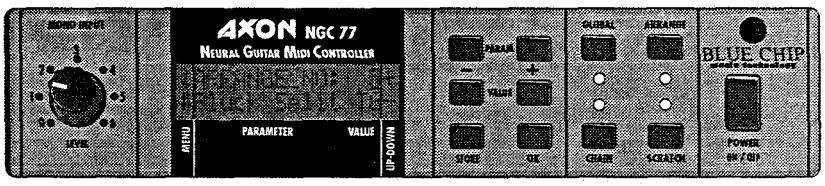
BLUE CHIP

music technology

AXON NGC 77

USER MANUAL



Version : 4.00 - 7/96

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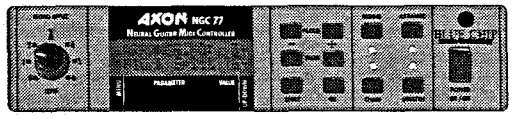
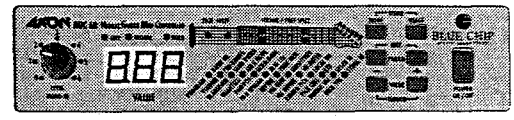
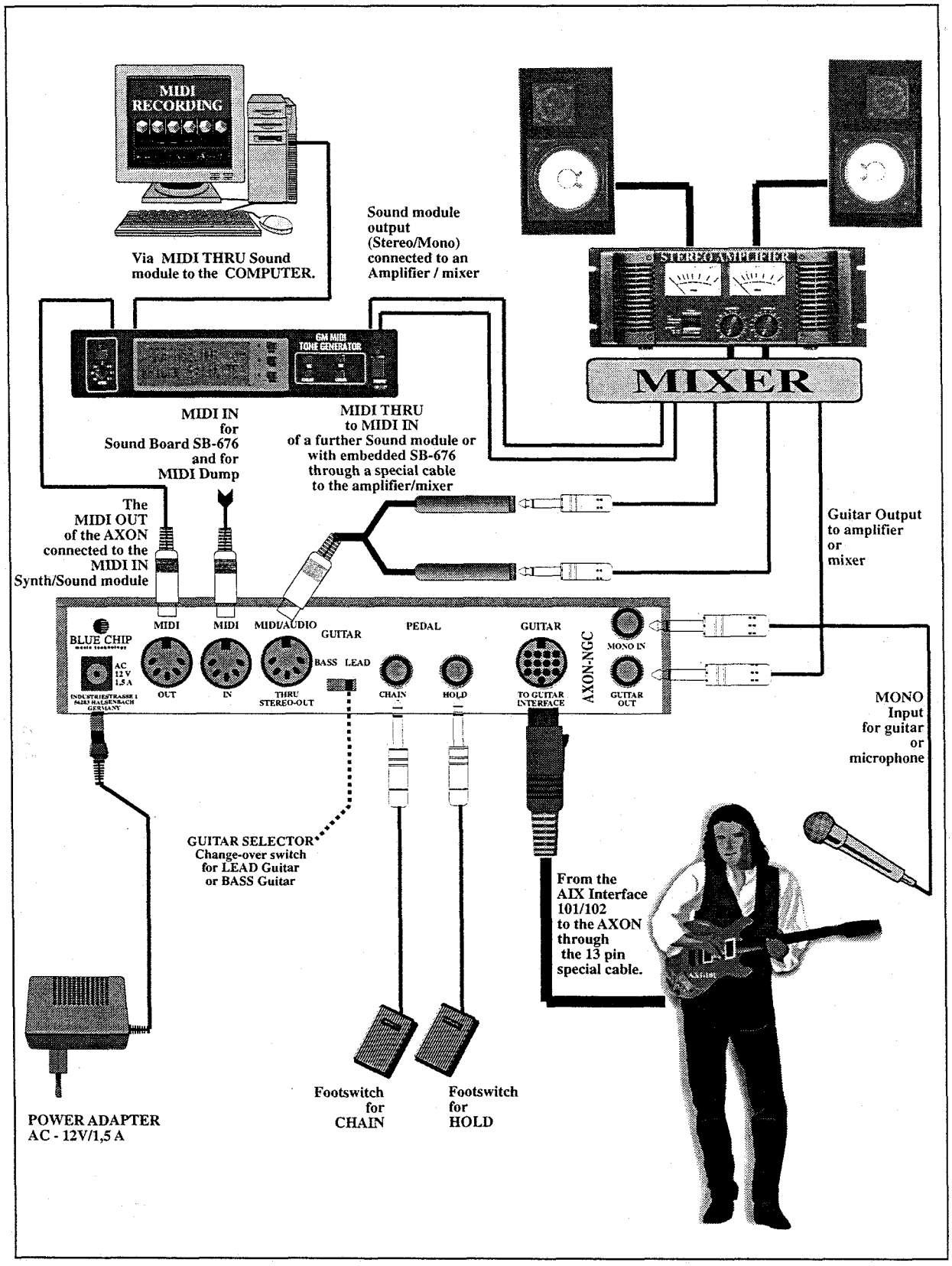
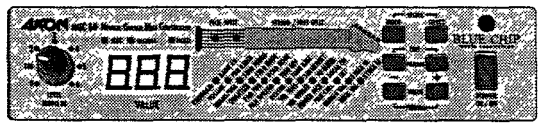
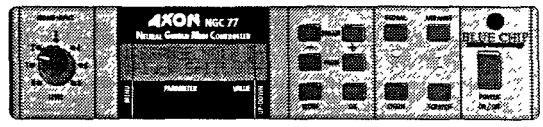


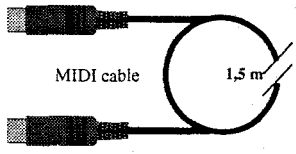




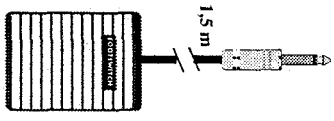




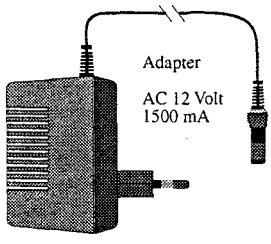
Accessories of the AXON NGC 60 respectively NGC 77



One MIDI cable with a length of 1,5 m (5')



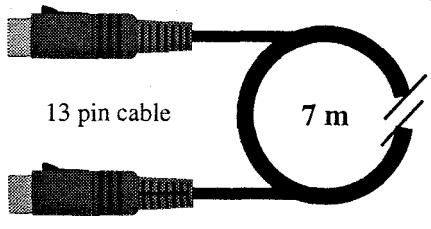
One footswitch for Hold -or Chain function

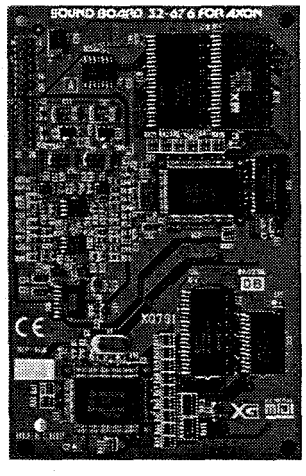


One Power Adapter for the power supply of the AXON

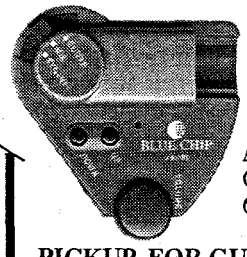
User Manual

Optional accessoires for the AXON





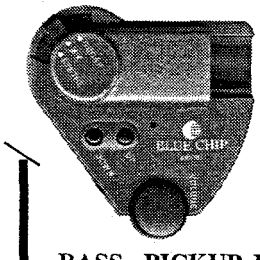
SB-676
GM / XG Sound card with 676 sounds, 11 reverb, 41 effects, inclusive special cable for stereo output.



13 pin connector

AIX-101
Guitar Interface for 6-string-guitar

PICKUP FOR GUITAR

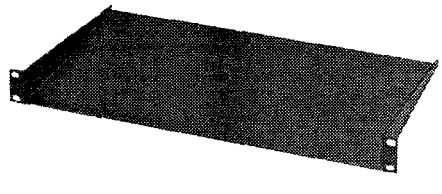


13 pin connector

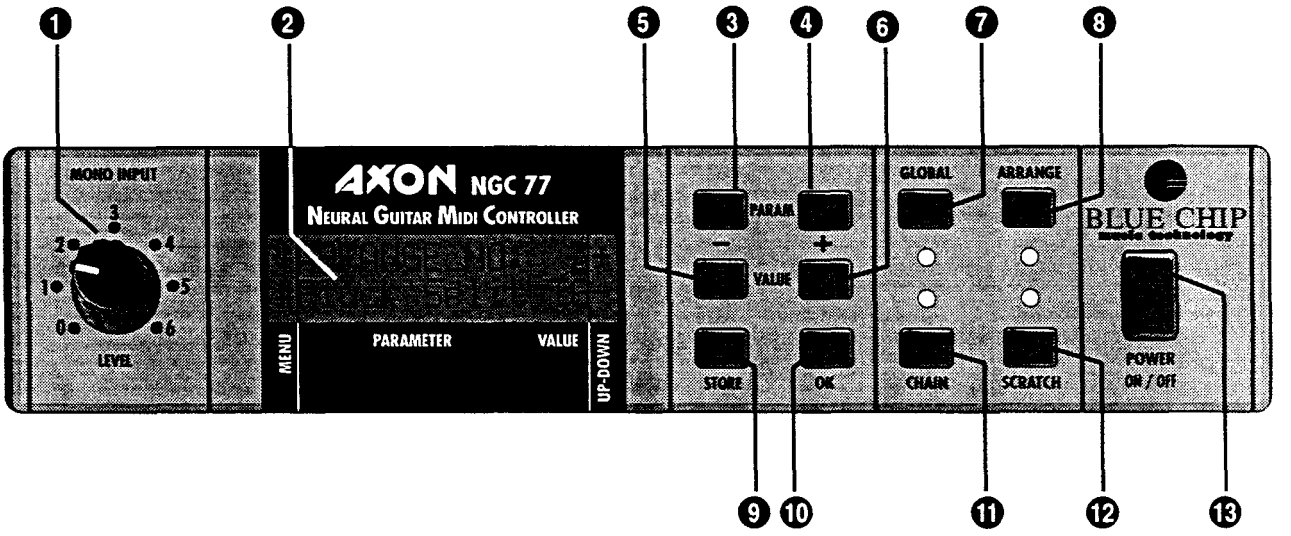
AIX-102 Bass Interface for 4-string-bass

BASS - PICKUP FOR 4 STRING BASS

19" , 1HE rack carrier for AXON + Sound modul



AXON NGC 77



FRONT PANEL

❶ Level of the MONO input

❷ The LCD-Display is rich in contrast and shows the current presets as well as the different parameters.

❸ ❹ Parameter selection; the + button moves the cursor to the next, the - button moves the cursor to the previous parameter.

❺ ❻ The Value + , - buttons are used either to select Sratch, Arrange or Chain presets, or to edit the parameter values.

❼ Access to GLOBAL parameters.

❽ Switches the AXON to the ARRANGE mode with access to 64 different ARRANGE presets as well as the possibility to edit them.

❾ The STORE button is used for saving and copying.

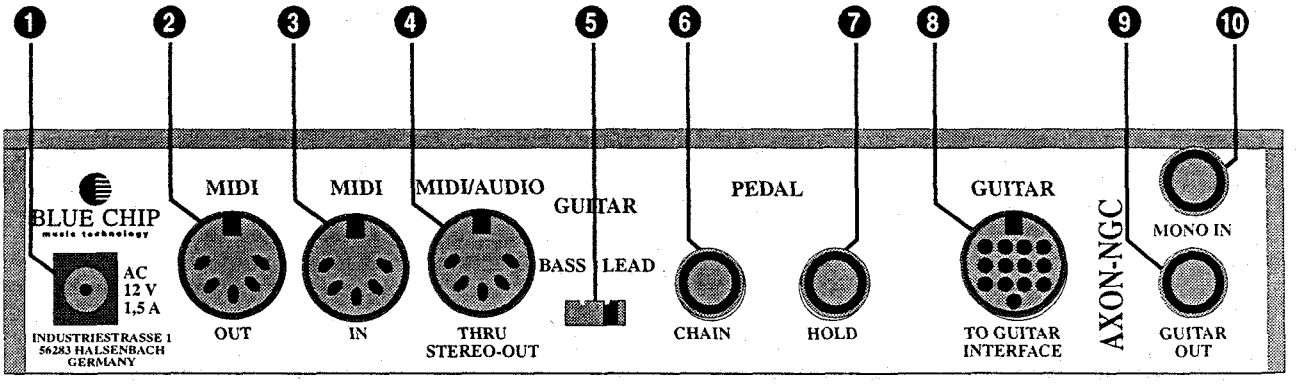
❿ The OK button serves to confirm the text at the display, to leave and call up submenus as well as to confirm the saving and copying.

⓫ Change to the CHAIN mode in order to call up a pre-programmed preset series with the chain footswitch. The chain parameters are also edited in this mode.

⓬ Change to the SCRATCH mode. 128 different SCRATCH presets are available. Moreover access to arrangement possibilities.

⓭ Power ON/ OFF switch.

AXON



Back Panel

1. Input for power adapter 12 V, 1500 mA, AC.

2. MIDI OUT jack. The AXON sends out its MIDI data at this jack.

3. MIDI IN jack. The AXON receives program change commands as well as system exclusive data via this jack. System exclusive data can also be sent to the optional sound board SB-676 which is sold by BLUE CHIP, too.

4. MIDI THRU jack. All data arrive via MIDI IN and are transmitted further through this jack. At the unused pins of this jack, the stereo audio signals of the Sound board are available. For that purpose, use the special cable which is included with the Sound board.

