1 K Ohms | | -- | -- | -- | on | -- | -- | -- | -- | -- | -- |
| 2,2 K Ohms | | -- | -- | on | -- | -- | -- | -- | -- | -- | -- |
| 4,7 K Ohms | | -- | on | -- | -- | -- | -- | -- | -- | -- | -- |
| 10 K Ohms | | on | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 47 K Ohms | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Value | Dip No | 10 | 09 | 08 | 07 | 06 | 05 | 04 | 03 | 02 | 01 |

Normally for the adjustment a value of about 5x to 10x the internal resistance of the generator (the cartridge) should be used.

Most common MC cartridges have values between 4 to 25 Ohms, so we recommend resistance values between 20 and 250 Ohms.

Higher values than **500 ohms** makes only **small changes** in the sound characteristic.

We know from experience that when you are using an adjustment with a **lower input resistance** the soundstage is **deeper** and is more **precise**, but the **dynamic** gets **lower**.

With a **higher input resistance** the overall performance is **brighter** and has more **dynamic**, but definition and precision are decreased.

You can easily find out the perfect setting for you: make an adjustment and listen to the system.

! The best adjustment is the one you like best !

MM Cartridges can only be used in unbalanced mode !

For MM cartridges we recommend values of 47 k, what means all Dip switches left to OFF.

By using **combinations** of Dip switches you can get additionally values for the resistance.

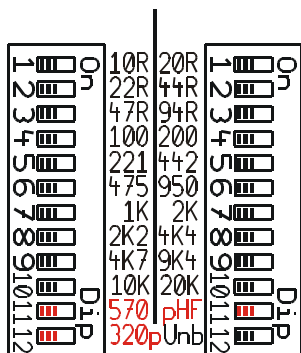
Formula for the Calculation : $1/R \text{ total} = 1/R1 + 1/R2 + 1/R3 \dots$

Example: 221 and 475 Ohm combined (47k is fix): $1/Rt = 1/221 + 1/475 + 1/47000 = 1/0,00665 = 150$

The result gives 150 Ohms when you switch Dip No. 5 and 6 to ON at the left Dip Switch.

3.4 Adjusting the input capacity

The input capacity in **unbalanced** mode can be adjusted on the left DIP switch No. 12: position „Off“ = 100pF, „On“ = 320pF. Number 11 at the left dip switches to 570 pF.



You can easily determine the value for your cartridge by using the cartridge manufacturer’s recommended value and subtract the capacity of the phono cable you are going to use –

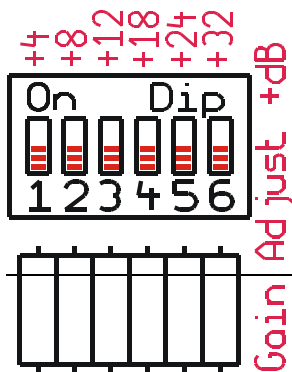
the result is the value you have to adjust in your ASR Basis Exclusive.

For **balanced mode** you can use the Dip switches Number 11 **left** and **right** to in increase the input capacity from 100 to 570 pF.

This can be used to filter Radio frequencies that are picked up from the tonearm cable.

Also of the input stage work more stable with higher input capacities.

3.5 Setting the gain



The gain can easily be adjusted on the 6 fold DIP switches „Gain Adjust“.

The switches can be combined to get higher gain.

The minimal total gain of +32 dB is obtained with all Dip switches in OFF, the Maximum total gain of +70 dB (32+ 38dB) is obtained by putting all 6 DIP switches to „On“.

To know the adjusted gain please add the following values to 32 dB

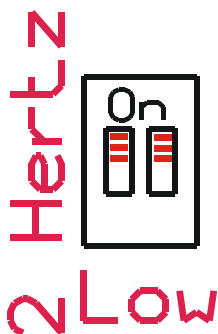
| switch No. | „On“ | none | 1 | 2 | 3 | 4 | 5 | 6 |
|------------|------|------|------|------|-------|-------|-------|-------|
| gain: | | 0dB | +4dB | +8dB | +12dB | +18dB | +24dB | +32dB |

When you set combined Dip Switches to ON, the gains does not add up ! For Example : when you switch for example No. 3 and 4 to **ON** you will have a gain of 22 dB, **not** 30 dB.

