

Operation manual

MuSiCa NoVa

Phoenix

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Congratulations! You are the proud owner of an extremely sophisticated tube preamplifier. Please read this operation manual carefully and store it in a safe place for later reference.

## 1 Basic version

### 1.1 Softstart




The power switch  turns this unit on and off.

Whilst *warm up*, the operation mode indicator  (LED) flickers with red light. In this mode the tubes are gently preheated for operation. After about 25 seconds the LED stops flickering, and the operation voltage (high voltage!) is added. After about 25 further seconds the operation mode indicator changes to green. Now the preamp is in its' normal operation mode.

This softstart circuitry increases the lifetime of the tubes dramatically.

**Note:** Whilst *warm up* the unit is not remote controllable.

### 1.2 Mains supply

The voltage selector on the rear panel  of this unit must be set for your local mains voltage BEFORE plugging into the mains supply. The mains fuse is placed in the fuseholder  below the mains socket .

### 1.3 Gain Select

By means of the gain selectors (Ⓜ+Ⓜ), you have the possibility to optimize the adjustment between preamp and main amp. You are able to select the gain, channel separated at 0.5dB steps from +6dB (6 o'clock) up to +11.5dB (5 o'clock). So you are able to adjust the channel balance, too.

**Note:** The gain selector is not in the signal path, so it does not worsen the sound quality.

### 1.4 Input Select

With the buttons *p/a 1*, *p/a 2*, *cd* and *tuner* (Ⓜ - Ⓜ) and the two tape monitor buttons *tape 1* and *tape 2* (Ⓜ+Ⓜ) you can select the desired source (see fig. 6). A small LED above every button always indicates the selected source.

The *p/a1* Ⓜ and *p/a2* Ⓜ button have different functions. At the basic version you can switch two line inputs (sockets Ⓜ + Ⓜ). If there are any other modules build in, you can switch those.

For details see chapter 2 (modules).

The tape inputs *tape 1* Ⓜ and *tape 2* Ⓜ allow real monitoring. To switch off the tape function, press any other source button (Ⓜ - Ⓜ).

### 1.5 Loop

With the *loop* Ⓜ button you are able to switch a processor loop.  
For details see chapter 4 (The processor loop).

### 1.6 Muting

In the volume control Ⓜ there is a LED that lights up green in the normal operation mode. By means of the remote control transmitter (see chapter 3) you are able to mute the output temporarily pressing the *mute* button. In the muted state the LED lights up red. Pressing the *mute* button again will reactivate the adjusted output level. So always take care of the position of the volume control to prevent the speakers from damage.

**Note:** If a subvol module is installed, it will also be muted.

### 1.7 Groundlift

With the switch Ⓜ on the rear panel of the unit, you have the possibility to disconnect the ground from earth (open). In position DC, earth and ground are DC-coupled, in position AC, they are AC-coupled. So you can avoid humming loops.

**Note:** The cabinet is always connected with the earth!

### 1.8 Precautions & safety instructions

Keep the unit away from locations where it is likely to be exposed to high temperatures or humidity. Also avoid locations which are subject to excessive dust accumulation or vibration. Keep it also away from such sources of hum as transformers, TV-sets or motors. The openings in the cabinet assure ventilation. Make sure to allow a space of at least 10cm above the top panel of the unit.

You will hear that your Phoenix sounds best after about two hours after switch-on, so we recommend to switch off the unit only, if you don't want to use it for a longer period (e.g. for more than one day).

## 2 The modules (Phono MM, Phono MC, Phono MC Sym, Subvol)


If you ordered your Phoenix with a module you may skip the chapter 2.1 (Installation).