5. Before turning on the AXON, this switch has to be set to BASS or LEAD guitar.

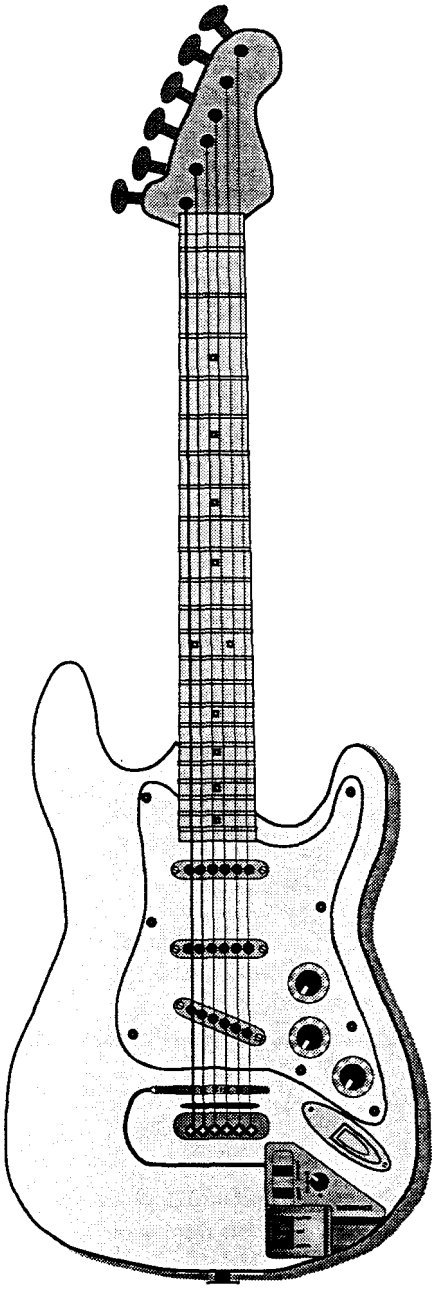
6. CHAIN footswitchjack. It enables you to activate pre-programmed preset series at the NGC 77 respectively presets at the NGC 60 with an optional footswitch.

7. HOLD footswitchjack. The footswitch belongs to the delivery of the AXON and can be used for different functions of the hold mode which can be programmed.

8. INTERFACE jack. Please connect the 13 pin cable of your guitar or bass interface to this input.

9. GUITAR OUT jack. The pickup signals of your guitar can be unchanged transmitted from this jack.

10. MONO IN jack. It enables you to connect monophonic signals with line or microphone level.



Features of the AXON

Your AXON is fitted with a novel method of pitch recognition working so quickly and safely that you can use your AXON also with a bass guitar. At present, no comparable device offers you this feature.

The AXON is unique because it recognizes the pick position of each string, and the AXON offers you new possibilities to control your MIDI instrument.
Your AXON is able to reduce the MIDI output data stream as far as possible to a minimum. According to the setting of the preset parameter, further reliefs are the result. At previous devices, Pitch Bend data load the MIDI interface strongly.
If you did not work with a comparable device before, you will get to know some terms which are perhaps new for you. Therefore, we would like to explain here the extraordinary possibilities you can use with your AXON.
The most interesting and the most extraordinary features of your AXON are undoubtedly the different split possibilities.

You can set a string split in order to divide the six strings of your guitar into two parts. In each part, your MIDI instrument could give out another sound. For that purpose, you will fix a split point - in this case a string number - in order to set the border between the two parts.

Assign a fret split in order to divide the neck of your guitar into two parts.
Think of an accord accompaniment which you play in low-pitched registers with an optional sound. Then you change to a solo which is played in higher notes with another sound. In this case, the split point is a fret number.

You get an impressive play by the possibility of pick splitting.

Two split points can be defined to split the pick range between the pickup and the neck into three pick regions. An individual sound can be assigned to each of these regions.

At each of the three split possibilities, you can additionally use the pick control function. You can change the value of each MIDI controller with the pick position. Keyboard players often use a modulation wheel in order to produce vibrato or filter effects. With the pick control function you have the same possibilities, only by changing the pick position.

How to use the Hold Pedal

The Hold Pedal can be used to play an additional, third sound of your MIDI instrument. In this case, the current split becomes temporarily ineffective and you can use another sound. All notes which sound while releasing the pedal will sound until the next pressure on the Hold Pedal. Play a chord by depressed Hold Pedal. Without muting the chord, you release the Hold Pedal now and the Hold sound will be locked. You can play again with the current preset to your chord accompaniment. After pressing once more, you can play a new chord, the old one will be replaced by a new one. Or you simply turn off the chord while pressing once the Hold Pedal shortly without playing at that time.
Additionally, the pick control function can be used as well for the Hold sound.

After pressing the Hold Pedal, you can also send a pre-programmed MIDI controller to the MIDI instrument. This could be the controller No. 64 (Sustain), the controller No. 65 (Portamento) or even the controller No. 93 (Chorus).

After pressing the Hold Pedal you are moreover able to freeze the already played tones in order to play only on your guitar. Then, all other MIDI sounds are suppressed. You can also realize a bypass function in order to hear temporarily your guitar sound alone.

How to use the Mono Input

All instruments with pickups can be directly connected by a jack cable to the MONO input of your AXON. At the front of the AXON is the potentiometer which helps you to set the sensitivity of the MONO input. Please consider that not all features of the AXON are available when using the MONO input. The extremely fast pitch recognition is inactive. In this case you work with a pitch recognition which is a little bit slower. But it is comparable to devices which were already offered by competitors. String Split, Pick Split and the Pick Control function are no longer available.

The Fret Split depends now on the pitch because your AXON does not know anything about your frets. Think of a violin or think of instruments which you have to connect by a microphone. There are no limits to your imagination but you can not foresee the results in each case. We had already achieved good results using guitar and bass.

How to use the optional sound module

If your AXON is fitted by an embedded sound module, 128 GENERAL MIDI SOUNDS in excellent quality will immediately be available for you. Additionally, the sound module has an installed reverb as well as a chorus effect which can be called up by the AXON. Combined with a sequencer or similar devices you have access to 480 sounds. Furthermore, 11 different drumkits are available. The complete effect range consists of 11 reverb types, 11 chorus types as well as 42 variation programmes. Please take details from the enclosed description of the sound module.

If you use a sequencer program, please connect the MIDI OUT of your AXON to the MIDI IN of your computer, and the MIDI IN of your AXON to the MIDI OUT of the computer. In this case the GLOBAL parameter "LOCAL" on the AXON has to be LOCAL ON.

First settings

How to install the guitar interface and the pickups

For that purpose, please read the installation instruction of your guitar interface.

How to connect your MIDI equipment

Please connect the MIDI OUT of your AXON to the MIDI IN of your MIDI instrument. For that purpose, use a commercial 5 pin DIN cable (MIDI cable).

If you use a sequencer program, please connect the MIDI OUT of your AXON to the MIDI IN of your computer, and the MIDI OUT of the computer to the MIDI IN of the sound module. Your synthesizer should be polyphonical (minimum 7 voices) and has to handle up to six or seven MIDI channels. Please adjust your synthesizer so, that it receives channels 1 to 7. (The channels 1-6 are for each string of your guitar and the channel 7 is for the HOLD PEDAL function). After you connected your synthesizer with the AXON, please switch on the synthesizer first and wait until it had initialized before starting the AXON. After turning on the AXON, it sends the most important information to the synthesizer in order to make the configuration as easy and quick as possible. Not all synthesizers accept these information. Therefore, you should definitely check the Pitch Bend range at your synthesizer.

How to mount an AXON in a 19 " rack

You can mount your AXON in a 19" rack by using the optional installation frame. In order to fix, use only the original screws. If you prefer another form of mounting, remove first the rubber foot from the bottom of the AXON. Please use only screws of the type M3 to fix the 19" rack with the bottom of the AXON and take care that the screws do not reach longer than 4 mm into the AXON. Longer screws can damage the inside of the device.

AUDIO OUTPUT of the optional sound module

The AUDIO OUTPUT is realized by the unused pins of the MIDI THRU socket. For that purpose, take the special cable which is included with your AXON.

Reloading the default settings

Keep the SCRATCH key pressed while turning on the AXON. For a short time you will see "ALL DATA INITIALIZED" in the display. Beware that all previous presets that you made will be lost in this case. If necessary, store your data with a Sysex Dump.

Display usage

The possibilities offered by the AXON require a large number of parameters, that can be programmed according to your wishes. In order to get accustomed quickly to the usage of the AXON here you will find some general information about the preset structure.

Each of the four MODEs (GLOBAL, SCRATCH . ARRANGE and CHAIN) consists of several parameters which can be called up in the display by pressing the + or - parameter keys. A single + sign on the right edge of the display shows that you are in the uppermost line of the parameter list. A single - sign characterizes the end of a parameter list. Please use the - key in order to get to the previous parameter. A +/- sign shows that you are somewhere within the list; the + and - keys help you to go up or to go down in the menu.

Some parameters include submenus with further parameters. You recognize a reference to a submenu by an arrow pointing to the bottom. It is positioned on the left edge of the display. Press the OK key to change to the submenu. In the submenu, you can move again with the +- keys. There could be an arrow on the left edge of the display pointing at the top. It signalizes that you can press the OK key in order to leave the submenu, and return back to the point where the submenu was called up.

Global Parameter

If you use your AXON **for the first time** you have to check the settings of some global parameter in correspondence to your MIDI instrument:
Please check the basic MIDI channel and tune your guitar with the embedded tuning aid of your AXON. If you are in a hurry and if you would like to play immediately with your AXON, read the explanations in the sections BASIC CH and tuning of the guitar. You must ensure that the connected MIDI instrument receives Pitch Bend Range information, otherwise you set this value at your MIDI instrument on 12. Then you leap over all further parameters for the present and you can test the factory presets.

In order to change one of the GLOBAL parameter, switch your AXON into the GLOBAL mode. Please press first the GLOBAL key. If the GLOBAL LED lights, your AXON is in the GLOBAL mode. With the +- keys, you move the blinking cursor in the line in which the desired parameter is shown. Please change the shown value with the +- keys. If you are satisfied with the setting, leave the GLOBAL mode and change again to the SCRATCH, ARRANGE or CHAIN mode by pressing the corresponding key. You see the current mode on the appropriate LED.

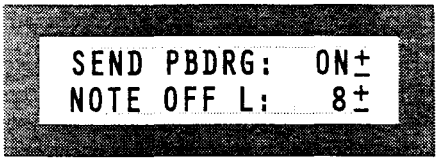
BASIC CHAN

Basic MIDI channel 1-10
Your AXON needs maximal seven successive MIDI channels in order to control a connected MIDI tone generator. One channel is necessary for each string and an additional channel is required if you would like to use the special function of the Hold Pedal. With the basic MIDI channel you assign the first of seven channels which will be used by your AXON. All further channels follow implicitly.

PBEND RANGE

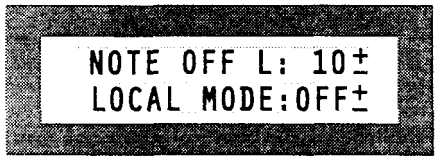
Pitchbend Range OFF/I...24
Since your connected MIDI instrument should convert the pitch changes of your guitar correctly, you have to set the Pitch Bend Range of your MIDI instrument to the same value as this one on the AXON. The value shows the maximum number of semitone steps that can be converted with Pitch Bend information, without triggering a new note on your MIDI instrument. If your MIDI instrument allows, this value should be set to at least 12. For bass guitars it is especially recommended to set it even higher, to 24.

SEND PBDRG



Send Pitchbend Range ON/OFF
This parameter has to be ON if your MIDI instrument stores Pitch Bend Range in each preset separately. In this case the AXON sends the Pitch Bend Range information after each program change immediately again. This is necessary by most KORG synthesizers, and probably by some other manufacturers. If your MIDI instruments store Pitch Bend Range globally, just like the AXON itself, this parameter should be OFF. If your are not familiar with your MIDI instrument, you should set this parameter to ON. Then your AXON will possibly give out some unnecessary MIDI data but you will hardly notice it.

NOTE OFF L



Note off limit 10...30
This level sets the point on the decay envelope where the NOTE OFF event will be sent. The higher the setting, the shorter the note will be; the lower the setting, the longer the note will be sustained.

LOCAL MODE

Local Mode : ON/OFF
OFF:
The MIDI data that are received by your AXON are directly transferred to the embedded sound module. Programm change commands do not influence your AXON. Naturally, you can keep changing the presets of your AXON with the buttons. Concerning the receive, your AXON is now like a GM-expander. This function addresses especially to persons who work with a sequencer: All MIDI data, the AXON generates during play, are exclusively given out via MIDI OUT. The sequencer will send data through its MIDI OUT. Please connect the MIDI OUT of your sequencer to the MIDI IN of your AXON in order to direct it to your embedded sound module. The AUDIO OUT signals are transferred via the non-used pins of the MIDI THRU of your AXON. For that purpose, use the special cable included with your AXON.
ON:
If you don't use a sequencer, you should set this parameter to ON. Your AXON controls now the embedded sound module and programme change commands influence your AXON. Additionally, the general MIDI sound name is shown while editing the segment parameters. Of course, your AXON keep sending data via MIDI OUT. Then, you can connect futher MIDI instruments to the MIDI OUT. If you do not have an embedded sound module, you should set LOCAL on ON in order to benefit from preset changes via MIDI IN.

VU METER

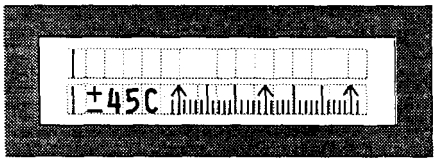
Level Meter ON/OFF
When strings are played, the display shows 6 small VU-Meters for six strings. The normal display appears again when the decay reaches -40dB. This function can be suppressed by turning the VU-Meter OFF (key).

