OWNER´S MANUAL

REFERENCE LINE PREAMP 077
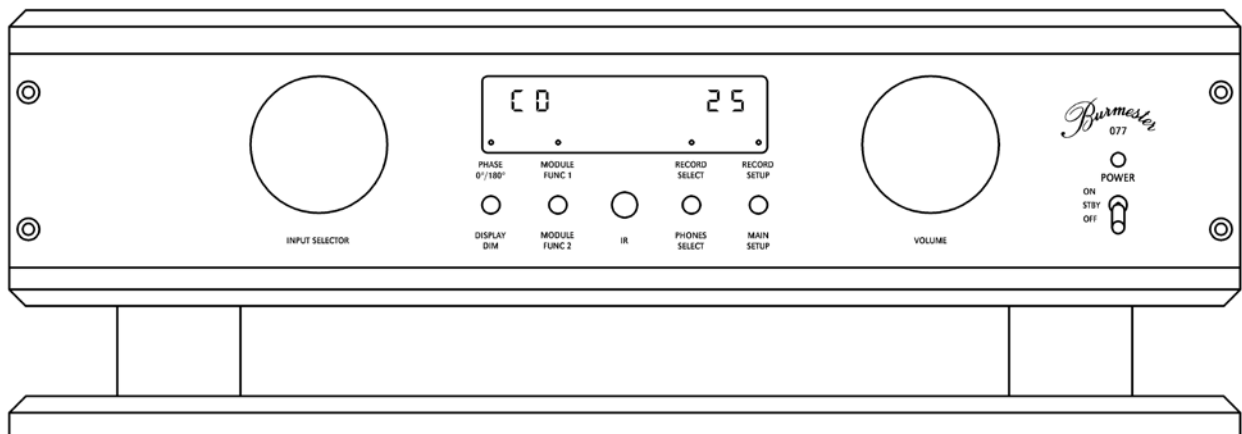
Burmester
ART FOR THE EAR

HIGH END MADE IN GERMANY

VERSION: 1.8 FROM AUGUST 15th 2018

Dear Audiophile,

Thank you for choosing this Burmester audio component. We sincerely appreciate your trust in our products. You have purchased a unit, which excels in musical fidelity and combines uncompromising manufacturing quality with technical innovation and the highest degree of operating flexibility.

We recommend reading this user manual in its entirety before initial operation. It will enable you to make full use of all capabilities of this outstanding audiophile instrument. Should you have any further questions, please contact your dealer or us directly.

Talk to us about your special requests, even if they seem out of the ordinary. We happily accept technical reasonable challenges.

Enjoy your enhanced listening pleasure.

Your Burmester Team

TABLE OF CONTENTS

LIST OF FUNCTIONS

Through factory settings a lot of functions are disabled to operate the 077 as a simple preamp. With the menus you are comfortably able to activate the numerous options the 077 offers. In daily use these functions are hidden. If wanted, factory settings can be reestablished.

The most important facts of the factory settings are:

- **The output MAIN OUT is the primary output of the preamp to connect to a power amp or active loudspeakers. This output has an adjustable volume (VARIABLE).**
- **The output RECORD OUT is preset as a recording output to be connected to the input of a recording unit e.g. of an analogue tape deck. This output in factory settings will deliver the maximum volume to the output of the selected input (FIX).**
  CAUTION: Never connect a power amp or active loudspeakers to this output in FIX mode. Serious damage to your ears and equipments may occur.
- **The Input 6 / SURROUND is supposed to be connected to the front-speakers output of a volume adjustable surround decoder. The incoming signals on this input will be put through to the output MAIN OUT with maximum volume bypassing the volume control of the 077.**
  CAUTION: With these settings never connect a unit to this input without a volume-control. Serious damage to your ears and equipments may occur.

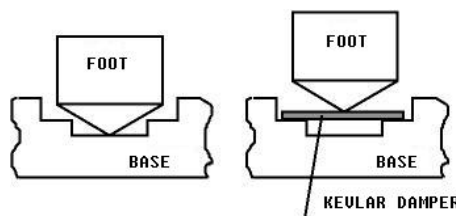**Characteristics and functions of the preamp 077:**

- **6 balanced input terminals, XLR 3pins. On demand operable as unbalanced inputs by using adapter plugs.**
- **Surround throughput for ideal integration in home theatre systems**
- **Module slots for:**
  - Line module (standard configuration), with unbalanced inputs, RCA
  - Phono MC module (optional), with balanced XLR 3pins inputs, input sensitivity and input resistance are selectable; connectable subsonic filters; automatic channel calibration for ideal channel equality
  - Phono MM module (optional), with balanced XLR 3pins inputs, input sensitivity and input impedance are selectable; connectable subsonic filters; automatic channel calibration for ideal channel equality
  - D/A – converting module (optional), with S/P-DIF input (RCA) and USB slave input, 069-technology with up sampling to 96kHz and 192kHz selectable
- **2 balanced output terminals, XLR 3pins, with selectable source, RECORD level programmable for 2-Zone-Mode or TAPE-Record-Mode**
- **MAIN output terminals supplied with X-AMP MK2 modules**
- **2 headphone terminals, audio jack 6,3mm, with selectable source and volume preset for 2-Zone-Mode**
- **Global SETUP menu for individual setup of basic functions:**
  - Input sensitivity adjustable from -6dB to +12dB for each input allowing better volume control
  - Input names may be programmed individually
  - Display of serial number adjustable
  - 4 Channel Mode, select both levels, MAIN and RECORD as one preamp
  - Device control elements can be switched off manually to eliminate operating error (child lock)
  - Reset to factory settings
- **Separate SETUP-Menus for individual preset of every zone:**
  - Volume balance adjustable for every zone
  - Start up volume adjustable for every zone
  - Volume control and volume display adjustable in BURMESTER steps or dB steps for every zone
  - Output amplification for MAIN output may be selected between LOW and HIGH to adjust to connected power amps or active loudspeakers
  - Input 6 for MAIN zone may be programmed as a regular input or Surround Throughput
  - RECORD output may be programmed with fixed volume for TAPE-Record-Mode or with variable volume for 2-Zone-Mode
  - Monitor lock selectable for every input during TAPE-record-Mode to eliminate audio feedback
- **Display brightness adjustable in four steps, Display-Off-Function**
- **Remote power up of other devices possible, Master/Slave over DC IN/OUT connection**
- **BURmester LINK module for external control via RS232 and USB1.1**

UNPACKING AND SETTING UP

CAUTION: The preamplifier 077 and the external power supply unit (if existent) are very heavy. To avoid injuries while unpacking it is suggested that only personnel with experiences in heavy weights unpack the units.
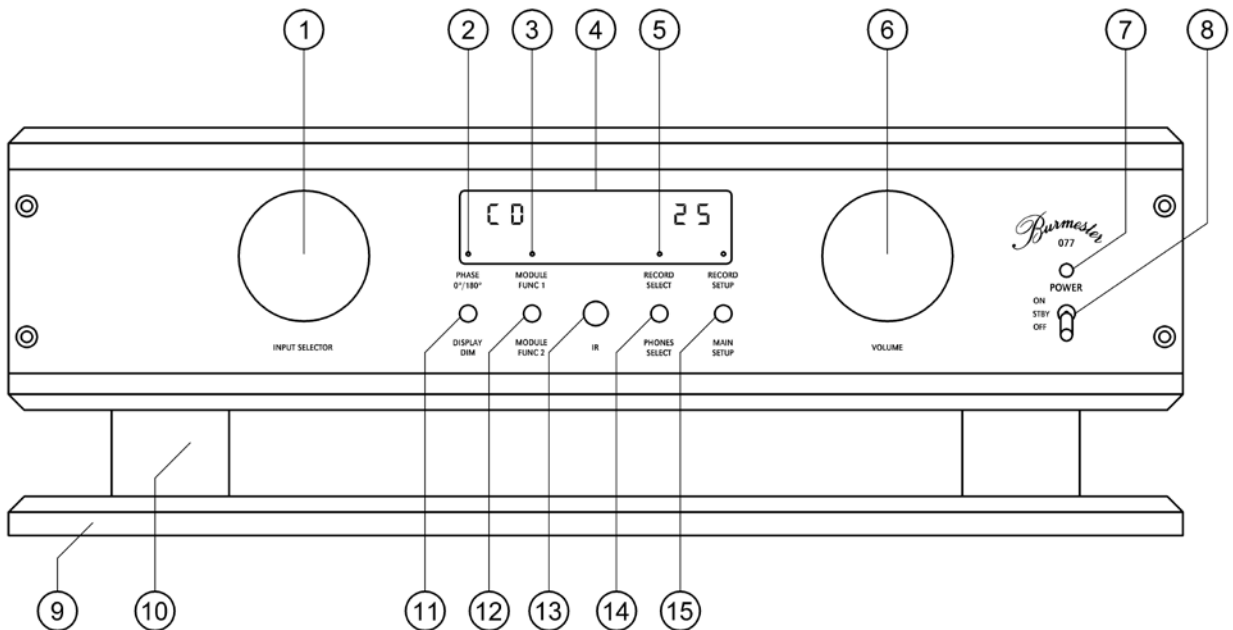**CAUTION: The preamp 077 is shipped inside a plastic protective cover. Make sure that children do not play with it to avoid the danger of suffocation.**

Unpacking

To avoid damaging the housing, please do not use pointed or sharp tools to open the box.
Please make sure that the content of the box is complete. If something is missing or you notice any damage while unpacking, do not hook up the unit. Instead, contact your authorized dealer.

Content of boxes

The two boxes should contain the following:

- 1 box with the preamp 077

- 1 Base plate with 4 carbon fiber damping discs for the preamp

- 1 AC BURMESTER power cord 2.5mm²

- 4 Input adapter plugs XLR – RCA

- 1 remote control 005

- 1 owner's manual

- 1 box with the power supply unit (only with external power supply)

- 1 Base plate with 4 carbon fiber damping discs for the power supply unit (only with external power supply)

- 1 multi-pin power cord for connecting the power supply unit to the preamp (only with external power supply)

Packaging

We recommend to keep the original packing in case the unit needs to be shipped in the future.