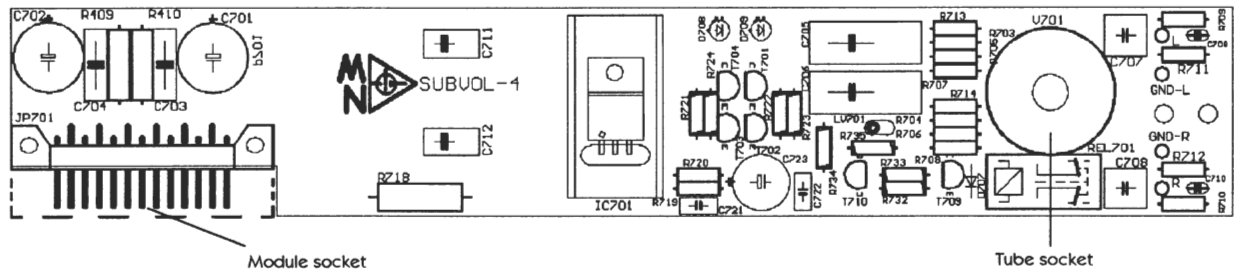
## 2.1 Installation

Disconnect the AC power plug. Then loosen the seven screws of the cabinet top with the included 2mm allen key and remove it. On the left side behind the front panel, you see two 13pin module sockets on the main board (see fig. 5).

To build in a phono module, you have to remove the (p/a1 or p/a2) blend with a suitable screwdriver.

**Note:** You will need the screws  of the blend later to fix the module.

The mounting of the subvol module has to be done at module port p/a2 (module socket JP 509), the line input p/a2  will exist on. Before mounting you have to move the jumpers JP 506 and JP 507 from position „phono-modul“ to position „output-modul“ (see fig. 5). Also you have to fix the subvol connection wire to the socket „to LV 701 SUBVOL-MODUL“.

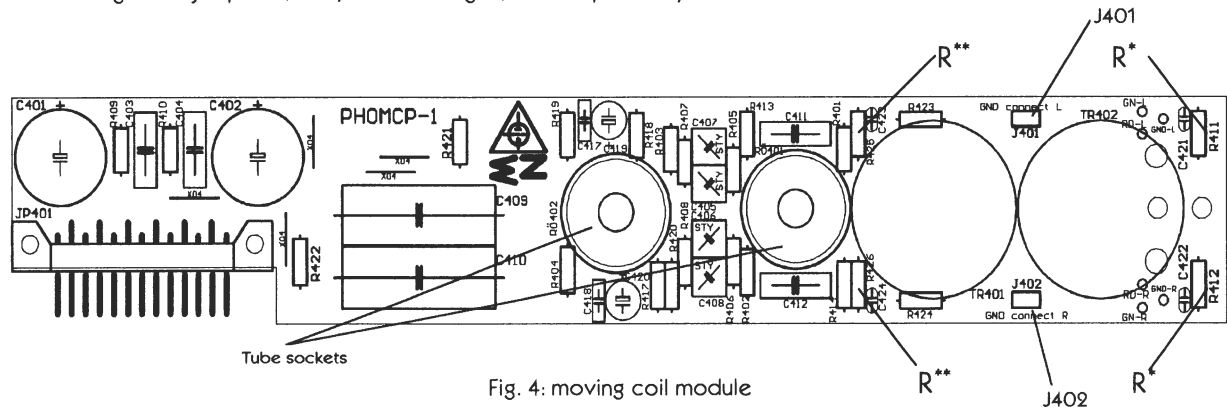


Raise the module sloping from upside with the rca sockets through the opening in the rear panel (where you have removed the blend) and press the module plug carefully into the socket. While doing this, press the rca sockets a little bit upwards (see fig. 3).

Now you can fix the module with the two screws again.

**Note: Don't tighten the screws to hard!**

If you want to use a moving coil module with a turntable which has no separate ground connection, you have to leave the ground jumpers (J401/J402 see fig. 4) in their position, otherwise remove them.



Having finished all that, you can assemble the unit in the opposite way.

## 2.2 Operation

To switch the desired phono input (sockets ② or ③) press the corresponding buttons *p/a 1* ① or *p/a 2* ④.

If there is a phono module built in, the corresponding line input (sockets ② or ③) won't work .

