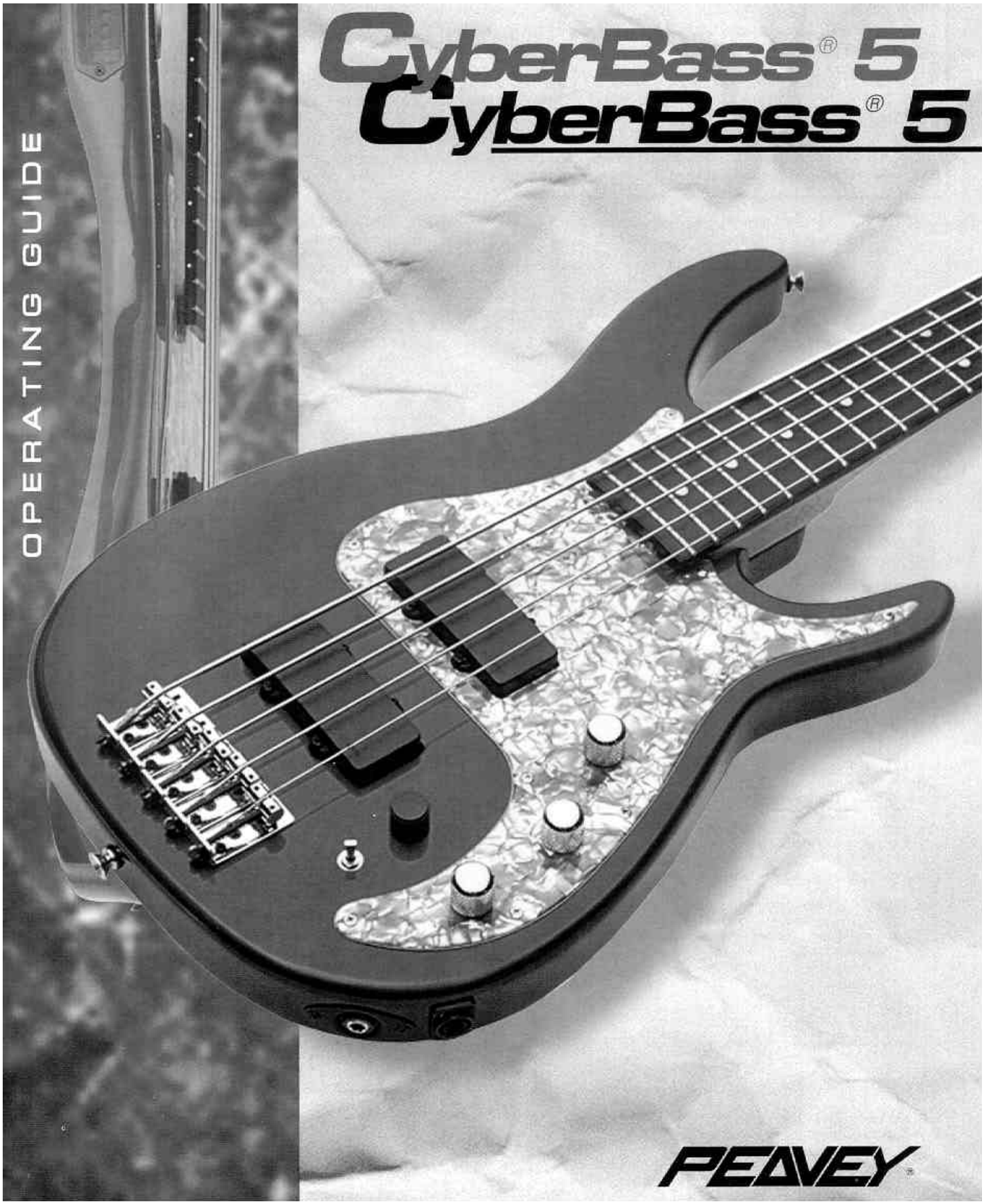
CyberBass® 5

CyberBass® 5

OPERATING GUIDE



PEAVEY®

Intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

Intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

CAUTION: Risk of electrical shock – DO NOT OPEN!
CAUTION: To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

WARNING: To prevent electrical shock or fire hazard, do not expose this appliance to rain or moisture. Before using this appliance, read the operating guide for further warnings.

INTRODUCTION

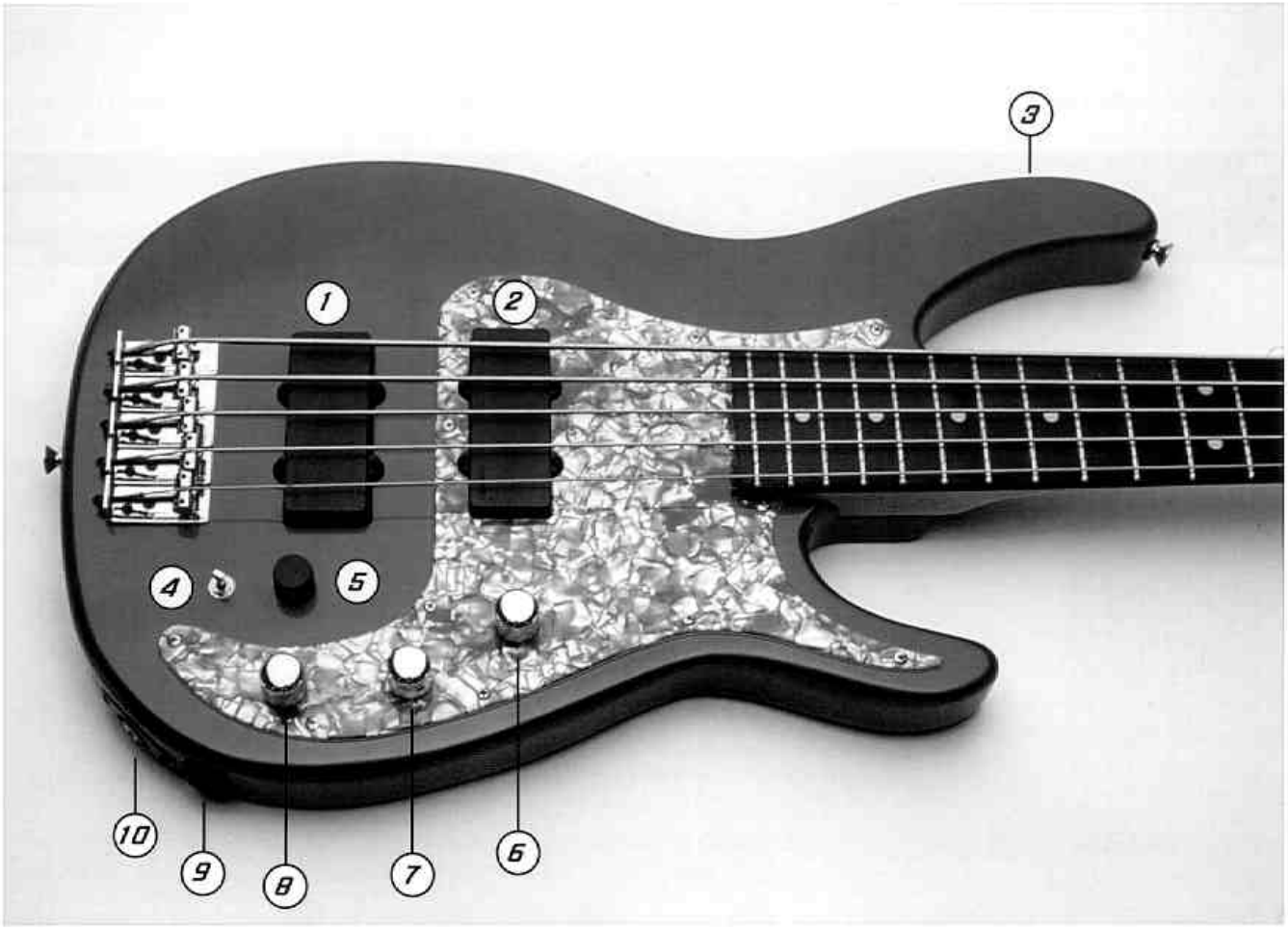
Congratulations! You are now the proud owner of a PEAVEY CYBERBASS™ 5. With this technologically-advanced instrument, you now have access to the world of MIDI.

The CYBERBASS 5 translates bass guitar playing into MIDI CODE. Using this MIDI CODE, the CYBERBASS 5 can trigger synthesizers, samplers, sequencers, or any other musical instrument or computer that has a MIDI INPUT.

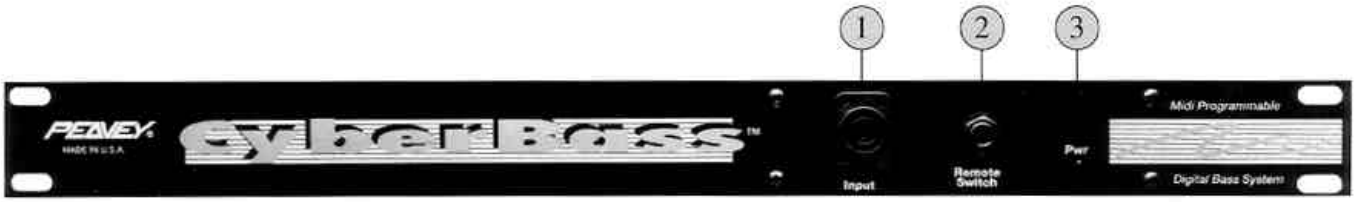
As well as opening the door to the world of MIDI, the CYBERBASS 5 is also a professional bass guitar. So, you can have the best of both worlds—at the same time. For example, you can double your regular bass sound with any sound you want: a double bass, a vibraphone, or a sample of a 747 taking off. The only limit to sound creation is your imagination.