Setting up

Too low or too high temperatures may cause damage inside of the preamp. Therefore we recommend you leave the unit to adapt to room temperature, before using it for the first time.
Carefully remove the unit from its packaging and set it up in an appropriate location. To protect the preamp 077 from overheating make sure that the location offers sufficient air circulation around the unit. Also, avoid excessive exposure to sun, dust and humidity.
Please make sure that your desired location for the preamp is stable enough to carry its weight.
Ventilation ducts and openings in the housing serve to keep the unit cool. They must not be covered up with magazines, tablecloth, curtains etc.
If the preamp has to be operated in an extremely warm environment it may be necessary to supply additional ventilation. Avoid operating the unit in an excessively humid environment like bathrooms etc.

Set up variations

The feet of the preamp and of the power supply unit are constructed as spikes. They can either be placed directly on the aluminum of the base plate or on the supplied carbon fiber damping discs. Using the Kevlar fiber damping discs additionally decouples the entire housing acoustically from the ground surface.

FUNCTIONAL OVERVIEW OF THE PREAMP

FRONT PANEL

(1) Input selector

(2) PHASE LED lights up when phase is180˚ between active input and output

(3) AUDIO LED shows up sampling of 192kHz, if a D/A converter module is equipped

(4) Alphanumeric display shows the selected input and the volume

(5) REC/MAIN LED lights up when REC is selected

(6) Volume selector controls the playback volume

(7) POWER LED lights up red when the unit is on

(8) POWER switch to switch the unit on & off

(9) Base plate

(10) Foot – constructed as spike

(11) PHASE/DISPLAY switch key switches the phase and toggles display brightness

(12) MODULE FUNCTION switch key functions depend on installed module

(13) IR receiver for commands of remote control

(14) RECORD/PHONES switch key

(15) SETUP switch key to enter or leave GLOBAL, RECORD and MAIN SETUP

REAR PANEL WITH INTERNAL POWER SUPPLY

(17) **BURLINK interface RS-232** with check LEDs

(18) **BURLINK interface USB** with check LEDs

(19) **Phones jack PHONES 1**

(20) **Phones jack PHONES 2**

(21) **MAIN output** balanced preamp output

(22) **RECORD output** balanced output for recording or second preamp output

(23) **SURROUND or high level input, INPUT 6** balanced

(24) **High level inputs INPUT 1 to INPUT 5**, balanced

(25) **Module input** as ordered

(26) **GROUND screw** for ground cable of record player, only with PHONO modules

(27) **REMOTE output**

(28) **REMOTE input**

(32) **AC Mains Terminal**

(33) **AC Mains Switch**

REAR PANEL WITH EXTERNAL POWER SUPPLY

(16) POWER SUPPLY terminal

(17) BURLINK interface RS-232 with check LEDs

(18) BURLINK interface USB with check LEDs

(19) Phones jack PHONES 1

(20) Phones jack PHONES 2

(21) MAIN output balanced preamp output

(22) RECORD output balanced output for recording or second preamp output

(23) SURROUND or high level input INPUT 6, balanced

(24) High level inputs INPUT 1 to INPUT 5, balanced

(25) Module input as ordered

(26) GROUND screw for ground cable of record player, only with PHONO module

(27) REMOTE output

(28) REMOTE input

FUNCTIONAL OVERVIEW OF EXTERNAL POWER SUPPLY UNIT

FRONT PANEL
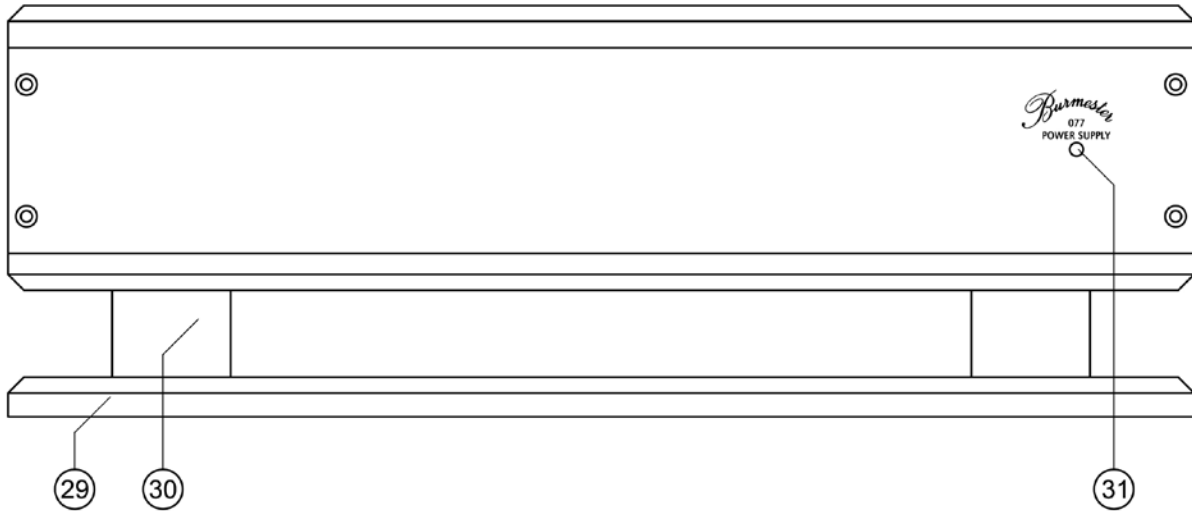
(29) **Base plate**

(30) **Foot** – constructed as spike

(31) **POWER LED** lights up red when the unit is on

REAR PANEL
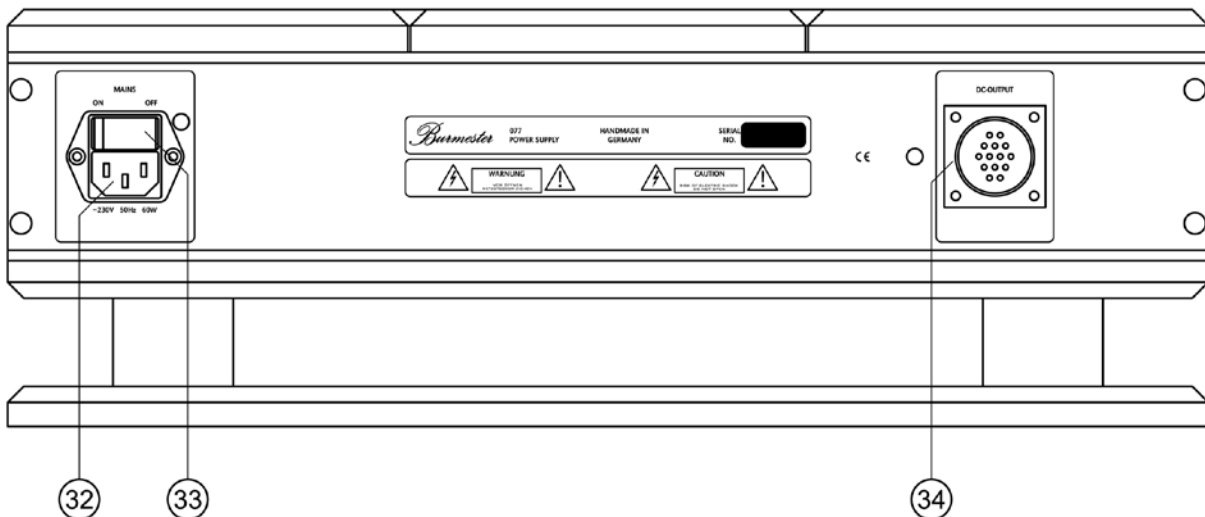
(32) **AC mains terminal**

(33) **AC mains switch**

(34) **POWER SUPPLY terminal**

FIRST STARTUP

CAUTION: Before connecting the unit, please check if the input voltage data on the rear panel, underneath the **AC mains terminal (32)** is equal to the local voltage of your wall outlet.
In case of doubt contact a licensed electrician or your power supply company.

- **With external power supply:** Connect both components with the multi-pin power cord. To do this, plug any of the two ends (watch out for the guided grove) of the cord carefully into the **POWER SUPPLY terminal (16)** of the preamp and screw down the connector.

- **With external power supply:** Use the same procedure to connect the other end into the **POWER SUPPLY terminal (34)** of the power supply unit.

- Connect your preferred in- and outputs of the preamp with your HiFi system. Please refer to the chapter CONNECTIONS.

- Make sure, that the **AC mains switch (33)** on the rear panel of the 077 or on the external power supply unit is set to OFF position.

- Connect the AC power cord into the **AC mains terminal (32)** and plug it into the wall outlet.

- Switch the **AC mains switch (33)** to ON position.

- With the **POWER switch (8)** on the front panel the unit is switched on.

- Detailed information about the manifold functions of the preamp, are available in the following chapters of this owner's manual.

CONNECTIONS

THE "SIMPLE" PREAMP - FACTORY SETTINGS

All connection terminals are located on the rear panel. While connecting the preamp, all components of the music system must be turned off.

Through factory settings a lot of functions are disabled to operate the 077 as a simple preamp. With the menus you are comfortably able to activate the numerous options the 077 offers. In daily use these functions are hidden. If wanted, factory settings can be reestablished.

Inputs
To connect source components like CD-Player, FM-Tuner, Tape deck etc. the standard version of the preamp provides five **balanced inputs (XLR)** named **INPUT 1** to **INPUT 5 (24)** and one **unbalanced module input (RCA)** named **INPUT LINE (25)**. For the best sound we recommend using the balanced inputs whenever possible.

Instead of the **LINE module** the preamp may be equipped alternatively with **Phono MC module**, **Phono MM module** or with a **D/A converter module**.

The pinning of the balanced inputs is: **PIN1=GND**, **PIN2=NEG**, **PIN3=POS**.

SURROUND input
The two front channels (right front / left front) of a surround sound processor or decoder must be connected to the **INPUT 6/SURR (23)**. In this configuration the signal is sent directly to the MAIN outputs (not to the RECORD outputs), bypassing volume control. **Therefore connect only components with their own volume control to the SURROUND input!**

This input allows the easy integration of surround sound components into an existing two-channel hifi system.

The SURROUND input cannot be selected over the RECORD level.

The pinning of the SURROUND input is: **PIN1=GND**, **PIN2=NEG**, **PIN3=POS**.

