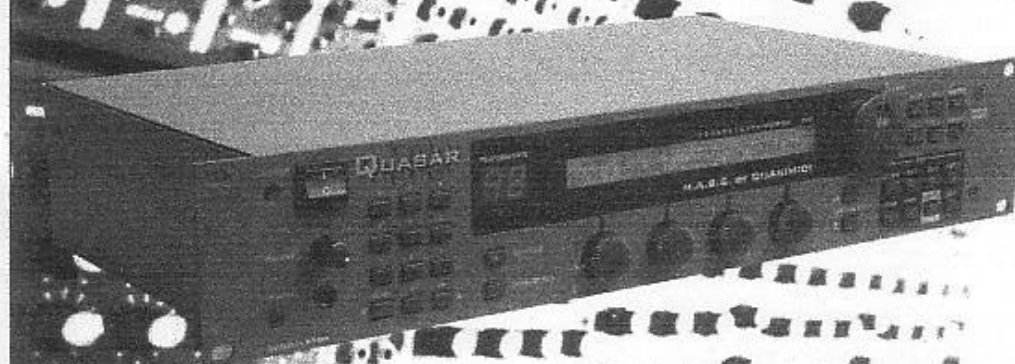


Ser. No.:

QUASAR

THE SYNTHESIZER



OWNER'S  
MANUAL

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## 1.) Introduction and Overview

First we want to thank you that you decided to buy the QUASAR. You will be astonished at the huge amounts of Sounds the QUASAR offers. The QUASAR will be the ideal partner for your music-productions. Although the QUASAR has got many possibilities it is really easy to use. And even Users of Sequencers will like the fantastic timing of the QUASAR's Multimode.

### QUASAR FEATURES:

- more than 1000 single-sounds in ROM
- 200 Performance Layer-Sounds in ROM. 100 Performance Layer-Sounds in RAM (editable)
- PCM subtractive, FM and additive synthesis
- analogue sounding filters (6 db/12 db/ 24 db) with controllable frequency and resonance capable of self-oscillation
- two independent digital highspeed signal processors with more than 50 effects including Vocoder, Ringmodulation and Rotary effect.
- 19 drumsets
- Built in Portamento
- Built-in Arpeggiator that can be synchronised by MIDI-Clock.
- Compatible with General-Midi
- 2 Midi-In
- Stereo Output and 4 single-Outputs
- Any editable parameter recordable in real time with a sequencer.

## 2.) Connecting the QUASAR to your equipment

To operate with the QUASAR you need the following:

- 1 MIDI -cable to connect a masterkeyboard to the QUASAR (included)
- at least 1 (mono) better 2 (stereo) audio cables ( included) to connect the QUASAR to your audio-equipment
- a masterkeyboard or a similar instrument which is able to transmit MIDI-Data
- Audio-Equipment for listening. In the easiest case this could be a headphone that you connect to the QUASAR's Phones Output (Front Panel)

Important: Please switch off all your equipment before you connect the QUASAR to your masterkeyboard and your Audio-equipment

Connect the MIDI-Output of your masterkeyboard with the MIDI-Input of the QUASAR. After that connect the audio-cables with your audio-equipment. Use the Line-Inputs of your Mixer or your Keyboard-Amp. If you use your Hi-fi-Amplifier you can either use the Line-, the AUX- or the CD- input. You must not use the high-sensitive Phono-Input ! If you like to work with SUSTAIN or you want to have more effective control of some parameters you can connect a Footswitch.

Now switch all units on. At the final stage switch on the amplifier to protect it from level-peaks. Set the Volume-Fader of your Mixer/Amplifier to a minimal value. Now you can play the first key.

### a.) DEFAULT-SETTINGS :

- Performance Mode: Bank A; Rockpian
- MIDI-Omni-Mode: The QUASAR plays the performance shown in the display. It doesn't matter which channel your Master-Keyboard sends on.
- The effects are active, the Single-Output-Mode is switched off.

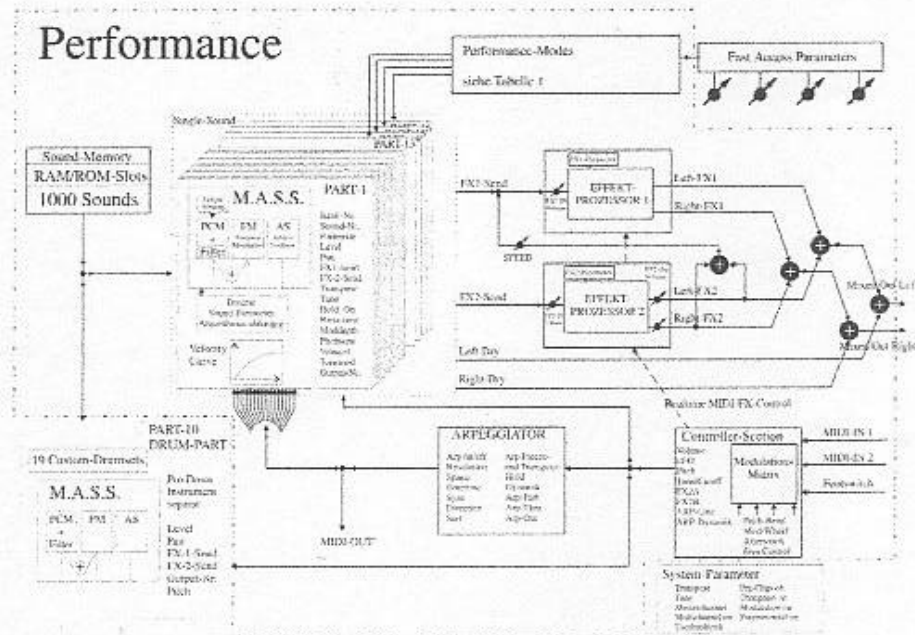
Please notice these adjustments, before you work with the QUASAR. If you work with sequencers you may have to change them. If you want to use the QUASAR in the MIDI-Poly-Mode, just switch the OMNI-Mode off. (Comm. Page <2>). Now the QUASAR receives the selected Performance just on the Masterchannel (Comm. Page <1>).

If you want to use one Performance in combination with Single-Sounds, switch the Parameter „Multichannel“ on (Comm. Page <5>). The Performance is now playable on the Master Channel, the other parts are using Single-Sounds. The 16-part multitimbrality is obtainable by pressing the „GM“-button.

For using the Single-Outputs you have to change the parameter „Single-Output-Mode“. Switch this Parameter on (Comm. Page <2>). In this mode you have to connect the Line-Outputs 1-4 to your mixer.

### 3.) QUASAR: Structure

The following picture shows you how the QUASAR is structured:



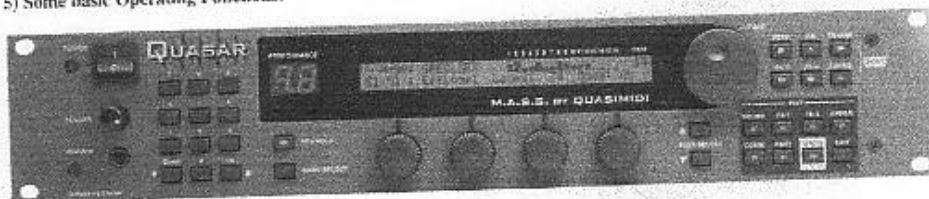
M.A.S.S. stands for Multi-Algorithm-Sound-Synthesis. To offer a wide spectrum of Sounds we decided to use different forms of synthesis. So you have got 5 synthesis algorithms using PCM and there are different forms of FM and additive-synthesis algorithms. Some algorithms even use combinations of the different synthesis forms. The huge amount of parameters would make it impossible to operate the QUASAR. That's the reason why we decided to go a different way. The quantity of the preprogrammed sounds is very high (1000 Sounds). So you have a lot of base-material that only a few parameters are enough to realise your desired sound. Take a sound that impresses you and change the envelope, the filters e.g., Layer sounds in the Performance-Mode, use the Arpeggiator to create Wave-Sequences. You will be surprised by the results. And the operation is so easy, it is in no way time consuming. Lastly you have the possibility to build up the QUASAR with optional RAM- and ROM-Boards (up to 256 new single sounds/ 100 new performance layer sounds). With the optionally Sample-Ram you even have the possibility to use your own samples in the QUASAR (see chapter 16b)

### 4.) The DEMO-Song

To get a first impression of the QUASAR listen to the internal demo-song. To start the demo press the buttons „Transp.“ and „Arpeg.“ at one time. In the LCDisplay the active parts of the QUASAR are displayed with moving bars. While the demo runs you can level in your audio-equipment.



## 5) Some basic Operating Functions:



On the left side of the Quasars Front panel you will find a group of buttons named 0-9 and „up“ and „Down“. With these 12 buttons you can choose the performances direct by their number or step through the Performances. When you type in the number, you always have to select two digits ( from 00-99). You can also use the buttons „0 - 9“ to select the different edit-pages directly in the edit - menus. The number is displayed in the red two digits display. In the same display there are two little dots, which flash when MIDI data is received on the two different MIDI-inputs of the QUASAR. Next to this group on the right are two additional buttons:

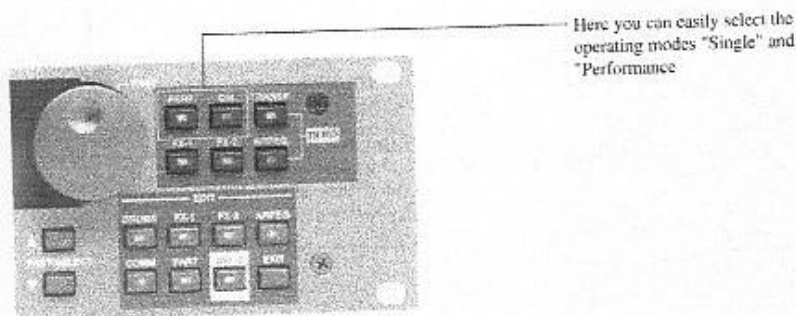
### „10's Hold“

Here you can freeze the 10th position of the performance number, so you can reach up to 10 performances by pushing only one single button (0-9). For example: when you play performance number 74 and the 10's-Hold function is activated you only have to push the 8 to reach performance number 78.

### „Bank select“:

Because the Quasar contains more than 100 performances, we have added a button named „bank-select“. After pressing this button the banknumber of the actual selected bank is blinking in the display. Now simply press one of the following numbers to reach the new bank:

- |                              |                                |
|------------------------------|--------------------------------|
| 1- RAM                       | Bank : RAM is displayed in LCD |
| 2- internal ROM              | Bank : A is displayed in LCD   |
| 3- internal ROM              | Bank : B is displayed in LCD   |
| 4- optional RAM or ROM-Modul | Bank : C is displayed in LCD   |
| 5- optional ROM-Modul        | Bank : D is displayed in LCD   |



The QUASAR has three operating modes: The „perf-mode“ with its sub-mode „multichannel“ and the „GM-Single“ mode. In the perf-mode you can select and play splits, layers and combinations of both. The „GM-Single mode“ is excellent for running the QUASAR with a sequencer on different MIDI-channels with different sounds at the same time (multitimbral). The sub-mode multichannel is excellent, if you like to play a performance live accompanied by a sequencer on the 12 remaining channels of the QUASAR (you will find this mode in the common-menu number 5. If this value is set to „on“, this mode is activated). In this case the masterchannel plays the performance and is disabled for

the remaining single sounds. This explains why you can use only 12 channels in this mode.

You can select the different modes direct on the front panel right next to the big Page-dial in the upper group. The Performance-button is named „Perf.“ and the GM-Single-button is named with „GM“. The task will be acknowledged by the red led in the button. The default-mode by turning the power on is the Performance-mode and „multichannel“ is switched off.

In the same group as the mode-buttons are the ON/OFF-buttons for the two effect-units, the arpeggiator and the global transpose of the QUASAR. When the function is activated the red led in the button is illuminated. Independent from the kind or level of an effect you can simply mute the desired function immediately e.g. on stage or for comparing. The default setting of this group is: FX 1 and FX 2 are activated, the arpeggiator and the global transpose are disabled. Beneath this group on the upper right you will find the edit-section. This section is used for change Sounds, MIDI-Parameters, Special-parameters (common) and effect parameters. To make editing easier we divided this group in seven main-menus.:

#### **DRUMS:**

In this menu you can change the drumsounds of a drumset in the following parameters: level, pitch, panorama, FX1 level and FX2 level.

#### **FX1 /FX2:**

In this menu you can select and change the types and parameters of the different effect structures.

#### **ARPEGG:**

All efficient parameters of the arpeggiator can be manipulated in this menu.

#### **COMM:**

In this menu you find the system-parameters like master channel, the master tune and chromatic transpose, the MIDI-mode, the master velocity curve for the QUASAR in general, the option to work with the single outputs, several MIDI-Filters for input and output, some switch-functions and the MIDI-modulation-matrix.

Attention: Menu number <6> can only be reached, when you have activated the „Performance-mode with the button „Perf.“. In „GM-Single-mode“ this common-submenu is disabled.

#### **PART:**

All changes concerning the single sounds of the QUASAR (up to 16 simultaneously) can be done in this menu. From Panorama, tuning, level, FX sends, filters, envelopes, Part-velocity curves and Portamento to modulations; This is the main section for you to create your own sounds that can be dumped via MIDI or stored in a Performance-memory.

#### **WRITE:**

In this menu we placed all functions to store your sound changes, Part and Performance init-menus, a Part copy function and all MIDI-dump commands.

#### **EXIT:**

With this button you can leave the edit-menu and the last edited part or performance is displayed.

To each of the above mentioned menus exist several submenus (pages) that can be selected with the big dial named „Page“ or with the „0-9“-Buttons. In the display all parameters (up to four) are shown and can be edited directly with the four dials under the display. As you have already read in the introductions the QUASAR is 16 times multitimbral. This means nothing else than having 16 different synths in one box with one common surface.

So QUASAR is like having 16 different Synthesizers that share one arpeggiator, two effect-units and a little mixer with 4 subgroups and a stereo output. A very useful option is, that you can edit the sounds of the single synths in realtime while an external sequencer is running the QUASAR. To select the single synth (by the way: we call it a „PART“) to be edited, press one of the two „PART-SELECT“ buttons. With these two buttons you can skip through the Parts backwards and forwards. If you hold the button it increases or decreases the part number automatically. The selected part is shown by its number in the upper right corner of the LCDisplay

The PART-number is identical with the MIDI-Channel number.

Now you have learned all about the buttons on the panel of the QUASAR. A very special feature of the QUASAR is, that all changes of the buttons and dials can be recorded in realtime on a connected sequencer. For details to activate this function see chapter 14 page 29

In the next 3 chapters we are going to play single sounds, drumsounds and performances.

#### 6.) Playing with the performance-sounds:

If you have connected the QUASAR to your MIDI-keyboard and your amplifier or headphones and you switch the QUASAR on it is in the Performance-mode by default. Now you can play the performances if everything is correct. If not, there might be two main mistakes.

##### Mistake 1:

The MIDI-connection is faulty. If the MIDI-Connection is O.K., the small MIDI activity LED in the Performance display will flash each time you press a key on the keyboard. You will find two LEDs in this performance-number display in the right corner of each character (which normally is the decimal point), for the two MIDI-inputs.

##### Mistake 2:

The MIDI-signal-LED is flashing but you don't hear anything. Check the audio cables and make sure that the volume controller on the left side of the QUASAR's panel board is set to a normal volume.

In chapter 17 you will find a complete list of all performances (ROM and RAM). You can select the performances in the following way:

You will recognize, that each performance uses different controllers like aftertouch, modulation or pitch bend for controlling several parameters of the sound. For example the modulation wheel is not always used to control a frequency-vibrato. In many performances it is used to open the filter or to control the gate-time of the arpeggiator etc. It is even possible to control the intensity of a delay-effect in a performance-sound. Also the footswitch-connector on the backside of the QUASAR can be programmed for various functions. How this can be programmed for your own performances is described in chapter 10 a -g. Checking out the preprogrammed 200 ROM- and 100 RAM-performances gives you an excellent overview about the QUASAR's power.

A performance can be built out of up to four single sounds. The performance always uses the sounds of the parts 13, 14, 15 and 16 (the upper four synths of the QUASAR). These sounds can be layered or split on the keyboard in different ways. Some of the performances use the possibility of velocity-switch, so it always makes more sense to use a MIDI-Keyboard with velocity response and aftertouch.

If you turn the Page-dial you now have instant access to the single-sounds of the performance, the volumes, the part mode (see chapter 10d) and the panorama of each sound individually. Try it by selecting new values with the four dials under the big display.

In some performances the arpeggiator is activated. To disable it simply press the button „ARPEGI.“ in the upper right block of the QUASAR front panel. The same can be done with the two effect-units: simply deactivate them by pressing the corresponding button in this upper right block.

Attention: Some sounds use 100% effect signal and no original signal, so the Pan-parameter therefore is set to „—“, so you will not hear this sound if you switch the effects off.

#### 6a) Tuning and transposing:

If you are playing the QUASAR in combination with other synths or instruments it might be important to change the tuning of the QUASAR. Therefore press the „COMM“ button in the Edit-section and turn the Page-dial until the following menu appears:

```
COMMON EDIT: 11> SYSTEM PARAMETER 1
TRANSP: C TUNE: -0 MASTER CHANNEL: 1
```

With the first two dials you can change the chromatic-transposition and the fine tuning. If you have changed the value of the chromatic transpose the LED in the „TRANS“-button is illuminated and by pressing this button you can switch between your selected transposition and the basic c-transpose (light is off).



## 7.) Playing the single sounds

Next, you must surely like to know how the single sounds for the parts sound like. In the QUASAR you will find more than 1000 of them in a high quality. The single sounds are real sounds and not a mixture between multiple combinations. That means, that you always have real polyphony, independent from the sounds you have chosen.

To play the single sounds you have to select the „GM“-button on the front panel. In the display the following message appears:

```
GM-DD1:  KLAVIER  ----- 1
SNDGROUP:  GR-PIANO  LEVEL:100  MODE:ON
```

In the upper row the sound-group, the sound-number and the sound name are shown in the left corner. In the right corner the part number is displayed (here: part 1). In between there are 16 blocks left free for the MIDI-channel-monitor. Each time you press a key on your midi-keyboard a bar appears in this sector direct under the printed number that corresponds to your keyboard's transmit-channel. So it is no longer a problem to find out on which MIDI-channel your keyboard sends its data. In case a computer sequencer is connected to the QUASAR and playing a song, all used MIDI-channels are shown on the MIDI-monitor. The deflection depends on the velocity of the MIDI-events.