If there is a subvol module build in, you have an additional adjustable output.

This output enables you to connect e.g. an active subwoofer and to adjust the level of the subwoofer via remote control transmitter. For this output transmits the whole frequency range, you are able to connect another main amplifier for a second room, too.

Pressing the *rew* button (on the TUNER/AMP level) decreases the output level, pressing the *wind* button (on the TUNER/AMP level) increases the output level.

If you have adjusted the subvol output level to the main output level, you are able to alter all output levels at the same rate by means of main volume control.

Pressing the *stop* button (on the TUNER/AMP level) switches the subvol output on/off. There are two LEDs on the subvol module indicating the state of operation: green = output on; red = output off.

## 2.3 Adjustment for moving coil pick ups

By means of changing the four marked resistors (see fig. 4), you are able to adjust the resistance of the module to your moving coil pick up.

*Adjustment secondary:*

$$\text{Input resistance: } Z_i = \frac{R^{**}}{100}$$

e.g.  $Z_i = 100 \Omega \Rightarrow R^{**} = 10 \text{ k}\Omega$  (normal state!)

$Z_i = 1 \text{ k}\Omega \Rightarrow R^{**} = 100 \text{ k}\Omega$

*Adjustment primary:*

$$\text{Input resistance: } Z_i = \frac{\left(\frac{R^{**}}{100}\right) * R^*}{\left(\frac{R^{**}}{100}\right) + R^*} \approx R^*; (R^{**} \rightarrow \infty)$$

As  $R^{**}$  you may use values from 100k up to 680k. For  $R^*$  is not so good accessible, you better solder the resistors directly to the rca sockets.

## 3 Switchable outputs

The Phoenix has two outputs, switchable via remote control transmitter (*play/pause* buttons). For details see chapter 5 (Remote control transmitter).

### 3.1 Connection and adjustment

At the rear panel there are two *main outputs* ②. The right pair of rca sockets are output 1, the left ones are output 2. So you can connect two stereo amplifiers to the Phoenix. At the state of delivery, output 1 will be activated after power on. This setting may be changed:

There are two jumpers on the main board (JP 202, JP203; see fig. 5). It depends on the setting of these jumpers which output will be activated after power on:

|                  |               |                  |                |
|------------------|---------------|------------------|----------------|
| jumper JP 202 at | effect        | jumper JP 203 at | effect         |
| 1-off            | output 1 off  | 2-off            | output 2 off * |
| 1-on             | output 1 on * | 2-on             | output 2 on    |

\* settings at the state of delivery

### 3.2 Operation

By means of the remote control transmitter you are able to switch both main outputs. Pressing the *play* button switches output 1 on/off, the *pause* button (both on the TUNER/AMP level) switches output 2. If output 1 is activated, the left LED at the remote sensor window ① lights up, the right one lights up at the activation of output 2.

## 4 The processor loop

The processor loop enables you to connect an equalizer or surround decoder, and to switch this unit into or out of the signal path, by pressing one button (the *loop* ⑩ button on the front panel, res. the *record* button on the transmitter). By means of a jumper (JP 201; see fig. 5) you are able to change the power up setting.

The marking on the main board is corresponding to the function: *loop-on* → loop activated after power on respectively *loop-off* → loop deactivated after power on.

If you want to use a processor with an own volume control (e.g. surround processor), you also are able to take the Phoenix volume control out of the signal path. Therefore you have to put the jumper JP 205 (s. fig. 5) to the corresponding position („bypassing“ res. „working“).

At „bypassing“, the Phoenix volume control will be deactivated by pressing the *loop* ⑩ button. So you only have to adjust one volume control for all channels (esp. surround decoders). Pressing the *loop* ⑩ button again reactivates the Phoenix volume control using the level adjusted before.

At „working“ (esp. for equalizers without own vol. control) the level may be adjusted the normal way.

To join a decoder to your Phoenix you have to connect the *send* ⑨ sockets with the input of the decoder (probably „main-in“), and the output (probably „main-out“) with the *return* ⑪ sockets.