Due to the accurate and quick-tracking speed of the CYBERBASS 5, you will find it exceptionally invaluable in live situations. We all know how synthesizer bass sounds have dominated music in recent times. Well, now you can access the big synth-sounds, so popular today, using your CYBERBASS 5. You can record these grooves into sequencers and your artistry translates perfectly into the digital domain. As well as laying down the bass line, you can "trigger" the drums and provide your own percussion, as well as string lines, horn arrangements, etc.

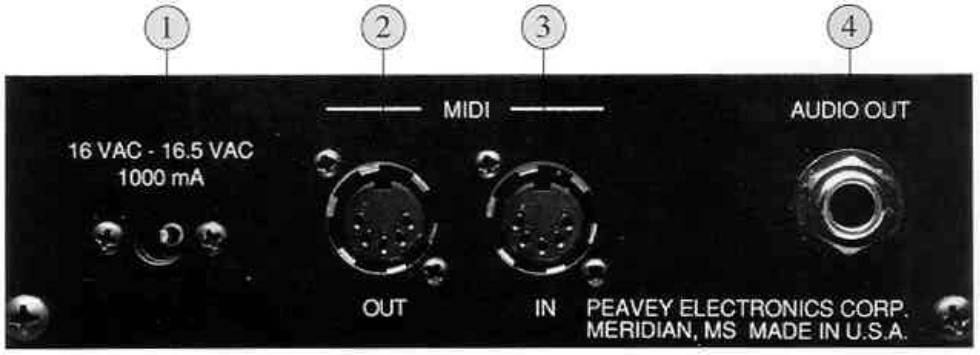
Your ability to access a greater range of tones and textures will be invaluable in writing, recording, and performing.



1. ANALOG BRIDGE PICKUP
   As on a standard bass.
2. ANALOG NECK PICKUP
   As on a standard bass.
3. LED DISPLAY
4. DATA SWITCH
   Switch used for adjusting data in the CYBERBASS.
5. MIDI VOLUME CONTROL
   Volume control for the synthesizer.
6. VOLUME CONTROL ANALOG PICKUPS
7. ANALOG PICKUP BALANCE CONTROL
8. ANALOG TONE CONTROL
9. CYBERBASS CABLE INPUT JACK
   The CYBERBASS cable is plugged in here.
10. 1/4" ANALOG AUDIO OUTPUT JACK
    Only used when NOT using MIDI.



1. CYBERBASS CABLE INPUT JACK
   The CYBERBASS guitar is plugged in here.
2. FOOTSWITCH INPUT JACK
3. POWER LED
   This red LED shines when power is connected.



1. AC POWER PACK INPUT
   The 16 V AC – 16.5 V AC 1000 mA power pack is plugged in here.
2. MIDI OUTPUT JACK
   Standard 5-pin DIN jack used for sending MIDI data.
3. MIDI INPUT JACK
   Standard 5-pin DIN jack used for receiving MIDI data.
4. 1/4" AUDIO OUTPUT JACK
   The analog audio is available from this jack.

MIDI PICKUPS

The MIDI pickups for the CYBERBASS 5 are located in the analog bridge pickup. When your CYBERBASS 5 leaves the factory, the bridge pickup is preset to a correct adjustment.

However, if you decide to change the action on your CYBERBASS 5, the bridge pickup may have to be reset. (See Page 19 "MIDI PICKUP ADJUSTMENTS.")

If the bridge pickup is not adjusted correctly, the PEAVEY CYBERBASS will not operate properly.

CLEANING

You will find that the CYBERBASS 5 has excellent tracking. This is due to the "SENSING FRET" technology, used in its design.

The CYBERBASS 5 is a fret/string CONTACT system. What this means is that the fret and the string have to make CLEAN CONTACT with each other, so that your CYBERBASS 5 will be able to accurately locate your finger position on the fret. Once the CYBERBASS 5 has ascertained where your fingers are, this information is relayed to the synthesizer, instantaneously, and the result is the sounding of the correct note.

There are many materials that can get between the string and the fret and interfere with contact: grease from your fingers, tarnish on the frets, rust on the strings, lint from unsuitable cleaning cloths, oil from oil-based smoke machines, etc. But DON'T PANIC. The solution is so simple. Just clean your strings.

It is essential to keep not only your strings but also your frets clean and free of tarnish, grease, and grime. It cannot be stressed enough how important this is.

Which leads us to the MOST IMPORTANT piece of information regarding the care of the CYBERBASS 5, and that is:

NEVER USE STEEL WOOL TO CLEAN FRETS OR STRINGS!

SYNTHESIZERS

If you use the Peavey CyberBass™ Module or the Spectrum™ Bass module, you will have no MIDI compatibility problems, as these modules have been set up for use in conjunction with the CYBERBASS 5.

MIDI COMPATIBILITY:

1. OMNI OFF
2. MULTI MODE
3. PITCH WHEEL SETTING TO + OR - 24 SEMITONES
4. MIDI CHANNEL ALLOCATION

If you do not fully understand how to set these parameters on all the sounds in your synthesizer, you will be unable to operate the system successfully.

DO NOT DESPAIR. The Peavey Spectrum Bass, Spectrum Synth, and CyberBass Modules have taken the hard work out of parameter setting, etc. As well as having all the necessary MIDI facilities and features required for successful operation of the CYBERBASS 5, they have also been preprogrammed.

However, if you are NOT using one of the above mentioned synthesizers, then there are certain parameters that need to be set in the synthesizer, OR THE SYSTEM WILL NOT OPERATE.

If you are NOT using one of the above mentioned synthesizer modules, then you should now go to the section on "SYNTHESIZERS."

SYSTEMS OVERVIEW

When you unpack your PEAVEY CYBERBASS 5, check that the following components are present.

- CYBERBASS GUITAR
- SPLITTER RACK
- POWER PACK
- CYBERBASS CABLE
- MANUAL

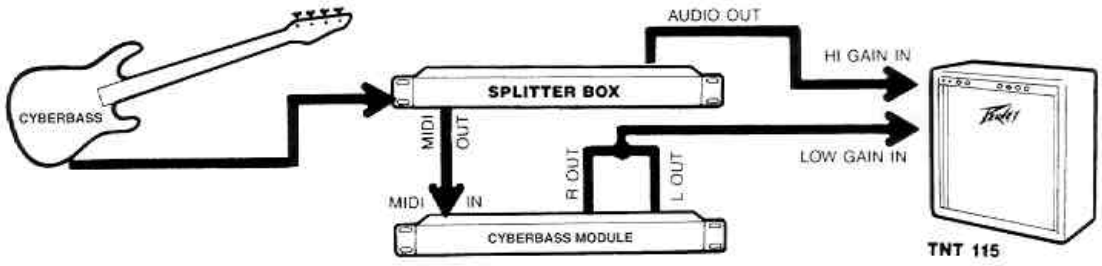
At this point, it is a good idea to refer to the SAFETY SECTION (page 28).

CABLE SETUP AND TURNING ON

If you want to hear the regular bass sound as well as the synthesizer sound, you will need an amplifier with two inputs. If you do not have an amplifier with two or more inputs, then you will have to use an AUDIO MIXER.

The following cables need to be connected.

- The CYBERBASS CABLE is connected between the guitar and the SPLITTER RACK.
- MIDI OUT on the CYBERBASS SPLITTER RACK is connected to MIDI IN on the synthesizer, using a standard MIDI cable.
- The AUDIO OUTPUT of the synthesizer is connected to one input of the amplifier using a standard 1/4" jack to jack cable.
- The AUDIO OUT on the back of the splitter rack is connected to the second input of the amplifier using a standard 1/4" jack to jack cable.
- Now connect the power supplies first to the synthesizer, then connect the power pack to the 16 V AC power input on the back of the splitter rack.
- Make sure the volume settings on the amplifier are set to zero. Now turn the power on to the amplifier, followed by the synthesizer, then finally connect power to power pack that is plugged into the splitter rack.



The LED display on the CYBERBASS SHOULD now show:

- Turn up volume on both channels of the amplifier.
- Adjust ANALOG VOLUME CONTROL on the CYBERBASS to give you regular bass sound.
- Adjust MIDI VOLUME CONTROL on the CYBERBASS to give you synthesizer sound. (You will also need to check that the volume control on the synthesizer module is turned up.)
- You should now hear SYNTHESIZER and REGULAR BASS sounds.

PERFORMANCE SETUPS

The CYBERBASS is actually an electronically modified bass guitar connected to a computer. The computer electronics are housed inside the back of the bass. This computer generates the MIDI MESSAGE that drives your synthesizer, sequencer, etc.

There are several MIDI functions and parameters in the CYBERBASS that you have to program. This section attempts to explain how all these functions and parameters are laid out, accessed, and fit together.

Rather than supplying a computer keyboard for the input of data to the CYBERBASS, a system has been developed using the FRETS and a single DATA SWITCH.

The DATA SWITCH can be found on the front of the bass guitar. (See the LAYOUT SHEET for exact position.)

The neck of the CYBERBASS is not an ordinary bass guitar neck. Under the black plastic film on the fingerboard, the frets are wired and these wires combine with the MIDI pickups and the electronics in the back of the bass so that you can access the MIDI world.

You will also notice that each fret is divided into four sections. These sections will, from now on, be called FRET SEGMENTS. Each FRET SEGMENT has been assigned a different task. (See "FRET MAP")

To access the task of a given FRET SEGMENT, you must hold down the relevant string so that it makes contact with the relevant fret and at the same time switch the DATA SWITCH. Now look at the LED DISPLAY. This will show an abbreviated four character visualization of the task assigned to that FRET SEGMENT.

The DATA SWITCH is pressed UP to increase the value of the selected parameter and is pressed DOWN to decrease the value so the DATA SWITCH is used not only for ACCESS but also for manipulation. One click selects the parameter. Two clicks will change the value of that parameter.

NOTE: EXCEPT in the case of the D and G strings, which are instantaneous when selecting PERFORMANCE SETUP.