With the part select buttons you can choose the part you wish to see in the display. For example: you can easily see what sounds are playing on the other channels or what filter values are chosen on the other parts. If you have selected the correct part (in this case your keyboard transmit-channel number)

## 8) The Drumsets:

It goes without saying that the QUASAR also contains a lot of drumsounds. As it is defined in the General-Midi-Norm the Drumsets are using the Midi-Channel 10. If you want to use more than one of the 19 drumsets simultaneously, you can put more drumsets to other MIDI-Channels (but without editing the single drum instruments).

You find the Sets and the single drum instruments in the Soundgroup „Drumsets“ and „Drums“ where they can easily be chosen.

There are two possibilities to play the Drumsets. Either you switch the Send-Channel of your Masterkeyboard on MIDI-Channel 10 or you select a drumset on the part you play on.

In the first case you can - after selecting part 10 - choose the drumset directly. In the second case you first have to select the Soundgroup „Drumsets“. In both cases please take the „GM“-Mode.

If you've chosen the Drumset on Channel 10 you can edit the single drum instruments of this set in Level, Pitch, Panorama and FX-sends individually (just press the „DRUM“-button or look in Chapter 11).

## 9.) Editing of the Single-Sounds:

Independent of being in „GM“ or „Performance“-Mode you can edit the several parts of the sound. The parameters of the parts are stored in every Performance. To get to know the different parameters it is recommendable to work at first with just one Single-Sound in the „GM“-Mode. In this case you just listen to the sound you work with.

### a.) PartOutput and Panorama (Edit- menu „PART“: Page 1>)

Press the „GM“-Button at first. Note that the part you play is shown in the display. Look at the „MIDI“-Monitor. Choose the right part with the „PART-SELECT“-Buttons. After that, press the „PART“-Button, so you reach the following LCDisplay-Message:

```
PART EDIT: KLAVIER  11> OUTPUT ASSIGN 1
PAN: >C<  FX1 SEND: 63  FX2 SEND: 0
```

With the first dial you choose the panorama-position of the part. The following adjustments are possible:

„>C<..	Position in the middle of the stereo-sound
„L< 1 - L< 7“	The sound comes from the left more or less drastically
„R< 1 - R< 7“	The sound comes from the right more or less drastically
„RND“	Random: each note gets a random Pan-Position
„KEY“	Like a Piano: Lower keys come from the left. Higher keys from the right
„YEK“	Vice versa
„DYN“	The harder you play the sound turns more to the right

## 7.) Playing the single sounds

Next, you must surely like to know how the single sounds for the parts sound like. In the QUASAR you will find more than 1000 of them in a high quality. The single sounds are real sounds and not a mixture between multiple combinations. That means, that you always have real polyphony, independent from the sounds you have chosen.

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```
GM-DD1:  KLAVIER  ----- 1
SNDGROUP:  GR-PIANO  LEVEL:100  MODE:ON
```

In the upper row the sound-group, the sound-number and the sound name are shown in the left corner. In the right corner the part number is displayed (here: part 1). In between there are 16 blocks left free for the MIDI-channel-monitor. Each time you press a key on your midi-keyboard a bar appears in this sector direct under the printed number that corresponds to your keyboard's transmit-channel. So it is no longer a problem to find out on which MIDI-channel your keyboard sends its data. In case a computer sequencer is connected to the QUASAR and playing a song, all used MIDI-channels are shown on the MIDI-monitor. The deflection depends on the velocity of the MIDI-events.

With the part select buttons you can choose the part you wish to see in the display. For example: you can easily see what sounds are playing on the other channels or what filter values are chosen on the other parts. If you have selected the correct part (in this case your keyboard transmit-channel number)

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It goes without saying that the QUASAR also contains a lot of drumsounds. As it is defined in the General-Midi-Norm the Drumsets are using the Midi-Channel 10. If you want to use more than one of the 19 drumsets simultaneously, you can put more drumsets to other MIDI-Channels (but without editing the single drum instruments).

You find the Sets and the single drum instruments in the Soundgroup „Drumsets“ and „Drums“ where they can easily be chosen.

There are two possibilities to play the Drumsets. Either you switch the Send-Channel of your Masterkeyboard on MIDI-Channel 10 or you select a drumset on the part you play on.

In the first case you can - after selecting part 10 - choose the drumset directly. In the second case you first have to select the Soundgroup „Drumsets“. In both cases please take the „GM“-Mode.

If you've chosen the Drumset on Channel 10 you can edit the single drum instruments of this set in Level, Pitch, Panorama and FX-sends individually (just press the „DRUM“-button or look in Chapter 11).

## 9.) Editing of the Single-Sounds:

Independent of being in „GM“ or „Performance“-Mode you can edit the several parts of the sound. The parameters of the parts are stored in every Performance. To get to know the different parameters it is recommendable to work at first with just one Single-Sound in the „GM“-Mode. In this case you just listen to the sound you work with.

### a.) PartOutput and Panorama (Edit- menu „PART“: Page 1>)

Press the „GM“-Button at first. Note that the part you play is shown in the display. Look at the „MIDI“-Monitor. Choose the right part with the „PART-SELECT“-Buttons. After that, press the „PART“-Button, so you reach the following LCDisplay-Message:

```
PART EDIT: KLAVIER  11> OUTPUT ASSIGN 1
PAN: >C<  FX1 SEND: 63  FX2 SEND: 0
```

With the first dial you choose the panorama-position of the part. The following adjustments are possible:

„>C<..	Position in the middle of the stereo-sound
„L< 1 - L< 7“	The sound comes from the left more or less drastically
„R< 1 - R< 7“	The sound comes from the right more or less drastically
„RND“	Random: each note gets a random Pan-Position
„KEY“	Like a Piano: Lower keys come from the left. Higher keys from the right
„YEK“	Vice versa
„DYN“	The harder you play the sound turns more to the right

„NYD“	Vice versa
OUT: 3	The signal comes out of Output 3
OUT: 4	The signal comes out of Output 4

The third dial (FX1 send) controls the depth of the FX 1 of the chosen part. The values can be 0-63. The fourth dial controls the depth of the FX 2. Both Dials don't cause a change at all, if the FX1 or FX 2 are switched off.

*Important: If the Single-Output-Mode is selected, a new menu appears for selecting single outputs rather than pan and FX-sends.*

#### b.) Tune and Transpose (EDIT-MENU „PART“: Page <2>)

Turn the Page-Dial to reach Page <2>

```
PART EDIT: KLAVIER    <2>  TUNE          1
CORSE TUNE: +0        FINE TUNE:  -0
```

With the second Dial you can change the coarse-tune of the part. The value can be changed in half-tones up to two octaves higher or lower. With the fourth dial you can change the fine-tune of the part.

#### c.) The Filter-adjustments of the QUASAR (Edit-menu „PART“: Page <3>)

The parameter of this page only works with Synthesis-Algorithms that use a filter. The slope of the filters depends on the chosen algorithm (6 db/ 12 db/ 24 db)

```
PART EDIT: KLAVIER    <3>  LCF-OFFSETS    1
CUTOFF-FREQ: +0        RESONANCE:  -0
```

The filter is a Low-Pass Filter. This filter cuts the treble from a selectable frequency (Cutoff-Frequency).

You can change this Frequency with the second Dial. Higher values cause a brighter sound, lower values a darker sound.

The fourth dial controls the resonance. A high value can even lead to self-oscillation.

#### d.) The envelope-generator of the QUASAR (Edit-menu „PART“: Page <4>)

The envelope of a synthesizer is responsible for the passing of the amplitude. Percussive sounds like drums, guitars or piano start very fast, strings and brasses need a little bit longer until they reach their final level.

```
PART EDIT: KLAVIER    <4>  EG-OFFSETS    1
ATT: +0    DEC: +0    REL: +0
```

- The first dial changes the Attack-Time
- The second dial changes the Decay-Time
- The third dial changes the Release-Time after releasing a key

#### e.) Vibrato (Edit-Menu „PART“: Page <5>)

The following parameters control the Vibrato of the selected part. The Vibrato affects the pitch.

```
PART EDIT: KLAVIER    <5>  VIB-OFFSETS    1
RATE: +0  DEPTH: +0    DELAY: +0
```

- The first dial changes the rate (speed) of the vibrato
- The second dial is responsible for the depth of the vibrato
- The third dial changes the start point of the vibrato.

#### f.) Modulation- Depth/ MIDI-Controller (Edit-Menu „PART“: Page <6>)

MIDI-Controllers like Modulation-Wheel or Pitch-Bend are very important to make your music more expressive.

```
PART EDIT: KLAVIER <6> MODULN-DEPTH 1
LFQ: 76 VOL: 63 PITCH: +2 TONE: +63
```

With the first dial you can chose how deep the Modulationwheel affects the Vibrato.

The second dial makes the same but affects the volume (VOL: „-63“ „+63“).

The third dial changes the amount of halftones that can be changed with the Pitch-Wheel (PITCH: „-12“ „+12“)

The fourth dial makes it possible to modulate the Sound more or less dramatically (TONE: „-63“ „+63“)

The MIDI-Controllers for these parameters are selectable in the Common-menu (Controller-Routing; Chapter 10g), page 16)

#### g.) Velocity-, Portamento and Hold-Functions (Edit-Menu „PART“: Page <7>)

```
PART EDIT: KLAVIER <7> VELOCITY/ HOLD 1
VELOCURVE: LIN PORTTIME: 0 HOLD: ON
```

Sometimes it is necessary to change the Velocity-Curve of an instrument that corresponds to the masterkeyboard you are using or to your kind of playing. The following curves are selectable:

- LIN - The dynamic of your masterkeyboard will be transmitted without change
- LIN- - The dynamic of the masterkeyboard will be compressed. Silent passages sounding louder than they are played, louder passages will be a little bit more silent. The changes are linear.
- LIN+ - The dynamic will be expanded. The dynamic stays linear, but it is stronger
- FLX - The velocity will always be the same independent of the Velocity of the masterkeyboard
- EXP- - The Velocity-curve gets an exponential course and is compressed at the same time
- EX- - The same as EXP- but compressed in a stronger way
- EXP+ - This curve passes in an exponential and expanded way.
- EX++ - The same as EXP+ but expanded in a stronger way.

With the third dial you can adjust different portamento times for each part. The portamento will be active if „MONO“ or „LEAD“ is selected in the Part-Mode.

With the fourth Dial you can decide if the Sustain-Pedal affects the chosen part (Hold On) or not (Hold off)

### 10.) Performances:

The QUASAR-Performances are structured in a very simple way to make it easy to create your own performances. You can decide between so called Performance-Modes like Split, Layer or Unison e.g. to create the structure of your performance. QUASAR keeps all parameters of a Performance in its memory as there are Part, FX- and Arpeggio-Parameter. So don't be afraid, that a change of the filter in a performance part changes the same single-sound in another performance. All parameters are stored per performance.

#### a ) Editing a Performance:

The performances always use the parts 13-16. The other parts can also be used by the sequencer (Multichannel-Mode). So you can even use a performance in the Multimode. To edit a performance you first have to press the „PERF“-Button followed by the „COMM“-Button in the EDIT-menu. Now you see the following Display message:

```
COMMON EDIT: <6> PERFORMANCE PARAMETER
PERFMODE: SINGLE PVDL: 127
```

On this page you can choose the following Performance-Modes:

Single	-	One Sound. Part 13	->
Double	-	Two sounds are layered. The parts are 13 and 14	
Layer3	-	Three sounds are layered. Parts 13,14,15	
Layer4	-	four sounds are layered. Parts 13,14,15,16	
Split 1+1	-	One sound is playable left from the splitpoint, the other(s) right from the	
Split 1+2	-	splitpoint. The splitpoint can be varied with the „KEY“-Parameter. The left	
Split 1+3	-	sound is on part 13, the other(s) on 14 (15,16)	
Split 2+2	-	Similar to the other splitmodes, but with different amounts of sounds on the	Split 2+1
	-	left side of the splitpoint	
Split 3+1	-	See above	
DynSplit	-	Two sounds, one sound is playable until a special velocity is reached. At this	
	-	velocity you have a breakpoint and the second sound starts.	
DynSpl2	-	The same as Dynsplit but with four parts (2+2)	
Ensemble	-	The Sounds of a Chord are divided up the parts 13-16.	
SndRotate	-	The incoming keys are „rotating“ through the parts 13- 16. Use this mode	
	-	together with Arpeggiator. So you will get Wave- sequences.	
UpVocSolo	-	The highest key of a chord uses the sound of part 16, the other keys the parts	
	-	13-15	
Unisono	-	Four times the same sound is detuned with a changeable value (0 - 127).	

On this page (<6>) you further find a parameter called PVOL that regulates the main volume of the performance.

#### b.) Selecting the sounds of a performance

After choosing a Performance-Mode you should leave the Common-menu by pushing the Exit-button. Now you see the main-page of the performance-mode:

```
A-04: MONUMENT 1>SOUNDGROUP      - -
EFFECTS  GN-ENSEMBL
```

For every part you can select a soundgroup. Starting on the left with part 13 until part 16 on the right. If you've chosen the „Double“-Mode (as in this example) you just see the parts 13 and 14. The missing parts show you that they are not activated.

Now step to the next page by turning the page-dial. There you can select the single-sounds for every part.

```
A-04: MONUMENT <>SOUND-SELECT      - -
CHOIR      CHOR
```

If you change a single-sound you will see the soundgroup and the program-number of the selected sound. This message disappears after a short while.

```
A-04: MONUMENT SOUND-SELECT  51-003
CLUSTER    CHOR
```

#### c.) Adjustment of the different part-levels

After you've selected the sounds of a performance you maybe have to change their levels. Go to the next page with the page-dial.

```
A-04: MONUMENT VOLUME CONTR      - -
LEVEL:100  LEVEL:100
```

Now the dials of the QUASAR behave like faders on a mixer.



#### d.) Partmode- and Panorama-Control

On the next page you can select the different part-modes:

```
A-04: MONUMENT <-> PART-MODE - -
MODE: ON MODE: ON
```

Here you can activate or mute a part, further you can activate different playmodes called Lead- and Mono-Mode. If you mute a part of a performance you see a „X“ instead of a bar (in the example part 14 is muted)

```
A-04: MONUMENT PART-MODE - X
MODE: ON MODE: OFF
```

The remaining playmodes are especially for sololines. These modes are called Lead- and Mono-Mode. In these both cases you can activate the portamento function. If one of these modes is active the part is monophonic. The Mono-Mode has a so called „last note priority“. In the Lead-Mode always the highest note is sounding.

If you want to change parameters of a sound like tune, filter, FX-Sends e.g. you have to go into the Part-Edit-menu. The QUASAR even stores these kind of changes in a performance.

Turn to the next page. There you find the possibility to control the panorama:

```
A-04: MONUMENT <1 PANORAMA - -
PAN: - - - PAN: - - -
```

Here you can change between different adjustments. The different possibilities you see in chapter 9a, page 11.

If you want to change parameters of a sound like tune, filter, FX-Sends e.g. you have to go into the Part-Edit-menu. The QUASAR stores even these kind of changes in a performance.

#### e) Footswitch Control (Edit-Menu „COMM“-Page <7>)

Push the „COMM“-Button. Select Page <7> with the page-dial.

```
COMMON EDIT: <7> FOOTSWITCH CONTROL
FTCTRL: 64 FTON: 64 FTOFF: 0 FITOG: OFF
```

This page regulates the adjustments of the Footswitch. The polarity of the footswitch doesn't matter. The QUASAR will check by itself of what polarity the Switch is. But check that the Footswitch is connected to the QUASAR before you switch the power on.

The first parameter (FtCtrl: 0-127) shows which MIDI-Controller is controlled by the Footswitch. This Controller affects the QUASAR and it is transmitted via the MIDI-Output.

The second parameter (FtOn: 0-127) shows the value for the controller if the switch is pressed.

The third parameter (FtOff: 0-127) shows the value for the selected controller if you release the switch.

The last parameter on this page (FtTog: On/Off) changes the function of the Footswitch. If you put this parameter to „on“ the footswitch becomes a toggle switch.

#### f.) Free MIDI-Controller (Edit-Menu „COMM“-Page <8>)

On the next pages you can control the Modulation-routings. You can define a free selectable MIDI-Controller on page <8>:

```
COMMON EDIT: <8> FREE MIDI CONTROLLER
FREE CNTRL: 64
```

Here you give in the controller number to which the Quasar should react. See also the addendum page 48.

g.) The Modulation-Matrix ( Edit-Menu „COMM“ -Page <9> - <161>)

For each of the assignable MIDI-Controllers you can control the strength of the effect to the eight possible targets:

**Modulationwheel:**

COMMON EDIT: <9> MODSOURCE: MODWHEEL  
>LFO: +63 >VOL: +0 >PIT: +0 >TONE: +0

COMMON EDIT: <10> MODSOURCE: MODWHEEL  
>FXA: +0 >FXB: +0 >ARP: +0 >ARPGT: +0

**Aftertouch:**

COMMON EDIT: <11> MODSOURCE: AFTERTOUCH  
>LFO: +63 >VOL: +0 >PIT: +0 >TONE: +0

COMMON EDIT: <12> MODSOURCE: AFTERTOUCH  
>FXA: +0 >FXB: +0 >ARP: +0 >ARPGT: +0

**Pitch-Bend:**

COMMON EDIT: <13> MODSOURCE: BENDWHEEL  
>LFO: +63 >VOL: +0 >PIT: +0 >TONE: +0

COMMON EDIT: <14> MODSOURCE: BENDWHEEL  
>FXA: +0 >FXB: +0 >ARP: +0 >ARPGT: +0

**Free MIDI-Controller:**

COMMON EDIT: <15> MODSOURCE: FREECTRL  
>LFO: +63 >VOL: +0 >PIT: +0 >TONE: +0

COMMON EDIT: <161> MODSOURCE: FREECTRL  
>FXA: +0 >FXB: +0 >ARP: +0 >ARPGT: +0

**The eight different Modulation-targets:**

**Page 1:**

>LFO: +63 >VOL: +0 >PIT: +0 >TONE: +0

The first parameter (Lfo: 0-63) controls the strength of the LFO-Modulation. If you can't hear the modulation effect please check if the LFO-Parameter of the corresponding part is put on a value higher than 0 in the Part-menu (Page <6>).  
The second parameter (Vol: 0-63) controls the Volume. In the corresponding Parameter in the Part-menu you have values from „-63“ to „+63“. This makes it possible to fade over between two sounds.  
With Parameter 3 (Pitch: 0-63) you can control the Pitch. Don't forget to check the parameter in the Part-menu.  
The last Parameter (Tone: 0-63) affects the Filter (if the sound uses PCM) or the Feedback (FM-Sounds).

**Page 2:**

>FXA: +0 >FXB: +0 >ARP: +0 >ARPGT: +0

The first Parameters (FX\_A and FX\_B: „-63“ to „+63“) are for the Modulation of the parameters of FX\_2 (Chapter 12c: page 27).  
The third Parameter (ArpD: „-63“ to „+63“) has effect on the Velocity of the Arpeggiator. The modulated value will be added or subtracted to the original Velocity.  
The last Parameter (ArpGt: „-63“ to „+63“) controls the length of the single notes of the Arpeggiator (Staccato->Legato).

## 11.) Editing the Drumsounds

If you want to change some of the Drumsounds of the Drumset on Midichannel 10 you can easily do that. Just press the „DRUMS“-Button. The following message appears in the display:

Page 1 of 2 pages:

```
DRUM EDIT: HIGH_0      1 1 > LEVEL/ PITCH
NOTE: 0#0              LEVEL:110      PITCH:-0
```

If you want to listen to the changes you make simultaneously, your MIDI-masterkeyboard's transmit-channel must be set to MIDI-Channel 10.

With the first dial you select the key on your keyboard. In the upper line the name of the assigned drum instrument appears. Changes of the parameters affect the selected instrument.

The second dial controls the Volume of the instrument (Level: 0-127). The fourth dial controls the Tune (Pitch: „-24“ - „+24“) of the selected drumsound.

Turn the Page-Dial:

Page 2 of 2 pages:

```
DRUM EDIT: HIGH_0      < 2 1 OUTPUT ASSIGN
NOTE: 0#0  PAN: >C< FX1SEND: 63 FX2SEND: 0
```

Again the first dial controls the selections of the drumsounds. The second dial controls the panorama position of the instrument. The third and the fourth dial control the FX1- and FX2-send.

*Check if the FX1- and FX2- Send in the Part-Mode of Part 10 are both be set to „63“.*

If you want to save your adjustments (Pitch; Pan; Level and FX-Sends) in a sequencer you can do this with a dump („WRITE“-menu PAGE <9>). The different Dumps are described in Chapter 15 f-j, Page 33

*In the Single-output-Mode you can choose the Single-Outputs (1-4) instead of the Pan and the FX-Sends. The Display message changes.*

## 12.) Editing of the effect processors of the quasar

The quasar offers two independent Effect processors, where FX-1 is responsible for Reverb, Echo and Room simulation effects and FX-2 mainly does Modulation and special effects. Both effect processors can be driven serial, which means that the output of FX-2 can be routed to the input of FX-1 (via the SFEED-parameter). This way, reverb can be added to chorus, flanger of special effects. The Effect levels for each sound can be adjusted in the part menu with FX1-send and FX2-send.

For modulation effects, it is often useful to set the panorama to „off“ (Pan: — in part edit menu). Otherwise the original sound would be heard too, which is not wanted for overdrive, phaser and equalizer.

The effect parameters are available through „Edit FX1“ and „Edit FX2“. These menus are structured as follows: the first alpha-dial changes the effect algorithm, the other ones are for the effect parameters. The actual page number is displayed in the right upper corner of the display, the total number of parameter pages depends on the selected effect algorithm. Small marks (< >) show if there are more pages to the left or the right. If not, a vertical line appears instead (e.g. page 11 >).

Here is a complete list of all effects :

FX-1:	FX-2:
1 Room	1 Chorus 1
2 Small Room	2 Chorus 2
3 Warm Room	3 Chorus 3
4 Chamber 1	4 Flanger 1
5 Chamber 2	5 Flanger 2
6 Plate 1	6 Phaser 1
7 Plate 2	7 Phaser 2
8 Hall	8 Rotary & Overdrive
9 Large Hall	9 Rotary 2
10 Cathedral	10 Rotary 3
11 Gated Reverb 1	11 Rotary 4
12 Gated Reverb 2	12 Vibrato
13 Gated Reverb 3	13 Panning
14 Duck Reverb	14 Tremolo
15 Early Reflection 1	15 Short Delay
16 Early Reflection 2	16 Long Delay
17 Early Reflection 3	17 Cross Delay
18 Early Reflection 4	18 Ping-Pong
19 Raindrops	19 Gated-Delay
20 Long Delay	20 Duck-Delay
21 Duck Delay	21 Special SFX
22 HQ-Delay	22 Equalizer
23 Bypass	23 Wah-Wah Overdrive
	24 Auto Wah-Wah
	25 Warm Overdrive
	26 Distortion
	27 Ring Modulation
	28 Vocoder
	29 HQ-Delay
	30 Bypass

### a) FX-1 - Room simulation, reverb and echo

The first 10 algorithms produce room simulations. They differ from each other in pre-delay and early reflections. All changeable parameters are the same for these effects:

- 1 Room
- 2 Small Room
- 3 Warm Room
- 4 Chamber
- 5 Chamber 2
- 6 Plate 1
- 7 Plate 2
- 8 Hall
- 9 Large Hall
- 10 Cathedral

#### Effects 1-10)

parameter page 1 of 1:

```
FX1 EDIT: ROOM          PAGE 1 1 1
FX-TYP: 1 INPLV: 60  SPEED:0  DECAY: 50
```

InpLv - Effect input level can be adjusted here  
 SFeed - The amount of signal which comes from FX-2 to FX-1  
 Decay - Reverb Time

#### Effects 11-14)

For the following 4 effects, the reverb is combined with an audio-gate:

- 11 Gated Reverb 1
- 12 Gated Reverb 2
- 13 Gated Reverb 3
- 14 Duck Reverb

The gate opens and closes depending on its input level. In gated reverb effects this forces an abrupt muting of the reverb. On the other hand, reverb is only heard when signal is loud enough. With duck reverb it works just the other way around: soft sounds open the gate, while loud sounds close it.

parameter page 1 of 2:

```
FX1 EDIT:  GATEDREV1      PAGE 1 1 1
FX-TYP: 11 INPLV: 60  SPEED: 0  TRESH: 16
```

parameter page 2 of 2:

```
FX1 EDIT:  GATEDREV1      PAGE 2 2 1
FX-TYP: 11 HOLDT: 2  ATTCK: 16  RLEAS: 30
```

InpLv - Effect input level can be adjusted here  
 SFeed - The amount of signal which comes from FX-2 to FX-1  
 Tresh - Minimum level to open the gate (gated reverb 1 to 3)/close the gate(duck reverb)  
 HoldT - sets the minimum time of the open gate  
 Attck - adjusts the rise speed of the opening gate  
 Rleas - controls the speed for closing the gate again

#### Effects 15-19)

The next algorithms offer room simulations with strong early reflections:

- 15 Early Reflection 1
- 16 Early Reflection 2
- 17 Early Reflection 3
- 18 Early Reflection 4
- 19 RainDrops



The editable parameters are the same as for the first 10 effects (please inform yourself there)

#### Effects 20-22)

The following 3 Effects produce echoes:

- 20 Long Delay
- 21 Duck Delay
- 22 HQ-Delay

Duck delay has different parameters, so we will discuss the other ones first:

HQ-Delay has a broader frequency range, while long-delay offers longer echoes with reduced treble.

parameter page 1 of 2:

```
FX1 EDIT: LONG DELAY      PAGE 11>
FX-TYP: 20 INPL: 90 SPEED: 0 DELAY: 100
```

parameter page 2 of 2:

```
FX2 EDIT: LONG DELAY      PAGE <21
FX-TYP: 20 FEEDB: 64
```

Inpl.v and SFeed should be now familiar for you,  
Delay - changes the echo time  
Feedb - sets the number of echo repetitions

#### 21 Duck Delay

The Delay here is combined with a gate, which keeps the echoes down while level is up. This way solos stay clean with echoes in the rests.

parameter page 1 of 2:

```
FX1 EDIT: DUCKDELAY      PAGE 11>
FX-TYP: 21 INPL: 90 SPEED: 0 DELAY: 50
```

parameter page 2 of 2:

```
FX1 EDIT: DUCKDELAY      PAGE <21
FX-TYP: 21 FEEDB: 120 TRESH: 1 HOLDT: 0
```

The new parameters are:  
Tresh - minimum input level to suppress the echo  
HoldT - minimum time to keep the gate closed

#### b) FX-2 - special effects, modulation effects and sound enhancement:

##### Effects 1-3)

The first 3 effects produce a stereo chorus with a short, modulated delay. The sound becomes warmer.

- 1 Chorus 1
- 2 Chorus 2
- 3 Chorus 3

parameter page 1 of 2:

```
FX2 EDIT: CHORUS 1      PAGE 11>
FX-TYP: 1 INPL: 64 DEPTH: 10 RATE: 20
```

parameter page 2 of 2:

FX2 EDIT: CHORUS 1                      PAGE <21  
FX-TYP: 1 CENTR: 30 OUTL: 64

Inpl. - Here you set the input level - this time for the sum of FX-2 send  
Depth - Intensity of the delay-modulation  
Rate - speed of the delay-modulation  
Centr - sets the average delay time  
OutLv - effect output level

#### Effects 4-5)

Flanger effects produce a similar modulation. In addition, a feedback gives more possibilities and extreme sounds.

- 4 Flanger 1
- 5 Flanger 2

parameter page 1 of 2: identical with chorus  
parameter page 2 of 2:

FX2 EDIT: FLANGER1                      PAGE <21  
FX-TYP: 4 CENTR: 15 FEEDB: 90 OUTL: 80

Only new here:

Feedb - The amount of signal, which is fed back from FX-2 output to the FX-2 input.

#### Effects 6-7)

- 6 Phaser1
- 7 Phaser2

Phaser effects produce level changes for different frequencies at once by phase shifting. The amount of phase shift can be modulated, so a moving multi-notch filter is generated. When setting the rate to zero, the phase-shift can be adjusted manually with „Centr“. The parameter names are same as for chorus.

#### Effects 8 -11)

- 8 Rotary + Overdrive
- 9 Rotor 2
- 10 Rotor 3
- 11 Rotor 4

These algorithms produces the well-known rotary effects for organs. We will now describe the parameters of rotary+overdrive:

parameter page 1 of 3:

FX2 EDIT: ROTARY + OVR                      PAGE 1 1 >  
FX-TYP: 8 INPL: 64 ROTLO: 8 ROTHI: 48

parameter page 2 of 3:

FX2 EDIT: ROTARY + OVR                      PAGE < 2 >  
FX-TYP: 8 DECAY: 46 ROTL: 90 SWTCH: 0

parameter page 3 of 3:

FX2 EDIT: ROTARY + OVR                      PAGE < 3 1  
FX-TYP: 8 DRIVE: 90 OUTL: 127

RotLo - leslie speed when Switch set to „0“  
 RotHi - leslie speed when Switch set to „1“  
 Decay - acceleration and deceleration speed  
 RotL - Intensity of amplitude modulation  
 Switch - switches from slow (0) to fast (1)  
 Drive - sets the distortion amount  
 OutLv - the overall level of the effect

The other rotary effects offer no additional parameters and should be clear now. If you want to control the effect speed via midi-controllers, you should read the chapter midi-control of effect parameters on page 27.

## 12 Vibrato

The next effect produces a pitch modulation

parameter page 1 of 2:

```
FX2 EDIT: VIBRATO          PAGE 1 1 >
FX-TYP: 12 INPLV: 80 DEPTH: 5 RATE: 50
```

parameter page 2 of 2:

```
FX2 EDIT: VIBRATO          PAGE < 2 1
FX-TYP: 12 OUTLV: 64
```

Depth - Intensity of the modulation  
 Rate - Speed of modulation

## 13 Panning :This effect moves the signal between the speakers

parameter page 1 of 2:

```
FX2 EDIT: PANNING          PAGE 1 1 >
FX-TYP: 13 INPLV: 80 DEPTH: 127 RATE: 40
```

parameter page 2 of 2:

```
FX2 EDIT: PANNING          PAGE < 2 1
FX-TYP: 13 PHASE: 80 ANPAN: 64 OUTLV: 64
```

Depth - maximum movement from center position  
 Rate - speed of panning  
 Phase - sets the phase offset for modulation left/right. A value of 127 means linear panning, 0 gives synchronous change for both channels (tremolo), 90 sounds more like a rotation.

## 14 Tremolo :Only modulates the volume

parameter page 1 of 2:

```
FX2 EDIT: TREMOLO          PAGE 1 1 >
FX-TYP: 14 INPLV: 80 DEPTH: 127 RATE: 15
```

parameter page 2 of 2:

```
FX2 EDIT: TREMOLO          PAGE < 2 >
FX-TYP: 14 OUTLV: 64
```

Depth - Intensity of tremolo effect  
 Rate - speed of the tremolo effect

#### Effects 15-16)

The following two algorithms offer simple echo-effect (similar to FX-1 echo)

##### 15 Short Delay

##### 16 Long Delay

parameter page 1 of 2:

```
FX2 EDIT: LONG DELAY          PAGE 1 1 >
FX-TYP: 16 INPLV: 50 DELAY: 127 FEEDB: 50
```

parameter page 2 of 2:

```
FX2 EDIT: LONG DELAY          PAGE < 2 1
FX-TYP: 16 OUTLV: 64
```

Delay - Echo-interval  
Feedb - controls the repetition of the echos

##### 17 Cross delay

The cross delay effect includes two independent delays - one for left and one for right. In addition, you can feed the delays with the output of the other channel (cross delay feedback). The delay time for each channel is independent. Warning: High feedback values can lead to increasing levels with digital clipping at the end.

parameter page 1 of 3:

```
FX2 EDIT: CROSS DELAY        PAGE 1 1 >
FX-TYP: 17 INPLV: 64 DELYL: 127 FEEDL: 10
```

parameter page 2 of 3:

```
FX2 EDIT: CROSS DELAY        PAGE < 2 >
FX-TYP: 17 DELYR: 127 FEEDR: 10 CROSSFB: 50
```

parameter page 3 of 3:

```
FX2 EDIT: CROSS DELAY        PAGE < 3 1
FX-TYP: 17 MUTER: 0 SYNCT: 0 OUTL: 64
```

DelyL - Delay-Time for left channel  
FeedL - Feedback for left channel  
DelyR - Delay-Time for right channel  
FeedR - Feedback for right channel  
CrsFb - Cross-Feedback  
MuteR - disables the right channel dry input (for ping-pong type echos).  
SyncT - synchronises the two delay times. In position „1“, only DelyL controls the delay time.

##### 18 Ping-Pong

The Ping-Pong effect makes the signal jump between the two stereo channels. The parameter pages 1 and 2 are identical with those of short and long delay.

#### Effects 19-20)

##### 19 Gated Delay

##### 20 Duck Delay

Gated Delay is only audible when fed with sufficient input level, because the gate is closed in silent passages. The speed for gate opening and closing can be changed individually (see above in FX-1 gated reverb). Duck Delay behaves in an

exact opposite manner. So echos can only be heard in silent passages.

parameter page 1 of 3:

```
FX2 EDIT: GATEDDELAY          PAGE 1 1 >
FX-TYP: 19 INPLV: 50 DELAY: 127 FEEDB: 50
```

parameter page 2 of 3:

```
FX2 EDIT: GATED DELAY        PAGE < 2 >
FX-TYP: 19 TRESH: 5  HOLDT: 10  ATTCK: 16
```

parameter page 3 of 3:

```
FX 2 EDIT: GATEDDELAY        PAGE < 3 1
FX-TYP: 19  RELEAS: 10      OUTLV: 64
```

The delay parameters should be familiar for you, yet. Here are the parameters for the gate described:

Tresh - This controls the minimum input level which opens the gate (gated delay) or closes the gate (duck delay), respectively.  
HoldT - Sets the minimum time after reaching the Threshold level before gate reacts.  
Attk - Adjusts the opening speed of the gate  
Releas - Adjusts the closing speed of the gate  
OutLv - Output level of the effect

## 21 Special FX

This effect is especially for experimental FX-users. It offers a wide-range modulated stereo delay.

parameter page 1 of 2:

```
FX 2 EDIT: SPECIALFX        PAGE 1 1 >
FX-TYP: 21 INPLV: 64  DEPTH: 120  RATE: 30
```

parameter page 2 of 2:

```
FX2 EDIT: SPECIALFX        PAGE < 2 1
FX-TYP: 21 DELAY: 0  FEEDB: 120  OUTLV: 127
```

Depth - Controls the intensity of the delay-time modulation  
Rate - Adjusts the speed  
Delay - Sets the average delay-time  
Feedb - Controls the amount of echo repetitions. This can lead up to self oscillation

## 22 Equalizer

The equalizer is an effective tool for sound enhancement, because you can change the sound spectrum of different points individually.

Page 1 of 2:

```
FX2 EDIT: EQUALIZER        PAGE 1 1 >
FX-TYP: 22 INPLV: 64  OUTLV: 127
```

Page 2 of 2:

```
FX2 EDIT: EQUALIZER        PAGE < 2 1
FX-TYP: 22 100 HZ: +0 500 HZ: +0 3 KHZ: +0
```



100Hz / 500Hz / 3 KHz - rises or lowers the spectrum around these frequencies

### 23 WahWah+Ov

Although the WahWah effect has been influencing contemporary music for a couple of years, it is seldom used nowadays. Luckily, we have brought this effect back to life for keyboard players. It combines a resonant sweepable filter with overdrive.

parameter page 1 of 2:

```
FX2 EDIT: WAHWAH+OV          PAGE 1 1 >
FX-TYP: 23 INPLV: 80 FREQ: 64
```

parameter page 2 of 2:

```
FX2 EDIT: WAHWAH+OV          PAGE < 2 1
FX-TYP: 23 DRIVE: 100 CLIP: 100 OUTLV: 127
```

- Freq - Controls the cutoff frequency of the filter. This is most useful for midi controlled effect. See next chapter for further information.
- Drive - Adjusts the Overdrive effect
- Clip - Sets the clip-level for the overdrive.
- OutL - Adjusts the overall level. It is recommended to use relatively high input level and low output level, so the overdrive works properly.

### 24 AutoWahWah

Similar to the preceding effect, but the cutoff frequency can not be adjusted manually. It is controlled through the input level, in other words: from the sound's volume envelope. Mainly percussive sounds should be used with it, therefore.

parameter page 1 of 2:

```
FX2 EDIT: AUTOWAHWAH          PAGE 1 1 >
FX-TYP: 24 INPLV: 80 DRIVE: 100 CLIP: 100
```

parameter page 2 of 2:

```
FX2 EDIT: AUTOWAHWAH          PAGE < 2 1
FX-TYP: 24 OUTLV: 127
```

The parameters are the same as in WahWah+Ov. Only Freq is not available.

Effects 25-26)

### 25 Warm Overdrive

### 26 Distortion

These effects produce distortion and overdrive. Distortion has an additional gain switch for hard&heavy sounds.

parameter page 1 of 1:

```
FX2 EDIT: DISTORTION          PAGE 1 1 1
FX-TYP: 26 INPLV: 64 OUTLV: 64 DRIVE: 4
```

- InpLv - As nearly everybody knows, the input level/gain of an overdrive adjusts the amount of distortion effect.
- OutLv - For adjusting the volume in comparison to „dry“ sounds, you should adjust this parameter.
- Drive - (only available for distortion) sets the pre-gain.

## 27) Ring-Modulation

The Ringmodulator is very rarely in synths nowadays, although it was a very important component of soundshaping in their early days. Because the Ringmodulator produces difference and sum frequencies out of its two inputs, it creates disharmonic frequencies, which often sound like bells or metallic noise. To get familiar with the principles, you should first use only sounds with very few harmonics. Please use the performance-mode „double“, select two (different!!!) sounds for the two parts, and set the FX-1 send of the first to 63, the FX-2 send of the second sound to 63 and the other ones to zero. Important: the panorama should be set to „—“, so you can hear only the effect and not the dry signal! For the same reason, you should turn the FX-1 to off by pressing the FX-1 on/off button. Now you should detune the sounds for getting more effect. Playing more than one note increases. The more frequencies (notes/harmonics) are fed into the FX, the more the result becomes noisy (which is the characteristic of a ringmodulator and not an error).

parameter page 1 of 1:

```
FX2 EDIT: RINGMOD          PAGE: 1 1 1
FX-TYP: 26 INPLV: 64 OUTLV: 64
```

Although it has exciting possibilities it has only its two volume parameters - that's all!  
The sound is influenced through its input material...

## 28) Vocoder-effects

The vocoder effect is one of the most exciting effects in electronic music. In most cases, it consists of 2 banks of filters. Each bank has exactly the same band pass filters. One filter bank is for sound analysis and the other for sound synthesis. In the analysis section, the signal is filtered and the amplitude of each filter is extracted for further procedure. These signals control amplifiers behind the corresponding synthesizer filters. So, the more signal is detected in an analysis filter, the more the signal band in the synthesizer bank is amplified. Conclusion: the spectrum of the analysed sound modulates the spectrum of the synthesis input signal. The precision of this process depends mainly on the number and narrowness of filters. It is recommended to feed sounds with many harmonics into the synthesizer input and sounds with fewer harmonics in the analyser input, otherwise the sound would be fed through nearly unchanged or no effect would be heard in the other extreme...

In the Quasar, the analyser filter is fed from FX-2 input, while the FX-1 input goes into the synthesizer filter bank. The original signals should be set to Pan: „—“ for undisturbed effect. Because of its complexity, the vocoder needs the whole power of both effect processors, so no reverb can be produced at the same time.

parameter page 1 of 3:

```
FX2 EDIT: VOCODER          PAGE: 1 1 1
FX-TYP: 28 INPLV: 64 150HZ: 127 350HZ: 127
```

parameter page 2 of 3:

```
FX2 EDIT: VOCODER          PAGE: 2 2 1
FX-TYP: 28 760HZ: 127 1.6KH: 127 3.6KH: 127
```

parameter page 3 of 3:

```
FX2 EDIT: VOCODER          PAGE: 3 3 1
FX-TYP: 28 ATTACK: 10 DECAY: 113 OUTLV: 64
```

150Hz

350Hz

760Hz

1.6kH

3.6kH - The volume of the band pass filters can be reduced here.

Attack - This controls the recognition speed of the analyser

Decay - Adjusts the decay speed of the synthesizer band pass filter, when analyser input is removed.

The handling of vocoder effects gets better with more practice. It is not „plug-and-play“.

## 29 HQ-Delay

The HQ-Delay parameters are identical with those of the FX-1. Hint: You can put this delay in front of the Reverb by sending its output through the SFeed. So you can use it as a pre-delay. For this kind of usage, FX-1 send should be set to zero, and only small values are recommended for Feedback for natural sound impression. For parameters description, see 12a) FX-1 long delay.

### 12c) MIDI-control of effect parameters

The following effect algorithms are implemented in the quasar. In FX-2, some effect parameters can be controlled/modulated via midi controllers (>modulation-routing). Behind the FX-2 type you can see which parameter through FX-Mod A/B in the modulations matrix.

FX-2:	FX Mod - A	FX Mod - B
Chorus 1	Input Level	Rate
Chorus 2	Input Level	Rate
Chorus 3	Input Level	Rate
Flanger 1	Rate	Center
Flanger 2	Rate	Center
Phaser 1	Input Level	Rate
Phaser 2	Input Level	Rate
Rotary & Overdrive	LO-Speed	Input Level
Rotary 2	LO-Speed	Input Level
Rotary 3	LO-Speed	Input Level
Rotary 4	LO-Speed	Input Level
Vibrato	Depth	
Panning	Depth	Man. Pan
Tremolo	Depth	Phase
Short Delay	Input Level	Feedback
Long Delay	Input Level	Feedback
Cross Delay	Input Level	Feedback
Ping-Pong	Input Level	Feedback
Gated-Delay	Input Level	Feedback
Duck-Delay	Input Level	Feedback
Special SFX	Rate	Output L.
Equalizer	100 Hz Level	3KHz Level
Wah-Wah Overdrive	Frequency	Drive
Auto Wah-Wah	Drive	Output L.
Warm Overdrive	Input Level	Output L.
Distortion	Input Level	Output L.
Ring Modulation	Input Level	Output L.
Vocoder	Input Level	Output L.
HQ-Delay	Input Level	Feedback
Bypass	Input Level	Output L.

For controlling an effect parameter, you have only to hit the common-button and turn the page-dial until you reach this menu:

```
COMMON-EDIT: < 10 >  MODSOURCE: MODWHEEL
>FXAR:00 >FXAB:00 >ARPD:00 >ARPGT:00
```

Now, you can adjust the intensity of the modulation with the first two alpha dials.

Hint: There is a trick to control the FX-1 depth in realtime. Set all FX-1 sends to zero, SFeed to a high value, and the FX-2 sends to values other than zero. Set FX-2 type to „Bypass“. FX-Mod A+B now modulate the Reverb input level directly.

### 13.) The Arpeggiator

#### a.) What does an arpeggiator do?

Maybe some of you still remember the Arpeggiator from old analogue synthesizers. The arpeggiator breaks chords you play into its single notes, which then are played not simultaneously, but one after each other. So it plays sequences of notes derived from the chords you play. The arpeggiator effect can be controlled from its many parameters, giving you more variations. Even a modulation of the arpeggio via midi controllers in realtime is possible.

#### b.) Turning the arpeggiator on and off

On the panel of the Quasar at the top right corner, there is a button 'Arpeg', which turns the arpeggiator on and off. If the light in the button is on, the Arpeggiator runs when playing notes, if not, be sure that the masterchannel (Perf-Mode) or the arpeggiator-channel (GM-Mode) is identical with the transmit channel of your keyboard.

#### c.) The parameters of the arpeggiator

Note: the arpeggiator is turned on, if you select 'Arpeggiator-Edit' by pressing the 'Arpeg' button in the Edit section of the panel. The first sub-menu appears on the display:

```
ARPEGGIATOR EDIT: 11> TIMING
RESLT: 16  SPEED: 86  GATE: 64 SYNC: INT
```

The first parameter sets the Note Value (Resolution) of the notes being played. The possible values are from quarter to thirtysecond notes (1/4, 1/8, 1/16, 1/32).

The second dial sets the speed in bpm.

The third dial changes the relative note duration (gate-time) from staccato (0) to legato (127).

The last dial is for selecting of the synchronisation (intern/external). This offers you the possibility of connecting a drum-computer or sequencer to one midi-input of the Quasar and your keyboard to the other one. The Arpeggio runs in timing with the external master beat.

sync: int	The internal clock controls the arpeggiator
sync: Ex1	The midi-clock on Midi-Input 1 controls the arpeggiator. The speed-dial does not function in this mode.
sync: Ex2	The midi-clock on Midi-Input 2 controls the arpeggiator. The speed-dial has no function in this mode.

You reach the next sub menu with the page-dial:

```
ARPEGGIATOR EDIT: <2> SWITCHES
DIR:UP  SORT: OFF  HOLD: ON  DYN: OFF
```

The first dial controls in which order (direction) the notes are played:

up	-	the lowest note is played first, the others in ascending order
down	-	the highest note is played first, the others in descending order
up/dwn	-	ascending and descending consecutively
RND	-	the notes are played in random (no) order

The second dial (sort on/off) decides, if the arpeggiator remembers the order the notes you play on the keyboard (sort off), or sorts them itself by their key (sort on). This results in arpeggios straightly running up and down (sort on) or sequencer-like effects (sort off).

The third dial (hold on/off) enables the arpeggiator to keep on playing the notes after you release the keys. The arpeggiator's memory is refilled when you play the next chord.

The last dial of this sub menu (dynamic on/off) is to set whether the arpeggiator plays the notes of the arpeggio with the same dynamic (velocity) you played these notes. This changes the effect from mechanical to live sounding sequences.

The last menu of the arpeggiator is responsible for the midi settings:

```
ARPEGGIATOR EDIT: <3> MIDI FOOT-CTR.  
PART: 16 FREEZE: OFF THRU: OFF OUT: OFF
```

The first parameter (part: 1-16) selects which part controls the arpeggiator and is controlled reversal. In combination with the performance mode, you can limit the arpeggiator to one split sound on the keyboard. In the part-rotate mode, part 13 controls all 4 parts of the performance consecutively. In the Unisono-mode part 13 controls all parts simultaneously.

You can transpose the arpeggios by setting the second parameter 'Freeze' to 'on'. With this function, you can memorize the actual chord by pressing and holding the footswitch connected to the rear panel and transpose the arpeggio by playing single notes on the keyboard at the same time.

The third parameter (thru: on/off) selects whether the chord played on the keyboard is only played as arpeggio or, in addition, as chord.

The very last parameter: (out: on/off) enables the output of the arpeggiator notes to the midi out. So you can record its notes on an external sequencer for later use.

#### d.) Midi-Controlling of the arpeggiator

There are two parameters, which can be modulated via midi controllers in realtime, thus giving more expression to your performance. The first parameter changes the dynamic of the arpeggio notes and the other one varies the note-length. How these parameters are controlled by midi is described in chapter 10, page 16 (controller routing).

### 14.) The Common Parameters (Edit-menu „COMM „/ Page 11> to <16l )

General information : You can always leave the „Edit“-menu by pressing the „EXIT“-button.

You can select the different menu-pages by using the page-dial or by pressing the corresponding number-buttons (number-buttons are placed left beside the display).

All global adjustments of the Quasar will be kept in the first five pages of the Edit-menu „COMM“. They are also kept if you switch the Quasar power off.

Please pay attention to the fact that these adjustments are not storable in any performance.

```
COMMON EDIT: 11> SYSTEM PARAMETER 1  
TRANSP: C TUNE: +0 MASTER CHANNEL: 1
```

Dial 1 (Transp C:) determines the transpose in half-tone steps. Dial2 (Tune:) controls the fine-tuning.

Dial 4 (Masterchannel:) determines the MIDI-channel on which your MIDI-keyboard has to send to control the performances.

```
COMMON EDIT: <2> SYSTEM PARAMETER 2  
OMNI: ON VELOCrv: EXP SINGLE-OUTPUT: OFF
```

Omni-Mode „On“ means, that the Quasar receives MIDI-data on all 16 MIDI-channels during the performance-mode. If you have connected a MIDI device which is sending simultaneous on several MIDI-channels it is recommended to switch off the Omni-Mode.

The second parameter (VeloCrv:) is very useful and important because each keyboard has different characteristics concerning the velocity.



You can choose between 8 different velocity-curves to adapt the Quasar efficiently to your keyboard.

The last parameter on this page (Single-Output:On/Off) changes the output-routing of the Quasar. Preadjusted is „Single-Output: OFF“ and causes that only the single-outputs 3 + 4 can be used.

The effect-processors can still be used.

„Single-Output: ON“ disables the effects and enables all 4 single-outputs.

Depending on that, the Edit-menu „PART“/Page 11> will change the display.

Now you could assign the single sounds of a performance to different outputs.

To determine if special MIDI-data on both MIDI-inputs will be filtered or not use page 3 of the menu.

COMMON EDIT: <3> MIDI INPUT HANDLING  
PRGCH: ON AFTCH: ON ACTRL: ON PCTRL: ON

PrgCh: OFF no Program changes  
AftCh: OFF Channel-Aftertouch will be filtered  
MCtrl: OFF Modulation data will be filtered  
PCtrl: OFF NRPN and RPN-controller will be filtered  
(for more information see chapter 22)

COMMON EDIT: <4> MIDI OUTPUT HANDLING  
PRGCH: ON PCTRL: OFF FTCTR: OFF CLOCK: OFF

PrgCh: OFF no Program changes  
PCtrl: OFF NRPN and RPN-controller will be filtered  
(for more information see chapter 22)  
FtCtr: OFF Foot-control data will be filtered  
Clock: ON/OFF If ON is selected the Quasar will send out the MIDI-clock (with the tempo which is adjusted in the „ARPEG.“-menu), provided that the Quasar isn't synchronized by an external device. In that case the MIDI-clock will be filtered.

COMMON EDIT: <5> GLOBAL MIDI SWITCHES  
MULTICHANNEL: OFF USERBANKLOCK: OFF

„MultiChannel: ON“ enables the simultaneous use of performances and single sounds on the MIDI-channels 1-12. So you can control the Quasar even during the performance-mode by a sequencer. The Masterchannel can't be used for the single-sounds because it will receive the performance. Usually, with standard MIDI files on disk, channel 1 is reserved for the solo voice.

E.g. if you choose channel 1 as the Masterchannel then you can play a performance sound while your sequencer is controlling the single sounds. A fantastic possibility to give your MIDI-songs an ultimate touch. This is also a nice feature in connection with STYLE DRIVE because you will get the ability to play performances with your accompaniments.

„UserbankLock: ON“ means that a self-created programchange-map is selected. Then „Enter-GS“- or Bankchange-messages won't affect the Quasar.

This is advantageous if you want to use special single sounds which are not provided in the typical GS-programchange-map. It is recommended to note down these adjustments, because Quasar doesn't display the Userbank. How to create a „Userbank“ is explained in chapter 15.e) page 32.

You already know the following menu-pages from earlier chapters (see chapter 10 c) - g on page 15).

## 15.) Store, Initialize and Copy (Edit-menu „WRITE“ / page 11 to <111)

In the „EDIT“-area you will find a button called „WRITE“. If you select that button, you will get into the „Write“-menu which contains all functions referring to store-, initialize-, copy- or transmit-processes.

Depending on the play-mode you've selected („PERF.“ or „GM“-Mode), Quasar will display either „Write“-menu page 11> („PERF“-mode) or page <6> („GM“-mode).

#### a) Storing and naming a performance („Write“-menu / page <1>)

Imagine you have changed a performance and want to store it.

Press the „WRITE“-button. Page <1> will appear (if not use the page-dial). This page has the following architecture (example):

```
<1> WRITE PERF.: ROCKPIAN TO 00 BANDONED
YES: PRESS <WRITE>      NO: PRESS <EXIT>
```

In the first line of this display-message you will see the performance-name of the performance you have changed (here ROCKPIAN) and the RAM-place-number with performance-name (here 00 Bandoned) which will be overwritten if you store your changes. Both can be edited very easy.

With dial 2 you can move the blinking cursor to the letter you want to change. With dial 3 you select a letter, number or sign to create a new name.

With dial 4 you can select the RAM-place to store your new performance.

A further advantage is that you can change all parameters you want and store the new adjustments in one go. It is not necessary to store after each changing.

If you press the „WRITE“-button a second time Quasar will ask you „Overwrite ROCKPIAN?“ and you can confirm (by pressing the „WRITE“-button again) or not (by pressing the „EXIT“-button).

Please notice that the changed data will be lost if you press the „EXIT“-button and then the „GM“- or „PERF“- button. Selecting a new performance causes the same.

#### b) Initializing a performance („Write“-menu / page <2>)

(This is not an UNDO- function)

This function is important to set a performance and all adjustments due to that, back to standard-values. It does not mean that you get back the old adjustments. The arpeggiator will be switched off, the effects on and respectively the first effect-algorithm (Room and Chorus) of the two main effect-groups is selected. Further the performance-mode „Single“ is selected, all part-parameter-values are changed into standard-values and the single-sound „Klavier“ has been chosen. Enter the „Write“-menu, select with the page-dial page <2> and the following display-message will appear:

```
<2> INIT PERFORMANCE P
YES: PRESS <WRITE>      NO: PRESS <EXIT>
```

By pressing the „WRITE“-button again you will confirm the initializing.

#### c) Initializing one part or all parts („Write“-menu / page <3> and <4>)

All part-parameters will be reseted if you change from the „PERF“-mode to the „GM“-mode. The same will happen if the Quasar receives an „Enter-GS“-message on a MIDI-input.

It even could be necessary to reset particular parts which is possible, if you enter the „Write“-menu and then page <3>. Here an example:

```
<3> INIT PART 1P
YES: PRESS <WRITE>      NO: PRESS <EXIT>
```

Dial 2 enables you to select the partnumber you want to change (here 1).

By pressing the „WRITE“-button you will confirm the initializing.

To initialize all parts select page <4> of the „Write“-menu:

```
<4> INIT ALL PARTS/COMMON (GM-INIT)?
YES: PRESS <WRITE>      NO: PRESS <EXIT>
```

Similar to „Initializing a performance“ (chapter 15.b), the part-parameters of all 16 parts will be changed to standard-values.

#### d) Copying Part-parameters to another Part

To copy adjustments of a part to another part select page <5> of the „Write“-menu.