Please set the DIP switches exactly the same for the right and the left channel (only exception from this rule: your cartridge has different output levels at the right and left channel).

!! The gain should be set as low as necessary to get lowest possible noise !!

3.6 Setting the low frequency cut OFF



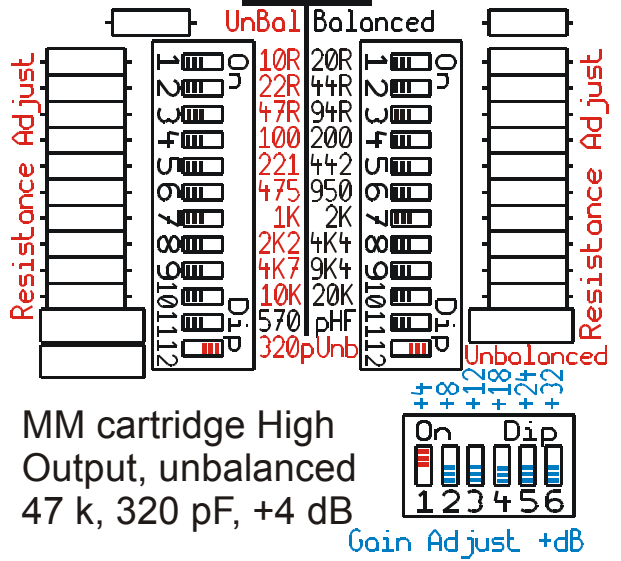
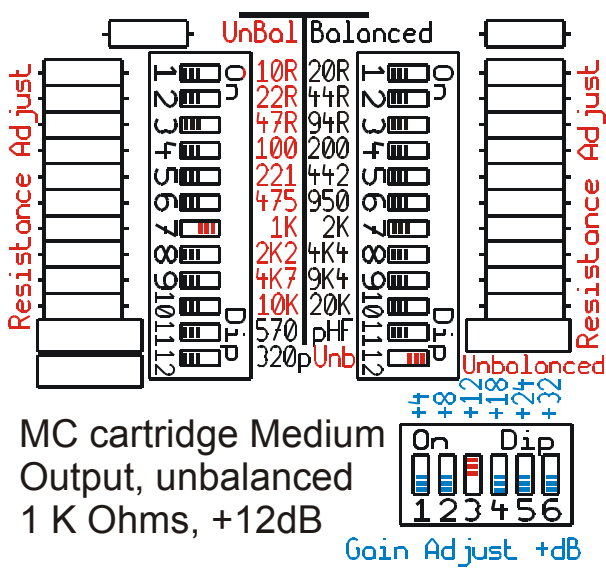
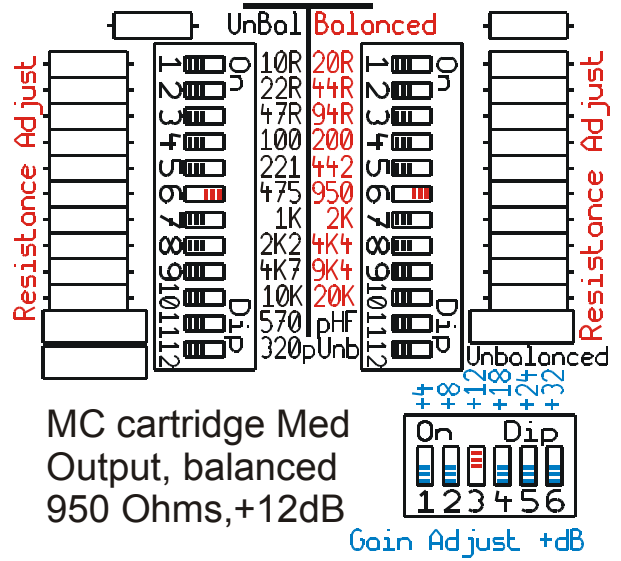
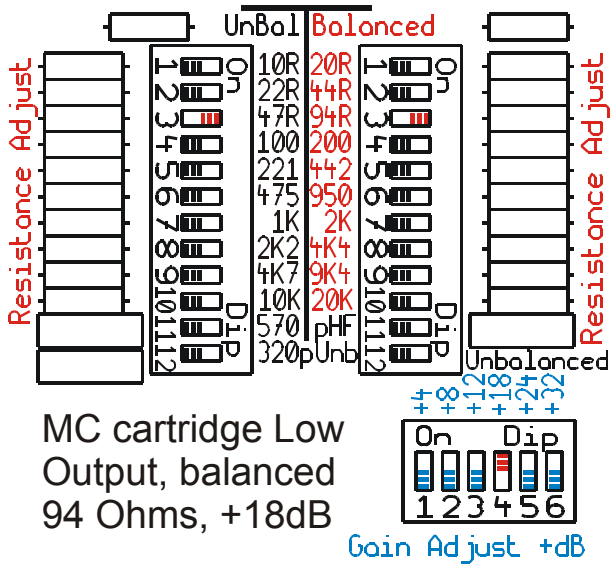
With the 2 pole-Dip-switch named „Low“ the low **Cut Off** frequency can be adjusted between 2Hz (position „ON“) and 20Hz (position „OFF“).