When holding down the string on the fret, be careful to only hold down ONE string at a time or you many accidentally trigger the wrong fret.

When CLICKING, always make sure that the string is in contact with the selected fret.

NOTE: Some frets will alter the values of parameters, others will trigger functions, and some frets are non-operational (i.e. they are just frets).

PERFORMANCE SETUPS

What is a PERFORMANCE SETUP, you ask?

It is exactly that.

You set up a sound by manipulating your available parameters until you get a sound that you really like. Then you store it in one of the 32 PERFORMANCE SETUPS. Later on you can recall it quickly and use it during a live performance.

As just mentioned, the CYBERBASS is capable of storing in its memory 32 PERFORMANCE SETUPS.

For example:

PERFORMANCE SETUP 1.

PERFORMANCE SETUP 2.

And so on:
PERFORMANCE SETUP 32.

Each PERFORMANCE SETUP is made up of a number of parameters that can be programmed uniquely to each PERFORMANCE SETUP. This allows you to develop a sound on the CYBERBASS, then store it into one of the 32 PERFORMANCE SETUPS. The CYBERBASS will remember this SETUP even when the power has been turned off. At a click of the DATA SWITCH, the entire sound you have developed can be instantaneously recalled. The main idea of this is for live performance so you can change sounds quickly.

A MIDI foot controller can also be plugged into the MIDI INPUT socket on the CYBERBASS SPLITTER RACK. This will allow you to change sounds with your feet while performing.

These 32 PERFORMANCE SETUPS are accessed from the CYBERBASS by clicking frets 1 - 16 on the G & D strings. For example:

FRET 1 – G STRING	PF01
FRET 2 – G STRING	PF02

and so on to:

FRET 16 – G STRING	PF16

THEN

FRET 1 – D STRING	PF17
FRET 2 – D STRING	PF18

and so on to:

FRET 16 – D STRING	PF32

At this point, set up your CYBERBASS, click on these frets on the D & G strings, and watch the LED DISPLAY

change.

If you click on a fret on the G & D string higher than 16,

FRET 17 – G STRING

you will see in the LED display:

This display indicates that you have clicked on a fret which stores no parameter or alternately has no function. Don't worry, nothing will change in your sound. The –CB– will just appear to indicate that you are on a null fret.

You may now ask, how do I change, or EDIT, a PERFORMANCE SETUP? First, click on a fret on the G or D string and select the PERFORMANCE SETUP you wish to EDIT.

If you wish to EDIT, for example, PERFORMANCE SETUP 18, the LED DISPLAY should now be showing.

A copy of the parameters of PF18 are loaded into the "EDIT BUFFER," ready for editing. You do not have to edit these parameters, but you can if you want to.

(The EDIT BUFFER is part of the computer's memory into which the parameters that make up the PERFORMANCE SETUP are loaded when that particular PERFORMANCE SETUP is being played. When you edit these parameters, it allows you to instantaneously hear what effect they have on your sound. If you like the sound, then you can save it if you want to.)

Fret 1 – A String	MIDI Mode
Fret 2 – A String	Octave Transpose
Fret 3 – A String	Null Fret
Fret 4 – A String	B String Patch
Fret 5 – A String	E String Patch
Fret 6 – A String	A String Patch
Fret 7 – A String	D String Patch
Fret 8 – A String	G String Patch
Fret 9 – A String	Null Fret
Fret 10 – A String	Style (Fingers, Pick, or Tap)
Fret 11 – A String	Bend Range
Fret 12 – A String	Footswitch Function
Fret 13 – A String	Fretless Mode
Fret 14 – A String	Fretless Speed
Fret 15 – A String	Dynamics On or Off
Fret 16 – A String	MIDI Velocity
Fret 17 – A String	Note Off Format
Fret 18 – A String	Pitch Wheel Setting
Fret 19 – A String	MIDI Output Channel
Fret 20 – A String	Performance Setup Store Location
Fret 21 – A String	Execute Store Function

GLOBAL PARAMETERS

Once a GLOBAL PARAMETER has been set to a particular value, this value will be applied to all performance setups.

For example: E STRING TRIGGER SENSITIVITY. This determines how sensitive the strings are to triggering MIDI note on commands. It does not matter what performance setup you are using or whether you are in the process of editing it, the trigger sensitivity on the E string will always be just as you set it.

The GLOBAL PARAMETERS are to be found on the E string. They are as follows:

FRETS 1 to 5 – E STRING	**TRIGGER SENSITIVITY**		
FRET 1	B STRING	B STRING TRIGGER SENSITIVITY	B S (1–16)
FRET 2	E STRING	E STRING TRIGGER SENSITIVITY	E S (1–16)
FRET 3	A STRING	A STRING TRIGGER SENSITIVITY	A S (1–16)
FRET 4	D STRING	D STRING TRIGGER SENSITIVITY	D S (1–16)
FRET 5	G STRING	G STRING TRIGGER SENSITIVITY	G S (1–16)

FRETS 1, 2, 3, 4, and 5 are all concerned with STRING SENSITIVITIES. These parameters determine how sensitive the strings are to triggers.

For example, if you set ES = 16, you will only have to very lightly pluck the E string to get a trigger. If you set ES = 01, you will have to pluck the E string firmly to get a trigger. You will have to play with the sensitivities of each string relative to each other. A lower setting is better than a higher one. As a general rule of thumb, start with the sensitivity set to 8.

FRET 6 – E STRING NULL FRET –CB–

This fret is non-operational; in other words, it has no function other than its usual role in an ordinary bass guitar.

FRETS 7 to 11 – E STRING	**BEND CALIBRATION**		
FRET 7	B STRING	B STRING BEND CALIBRATION	B B (1–32)
FRET 8	E STRING	E STRING BEND CALIBRATION	E B (1–32)
FRET 9	A STRING	A STRING BEND CALIBRATION	A B (1–32)
FRET 10	D STRING	D STRING BEND CALIBRATION	D B (1–32)
FRET 11	G STRING	G STRING BEND CALIBRATION	G B (1–32)

FRETS 7, 8, 9, 10, and 11 are concerned with PITCH BEND CALIBRATION.

These parameters are used to make the bend of the synthesizer equal to the bend of the natural sound of the string.

NOTE:

This section works in close conjunction with the PITCH WHEEL SETTING. Both of these sections must be set correctly or you will have problems. Also, please refer to the SYNTHESIZER section of this manual to make sure that your synthesizer is set correctly.

Basically, your PITCH WHEEL setting on the CYBERBASS (FRET 18 A STRING) and the PITCH WHEEL SETTING on the synthesizer must be set so that both are displaying the same number.

Thus, if the CYBERBASS LED DISPLAY is showing PW08, then the synthesizer pitch wheel must also be set to 8.

NOTE:

References to PITCH WHEEL SETTING do not refer to the external pitch wheel found on many synthesizer keyboards, but to the internal PITCH WHEEL PARAMETER which controls the PITCH WHEEL RANGE.

Confusingly, in synthesizers this parameter may be known as a number of different things: e.g. pitch wheel range, pitch bend range, pitch bend (as in the CYBERBASS Module synthesizer), bend, etc. This will depend on which synthesizer you have.

CALIBRATION:

After you have checked the above, then set BD=1 (A STRING FRET 11).

Check that the regular bass sound and the synthesizer are in tune. If they are, then bend the string and listen if the synthesizer

and string sound are in tune. If not, vary the BEND CALIBRATE parameter for that string until they both come into tune.

FRET 12 – E STRING	NULL FRET	–CB–

This fret is non-operational; in other words, it has no function other than its usual role in an ordinary bass guitar.

FRET 13 – E STRING	MIDI INPUT CHANNEL	M I = 1

You may choose to use a MIDI footswitch controller to change your performance setups when you play live. If so, then you need to specify the MIDI INPUT CHANNEL on which MIDI data will be accepted.

Go to FRET 13 E STRING and program the required MIDI INPUT CHANNEL.

For example: If you wanted to set the MIDI INPUT CHANNEL to receive on channel 6, the LED display should read:

FRET 14 – E STRING	MEMORY LOCK	L = ON/OFF

This is used to avoid accidental erasure or altering of programmed data. When the MEMORY LOCK is "on," GLOBAL SETTINGS (other than MEMORY LOCK) cannot be altered. PERFORMANCE SETUPS can be edited, but your edited PERFORMANCE SETUPS cannot be saved. If you attempt to save them, the word "LOCK" will show in the display.

FRET 15 – E STRING	MIDI SYSTEM EXCLUSIVE DUMP 1	DMP1 / BUSY

As a new user of the CYBERBASS, do not worry too much about this parameter. This parameter is for advanced users.

This is not actually a GLOBAL setting, but has been put here for convenience.

Switching on this fret initiates a system exclusive MIDI DUMP of the performance setups 1 - 16. The MIDI data is directed to the MIDI OUTPUT socket on the back of the splitter rack. This function allows you to store your performance setups in any MIDI data storage device.

FRET 16 – E STRING	MIDI SYSTEM EXCLUSIVE DUMP 2	DMP2 / BUSY

Switching on this fret initiates a system exclusive MIDI DUMP of the performance setups 17 - 32. The MIDI data is directed to the MIDI OUTPUT socket on the back of the splitter rack. This function allows you to store your performance setups in any MIDI data storage device.

Later, you can reload your performance setups if they are accidentally altered, etc. This is achieved by connecting a MIDI cable from the MIDI OUT socket of the MIDI storage device to the MIDI IN socket of the CYBERBASS splitter rack. Then send the CYBERBASS SYSTEM EXCLUSIVE file from the MIDI storage device to the CYBERBASS.

The LED display on the CYBERBASS will show:

This operation will take approximately one minute. You will need to consult the MIDI storage device manual for more details.

FRETS 17-21 – E STRING	NULL FRETS	–CB–

This fret is non-operational; in other words, it has no function other than its usual role in an ordinary bass guitar.