```
<5> COPY PART 13 TO PART 14  
YES: PRESS <WRITE>    NO: PRESS <EXIT>
```

You select the source-part with dial 2 (here part 13) and destination-part with dial 3 (here part 14).  
Like before you confirm your settings again with the „WRITE“-button.

#### e) Creating an own User-Programchange-map

To create your own soundbank containing 128 single sounds, Quasar offers you more than 1000 single sounds you can select from. As already described above (chapter 14) the Bank-change messages will be ignored if you work with the Userbank.

Press the „GM“-button and choose with the „PART-SELECT“-buttons the part your keyboard is sending on (during the „GM“-Mode Quasar is switched to the Multimode (16 parts multitimbral), independent of the adjustments in the „COMM“-menu).

To find out on which channel your keyboard is sending, is pretty easy if you look at the Quasar display. Press a note on your keyboard and notice the cursor appearing below the number which is printed on the displayframe. This is the channel-number on which your keyboard is sending.

After that you select the sound you want to copy into your User-Programchange-map.  
Then press the „WRITE“-button. You automatically get into the right menu-page which is page <6>:

```
<6> WRITE PART 01 SOUND: KLAVIER TO 14  
YES: PRESS <WRITE>    NO: PRESS <EXIT>
```

In our example the keyboard is sending on channel 01, the selected sound is „Klavier“ and the programchange-number is 14 (no matter if that makes any sense).

The program-change-number is selectable with dial 4 from 1 to 128.

Confirm your assignment by pressing the „WRITE“-button.

Pay attention to the fact that the Userbank is only activated if it's switched on in the „Comm“-menu.  
Further you can reach just 128 sounds by MIDI because the bank-change-message will be ignored in that mode. Nevertheless you can select the other Quasar sounds by the panel.

```
COMMON EDIT: <5> GLOBAL MIDI SWITCHES  
MULTICHANNEL: OFF    USERBANKLOCK: ON
```

To get back the basic adjustments execute an „GM-Init“ („Write“-menu / page <4>)

#### f) MIDI-Data-dump of the User-Programchange-map („Write“-menu / page<10>)

It is of course possible to store your personal sound-selection. Qualified for that is each device which is able to store active MIDI-dumps.

We recommend our STYLE DRIVE for that job. Connect the MIDI-output of the Quasar with the MIDI- input of the STYLE DRIVE or an qualified computer, enter the „Write“-menu and select page <10> :

```
<10> SEND USER PROGRAM CHANGE MAP...  
YES: PRESS <WRITE>    NO: PRESS <EXIT>
```

Turn the STYLE DRIVE to its „SAVE DUMP“-menu or your sequencer to its „RECORD“-function.  
Now press the „WRITE“-button of the Quasar and the connected sequencer will record the data.

g) Sending the current programchange-number („Write“-menu / page <7>)

A lot of keyboard player don't know how they can produce a bank-change command with their sequencer. Especially this is important to know, if you want to reach and control all single sounds of the Quasar by your sequencer. If desired, Quasar is able to send the bankchange-, the programchange-command and the channel-number of a selected single sound. You just have to record this MIDI-commands with your sequencer.

For this you have to connect the MIDI-output of the Quasar with the MIDI-input of your sequencer. Select at first in the „GM“-menu the part (respectively the MIDI-channel) and the sound you want to assign. Then enter the „Write“-menu and select page <7>:

```
<7> SEND PROGRAM-CHANGE FROM PART 1
YES: PRESS <WRITE>    NO: PRESS <EXIT>
```

Start the record of your sequencer and confirm the transmission by pressing the „WRITE“-button (as usual). Then the bankchange- and the programchange-number should be visible in the „Event-monitor“ of your sequencer.

Pay also attention to the next menu-page <8> which is described below.

h) MIDI-data dump of the temporary memory („Write“-menu / page <8>)

All part-parameters, common-parameters and arpeggio-adjustments are stored in the temporary memory of the Quasar. During the performance-mode the memory contains all performance-parameters respectively adjustments. To store a performance or even all partparameters on cheap 3,5 „Disks“ is possible in just a second.

The main application surely is the sequencer-mode (also called „GM“-mode). After you have created a new sequencer-song, you have the possibility to record all the settings at the beginning of your song with your sequencer. Even the adjustments of the volume, pan or program-changes are simply done with the dials of the Quasar panel.

Connect the MIDI-output of the Quasar with the MIDI-input of your sequencer. It is recommendable to leave the first bar of a song empty. Into that bar you can dump the MIDI-data. This is advantageous because your song will run on every Quasar immediately. Enter the „Write“-menu and select page <8>:

```
<8> SEND TEMP COMMON/PART PARAMETER . . .
YES: PRESS <WRITE>    NO: PRESS <EXIT>
```

Start the record of your sequencer and confirm the transmission by pressing the „WRITE“-button.

i) MIDI-data dump of your personal drum-sound settings („Write“-menu / page <9>)

Drumsounds which have been changed in the „Drum“-menu you can store on cheap 3,5" disks with STYLE DRIVE, a computer sequencer, as well. How to edit the drum-sounds is described in chapter 11 page 17.

To transmit your adjustments to STYLE DRIVE or a sequencer, enter the „Write“-menu page <9>:

```
<9> SEND TEMP DRUM PARAMETER . . .
YES: PRESS <WRITE>    NO: PRESS <EXIT>
```

Start to record on your sequencer (or whatever you are using) and confirm the transmission by pressing the „WRITE“-button.

---

#### j) MIDI-data dump of all RAM-performances

To store your complete RAM-performance-bank on 3,5" disks you can use this function.  
Target device could be STYLE DRIVE, a sequencer or a data filer.  
Provided that Quasar and the target are connected correctly (QUASAR MIDI-output to device MIDI-input), enter the „Write“-menu and then page <11>:

```
<111 SEND ALL RAM-PERFORMANCES . . .  
YES: PRESS <WRITE> NO: PRESS <EXIT>
```

Start the record of your target device and confirm the transmission by pressing the „WRITE“-button.

### 16.) Accessories - Overview

To extend the sound-selection and possibilities QUASIMIDI offers the following accessories:

#### a) ROM-modules

With our ROM-modules (each 1MByte) you can extend your Quasar very effectively.  
Each contains 256 single sounds and additional 100 performances.  
Maximum 2 ROM-modules can be installed by inserting them simply into the built-in sockets. That means, that you are able to expand your sound-memory up to more than 1500 single-sounds and 500 performances.  
Please answer the questions in our guarantee-form, which will help us to integrate your wishes into our next developments.

#### b) RAM-module

The RAM-module with 768 Kilobyte memory-space is an useful accessory to load samples in the MIDI-sample-dump-standard. It is possible to store up to 255 single-sounds, one drumset and 100 self-created performances. The RAM-module is battery-buffered which is an further excellent feature. The loaded data will be stored even if Quasar is switched off.  
In contrast to the ROM-modules you can use just 1 RAM-module and the socket that you insert the module is not freely selectable.  
The combination with a ROM-module is possible.

For more details ask your local distributor or QUASIMIDI Germany.

# 17.) Listing of the ROM- and RAM-Performances:

ROM-Bank A:		ROM-Bank B:	
00	ROCKPIAN	00	TIMELESS
01	VELOSAX_	01	CARPET_1
02	I2STRING	02	MADDRUMS
03	DOMCHURC	03	OLD_DAYS
04	MONUMENT	04	ECHOSYNT
05	BASS_STR	05	OBERIM2_
06	HITBRASS	06	MOOGIIC
07	EMERSORG	07	MODPITCH
08	CHAMBER_	08	EROPAEXP
09	OCTAVSTG	09	ESSENTIL
10	RHODESEQ	10	STACK_
11	J_HAMMER	11	5AFTER12
12	HOHNERVX	12	DIGIPAD_
13	CLEANGTR	13	FADEPAD_
14	CLAVINET	14	CARPET_2
15	SMOKE_ON	15	EMERSON_
16	MELLOTRN	16	INTROPAD
17	TOTOBRAS	17	REVERSE_
18	STEINWAY	18	RESOBASS
19	ORCESTSP	19	SIENCE_
20	TREMOLO_	20	MADSEQUZ
21	MOD_GUIT	21	DIGITAL_
22	HANCOCK_	22	HARDCORE
23	SUPERJX	23	FX_PAD_
24	KEYSPLIT	24	SYNPHAS_
25	SAXSPLIT	25	POLYSYN2
26	MATINEE_	26	FATTY_
27	CALLIOPE	27	LEADSYNT
28	SACRAL_	28	WARM_FM_
29	DREAMGTR	29	OBX_
30	BAROCK_I	30	RAVEBASS
31	VOXCONTI	31	BRASSWEL
32	MICRO_B1	32	TB303_
33	FLIPPERS	33	PADDING
34	LEVEL42_	34	X_Mus_
35	BRASS_	35	PHASMELO
36	WELTMSTR	36	FILICORD
37	RHODES_1	37	MENTASM_
38	ORCHEST1	38	OSCAR_SA
39	WILDECK_	39	TECHNOBS
40	HENDRIX_	40	ATMOFILE
41	HAWAIL_	41	TRANCE_
42	WAH_WAH_	42	MINDBLOW
43	AKK_BASS	43	ITALHOUS
44	BAROCKSP	44	SPECTPAD
45	BASSPIAN	45	FM_PAD_
46	BARITON_	46	VANGELIS
47	CLICKORG	47	VINT_SPL
48	DREAMGUI	48	D50LIKE_
49	ATTSTRIN		
50	BASSSTRI		
51	JUMP_		
52	DR_BOEHM		
53	ORCH_END		
54	SHINEON1		
55	SHINEON3		
56	SHINEON2		
57	CHURCHOR		
58	TANZSOLO		
59	MICRO_B3		
60	MIX_CHOR		
61	BIG_HIT		
62	CHURCH		
63	GUITSTRG		
64	BRASSSTR		
65	BASS_AIM		
66	VAL_LEAD		
67	TRUMPSPL		
68	NAABTAL_		
69	PIANSTRI		
70	RHODES_		
71	Brasses_		
72	PINKPANT		
73	AKKOSPLT		
74	TANZSPLT		
75	CLORGAN		
76	PHAWURL_		
77	BRASS_1		
78	BRIGHT_		
79	HAMMOND_		
80	WARMSTR_		
81	STRINGS_		
82	VOICEPAD		
83	TEPPICH_		
84	OBERHEIM		
85	ULLA_MR_		
86	DIRTY_		
87	VATIKAN_		
88	DYNPAD_		
89	AKKO_3LA		
90	LEADER_2		
91	TEPPICH1		
92	FLNGMOOG		
93	SYNSTRIG		
94	dx_rhods		
95	POLYSYNT		
96	MELOSPLT		
97	NEW_AGE_		
98	pizzagag		
99	pansplit		

# 17.) Listing of the ROM- and RAM-Performances:

49	VOCEFFEC	RAM-Bank:	49	JUNO106
50	SUPERSOL		50	JX3P
51	100_HZ_	00	51	Lunatics
52	WAH_SAWS	01	52	Marbles
53	MODULATE	02	53	Mozaring
54	SOLO_POR	03	54	Old-Rome
55	ODYSSEUS	04	55	Orchster
56	TECHNO_	05	56	SoloSynt
57	BELLPADS	06	57	Peter G.
58	D50VOICE	07	58	PhasPuls
59	PHASEPAD	08	59	Pizza
60	AIRVOX_	09	60	Play1Key
61	SUPERSNT	10	61	PO1YSWEP
62	SEQBASS_	11	62	Quartet
63	SYNTSPLT	12	63	Randomiz
64	ROTAT303	13	64	RECHTECK
65	JAPANESE	14	65	Desaster
66	SPACEVOX	15	66	SawStrgs
67	SPEKTAKL	16	67	Sawtooth
68	PPGING_	17	68	Science
69	GHOSTY_	18	69	GateDist
70	PAD303_	19	70	Soundtra
71	SOFTEN_	20	71	Spaceys
72	PROPHET_	21	72	SquareFX
73	JX_SWELL	22	73	SQUARIAN
74	SFX_BLOW	23	74	StrgFlng
75	SWELLPAD	24	75	Tinkling
76	SMURFS_	25	76	Trumpet
77	ECHOSAWS	26	77	Tubulars
78	BELLSTRG	27	78	AmoreMio
79	HORROR_	28	79	Uranus
80	ICEPAD_	29	80	VoxChor
81	JUPITER_	30	81	Voyager
82	INVADERS	31	82	WaveSequ
83	SWEEP PAD	32	83	DirtyOrg
84	CROSSING	33	84	Prophets
85	EFFEKT_	34	85	America
86	AIRVOX2_	35	86	PercSolo
87	ANALOG_	36	87	Starwars
88	ALIENS_	37	88	Kurpfalz
89	SEQUECER	38	89	Birdland
90	TAURVOX_	39	90	Blaster
91	SYNBASS_	40	91	Pulsweep
92	FLANGBS_	41	92	CMIDream
93	HALOPAD_	42	93	FMSynth
94	HARDSYNC	43	94	TechCats
95	ACID_	44	95	VOCODER_
96	Utopia_	45	96	Churchy
97	DRJEKYL	46	97	Gloeckls
98	DREAMPAD	47	98	VoisCow
99	Rituals_	48	99	BowedStg



## 18.) The Single-Sounds of the QUASAR

<b>Bank 0 General-MIDI</b>	49 Strings	100 Atmosphe	22 Storm
— GM-Piano —	50 SlwStrgs	101 Gsbright	23 Take_Off
1 Klavier	51 Synstr1	102 Goblin	24 WarrPani
2 Piano1	52 OB_Strng	103 Echodrop	25 WindHarp
3 Piano3	53 Chor	104 Starthem	26 Whale
4 Honky	54 Duuh	— GM-Ethnic —	27 Winter
5 Rhodes	55 CMI_Vox1	105 Sitar	28 DeepSpac
6 EPiano1	56 Orchestex	106 Banjo	29 Explo93
7 Harpsi	— GM-Brass —	107 Shamisen	30 Zap
8 Clavi	57 Trumpet	108 Koto	31 Jodler3
— GM-CrPerc —	58 Trombone	109 Kalimba	32 FM_Kick
9 Celesta	59 Tuba	110 Bagpipe	33 FM_Saage
10 Glosple2	60 Muteclmp	111 Fiddle	34 FM_Snare
11 MusicBox	61 GSFrench	112 Shanaï	35 FM_Video
12 Vibe	62 Brass	— GM-Percus —	— Voices —
13 Marimba	63 SynBras1	113 Tinkle	36 Dip
14 Xylo	64 Synhrs2	114 Hi_Agogo	37 Jodler2
15 Tubell2	— GM-Reed —	115 Steeldrm	38 Boom_T
16 Zither	65 Sopranx	116 Hi_Wdblk	39 Bang_T
— GM-Organ —	66 Altsax	117 MidSurdo	40 Au_T
17 Gospel	67 TenorSax	118 Tom_1	41 Au2_1
18 CleanRck	68 Bariton	119 E_Tom_A	42 Ahhh_T
19 Hammond	69 Obse	120 GSReverse	43 Eeh_T
20 FM_Chure	70 English	— GM-SFX —	44 Fuh_T
21 ReedOrgn	71 Bassoon	121 Fretmoiz	45 Zack_1
22 Musette1	72 Klarinet	122 BratNois	46 Geh_T
23 Harmonic	— GM-Pipe —	123 SeaShore	47 Gosh_T
24 Bando	73 Piccolo	124 BrdTweet	48 Oohh_T
— GM-Guitar —	74 Floete	125 Telephn	49 VncHit_T
25 AcousGtr	75 Recorder	126 Helicopt	50 Wooh_T
26 SteelGtr	76 Panflute	127 Applaus	51 Yeah_T
27 FM_Jazz	77 Bottle	128 GunShot	— Drums —
28 CleanGtr	78 Shaku	<b>Bank S01 Bank-Change</b>	52 EffLoop1
29 Mutedgtr	79 Whistle	65	53 EffLoop2
30 Drivgtr	80 Ocarina	— Effects —	54 EffLoop3
31 Distgt	— GM-SyLead —	1 BlakHole	55 Loop
32 Guitharm	81 SqarWave	2 Choir	56 Looping
— GM-Bass —	82 GS_Saw	3 Cluster	57 meogdrum
33 Acoubass	83 Calliope	4 ColdWind	58 IronBell
34 GMFinger	84 Chiffer	5 Didgerid	59 KwTschak
35 GS_Pick	85 Charang	6 Effect	60 Drumloop
36 Fretless	86 Voice	7 Fall_Out	61 Drmlloop2
37 Slapbas1	87 Fhsaw	8 Flys	62 Tech_T
38 Slapbas2	88 Basslead	9 FreshAir	63 Class_T
39 GM_Srbas	— GM-SynPad —	10 Noise	64 Cow808_T
40 Synbas3	89 Fantasy	11 Opera	65 Claps_T
— GM-String —	90 Warrapad	12 Pigs	66 China_T
41 Violine	91 PolySynt	13 Pig_2	67 Crash_T
42 Viola	92 Glasvoic	14 Dog	68 Open_T
43 Cello	93 BowedGls	15 Plop	69 Guiro_T
44 Contrabs	94 Metalpad	16 RedAlert	70 Snare_T
45 Tremolo	95 HaloPad	17 RlsClust	71 Sticks_T
46 Pizzicat	96 Obxsweep	18 SFX_VOX	72 OCrash_T
47 Harp	— GM-SynSFX —	19 Sirene	73 E_Tom
48 TimpaniT	97 IceRain	20 Spucey	74 Hihat_T
— GM-Ensmbl —	98 SondTrk2	21 Sturtrek	75 NoisDrum
	99 Crystal		76 Tr_Tom_T

## The Single-Sounds of the QUASAR

77 Scrch1T	:- BestOf -	57 Pat_Line	114 TileBass
78 Scrch2T	1 Angels	58 DrehOrgl	115 AcidSplt
79 Reso_T	2 ClearOBX	59 Farm	116 Polymere
80 KW_T	3 _303Lead	60 Obs_pad	117 EcoDrop2
81 Gated_T	4 Akkordeu	61 Softfunk	118 America
82 Analog_T	5 Taenzeru	62 SpaceStr	119 PlingPad
83 Agogo_T	6 Aliens1	63 Birdland	120 PlingVoc
84 Powtom_a	7 Aliens2	64 ChorusMe	121 Mic_Moog
85 Congalo	8 Melloch	65 Farfisa2	122 Axxe
86 Congahi	9 Organ3	66 Musette5	123 CleanSaw
87 Congasp	10 Taurus2	67 OberSolo	124 SawWave
88 cowbell	11 Positiv2	68 V_Clarke	125 DistMute
89 JazzKick	12 Flang_Ch	69 Pictures	126 Bell_Pad
90 Jinglebl	13 Electron	70 Techno1	127 Cell_ore
91 Kickdrml	14 Multiman	71 Techno2	128 Sam&Hld2
92 Kickdrml	15 JunoBass	72 Warmobx	
93 Kwzap	16 Jurassic	73 Odyssey	<b>Bank S03 Bank-Change</b>
94 LinnKick	17 MC_202	74 Wurlitz2	<b>67</b>
95 LongWhis	18 Bass1	75 FinalSaw	:- Accordeon -
96 Lo_Trngl	19 Ravcbass	76 IntroPad	1 Musette1
97 Lo_Wdblk	20 Voc_OBX	77 Hot_Keys	2 Harmonic
98 Mondo_BD	21 TotoBras	78 Soloist	3 Bando
99 Natsnare	22 FMFrench	79 Effects1	4 Akk&Bass
100 Natsnar2	23 Churchy	80 Hawaii	5 Akkbalg
101 Open_HH	24 WarmStrg	81 Ipinano2	6 Lydia_A3
102 Op_Surdo	25 Filicord	82 Epiano3	7 Lydia_A2
103 OrchRim	26 Leadsyne	83 SyncSolo	8 Lydia_A1
104 OrcCrash	27 Slowfast	84 SineBass	9 Detuned
105 Peking	28 FM_Trnop2	85 Laufer	10 TrmlAkko
106 PowClaps	29 Ricochet	86 Machine1	11 ReedOrgn
107 RaveHut	30 WarmVibe	87 InfraBas	12 TrmlMuss
108 Shaker	31 Touchy	88 Machine2	13 H_Monica
	32 Wurlitz1	89 WarmPad2	14 Musette2
	33 Bassline	90 Francois	15 Musette3
	34 CheapSnt	91 Sam&Hold	16 Musette4
	35 JtTuba	92 JazzOrgn	17 Quetsche
	36 SlwLesli	93 Seqbass2	18 Lo_Akko
	37 Lutscher	94 Klavier3	19 Basson
	38 Mello2	95 Orchhit2	20 Band_Tub
	39 Musibox2	96 OrchHlf	21 Bandneon
	40 FlangeMe	97 SynVoice	22 Flute
	41 Jodler_T	98 Nitemare	23 FM_Akko
	42 Clarinet	99 Hardcast	24 FM_Akko2
	43 StarDust	100 PitchVox	25 FM_Akko3
	44 Golem	101 Guitefl	26 BlusHarp
	45 Techno3	102 Guitefl2	27 Synthion
	46 C_Person	103 PitchStg	28 Pulseon
	47 TinkBell	104 Lectolet	29 MondHika
	48 SH101Bs2	105 ShineOn	30 SlowAkko
	49 Yazoo	106 SlowViol	:- Organ -
	50 TB303_2	107 SoftCelo	31 Hammond
	51 Piano2	108 Cry Vox	32 TableOrg
	52 Popcorn	109 Mandolin	33 Sacral1
	53 MicMoog2	110 Leader1	34 CleanRck
	54 VeloCity	111 LoopedEG	35 Rocking
	55 VocVoice	112 JX_3P	36 Rockorg2
	56 Planet	113 SynCello	37 RockOrgn
<b>Bank S02 Bank-Change</b>			
<b>66</b>			

## The Single-Sounds of the QUASAR

38 Gospel	94 Piccolo	18 StString	74 PPG_1
39 Sacral2	95 Floete	19 SlwAtack	75 FM_Synt5
40 Sacral3	96 Recorder	20 Foehn	76 FM_Synth
41 Sacral4	97 Panflute	21 VS_Chor	77 DigiPlu2
42 FM_Church	98 Bottle	22 SlwFlang	78 DigiPluk
43 Organ1	99 Shaku	23 SmurfChr	79 Level_42
44 Organ14	100 Whistle	24 Stri_Tru	80 Fucksyn
45 Organ15	101 Bambus	25 QuasarV	81 Cpt_Iglu
46 Farfisa1	102 Companie	26 SweepStr	82 Doc_SOLO
47 FelixOrg	103 DoomFlut	27 SynStr2	83 Dr_Reso
48 Organ1b	104 EchoBamb	28 PongPad	84 EBM_Lead
49 FMChurch2	105 FM_Blow	29 Pongpad2	85 EchoSnth
50 Organ2	106 FM_Pan	30 SynStr3	86 FatDisco
51 Organ2b	107 Glas_pip	31 SynPad13	87 RockIt
52 Organ4	108 O_Carina	32 SynStrsa	88 Jupiter1
53 Hammond2	109 Panetcho	33 Atstrin	89 Kraftwe1
54 O_Pfeife	110 Shakuliff	34 vintchor	90 Leader2
55 Pop_Org1	111 ToyFlute	35 Vint_Cho	91 Leader3
56 Positiv1	112 Zentaur	36 VoiceStr	92 Leading
57 Positiv3	113 Motette	37 Noisy_Ch	93 Logos
58 Organ5	:- Orchester ---	:- SynPiano ---	94 LongPoly
59 Organ6	114 Strings	38 VeloCity	95 M_Mann
60 VoxConti	115 Violine	39 Cembalo1	96 M12_Lead
61 SineOrgn	116 Viola	40 EPiano1	97 Oberheim
62 HouseOrg	117 Cello	41 Cembalo2	98 PercSolo
63 O_16_8_5	118 Contrabs	42 Taenzern	99 PlukSolo
64 Slow_Les	119 Tremolo	43 Wurlitz2	100 Poland
65 O_888000	120 Pizzicat	44 Epiano2	101 Pulsate
66 O_808800	121 Harp	45 Epiano3	102 QuakSyn2
67 O_848000	122 TimpaniT	46 ChorusMe	:- SoloBrass ---
68 O_832000	123 HarpFM	47 Axse	103 Trumpet
69 O_888808	124 OrchHit5	48 CheapSnt	104 Trombone
70 O_800000	125 OrchPa	49 Electron	105 Tuba
71 O_808000	126 Orchitex	50 FlangeMe	106 Muettrmp
72 O_880000	127 Orchestr	51 Digi_pia	107 GSFrench
73 O_878000	128 Orchestb	52 Dig_Honk	108 Sopr_Sav
74 O_828000		53 Dig_Pia2	109 Sopranx
75 O_864000	<b>Bank S04 Bank-Change</b>	54 Dig_Pia3	110 Altsax
76 O_004301	<b>68</b>	55 ElectroX	111 TenorSax
77 O_800300	:- Ensemble ---	56 EPiano4	112 Bariton
78 O_080403	1 Strings	57 PulsClav	113 Oboe
79 O_000008	2 SlwStrgs	58 Symceles	114 Klarinet
80 O_000808	3 Synstr1	59 Synpian2	115 Carmet2
81 O_000340	4 OB_Strng	60 SynPiano	116 WarmTuba
82 O_000110	5 Chor	61 Synthets	117 FM_Trump
83 O_000870	6 Drnh	62 Saw_EP	118 ShrtTuba
84 O_000608	7 CMI_Vox1	63 Underwat	:- Brasses ---
85 O_000206	8 Anstring	64 Seventys	119 Brass
86 O_000678	9 Rls_Chor	65 Supertp	120 Horns
87 O_000544	10 Full_Saw	66 FM_Clav2	121 BrsPitch
88 O_000888	11 JpString	67 FM_Perc	122 AnaBrass
89 O_000256	12 AtckVox	68 FM_Perc2	123 Brassey
90 Perc_3rd	13 DarkChor	69 FM_Perc3	124 Brs&Strg
91 Perc_2nd	14 Filt_Vox	70 FM_Synt2	125 Cho_Bras
92 Click1	15 Mellotr	71 FM_Synt3	126 DarkBrss
93 Click2	16 MeloStrg	72 FM_Synt4	127 F_Brause
:- Pipes ---	17 S&H_Chor	73 Pianstrg	128 FullSeq

## The Single-Sounds of the QUASAR

### Bank S05 Bank-Change

69	52 Piano1
---	53 Atmosphe
---	54 Gsbright
1	55 Bell_Pad
2	56 Fantasy
3	57 Schlag_1
4	58 Schlag_2
5	59 Schlag_3
---	60 Schlag_4
6	61 Schlag_5
7	62 Schlag_6
8	63 Schlag_7
9	64 Schlag_8
10	65 Schlag_9
11	66 Schlag10
12	---
13	67 IceRain
14	68 SndTrk2
15	69 Crystal
16	70 Goblin
17	71 Echodrop
18	72 Starthem
19	73 Berlin1
20	74 BrightEf
21	75 Brigrne2
22	76 Brigrne3
23	77 Brigrne4
24	78 Brigrnes
25	79 BriteSeq
26	80 Cold_Seq
27	81 Digi_Fch
28	82 Dreaming
29	83 Duester
30	84 EchoBell
---	85 EntrPris
31	86 Flummi
32	87 FM_Blow2
33	88 FM_Efect
34	89 FM_Sweet
35	90 FM_Swel2
36	91 FM_Swel3
37	92 FM_Swell
38	93 FMGlde
39	94 Kurzwave
40	95 Oct_Swel
41	96 Pfeifen
42	97 Plastic
43	98 PlingVox
44	99 Qui_Swel
45	100 Rev_Tep
46	101 Sequenz3
47	102 ShortSeq
48	103 Soundtrk
49	104 Spaclost
50	105 SpacMoog
51	106 Starhel1
---	107 Sweep1

108	Swel_Ch
109	SwelSnt1
110	SwelSnt2
111	Mentasm
112	Voc_Clus
113	VocChord
114	VocCord2
115	VocEffe
116	VocoVelo
117	VocPuls
118	VocStrin
119	Voice_Sp
120	Yello
121	VoiceRel
122	Voice_St
123	Voxeffec
124	Attswell
125	Ethngrov
126	Ethnic
127	FM_aff
128	ReleasMe

### Bank S06 Bank-Change

70	---
---	Pianos ---
1	Klavier
2	Piano1
3	Piano3
4	Honky
5	Rhodes
6	E-Piano1
7	Harpsi
8	Clavi
9	GrandPin
10	Wurlitz1
11	Wurlitz2
12	Clavinet
13	RhodsDtd
14	HonkTonk
15	ItaloPia
16	ToyPiano
17	Cembalo1
18	Cembalo2
19	Piano2
20	Taenzern
21	Epiano2
22	Epiano3
---	Basses ---
23	AcidBass
24	AcidHarp
25	Acous2
26	Bass_Str
27	Bass_Voc
28	Bas_Voc2
29	Electron
30	AcidSplit
31	FinalSaw

32	Taurus2
33	JunoBass
34	Techno1
35	Seqbass2
36	Techno2
37	SineBass
38	Acnubass
39	EBass
40	GS_Pick
41	Fretless
42	Slapbus1
43	Slapbus2
44	GM_Snbass
45	Synthbas3
46	Hardcast
47	Mic_Moog
48	Axxe
49	CleanSaw
50	SawWave
51	Bassline
52	CheapSnt
53	Techno3
54	SH101Bs2
55	MicMoog2
56	Fat_Line
57	V_Clarke
58	VeloCity
59	Yazoo
60	TB303_2
61	C_Peron
62	FlangeMe
63	Bass&Org
64	Bass1
65	Ravebass
66	Basslin2
67	Basslin3
68	Bretty
69	MC_202
70	CasioPiz
71	CasioTek
72	Combine
73	EBass2
74	FatBass
75	Fingered
76	FmBass
77	HeavyBas
78	Juno101
79	Leila_K
80	LfoSweep
81	Mis80bas
82	MicMoog3
83	Moog_Str
84	MoogBus
85	Moogbas2
86	Moogbass
87	Oct_Bas
88	Oct_Bas2

## The Single-Sounds of the QUASAR

89 PCM_Bass	14 Poland	70 Perc_Tep	127 Spect_33
90 Pickbass	15 Pulsate	71 PerVoive	128 Spect_34
91 Pickbass2	16 QuakSyn2	72 Pluc_Pul	
92 PizzBass	17 QuakSyn1	73 Polaris	
93 Satzi	18 Quin_Sol	74 PolyMoog	
94 SeqBass	19 Recluck1	75 PolySyn2	
95 Seqbass3	20 Recluck2	76 PongPad	
96 SH101_BS	21 Recluck3	77 Pongpad2	
97 Sinus	22 Seq_Tep	78 Prophet	
98 SubBass	23 SeqMatrix	79 Prophet2	
99 Synbass1	24 Sequenz1	80 QuasarV	
100 Synbass2	25 Softimog	81 Reis2Pad	
101 Synbs1	26 SoftSolo	82 Reis_Pad	
102 Synchass	27 Squarist	83 ShakuVox	
103 Taurus	28 Stella	84 Slow_CMI	
104 TB303_1	29 Sweep303	85 SpaceVoc	
105 TB303_3	30 Syncer	86 Sweep	
106 TB_303_4	31 Wah_Wah	87 Sweeper	
107 ThinBass	32 Osc_Sync	88 SynPad13	
108 VeloLine	33 Oct_Sync	89 SynStrsa	
109 VeloPuls	34 PitchSnc	90 Table	
110 ZimpBass	35 PolySix	91 Vangelis	
111 Birdland	36 LoTech	92 VS_Chor	
112_303Lead	37 NeoDisco	93 WarmStr	
--- SynthLead ---	38 Fatsynt2	94 WarmSync	
113 Leadsync	39 FatSynth	--- Spectrals ---	
114 Arp_2600	40 ResoSaw	95 Spect_01	
115 OberSolo	41 Saga	96 Spect_2	
116 Ban5th	--- SynthPad ---	97 Spect_3	
117 Banana	42 Atstrin2	98 Spect_04	
118 Basleat2	43 Atstrin	99 Spect_05	
119 SyncSolo	44 Bowglas2	100 Spect_06	
120 bowglass	45 Childpad	101 Spect_07	
121 CornPop	46 Cold_Pad	102 Spect_08	
122 Cpt_Iglo	47 DampdPad	103 Spect_9	
123 Doc_SOLO	48 DigiAge2	104 Spect_10	
124 Dr_Reso	49 DigiPerc	105 Spect_11	
125 EBM_Lead	50 DigiTep	106 Spect_12	
126 EchoSnth	51 Digi_Age	107 Spect_13	
127 FatDisco	52 DigPlast	108 Spect_14	
128 RockIt	53 Dumpf	109 Spect_15	
	54 DynStrin	110 Spect_16	
<b>Bank S07 Bank-Change</b>	55 DX_Sweep	111 Spect_17	
71	56 Fantasia	112 Spect_18	
1 Jupiter1	57 FatSweep	113 Spect_19	
2 Kraftwel	58 Flut_Pad	114 Spect_20	
3 Leader2	59 Foehn	115 Spect_21	
4 Leader3	60 Fucksyn	116 Spect_22	
5 Leading	61 HeyFolks	117 Spect_23	
6 Logos	62 Japanese	118 Spect_24	
7 LongPoly	63 M12Sweep	119 Spect_25	
8 M_Mann	64 Mars	120 Spect_26	
9 M12_Lead	65 Matrix	121 Spect_27	
10 Morette	66 Noisy_Ch	122 Spect_28	
11 Oberheim	67 Oldstr	123 Spect_29	
12 PercSolo	68 PadEffect	124 Spect_30	
13 PlukSolo	69 Percussi	125 Spect_31	
		126 Spect_32	

## 19.)DRUMSETS:

Manual drums and key assignment. The blank positions have the same instruments like the „STANDARD“ set.

### DRUMSETS

Note	Standardset	Roomset	Powerset	Electronset	TR808-Set
27	High_Q				
28	Slap				
29	Scratch1				
30	Scratch2				
31	Sticks				
32	SquadClk				
33	Casiodr1				
34	Casiodr2				
35	Kickdr1		Kickdr1		TR909bs
C1 36	Kickdr1		Mondo_BD	E_Kick	TR808bs
37	Snck				TR808Pm
38	Snare		Gated_SD	E_Snare	TR808Sn
39	Claps				
40	Classic		Gated_SD	TR909Sn	
41	Tom	Powtom	Powtom	E_Tom	TR808Tom
42	Cisd_HH		HHCl_2	HHCl_2	TR808CHH
43	Tom	Powtom	Powtom	E_Tom	TR808Tom
44	HHFoot	HHFoot	HHFoot		RaveFlat
45	Tom	Powtom	Powtom	E_Tom	TR808Tom
46	Open_HH	HHOp_2	HHOp_2		TR808DHH
47	Tom	Powtom	Powtom	E_Tom	TR808Tom
C2 48	Tom	Powtom	Powtom	E_Tom	TR808Tom
49	Crash				TR808CRS
50	Tom	Powtom	Powtom	E_Tom	TR808Tom
51	RideOpen				
52	China_Cr			Reverse	
53	RideBell				
54	Tamburin				
55	Splash				
56	Cowbell				TR808Cow
57	Crash2				
58	Vibroslp				
59	Ride				
C3 60	Bongolo				
61	Bongolo				
62	Congasl				TR808Clb
63	Congasl				TR808CMB
64	Congalo				TR808CHb
65	Timbale				
66	Timbale				
67	Hi_Agogo				
68	Lo_Agogo				
69	Cabasa				
70	Marcas				TR808Mcs
71	ShrWhis				
C4 72	LongWhis				
73	GüiroShr				
74	Güiro				
75	Clave				TR808Cla
76	Hi_Wdblk				
77	Lo_Wdblk				
78	CocaLa				
79	CucaHi				
80	Mt_Trngl				
81	Lo_Trngl				
82	Shaker				
83	Jinglenl				
C5 84	Belltree				
85	Cajonet				
86	MidSurdo				
87	Op_Surdo				

Note	StandardSet	JazzSet	BrushSet	Orchestr	VocalSet
27	High_Q	Cbd_HH			
28	Slap	HHFoot			
29	Scratch1	Open_HH			
30	Scratch2	Ride			
31	Sticks	Sticks			
32	SqrntCk	SqrntCk			
33	Casiodr1				
34	Casiodr2				
35	Kickdrn2	JazzKick		O_Bass	Ech
C1 36	Kickdrn1	JazzKick		O_Bass	Boom
37	Stick	Snap			Aw
38	Snare	NatSnare2	Swish	OrchRim	Geh
39	Claps	BrushSlp	BrushSlp	Castanet	Cha
40	Classic	NatSnare	Swirl	OrchRim	Zack
41	Tom			Timpani	FuhTom
42	Cbd_1HH			Timpani	ZackHH
43	Tom			Timpani	FuhTom
44	HHFoot			Timpani	ZackHH
45	Tom			Timpani	FuhTom
46	Open_HH			Timpani	GeshOHH
47	Tom			Timpani	FuhTom
C2 48	Tom			Timpani	FuhTom
49	Crash			Timpani	Gesh
50	Tom			Timpani	FuhTom
51	RideOpen			Timpani	Fuh
52	China_C2			Timpani	YeahYeah
53	RideBell			Timpani	
54	Tamburin				
55	Splash				Jodler
56	Cowbell				Oohh
57	Crash2			OrchCrash	Au2
58	Vibetrip				
59	Ride				
C3 60	Bongohi				
61	Bongobo				
62	Congalvp				
63	Congahi				
64	Congalo				
65	Timbale				Bang
66	Tritobale				Bang
67	Ht_Agogo				
68	Lac_Agogo				
69	Cabasa				
70	Maracas				
71	ShnWhis				
C4 72	LongWhis				
73	GuroShi				
74	Guro				
75	Clave				
76	Ht_Wdthk				
77	Lo_Wdthk				
78	Cuicalo				Wooh
79	Cuicalfi				Aazh
80	Mt_Tngl				
81	Lo_Tngl				
82	Shaker				
83	Jinglebf				
C5 84	Belltree				
85	Castanet				
86	MedSardo				
87	Op_Surdu				



Note	StandardSet	TR909Set	House	SteelSet	DrySet
27	High_Q				
28	Slap				
29	Scratch1				
30	Scratch2				
31	Sticks				
32	SquarClk				
33	Casiodr1				
34	Casiodr2				
35	Kickdrn2	TekkkKick	TR908bs	Metall_BD	Kickdrn1
C1 36	Kickdrn1	TR909bs	Tekkkick	E_Kick2	LimnKick
37	Stick	TR909Sk	TR909Sk		
38	Snare	TR909Sn	TR909Sn	MetallSD	
39	Claps	TR909Clp	TR909Clp	PostClaps	
40	Classic	TR908Sn	E_Snare2		Snare
41	Tom	TR908Tom	TR908Tom	SteelTom	
42	Clad_HH	TR909CHH	TR909CHH	SteelHH	HHCl_2
43	Tom	TR908Tom	TR908Tom	SteelTom	
44	HHFoot	RaveHat	RaveHat	SteelHH	HHShoape
45	Tom	TR908Tom	TR908Tom	SteelTom	
46	Open_3HH	TR909CHH	TR909CHH	SteelCHH	HHOp_2
47	Tom	TR908Tom	TR908Tom	SteelTom	
C2 48	Tom	TR908Tom	TR908Tom	SteelTom	
49	Crash	TR908CR5	TR908CR5	LeakCrash	
50	Tom	TR908Tom	TR908Tom	SteelTom	
51	RideOpen		VocHit	Peking	
52	China_Cr		KwTchak		
53	RideBell		Kwzap		
54	Tamburin				
55	Splash				
56	Cowbell	TR908Cow	TR908Cow		
57	Crash2				
58	Vibesalp		ZipUp		
59	Ride				
C3 60	Bongobu				
61	Bongolo	TR908Clo	Casiodr1		
62	Congaslp	TR908CMi	Casiodr2		
63	Conguba	TR908CHi	Casiodr2		
64	Congalo		Wash		
65	Timbale		YeahYeah		
66	Timbale				
67	Hu_Agogo				
68	Lo_Agogo				
69	Cubasa				
70	Maracas	TR908Mrs	TR909bs		
71	ShriWhis		Tylo_SD		
C4 72	LumpWhis				
73	GuireSho				
74	Guire		Indian		
75	Clave	TR908Cla	TR908Cla		
76	Ifi_Watbk		Scratch1		
77	Lo_Watbk		Scratch2		
78	CyicalLo				
79	CucallR				
80	Mt_Tingl		DrumF111		
81	Lo_Tingl		DrumF112		
82	Shaker		FM_Kick		
83	Jinglebl		FM_Snare		
C5 84	Bellino		FM_Video		
85	Castanet		VocoKick		
86	MidSundo		VocoPop		
87	Op_Surda		VocoZach		

Note	StandardSet	AnalogSet	RockSet	NaturalSet
27	High_Q			
28	Slap			
29	Scratch1			
30	Scratch2			
31	Sicks			
32	SquareCik			
33	Casiodr1			
34	Casiodr2			
35	Kickdrml	TekkKick	LinnKick	Mundo_BD
C1 36	Kickdrml	Resolned	Mondo_BD	Kickdrml2
37	Sick	Casiodr2		
38	Snare	Tight_SD	Classic	NatSnare
39	Claps	TR809Clip		PowClaps
40	Classic	NoiseStr	Gated_SD	NatSnar2
41	Tom	AnalogTom	Powtom	
42	Cbsd_HH	AnalogHH		
43	Tom	AnalogTom	Powtom	Powtom
44	HHFoot	RaveHat		
45	Tom	AnalogTom	Powtom	
46	Open_HH	AnalogObh		
47	Tom	AnalogTom	Powtom	PowTom
C2 48	Tom	AnalogTom	Powtom	
49	Crash	NoiseCrs		
50	Tom	AnalogTom	Powtom	Powtom
51	RideOpen			
52	China_Cr			
53	RideBell	ZipUp		
54	Tamburin			
55	Splash	KwTachik		
56	Cowbell	TR808Cow	ShortCrs	
57	Crash2			
58	Whistle			
59	Ride			
C3 60	Bongohi	Casiodr2		
61	Bongolo	Casiodr1		
62	Congasp	TR808Cto		
63	Congahi	TR808CMu		
64	Congalo	TR808CHI		
65	Timbale			
66	Timbale			
67	Hi_Agogo			
68	Lo_Agogo			
69	Cabasa			
70	Maracas	Shaking		
71	ShrtWhis			
C4 72	LongWhis			
73	GuanShit	KwZap		
74	Cairo			
75	Clave	TR808Cla		
76	Hi_Wahuk			
77	Lo_Wdhlk			
78	CacaoLo			
79	CacaoHi			
80	Mt_Tingl	DrumEff1		
81	Lo_Tingl	DrumEff2		
82	Shaker	FM_Kick		
83	Jingiehl	FM_Snare		IronBell
C5 84	Belline	FM_Video		
85	Castanet	VocoKick		
86	MidSunko	VocoPop		
87	Op_Sunda	VocoZish		

Note	Chaos1	Chaos2	Chaos3
27	Natscare	Timpani	TR808cl
28	Natscar2	Timpani	TR808Cl2
29	GushOth	Wood	TR808Ch
30	AnalogueHH	OreCrash	TR808Chh
31	Analogueh	zipup	Tom
32	Fm_Kick	Razobard	Tom
33	Noiseers	KwZap	Tom
34	LinnKick	KwTchak	Timbale
35	ZackHHH	HHop_2	Timbale
36	Jodier	Gosh	tamburin
37	FuhTom	Geh	Swish
38	Boom	Fuh	Squarck
39	Analgtom	Ezh	snare
40	Analgtom	steelHH	Snap
41	analgtom	steelTom	Shaker
42	cuicelo	SteelOth	ShortCrs
43	cucane	MetallSD	Scratch1
44	le_walbk	MetallBD	Scratch2
45	crash1	IronBell	RideOpen
46	crash	IndCrash	RideBell
47	china_cr	Drumett1	Ride
48	tr909m	Drumett2	Reverse
49	strwhts	Drumett3	Ravellet
50	Peking	Casodr2	PowTom
51	longwhis	Casodr1	PowTom
52	high_q	Casosm2	PowTom
53	lo_tngl	Bang	Orchrm
54	mt_tngl	An2	Open_HH
55	right_sd	Aa	Op_Sndr
56	zack	Tr909Sk	Mondo_BD
57	ccokick	Zip	Morcas
58	yeahyeah	KickDrm1	Woodblok
59	vocit	ToKKKick	Guitrnt
60	tr909ohh	Jinglebl	Gtrm
61	tr909clp	Jodira	Gated_SD
62	tr909clh	Powelops	Lo_Agogo
63	Tr909bs	Jazzkick	Kickdrum2
64	Tr808tom	HHStoppe	zipzap
65	tr808tom	HHFctr	
66	tr808tom	HHFCT_2	
67	tr808m	E_Tom	
68	tr808rim	E_Snare	
69	tr808ohh	E_Snare2	
70	tr808crs	E_Kick2	
71	tr808mrs	E_Kick	
72	tr808cow	Crash1	
73	tr808mni	CowBell	
74	fm_snare	Congaslp	
75	fm_videv	Congalo	
76	aaahh	Clst_HH	
77	q_bass	clave	
78	octh	classic	
79	stick	castanet	
80	sticks	cubasa	
81	swid	brushdp	
82	vibraslp	BongoLo	
83	vocopop	BongoHi	
84	vocozish	BellTree	
85	vococelo	Tr808Bs	
86	slap	Splash	
87	claps		

## 20.) The Bank-Changes

If you want to reach all Performances via MIDI, you have to send a Program-change and a bank-change. The reason for that is that you have a maximum of 128 sounds if you only use a program-change. But notice that you have to send the bankchange before you send the program-change.

The different Performance-Banks you reach with the following bank-changes

MIDI-Bank-Change	Performance-Bank
0	Ram
1	ROM-Bank 1
2	ROM-Bank 2
3-4	(Expansion Boards)

The 1000 sounds are divided into 8 banks.

To reach the different banks via MIDI you need a Bank-Change-Command (Midi-Controller 0). The corresponding Bank-Change-Numbers you will find in the Single-Sound-Listing.

If you don't know how to carry out the Bank-Change-Command, you can let the QUASAR do this. Just connect the MIDI-Output of the QUASAR to the MIDI-Input of the Sequencer. In the „WRITE“-menu there is a page (<7>) where you can send the Bank- and the Program-change of the selected part.

## 21.) The different Midi-Modes of the QUASAR:

The following Modes are reachable only in the Performance-Mode. All adjustments you can make in the „COMM“-menu

### -Omni Mode:

The Default-Adjustment of the QUASAR. Every incoming MIDI-Data (no matter on which MIDI-Channel) will be routed to the displayed Performance. If you use just one MIDI-Transmitchannel and if you just want to play Performances then you can use the Omni-Mode.