In the position 20 Hz (OFF) low frequent disturbances like rumble are reduced. As a result of the acoustically favourable 6 dB characteristic, however, these are not suppressed completely.

In the position 2 Hz (ON), the frequency range is wider into the subsonic area.

When you audio equipment has a very low frequency resolution, the bass signals can be even more substantially and may have more impact.

3.7 Settings for common cartridges



4.0 Operating the ASR Basis Exclusive

4.1 General Operation

The knob on the front plate of the ASR Basis Exclusive has the following functions :

- a) position „**Off**“: the unit is turned off.
- b) position „**Line**“ („**Line A**“ and „**Line B**“) if your unit is equipped with two inputs) :
the main unit is turned **ON** and is supplied with current out of the charging transformer.
To protect all the internal high-grade components the voltage is lowered in this position.
- c) position „**Auto**“ („**Auto A**“ and „**Auto B**“) if your unit is equipped with two inputs) :
the main unit is turned **ON** and is supplied with current out of the charging transformer.
when a output signal higher than 100 mV is detected the Basis is switched **Batt** mode.
After about **3 minutes without signal** the unit switches to **Line** mode again.
- d) position „**Batt**“ („**Batt A**“ and „**Batt B**“) if your unit is equipped with two inputs):
the unit is turned On and supplied with current out of the external battery power supply.
The charging transformer is separated from the AC outlet.

We **recommend** that you normally should use the unit in **Auto mode**.

Use the other modes are only when you want to operate the unit definitely in Line or Batt mode.

It may happen that when the records start very low the voltage is too low to switch to Batt mode.

In this case you may just wait till the signals gets louder. Or you may adjust the gain higher.

IMPORTANT: before **switching** from one position to another on the ASR Basis Exclusive **turn down** the volume control on your pre- or integrated amplifier or simply switch to another input, which is not used at the moment.

This will keep your speakers from getting damaged by probably occurring switching noise.

4.2 Monitor Leds

The operation mode is monitored in the Main unit by some Leds around the switch ON knob:

Line Operation with a **yellow** led, in **Batt** operation an additionally **blue** Led comes ON,
input A is shown with a **green** led, **input B** is shown with a **red** led.

In the **battery** power supply unit during “**Batt**” operation a **blue** led Bar is showing “**Batt ON**”.
In all other positions the display is showing a **yellow** bar with “**Charge**”.

Additionally the operation voltage is shown with 4 yellow and 4 blue Leds in front of the main unit:
The 4 **yellow** leds are shining in „**Line**” mode, the **blue** ones light up **additionally** in „**Batt**” mode.

There is 1 led for the positive and 1 led for the negative voltage of the both colours at each channel.

While operating the ASR Basis Exclusive, the **voltage** is constantly **monitored**. When the batteries are completely **discharged**, the ASR Basis Exclusive **switches** automatically into charging mode and **supplies** the main unit out of the **transformer** so that you can continue listening music.