TUNE BASE

Tune Base -99...+99
Your AXON generates MIDI sounds relating to a tune base of 440 Hz plus a deviation which is set by this parameter. If your musicians play instruments which can only be tuned with great effort (for example a piano), it is better, you fit your AXON to this situation. We recommend the following procedures if the tune base deviates from 440 Hz: You tune first the open A string carefully by ear on the basis of the instrument (for example a piano). Then, press the OK button. At the display, the following text appears: "PICK THE OPEN A STRING". While playing now the open A string, your AXON analyses the coming vibration and sets itself the Tune Base Parameter at the correct value. Naturally, you can change the value also with the +- buttons, if you know exactly the value. Then you tune the remaining strings of your guitar with the embedded tuning aid of your AXON. If you play alone, you should set the tune base on the value 0.

TUNING AID

How to call up the tuning aid
It is important that your guitar is tuned within a certain pitch tolerance, so that the AXON can properly interpret MIDI pitch values. Press OK. You will see a display similar to a chromatic guitar tuner. Tune each string so that the pointer is above the middle arrow. The left arrow of the tuning scale marks a deviation of -45 cent (0,45 of a semitone), the right arrow deviates +45 cents from the current tune base. If the Tune Base Parameter is on 0, the middle arrow corresponds to a tuning calibration of 440 Hz. If the Tune Base Parameter is set for +50 for example, the middle arrow correspond to a pitch that is a quarter step higher than 440 Hz. Note: Tuning aid is a feature that will allow to tune your guitar to the AXON quickly and simply, whereas Tune Base allows you to tune the AXON to your guitar.

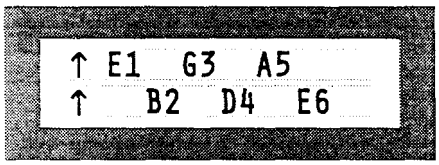


GUITAR NO

The AXON allows you to set preferences for up to four different totally separate guitars or bass guitars. If for example, you change guitars during a concert, you don't have to change all the sensitivity settings for that instrument, you merely change to the appropriate guitar number (name) in your AXON.

Sensitivity

The AXON converts audio signals into digital information. They are very sensitive to overloading. But you shouldn't drive your AXON too low. Your AXON helps you to set the sensitivity optimally. Press the OK button. The string names are now shown at the display. Play on your guitar and use all strings. You should play all strings loudly, even at least 8 times. Later on those strings are faded out on the display that are already adjusted. If your AXON adopted the optimal setting for all strings, the following text appears on the display:



ALL ADJUSTED
PRESS OK.
You can call up this function as often as you like, perhaps in order to increase the sensitivity later. For that purpose, you repeat the above mentioned procedure, but you play less powerful on your guitar. Your AXON will then increase the sensitivity. Please consider that you can overload your AXON later by playing loudly which can lead to faulty MIDI data.

GUITAR NUMBER/ NAME

Please scroll your cursor with the +/- parameter buttons to the line which indicates the guitar name. Press the OK button, the cursor flashes now over the first letter. Change the letter with the +/- value buttons. While pressing either the + or the - parameter buttons you reach the next or the previous column. Program the desired name letter by letter into your AXON and leave the menu with the OK button.

COPY SCRATCH

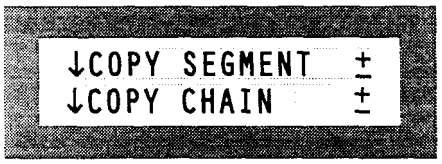
How to copy a scratch preset
Press the OK button and scroll your cursor with the +/- parameter keys in the line "SOURCE SCR:". Set with the +/- value buttons the desired scratch preset you would like to copy. Change with the +/- parameter buttons to the line "DEST.SCR:" and set with the +/- value buttons the target preset to which you want to copy. Then scroll the cursor with the + parameter button in the line displaying the following text "COPY: OK" and press the OK button in order to start copying. If you decide you don't

want to complete the copy, move the cursor to another line, and press OK. This will return you to the main Global Menu page.

COPY ARRANGE

How to copy Arrange Presets
Press the OK button and move the cursor with the +- parameter keys in the line "SOURCE ARR:". Set your desired Arrange Preset with the +- value keys. Change with the +- parameter buttons to the line "DEST. ARR:" and assign here the desired target preset with the +- value keys as well. Then position the cursor with the + parameter key to the line displaying the text "COPY: OK" and press the OK button in order to start copying. If you decide you don't want to complete the copy, move the cursor to another line, and press OK. This will return you to the main Global Menu page.

COPY SEGMENT



How to copy segment parameters
Press the OK button and move the cursor with the +- parameter keys in the line "SOURCE SGM:". Set the segment with the +- value buttons which you would like to copy. Change to the line "DEST. SGM:" with the +/- parameter keys and assign here the desired target segment with the +/- value buttons, too. Then set the cursor with the + parameter key to the line displaying the text "COPY: OK." and press the OK button in order to start copying. You can abort the function by moving the cursor in another line and hitting the OK key: Then you are again at the global menu page.

COPY CHAIN

How to copy a chain preset
Press the OK button and move the cursor to the line "SOURCE CHN:" with the +/- parameter keys. Set the preset which you would like to copy with the +/- value buttons. Change to the line "DEST. CHN:" with the +/- parameter keys and assign here the desired target preset with the +/- value buttons, too. Then set the cursor with the + parameter key to the line with the text "COPY: OK." and press the OK button in order to start copying. You can abort the function by moving the cursor in another line and hitting the OK key: Then you are again at the global menu page.

SEND SCRATCH

How to send a Scratch preset (as a system-exclusive-message = sysex)
Please set the Scratch number you would like to send with the +/- value buttons. Position the cursor in the line "SEND:" with the +/- parameter keys and hit OK. You can abort the function by moving the cursor in another line and pressing the OK button. Then you are again at the global menu page.

SEND ARRANGE

How to send an Arrange preset (as a system exclusive message = sysex)
The procedure is identical to sending Scratch Presets. Please look at the section SEND SCRATCH.

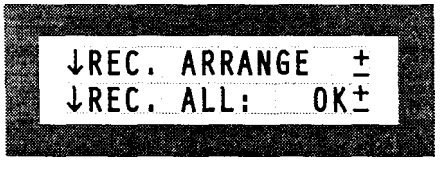
SEND ALL

How to send SCRATCH/ARRANGE and CHAIN Preset data
Press the OK button in order to transfer the settings of all presets which are now system exclusive data.

REC. SCRATCH

How to receive a Scratch preset (as a system exclusive message = sysex)
Use the +/- keys to set the number of the Scratch Preset that will be overwritten by the received data. Move the cursor to the line "RECEIVE:" with the parameter buttons and hit OK. You can abort the function while scrolling the cursor in another line and pressing the OK key. Then you are again at the global menu page.

REC. ARRANGE



How to receive an Arrange preset (as a system exclusive message = sysex). The procedure is identical to receiving Scratch Presets. Please look at the section REC. SCRATCH.

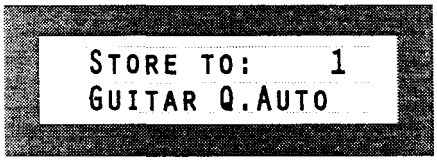
REC. ALL

How to receive SCRATCH / ARRANGE and CHAIN Preset data. Press the OK button in order to receive all presets.

ADC MONITOR

ADC display
It shows the values of the AD converter in hexadecimal notation. This function is only for error diagnostic.

How to store Scratch versus Arrange data

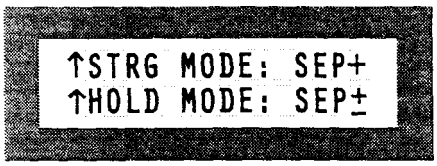


All changes made on the actual preset don't destroy the original preset data. In order to store the Scratch/ Arrange parameter permanently after a change in a preset, please press the store button. The display line shown here indicates the current preset number, the line at the bottom presents the corresponding preset name. You can choose an optional preset number with the +/- value buttons, the preset name will be actualized analogously. Hit the OK button in order to store the preset data at the indicated cursor place. Except of the +/- value buttons each other key aborts the procedure and prevents from overwriting data erroneously. In any case, the display returns to the previous position.

Scratch Mode

Scratch presets I... 128
The SCRATCH Mode includes presets which can simply be programmed but without the possibility to split. The pick control function as well as the different possibilities of the Hold Pedal are available without limitations. Press the Scratch button in order to activate the Scratch mode. You call up the different Scratch presets with the +/- value buttons. For that purpose, you can also use the UP/ DOWN keys of your guitar interface. They have always the same effect as the corresponding +/- value button. In order to change the Scratch preset scroll the cursor with the +/- parameter keys to the line displaying the following text: "SCRATCH NO:" and press the OK button. In this manner, you come to the main menu of the current Scratch preset. There are three parameters: STRG MODE, HOLD MODE as well as EDT SEGM.

STRG MODE



String mode (separate/common)

SEPARATE

A separate MIDI channel is assigned to each string in the following order:

E1: Basic MIDI channel
B2: Basic MIDI channel+1
G3: Basic MIDI channel+2
D4: Basic MIDI channel+3
A5: Basic MIDI channel+4
E6: Basic MIDI channel+5

This setting allows the greatest flexibility. In the Arrange Mode, this mode is active and cannot be changed, in the Scratch Mode you can freely choose this parameter.

COMMON

In the Common Mode, all strings of your guitar are assigned only to the basis channel. In order to avoid conflicts with still sounding notes of the same channel, no Pitch Bend Information is sent in this mode, if more than one note is played. By this way solo playing is possible although with restrictions. If your MIDI instrument can only receive at one MIDI channel, you should use this mode.

If your sequencer does not allow to record on 6 MIDI channels at the same time you have to use this mode as well.

HOLD MODE

Hold mode (common/ separate/ sustain/ controller)

While pressing the Hold Pedal, you can access to four different functions:" Common, separate, sustain and controller".

COMMON

While pressing the Hold Pedal, no other MIDI data are sent. A previous chord will be kept frozen on your MIDI instrument as long as you keep the pedal down. Herewith, you realize also a bypass function, i.e. as long as you press the Hold Pedal in this mode, your AXON doesn't give out further MIDI data.

SEPARATE

A further MIDI channel is available.

In the Common String Mode it is the basis channel +2, in the Separate Mode it is the basis channel +7.

You can for example underlay a solo with an optional accompaniment. For that purpose, you play a chord while pressing the Hold Pedal and releasing it then. You can now play again with your AXON and at an additional channel the already played chord sounds. If you press the Hold Pedal again, all notes are turned off and you can play a new chord again.

SUSTAIN

While pressing the Hold Pedal, the controller 64 (Sustain) with a

maximum value of 127 (7Fh) is given out. Play notes on your guitar. Every note you play as long as you have the Pedal pressed will be sustained, much like the sustain pedal on a piano. Leaving the pedal releases the sustained notes. The same controller (64) is given out again, but with the value 0. All played notes will sound then normally.

CONTROLLER: (0...127)

It is possible to call up one of the 128 MIDI controller. While pressing the Hold Pedal, the selected controller is given out with the maximum value 127 (7Fh). As you release the Hold Pedal again, the controller will be sent out value 0. Appropriate controllers are Sustain (64), Portamento (65) or for example Chorus (93). In the appendix, you can find a detailed list of all MIDI controllers.

EDT SEGM

Here you can choose one of the two segment pages: NORMAL or HOLD.

Normal (NORM)

This submenu contains segment parameters which are set for the current Scratch preset (timbre, volume, transposing ...)

Hold (HOLD)

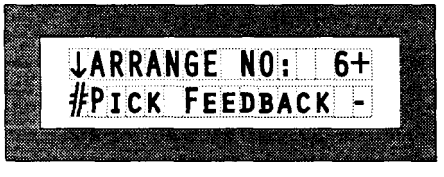
In this submenu you assign the sound parameter which you would like to use while pressing the Hold Pedal in SEPARATE Hold Mode.

Scroll the cursor with the +/- parameter buttons to the current segment and call up the desired segment by using the +/- value keys and hit the OK button. From this submenu you return to the previous position with the OK key.

SCRATCH NAME

In order to rename a Scratch preset, move the cursor to the line with the current name and hit OK. Now the cursor flashes over the first letter. Change this letter with the +/- value buttons. You reach the next/ previous column with the +/- parameter keys. Please enter your desired name and leave this menu with the OK button.

Arrange Mode



Arrange presets I...64

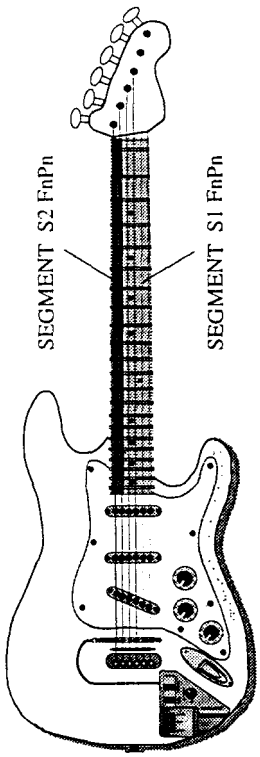
In contrast to the Scratch presets you can access to different split possibilities within the Arrange presets. These splits can also be combined.

Press first the Arrange button to select Arrange mode. Using the +/- value keys, you can choose one of the 64 possible Arrange presets. For this purpose you can also use the UP/DOWN

buttons of your guitar interface just like by Scratch presets.
To edit the Arrange parameter, move the cursor with the +/- parameter keys to the line with the text "ARRANGE_NO:" and press the OK button. This brings you to the main page of the current arrange preset. Here you will see six parameters:

HOLD MODE
STRG SPLIT
FRET SPLIT
PICK SPLIT1
PICK SPLIT2
EDT SEG

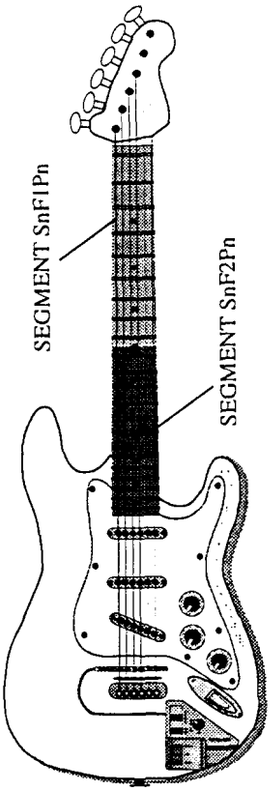
The first parameter, the Hold mode is identical with the corresponding parameters in the Scratch mode.