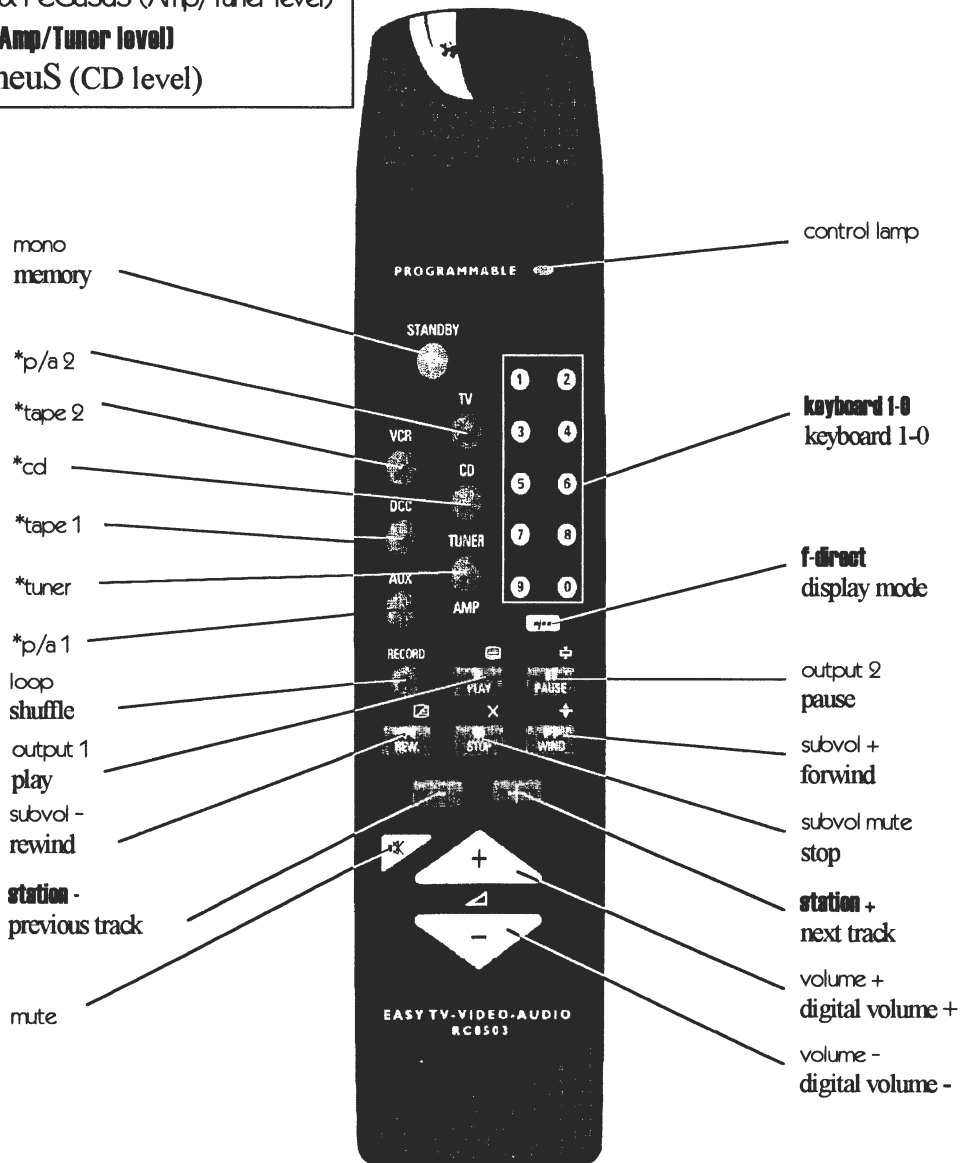
## 5 The remote control transmitter

If you ordered your PhoeniX without remote control transmitter, you don't have to read the following chapter. For the remote control receiver is already built in, you have always the possibility to buy our transmitter, to make the PhoeniX and all other MuSiCa NoVa units remote controllable.