For best sonic results the ASR Basis should not be switched into Off Position.

Also when not in use please switch it in Line or Auto Position to keep the circuits warm.

4.3 **Battery capacity display**

The **capacity** of the batteries can be **monitored** by pushing the button at the back side of the ASR Battery Power supply unit. **10 green** led bars will shine when the batteries are **fully** charged.

The amount of bars does not show perfect the residual capacity of the battery. Only the positive voltage at the batteries is monitored. The voltage at the batteries is relatively constant during discharging. That means that till the capacity is about 60 % when 7-8 bars are On. Below 50 % capacity the bars go down faster.

When the batteries are nearly empty then only 2-3 bars can be seen.

4.4 **Mono switch**

The optional Mono switch that is located at the rear panel. To use this switch while playing Mono records, simply turn it in the “**Mono**” position. Turn it back to “**Stereo**” position when not used.

7.0 **Maintenance of the ASR Basis**

5.1 **Cleaning of acrylic material**

The standard cleaning set includes everything you need to take care of the finish of the ASR Basis Exclusive: **antistatic plastic cleaner** and a special **cloth**. Please do not use any other cloths than the supplied one to clean the acrylic glass of the ASR Basis Exclusive.

The use of the **plastic cleaner** is quite simple: spray some of the liquid on the acrylic glass and spread it with the cloth. Clean the acrylic glass, wipe off the liquid and polish it with the cloth.

The knob on the front plate is sealed and may not be cleaned with anything else than a soft cloth with no liquids or chemicals on it.

Tip: if your are not using your equipment for a certain time cover it with a soft, fluff-free cloth – you avoid most of the soiling on your equipment.

5.2 **Removal of scratches**

Most of all scratches can easily be removed by using acrylic polishing paste. Please use as specified by manufacturer. After the use of acrylic polishing paste you should use the plastic cleaner.

The ASR warranty does not cover any damage of the acrylic material.

5.3 **Trouble-shooting**

No LED is shining when the unit is turned to “LINE” mode

First please check if the yellow Charge Bar is shining in the battery unit. If not please **check** the **fuse** that can be found in a little **drawer** in the **connector** for the AC plug at the backside of the battery unit. Replace the fuse, when necessary with a 0,5A slow at 230V and 1A slow for 115V.

When the charge Led is shining, but there are no Leds in the main unit, please check if the plug at the heavy silver cable is connected properly to the Battery powers supply unit

The main unit is not switching into “Batt” mode

After switching the main unit to “Batt” the blue Batt ON bar should light up in the front plate of the battery unit. The **blue leds** in the Basis main unit should light up and shows that the Basis is **supplied** out of the **battery**. If that does not occur, and the yellow Charge Bar is shining up instead then the batteries are empty and should be charged.

After **recharging** the battery unit switches **automatically** into battery mode.

If the charge led is not shining please check if the AC cord is plugged in properly.

The Battery PSU is switching between Charge and Bat On

If the unit is switching between charging and operation, (between the yellow **Charge** and blue **Batt On Led**) please control the two **battery fuses** on the PCB board and the connecting cables to the batteries, or the **batteries** have reached the end of their **lifetime** and need to be exchanged.

Hum

In principle the ASR Basis Exclusive should not be placed near power supplies, AM/FM-receivers, cordless phones, computers etc.. Due to its unique design principle the ASR Basis itself can not produce any hum. Hum can also occur because of other reasons:

- a) Ground loop caused by a improper ground connection, **Action** : try different ground connections in different manners that may interrupt the hum-chain.
- b) Electromagnetic fields. **Action** : Remove power supplies from the surroundings, or try to put the record player as well as the Basis Exclusive at another places.
- b) Connecting the tone arm cable with an unbalanced cable to the ASR Basis Exclusive, although the ASR Basis Exclusive is set to operate in balanced mode
Action: switch the ASR Basis Exclusive to unbalanced mode (see 3.1)

Noise

If noise occurs while playing an LP, you should lower the gain.

The noise at the cartridge's inner resistance of a very low output MC cartridge might be already higher, than the noise of the built-in input gain stage of the ASR Basis Exclusive!