STRG SPLIT

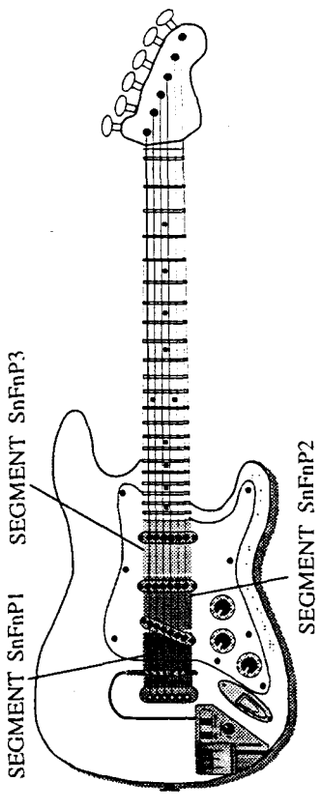
(OFF/1-5)
You can divide the six strings on your guitar into two different groups, each group playing a particular synth sound. The numbers correspond to the string numbers, the high E-string being string number 1. For example, if you set the string split to 2, then strings 1 and 2 will play one sound and strings 3-6 will play another.

Please set this parameter to OFF, if you would not like to use the string split function.



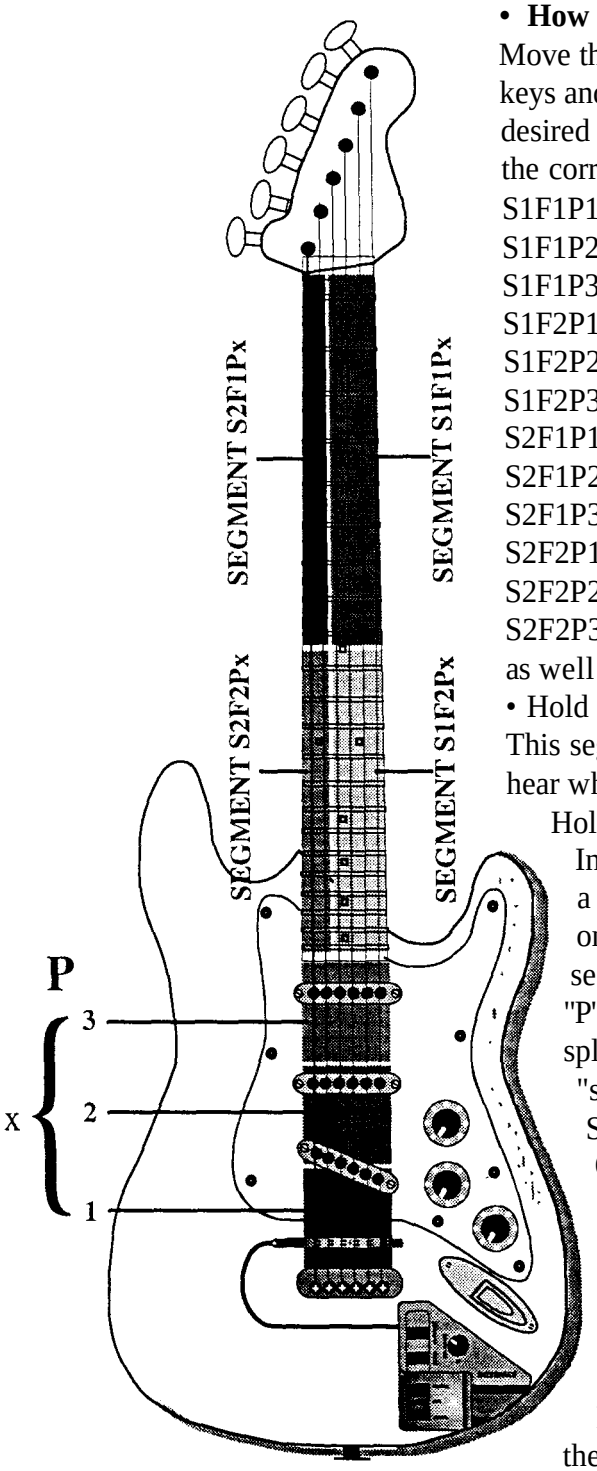
FRET SPLIT

(OFF/0...23)
You can also divide the fretboard of your guitar into two groups of frets so that when you play within one of these groups of frets, regardless of what strings you play, you will hear one synth sound. If you then move to a position outside of this group of frets, you will hear another sound. You can set a fret split from 0 to 23. For example, if you set your Fret Split to 4, as long as you play between frets 1 and 3 including fret 3, you will hear the first sound (which you assigned before in the segment SnFlPn). If you play a note using fret 4 or above, you will hear the second sound (which you fixed before in the segment SnF2Pn). If you do not want to split the fretboard, set this parameter to the value OFF.



PICK SPLIT 1 and 2

(OFF/I...99)
The pick area (the area of your guitar typically used for picking), between the bridge and the highest fret, can be divided into 3 parts. To do this, two split points have to be determined. The entire pick area is divided into 99 units, numbered 1.. .99. 1 is the bridge and 99 is the neck position. Pick Split 1 and 2 are these two points. For example, you can divide your pick area into 3 roughly equally sized parts by setting Pick Split 1 to 33 and Pick Split 2 to 66. When you pick in the area closest to the bridge, regardless of what string you pick, you will hear one sound. If you move your picking into the center of your pick area (between the two pick split points), you will hear a second sound. If you move your picking further forward near the frets, you will hear a third synth sound.
Please set the corresponding parameter to OFF, if you don't want to use one of the pick split functions.



EDT SEGM

The three types of splits are combined and superimposed upon each other to give you a synthesis of up to 12 different combinations of splits. Within these combinations, depending on where your split points are, the possibilities are innumerable.

• **How to call up the segments:**

Move the cursor to the current segment with the +/- parameter keys and change the display by using the +/- value buttons to your desired split combination. Press the OK key in order to get into the corresponding submenu containing the segment parameters.

S1F1P1 (String 1, Fret 1, Pick 1)
S1F1P2 (String 1, Fret 1, Pick 2)
S1F1P3 (String 1, Fret 1, Pick 3)
S1F2P1 (String 1, Fret 2, Pick 1)
S1F2P2 (String 1, Fret 2, Pick 2)
S1F2P3 (String 1, Fret 2, Pick 3)
S2F1P1 (String 2. Fret 1, Pick 1)
S2F1P2 (String 2, Fret 1, Pick 2)
S2F1P3 (String 2, Fret 1, Pick 3)
S2F2P1 (String 2, Fret 2, Pick 1)
S2F2P2 (String 2, Fret 2, Pick 2)
S2F2P3 (String 2, Fret 2, Pick 3)

as well as

• Hold (HOLD)

This segment allows you to set the parameters for the sound you hear when you have the HOLD pedal depressed in SEPARATE - Hold mode.

In most cases, you will only want to use one kind of split at a time, for example, a fret split, but probably not more than one simultaneously. You will then need to simply find the segment where the "F" (for "fret") is 1 and 2, and "S" and "P" are 1 (S1F1P1 and S1F2P1). If you want to use a string split but no other splits, find the segment where the "S" (for "string") is 1 and 2, and the "F" and "P" are 1 (S1F1P1 and S2F1P1).

Only those segments can be found which are used for the current split combination. All other segments are skipped. Please ensure that the corresponding split is not set to OFF.

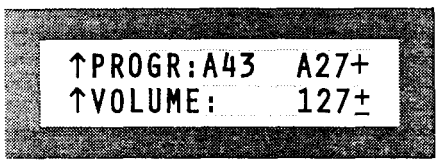
ARRANGE NAME

In order to rename an arrange preset, move the cursor to the line with the current name and hit OK. Now the cursor flashes over the first letter. Change this letter with the +/- value buttons. You reach the next/ previous column with the +/- parameter keys. Please enter your desired name and leave this menu with the OK button.

Segmentparameter

The basic element of your AXON is a segment, both in the Scratch mode and in the Arrange mode. A segment is a package of Midi information which are assigned to a sound in your synth. The segment includes not only the patch numbers of the sound, but also important information to convert your guitar signal into MIDI information that comprehends the synth.

PROGRAM



Program number (AI 1...D88 and AI...A128, B1...B 128).
The AXON can use the timbres of the MIDI banks 0 and 1 in your synth. There are two current systems to number timbres in synthesizers:

1. MIDI-Bank 0: Al 1-A88, Bl 1-B88; MIDI-Bank 1: Cl 1-C88, Dl 1-D88 (for example Korg i3)
2. MIDI-Bank 0: A1-A128; MIDI-Bank 1: B1-B128 (for exampleYamaha)

If you edit a Patch number (sound) within a segment in your AXON, you will see both numbering systems at the display simoultaneously in one line. In case of setting the Global Parameter LOCAL to ON, the GENERAL MIDI standard -sound names will be indicated.

VOLUME

Volume (O...127)
Perhaps the preset volume of your MIDI instrument is too low (or too loud). This parameter allows you to increase/ decrease the volume of your sound. Should the volume be too high for you, it is possible to decrease the volume of your MIDI instrument with the volume controller of your interface. For this reason you should set the value of this parameter as high as possible. A later increase with the volume controller of your interface is not possible.

TRANSPOSE

Transposing in semitones (-36...+36).
This parameter allows you to trigger notes at your MIDI instrument which you can't reach with your guitar.

QUANTIZE

How to quantize pitches: Setting possibilities OFF/ON/AUTO
You determine by this parameter if pitch changes within a set Pitch Bend Range should be converted with continous or step by step (quantized) Pitchbend.

OFF:
All Pitch changes (for example pulling strings, hammer on's or other playing techniques) are converted as exactly as possible (see also Global Parameter: Pitch bend range).
ON:
Each pitch change won't be converted with Pitch Bend until the next semitone is reached; then another Pitch bend value gives out the new pitch. Pulling strings continuously and other playing techniques won't be interpreted as expected. This setting is advantageous while playing chords exclusively, since insignificant pitch changes resulting from varying the string pressure have no influence any more. Especially organ and piano tones would then sound very unnatural.
AUTO:
By this setting you make use of the unique possibility of the AXON, to recognize your intention how to play. The pitch quantization is switched on or off depending on the situation. Chords are now exactly played (without Pitch bend), whereas the pitch quantization is for example turned off again for a solo with pulling string, hammer on's and similar playing techniques.

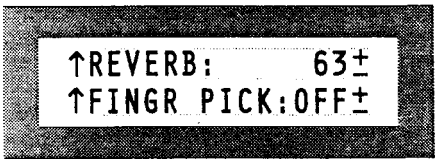
PAN POS

Panorama Position (OFF, L15..MID ...R15)
This parameter allows you to displace the sound of your MIDI instrument at the stereo panorama. The values LI ... LI5 mean that the current sound is more shifted to the left channel, the values Rl ... R 15 move the sound more to the right channel. The value MID corresponds to the mid position. OFF expresses that your AXON won't send this controller (controller #10) to your MIDI instrument. If your MIDI instrument has no panorama function, set this parameter to OFF.

PAN SPREAD

Panorama spread (-15...+15)
By using the parameter PAN POS, you assign the stereo position for all 6 strings. In order to avoid that all 6 strings are at the same stereo position, you can use this parameter to spread the single strings around the panorama position. Set the PAN POS value for example to MID (to the MID position). Play on your guitar and vary the PAN SPRD value.
Please consider that your MIDI instrument has to interpret panorama information. For that purpose, read the user manual of your MIDI instrument.

REVERB



Reverb portion of a sound (MIDI controller 91) : OFF/I.. 128
If your MIDI instrument is fitted with an embedded Reverb, this parameter allows you to decide about the Reverb portion of your used sound. This parameter must set to OFF, if your MIDI instrument does not have an installed Reverb. Your AXON won't transfer this controller via MIDI. The Reverb portion of the optional sound module will be controlled with this parameter, too.

FINGR PICK

Finger picking : OFF/ON
This parameter switches on/ off several internal parameter, which can be used for the finger picking technique at your AXON. In this case, the pick split and the pick control function aren't available any more. Please ensure that you hadn't used a pick split in the current Scratch or Arrange preset. Also the pick controller must be turned off (OFF).

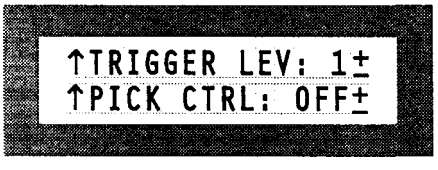
VLCTY SENS

Velocity sensitivity (0...127)
You can restrict the dynamic response at your MIDI instrument by reducing the value of this parameter. If the value is 0, all played notes are given out of your AXON with the same velocity value, independently of your dynamics. You get the greatest dynamic response at the value of 127.