### 5.1 Infrared remote control for PhoeniX, PeGaSuS, PAndorA and ProMetheuS

For this is a programmable remote control unit with six operation levels, you can use those keys, which are not needed for ProMetheuS, PAndorA, PeGaSuS and PhoeniX for programming with any other function you have on your existing remotes so far. E.g. you can make this remote control learn the remote functions for your TV-set. Please take care of having always a set of spare batteries - empty batteries must be replaced *within 30 minutes*. *Otherwise all functions will be deleted.*

PhoeniX & PeGaSuS (Amp/Tuner level)  
**PAndorA (Amp/Tuner level)**  
 ProMetheuS (CD level)



## 5.2 Summary of overlaid keys on learnable RC8503 used for **MuSiCa NoVa** – sets

| level      | AMP/TUNER                          |         |          | AUX | TV | VCR | TAPE/DCC | CD              |
|------------|------------------------------------|---------|----------|-----|----|-----|----------|-----------------|
| MN-sets    | PhoeniX                            | PeGaSuS | PAndorA  |     |    |     |          | ProMetheuS      |
| key        |                                    |         |          |     |    |     |          |                 |
| *AMP/TUNER | tuner                              | tuner   |          |     |    |     |          |                 |
| *CD        | cd                                 | cd      |          |     |    |     |          |                 |
| *TV        | p/a2                               |         |          |     |    |     |          |                 |
| *VCR       | tape2                              |         |          |     |    |     |          |                 |
| *TAPE/DCC  | tape1                              | tape    |          |     |    |     |          |                 |
| *AUX       | p/a1                               | p/a     |          |     |    |     |          |                 |
| 0          |                                    |         | 0        |     |    |     |          | 0               |
| 1          |                                    |         | 1        |     |    |     |          | 1               |
| 2          |                                    |         | 2        |     |    |     |          | 2               |
| 3          |                                    |         | 3        |     |    |     |          | 3               |
| 4          |                                    |         | 4        |     |    |     |          | 4               |
| 5          |                                    |         | 5        |     |    |     |          | 5               |
| 6          |                                    |         | 6        |     |    |     |          | 6               |
| 7          |                                    |         | 7        |     |    |     |          | 7               |
| 8          |                                    |         | 8        |     |    |     |          | 8               |
| 9          |                                    |         | 9        |     |    |     |          | 9               |
| STANDBY    | mono                               |         |          |     |    |     |          | memory          |
| -/--       |                                    |         | f-direct |     |    |     |          | display mode    |
| RECORD ●   | loop                               |         |          |     |    |     |          | shuffle         |
| PLAY ▶     | output1                            |         |          |     |    |     |          | play            |
| PAUSE ■    | output2                            |         |          |     |    |     |          | pause           |
| REW. ◀◀    | subvolume-                         |         |          |     |    |     |          | rewind          |
| STOP ■     | subvol mute                        |         |          |     |    |     |          | stop            |
| WIND ▶▶    | subvolume+                         |         |          |     |    |     |          | forwind         |
| -          |                                    |         | station- |     |    |     |          | previous track  |
| +          |                                    |         | station+ |     |    |     |          | next track      |
| MUTE       | muting for PhoeniX and/or PeGaSuS  |         |          |     |    |     |          |                 |
| VOLUME+    | volume+ for PhoeniX and/or PeGaSuS |         |          |     |    |     |          | digital volume+ |
| VOLUME-    | volume- for PhoeniX and/or PeGaSuS |         |          |     |    |     |          | digital volume- |

\*These keys switch the command levels on the remote by a short push, longer pressing additionally switches the corresponding inputs on PhoeniX or PeGaSuS.