PERFORMANCE SETUP EDITING

All the parameters that make up a performance setup are located on the A string.
The following section deals with the operation and effect of those parameters.

A STRING – FRET 1 MIDI MODE

There are 7 different modes of MIDI transmission that can be selected:

MON 1

In this mode, only one note can be played at a time. YOU CANNOT PLAY CHORDS.

For example, if you play the open E string and then a note on the G string, the E string note will turn off then the G string note will sound.

This mode is great for playing monophonic bass lines. In fact, most bass players use the MONO modes when they play live.

All MIDI data is transmitted on ONE MIDI channel.

If the pitch wheel setting is set to PW08, slides of 8 semitones maximum will only be possible. If the pitch wheel is set to PW 12, slides of 12 semitones maximum will on be possible. (See "PLAYING TECHNIQUES" section for more details.)

MON 2

As in MON 1, YOU CANNOT PLAY CHORDS, as only one note can be played at one time.

The advantage of this setting is that when you have the pitch wheel range set to PW08 you can play 16 note slides. However, you cannot play above the 16th fret.

If the pitch wheel is set to PW12, there are no limitations.

This mode uses pitch wheel MIDI information to establish the pitch rather than note on MIDI information.

PY1A

This is similar to MON 1 except that you CAN play chords. This is a polyphonic mode.

The PEAVEY CYBERBASS 5 transmits on 5 separate MIDI channels. If the MIDI channel parameter was set to 1, the CYBERBASS would transmit MIDI. (See section, "FRET 19 – MIDI OUTPUT CHANNEL.")

G STRING	MIDI CHANNEL 1
D STRING	MIDI CHANNEL 2
A STRING	MIDI CHANNEL 3
E STRING	MIDI CHANNEL 4
B STRING	MIDI CHANNEL 5

Once again, if the pitch wheel parameter is set to PW08, only 8 note slides maximum are possible. If the pitch wheel parameter is set to PW12, only 12 note slides maximum are possible.

PY1B

This is exactly similar to PY1A except that it will not allow downward slides. (NOTES GOING FLAT.) This is very useful when playing chords with sounds like pianos and strings.

PY2A

This is similar to MON 2 except that you CAN play chords.

If the pitch wheel is set to PW08, 16 note slides are possible; BUT, you cannot play above the 16th fret.

This mode is invaluable when playing string style sounds like cellos, etc., or any sound which has a long release time.

PY2B

Exactly the same as PY2A except no downward slides.

PLY 3

This is a polyphonic mode similar to a normal keyboard.
In this mode, you CAN play chords.
The MIDI is transmitted on only one MIDI channel.
The limitation of this mode is that you cannot slide notes. This mode is great for piano sounds, string sounds, and big wash bed sounds that may sound peculiar if you slide notes.

A STRING – FRET 2	TRANSPOSE

The display will show: T = -2, -1, 0, +1, +2.
This shifts the pitch of the sound up and down 2 octaves.

A STRING – FRET 3	NULL FRET

A STRING – FRET 4	B STRING PATCH NUMBER

The display will show B = 00–499. This will select which PATCH NUMBER will be selected for the B string (i.e.: the number of the sound in the synthesizer).
When in modes MON 1, MON 2, and PLY 3, this parameter is the one which selects the sound played on all strings.
To obtain PATCH NUMBERS higher than 99, the CYBERBASS uses MIDI BANK SWITCHING.

A STRING – FRET 5	E STRING PATCH NUMBER

The display will show E = 00–499. This will select which PATCH NUMBER will be selected for the E string.
This parameter only has an effect when modes PY1A, PY1B, PY2A, or PY2B are selected. This allows you, if desired, to have a different sound on the E string.
If E=** is displayed, it uses the PATCH NUMBER programmed in FRET 4 B STRING PATCH NUMBER.

This facility is supplied so that you only have to change one parameter to change the sounds on all strings.

A STRING – FRET 6	A STRING PATCH NUMBER

The display will show A = 00–499. This will select which PATCH NUMBER will be selected for the A STRING.
The parameter only has an effect when modes PY1A, PY1B, PY2A, or PY2B are selected. This allows you, if desired, to have a different sound on the A string.
If A=** is displayed, it uses the PATCH NUMBER programmed in FRET 4 B STRING PATCH NUMBER.

A STRING – FRET 7	D STRING PATCH NUMBER

The display will show D = 00–499. This will select which PATCH NUMBER will be selected for the D string.
This parameter only has an effect when modes PY1A, PY1B, PY2A, or PY2B are selected. This allows you, if desired, to have a different sound on the D string.
If D=** is displayed, it uses the PATCH NUMBER programmed in FRET 4 B STRING PATCH NUMBER.

A STRING – FRET 8	G STRING PATCH NUMBER

The display will show G = 00–499. This will select which PATCH NUMBER will be selected for the G string.
This parameter only has an effect when modes PY1A, PY1B, PY2A, or PY2B are selected. This allows you, if desired, to have a different sound on the G string.
If G=** is displayed, it uses the PATCH NUMBER programmed in FRET 4 B STRING PATCH NUMBER.

A STRING – FRET 9 NULL FRET

This fret is non-operational; in other words, it has no function other than its usual role in an ordinary bass guitar.

A STRING – FRET 10 STYLE

The display will show:

ST=F The STYLE will be set for fingers.

ST=P The STYLE will be set for plectrum (pick).

ST=T The STYLE will be set for tap mode. A note will sound when a string makes contact with a fret. There are no open strings and there is no point in plucking strings as the computer is only looking at the neck.

A STRING – FRET 11 BEND RANGE

The display will show:

BD=0 The pitch bend is disabled.

BD=1 The pitch bend is normal.

BD=2 The pitch bend is exaggerated by a factor of 2.

A STRING – FRET 12 FOOTSWITCH CONTROL

This parameter defines what the footswitch will do when pressed. It can be programmed as a hold or modulation switch.

The display will show:

HLD1 Notes will hold that are played.

HLD2 Notes that are played when the footswitch is pressed will hold. However, no new notes can be triggered until the footswitch is released. The idea is to play a chord, hold it with the footswitch and then play real bass over the top of the chord.

MODU Footswitch is a modulation pedal.

NOTE: When a string is being held, i.e. when you foot is depressing the pedal, YOU CANNOT SLIDE NOTES.

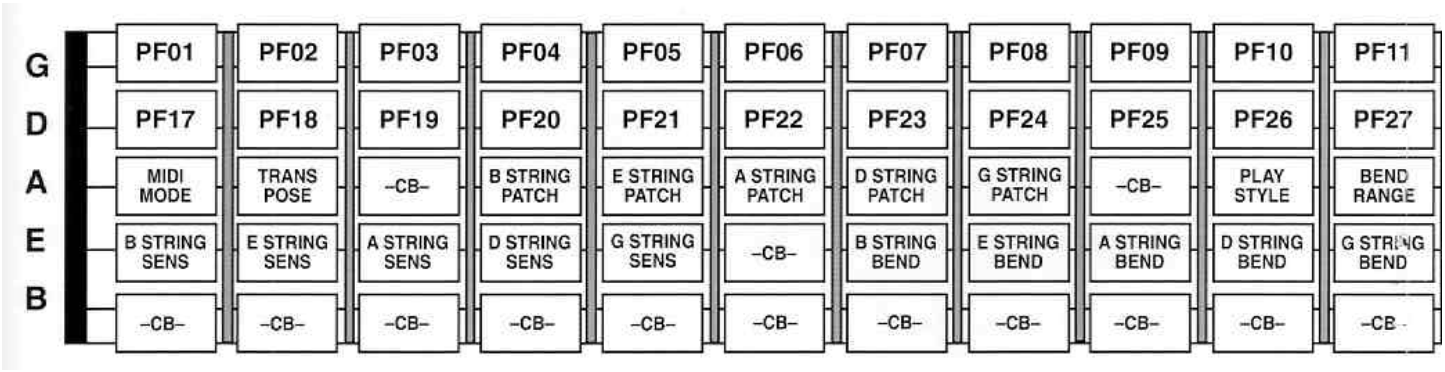
A STRING – FRET 13 FRETLESS MODE

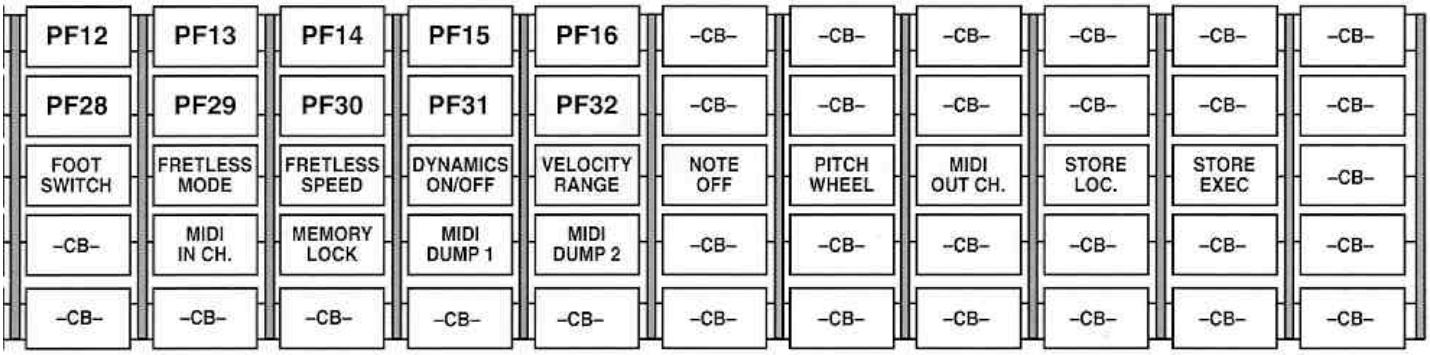
The display will show:

FL=0 Fretless mode disabled.