! **CAUTION: Never connect a unit to this input without its own volume control. Serious damage to your ears and equipments may occur.** **!**

Adapter Plugs
If your stereo components should only offer unbalanced outputs, you are able to use our balanced inputs with the adapter plugs as unbalanced inputs. In these adapter plugs the Pins 2 (negative input) and Pin 1 (ground pin) are connected (see graphic below). 4 XLR-RCA adapters plugs are delivered with the units, allowing you to use 2 inputs as unbalanced inputs. If you need further plugs you may get them at your authorized dealer. **NOTICE: Please do only use BURMESTER XLR-RCA adapter.**

Wiring of the Adapter Plugs

GROUND

SIGNAL

1

3

2

RCA   XLR
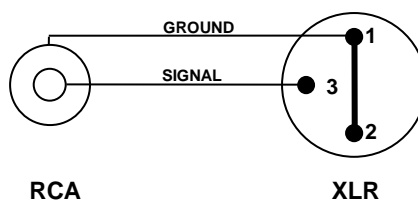
Module input   The **module input (25)** may be equipped alternatively with 4 different modules:

- **LINE module**
  The standard version of the preamp is equipped with a **LINE module**. In this case the module input is an unbalanced high-level input.

  NOTICE: Subsequent installation of other modules must only be done by your authorized dealer or by Burmester Audiosysteme GmbH.

- **PHONO MC module**
  With a **PHONO MC module** the module input is a balanced PHONO MC input to connect a record player with **moving coil** pickup (no high output MC).
  If your pickup has an unbalanced output, the balanced PHONO MC input can be converted to unbalanced mode by using XLR-RCA adapter plugs.
  The input resistance and the amplification of the PHONO MC module can be attuned to your pickup with the MC SETUP. For detailed instruction please refer to the chapter **THE SETUP MENUS / MC SETUP**.
  The PHONO SETUP offers an automatic channel calibration, which verifies the channel equality of your pickup and adjusts it, if necessary. The PHONO SETUP also offers the chance to switch on a subsonic filter to eliminate low frequency noise.

  The pinning of the balanced PHONO MC input is: **PIN1=GND**, **PIN2=NEG**, **PIN3=POS**.

  On request the PHONO MC modules and the adapter plugs are available at your local dealer.

  NOTICE: Subsequent installation of other modules must only be done by your authorized dealer or by Burmester Audiosysteme GmbH.

- **PHONO MM module**
  With a **PHONO MM module** the module input is a balanced PHONO MM input to connect a record player with **moving magnet** pickup or **high output moving coil** pickup.
  If your record player has an unbalanced output, the balanced PHONO MM input can be converted to unbalanced mode by using XLR-RCA adapter plugs.
  The input capacitance and the amplification of the PHONO MM module can be attuned to your pickup with the MM SETUP. For detailed instruction please refer to the chapter **THE SETUP MENUS / MM SETUP**.
  The PHONO SETUP offers an automatic channel calibration, which verifies the channel equality of your pickup and adjusts it, if necessary. The PHONO SETUP also offers the chance to switch on a subsonic filter to eliminate low frequency noise.

  The pinning of the balanced PHONO MM input is: **PIN1=GND**, **PIN2=NEG**, **PIN3=POS**.

  On request the PHONO MM modules and the adapter plugs are available at your local dealer.

  NOTICE: Subsequent installation of other modules must only be done by your authorized dealer or by Burmester Audiosysteme GmbH.

- **D/A converter module**
  With the D/A converter module inserted two inputs for digital audio signals will be available: an unbalanced chinch input (RCA), which can receive pulse coded signals (PCM) in the usual S/P-DIF format with a maximum sampling rate of 192kHz, and a USB input, which supports USB class 1 audio and USB class 2 audio, depending on the operating system of your computer. Since the USB input is a so-called slave connection, no USB sticks or USB hard disks may be connected.

  The RCA and USB inputs are selected by either pressing the **MODULE FUNCTION (12)** key on the front panel of the device or by pressing and holding the **AUDIO** button on the remote control for about 2 seconds. The active input will be indicated on the display.

  The sampling rate is toggled between 96kHz and 192kHz by pushing up the **MODULE FUNCTION (12)** key on the front panel of the device or by shortly pressing the **AUDIO** button on the remote control. With a sampling rate of 192kHz the **AUDIO LED (3)** will be lit.

  The level of both the RCA and USB inputs can be preset individually, see **THE SETUP MENUS / GLOBAL SETUP**.

- **USB Connection**
  To establish the connection we will describe the variants for Microsoft and Apple operating systems.

  Connecting the 077 to a Windows™ operating system for the first time will automatically prompt the installation of the USB class 1 audio driver. In the system management of your operating system you may then select the Burmester class 1 audio output from the list of audio devices. When playing back music over the PC now, it will be output via the 077. Regrettably problems may occur on Windows PCs in connection with class 2 audio. Therefore we recommend selecting USB class 1 audio on PCs with Microsoft operating systems.

  The Apple® operating systems automatically recognize both USB class 1 audio and USB class 2 audio. To select between class 1 and class 2 audio, simply press the **OSD button** on the remote control or the **MODULE FUNCTION (12)** key on the 077 for about 2 seconds. The operating system will automatically recognize the selected connection and activate it. You may then adjust the sampling rate between PC and 077 in the audio settings of the operating system to as high as 192kHz / 24 bit.

- **USB Quality**
  The quality of the two USB audio classes differs in their sampling rate. The D/A converter module of the 077 offers two options to establish a USB connection: either as USB class 1 audio or as USB class 2 audio. USB class 1 audio can transmit signals of up to 96 kHz / 24 bit while class 2 audio can handle signals of up to 192kHz / 24 bit.

  Please note: The volume level may be controlled either from the PC or from the 077. So if the PC volume level is set to zero, the 077 will receive no signal.

GROUNDING screw   When using the PHONO input as an unbalanced input for a record player it is necessary to connect the GND wire of your record player to the **GND screw (26)**. Loosen the GND screw, clamp the GND wire of your turntable between the two washers and tighten the GND screw. The GND-screw is only assembled when a Phono module is equipped.
Don't use any other tools but your hand to tighten the GND screw! This way you avoid overwinding the screw.

MAIN output   To connect power amps or active loudspeakers the preamp provides the **OUTPUT MAIN (21)** as a regular balanced preamp output.
This output provides the volume-controlled signal of the selected input of the MAIN level. e pinning of the OUTPUT MAIN is: **PIN1=GND**, **PIN2=NEG**, **PIN3=POS**.

RECORD output	The output terminal **OUTPUT REC (22)** must be connected to the recording input of an analog recording device (mostly named TAPE IN or REC).
	This output provides the signal of the selected input of the RECORD level at maximum volume level. Signals from the inputs TAPE and SURROUND cannot be taken from the RECORD output.
	Through factory settings, volume controls have no bearing on the signal at the RECORD output.
	If no recording is desired, the RECORD output may be used as a second volume controlled preamp output. (see chapter **RECORD SETUP**)
	The pinning of the OUTPUT REC is: **PIN1=GND**, **PIN2=NEG**, **PIN3=POS**.

! **CAUTION: Never connect a power amp or active loudspeakers to this output with these settings. Serious damage to your ears and equipments may occur.** !

Headphone jacks	The **headphone jacks PHONES 1 (19)** and **PHONES 2 (20)** require headphones with a 6,3mm stereo plug and an impedance of 16Ω or more. Each of the phones output can playback the MAIN and the RECORD level. The **PHONES MENU** gives you the option to choose your favorite settings. The volume level is being reduced to 01 respectively -79dB while inserting or pulling off the phones plug. With the **volume selector (6)** on the front panel or with the buttons **VOLUME +** and. **VOLUME –** on your remote control you select the volume level of the phones outputs.
	NOTICE: The signal at the MAIN or RECORD output will be interrupted while inserting a headphone plug into the headphone jacks.

REMOTE	Connecting **DC OUT (27)** to the corresponding DC IN-jack of another BURMESTER-unit offers the function to switch on or off this other unit simultaneous by the 077. In this case, the 077 has the master function.
	Connecting **DC IN (28)** to the corresponding DC OUT-jack of another BURMESTER-unit offers the function to switch on or off the 077 simultaneous by the other unit. In this case, 077 has the slave function.

BURLINK	To the **BUR**mester-**LINK** interface plugs **(17), (18)** a computer system e.g. PC, CRESTRON™, AMX™ can be connected to the preamp 077. The computer system allows a comfortable control of your High End system using for example an individual programmable touch panel. With the LEDs beside the plugs named **T** and **R** (**T**ransmit and **R**eceive) you are able to monitor whether data exchange is working.
	You will find the commands to control the 077 in the chapter **BURLINK**.

OPERATING CONTROLS

With the exception of the AC mains switch, which is located on the rear panel of the power supply unit, all operating controls are located on the front panel of the preamp.

AC mains switch   The **AC mains switch (33)** which completely disconnects the AC power to the unit is located on the rear panel of the 077 or on the rear panel of the external power supply unit above the AC mains terminal. By switching to the ON position the standby transformer is powered up.

POWER switch   The **POWER switch (8)** switches the preamp on and off, presuming the AC mains switch is in the ON position.
With the **POWER switch (8)** set to "OFF" all functions of the preamp are powered down.
Flipping the **POWER switch (8)** from "OFF" to "STBY", the **POWER LED (7)** lights up orange. This shows that the unit is in standby mode.
When the POWER switch is in "STBY" position the unit can be switched on and off by pulling up the POWER switch, pushing the POWER button on the BURMESTER remote control, the Burlink interface or by the DC IN jack.
In operating mode (ON) the **POWER LED (7)** lights up red and all functions of the preamp are activated.
PLEASE NOTICE: Always switch off the preamp with the POWER switch first before bringing the AC mains switch into OFF position.

Volume selector   The **Volume selector (6)** controls the volume level in 61 steps from 00 (mute) to 60 (maximum volume) or in dB-step from MUTE to +5dB (maximum volume with LOW amplification) or + 21dB (maximum volume with HIGH amplification). The volume setting can be selected separately for MAIN and RECORD level. To change between MAIN and RECORD level pull the **RECORD/PHONES switch key (14)** up at the or push the MODE button on your remote control. If the **REC/MAIN LED (5)** lights up, you are controlling the RECORD level.
The selected volume level will be shown in the **alphanumeric display (4)**.
The volume selector also controls functions in the SETUP menus.

Input selector   With the **input selector (1)** you select the input you want to listen to. The input selection can be done separately for MAIN and RECORD level. To change between MAIN and RECORD level push the **RECORD/PHONES switch key (14)** up or push the **MODE** button on your remote control. If the **REC/MAIN LED (5)** lights up, you are controlling the RECORD level, if it doesn't light up you are controlling the MAIN level.
The selected input will be shown in the **alphanumeric display (4)**.
The input selector also controls functions in the SETUP menus.