Different channel volumes

Please check if all DIP switches are set the same for both channels and are positioned correct.

Radio Interferences

Some times the connecting Cables to the turntable have the exact length of an FM antenna. This may cause distortion in the playback. Please try Dip switches No 11 for a higher input capacity, use a lower input resistance and nevertheless please use the balanced connection.

That also results in a much better sound !

5.4 Battery life expectancy

The batteries used in the ASR Power supply are completely sealed **Gel lead acid** Types. Like all batteries they **lose** their **capacity** of storing electrical power over the years. When the ASR Basis is able to play only one day without recharging, the batteries should be replaced. To get best results, please replace the batteries after 5-7 years of use.

The batteries can be exchange easily at your dealership.

To **lengthen the lifetime** of the batteries please do not use the Basis with the ON/OFF-selector to the **“Batt”** Position for longer than **one day**.

Otherwise the batteries may get completely discharged !

The ON/OFF switch can stay in **“Line”** position. The ON/OFF switch in **“Auto”** position can also be used all the time, when you listen to records a few hours per day and there is time for recharging when the unit is not being used.

Please avoid **playing records continuously** in Auto Mode, without letting the unit time to charge. This shortens the life expectancy of the batteries

One hour of charging is equivalent to three hours of playing music.

If however, the unit is left in **“Auto”** position all the time then you don't need to do anything as it relates to charging the battery unit.

When you have disconnected the Basis from AC power network cause you are not using it, please charge the Battery unit at **least for one day every month**.

5.5 Just in case: repair

If all the help we provided in this trouble-shooting-section of the manual did not help to make the ASR Basis Exclusive operate properly, please contact your authorized ASR dealer.

Please pack the units into the original ASR boxes and with the original ASR packing accessories. Your authorized ASR dealer will take care of your unit and will repair it properly.

7.0 The ASR Basis Exclusive technical description

6.1 Function of the main unit

The ASR Basis Exclusive is an Phono-Preamplifier for MC and MM. The **input stage** is fully **balanced** and amplifies the input signal linear. Gain, input resistance and input capacity can be easily adjusted. Either **unbalanced** mode can be chosen by **grounding** the negative input. The signal then passes a passive high frequency RIAA filter.

The **low frequency** cut OFF is switchable. The following amplifier achieves an active RIAA equalisation. With its very low output impedance it drives the unbalanced output directly.

The balanced output is equipped with an additionally converter/driver circuit.

The **ASR Basis Exclusive** has a double-sided layer board with two very thick 105 μ copper-lead-layers. In the signal path only Polypropylen and Polystyren capacitors are used.

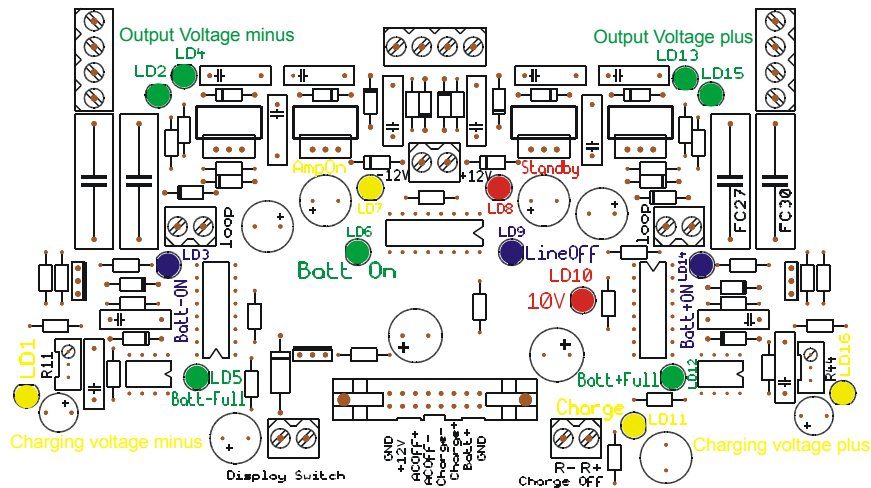
Additional foil capacitors are used to buffer the operational voltage.