FL=1 Fretless mode 1. When you slide the notes on the bass, the notes will slide at the speed programmed at fret 14 (speed). The slides have to be semitone slides as in fretless bass playing.

FL=2 Fretless mode 2. As above but notes will slide for any type of slide or hammer. This is more like a portamento effect.


G
D
A
E
B
PF01
PF02
PF03
PF04
PF05
PF06
PF07
PF08
PF09
PF10
PF11
PF17
PF18
PF19
PF20
PF21
PF22
PF23
PF24
PF25
PF26
PF27
MIDI MODE
TRANS POSE
–CB–
B STRING PATCH
E STRING PATCH
A STRING PATCH
D STRING PATCH
G STRING PATCH
–CB–
PLAY STYLE
BEND RANGE
B STRING SENS
E STRING SENS
A STRING SENS
D STRING SENS
G STRING SENS
–CB–
B STRING BEND
E STRING BEND
A STRING BEND
D STRING BEND
G STRING BEND
–CB–
–CB–
–CB–
–CB–
–CB–
–CB–
–CB–
–CB–
–CB–
–CB–
–CB–


PF12
PF13
PF14
PF15
PF16
–CB–
–CB–
–CB–
–CB–
–CB–
–CB–
PF28
PF29
PF30
PF31
PF32
–CB–
–CB–
–CB–
–CB–
–CB–
–CB–
FOOT SWITCH
FRETLESS MODE
FRETLESS SPEED
DYNAMICS ON/OFF
VELOCITY RANGE
NOTE OFF
PITCH WHEEL
MIDI OUT CH.
STORE LOC.
STORE EXEC
–CB–
–CB–
MIDI IN CH.
MEMORY LOCK
MIDI DUMP 1
MIDI DUMP 2
–CB–
–CB–
–CB–
–CB–
–CB–
–CB–
–CB–
–CB–
–CB–
–CB–
–CB–
–CB–
–CB–
–CB–

A STRING – FRET 14 FRETLESS SPEED

The display will show:

SP=1 to 16

This is the speed at which the fretless mode will slide. The higher the value, the slower the speed.

A STRING – FRET 15 DYNAMICS

The display will show DY=0 or DY=1

If the display shows DY=1, the synthesizer sound will respond to how hard you pluck the string.

If the display shows DY=0, the synthesizer will NOT respond to how hard you pluck the string, i.e. the CYBERBASS will transmit a constant MIDI velocity if you play loud or soft.

(See the next heading for further details on VELOCITY.)

NOTE: Some early synthesizers do not respond to the VELOCITY MIDI MESSAGE. Also, some sounds in the synthesizers may be programmed specifically to NOT respond to the VELOCITY MIDI MESSAGE.

A STRING – FRET 16 VELOCITY

This message varies from 0 to 127.

This VELOCITY parameter in the CYBERBASS gives you some control over how the instrument responds to firm and light playing. The VELOCITY parameter works in conjunction with the DYNAMICS parameter as follows.

When DY=0, the CYBERBASS will not respond to DYNAMICS. Therefore, if you pluck a string firmly or lightly, the synthesizer will only sound at one consistent level. This level is determined by the VELOCITY parameter.

For example: If V=49, the MIDI VELOCITY VALUE of 49 is transmitted whenever a note is plucked, REGARDLESS if it is plucked firmly or lightly.

When DY=1 shows, the CYBERBASS WILL respond to DYNAMICS.
The harder you pluck the string, the higher the VELOCITY MIDI VALUE, so the louder the synth. The VELOCITY parameter in this case provides a ceiling level or maximum value of MIDI VELOCITY transmitted.

For example: V=68

You begin to play lightly at first, then gradually play harder and harder. The MIDI VELOCITY will increase, for example 20, 30, 35, 40, 48, 52, 60, 68, 68, 68..

Even though you are playing hard enough to warrant a higher VELOCITY MIDI VALUE, the computer will limit you to your set value of 68.

This parameter sets the maximum loudness, or VELOCITY, at 127.

NOTE: If V=00, the synth will not sound at all. This can be very useful in a live situation if you are using a MIDI footswitch controller.

As well as programming in all your favorite live synth sounds, program one performance setup with DY=0 and V=00. Then if you do not want synth bass, hit that performance setup. This can be used as a synth "MUTE."

A STRING – FRET 17 NOTE OFF

The display will show:

NO=0 Notes will turn off as soon as the vibrations on the string have decayed.

NO=1 Notes will not be turned off as long as a note is fretted.
This gives you infinite sustain on all fretted notes.

A STRING – FRET 18 PITCH WHEEL

This formats the pitch wheel MIDI data that the CYBERBASS transmits:

The display will show:

PW08 The synthesizer pitch wheel MUST be set to + or - 8 semitones.

PW12 The synthesizers pitch wheel MUST be set to + or - 12 semitones.

PW24 The synthesizer pitch wheel MUST be set to + or - 24 semitones.

A STRING – FRET 19 MIDI OUTPUT CHANNEL

This display will show:

MO = 1–16

This selects the MIDI output channel on which MIDI data will be transmitted.

For example: If you select MO = 6 and have selected PY1A or PY2A mode, then the strings will transmit as follows:

G STRING	MIDI CHANNEL 6
D STRING	MIDI CHANNEL 7
A STRING	MIDI CHANNEL 8
E STRING	MIDI CHANNEL 9
B STRING	MIDI CHANNEL 10

A STRING – FRET 20 STORE

The display will show >>01 to >>32.

Into this parameter is placed the location at which you want to store your edited performance setup.

After you have selected the performance setup location, then move to the 21st fret on the A string and click again. The display will show SURE.

Another click up and the display will show EXEC for a split second, and then the number of the performance setup in which the sound is stored is displayed.

The patch is now said to be STORED.

Clicking while NOT fretting any string, i.e. all strings are open, will cancel the STORE procedure.

PLAYING TECHNIQUES

The purpose of this section is to help you, the player, come to terms with some of the idiosyncrasies that will become evident when accessing synthesizer sounds using a bass guitar.

The PEAVEY CYBERBASS system was designed to preserve most of your bass playing techniques. However, there are a few minor adjustments that you must make to your technique so that you can realize that full potential of the CYBERBASS system.

When playing the CYBERBASS, the key hints are ACCURACY and COMMITMENT to the note that you are playing.

As you are now an owner of a CYBERBASS, we assume that you are interested in mixing real bass sounds and synthesizer sounds together. The number, size, and texture of the sounds that you can create are limited only by your imagination.

As contemporary electric bass player, you will be aware that the playing of musical notes is not the only function of bass these days. As well as providing pitch, the bass has a role has a percussive instrument, more now than at any other time in its history. This is evident in the styles of play that are so popular today.

When you use a percussive technique, e.g. slap, while your bass is hooked up to a synthesizer, the nature of MIDI is that the synthesizer will translate this information into notes. To get around this so that you can hear the percussive texture of the sound as well as the pitch, make sure you mix in a high degree of real bass and pull back the synthesizer sound a little.

FINGER STYLE

To get optimum performance when playing finger style using the CYBERBASS, play over the bridge pickup of the bass.

THE BUMP FACTOR

This is best explained using an exercise.

The purpose of this exercise is to illustrate what happens if you are in the habit of resting your fingers on strings while plucking other strings. If you do this while using PY1A, PY1B, PY2A, PY2B, or PLY 3 modes, you will encounter.:

"THE BUMP FACTOR"

1. Make sure that your CYBERBASS is programmed for FINGER STYLE (10th Fret A String).
2. Program the CYBERBASS to PLY 3 (1st fret A string).
3. You will now be able to play chords on the synthesizer via the bass.
4. On the G string hold down the 5th fret, and on the D string hold down the 5th fret.
5. Now, with your finger pluck the G string firmly. The G string will sound and the D string will sound as well!!! When you plucked the G string your finger followed through and bumped into the D string, resulting in the D string triggering as well.

   This is what is known as THE BUMP FACTOR.
6. Now hold down the 5th fret on the G string and leave the D string open.
7. Again, pluck the G string. The G string will sound, but this time the open D string will not sound even though you bumped into the D string!!! This is because the computer in the CYBERBASS will not play any open string notes that are bumped, but will play any fretted notes that are bumped.

So, if you are playing a note on a string, make sure that you are not fretting a note on the string above it, or that note may sound as well.

NOTE: THE BUMP FACTOR ONLY OCCURS WHEN THE CYBERBASS IS IN POLY MODES.

PLECTRUM (PICK) STYLE

To play with a plectrum, the CYBERBASS should be set to ST=P (STYLE on A string Fret 10).

You may find it necessary to mute the string with your right hand when playing fast passages.

PLAYING SOUNDS WITH LONG DECAYS

Some synthesizer sounds have long decay times, which means after you release the note the synthesizer will still sound.

A problem can arise when playing these long decay sounds. That is, when you take your finger off the fret, you momentarily slide to the fret below. This results in the pitch going flat...which is not a good thing.

To remedy this, make sure when you release your finger from the fret, that you come off cleanly and try to play right over the fret rather than between frets.

Another solution is to use the HOLD footswitch as hammering and slides are disabled when the HOLD switch is depressed.

For these types of sounds, PY1B, PY2B, or PLY 3 mode is the best mode.

SLAP STYLE

Set STYLE to fingers; i.e. ST=F

During our period of research and development, we found that one of the most impressive features of the CYBERBASS was that slap players, once they had adjusted to the system, were absolutely blown away by the sounds and effects produced while playing in this style. Slap style playing does take a little bit of work, but it is certainly worth it in the long run.

HOLD FOOTSWITCH

When the FOOTSWITCH is plugged into the CYBERBASS SPLITTER RACK and is depressed, then it is not possible to slide notes, HLD1 or HLD2 (hold modes) are programmed.

PULL OFFS

PULL OFFS cannot be played on the CYBERBASS. If you try to, you will find that the bass will not play the open note.