Phase reversal
In factory settings the preamp 077 passes incoming signals without phase reversal to the MAIN and RECORD outputs. If the pin polarity of a reproducer differs from the pin polarity of power amps or active speakers connected to the output terminals (see also owner `s manual → PINS 2 and 3) there is the possibility to reverse the phase of the according input by 180˚.

The phase reversal is activated or deactivated by pulling the switch key **PHASE/DISPLAY (11)** up, or by longer pressing the **DIM** button (approx. 2 seconds) on your remote control. If the phase reversal is activated (180˚), the **PHASE LED (2)** illuminates.

Every input needs to be preset separately for the MAIN and RECORD level. The presetting will be maintained.

NOTICE: Please be advised that each input can be reversed separately. A phase reversal of the outputs is not intended.

Shifting between MAIN and REC level
All presets like input selection, volume, input level, phase shift, volume display etc. are separately selectable. Switching between MAIN and RECORD level is done by moving the switch key **RECORD/PHONES (14)** upwards or by shortly pressing the **MODE** button on your remote control. When the **MAIN/REC LED (5)** illuminates, the device is in RECORD level. If the LED is off, the device is in MAIN level.

Display brightness
By pushing the switch key **PHASE/DISPLAY (11)** down, or by shortly pressing the **DIM** button on your remote control you can adjust the brightness of your display in four steps from "maximum brightness" to "off".

If modus "off" is chosen, the display illuminates when the device is operated to indicate that a function is controlled, and dims out after a few seconds.

In modus "off", the device shifts to maximum brightness in SETUP-mode. The display will stay illuminated until you leave the SETUP-mode.

SPECIAL FUNCTIONS

The preamp 077 offers a variety of special functions in order to allow a personalized configuration of the device. Most functions are adjustable in the SETUP MENUS.

RECORD output	Through factory settings the **OUTPUT REC (22)** of the preamp 077 is preset to be connected to an analog tape recorder. Meaning, the recording volume is fixed.
	If required, this setting can be changed. The RECORD output can be programmed as additional volume controllable preamp output. In this setting, it is possible to provide a second room with music. The REC output is able to reproduce a different source than the MAIN output and is volume controllable in itself.
	To change the output from FIXED to VARIABLE you have to go to the **RECORD SETUP** in submenu **REC**.
	For specific instructions please refer to **THE SETUP MENU/ RECORD SETUP.**
SURROUND input	Through factory settings the **SURR/INPUT 6 (23)** of the preamp 077 is preset as a SURROUND input. The signal is transported directly to the MAIN output, avoiding volume control and all amp stages.
	If you prefer not to connect a surround decoder, you can use the input as regular high-level input with volume control (like INPUT 1 to 5). Adjustment options are available in the **MAIN SETUP** in submenu **M-IN6**.
	For specific instructions please refer to **THE SETUP MENUS / MAIN SETUP**.
	PLEASE NOTICE: In RECORD level INPUT 6 is always a regular high-level input.
Volume scale	Through factory settings the volume steps are set to the BURMESTER curve. The volume indicator is divided into steps between 0 (mute) to 60 (maximum volume).
	You may change the setting to dB steps. This can be adjusted individually for the MAIN and RECORD level.
	Adjustment options are available in the **MAIN SETUP** in submenu **M-SCALE**. The adjustment for the RECORD level can be found in the **RECORD SETUP** in submenu **R-SCALE**.
	For specific instructions please refer to **THE SETUP MENUS/ MAIN SETUP** and **RECORD SETUP** respectively.
Output amplification	Through factory settings the entire volume of the preamp 077 is set to a maximum amplification of +5dB (factor 1.8). This preset should be maintained if you are operating your system with BURMESTER power amps, which have a high input sensitivity. If you are operating the preamp 077 with power amps or active speakers with low input sensitivity, it is possible to change the maximum amplification to +21 dB (factor 11.2).
	Adjustment options are available in the **MAIN SETUP** in submenu **M-OUT**.
	For specific instructions please refer to **THE SETUP MENUS/ MAIN SETUP**.
	NOTICE: The RECORD level has a maximum amplification of +5dB (factor 1.8) when set to preamp function. The amplification of the RECORD level cannot be adjusted.
	At fixed volume the signal is put through to the RECORD output without any influence of the preamp.
Input sensitivity	Through factory settings all inputs are set to the same input sensitivity. As experience has shown, connected reproducers deliver different output levels. Therefore, it is possible to decrease every input of the preamp 077 up to -6 dB (factor 2) or to increase it up to 12 dB (factor 4) in order to adjust the different volumes of your sources.
	Adjustment options are available in the **GLOBAL SETUP** in submenu **INPUT LEVEL**.
	For specific instructions please refer to **THE SETUP MENUS/ GLOBAL SETUP**.

Monitor lock	Through factory settings the **OUTPUT REC (22)** of the preamp 077 is preset to be connected to an analogue tape recorder. The INPUT 3 = TAPE cannot be chosen for recording, because of the audio feedback that would result of this connection. If your analogue recording device is connected to another input, it is possible to activate the monitor lock for this input and lift the locking for INPUT 3. Adjustment options are available in the **RECORD SETUP** in submenu **LOCK**. For specific instructions please refer to **THE SETUP MENU/ RECORD SETUP.** This option cannot be chosen if the volume control for the RECORD level is variable.
Volume balance	Some spatial arrangements require shifting the volume conditions for each reproducing channel. The volume shift is realized by reducing one of the two stereo channels. It is possible to reduce one channel of the preamp 077 up to 9 dB (factor 2.8) in steps of 1 dB, and for specific situations to switch off completely. Adjustment options are available in the **MAIN SETUP** in submenu **M-BAL**. For the RECORD level adjustment options are available in the **RECORD SETUP** in submenu **R-BAL**. If the volume is fixed for the RECORD level, the balance setting has no effect. For specific instructions please refer to **THE SETUP MENU/ MAIN SETUP** and **RECORD SETUP** respectively**.**
Input names	Through factory settings all inputs of the preamp 077 are assigned with specific names. You may, however label the inputs 1 through 6 with other names. We provide a range of names. It is of course possible to choose an individual name, e.g. the type of your device. Adjustment options are available in the **GLOBAL SETUP** in submenu **INPUT NAMES**. For specific instructions please refer to **THE SETUP MENU/ GLOBAL SETUP**.

Factory setting assigns the following names:

- **INPUT 1**   CD
- **INPUT 2**   TUNER
- **INPUT 3**   TAPE
- **INPUT 4**   AUX1
- **INPUT 5**   AUX2
- **INPUT 6**   AUX3
- **MODULE INPUT LINE**   (if equipped with LINE MODULE)
  PH-MC (if equipped with PHONO MC MODULE)
  PH-MM (if equipped with PHONO MM MODULE)
  DA USB (if equipped with D/A-CONVERTER MODULE)
  DA RCA (if equipped with D/A CONVERTER MODULE)

Restoring factory settings will reset all the input names to the ones above.

4 Channel Mode	This option allows you to use both, the MAIN and RECORD level, as one preamp. When activated only the MAIN level is operable. The RECORD level will automatically reproduce the selected input of the MAIN level. Also the volume will be adjusted for both levels. However you have the option to fade the volume of the RECORD level in reverence to the MAIN level. For the 4 Channel Mode the activation option is available in the **GLOBAL SETUP** in submenu **4CH-MODE**. For specific instructions please refer to **THE SETUP MENUS / GLOBAL SETUP**. For the **FADER** option please refer to **THE SETUP MENUS / MAIN SETUP**

Serial number	In order to view the serial number of your preamp 077 after switching on the device, the function needs to be activated. You will find the activation options in the **GLOBAL SETUP** in submenu **SNR**. For specific instructions please refer to **THE SETUP MENUS/ GLOBAL SETUP**.
Switching off control elements of device	In order to prevent undesired control of the preamp 077, it is possible to lock all controlling elements on the front panel (except the POWER switch). Then all functions are only operable via remote control. This provides a child proof lock option. This option can be found in the **GLOBAL SETUP** in submenu **FRONT-P**. For specific instructions please refer to the **SETUP MENUS/ GLOBAL SETUP**.
Initial volume	After switching on your preamp 077, a certain volume is set. It is possible to set the volume separately for MAIN level and RECORD level. The range of this setting extends from volume **01** and **-79 dB** respectively up to **20** and **-60 dB** respectively. If the setting **LAST** is chosen, the volume that was last selected will be used. For security reasons, this is only possible up to a maximum volume of **20** and. **-60 dB** respectively. For the RECORD level this setting is only valid if the REORD level is set to adjustable volume. You will find the adjustment options for the MAIN level in the **MAIN SETUP** in submenu **M-VOL.** For the RECORD level Adjustment options are available in the **RECORD SETUP** in submenu **R-VOL**. For specific instructions please refer to **THE SETUP MENUS/ MAIN SETUP** and **RECORD SETUP** respectively.

The different functions of the headphones are available in the **SETUP MENU / PHONES SETUP**.

The different functions of the Phono MC and Phono MM module are available in **THE SETUP MENU / PHONO SETUP**, **THE SETUP MENUS / MC SETUP** respectively **THE SETUP MENUS / MM SETUP.**

THE SETUP MENUS

The SETUP menus of the preamp 077 allow comfortable programming of certain basic settings as well as special functions. Changes in some of the settings have an impact on the reproduction of the signal. We recommend, selecting a moderate volume level before activating a setup.

NOTICE: While the SETUP menu is active, the **volume selector (6)** on the front panel of the 077 serves to change the settings of the various menu items. During this procedure the volume level can only be changed by the volume buttons on your remote control.

Activating the SETUP Menus

GLOBAL SETUP: Pushing down the switch key **(15)** or longer pressing (approx. 2 seconds) the **MENU** button on your remote control activates the GLOBAL SETUP.

MAIN SETUP: Pulling up the switch key **(15)** or shortly pressing the **MENU** button on your remote control activates the MAIN SETUP, when the unit is in MAIN level.

RECORD SETUP: Pulling up the switch key **(15)** or shortly pressing the **MENU** button on your remote control activates the RECORD SETUP, when the unit is in RECORD level.