VLCTY OFFS

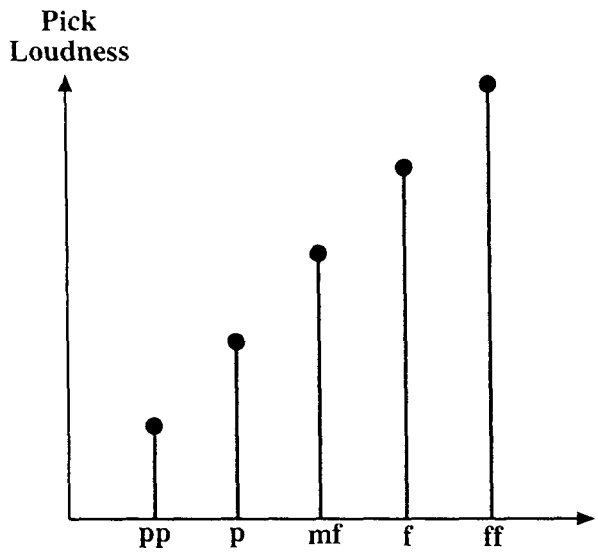
Velocity offset (-63...+63)
If the dynamics of your AXON is reduced by the Velocity Sensitivity parameter, the generated velocity values could be too high/ too low.. This parameter allows you to increase/ decrease the velocity value again. (See illustration on the next page).

TRIGGER LEV



Trigger Level (0...9)
You assign by this parameter the weakest picking level that causes a NOTE ON event to be sent. A low value means that a weak picking triggers a tone; a high value means that a strong picking is required.

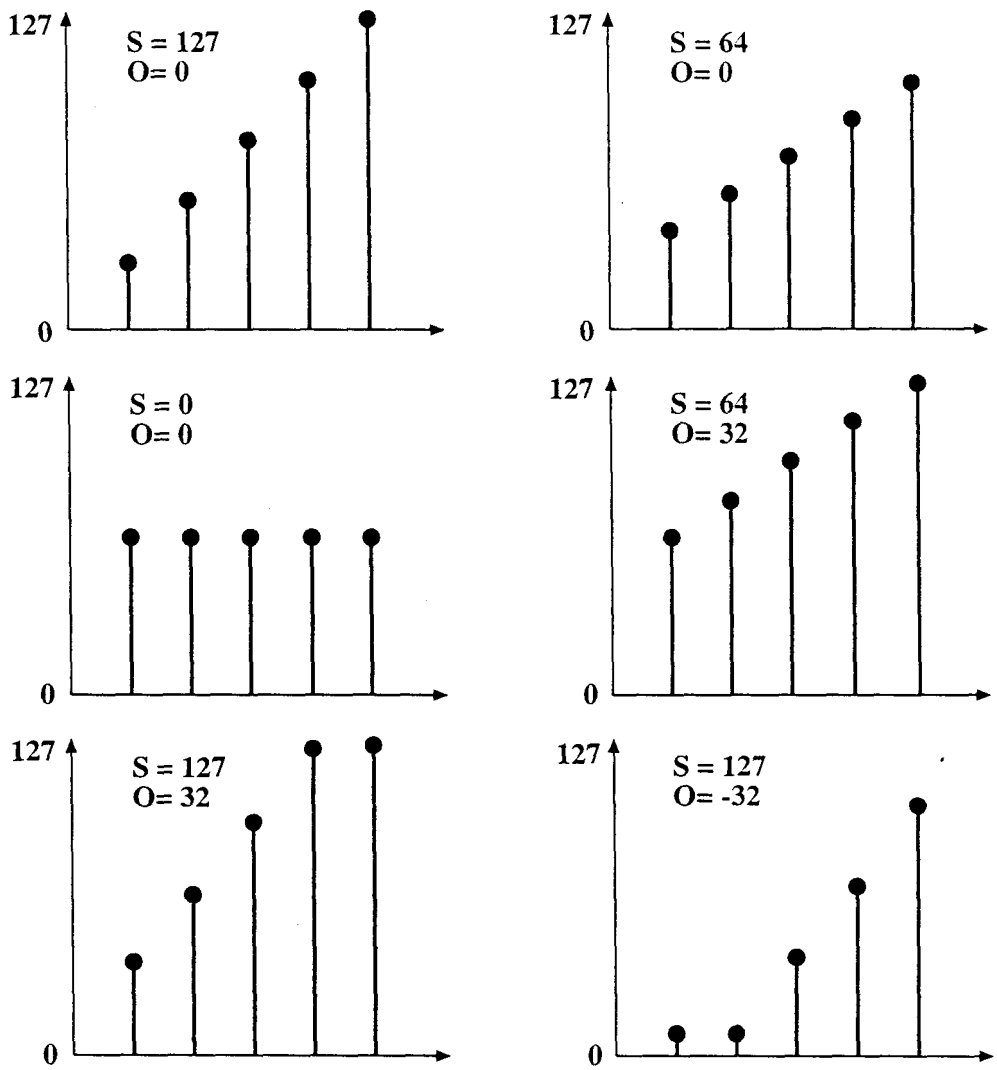
EXAMPLE INPUT OF VELOCITY MAPPING



MIDI VELOCITY VALUES BY DIFFERENT SETTINGS OF VELOCITY SENSITIVITY AND VELOCITY OFFSET

S=Sensitivity

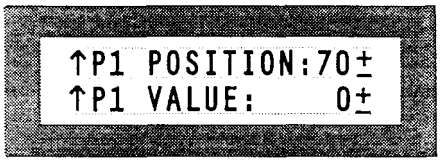
0=0ffset



PICK CTRL

Pick Controller (OFF, 0...127)
As mentioned above, your AXON has the unique possibility to recognize the picking position. You can assign this picking position to one of several MIDI controllers. Set the value for example to 1 and you can simulate the modulation wheel of a keyboard by the picking position. There are MIDI controllers which are worth while. For that purpose, look at the user manual of your MIDI instrument. Interesting controllers are for example 1 (mod wheel), 7 (volume) or 10 (panorama). By using the following parameters you limit the picking position and determine values which are appropriate for the used controller.

PI POSITION

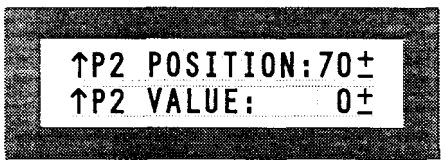


Pick Position 1: 0...99
This parameter indicates the picking position from which the pick value 1 changes continously its value to the pick value 2.

PI VALUE

Pick Value 1: MIDI controller value
As long as the picking position is below Pick position 1, this value is triggered to the corresponding MIDI controller. If the picking position is above pick position 1, the controller value changes continously to the controller value which is determined as Pick value 2.

P2 POSITION



Pick Position 2: 0...99
This parameter indicates the picking position to which the controller value will continously change.

P2VALUE

Pick Value 2: MIDI controller value
As long as the picking position is below Pick position 2, this value is triggered to the corresponding MIDI controller. If the picking position is above pick position 2, the controller value changes continously to the controller value which is determined as Pick value 1.

Chain Mode

Presets (I...64)
In live performance you will often want to change from one scratch or arrange preset to another. You can do this very easily by creating chains of presets in chain mode.You have the option of creating up to 64 different chains with up to 32 scratch and/ or arrange presets (=steps) in each chain.
The chain presets or the single steps in a chain can be cycled through by using the UP/DOWN keys on your guitar interface whereas a footswitch can only move through the single steps of a chain. It is plugged into the chain jack on the back panel of yourAXON (clicking the footswitch once = forward moving; double-click the footswitch = backward moving).
In order to create or change a chain you press the chain button and use the +/- value keys. After hitting the OK button you can start programming. You have four parameters to edit a chain preset:

Step

(1...32)
Within a chain you set the step you want to edit. By using the +/- keys you assign the step number which you would like to change.
Please consider that the UP/ DOWN keys on your guitar interface will not allow you to go past a LOOP point. In order to do that use the +/- value buttons at your AXON.

Mode

(EDIT, INSERT, DELETE)
In most cases you will want to use the Edit mode whenever you create a new chain or edit an existing one.
If you want to insert a step in the chain, select the number of the step, at which point you want to insert a step. Selecting INSERT and pressing OK will copy the present step to the very next step and move all the following steps up by one number. You can then edit the inserted step using EDIT.
Similarly, if you want to delete a step in the chain, set the MODE: to DELETE and select the number of the step you want to delete and press OK. The following steps in the chain will be copied to their previous steps and their step numbers will be reduced by one.

Please consider that you cannot leave here the submenu by pressing the OK button since it is used to confirm the input. In order to leave the submenu, change to another line by means of the +/- parameter keys and press then the OK button.

TYPE and VALUE

A chain element can be one of six different types: a scratch preset, a patch change for MIDI bank A, a patch change for MIDI bank B, an arrange preset, a loop, an end of chain element.
To define a chain step using a scratch preset, you need to select the SCRATCH option in the MODE parameter and then the number of the scratch preset in the VALUE parameter.
Often you will want to change only a patch within a scratch preset but maintain all the other segment information. To do this, create a step and select PROG A or PROG B in the MODE parameter immediately after the step in which the scratch preset appears. Then set the VALUE to the number of the patch you want to play. When you come to this step in the chain, only patch change information will be sent to the synth and everything else will stay unaffected. This way you don't have to create a completely different scratch preset if you only want to change a sound.
There may be a situation in which you will want to repeat several steps in a chain. Use the LOOP element in the MODE parameter to do this. Then set the value of the loop for the number of steps backward in the chain to which it will jump when you come to the loop element in the chain. For example, if you create a LOOP at step number 5 in the chain, and set it's value to 3, when you reach step 5, it will activate step 2. You will then be able to cycle through steps 2, 3 and 4. Upon reaching step 5, you will be sent back to step 2 again. Looping is infinite and will continue until you change the chain number or exit.
In order to avoid confusion it is recommended that you include an END element as the very last step of your chain. The value parameter here is set for 1 and cannot be changed because it is irrelevant.

Appendices

MIDI channel/ string assignment

You can connect to your AXON bass guitars with 4, 5 and 6 strings provideded that a corresponding HEX-Pickup exists. The string assignment relating to the BASIC CHAN is:

MIDI channel Offset	Guitar with 6 strings
0	E1
1	B2
2	G3
3	D4
4	A5
5	E6

MIDI channel Offset	Bass guitar with 4 strings
0	–
1	G2
2	D3
3	A4
4	E5
5	–

MIDI channel Offset	Bass guitar with 5 strings
0	–
1	G2
2	D3
3	A4
4	E5
5	B6

MIDI channel Offset	Bass guitar with 6 strings
0	C1
1	G2
2	D3
3	A4
4	E5
5	B6

How to change a preset via MIDI IN

Your AXON is able to use received program change commands to select between different presets. In the SCRATCH, ARRANGE or GLOBAL mode you call up the presets of your AXON by bank selection and program change commands corresponding to the following table.

Bank 0, program 0..63 :	ARRANGE Presets	1..64
Bank 0, program 64.. 127 :	SCRATCH Presets	1..64
Bank 1, program 0..127 :	SCRATCH Presets	1.. 128

You change within the CHAJN mode by using:

Bank 0, program 0..63 :	CHAIN Presets	!..(34.

Troubleshooting

•**Question** When I play the guitar, the Axon reacts with level meter response, but the synth does not play.
Area: Synth/Axon setup
Solutions: Make sure MIDI cables are correctly connected: MIDI OUT on your Axon, MIDI IN on your synth. MIDI channel number should be properly set on both machines. The synth should be in Multi-timbral mode. Audio OUT cables from your synth to the amp may not be correctly connected or may be defective. The Synth Volume control on your guitar interface may be turned down. The Selector switch on your guitar interface could be set to Guitar.

Question : When I pick a string, I hear the right note, but hammer-ons and pull-offs and/or bending strings do not work.
Area: Discrepancy in pitchbend settings between Axon and synth
Solution: Make sure the pitchbend range values within the synth correspond to your settings in the Axon.

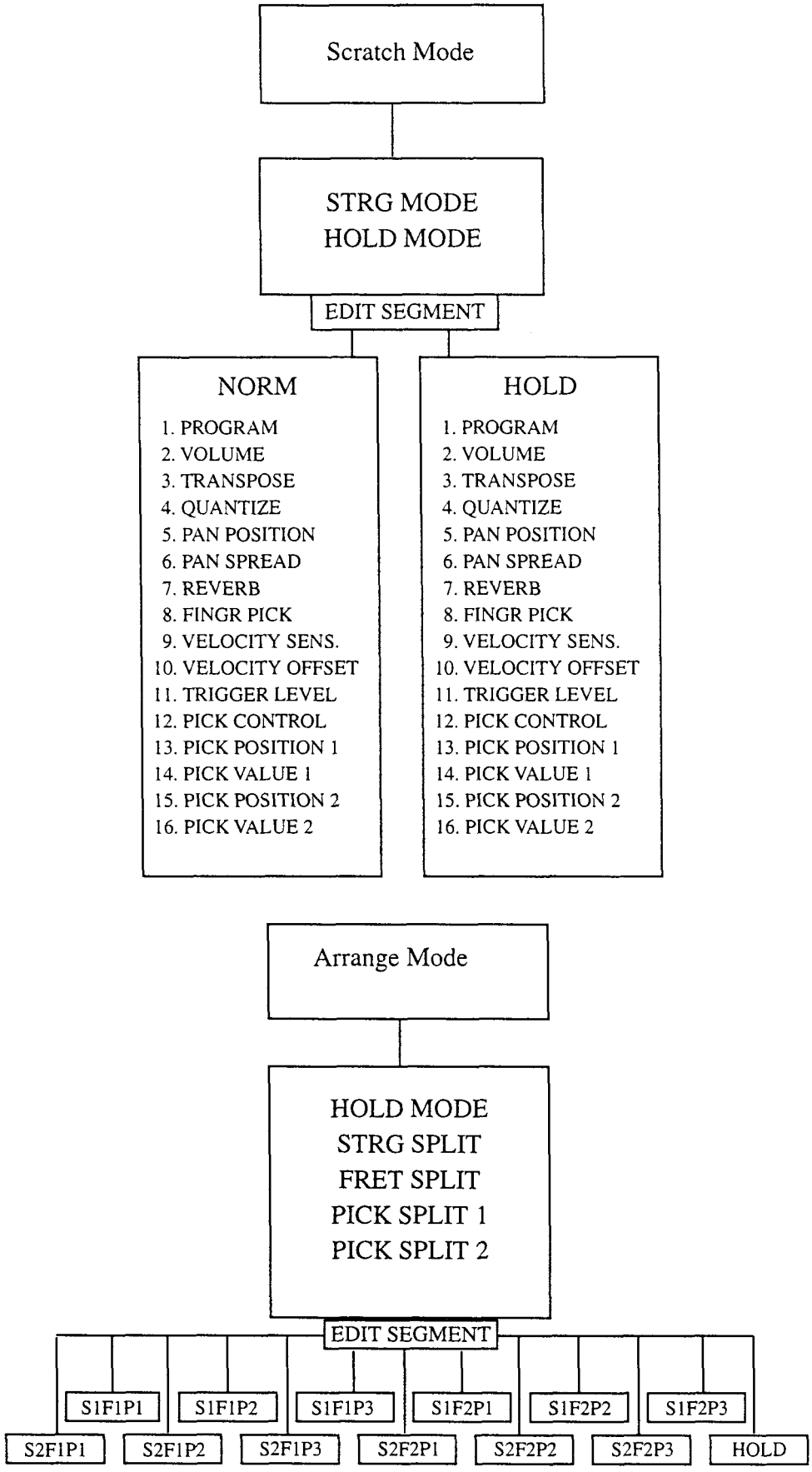
Question : When I play the guitar, the notes I hear are wrong, partly or completely.
Area: Intonation discrepancy.
Solutions: Make sure you tune your guitar to the Axon by using the Tuning Aid feature in Global mode. Tune the Axon to your guitar by using the Tune Base feature in Global mode. Your Axon may be set to transpose pitches in a segment page. This should be turned off. Your synth could be out of tune or set to transpose. This should be turned off.