To achieve the same effect as a PULL OFF, you need to PLUCK the string simultaneously as you release the string.

22ND FRET

Note that the 22nd fret will not sound MIDI notes. We refer to this fret as a "STOP FRET."
It is necessary for wired fret technology.

TAP STYLE

It is possible to TAP on the CYBERBASS in two ways.

1. With ST=T which is a dedicated TAP MODE.
2. With ST=F which is finger style. You will have to tape firmly in order to get a trigger.

Only try tapping with the MIDI mode set to PY1A, PY1B, PY2A, PY2B.

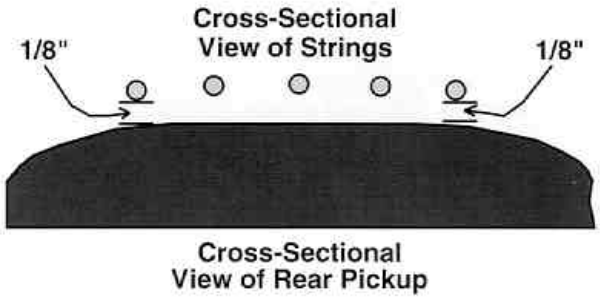
Also you will need to have the pitch wheel set to PW24 or there will be limitations.

NEVER USE PLY 3 FOR TAPPING AS IT WILL NOT TRACK.

CARE & MAINTENANCE

BRIDGE ANALOG PICKUP

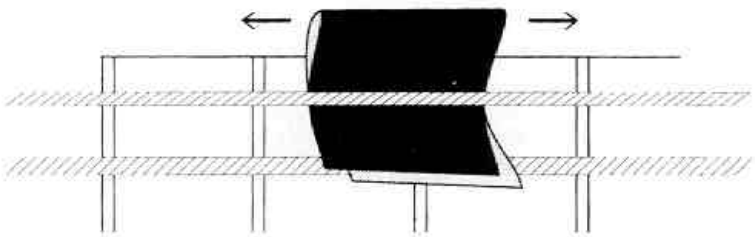
The correct bridge pickup height is as follows:



THE PEAVEY CYBERBASS 5 IS A FRET CONTACT SYSTEM.

This means that there must always be good contact between your strings and the frets. So, you MUST CLEAN YOUR STRINGS in the following manner.

Fold a lint free cleaning cloth into a rectangular shape and put the cloth under the string as illustrated.



Apply a small amount of string cleaner to the string which is now lounging comfortably on the folded cloth.
DO NOT SQUEEZE THE BOTTLE.
Dab a little of the cleaning fluid on the string.
Fold the cloth over the string and drag back and forth about 5 - 10 times along the full length of the string.
Do this to each string.
You should clean your strings about once a week or before every live performance.

NOTE: For optimum tracking, use only nickel wound bass strings. Peavey Accuwrap™ strings are recommended, as they contain a higher nickel content.

FRET CLEANING

With time, frets will tarnish if not cleaned.

This tarnish, if present, will impede good string/fret contact. A good rule is that every time you change your strings, clean your frets as well.

YOU MUST ONLY USE PLASTIC SCOTCHBRITE SCOURING PADS
** NEVER USE STEEL WOOL **

Carefully polish the fret. Do not use any cleaning fluids or pastes. Also be careful not to polish the surface of the fingerboard. You cannot harm it, but with polishing it can end up with an uneven look.

MULTI CORE CABLE

The cable which connects the guitar to the splitter rack is a multi core cable, i.e. it has eight conductors within the cable as compared to a standard 1/4" jack to jack cable which has only two. This cable is built to a high standard with quality Neutrik™ connectors at each end. However, care must be taken, as cables of this sort will break if exposed to harsh treatment.

SMOKE MACHINES

If you use smoke machines during live gigs, be careful that extra care is taken in the cleaning of you CYBERBASS, as an oil residue could possibly build up on the fingerboard, resulting in inferior tracking.

HUMID CONDITIONS

If you take your PEAVEY CYBERBASS into a high humidity environment, like the tropics, be sure to pack SILICA GEL CRYSTALS or the like (i.e. moisture absorbing bags) in the case with your CYBERBASS to avoid excessive moisture build up on the fingerboard.

SAFETY

Read the electronic equipment safety rules at the end of this manual.

CYBERBASS LIVE!

This section presents a run down of what is involved in using the PEAVEY CYBERBASS in a live situation. What follows is the result of years of experience working with a number of internationally acclaimed bass players who have used CYBERBASS technology in a live situation.

AMPLIFICATION

If you are using a single channel amplifier, you will require a mixer or Peavey Spectrum™ Analog Filter to blend the real bass with the synthesizer. A rack mount mixer is best, as you will want your live rig to be a rack mounted system.

If you can afford it, an even better system is a stereo rig where you have an amp/speaker for the bass sound and an amp/speaker for the synthesizer.

Also, when selecting a speaker cabinet, look for the one that has a better high frequency capability, as the synthesizer is capable of producing much higher harmonics that a regular bass.

MIDI FOOTSWITCH

Although not essential, you will probably find a MIDI footswitch controller desirable. This will enable you to change performance setups with your feet. If desired, you can use several sounds in one song. Also, when selecting a MIDI footswitch, select one that has programming features like the Peavey RMC™ 2010. This will enable you to not only control the performance setups on the CYBERBASS, but any other effect processors that you have in your rig that are MIDI compatible.

For example, you could assign the CYBERBASS to receive on INPUT CHANNEL 1 by programming the MIDI input parameter (E STRING–FRET 13) to MI=1. Then assign your effects processor to receive on MIDI input channel 2.

So, the MIDI footswitch, when pressing pedal 1, could select PF16 on the CYBERBASS and the digital reverb effect #89 on the effects processor. The MIDI footswitch would transmit:

MIDI CHANNEL 1 - PATCH 16

THEN:

MIDI CHANNEL 2 - PATCH 89

NOTE: When connecting the MIDI footswitch, the MIDI OUT on the footswitch is connected to the MIDI IN on the effects processor. Then, MIDI thru on the effects processor is connected to MIDI IN on the CYBERBASS splitter rack.

The MIDI out on the CYBERBASS splitter rack should ALWAYS be connected to the MIDI in on the synthesizer.

So in effect, the footswitch selects which performance setup (PF01 TO PF32) the CYBERBASS plays. Then, that performance setup, depending on what sounds are programmed (A STRING–FRETS 4, 5, 6, 7, and 8), selects the sound in the synthesizer to be played.

If you press PEDAL 6 on the footswitch, you could end up playing sound #269 in the synthesizer.

VOLUME PEDAL

To control the level of the synthesizer, a foot volume pedal is very handy. You run the AUDIO OUT of the synthesizer through the foot volume pedal. Once again, this gives you control of the balance of your bass/synthesizer sound while you are actually playing.

COMMON PROBLEMS & SOLUTIONS

PROBLEM 1.

THE SYNTHESIZER MAKES NO SOUND WHEN A NOTE IS PLUCKED ON THE BASS

There are many things that could cause this to happen.

Here is a check list:

A	Check that the power is connected to the CYBERBASS and the synthesizer.
B	Check that the audio out of the synthesizer is connected to the audio input of the amplifier.
C	Check that the volume controls on both the amplifier and the synthesizer module are turned up.
D	Check that the MIDI cable is connected from the MIDI OUT jack on the CYBERBASS splitter rack to the MIDI IN jack on the synthesizer.
E	Check that the MIDI volume control on the CYBERBASS is turned up.
F	Check that the velocity parameter (A STRING–FRET 16) is NOT set to zero.
G	Check that the synthesizer is on the same MIDI channel as the CYBERBASS. (MIDI OUT is located on the A STRING–FRET 19)
H	The key group range on the synthesizer has not been set to a restrictive value.

PROBLEM 2.

THE SYNTHESIZER IS OUT OF TUNE WITH THE BASS WHEN I HAMMER OR SLIDE A NOTE.

The pitch wheel parameter in the synthesizer must be set to the same value as the pitch wheel parameter in the CYBERBASS (A STRING–FRET 18).

This parameter can have only one of three values. (i.e. 8, 12, or 24).

The display on the CYBERBASS will show PW08, PW12, or PW24.

The synthesizer must be programmed correspondingly to 8, 12, or 24.

PROBLEM 3.

THE SYNTHESIZER IS OUT OF TUNE WITH OTHER GUITARS
IN THE BAND WHEN THEY TUNE TO THEIR TUNERS

Find the master tune parameter on the synthesizer and adjust this value until the synthesizer comes into tune with the guitars.

PROBLEM 4.

WHEN IN MIDI MODES PY1A, PY1B, PY2A, or PY2B (A STRING–FRET 1), THE STRINGS SEEM TO INTERACT WITH EACH OTHER, ESPECIALLY WHEN SLIDING NOTES.

The synthesizer is probably programmed for OMNI ON.
To play in these POLY modes, the synthesizer must be set to OMNI OFF.

PROBLEM 5.

ONLY ONE STRING WILL TRIGGER THE SYNTHESIZER.

The synthesizer needs to be put into MULTI mode so it can receive MIDI data on four individual channels.

For example, if the PEAVEY CYBERBASS is set to PLY 1 (A STRING–FRET 1) and its MIDI output channel is set to MO=1 (A STRING–FRET 19), then the synthesizer MUST be set as follows.

MULTI MODE ON, RECEIVING ON MIDI CHANNELS 1, 2, 3, 4, & 5.

PROBLEM 6.

WHEN I ATTEMPT TO SLIDE OR HAMMER A NOTE, THE PITCH DOES NOT CHANGE

It could be one of the following:

- The footswitch is being held down, thus disabling slides.
- The CYBERBASS MIDI mode is set to PLY 3 (A STRING–FRET 1).
- The footswitch is the wrong type. (See PROBLEM 7.)