The main unit has more than 860,000 μ F capacitors.

6.2 Function description of the separate battery power supply

The ASR Battery Power is housed in massive separate case. The case contains six batteries, each 6Volts/12Ampere-hours and capacitors for buffering summing up to 440,000µF.

All operations are controlled by an **optical digital logic** circuitry to avoid RF distortions.



Function explanation and description of the control Leds

- turned Off (**Off-mode**): the batteries are **charged** with 20Volt. The **yellow** “**Charge**” Led is shining. When **full** (19,5Volt) the **green** Leds “**Batt+Full**” and “**Batt-Full**” are shining.
- turned On (**Line-mode**): the batteries are **charged** with 20V. The main unit is supplied with +/- 12 Volts out of the charging circuit to **preheat** the built in circuits. The **red** “**Standby**” and “**10 V**” Leds are shining.
- turned on (**Batt-mode**): The **yellow** led “**Amp ON**” and the **blue** Led “**Line Off**” are shining. Then the batteries are switched to the buffering capacitors with 2 Power Mos-Fets. The main unit is supplied with current out of the batteries.
- Then the **charging transformer** is **separated** via relay in both phases from the AC power line. The **green** Led “**Batt On**” and two **blue** Leds “**Batt+ON**” and “**Bat-ON**” are shining.
- during „**Batt**“-mode the voltage at the batteries is constantly **monitored**. When the voltage is lower than 17 Volts the batteries are empty, and the **Batt Full Leds** will go out. The Battery PSU switches into the charging mode and the main unit is supplied out of the charging circuitry.
- Also **during charging** the main unit is working and you can still **listen to music**.
- when the batteries are **fully charged** the voltage reaches 19,5 Volts and the **green** Leds “**Batt+Full**” and “**Batt-Full**” are shining. Then the charging transformer is disconnected, and the ASR Basis Exclusive is **supplied** again out of the **batteries**.
- fully charged, the batteries can supply the ASR Basis Exclusive for approximately **60 hours**.

To lengthen the **lifetime** of the batteries please turn the main unit to the „**Line**“ position after approximately **24 hours** of playing in “**Batt**” position, or just **over night**. In this case the batteries are not much discharged. Lower quantity of discharging is **good** for the battery **life expectancy**.

One hour of charging is equivalent to about three hours of playing music.

Fuses: 0,5 Amp slow-blow for 230V, 1 Amp for 115V for the charging transformer. This fuse is located in a **small drawer** in the power input module for the AC cord.

2 Fuses 8A slow-blow protect the batteries. This fuses are located at the PCB board.

7.0 **Technical Data** (Effective date: July 2010)

Signal-to-noise-ratio: (depends on settings)

with 5 mV MC input signal and 1 volt output: > 77dB
with 0.5 mV MC input signal and 1 volt output: > 68 dB

Frequency response: from 3 Hz to 200 kHz (+/- 3dB), RIAA Correction
better than (+/- 1dB) between 20 and 20 kHz

Distortion factor: from 0,5V to 8VAC Output (100 Ohm load) at 1 kHz
< 0.01%, from 20Hz to 20 kHz < 0.05%

Input impedance: MC: adjustable between 5 and 10 K Ohms
MM: adjustable between 10 and 47 K Ohms

Input capacity: switch able between 100, 320 and 570 pF

Gain : adjustable between + 32 dB and +64 dB

Output impedance: less than 50 Ohm

Dimensions & weights:

(width x depth x height)

ASR Basis Exclusive (main unit) 43 x 37 x 10 cm, 10 kg (16,9' x 14,6' x 3,2', 22 lbs)

ASR Battery Power Supply: 46 x 33 x 15 cm, 26 kg (18,4' x 13,0' x 5,9', 58 lbs)

Our address :

ASR Audio Systeme
Friedrich Schaefer

Hohe Straße 700, House 5A,

D 35 745 Herborn / Germany

Phone +49 (27 72) 42 905

Fax +49 (27 72) 40 488

E- Mail : ASR@ASRAudio.com

Internet : www.ASRAudio.com

Subject to change without notice.

© July 2010 Friedrich Schaefer, ASR Audio