Question : When I play my guitar, I hear synth sounds but no audio guitar signal.
Area: The Audio chain is broken
Solutions: Make sure the selector switch on your guitar interface is set to "Mix" or "Guitar". Make sure the audio connection cable between your guitar and guitar interface is properly connected. Make sure the audio controls on your guitar are turned up. Make sure an audio cable is connected from the Axon's "Audio Out" jack on the rear panel and is properly connected to your amp.

Question : There is an irritating dynamic difference between notes.
Area: Velocity mapping problems
Solutions'. The velocity sensitivity settings in the Axon for a given sound should match the synth patch. Experiment with decreasing the velocity sensitivity parameter in the segment page and eventually adding small amounts of velocity offset.

Question : One (or more) of the strings sounds too weak/too loud in comparison to the others.
Area: String sensitivity adjustment
Solution: Try adjusting the string sensitivity of the problematic string in the Global menu under "GUITAR_NO:"

AXON-NGC 77
Internal Structure



EXPLANATION OF THE DISPLAY FUNCTIONS

Text field

Displays the function name. If a # sign appears in front of the text, a name can be entered.

Menu / Arrow -

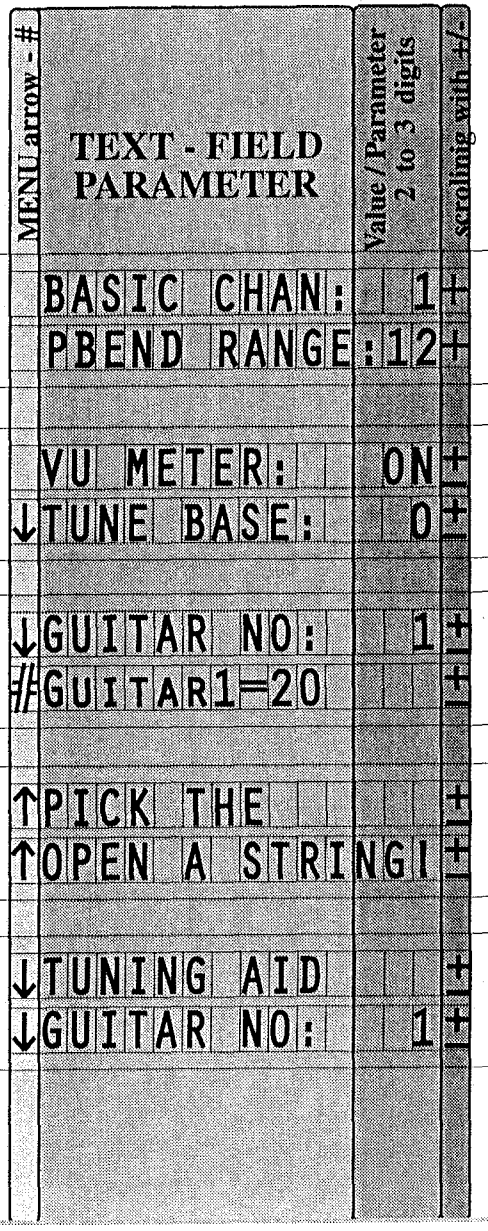
An arrow pointing downwards (↓) means that you come to submenu by pressing the OK button. An arrow pointing upwards (↑) expreses that you can move to the previous menu when pressing the OK key. The sign # says that you can enter a name in the text line.

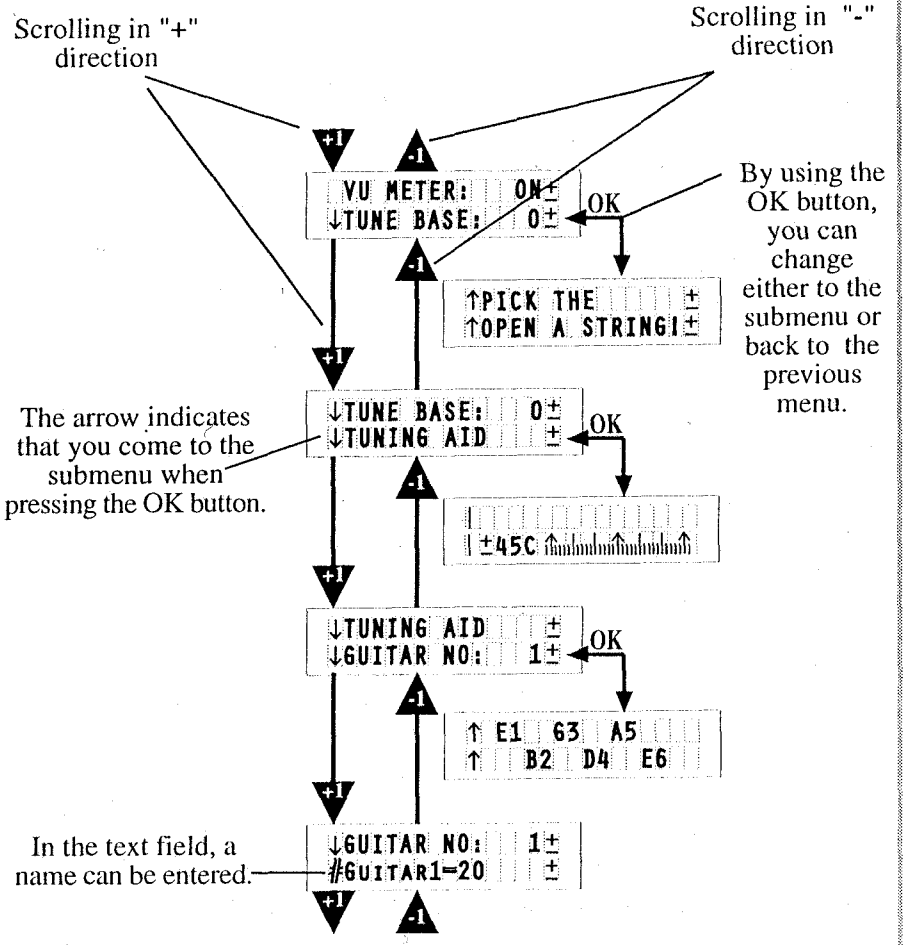
Parameter

In the field parameter numbers or text changes, for example ON or OFF can be edited by the + / - value buttons.

Up/Down

A + sign indicates that you can scroll only with the + parameter button in the menu. If the - sign appears the - button is valid. The + sign and the - sign both show you the possibility to scroll either with the + button or with the - button.





Specifications

Display
2-lines
16-character LCD

Connectors (rear panel)
Guitar IN Connector (GK)
Guitar Audio OUT (1/4")
Hold Pedal (1/4")
Chain Pedal (1/4")
MIDI connectors (IN, OUT, THRU)
AC IN

Power Supply
12V AC (AC adaptor included)
1000 mA

Dimensions
Depth: 21.5cm
Width: 22 cm
Height: 4.4 cm (1 rack unit)

Weight
1.5kg

Accessories
User's Manual
AC Adaptor
MIDI Cable
Foot switch (pedal)

Optional Accessories (sold separately)
AIX 101 Interface with hex pickup for guitar
AIX 102 Interface with hex pickup for bass guitar
13 pin cable from the interface to the AXON
extra foot switch (pedal)

SYSTEM EXCLUSIVE IMPLEMENTATION

Received:
l.DUMP:

0: FOH	SYSTEM EXCLUSIVE
1:OOH	header for 3 byte manufacturer' s ID
2: 20H	1 st byte of manufacturer' s ID
3: 2DH	2nd byte of manufacturer's ID
4: OBH	AXON model ID
5:x	device number (not evaluated)
6:y	y= 1 :ALL, y=2:SCRATCH, y=3:ARRANGE
7:d	d=0: dump coming; d= 1: dump requested
8: lengthO -	lowest 7 bits of length
9: length1 -	middle 7 bits of length
10:length2-	highest 7 bits of length
11:D[0].L -	low nibble of first byte
12: D[0].H -	high nibble of first byte
...D[N-1].L -	low nibble of last byte
...D[N-1].H-	high nibble of last byte
...CHS— -	checksum (modulo 128)
...F7H— -	end of exclusive

2. BULK DUMP REQUEST:

0: FOH	SYSTEM EXCLUSIVE
1:OOH	header for 3 byte manufacturer's ID
2: 20H	1st byte of manufacturer's ID
3: 2DH	2nd byte of manufacturer's ID
4: OBH	AXON model ID
5:x	device number (not evaluated)
6: 1	bulk dump (ALL)
7: 1	bulk dump requested
... F7H— -	end of exclusive

Transmitted:

l.DUMP: Same as Dump Received.

AXON MIDI Implementation Chart

Function...		Transmitted	Recognized	Remarks
Basic Channel	Default Channel	1-10 1- 10	X X	
Mode	Default Messages Altered	Mode 3,4 X X	X X X	
Note Number	True Voice	0- 127 X	X X	
Velocity	Note On Note Off	09n v=l-127 08n v=10	X X	
After Touch	Key's Ch's	X X	X X	
Pitch Bender		O	X	
Control Change	7	O	X	Volume
	10	O		Panorama
	64	O		Hold 1
	32	O		Bank 0,1
	121	O		ResetControllers
	100,38,101,6	O		Pitch Bend Range
	0-127	O		AssignablePick PositionController
Prog. Change	True #	O O	O	0- 127
System Exclusive		O	O	
System Common	:Song Pos :Song Sel :Tune	X X X	X X X	
System Real Time	:Clock :Commands	X X	X X	
Aux Mes-sages	:Local On/Off :A11 Notes Off :Active Sence :Reset	X X X X	X X X X	
Notes				

Mode 1 : OMNI ON, POLY
Mode 2 : OMNION, MONO
Mode 3 : OMNI OFF, POLY
Mode 4: OMNI OFF, MONO

O : Yes
X : No

GENERAL MIDI (GM) tables

(Source : MIDI 1.0 Detailed Specification 4.2)

GENERAL MIDI Sound Set Groupings

(all channels except 10)

Pros ^Instrument Group	Prog#	Instrument Group
1-8 Piano	65-72	Reed
9-16 Chromatic Percussion	73-80	Pipe
17-240rgan	81-88	Synth Lead
25-32Guitar	89-96	Synth Pad
33-40Bass	97-104	Synth Effects
41-48Strings	105-112	Ethnic
49-56Ensemble	113-120	Percussive
57-64Brass	121-128	Sound Effects

GENERAL MIDI Sound Set

(MIDI Program Numbers 1 - 128; all channels except 10)