PROBLEM 7

NOTES SEEM STUCK ON IN THE SYNTHESIZER.

Check that you have the right footswitch. It should be a Momentary Contact Type.
Unplug the footswitch from the SPLITTER RACK.
If notes are still stuck on, turn the synthesizer main power switch off and back on. Then check your MIDI cables.

NOTE: SEQUENCERS CAN SUFFER FROM THE HABIT OF LEAVING NOTES STUCK ON.

PROBLEM 8.

ONE OR MORE STRINGS SEEM TOO SENSITIVE TO
TRIGGER AND PLAY NOTES I DO NOT INTEND.

OR

THE STRINGS ARE TOO INSENSITIVE.

Read the information on setting up the MIDI pickups in the CARE & MAINTENANCE section. (Page 23)
Also, read STRING SENSITIVITIES in the GLOBAL PARAMETERS section. (Page 12)

PROBLEM 9.

WHEN I SLIDE A NOTE UP, THE SYNTHESIZER TRIGGERS NEW NOTES
AND DOES NOT SLIDE UP SMOOTHLY.

If you are playing using your fingers, check that the STYLE parameter (A STRING–FRET 10) is set for FINGERS (i.e. ST=F).

PROBLEM 10.

NOTES SEEM TO WOBBLE IN PITCH.

It is time to clean your CYBERBASS' frets and strings. For more information about this see the CARE & MAINTENANCE SECTION.

PROBLEM 11.

ONE STRING SEEMS TO TRIGGER THE SYNTHESIZER MUCH
LOUDER THAN THE OTHER STRINGS.

Set the MIDI mode parameter of the CYBERBASS to MON 1 (A STRING–FRET 1).
If the volume of the string has corrected itself, then the problem is in the synthesizer. You need to read the SYNTHESIZER OPERATING MANUAL and establish how to adjust the volume of individual MIDI channels.
If the string is still too loud, you should read the CARE & MAINTENANCE section on MIDI PICKUP ADJUSTMENT.

Contact Peavey for the name of the nearest authorized service center.

SYNTHESIZERS

When selecting a synthesizer module to use with the PEAVEY CYBERBASS, there are several important factors that need to be considered.

The CYBERBASS formats the MIDI data it transmits in a form that emulates, or tracks, what you are playing.

If you want the synthesizer to faithfully reproduce your playing, there are two important functions that your synthesizer must have.

1. It must have the ability to set the pitch wheel range to + or - 24 semitones.

AND

2. If must be able to set to MULTI mode and receive on five different MIDI channels.

PEAVEY SYNTHESIZER MODULES:

CYBERBASS™ MODULE
SPECTRUM® BASS MODULE
SPECTRUM® BASS II
SPECTRUM® SYNTH
SPECTRUM® SAMPLE PLAYER
DPM® SP
DPM® SP PLUS

All support these necessary features.

The listed Peavey sound modules have been specially designed for use in conjunction with the PEAVEY CYBERBASS.

There are not many synthesizers on the market that can have the pitch wheel set to + or - 24 semitones.

SO BE WARNED!!!

When purchasing a synthesizer, these features MUST be available. A good bet is NOT to buy a synthesizer until you have actually plugged your CYBERBASS into it and played it to make sure it supports the features you require.

Also, do not underestimate the amount of time, reading, and experimenting that is required to successfully program sounds on a synthesizer module. This is an advantage of purchasing a Peavey sound module, as all this hard work is done for you.

SYNTHESIZERS THAT DO NOT GO TO + OR - 24 SEMITONES ON THE PITCH WHEEL

If you already have, or intend buying, a synth that is NOT capable of having the pitch wheel set to + or - 24, then the only alternative is to set its pitch wheel to + or - 8 or 12.

If the pitch wheel does not go to 8, then DO NOT buy it or use it with the CYBERBASS, as you will NEVER be able to get them in tune.

The limitations of using the pitch wheel set to + or - 8 semitones in conjunction with the 7 MIDI modes (A STRING–FRET 1) are as follows:

MON 1

When you slide a note on the CYBERBASS, it can only be a maximum of 8 semitones. If you slide further than 8, the synthesizer will reach a point where it runs out of range and the synthesizer will fail to track the slide. You will find this mode a little restrictive as you will always have to be careful not to break this rule. In a live situation, this can be a problem as you cannot go back and correct mistakes. However, if you are sequencing into a computer you will find this setup okay.

MON 2

You will be able to achieve 16 semitone slides. The limitation is that you cannot play above the 16th fret. If you do play above the 16th fret, notes will not sound. The CYBERBASS achieves this by using pitch wheel MIDI data to establish all the pitches whether you slide or finger a note. If you record into a sequencer while using this mode and then view the notes that have been recorded, you will see only a one note value per string and lots of pitch wheel data. In a live situation, this is the better of the two monophonic modes when the pitch wheel is set to + or = 8.

PY1A, PY1B

This mode is similar to MON 1 except you will be able to play chords.

PY2A, PY2B

This mode is similar to MON 2 except you will be able to play chords.

PLY 3

There are no penalties. This mode works as well as if the pitch wheel was set to + or - 24.

SYNTHESIZERS THAT DO NOT SUPPORT MULTI MODE.

This in effect means that the synthesizer can receive MIDI on ONE channel only.

The only modes that will work will be MON 1, MON 2, and PLY 3

The penalty for synthesizers that only go to + or - 12 semitones in their pitch wheel is only for MIDI modes MON 1, PY1A, and PY1B. The restriction is that you will only be able to do 12 note slides.

CALIBRATING THE CYBERBASS 5

1. To calibrate the CYBERBASS, first remove the back cover, being careful not to disturb any of the internal wiring or connections.

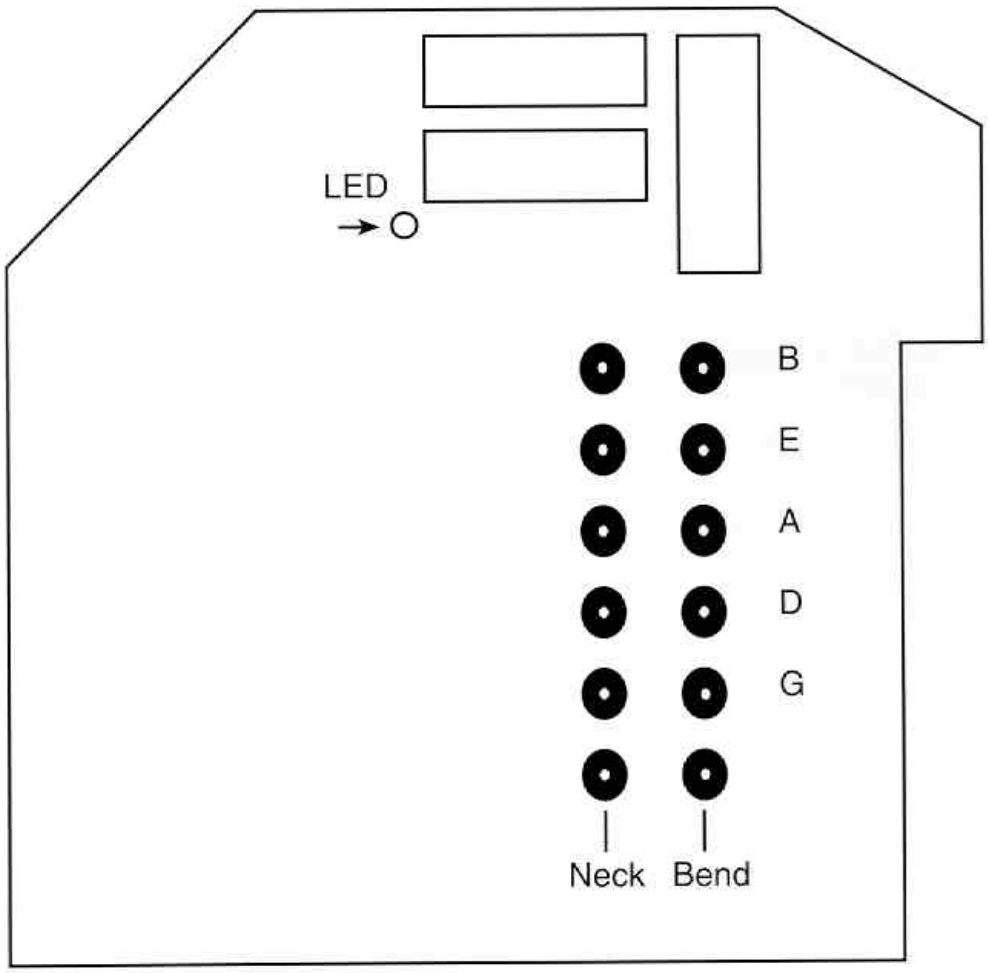
2. Locate the two rows of trim pots located at the bridge end of the circuit board. The trim pots closest to the neck of the bass are for neck calibration, and the row closest to the bridge are for bend calibration.

IMPORTANT: ALL ADJUSTMENTS MUST BE MADE WITH A SCREWDRIVER THAT HAS AN INSULATED HANDLE!

3. With the headstock to your left, fret the "B" string at the 1st fret. If the red LED at the top of the circuit board does not light up, turn the neck calibration trim pot at the top of the row until the LED is lit. When the LED lights up, the "B" string neck circuit is calibrated.

4. Fret the "B" string at the 12th fret. If the red LED does not light up, turn the bend calibration trim pot at the top of the row until the LED is lit. When the LED lights up, the "B" string bend circuit is calibrated.