PHONES SETUP: Pushing down the switch key **(14)** or longer pressing (approx. 2 seconds) the **MODE** button on your remote control activates the PHONES SETUP.

PHONO SETUP: Pulling up the switch key **(12)** or shortly pressing the **AUDIO** button on your remote control activates the PHONO SETUP.
This menu can only be activated, if a PHONO MC or PHONO MM module is equipped and the PH-MC or PH-MM input is selected.

AS EQUIPPED:

MC SETUP: Pushing down the switch key **(12)** or longer pressing (approx. 2 seconds) the **AUDIO** button on your remote control activates the MC SETUP.
This menu can only be activated, if a PHONO MC module is implemented and the PH-MC input is selected.

MM SETUP: Pushing down the switch key **(12)** or longer pressing (approx. 2 seconds) the **AUDIO** button on your remote control activates the MM SETUP.
This menu can only be activated, if a PHONO MM module is implemented and the PH-MM input is selected.

Select menu item The different items of the setup menus are selected by turning the **input selector (1)** on the front panel or pressing the navigation buttons ► ◄ on your remote control. (check tables on page 21)
The **alphanumeric display (4)** shows the selected item.

Change settings To change the setting of a selected menu item turn the **volume selector (6)** on the front panel or press the navigation buttons ▲ ▼ on your remote control.
The selected value of the menu item is indicated on the right side of the **alphanumeric display (4)**.
The selected value of any menu item will be saved immediately.

Exit SETUP Exiting the setup menu is done by pushing the same switch key that has activated the setup or by shortly pushing the **MENU** button on your remote control. The display will show **SETUP SAVED!**.

THE GLOBAL SETUP

The GLOBAL SETUP offers the adjustment of global functions like INPUT LEVEL, INPUT NAMES, displaying the SERIAL NUMBER, 4 CHANNEL MODE, SWITCHING OFF CONTROL ELEMENTS on the front panel, RC INPUT and resetting to FACTORY SETTINGS.

The following chart provides an overview of all menu items, which can be adjusted in the GLOBAL SETUP. The factory settings (defaults) are listed in brackets. Subsequent to the chart you will find a detailed description of the menu items.

MENU ITEM	DESCRIPTION	DISPLAY	VALUE
Input level	**Pre-level adjustment for every input**	**INPUT LEVEL**	**-06** to **-01, (00), +01** to **+12**
Input names	**Individual input names**	**INPUT NAMES**	**Input name**
Displaying serial number	**Displaying serial number after switching on the unit**	**SNR**	**(OFF) / ON**
4 Channel Mode	**Select both levels, MAIN and RECORD as one preamp**	**4CH-MODE**	**(OFF) / ON**
on/off of control elements on front panel	**Activating/Deactivating control elements on the front panel**	**FRONT-P**	**OFF / (ON)**
RC Input selection	**Activating/Deactivating Station +/- keys of the remote control**	**RC INPUT**	**(NO) / YES**
Factory settings	**Loading all factory settings**	**DEFAULTS**	

The GLOBAL SETUP MENU is activated by pushing down the switch key **(15)** on your device or by longer pushing the **MENU** button (approx. 2 sec) on your remote control. The display indicates the activation by shortly showing **GLOBAL SETUP**, followed by the first menu item.

To exit and automatically save the menu push down the switch **(15)** or press the **MENU** button on your remote control.

Input level   By adjusting the input level, you can equalize jumps in the volume resulting from differing output levels of the reproducers when switching between input sources.
Select the menu item **INPUT LEVEL** either with the left rotary switch or with the navigation buttons ► ◄ on your remote control.
If the menu item is selected, you will reach the input selection by using the right rotary switch or the **OK** button on your remote control.
With the left rotary switch or the navigation buttons ► ◄ on your remote control you may now select the desired input.
With the right rotary switch or the navigation buttons ▲ ▼ on your remote control you may now select the desired increase or decrease. The range of selection reaches from **+12 dB** to **-06 dB** in single steps.
In order to return to the menu item level, you have to select the item **BACK** either with the left rotary switch or the navigation buttons ► ◄ on your remote control. Now confirm with the right rotary switch or by pressing the **OK** button on your remote control. The display indicates **INPUT LEVEL** if the action is completed.

Input names

Through factory settings all inputs of the preamp 077 are assigned with specific names (INPUT1 = CD etc.). You may, however label every input with another name of your choice. We provide a range of names. It is of course possible to select an individual name, e.g. the type of your device. Please refer to the menu item **input selection** in the chapter **remote control**.

Select the menu item **INPUT NAMES** with the navigation buttons ► ◄.

If the menu item is selected, you will reach the input selection by pressing the **OK** button on your remote control.

With the navigation buttons ► ◄ you may select the desired input.

With the navigation buttons ▲ ▼ you may select the desired name. Fixed Input names are **DVD, SAT, DVB, DAB, VHS, TV, CD, TUNER, PHONO, AUX 1, AUX 2, AUX 3, PC and I-POD**.

The item **USER** allows an individual name of your choice. By pushing the **OK** button when **USER** is selected you will reach the name programming level.

A blinking digit indicates which part of the name can be modified. By using the navigation buttons ► ◄ you may select the position you would like to modify. With the navigation buttons ▲ ▼ you may select the desired sign (letter A-Z, digit 0-9, blank space, hyphen or underscore). By pressing the **OK** button you finish the input of signs. The display will show **SAVE:YES OK?**

Now select YES/NO with the navigation buttons ▲ ▼ and confirm by pressing the **OK** button on your remote control. If YES is selected, the adjustment is accepted, if NO is selected, the old setting is maintained.

In order to return to the menu item level, you have to select the item **BACK** with the navigation buttons ► ◄. Now confirm by pressing the **OK** button. The display indicates **INPUT NAMES** if the action is completed.

Displaying serial number

It is possible to choose whether the device is supposed to show the serial number (**ON**) after switching on the device or not (**OFF**).

Select menu item **SNR** with the left rotary switch or the navigation buttons ► ◄ on your remote control.

With the right rotary switch or the navigation buttons ▲ ▼ on your remote control you may select one of the following:

OFF	serial number not displayed
ON	serial number displayed after switching on the device

4 Channel Mode	This option allows you to use both, the MAIN and RECORD level, as one preamp. The RECORD level will be deactivated and the power amp connected to the RECORD output will reproduce the signals of the MAIN level input. When activated both, the MAIN and RECORD level, will reproduce the signal from the selected input. If the 4 Channel Mode is activated, another menu item in **THE MAIN SETUP**, the **FADER**, will be available. Please refer to **THE MAIN MENU** to see further instructions on the **FADER** option.

Select menu item **4CH-MODE** with the left rotary switch or the navigation buttons ► ◄ on your remote control.

With the right rotary switch or the navigation buttons ▲ ▼ on your remote control you may select one of the following:

OFF   4 Channel Mode is deactivated
ON   4 Channel Mode is activated

PLEASE NOTICE: If the RECORD level was set to FIX before the 4 Channel mode had been activated, the security request REC-FIX! OK? will appear on the display when the 4 Channel Mode shall be deactivated. You have to confirm the security request by pressing the OK button on your remote control. Now the 4 Channel Mode is deactivated.
CAUTION: In this case the RECORD output will be set to FIX after leaving the GLOBAL MENU. You must disconnect your power amps from the RECORD output beforehand, because the maximum volume resulting from this setting may cause severe damage to your power amps, speakers and ears! If the RECORD level was set to variable before the 4 Channel Mode was activated, it will remain variable after the 4 Channel Mode has been deactivated.

4 Channel Mode   **Normal Mode**
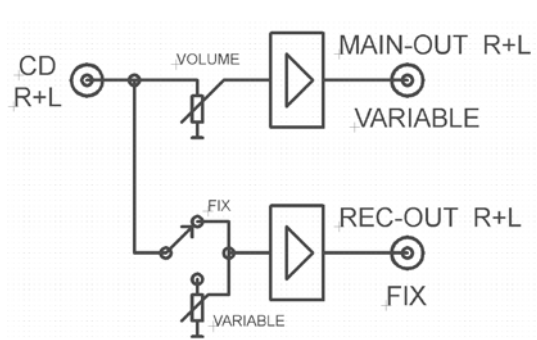
Deactivating control panel

In order to prevent accidental use of the control elements on the front panel, it is possible to deactivate all controlling elements on your device (except the POWER-switch). All functions can then only be operated via remote control. This provides a child proof lock option.

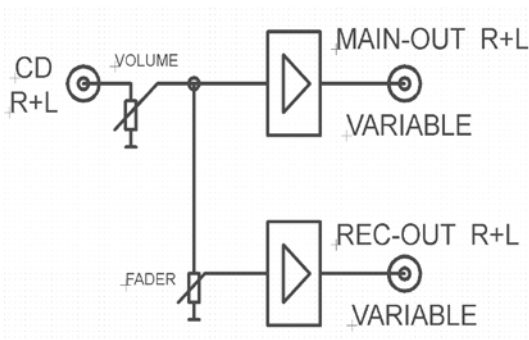Select menu item **FRONT-P** with the left rotary switch or the navigation buttons ► ◄ on your remote control.

With the right rotary switch or the navigation buttons ▲ ▼ on your remote control you may select one of the following:

ON	All panel switch keys are activated
OFF	All panel switch keys are deactivated

RC Input

If you want to change the inputs of the preamp with the keys STATION +/- on your remote control, you need to set this item to YES. If this item is set to NO, inputs can only be changed with the input selector on the front panel of the unit and the direct input buttons on the remote control, for example the **CD** button.

Select menu item **RC Input** with the left rotary switch or the navigation buttons ► ◄ on your remote control.

With the right rotary switch or the navigation buttons ▲ ▼ on your remote control you may select one of the following.

NO	Inputs cannot be changed with the STATION keys on your remote control.
YES	Inputs can be changed with the STATION keys on your remote control.

Factory Settings

In order to reset all adjustments including display brightness back to factory settings you have to select the menu item **DEFAULTS**. Now confirm with the right rotary switch or by pressing the **OK** button on your remote control.

For security reasons the preamp will ask you with **REC FIX! OK?** whether you have no power amp or active loudspeakers connected to your **RECORD** output. To confirm the warning press the **OK** button on your remote control or use the right rotary switch.

The display indicates **BUILDING** followed by **PRESET**, which confirms that factory settings have been loaded successfully. Afterwards the menu item **INPUT LEVEL** will be shown in the display.