Pros # Instrument	Prog# Instrument	Pros # Instrument	Proe # Instrument
1. Acoustic Grand Piano	33. Acoustic Bass	65. Soprano Sax	97. FX 1 (rain)
2. Bright Acoustic Piano	34. Electric Bass (finger)	66. Alto Sax	98. FX 2 (soundtrack)
3. Electric Grand Piano	35. Electric Bass (pick)	67. Tenor Sax	99. FX 3 (crystal)
4. Honkey-tonk Piano	36. Fretless Bass	68. Baritone Sax	100. FX 4 (atmosphere)
5 Electric Piano 1	37. Slap Bass I	69. Oboe	101. FX 5 (brightness)
6. Electric Piano 2	38. Slap Bass 2	70. English Horn	102. FX 6 (goblins)
7. Harpsichord	39. Synth Bass 1	71. Basson	103. FX 7 (echoes)
8. Clavi	40. Synth Bass 2	72. Clarine	104. FX 8 (sci-fi)
9. Celesta	41. Violin	73. Piccolo	105. Sitar
lO.Glockenspiel	42. Viola	74. Flute	106. Banjo
11.Music Box	43. Cello	75. Recorder	107. Shamisen
12.Vibraphone	44. Contrabass	76. Pan Flute	108. Koto
13.Marimba	45. Tremolo Strings	77. Blown Bottle	109. Kalimba
14.Xylophone	46. Pizzicato Strings	78. Shakuhachi	110. Bag Pipe
15.Tubular Bells	47. Orchestral Harp	79. Whistle	111. Fiddle
16.Dulcimer	48. Timpani	80. Ocarina	112. Shanai
17,Drawbar Organ	49. String Ensemble 1	81. Lead 1 (square)	113. Tinkle Bell
18.Percussive Organ	50. String Ensemble 2	82. Lead 2 (sawtooth)	114. Apogo
19.Rock Organ	51. Synth Strings 1	83. Lead 3 (calliope)	115. Steel Drums
20.Church Organ	52. Synth Strings 2	84. Lead 4 (chiff)	116. Woodblock
21. Reed Organ	53. Choir Aahs	85. Lead 5 (charang)	117. Taiko Drum
22.Accordion	54. Voice Oohs	86. Lead 6 (voice)	118. Melodic Tom
23.Harmonica	55. Synth Voice	87. Lead 7 (fifths)	119. Synth Drum
24.Tango Accordion	56. Orchestra Hit	88. Lead 8 (bass+lead)	120. Reverse Cymbal
25.Acoustic Guitar (nylon)	57. Trumpet	89. Pad 1 (new age)	121. Guitar Fret Noise
26.Acoustic Guitar (steel)	58. Trombone	90. Pad 2 (warm)	122. Breath Noise
27.Electric Guitar (jazz)	59. Tuba	91. Pad3(polysynth)	123. Seashore
28.Electric Guitar (clean)	60. Muted Trumpet	92. Pad 4 (choir)	124. Bird Tweet
29.Electric Guitar (mute)	61. French Horn	93. Pad 5 (bowed)	125. Telephone Ring
30. Overdriven Guitar	62. Brass Section	94. Pad 6 (metallic)	126. Helicopter
31.Distortion Guitar	63. Synth Brass 1	95. Pad 7 (halo)	127. Applause
32.Guitar harmonics	64. Synth Brass 2	96. Pad 8 (sweep)	128. Gunshot

GENERAL MIDI Percussion Set

(Channel 10)

MIDI Key	Drum Sound	MIDI Key	Drum Sound	MIDI Key	Drum Sound
35	Acoustic Bass Drum	51	Ride Cymbal 1	67	High Agogo
36	Bass Drum 1	52	Chinese Cymbal	68	Low Agogo
37	Side Stick	53	Ride Bell	69	Cabasa
38	Acoustic Snare	54	Tambourine	70	Maracas
39	Hand Clap	55	Splash Cymbal	71	Short Whistle
40	Electric Snare	56	Cowbell	72	Long Whistle
41	Low Floor Tom	57	Crash Cymbol 2	73	Short Guiro
42	Close Hi Hat	58	Vibraslap	74	Long Guiro
43	High Floor Tom	59	Ride Cymbal 2	75	Claves
44	Pedal Hi Hat	60	Hi Bongo	76	Hi Wood Block
45	Low Tom	61	Low Bongo	77	Low Wood Block
46	Open Hi Hat	62	Mute Hi Conga	78	Mute Cuica
47	Low Mid Tom	63	Open Hi Conga	79	Open Cuica
48	Hi Mid Tom	64	Low Conga	80	Mute Triangle
49	Crash Cymbal 1	65	High Timbale	81	Open Triangle
50	High Tom	66	Low Timbale		

GENERAL MIDI controller table

Controller number Dezimal	Hex	Controller function
0	00H	Bank Select
1	01H	Modulation wheel or lever
2	02H	Breath Controller
3	03H	Undefined
4	04H	Foot Controller
5	05H	Portamento time
6	06H	Data entry MSB
7	07H	Channel Volume(formerly Main Volume)
8	08H	Balance
9	09H	Undefined
10	0AH	Pan
11	0BH	Expression Controller
12	0CH	Effect Control 1
13	0DH	Effect Control 2
14-15	0E - 0FH	Undefined
16-19	10-13H	General Purpose Controllers (#'s 1-4)
20-31	14-1FH	Undefined
32-63	20-3FH	LSB for values 0-31
64	40H	Damper Pedal (sustain)
65	41H	Portamento On/Off
66	42H	Sostenuto
67	43H	Soft pedal
68	44H	Legato Footswitch (vv = 00-3FH:Normal, 40-7FH=Legatto)
69	45H	Hold 2
70	46H	Sound Controller 1 (default: Sound Variation)
71	47H	Sound Controller 2 (default: Timbre / Harmonic Intensity)
72	48H	Sound Controller 3 (default: Release Time)
73	49H	Sound Controller 4 (default: Attack Time)
74	4AH	Sound Controller 5 (default: Brightness)
75-79	4BH-4FH	Sound Controller 6-10 (no defaults)
80-83	50-53H	General Purpose Controllers (#'s 5-8)
84	54H	Portamento Control
85-90	55-5AH	Undefined
91	5BH	Effects 1 Depth (formerly External Effects Depth)
92	5CH	Effects 1 Depth (formerly Tremolo Depth)
93	5DH	Effects 1 Depth (formerly Chorus Depth)
94	5EH	Effects 1 Depth (formerly Celeste (Detune) Depth)
95	5FH	Effects 1 Depth (formerly Phaser Depth)
96	60H	Data increment
97	61H	Data decrement
98	62H	Non - Registered Parameter Number LSB
99	63H	Non - Registered Parameter Number MSB
100	64H'	Registered Parameter Number LSB
101	65H	Registered Parameter Number MSB
102-119	66-77H	Undefined
120-127	78-7FH	Reserved for Channel Mode Messages

SCRATCH No. : #1 Guitar Q.Auto
Description : Guitar sound with auto quantize

HOLD MODE [ ] COMMON [X] SEPARATE [ ] SUSTAIN [ ] CNTRL 0..127
STRING MODE [ ] COMMON [X] SEPARATE

	NORM	HOLD
PROGRAM 0-177	26	85
VOLUME 0..127	127	127
TRANSPOSE 06-.36	0	0
QUANTIZE ON/OFF/AUTO	AUTO	AUTO
PAN POS aiBll5..MIDRI5	MID	R6
PAN SPREAD •15.0-.13	2	0
REVERB 0-127	63	63
FINGR PICK ON/OFF	OFF	OFF
VEL SENS 0-127	110	127
VE OFFS «3-ifi3	10	10
TRIG LEV OS	0	1
PICK CNTRL OFTO..127	OFF	OFF
P1 POS 0-99	70	70
P1 VAL 0..127	0	0
P2POS 0.a	20	20
P2VAL OJ27	127	127

SCRATCH No. : #2 Flute Q.Off
Description : Sound of a flute with no pitch-quantization

HOLD MODE [ ] COMMON [ ] SEPARATE [X] SUSTAIN [ ] CNTRL 0..127
STRING MODE [ ] COMMON [X] SEPARATE

	NORM	HOLD
PROGRAM 0.127	74	--
VOLUME 0-127	127	--
TRANSPOSE '36.+36	0	--
QUANTIZE ON/OFFIAUTO	OFF	--
PAN POS OflFfLls-MID R15	MID	"
PAN SPREAD •15-0.»15	2	--
REVERB 0..127	63	"
FINGR PICK ON/OFF	OFF	--
VEL SENS 0-1Z7	107	--
VE OFFS •s-as	10	--
TRIG LEV 0-9	1	--
PICK CNTRL OFFfO.,127	OFF	--
P1 POS 0.39	70	"
P1 VAL 0-w	0	--
P2POS aaa	30	--
P2VAL OJ27	100	--

SCRATCH No. : #3 Piano Q.On
Description : piano sound with quantized pitchbend

HOLD MODE [ ] COMMON [X] SEPARATE [ ] SUSTAIN [ ] CNTRL 0..127
STRING MODE [ ] COMMON [X] SEPARATE

	NORM	HOLD
PROGRAM 0-127	1	2
VOLUME 0.127	127	127
TRANSPOSE <36.-3	0	0
QUANTIZE OWOFF/AUTO	ON	AUTO
PAN POS OfIRIS-WO .R15	MID	MID
PAN SPREAD •1SJ.-15	4	5
REVERB 0..127	63	63
FINGR PICK ONfOFF	OFF	OFF
VEL SENS 0-127	120	127
VE OFFS «i~S!	10	10
TRIG LEV 0.5	0	1
PICK CNTRL OFTO..127	OFF	OFF
P1 POS *us*	70	70
P1 VAL 0.127	0	0
P2POS 0.39	30	30
P2VAL 0-127	100	100

SCRATCH No. : #4 Strings Pan
Description : String sound with panorama effect

HOLD MODE [ ] COMMON [X] SEPARATE [ ] SUSTAIN [ ] CNTRL 0..127
STRING MODE [ ] COMMON [X] SEPARATE

	NORM	HOLD
PROGRAM 0-127	50	2
VOLUME 0-127	127	127
TRANSPOSE •X.-X	0	0
QUANTIZE ON/OFF/AUTO	AUTO	AUTO
PAN POS OIIBU5-MID .R15	MID	MID
PAN SPREAD •15-0-»15	15	5
REVERB 0..127	63	63
FINGR PICK OWOFF	OFF	OFF
VEL SENS 0.127	80	127
VE OFFS •63-S	20	10
TRIG LEV 0-9	1	1
PICK CNTRL OFFID..127	OFF	OFF
P1 POS O.S6	70	70
P1 VAL 0-127	55	0
P2POS O.S9	30	30
P2VAL 0-127	70	100

SCRATCH No. : #5 Organ Com

Description : Organ sound with only one MIDI channel (Common Mode)
Hold pedal with a jazz guitar and pick control function, using controller #1 (mod wheel)

HOLD MODE [ ] COMMON [X] SEPARATE [ ] SUSTAIN [ ] CNTRL 0..127
STRING MODE [X] COMMON [ ] SEPARATE

	NORM	HOLD
PROGRAM 0-127	20	27
VOLUME 0.127	127	127
TRANSPOSE j6-»36	0	0
QUANTIZE ON/OFF/AUTO	AUTO	AUTO
PAN POS OlfRUS-MID.RIS	MID	MID
PAN SPREAD -15-0-*15	4	5
REVERB OJ27	63	63
FINGR PICK ON/OFF	OFF	OFF
VEL SENS 0..127	60	127
VE OFFS •6M3	0	10
TRIG LEV 0.9	0	4
PICK CNTRL OFB0..127	1	1
PI POS as	70	70
P1 VAL 0..127	0	100
P2POS aa	30	30
P2VAL 0-127	100	10

SCRATCH No. : #6 Sax PickMod

Description : Saxophone sound with pick control function using controller # 1(mod wheel)

HOLD MODE [ ] COMMON [X] SEPARATE [ ] SUSTAIN [ ] CNTRL 0..127
STRING MODE [ ] COMMON [X] SEPARATE

	NORM	HOLD
PROGRAM 0.127	66	2
VOLUME 0-127	127	127
TRANSPOSE ^B.*36	0	0
QUANTIZE ON/OFF/AUTO	ON	AUTO
PAN POS 0(IBU5..HD.R15	MID	MID
PAN SPREAD •15-0-.15	4	5
REVERB 0..127	63	63
FINGR PICK ON/OFF	OFF	OFF
VEL SENS 0-127	100	127
VE OFFS •fii-a	10	10
TRIG LEV 0-9	1	1
PICK CNTRL OFFB..127	1	OFF
P1 POS as	70	70
P1 VAL 0-127	0	0
P2POS use	30	30
P2VAL 0..127	60	100

SCRATCH No. : #7 Synth PickPan
Description : Synthesizer sound with pick control function, using controiler #10 (panorama)

HOLD MODE ☐ COMMON ☒ SEPARATE ☐ SUSTAIN ☐ CNTRL 0..127
STRING MODE ☐ COMMON ☒ SEPARATE

	NORM	HOLD
PROGRAM 0-127	86	100
VOLUME 0-127	127	127
TRANSPOSE •3EL36	0	0
QUANTIZE ON/OFF/AUTO	AUTO	AUTO
PAN POS Off/LIS-MIO.RIS	OFF	MIO
PAN SPREAD •15..0..*15	0	5
REVERB 0-127	63	63
FINGR PICK ON/OFF	OFF	OFF
VEL SENS 0-127	127	127
VE OFFS •63-^3	0	10
TRIG LEV 0-9	1	1
PICK CNTRL OPR0..127	10	1
P1 POS *a»*	70	70
P1 VAL 0.127	0	0
P2POS *aa*	30	30
P2VAL 0.127	127	100

SCRATCH No. : #8 Gtr+HoldChoir
Description : guitar sound while playing without hold pedal,
use the hold pedal for a choir sound

HOLD MODE ☐ COMMON ☒ SEPARATE ☐ SUSTAIN ☐ CNTRL 0..127
STRING MODE ☐ COMMON ☒ SEPARATE

	NORM	HOLD
PROGRAM 0-127	26	53
VOLUME 0-127	127	97
TRANSPOSE ,B.<36	0	0
QUANTIZE ON/OFF/AUTO	AUTO	AUTO
PAN POS CHR1.15-MIO.ai5	MID	MID
PAN SPREAD •15-0-I5	4	5
REVERB 0-127	63	63
FINGR PICK ON/OFF	OFF	OFF
VEL SENS 0.127	107	80
VE OFFS o^s	15	0
TRIG LEV 0-9	1	1
PICK CNTRL OFR0..127	OFF	OFF
P1 POS 0,39	70	70
P1 VAL 0-127	0	0
P2POS 059	30	30
P2VAL 0-127	100	100

SCRATCH No. : #
Description :

HOLD MODE ☐ COMMON ☐ SEPARATE ☐ SUSTAIN ☐ CNTRL 0..127
STRING MODE ☐ COMMON ☐ SEPARATE

	NORM	HOLD
PROGRAM 0-127		
VOLUME 0-127		
TRANSPOSE *w--x*		
QUANTIZE ON/OFFfAUTO		
PAN POS OHR1.15..HO.H15		
PAN SPREAD •15..0..15		
REVERB 0..127		
FINGR PICK ON/OFF		
VEL SENS 0..127		
VE OFFS «)-6i		
TRIG LEV 0-9		
PICK CNTRL OFP10..127		
PI POS 0.99		
P1 VAL 0-127		
P2POS o.a		
P2VAL 0-127		