5. Repeat this procedure with the remaining strings using the subsequent rows of trim pots.



THIS LIMITED WARRANTY VALID ONLY WHEN PURCHASED AND REGISTERED IN THE UNITED STATES OR CANADA. ALL EXPORTED PRODUCTS ARE SUBJECT TO WARRANTY AND SERVICES TO BE SPECIFIED AND PROVIDED BY THE AUTHORIZED DISTRIBUTOR FOR EACH COUNTRY. Ces clauses de garantie ne sont vaiables qu'aux Etats-Unis et au Canada. Dans tour les autres pays, les clauses de garantie et de maintenance sont fixees par le distributeur national et assuree par lul seion la legislation envigueur. • • Diese Garantie ist nur in den USA and Kanada gultig. Alle Export-Produkte sind der Garantie und dem Service des Importeurs des jewelligen Landes unterworfen. • • Esta garantia es valida solamente cuando el producto es comprado en E.U. continentales o en Canada. Todos los productos que sean comprados en el extranjero, estan sujetos a las garantias y servicio que cada distribuidor autorizado determine y ofrezca en los diferentes paises.

PEAVEY ONE-YEAR LIMITED WARRANTY/REMEDY

PEAVEY ELECTRONICS CORPORATION ("PEAVEY") warrants this product, EXCEPT for covers, footswitches, patchcords, tubes and meters, to be free from defects in material and workmanship for a period of one (1) year from date of purchase, PROVIDED, however, that this limited warranty is extended only to the original retail purchaser and is subject to the conditions, exclusions, and limitations hereinafter set forth:

PEAVEY 90-DAY LIMITED WARRANTY ON TUBES AND METERS

If this product contains tubes or meters, Peavey warrants the tubes or meters contained in the product to be free from defects in material and workmanship for a period of ninety (90) days from date of purchase; PROVIDED, however, that this limited warranty is extended only to the original retail purchaser and is also subject to the conditions, exclusions, and limitations hereinafter set forth.

CONDITIONS, EXCLUSIONS, AND LIMITATIONS OF LIMITED WARRANTIES

These limited warranties shall be void and of no effect, if:

a. The first purchase of the product is for the purpose of resale; or
b. The original retail purchase is not made from an AUTHORIZED PEAVEY DEALER; or
c. The product has been damaged by accident or unreasonable use, neglect, improper service or maintenance, or other causes not arising out of defects in material or workmanship; or
d. The serial number affixed to the product is altered, defaced, or removed.

In the event of a defect in material and/or workmanship covered by this limited warranty, Peavey will:

a. In the case of tubes or meters, replace the defective component without charge.
b. In other covered cases (i.e., cases involving anything other than covers, footswitches, patchcords, tubes or meters), repair the defect in material or workmanship or replace the product, at Peavey's option; and provided, however, that, in any case, all costs of shipping, if necessary, are paid by you, the purchaser.

THE WARRANTY REGISTRATION CARD SHOULD BE ACCURATELY COMPLETED AND MAILED TO AND RECEIVED BY PEAVEY WITHIN FOURTEEN (14) DAYS FROM THE DATE OF YOUR PURCHASE.

In order to obtain service under these warranties, you must:

a. Bring the defective item to any PEAVEY AUTHORIZED DEALER or AUTHORIZED PEAVEY SERVICE CENTER and present therewith the ORIGINAL PROOF OF PURCHASE supplied to you by the AUTHORIZED PEAVEY DEALER in connection with your purchase from him of this product. If the DEALER or SERVICE CENTER is unable to provide the necessary warranty service you will be directed to the nearest other PEAVEY AUTHORIZED DEALER or AUTHORIZED PEAVEY SERVICE CENTER which can provide such service.

OR

b. Ship the defective item, prepaid, to:

PEAVEY ELECTRONICS CORPORATION
International Service Center
326 Hwy. 11 & 80 East
Meridian, MS 39301

including therewith a complete, detailed description of the problem, together with a legible copy of the original PROOF OF PURCHASE and a complete return address. Upon Peavey's receipt of these items: If the defect is remedial under these limited warranties and the other terms and conditions expressed herein have been complied with, Peavey will provide the necessary warranty service to repair or replace the product and will return it, FREIGHT COLLECT, to you, the purchaser.

Peavey's liability to the purchaser for damages from any cause whatsoever and regardless of the form of action, including negligence, is limited to the actual damages up to the greater of $500.00 or an amount equal to the purchase price of the product that caused the damage or that is the subject of or is directly related to the cause of action. Such purchase price will be that in effect for the specific product when the cause of action arose. This limitation of liability will not apply to claims for personal injury or damage to real property or tangible personal property allegedly caused by Peavey's negligence. Peavey does not assume liability for personal injury or property damage arising out of or caused by a non-Peavey alteration or attachment, nor does Peavey assume any responsibility for damage to interconnected non-Peavey equipment that may result from the normal functioning and maintenance of the Peavey equipment.

UNDER NO CIRCUMSTANCES WILL PEAVEY BE LIABLE FOR ANY LOST PROFITS, LOST SAVINGS, ANY INCIDENTAL DAMAGES, OR ANY CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT, EVEN IF PEAVEY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

THESE LIMITED WARRANTIES ARE IN LIEU OF ANY AND ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE; PROVIDED, HOWEVER, THAT IF THE OTHER TERMS AND CONDITIONS NECESSARY TO THE EXISTENCE OF THE EXPRESSED, LIMITED WARRANTIES, AS HEREINABOVE STATED, HAVE BEEN COMPLIED WITH, IMPLIED WARRANTIES ARE NOT DISCLAIMED DURING THE APPLICABLE ONE-YEAR OR NINETY-DAY PERIOD FROM DATE OF PURCHASE OF THIS PRODUCT.

SOME STATES DO NOT ALLOW LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THESE LIMITED WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

THESE LIMITED WARRANTIES ARE THE ONLY EXPRESSED WARRANTIES ON THIS PRODUCT, AND NO OTHER STATEMENT, REPRESENTATION, WARRANTY, OR AGREEMENT BY ANY PERSON SHALL BE VALID OR BINDING UPON PEAVEY.

In the event of any modification or disclaimer of expressed or implied warranties, or any limitation of remedies, contained herein conflicts with applicable law, then such modification, disclaimer or limitation, as the case may be, shall be deemed to be modified to the extent necessary to comply with such law.

Your remedies for breach of these warranties are limited to those remedies provided herein and Peavey Electronics Corporation gives this limited warranty only with respect to equipment purchased in the United States of America.

INSTRUCTIONS — WARRANTY REGISTRATION CARD

1. Mail the completed WARRANTY REGISTRATION CARD to:

PEAVEY ELECTRONICS CORPORATION
P.O. BOX 2898
Meridian, MS 39302-2898

   a. Keep the PROOF OF PURCHASE. In the event warranty service is required during the warranty period, you will need this document. There will be no identification card issued by Peavey Electronics Corporation.
2. IMPORTANCE OF WARRANTY REGISTRATION CARDS AND NOTIFICATION OF CHANGES OF ADDRESSES:
   a. Completion and mailing of WARRANTY REGISTRATION CARDS — Should notification become necessary for any condition that may require correction, the REGISTRATION CARD will help ensure that you are contacted and properly notified.
   b. Notice of address changes – If you move from the address shown on the WARRANTY REGISTRATION CARD, you should notify Peavey of the change of address so as to facilitate your receipt of any bulletins or other forms of notification which may become necessary in connection with any condition that may require dissemination of information or correction.
3. You may contact Peavey directly by telephoning (601) 483-5365.

IMPORTANT SAFETY INSTRUCTIONS

WARNING: When using electric products, basic cautions should always be followed, including the following.

1. Read all safety and operating instructions before using this product.
2. All safety and operating instructions should be retained for future reference.
3. Obey all cautions in the operating instructions and on the back of the unit.
4. All operating instructions should be followed.
5. This product should not be used near water, i.e., a bathtub, sink, swimming pool, wet basement, etc.
6. This product should be located so that its position does not interfere with its proper ventilation. It should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
7. This product should not be placed near a source of heat such as a stove, radiator, or another heat producing amplifier.
8. Connect only to a power supply of the type marked on the unit adjacent to the power supply cord.
9. Never break off the ground pin on the power supply cord. For more information on grounding, write for our free booklet "Shock Hazard and Grounding."
10. Power supply cords should always be handled carefully. Never walk or place equipment on power supply cords. Periodically check cords for cuts or signs of stress, especially at the plug and the point where the cord exits the unit.
11. The power supply cord should be unplugged when the unit is to be unused for long periods of time.
12. If this product is to be mounted in an equipment rack, rear support should be provided.
13. Metal parts can be cleaned with a damp rag. The vinyl covering used on some units can be cleaned with a damp rag or an ammonia-based household cleaner if necessary. Disconnect unit from power supply before cleaning.
14. Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation holes or any other openings.
15. This unit should be checked by a qualified service technician if:
    a. The power supply cord or plug has been damaged.
    b. Anything has fallen or been spilled into the unit.
    c. The unit does not operate correctly.
    d. The unit has been dropped or the enclosure damaged.
16. The user should not attempt to service this equipment. All service work should be done by a qualified service technician.
17. This product should be used only with a cart or stand that is recommended by Peavey Electronics.
18. Exposure to extremely high noise levels may cause a permanent hearing loss. Individuals vary considerably in susceptibility to noise induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time. The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the following permissible noise level exposures.

Duration Per Day In Hours	Sound Level dBA, Slow Response
8	90
6	92
4	95
3	97
2	100
1 1/2	102
1	105
1/2	110
1/4 or less	115

According to OSHA, any exposure in excess of the above permissible limits could result in some hearing loss.
Ear plugs or protectors in the ear canals or over the ears must be worn when operating this amplification system in order to prevent a permanent hearing loss if exposure is in excess of the limits as set forth above. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels such as this amplification system be protected by hearing protectors while this unit is in operation.

SAVE THESE INSTRUCTIONS!

PEAVEY®

Features and specifications subject to change without notice.

Peavey Electronics Corporation 711 A Street / Meridian, MS 39301 / U.S.A. / (601) 483-5365 / Fax 486-1278

#80302220 Printed in U.S.A. 1/96