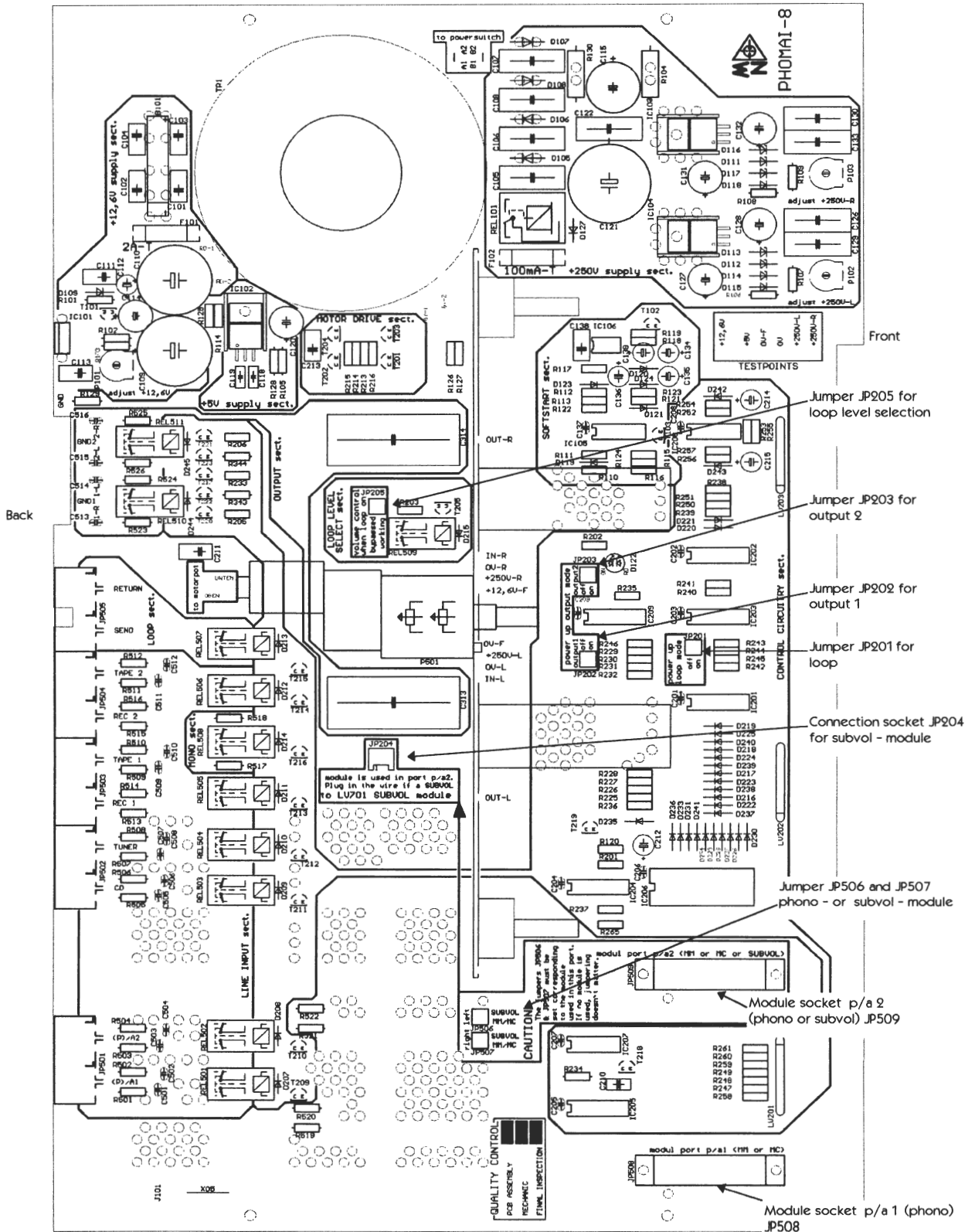
The commands for PAndorA, PhoeniX and PeGaSuS are placed on the AMP / TUNER level, those for ProMetheuS on the CD level. The markings on the remote control are essentially corresponding to the markings on your MuSiCa NoVa set (see illustration), respectively the common used symbols. Furtheron there are four levels for VCR, TAPE, AUX and TV. The commands *volume+*, *volume-* and *mute* are programmed on all six levels, but on the CD level the *volume+* and *volume-* keys control the digital output volume of ProMetheuS.