```
COMMON EDIT <2> SYSTEM PARAMETER
OMNI: ON VELOCITY: EXP * SINGLE-OUTPUT: OFF
```

### -Performance Mode (MIDI-Poly-Mode):

By switching the Omni-Mode off you reach the MIDI-Poly-Mode. The conclusion is that the Performance is playable on the Masterchannel of the QUASAR. The other parts are switched off.

```
COMMON EDIT <2> SYSTEM PARAMETER
OMNI: OFF VELOCITY: EXP * SINGLE-OUTPUT: OFF
```

Master Channel: The displayed Performance is only playable at the Masterchannel (PolyMode/MultiChannel). If the Masterchannel of the QUASAR is 2, the MIDI-Transmitchannel of your masterkeyboard has to be 2, too.

```
COMMON EDIT 11> SYSTEM PARAMETER 1
TRANSP: C TUNE: +0 MASTERCHANNEL: 2
```

### - Multi-Channel-Mode:

A special MIDI-Mode of the QUASAR. The displayed Performance is playable on the MasterChannel. The other parts can also be used. There you can play Single-Sounds. If you want to switch the Multichannel-Mode on go to the „COMM“-menu:

```
COMMON EDIT <5> GLOBAL MIDI SWITCHES
MULTICHANNEL: ON USERBANKLOCK: OFF
```

### GM-/Single-MODE: The 16-part multitimbrality you reach by pressing the „GM“-Button:

After you've pressed the GM-Button the QUASAR is automatically set to the 16-part multitimbrality. Now you can use the QUASAR as 16 synthesizer modules. Each part can have a different sound. The Multinode is the best if you want to use the QUASAR with a sequencer, if you want to make complete arrangements with one QUASAR or if you want to play Standard-Midi-Files.

Hint: Maybe you work together with more synthesizers and a sequencer. For that, it could be important to mute some parts of the QUASAR. Use the fourth dial to switch the Part-Mode to „OFF“. Now a „X“ appears in the Display.

#### a) The Multichannel-Mode:

The QUASAR has got one feature which makes it different from most other synthesizers. You can combine a Performance with Single-Sounds. The Single-Sounds are playable on the parts that are not used. To switch the Multichannel to „ON“, press the „COMM“-Button. Turn the page-dial until you reach page <5>.

There the following message appears:

```
COMMON EDIT: <5>      GLOBAL MIDI SWITCHES
MULTICHANNEL: OFF     USERBANKLOCK: OFF
```

Now switch the parameter called Multichannel to „ON“. The selected Performance is playable on the MasterChannel the left parts use single-sounds.

```
COMMON EDIT: 11>      SYSTEM PARAMETER 1
TRANSP: CTUNE: -0      MASTERCHANNEL: 1
```

The QUASAR is 12-part multitimbral in this mode

The Multichannel-Mode gives you the possibility to use a faster Solo-Voice in your arrangements:

But you should keep the following in mind:

#### 1.) Effects

All parts use the Effects of the Performance

#### 2.) Controller-Routing

To provide against undesired modulations you have a standard-controller-routing in the parts using single-sounds:

```
Modulation > LFO
Aftertouch > LFO
Pitch-Wheel > Pitch
```

3.) If you change the Performance, the Algorithms of the Effects will be changed as well. This can interrupt the signal of the other parts. The result will be much better if you work with performances using the same effects. Maybe you should program these changes.

#### 22.) Listing of the MIDI-Controllers

QUASAR is able to work with the following MIDI-Controllers

Controller	Number	Function	Notice
Dez.	Hex.		
0	(BnH 00H)	Bank-Select	Sound-Group - Select
1	(BnH 01H)	Modulation	Modulationstrength via Modulationwheel
5	(BnH 05H)	Porta-Time	Time of the gliding between two notes
6	(BnH 06H)	Data Entry	mostly used in connection with NRPN-Controllers

7	(BnH 07H)	Volume	Volume-Control
10	(BnH 0AH)	Panoramaposition	Moves the sound in the stereo-panorama
64	(BnH 40H)	Hold-Pedal	Sustain
65	(BnH 41H)	Porta on/off	switches the Portamento on/off (only in the Lead or Mono-Mode of the Quasar).
67	(BnH 43H)	Soft Pedal	Damper
80	(BnH 50H)	FX1-Typ	Selecting of the FX1-Algorithm
81	(BnH 51H)	FX2-Typ	Selecting of the FX2-Algorithm
91	(BnH 5BH)	FX1-Send	FX-1 - Strength of the selected part
93	(BnH 5DH)	FX2-Send	FX-2 - Strength of the selected part
98	(BnH 62H)	NRPN LSB	See
99	(BnH 63H)	NRPN MSB	the
100	(BnH 64H)	RPN LSB	discription
101	(BnH 65H)	RPN MSB	underneath
120	(BnH 78H)	all sounds off	hard version of all notes off, all sounds will be cut abruptly without taking care of the release-time
121	(BnH 79H)	Controller Reset	resets all Controllers
123	(BnH 7BH)	all notes off	all sounds will be cut, but will pass the release-time
124	(BnH 7CH)	omni off	all notes off
125	(BnH 7DH)	omni on	all notes off
126	(BnH 7EH)	mono on	all notes off
127	(BnH 7FH)	poly mode	all notes off

#### NRPN und RPN Controller

A particularity are the NRPN and the RPN- controllers. To make it possible to edit sounds just by MIDI-Controllers independent from manufactures and system exclusive data, some agreements were made by the manufactures. The change of a NRPN-parameters needs a lot more data than a standard-controller because there aren't enough standard-controllers to control all the possible parameters. The following controllable parameters had been defined in the GS-Standard. But at first we want to give an example for the use of the NRPN-Controllers to show you the principle.

Example: NRPN Controller are tuning a drum instrument:

Status	Second	Third	Commentary
HEX	BnH 63H	13H	Controller 99 (63H) with the value 24 (13H) Drumtuning
	BnH 62H	xxH	Controller 98 (62H) with the value xx for the Key
	BnH 06H	yyH	Controller 6 (Data Entry) with the value yy for the Tune

Sending these three lines one after another will have the following result:

The druminstrument on the key xx (00H - 7FH) on the MIDI-Channel with the Channel-No. n (0h - FH) will be transposed with the value yy (lowest value 00H - Standard 40H - highest value 7F). As you can see the tuning of one drum instrument needs 9 bytes. So if you want to tune more drumstruments you should make this at the beginning of a song to protect from timing problems.

The input of the MIDI-data is made in the HEX-Code. See the following listing:

Decimal		Hexadecimal	Binary
00	0	0000	0000
01	1	0000	0001
02	2	0000	0010
03	3	0000	0011
04	4	0000	0100
05	5	0000	0101
06	6	0000	0110
07	7	0000	0111
08	8	0000	1000

09	9	0000	1001
10	A	0000	1010
11	B	0000	1011
12	C	0000	1100
13	D	0000	1101
14	E	0000	1110
15	F	0000	1111
16	10	0001	0000
17	11	0001	0001 usw.

Now a list of all NRPN- and RPN- Controllers the QUASAR uses:

#### NRPN-Controller:

LFO-Speed NRPN MSB Contr.99 (BoH 63H xxH) n = Channel, xx = 01	NRPN LSB Contr. 98 (BoH 62H xxH) n = Channel, xx = 08	Data-Entry, Contr 6 (BoH 6H xxH) n = Channel, XX = Value
LFO-Strength NRPN MSB Contr.99 (BoH 63H xxH) n = Channel, xx = 01	NRPN LSB Contr. 98 (BoH 62H xxH) n = Channel, xx = 09	Data-Entry Contr 6 (BoH 6H xxH) n = Channel, XX = Value
LFO-Delay NRPN MSB Contr.99 (BoH 63H xxH) n = Channel, xx = 01	NRPN LSB Contr. 98 (BoH 62H xxH) n = Channel, xx = 10	Data-Entry, Contr 6 (BoH 6H xxH) n = Channel, XX = Value
Cutoff-Frequency NRPN MSB Contr.99 (BoH 63H xxH) n = Channel, xx = 01	NRPN LSB Contr. 98 (BoH 62H xxH) n = Channel, xx = 32	Data-Entry, Contr 6 (BoH 6H xxH) n = Channel, XX = Value
Resonance NRPN MSB Contr.99 (BoH 63H xxH) n = Channel, xx = 01	NRPN LSB Contr. 98 (BoH 62H xxH) n = Channel, xx = 33	Data-Entry, Contr 6 (BoH 6H xxH) n = Channel, XX = Value
EG-Attack NRPN MSB Contr.99 (BoH 63H xxH) n = Channel, xx = 01	NRPN LSB Contr. 98 (BoH 62H xxH) n = Channel, xx = 99	Data-Entry, Contr 6 (BoH 6H xxH) n = Channel, XX = Value
EG-Decay NRPN MSB Contr.99 (BoH 63H xxH) n = Channel, xx = 01	NRPN LSB Contr. 98 (BoH 62H xxH) n = Channel, xx = 100	Data-Entry, Contr 6 (BoH 6H xxH) n = Channel, XX = Value
EG-Release NRPN MSB Contr.99 (BoH 63H xxH) n = Channel, xx = 01	NRPN LSB Contr. 98 (BoH 62H xxH) n = Channel, xx = 102	Data-Entry, Contr 6 (BoH 6H xxH) n = Channel, XX = Value
Drum-Pitch NRPN MSB Contr.99 (BoH 63H xxH) n = Channel, xx = 24	NRPN LSB Contr. 98 (BoH 62H xxH) n = Channel, xx = key-number	Data-Entry, Contr 6 (BoH 6H xxH) n = Channel, XX = Value
Drum-Level NRPN MSB Contr.99 (BoH 63H xxH) n = Channel, xx = 26	NRPN LSB Contr. 98 (BoH 62H xxH) n = Channel, xx = key-number	Data-Entry, Contr 6 (BoH 6H xxH) n = Channel, XX = Value
Drum-Panorama-Position NRPN MSB Contr.99 (BoH 63H xxH)	NRPN LSB Contr. 98 (BoH 62H xxH)	Data-Entry Contr 6 (BoH 6H xxH)



n = Channel, xx = 28	n = Channel, xx = key-number	n = Channel, XX = Value
Drum-Instrument FX1-Send NRPN MSB Contr.99 (BnH 63H xxH) n = Channel, xx = 29	NRPN LSB Contr. 98 (BnH 62H xxH) n = Channel, xx = key-number	Data-Entry Contr 6 (BnH 6H xxH) n = Channel, XX = Value*
Drum-Instrument FX2-Send NRPN MSB Contr.99 (BnH 63H xxH) n = Channel, xx = 30	NRPN LSB Contr. 98 (BnH 62H xxH) n = Channel, xx = key-number	Data-Entry Contr 6 (BnH 6H xxH) n = Channel, XX = Value

#### RPN-Controller:

Pinch-Bend Strength RPN MSB Contr.101 (BnH 65H xxH) n = Channel, xx = 00	RPN LSB Contr. 100 (BnH 64H xxH) n = Channel, xx = 00	Data-Entry Contr 6 (BnH 6H xxH) n = Channel, xx = Value
Fine-Tune RPN MSB Contr.101 (BnH 65H xxH) n = Channel, xx = 00	RPN LSB Contr. 100 (BnH 64H xxH) n = Channel, xx = 01	Data-Entry Contr 6 (BnH 6H xxH) n = Channel, xx = Value
Coarse-Tune RPN MSB Contr.101 (BnH 65H xxH) n = Channel, xx = 00	RPN LSB Contr. 100 (BnH 64H xxH) n = Channel, xx = 02	Data-Entry Contr 6 (BnH 6H xxH) n = Channel, xx = Value

### 23.) System-Exclusiv Format

#### GM/GS-Messages:

Reset GS: F0 41 10 42 12 40 00 7F 00 F7 -> enter GM-Mode  
 Enter GM: F0 7E 7F 09 01 F7 -> enter GM-Mode  
 Exit GM: F0 7E 7F 09 02 F7 -> enter Performance-Mode

#### Request Data from device:

Byte No.	Value	Remarks
0	F0	System Exclusive start command
1	3F	Quasimidi id number
2	dv	device number = QUASAR System channel
3	20	QUASAR id number
4	52	(R)equst data
5	ah	adress high
6	am	adress mid
7	al	adress low
8	dh	data count high
9	dl	data count low
10	F7	end of System Exclusive

#### Dump Data to device:

Byte No.	Value	Remarks
0	F0	System Exclusive start command
1	3F	Quasimidi id number
2	dv	device number = QUASAR System channel

3	20	QUASAR id number
4	44	(Dump data
5	ah	adress high
6	am	adress mid
7	al	adress low
8...	dt	data (7 bit)
...	F7	end of System Exclusive

#### QUASAR Adress Map:

(third byte is Address-Offset)

00 00 00	system parameter
01 00 00	temporare common parameter
01 01 00	temporare part parameter (part 1)
01 02 00	... (part 2)
...	...
01 10 00	... (part 16)
01 11 00	temporare performance name
02 00 00	temporare drum parameter (drum instr 1)
02 01 00	... (drum instr 2)
...	...
02 3D 00	... (drum instr 61)
03 00 00	reserved
...	...
03 7F 00	...
04 00 00	single sound map program 1
04 01 00	... 2
...	...
04 7F 00	... 128
05 00 00	performance 1 common
05 01 00	... part 1
05 02 00	... part 2
05 03 00	... part 3
05 04 00	... part 4
05 05 00	name
06 00 00	performance 2 common
...	...
68 05 00	performance 100 name
69 00 00	sound name bank 0, sound 0 (only request!)
69 01 00	... sound 1 ...
...	...
69 7F 00	... sound 127 ...
6A 00 00	sound name bank 1, sound 0 ...
...	...
70 7F 00	sound name bank 7, sound 127 ...
71 00 00	sound name bank 8, sound 0 (dump data for
...	... ramcard only!)
72 7F 00	sound name bank 9, sound 127 ...
73 00 00	sound name bank 10, sound 0 (only request!)
...	...
74 7F 00	sound name bank 11, sound 127 ...
75 00 00	reserved
...	...

7F 7F 00

# Adress Offsets:

/***** SYSTEM-Parameter *****/	
00 transpose	/* 0..12 (-6..+6) */
01 tune	/* 0..127 (-64..+63) */
02 system channel	/* 0..15 (1..16) */
03 multichannel mode	/* 0..1 (off,on) */
04 userbanklock	/* 0..1 (off,on) */
05 program change input filter	/* 0..1 (off,on) */
06 channel pressure	/* 0..1 (off,on) */
07 modulation	/* 0..1 (off,on) */
08 parameter control	/* 0..1 (off,on) */
09 single out mode	/* 0..1 (off,on) */
0A omni mode	/* 0..1 (off,on) */
0B master velocity curve no.	/* 0..7 (lin, lin, lin+..., ...) */
0C program change out filter	/* 0..1 (off,on) */
0D parameter control	/* 0..1 (off,on) */
0E foot control	/* 0..1 (off,on) */
0F midi clock	/* 0..1 (off,on) */
/***** COMMON-Parameter *****/	
00 performance level	/* 0..127 */
01 performance mode	/* 0..15 (single,double...) */
02 performance value	/* 0..127, splitkey/detune */
03 reserved	
04 free controller no.	/* 0..97 */
05 foot controller no.	/* 0..127 */
06 foot control on value	/* 0..127 */
07 foot control off value	/* 0..127 */
08 foot control toggle mode	/* 0..1 (off,on) */
/* --- Modulations-Matrix... --- */	
09 mod.depth[SOURCE1][DEST1]	/* 0..127 (-64..63) */
09 mod.depth[SOURCE1][DEST2]	/* 0..127 (-64..63) */
...	
28 mod.depth[SOURCE4][DEST4]	
/* --- FX Parameter... --- */	
29 fx1 activity	/* 0..1 (off,on) */
2A fx1 type	/* 0..23, (FX1-Effect#) */
2B fx1 parameter[PAGE1][PAR1]	/* 0..127 (FX1-Parameter1) */
2C fx1 parameter[PAGE1][PAR2]	/* 0..63 (FX1-Parameter2) */
...	
30 fx1 parameter[PAGE2][PAR3]	
31 fx2 activity	/* 0..1 (off,on) */
32 fx2 type	/* 0..30, (FX2-Effect#) */
33 fx2 parameter[PAGE1][PAR1]	/* 0..127 (FX2-Parameter1) */
34 fx2 parameter[PAGE1][PAR2]	/* 0..127 (FX2-Parameter2) */
...	
3B fx2 parameter[PAGE3][PAR3]	
/* --- Arpeggiator Parameter... --- */	
3C arp pak1	/* bit 2 arp_on 0..1 (off,on) */
	/* bit 0..1 arp_resolution 0..3 (4,8,16,32) */
3D speed	/* 0..127 */
3E gate	/* 0..127 */

```

3F arp pak2          /* bit 5..6 arp_sync 0..2 (int,ext1,ext2) */
                     /* bit 3..4 arp_dir 0..2 (up,down,up/down) */
                     /* bit 2 arp_sort 0..1 (off,on) */
                     /* bit 1 arp_hold 0..1 (off,on) */
                     /* bit 0 arp_velo 0..1 (off,on) */
40 arp pak3          /* bit 3..6 arp_track 0..15 (1..16) */
                     /* bit 7arp_thru 0..1 (off,on) */
                     /* bit 1arp_out 0..1 (off,on) */
                     /* bit 0 arp_freeze 0..1 (off,on) */

***** PART-Parameter *****/
00 bank no.          /* 0..7 (8..11 Rom/Ramcards) */
01 sound no.         /* 0..127 */
02 trackmode         /* 0..2 (0=muted, 1=poly, 2=mono) */
03 level             /* 0..127 */
04 panorama         /* 0..20 (off,7L..7R,md,key,yek,dyn,ayd) */
05 fx1 send          /* 0..63 */
06 fx2 send          /* 0..63 */
07 transpose         /* 0..48 (-24..+24) */
08 tune             /* 0..127 (-64..+63) */
09 cutoff frequency /* 0..127 (-64..+63) */
0A resonance freq.  /* 0..127 (-64..+63) */
0B eg attack         /* 0..127 (-64..+63) */
0C eg decay          /* 0..127 (-64..+63) */
0D eg release        /* 0..127 (-64..+63) */
0E vibrato rate      /* 0..127 (-64..+63) */
0F vibrato depth     /* 0..127 (-64..+63) */
10 vibrato delay     /* 0..127 (-64..+63) */
11 velocity curve no. /* 0..14 (lin,lin,lin+,exp+,...) */
12 holdpedal         /* 0..1 (off,on) */
13 modulation depth /* 0..127 */
14 pitch sensitivity /* 0..24 (-12..12) */
15 volume mod. sens. /* 0..127 (-64..+63) */
16 tone mod. sens.  /* 0..127 (-64..+63) */
17 portamento time  /* 0..127 */

***** DRUM-Parameter *****/
00 level             /* 0..127 */
01 pan              /* 0..19 (off,7L..7R,md,out3,out4) */
02 fx1 send         /* 0..63 */
03 fx2 send         /* 0..63 */
04 pitch            /* 0..48 (-24..+24) */

***** Single Sound Map *****/
00 bank no.         /* 0..7 (8..11 Rom/Ramcards) */
01 sound no.        /* 0..127 */

```

#### ONLY WITH OPTIONAL RAM-BOARD and VERSION 2.0:

Sample-Dump-Header: (transmitted to QUASAR)

Byte No:	Value	Remarks
0	FO	System Exclusive start command

1	7E	Common Non-Real-Time message
2	cc	channel number = QUASAR system channel *
3	01	dump header id
4..5	ss ss	sample number (ignored)
6	ee	sample format (# of bits)
7..9	ff ff ff	sample period (ignored)
10..12	gg gg gg	sample length (lsb first)
13..15	hh hh hh	sustain loop start (ignored)
16..18	ii ii ii	loop end (ignored)
19	jj	loop type (ignored)
20	F7	end of System Exclusive

#### Sample-Dump-Data-Packet: (transmitted to QUASAR)

Byte No:	Value	Remarks
0	F0	System Exclusive start command
1	7E	Common Non-Real-Time message
2	cc	channel number = QUASAR system channel *
3	02	dump data id
4	pp	running packet count
5...	dd	120 bytes sample data
125	cs	checksum (ignored)
126	F7	end of System Exclusive

#### Acknowledge: (transmitted from QUASAR)

Byte No:	Value	Remarks
0	F0	System Exclusive start command
1	7E	Common Non-Real-Time message
2	cc	channel number = QUASAR system channel *
3	7F	acknowledge flag
4	pp	packet count
5	F7	end of System Exclusive

#### Abort-Dump: (transmitted from QUASAR)

Byte No:	Value	Remarks
0	F0	System Exclusive start command
1	7E	Common Non-Real-Time message
2	cc	channel number = QUASAR system channel *
3	7D	cancel flag
4	pp	packet count
5	F7	end of System Exclusive

#### Identity Request

Byte No.	Value	Remarks
0	F0	System Exclusive start command
1	7E	Common Non-Real-Time message
2	cc	channel number = QUASAR system channel *
3	06	general information
4	01	identity request
5	F7	end of System Exclusive

#### Identity Reply

Byte No.	Value	Remarks
0	F0	System Exclusive start command
1	7E	Common Non-Real-Time message
2	cc	channel number = QUASAR system channel *
3	06	general information
4	02	identity reply
5	3F	Quasimidi id
6	20	QUASAR id
7	xx	Romcard exists flag (00=no, 01=yes)
8	yy	Romcard1 exists flag (00=no, 01=yes)
9	zz	Romcard2 exists flag (00=no, 01=yes)
10..13	vv vv vv vv	Version no. (4 ascii characters, i.e. '2.00')
10	F7	end of System Exclusive

\* note that if cc = 7Fh the QUASAR respond regardless of what master channel it is on

#### 24.)Warranty and registration card

Please fill out this card and send it back to:

QUASIMIDI GmbH  
Eisenbahnstr. 13  
35274 Kirchhain  
Germany

##### How to Validate the warranty

To validate your warranty, fill out the enclosed warranty card and return it to QUASIMIDI within ten days of the purchase date. Without returning the warranty card we only grant for 6 months of full warranty instead of 12 months.

##### What is covered and what is not covered ?

This warranty covers all defects in material and workmanship for six (twelve) months from the date of original purchase. This warranty does not cover damage to or deterioration of the external cabinet or internal circuitry resulting from accident, misuse, neglect, attempted unauthorized repair or failure to follow instructions in the owners manual. This warranty does not cover units that have been modified or altered (The only exception is an Authorized QUASIMIDI modification which includes its own warranty coverages).

This warranty does not cover damage that may occur during shipping.

Software/Firmware are sold as is and are not covered by warranty.

QUASIMIDI accessory items are covered under a separate limited warranty.

##### How to obtain Warranty Performance

Return your unit to an Authorized QUASIMIDI Repair Station. If you are unable to locate one, write or call the QUASIMIDI Factory Service Department. We will either refer you to an Authorized Repair Station or issue you a return authorization number for factory service. Units returned to QUASIMIDI for factory service must prominently display the authorization number on the outside of the shipping carton and on all related documents or units will be returned freight collect. You must pay all shipping costs to and from the factory. Shipment of the product to QUASIMIDI is the responsibility of the owner, and should be insured by the owner for the full value of the product.

##### NO CLAIM FOR WARRANTY WILL BE HONORED WITHOUT PROOF OF PURCHASE

##### Limitations of implied warranties and exclusion of certain damages.

Any implied warranties, including warranties of merchantability and fitness for a particular purpose are limited in duration to the length of the warranty.

QUASIMIDI's liability, for any defective product, is limited to repair or replacement of the product.

QUASIMIDI shall not be liable under any circumstances for:

## 26.) MIDI-Implementation

Function...		Transmitted	Recognized	Arpeggiator	
				Transmitted	Recognized
Basic Channel	Default	1	1-16	1-16 ***	1-16
	Changed	1-16	1-16	x	x
Mode	Default	x	**	0	0
	Messages Altered	x	0		
Note Number	True Voice	x	0-127	0-127	0-127
Velocity	Note On	x	0	0	0
	Note Off	x	x	0	0
After Touch	Keys	x	x	x	x
	Channel	x	0	x	x
Pitch Bend	MSB (7 Bit)	x	0	x	x
	LSB (14 Bit)	x	0	x	x
Free Controller	0-97	One free Controller selectable	Routeable Controller Matrix	x	x
Continuous MSB	0-31	x *	0,1,5,6,7,10	x	x
Continuous LSB	32-63	x *	0	x	x
Control Change	64-95	x *	64,65,67,80,81,82,83,91,93	x	x
Inc/Dec. (N) RPN	96-101	x	98,99,100,101	x	x
other messages	120-127	x	120,123,124,125,126,127	x	x
Program Change		0	0	x	x
System Exclusive		0	0	x	x
System Common	Song Position	x	x	x	x
	Song Select	x	x	x	x
System Common	Tune Request	x	x	x	x
System Real Time	Clock	x	x	0	0
Aux Messages	Local On/Off	x	x	x	x
	All Notes Off	x	0	0	0
	Active Sens.	x	x	x	x
	System Reset	x	x	x	x
x = No 0 = Yes * = One Controller selectable for footswitch-control. ** = Multimode 3b in GM- and Performance Multichannel mode. Omni-Mode only for Performances without multichannel Activity. Monomode, when part set to mono or lead. *** = Switchable					