By pushing down the switch key **(15)** or shortly pressing **MENU** on your remote control you leave the menu and factory settings will be activated.

THE MAIN SETUP

The MAIN SETUP offers the adjustment of functions like BALANCE, FADER, INITIAL VOLUME, VOLUME SCALE, AMPLIFICATION and CONFIGURATION OF INPUT 6 for the MAIN level.

The following chart provides an overview of all menu items, which can be adjusted in the MAIN SETUP. The factory settings (defaults) are listed in brackets. Subsequent to the chart you will find a detailed description of the menu items.

MENU ITEM	DESCRIPTION	DISPLAY	VALUE
Balance	**Sets volume left/right ratio**	**M-BAL**	**OFF R, -09R** to **-01R** **(<C>)** **-01L** to **-09L, OFF L**
Fader	**Selects volume level of RECORD-speakers, only available during 4 channel mode**	**FADER**	**-10** to **–01** **(<C>)** **01** to **10**
Initial volume	**Selects volume after switching on the device**	**M-VOL**	**(01)** to **20, LAST**
Volume scale	**Indication in dB or Burmester steps**	**M-SCALE**	**(BUR) / dB**
Amplification	**Total amplification LOW or HIGH**	**M-OUT**	**(LOW) / HIGH**
Configuration of INPUT 6	**INPUT 6 as regular input or surround input**	**M-IN6**	**INP / (SURR)**

The MAIN SETUP MENU is activated by pulling up the switch key **(15)** on the front panel or by pressing the **MENU** button on your remote control. The display indicates the activation by showing **MAIN SETUP**, followed by the first menu item. **PLEASE NOTE:** In order to activate the MAIN SETUP, the device has to be in MAIN level (**REC/MAIN-LED (5)** is not illuminated).

To exit and automatically save the menu push down the switch key **(15)** or press the **MENU** button on your remote control.

Balance   Some spatial arrangements require a shift of the volume ratio between the two reproducing channels. The volume shift is realized by reducing one of the two stereo channels. It is possible to alleviate one channel of the preamp 077 up to 9 dB (factor 2.8) in steps of 1 dB, and for specific situations to switch it off completely.
Select menu item **M-BAL** with the left rotary switch or the navigation buttons ► ◄ on your remote control.
With the right rotary switch or the navigation buttons ▲ ▼ on your remote control you may select the desired value:

<C>   both stereo channels of the MAIN level will be reproduced at the same volume level
-09R to **-01R** the right channel of the MAIN level will be reproduced with reduced volume
OFF R   the right channel of the MAIN level is muted
-09L to **-01L** the left channel of the MAIN level will be reproduced with reduced volume
OFF L   the left channel of the MAIN level is muted

The balance setting has no effect on the **SURROUND** input.

Fader   **NOTICE: This menu item is only available when 4 Channel Mode is activated.**
The option Fader will allow you to increase or decrease the volume of the power amp connected to the RECORD output in reference to the MAIN output. It is possible to adjust the volume up to +/- 10 dB.
Select menu item FADER with the left rotary switch or the navigation buttons ► ◄ on your remote control.
With the right rotary switch or the navigations buttons ▲ ▼ on your remote control you may select the desired value:

<C>   the power amp connected to the RECORD output will have the same volume as the power amp connected to the MAIN output.

-10 to **–01**   the power amp connected to the RECORD output will have a reduced volume in reference to the power amp connected to the MAIN output. The steps are indicated in dB.

+10 to **+01**   the power amp connected to the RECORD output will have a increased volume in reference to the power amp connected to the MAIN output. The steps are indicated in dB.

Initial volume   This menu item preselects the volume for the MAIN level of your device when it is switched on.
Select menu item **M-VOL** with the left rotary switch or the navigation buttons ► ◄ on your remote control.
With the right rotary switch or the navigation buttons ▲ ▼ on your remote control you may select the desired value:

The range of selection reaches from **01** to **20** and **-79 dB** to **-60 dB** respectively, in single steps.

If the setting **LAST** is chosen, the volume that was last selected will be used. For security reasons, this is only possible up to a maximum volume of **20** and. **-60 dB** respectively.

Volume scale   This menu item preselects whether the Volume of the MAIN level is indicated in BURMESTER or dB steps.
Select menu item **M-SCALE** with the left rotary switch or the navigation buttons ► ◄ on your remote control.
With the right rotary switch or the navigation buttons ▲ ▼ on your remote control you may select one of the following:

BUR   Volume indicated in BURMESTER steps (**00** to **60**)
dB   Volume indicated in dB steps (**-99dB** to **+5dB** or **+21dB** at high amplification)

Amplification

It is possible to adjust the total amplification of the MAIN level of your preamp for an improved level adjustment to the connected power amps or active speakers.

Select menu item **M-OUT** with the left rotary switch or the navigation buttons ► ◄ on your remote control.

With the right rotary switch or the navigation buttons ▲ ▼ on your remote control you may select one of the following:

HIGH	high amplification, max. +21dB (factor 11.2)
LOW	low amplification, max. +5dB (factor 1.8)

To operate BURMESTER power amps we recommend the setting **LOW**.

Configuration of INPUT 6

Through factory settings the **INPUT 6/SURR (23)** of the preamp 077 is preset as a surround input for the MAIN level, i.e. the signal is transported directly to the MAIN output, avoiding volume control and all amps.

Instead, if you prefer not to connect a surround decoder, you may use the input as a regular high-level input with volume control (like INPUT 1 to 5) by changing the presetting.

Select menu item **M-IN6** with the left rotary switch or the navigation buttons ► ◄ on your remote control.

With the right rotary switch or the navigation buttons ▲ ▼ on your remote control you may select one of the following:

SURR	Input 6 is set as a SURROUND input
INP	Input 6 is set as a regular high-level input

PLEASE NOTE: If the setting SURR is selected, a security check via display will follow **M-IN6:SU OK?**. Now confirm by pushing the **OK** button on your remote control.

THE RECORD SETUP

The RECORD SETUP offers the adjustment of functions like BALANCE, INITIAL VOLUME, VOLUME SCALE, VOLUME CONTROL and TAPE MONITOR LOCK for the RECORD level.

The following chart provides an overview of all menu items, which can be adjusted in the RECORD SETUP. The factory settings (defaults) are listed in brackets. Subsequent to the chart you will find a detailed description of the menu items.

MENU ITEM	DESCRIPTION	DISPLAY	VALUE
Balance	Sets volume left/right ratio	R-BAL	**OFF R, -09R** to **-01R** (**<C>**) **-01L** to **-09L OFF L**
Initial volume	Selects volume after switching on the device	R-VOL	**(01)** to **20, LAST**
Volume scale	Indication in dB or Burmester steps	R-SCALE	**(BUR) / dB**
Volume control	Selects fixed or variable volume	REC	**(FIX) / VARIABLE**
Tape monitor lock	Selects locked input – only at fixed volume	LOCK	**(TAPE)**

The RECORD SETUP MENU is activated by pulling up the switch key **(15)** on the front panel or by pressing the **MENU** button on your remote control. The display indicates the activation by showing **RECORD SETUP**, followed by the first menu item.
PLEASE NOTE: In order to activate the RECORD SETUP, the device has to be in RECORD level (**REC/MAIN-LED (5)** is illuminated).

To exit and automatically save the menu pull up the switch key **(15)** or press the **MENU** button on your remote control.

Balance	**PLEASE NOTE: If the RECORD level is operated with fixed volume (FIX), the balance selection has no effect.** Some spatial arrangements require a shift of the volume ratio between the two reproducing channels. The volume shift is realized by reducing one of the two stereo channels. It is possible to alleviate one channel of the preamp 077 up to 9 dB (factor 2.8) in steps of 1 dB, and for specific situations to switch it off completely. Select menu item **R-BAL** with the left rotary switch or the navigation buttons ► ◄ on your remote control. With the right rotary switch or the navigation buttons ▲ ▼ on your remote control you may select the desired value:

<C> both stereo channels of the RECORD level will be reproduced at the same volume level
-09R to **-01R** the right channel of the RECORD level will be reproduced with reduced volume
OFF R the right channel of the RECORD level is muted
-09L to **-01L** the left channel of the RECORD level will be reproduced with reduced volume
OFF L the left channel of the RECORD level is muted

Initial volume	**NOTICE: The setting is only valid if menu item REC is set to VARIABLE.**

This menu item preselects the volume for the RECORD level of your device when it is switched on.
Select menu item **R-VOL** with the left rotary switch or the navigation buttons ► ◄ on your remote control.
With the right rotary switch or the navigation buttons ▲ ▼ on your remote control you may select the desired value:

The range of selection reaches from **01** to **20** and **-79 dB** to **-60 dB** respectively in single steps.

If the setting **LAST** is chosen, the volume that was last selected will be used. For security reasons, this is only possible up to a maximum volume of **20** and **-60 dB** respectively.

PLEASE NOTE: If the RECORD level is operated with fixed volume (FIX), the initial volume selection has no effect.

Volume scale	**NOTICE: The setting is only valid if menu item REC is set to VARIABLE.**

This menu item preselects whether the volume of the RECORD level is indicated in BURMESTER steps or dB steps. Select menu item **R-SCALE** with the left rotary switch or the navigation buttons ► ◄ on your remote control.
With the right rotary switch or the navigation buttons ▲ ▼ on your remote control you may select one of the following:

BUR Volume indicated in BURMESTER steps (**00** to **60**)
dB Volume indicated in dB steps (**-99dB** to **+5dB** or **+21dB** at high amplification)

PLEASE NOTE: If the RECORD level is operated with fixed volume (FIX), the volume scale selection has no effect.

Volume control	This menu item preselects whether the RECORD level works with a fixed volume for recordings or as a second preamp including volume regulation.

Select menu item **REC** with the left rotary switch or the navigation buttons ► ◄ on your remote control.
With the right rotary switch or the navigation buttons ▲ ▼ on your remote control you may select one of the following:

FIX RECORD level has a fixed volume output for recording
VARIABLE RECORD level has adjustable volume output like a second preamp

Tape monitor lock	**PLEASE NOTE: This setting is only valid when menu item REC is set on FIX.**

This menu item preselects which input cannot be selected as input for the RECORD output. Through factory settings this is INPUT 3. If your analog recording device is connected to another input, it is possible to activate the monitor lock for this input and lift the lock for INPUT 3.
Select menu item **LOCK** with the left rotary switch or the navigation buttons ► ◄ on your remote control.
With the right rotary switch or the navigation buttons ▲ ▼ on your remote control you may select the input that is supposed to be locked.