The switching between the different levels works with a short press of the \* marked keys, longer pressing of these keys will switch also the corresponding inputs of PhoeniX or PeGaSuS. For further details concerning the use of the remote control (e.g. learning of other commands), please read the original instruction manual.

**Note:** Pressing the *mute* key will additionally switch off the display of PAndorA and ProMetheuS. To switch the display on again, please press the *mono* key twice.



Fig. 5 mainboard PhoeniX



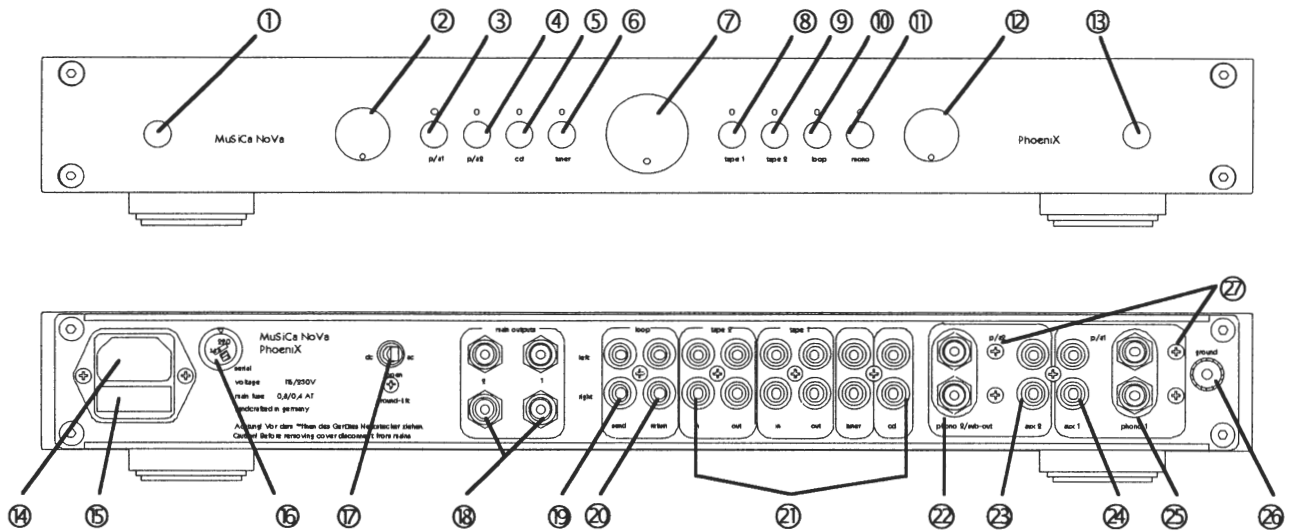


Fig. 6 front and rear view

- |                    |                     |                           |
|--------------------|---------------------|---------------------------|
| ① IR sensor window | ⑩ Loop              | ⑲ Loop - send (output)    |
| ② Gain select left | ⑪ Mono              | ⑳ Loop - return (input)   |
| ③ Phono / Aux 1    | ⑫ Gain select right | ㉑ Inputs/record outputs   |
| ④ Phono / Aux 2    | ⑬ Power on/off      | ㉒ Option 2 - phono/subvol |
| ⑤ CD               | ⑭ Mains socket      | ㉓ Line input - aux 2      |
| ⑥ Tuner            | ⑮ Mains fuse        | ㉔ Line input - aux 1      |
| ⑦ Volume control   | ⑯ Voltage selector  | ㉕ Option 1 - phono        |
| ⑧ Tape 1           | ⑰ Groundlift        | ㉖ Ground                  |
| ⑨ Tape 2           | ⑱ Outputs           | ㉗ Module mounting screws  |