SCRATCH No. : #
Description :

HOLD MODE ☐ COMMON ☐ SEPARATE ☐ SUSTAIN ☐ CNTRL 0..127
STRING MODE ☐ COMMON ☐ SEPARATE

	NORM	HOLD
PROGRAM 0-127		
VOLUME 0.127		
TRANSPOSE a-t36		
QUANTIZE ON/OFFrtUTO		
PAN POS 011FflJ5-MID.R15		
PAN SPREAD •15-0-»15		
REVERB 0..127		
FINGR PICK ON/OFF		
VEL SENS 0-127		
VE OFFS •6i-63		
TRIG LEV 0-9		
PICK CNTRL OFFKU27		
P1 POS 0./^8		
P1 VAL 0-127		
P2POS *na*		
P2VAL 0.127		

ARRANGE No. : #1 String Split

Description :The E6 and A5 strings will play with a bass sound, the upper four strings access a jazz guitar sound

HOLD MODE [ ] COMMON [X] SEPARATE [ ] SUSTAIN [ ] CNTRL 0..127

STRING SPLIT [ ] OFF [ ] 1 [ ] 2 [ ] 3 [X] 4 [ ] 5

FRET SPLIT [X] OFF [ ] 1..23

PICK SPLIT 1 [X] OFF [ ] 1..99

PICK SPLIT 2 [X] OFF [ ] 1..99

	S1F1P1	S1F1P2	S1F1P3	S1F2P1	S1F2P2	S1F2P3	S2F1P1	S2F1P2	S2F1P3	S2F2P1	S2F2P2	S2F2P3	HOLD
PROGRAM 0-127	27	--	--	--	--	--	33	--	--	--	--	--	2
VOLUME 0,127	107	--	--	--	--	--	127	--	--	--	--	--	127
TRANSPOSE •a6.t36	0	--	--	--	--	--	-12	--	--	--	--	--	0
QUANTIZE ON/OFFtAUTO	AUTO	--	--	--	--	"	AUTO	--	--	--	--	--	AUTO
PAN POS 0«F(ll5..MIO.R15	MID	--	--	--	--	--	MID	--	--	--	"	--	MID
PAN SPREAD I5.j0..ll5	4	--	--	--	--	--	4	--	--	--	--	--	4
REVERB 0-127	63	--	--	--	--	--	63	--	--	--	--	--	63
FINGR PICK ON/OFF	OFF	--	--	--	--	--	OFF	--	--	--	--	--	OFF
VEL SENS 0-127	127	--	"	--	--	--	127	--	--	--	--	--	127
VE OFFS fii-«6i	0	--	--	--	--	--	0	--	--	--	--	--	0
TRIG LEV 0-9	1	--	--	--	--	--	5	--	--	--	"	--	1
PICK CNTRL OFFB..127	OFF	--	--	--	--	--	OFF	--	--	--	--	--	OFF
P1 POS 0.SB	70	--	--	--	--	--	7D	--	--	--	--	--	70
P) VAL 0-127	0	--	--	--	--	--	0	--	--	--	--	--	0
P2POS 0.S9	30	--	"	--	--	--	30	--	--	--	--	--	30
P2VAL 0-127	127	--	--	--	--	--	100	--	-	--	--	--	100

ARRANGE No.: #2 Fret Split+HD

Description : the lower 9 frets will sound with a trumpet sound, the upper ones will sound with a choir sound, the hold pedal can be used to access a string orchestra.

HOLD MODE	[ ] COMMON	[X] SEPARATE	[ ] SUSTAIN	[ ] CNTRL 0..127			
STRING SPLIT	[X] OFF	[ ] 1	[ ] 2	[ ] 3	[ ] 4	[ ] 5	
FRET SPLIT	[ ] OFF	[8] 1..23					
PICK SPLIT 1	[X] OFF	[ ] 1..99					
PICK SPLIT 2	[X] OFF	[ ] 1..99					

	S1F1P1	S1F1P2	S1F1P3	S1F2P1	S1F2P2	S1F2P3	S2F1P1	S2F1P2	S2F1P3	S2F2P1	S2F2P2	S2F2P3	HOLD
PROGRAM 0-127	57	&t	--	--	--	--	--	--	--	--	--	--	52
VOLUME 0..127	127	127	--	--	--	--	--	--	--	--	--	--	127
TRANSPOSE •36-t36	0	0	--	--	--	--	--	--	--	--	--	--	0
QUANTIZE ON/OFRAUTO	AUTO	AUTO	--	--	--	--	--	--	--	--	--	--	AUTO
PAN POS OHBU5JIIO.H15	MID	MID	--	--	--	--	--	--	--	--	--	--	MID
PAN SPREAD 15-0-.*15	4	4	--	--	--	--	••	--	--	--	--	--	4
REVERB 0-127	63	63	--	--	--	--	--	--	--	--	--	--	63
FINGR PICK ON/OFF	OFF	OFF	--	--	--	--	--	--	--	--	--	--	OFF
VEL SENS OJ27	127	127	--	--	--	--	--	--	--	--	--	--	47
VE OFFS «i-<a	0	0	--	--	--	--	--	--	--	--	--	--	-4Q
TRIG LEV us	1	1	--	--	--	--	--	--	--	--	--	--	1
PICK CNTRL OFFB..127	OFF	OFF	--	--	--	--	--	--	--	--	--	--	OFF
PI POS as	70	70	--	--	--	--	--	--	--	--	--	--	70
P1 VAL 0-127	0	0	--	--	--	--	--	--	--	--	--	--	0
P2POS Q.S9	30	30	--	--	--	--	--	--	--	--	--	--	30
P2VAL 0-127	127	100	--	--	--	--	--	--	-	--	--	--	100

ARRANGE No. : #3 Pick Split

Description : Setup with three different pick zones controlling three different sounds
distortion guitar for the bridge position
in the middle position an electric guitar
the neck position plays an acoustic guitar

HOLD MODE [ ] COMMON [X] SEPARATE [ ] SUSTAIN [ ] CNTRL 0..127

STRING SPLIT [X] OFF [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

FRET SPLIT [X] OFF [ ] 1..23

PICK SPLIT 1 [ ] OFF [35] 1..99

PICK SPLIT 2 [ ] OFF [60] 1..99

	S1F1P1	S1F1P2	S1F1P3	S1F2P1	S1F2P2	S1F2P3	S2F1P1	S2F1P2	S2F1P3	S2F2P1	S2F2P2	S2F2P3	HOLD
PROGRAM 0-127	30	28	25	--	--	--	--	--	--	--	--	--	2
VOLUME o-ia	90	127	127	--	--	--	--	--	--	--	--	--	127
TRANSPOSE •3B.438	0	0	0	--	--	--	--	--	--	--	--	--	0
QUANTIZE OWOFFIAUTO	AUTO	AUTO	AUTO	--	--	--	--	--	--	--	--	--	AUTO
PAN POS OIFdIS-MIO.RIS	R12	MID	L12	--	--	--	--	--	--	--	--	--	MID
PAN SPREAD 1S-0..*15	2	2	2	--	--	--	--	--	--	--	--	--	4
REVERB 0-127	63	63	63	•-	--	--	--	--	--	--	--	--	63
FINGR PICK ON/OFF	OFF	OFF	OFF	--	--	--	--	--	--	--	--	--	OFF
VEL SENS O-IT	127	127	127	--	--	--	--	--	--	--	--	--	127
VE OFFS O-iffI	0	0	0	--	--	--	--	--	--	--	--	--	0
TRIG LEV 0-3	1	3	3	--	--	--	--	--	--	"	--	--	1
PICK CNTRL OFF0..127	OFF	OFF	OFF	--	--	--	--	--	--	--	--	--	OFF
PI POS 0Se	70	70	70	--	--	--	--	--	--	--	--	--	70
PI VAL 0-127	0	0	0	--	--	--	--	--	--	--	--	--	0
P2POS [196	30	30	30	--	--	--	--	--	--	--	--	--	30
P2VAL O.W	127	100	100	--	--	--	--	--	-	--	--	--	100

ARRANGE No. : #4 Multi Split

Description : a combination of string-split, fret-split and pick-split

HOLD MODE [ ] COMMON [X] SEPARATE [ ] SUSTAIN [ ] CNTRL 0..127

STRING SPLIT [ ] OFF [ ] 1 [ ] 2 [ ] 3 [X] 4 [ ] 5

FRET SPLIT [ ] OFF [7] 1..23

PICK SPLIT 1 [ ] OFF [50] 1..99

PICK SPLIT 2 [ ] OFF [99] 1..99

	S1F1P1	S1F1P2	S1F1P3	S1F2P1	S1F2P2	S1F2P3	S2F1P1	S2F1P2	S2F1P3	S2F2P1	S2F2P2	S2F2P3	HOLD
PROGRAM 0-127	26	17	2	100	64	2	36	38	2	63	27	2	2
VOLUME 0-127	127	127	127	127	127	127	127	127	127	127	127	127	127
TRANSPOSE <&»36	0	0	0	0	0	0	0	0	0	0	0	0	0
QUANTIZE ON/OFF/AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO
PAN POS 0«F<L15..MIOfflS	L12	MID	MID	R12	L12	MID	MID	R12	MID	L12	MID	MID	MID
PAN SPREAD 15-0..tl5	2	4	4	2	2	4	4	2	4	2	4	4	4
REVERB 0-127	63	63	63	63	63	63	63	63	63	63	63	63	63
FINGR PICK OMIOFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
VEL SENS 0.127	127	127	127	127	127	127	127	127	127	127	127	127	127
VE OFFS 6)-]6)	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIG LEV 0.3	3	3	1	3	3	1	3	3	1	3	3	1	1
PICK CNTRL OFF0..127	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
PI POS 0.9B	70	70	7D	*TO*	70	7D	70	7D	70	70	7D	7D	70
PI VAL 0..127	0	0	0	*0*	0	0	0	0	0	0	0	0	0
P2POS 0,39	30	30	30	30	30	30	30	30	30	30	30	30	30
P2VAL 0-127	127	100	100	100	100	100	100	100	100	100	100	100	100

ARRANGE No. : #5 Funky Split

Description : depending on the picking position the E6 string has access to three different bass sounds, the other five strings control the sound of a distortion guitar when picked close to the bridge, else playing with a muted guitar

HOLD MODE [ ] COMMON [X] SEPARATE [ ] SUSTAIN [ ] CNTRL 0..127

STRING SPLIT [ ] OFF [ ] 1 [ ] 2 [ ] 3 [ ] 4 [X] 5

FRET SPLIT [X] OFF [ ] 1..23

PICK SPLIT 1 [ ] OFF [30] 1..99

PICK SPLIT 2 [ ] OFF [42] 1..99

	S1F1P1	S1F1P2	S1F1P3	S1F2P1	S1F2P2	S1F2P3	S2F1P1	S2F1P2	S2F1P3	S2F2P1	S2F2P2	S2F2P3	HOLD
PROGRAM 0.127	30	29	29	--	--	--	3	35	38	–	–	–	26
VOLUME 0-127	70	127	127	--	--	--	110	77	110	–	--	–	110
TRANSPOSE 36L*36	0	0	0	--	--	--	-12	-12	-12	–	–	--	0
QUANTIZE ON/OFRAUTO	AUTO	AUTO	AUTO	--	--	--	ON	ON	ON	–	–	–	AUTO
PAN POS CHRU5..MIO.R15	R1	F12	MID	--	--	--	R2	R1	L1	–	–	–	MID
PAN SPREAD 15-0..<15	8	-7	4	--	--	--	0	0	0	–	–	–	0
REVERB 0-127	63	63	63	--	--	--	63	63	63	–	–	–	63
FINGR PICK ON/OFF	OFF	OFF	OFF	--	--	--	OFF	OFF	OFF	--	--	–	OFF
VEL SENS 0-127	127	127	127	--	--	--	127	127	127	–	–	–	127
VE OFFS *Wi63*	0	0	0	--	--	--	0	0	0	--	–	–	0
TRIG LEV Oi	1	1	1	--	--	--	1	1	1	–	--	–	1
PICK CNTRL OFF/0..127	OFF	OFF	OFF	--	--	--	OFF	OFF	OFF	--	–	–	OFF
P1 POS 0-99	70	70	70	--	--	--	70	70	70	–	--	–	70
P1 VAL 0.127	0	0	0	--	--	--	0	0	0	–	–	–	0
P2POS 0-9B	30	30	30	--	--	--	30	30	30	--	--	–	30
P2VAL 0-127	127	100	127	--	--	--	127	127	127	–	–	–	127

ARRANGE No. : #

Description :

HOLD MODE ☐ COMMON ☐ SEPARATE ☐ SUSTAIN ☐ CNTRL 0..127

STRING SPLIT ☐ OFF ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

FRET SPLIT ☐ OFF ☐ 1..23

PICK SPLIT 1 ☐ OFF ☐ 1..99

PICK SPLIT 2 ☐ OFF ☐ 1..99

	S1F1P1	S1F1P2	S1F1P3	S1F2P1	S1F2P2	S1F2P3	S2F1P1	S2F1P2	S2F1P3	S2F2P1	S2F2P2	S2F2P3	HOLD
PROGRAM 0-127													
VOLUME 0-127													
TRANSPOSE •aitS													
QUANTIZE OWOFRAUTO													
PAN POS OHB1.15..MID.R15													
PAN SPREAD i5.n.»iS													
REVERB OJ27													
FINGR PICK ON/OFF													
VEL SENS 0-127													
VE OFFS •6>-t6i													
TRIG LEV 0.3													
PICK CNTRL OFF0..127													
P1 POS 0-S8													
PI VAL 0.127													
P2POS O-SB													
P2VAL 0.127													