THE PHONES SETUP

The PHONES SETUP gives you the option whether the phones output shall playback music from the MAIN or RECORD level.

The following chart provides an overview of all menu items, which can be adjusted in the PHONES SETUP. The factory settings (defaults) are listed in brackets. Subsequent to the chart you will find a detailed description of the menu items.

MENU ITEM	DESCRIPTION	DISPLAY	VALUE
Phones output PHONES 1	Selects playback level MAIN or RECORD	HP-1->	(MAIN) / RECORD
Phones output PHONES 2	Selects playback level MAIN or RECORD	HP-2->	(MAIN) / RECORD

The PHONES SETUP MENU is activated by pushing down the switch key **(14)** on the front panel or by longer pressing the **MODE** button (approx. 2 sec) on your remote control. The display indicates the activation by showing **PHONES SETUP**, followed by the first menu item.

To exit and automatically save the menu push down the switch key **(14)** or press the **MENU** button on your remote control.

NOTICE: If the RECORD level is set to FIX in the RECORD SETUP, you can't select the signals from the RECORD level.

Phones output PHONES 1
Here you select, which level, RECORD or MAIN, you want to listen to on the headphones output PHONES 1.
With the left rotary switch or the navigation buttons ► ◄ on your remote control select the menu item **HP-1**.
With the right rotary switch or the navigation buttons ▲ ▼ on your remote control you may choose between:

MAIN The headphones output PHONES 1 provides the selected source of the MAIN level.
RECORD The headphones output PHONES 1 provides the selected source of the RECORD level.

Phones output PHONES 2
Here you select, which level, RECORD or MAIN, you want to listen to on the headphones output. PHONES 2.
With the left rotary switch or the navigation buttons ► ◄ on your remote control select the menu item **HP-2**.
With the right rotary switch or the navigation buttons ▲ ▼ on your remote control you may choose between:

MAIN The headphones output PHONES 2 provides the selected source of the MAIN level.
RECORD The headphones output PHONES 2 provides the selected source of the RECORD level.

THE PHONO SETUP

The PHONO SETUP offers the adjustment of functions like SUBSONIC FILTER and AUTOMATIC LEVEL ADJUST.

NOTICE: This menu is only available if your preamp 077 is equipped with a PHONO MC or PHONO MM module and the according input is selected.

The following chart provides an overview of all menu items, which can be adjusted in the PHONO SETUP. The factory settings (defaults) are listed in brackets. Subsequent to the chart you will find a detailed description of the menu items.

MENU ITEM	DESCRIPTION	DISPLAY	VALUE
Subsonic filter	Switches the subsonic filter on or off	SUBSONIC	(OFF) / ON
Level adjust	Automatic level adjust right / left channel	A-ADJUST	

The PHONO SETUP MENU is activated by pulling up the switch key **(12)** on the front panel or by pressing the **AUDIO** button on your remote control. The display indicates the activation by showing **PHONO SETUP**, followed by the first menu item.

To exit and automatically save the menu pull up the switch key **(12)** or press the **MENU** button on your remote control.

Subsonic filter   Our subsonic filter eliminates low frequency signals, which might come from the record player or wavy records. Switch on the subsonic filter, if the bass membranes of your loudspeakers are moving very slowly with a large swing.
With the left rotary switch or the navigation buttons ► ◄ on your remote control choose the menu item **SUBSONIC**.
With the right rotary switch or the navigation buttons ▲ ▼ on your remote control you may choose between:

        OFF   The subsonic filter is deactivated.
        ON   The subsonic filter is activated.

Level adjust	Some pickups show a pretty high level tolerance between the left and right channel. In this case the preamp 077 is equipped with an automatic level adjust function. This function measures the channel differences and automatically adjusts them. This requires that your record player is configured correctly.

<u>How to approach:</u>
Select a moderate volume, household noise level at max.
With the left rotary switch or the navigation buttons ► ◄ on your remote control select the menu option **PH-A-ADJ**.
To activate the adjustment, turn the right rotary switch or use the navigation buttons ▲ ▼ on your remote control until the displays shows **PH-A-ADJ ON**. Now turn the left rotary switch or use the navigation buttons ► ◄. The display will show **PH-A-ADJ OK?**.
Put a standard test record on your record player. The preamp requires a 1kHz-sine-wave stereo signal. Now lower the pickup on the record. As soon as you hear the measurement-signal, activate the measurement by pressing the **OK** button on your remote control.
During the measurement-process the display will show **MEASURE…** .
If both channel levels are equal, the display will show **LEFT = RIGHT**, and adjustment is not necessary.
If the channel levels are different the display will show **ADJUST…**, and the 077 adjusts the channel difference. After correctly finishing the adjust-process the display will show **ADJ-COMPLETE**.
If the difference between the channels is more than 5dB, the display will show **OVERFLOW!** and the adjust-process will abort. In this case you should check your record player and the connectors for any errors.
If the measured signal is too low, or there is no signal at all, the display will show **LOW SIGNAL**. In this case check all connectors. If those are all connected correctly, then slowly increase the volume.
At any time you can abort the adjust-process with pressing **OK** on your remote control. The display will then show **ADJUST OFF!**.

THE MC SETUP

The MC SETUP offers the adjustment of functions like AMPLIFICATION and INPUT RESISTANCE.

NOTICE: This menu is only available if your preamp 077 is equipped with a PHONO MC module and the input PH-MC is selected

The following chart provides an overview of all menu items, which may be adjusted in the MC SETUP. The factory settings (defaults) are listed in brackets. Subsequent to the chart you will find a detailed description of the menu items.

MENU ITEM	DESCRIPTION	DISPLAY	VALUE
Amplification	Adjusts PHONO MC amplification	GAIN	54dB / 60dB / (66dB) / 72dB
Input resistance	Adjusts input capacitance of PHONO MC module	LOAD	33Ω / 47Ω / 91Ω / (120Ω) / 390Ω / 47kΩ

The MC SETUP MENU is activated by pushing down the switch key **(12)** on the front panel or by longer pressing the **AUDIO** button (approx. 2 sec) on your remote control. The display indicates the activation by showing **MC SETUP**, followed by the first menu item.

To exit and automatically save the menu push down the switch key **(12)** or press the **AUDIO** button on your remote control.

Amplification   With this option you are able to adjust the playback volume of the PHONO MC module to your record player.
With the left rotary switch or the navigation buttons ► ◄ on your remote control select the option **GAIN**.
With the right rotary switch or the navigation buttons ▲ ▼ on your remote control select the amplification.

Input resistance   With this option you are able to adjust the input resistance of the PHONO MC module to the pickup of your record player. Usually the manufacturers of pickup systems have recommended settings for this option. Of course you can try different settings, whatever sounds best to your ears.
With the left rotary switch or the navigations buttons ► ◄ on your remote control select the option **LOAD**.
With the right rotary switch or the navigations buttons ▲ ▼ on your remote control select the desired input resistance.

THE MM SETUP

The MM SETUP offers the adjustment of functions like AMPLIFICATION and INPUT CAPACITANCE.

NOTICE: This menu is only available if your preamp 077 is equipped with a PHONO MM module and the input PH-MM is selected

The following chart provides an overview of all menu items, which may be adjusted in the MM SETUP. The factory settings (defaults) are listed in brackets. Subsequent to the chart you will find a detailed description of the menu items.

MENU ITEM	DESCRIPTION	DISPLAY	VALUE
Amplification	Adjusts PHONO MM amplification	GAIN	34dB, 40dB, (46dB), 52dB
Input capacitance	Adjusts input capacitance of PHONO MM module	LOAD	(68pF), 120pF, 180pF, 220pF, 260pF, 300pF, 360pF, 400pF

The MM SETUP MENU is activated by pushing down the switch **(12)** on the front panel or by an extended pushing of the **AUDIO** button (approx. 2 sec) on your remote control. The display indicates the activation by showing **MM SETUP**, followed by the first menu item.

To exit and automatically save the menu push down the switch **(12)** or press the **AUDIO** button on your remote control.

Amplification   With this option you are able to adjust the playback volume of the PHONO MM module to your record player.
With the left rotary switch or the navigation buttons ► ◄ on your remote control select the option **GAIN**.
With the right rotary switch or the navigation buttons ▲ ▼ on your remote control select the amplification.

Input capacitance   With this option you are able to adjust the input capacitance of the PHONO MM module to the pickup of your record player. Usually the manufacturers of pickup systems have recommended settings for this option. Of course you can try different settings, whatever sounds best to your ears.
With the left rotary switch or the navigations buttons ► ◄ on your remote control select the option **LOAD**.
With the right rotary switch or the navigations buttons ▲ ▼ on your remote control select the desired input capacitance.

REMOTE CONTROL

Equipped as standard is the 005 remote control

Switching on/off
The **POWER** button switches the preamp on or off, provided the Mains switch of the external power supply unit or on the rear panel of the preamp is set to ON and the power switch on the front panel of the preamp is set to STBY.

Input selection
The buttons **TUNER, PHONO, TAPE, DISC, AUX, SURR** activate the according input. If you have renamed the inputs the buttons will react as follows:

- **TUNER:** all inputs with the character combinations **TU, DAB, DVB, ADR, RADIO, RDS, 053, 993, 931, 915, 978** in its name
- **PHONO:** all inputs with the character combinations **PH, VINYL, PLATTE,** in its name
- **TAPE:** all inputs with the character combinations **TAPE, DAT, REV, BAND** in its name
- **DISC:** all inputs with the character combinations **CD, DVD, DISC, BD, MD, LD, VD, 001, 006, 052, 061, 069, 088, 992, 937, 916, 917, 963, 939** in its name
- **AUX:** all inputs with character combinations which are not listed above will be toggled through
- **SURR:** the **INPUT 6/SURR** can only be operated if you select SURROND in the SETUP menu for INPUT 6

NOTICE: If you have multiple inputs with same characters (for example CD1 and CD2), you will be able to toggle through those inputs with the DISC button on your remote control.

Furthermore you have the option to switch through all inputs, independent of the names, with the buttons **STATION+** and **STATION-**. With the **STATION+** button in ascending order (INPUT 1 → INPUT 2 → etc…), with the **STATION -** button in descending order (INPUT 4 → INPUT 3 → etc…).

NOTICE: To be able to use the STATION keys you have to activate the option in the **GLOBAL SETUP / RC INPUT**.

Playback volume
With the buttons **VOLUME +** and **VOLUME -** you are able to adjust the volume for the selected MAIN or RECORD level. The volume level is shown in the display. By shortly pressing the VOLUME buttons you are able to change the volume in small steps.
To be able to use the volume buttons on the RECORD level you have to choose the function VARIABLE VOLUME in the RECORD MENU.

Display brightness
With the **DIM** button you are able to adjust the brightness of the display in 4 steps. These steps vary between "max. brightness" and "off".
If you choose the option "off" the display will only light up when you change anything. This gives you a feedback about the changes you are applying. When you are done with your changes, the display will go blank again after a couple of seconds. If you enter the SETUP MENU while display is "off", it will automatically go to "maximum brightness" for the time you are in the SETUP MENU.

MAIN/REC change	Shortly pressing the **MODE** button will allow you to switch between MAIN and RECORD level.
Phase reversal	Longer Pressing the **DIM** button (approx. 2 seconds) will reverse the phase of the presently activated input channel by 180°. When the phase reversal is active, the **PHASE LED (2)** will light up.
Up sampling	If you have a D/A-converter module, and the module input is selected you are able to change the sample rate between 192kHz (**SRC LED (3)** lights up) and 96 kHz (**SRC LED (3)** is off). You may do so by shortly pressing the **AUDIO** button.
Input D/A module	If you have a D/A-converter module and the module input is selected, you have the option to select between the **USB** and the **RCA** input. Longer pressing the **AUDIO** button (approx. 2 seconds) will switch the inputs.
Setup menus	• Longer pressing the **MENU** button (approx. 2 seconds) will open the **GLOBAL MENU**. Shortly pressing **MENU** again will close the menu.
	• Shortly pressing the **MENU** button will open either the **MAIN MENU** or **RECORD MENU**, depending on which level you are currently in. Shortly pressing the **MENU** button again will close the menu.
	• Longer pressing the **MODE** button (approx. 2 seconds) will open the **PHONES MENU**. Shortly pressing the **MENU** button will close the menu.
	• Shortly pressing the **AUDIO** button will open the **PHONO MENU**, if a Phono MM or MC module is equipped and the module input is selected. Shortly pressing the **MENU** button will close the menu.
	• Longer pressing the **AUDIO** button (approx. 2 seconds) will open the **MC MENU**, if a Phono MC module is equipped and the module input is selected. Shortly pressing the **MENU** button will close the menu.
	• Longer pressing the **AUDIO** button (approx. 2 seconds) will open the **MM MENU**, if a Phono MM module is equipped and the module input is selected. Shortly pressing the **MENU** button will close the menu.

BURLINK

CONNECTIONS

Connections to the BURLINK interface can either be done by the 9-pin D-SUB connector (RS-232) or by the USB connector.

RS-232 configuration: 9600Baud, 8bit, parity: none, 1 stop bit, no hardware handshake

A USB device driver needs to be installed when using the USB connector. System requirements for using the USB software are either **WINDOWS 2000** or **WINDOWS XP** operating system.

COMMANDS

Listed below are the possible commands to control the preamp 077. All commands needs to be sent in capital letters finished with a "carriage return" **\r** .

POWON\r	switches the unit on
POWOFF\r	switches the unit to standby mode
INP+\r	switches the inputs of the preamp
INP-\r	switches the inputs of the preamp
INP1\r	switches to input 1
INP2\r	switches to input 2
INP3\r	switches to input 3
INP4\r	switches to input 4
INP5\r	switches to input 5
INP6\r	switches to input 6
INP_MOD\r	switches to module input
DAC_SRC_INP\r	switches between the inputs of the D/A converter module, if equipped
DAC_SRC_RCA\r	switches to the RCA input of the D/A converter module, if equipped
DAC_SRC_USB\r	switches to the USB input of the D/A converter module, if equipped
VOLUP\r	increases the volume by one step
VOLDN\r	decreases the volume by one step
VOL_BURxx\r	sets the volume level to the value xx referred to the BURMESTER scale
VOL_DByxx\r	sets the volume level to the value xx referred to the dB scale
	(y=algebraic sign **+** or **-**, respectively a blank space with the value 00)
MR_COND\r	switches between MAIN and RECORD level
MAIN_COND\r	switches to MAIN level
REC_COND\r	switches to RECORD level

PHASE\r	switches the active input between 0˚ and 180˚ phase
PHASEON\r	switches the active input to 180˚ phase
PHASEOFF\r	switches the active input to 0˚ phase
AUDIO\r	switches the D/A converter module between a sample rate of 96kHz and 192kHz, if equipped
AUDIO96\r	switches the D/A converter module to a sample rate of 96kHz, if equipped
AUDIO192\r	switches the D/A converter module to a sample rate of 192kHz, if equipped
DIM0\r	switches the display brightness to maximum
DIM1\r	switches the display brightness to middle
DIM2\r	switches the display brightness to low
DIM3\r	switches the display to off mode
DIM\r	switches the brightness up step by step (0,1,2,3,0,1,2....)
GLOBAL_SETUP\r	opens and closes the GLOBAL menu
LAYER_SETUP\r	opens and closes the MAIN menu or the RECORD menu
PHO_SEL\r	opens and closes the PHONES menu
PH_SUB_UNBAL\r	opens and closes the PHONO menu, if equipped
PH_AMP_SETUP\r	opens and closes the MC menu or the MM menu, if equipped
NAV_UP\r	equals the navigation button ▲ on the remote control
NAV_DN\r	equals the navigation button ▼ on the remote control
NAV_LEFT\r	equals the navigation button ◄ on the remote control
NAV_RIGHT\r	equals the navigation button ► on the remote control
NAV_OK\r	equals the OK button of the remote control (confirming of input)
TYPE\r	shows the type of the unit
VERSION\r	shows the software version of the unit
INFO\r	shows the content of the alphanumeric display

GENERAL INSTRUCTIONS

Please read the owner's manual carefully and keep it safely. If you have any questions, we ask you to contact your local authorized dealer.

Operating temperature An operating temperature that is too high or too low may cause malfunctioning. We therefore recommend letting the unit settle for a while after unpacking before connecting and operating it.

Setting up When choosing a place for your equipment please observe the following:
- Avoid direct sunlight.
- Do not expose the equipment to excessive heat, cold, humidity or dust.
- Provide adequate air circulation; avoid placing the equipment in enclosures.
- Slots and other openings in the housing are for ventilation. They must not be covered up.
- Please make sure that the component is not exposed to dripping water or splash water, also don't place boxes with liquid onto your component.
- Open flames like candles must not be placed on top of any electronic unit.

Mains voltage Check before operating the unit to see if the mains voltage setting shown on the back panel below the AC mains input conforms to the voltage of your household power supply. Any changes should only be done by an expert only.
- For AC connection please use only the three-pronged power cable provided.
The grounding pin should not be bypassed under any circumstances. Connect the component only to a wall outlet with fully functional grounding pin.

Comm. Operation Before installation switch off all other components of your hifi system. Switch them back on only after making sure that all connections have been made correctly and completely.
Never try to operate the equipment when it has obviously been damaged or if liquid has gotten into it.

Terminals The pins of the connecting terminals on the back panel must not be touched under any circumstances. Static discharges may damage the electronic circuitry inside the unit.

Interconnects We supply custom-made balanced as well as unbalanced interconnect cables and speaker cables of any length to ensure highest-quality signal paths for our components. The impedance of our cables is ideally matched to all BURMESTER components.
For the cleanest power supply we recommend our triple-shielded power cord BURMESTER-POWER.

IR receiver The IR receiver receives signals from the BURMESTER remote control and must not be covered up by any objects.

Heat development Be careful when touching the housing – it may get quite warm during operation.

Reset If the unit does not react when pressing the control keys on the front panel it may be reset to normal operation by switching it off and back on using the AC mains switch in the back.

Lightening strikes   During the summer months, malfunctions often occur due to voltage spikes in the power lines after lightning strikes. Completely unplugging the power cord offers the only effective protection. Merely switching the unit off does not suffice since voltage spikes are able to arc over separated contacts.

Fuses   The fuses are located inside the unit and should only be changed by a qualified technician.

Warranty   We offer a warranty of 3 years for this unit. It is a precondition that the unit has been hooked-up and operated correctly, is mechanically undamaged.
Opening the unit, modifying it or dismantling outlets will void the warranty instantly.

Care   Never clean the housing with a wet cloth or chemical cleaning agent. Always make sure that no liquid gets into the housing.

This symbol on the equipment points to important notes, which can be found in the owner´s manual.

This symbol on or inside the equipment warns of dangerously high voltage.

If the unit is to be put out of operation definitively, take it to a local recycling plant for a disposal, which is not harmful to the environment.

CAUTION: **The unit must only be opened by qualified experts. Opening the unit provides the chance of encountering dangerously high voltage. Therefore the power cord must always be unplugged before opening the equipment.**

TECHNICAL SPECIFICATIONS

Dimensions	Preamp incl. base plate (W x H x D)	**450 x 160 x 340 mm**
		(17.7 x 6.3 x 13.4 inches)
	Power supply unit incl. base plate (B x H x T)	**450 x 160 x 340 mm**
		(17.7 x 6.3 x 13.4 inches)
Weight	Preamp incl. base plate	**approx. 25 kg**
		(55.0 lbs)
	Power supply unit incl. base plate	**approx. 25 kg**
		(55.0 lbs)
Mains voltage and fuses	230V 50Hz/60Hz ex. power supply	**2 x slow 1A E, 1 x slow 50mA E**
	115V 50Hz/60Hz ex. power supply	**2 x slow 2A E, 1 x slow 100mA E**
	230V 50Hz/60Hz	**1 x slow 500mA E, 1x slow 50mA E**
	200V 50Hz/60Hz	**1 x slow 500mA E, 1x slow 50mA E**
	115V 50Hz/60Hz	**1 x slow 1A E, 2x slow 100mA E**
Power consumption	ON	**55 W**
	STBY	**4 W**
	OFF	**4 W**

PLEASE NOTE: The dimensions do not include the length of binding posts and the space needed for plugs of interconnect cables.

The technical data and design of this product are subject to change without notice.