

# Nanobass

## REFERENCE MANUAL

by Connor Freff Cochran

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## Unpacking and Inspection

Your Shipping Carton Should Contain The Following Items:

- 1 NanoBass
- 1 AC power adapter
- 1 rackmounting screw
- 1 Alesis warranty card
- 1 Reference Manual
- 1 Program Chart

If anything is missing, please contact your dealer or Alesis immediately.

**PLEASE NOTE:** The warranty card is important. Really. Don't just throw it away. We'll be able to take better care of you now, and serve you better in the future, if you fill it out and send it in.

### ALESIS CONTACT INFO:

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# Welcome!

Musician jokes are legion, but the one that comes to mind right now runs as follows:

Stanley and Livingstone, on trek through the jungles of darkest Africa, are awakened one night by the distant, maniacal pulsing of tribal drums. Unable to return to sleep, they leave their tent and make themselves a cup of tea at the campfire. The drums continue for hours, finally stopping at dawn. At noon that day, while taking a break from hacking a path through the thick vegetation, the two British explorers finally get to ask one of the bearers about the drums. The man becomes extremely agitated. When pressed on the subject, he says only one thing: “Oh no, no. Drums no problem. Much worse when drums stop.” That night the two explorers are woken again by the drums, and the night after that as well, but no matter how hard they push for an explanation all they hear, again and again, is the same useless reply: “Oh no, no. Much worse when drums stop.” Finally, exhausted from lack of sleep, unable to go further, they give up and turn the expedition around, returning to their base at the nearest trading outpost. All the way back the bearers seem much relieved.

Immediately on arrival, the explorers seek out the chief from whom they’d hired the bearers and demand an explanation. “Oh no, no,” the old man says, “Drums no problem. Much worse — “

“— when drums stop. Yes, old bean, we’ve got that part,” snarls Stanley. Meanwhile Livingstone loses it, screaming “But *why* is it worse when the drums stop!?”

“Bass solo,” says the chief.

(Just kidding. Some of my best friends are bassists, I swear it.)

You are now the proud owner of a tremendously powerful little box. Inside it you will find 256 truly extraordinary bass programs, all constructed from linear, non-compressed 48kHz 16-bit samples that are stored in four megabytes of on-board ROM. Electric basses, acoustic basses, synth basses, clavinet basses...they’re all here, and more, in an incredibly low cost/zero hassle package.

And while I’m grinning, let me also mention some other things I particularly appreciate about the unit — like 64 voices of polyphony, the same built-in

multieffects chip that Alesis uses in their Q2 pro-class signal processor, complete MIDI control, and incredibly simple operation.

Have a blast!

Connor Freff Cochran  
April 1997

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WELCOME!

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# 0: We Interrupt The Manual In Progress For Some Stuff You Might Not Feel Like Reading, But Which Has To Be Here Anyway

## **Important Safety Instructions Instructions To The User**

Many of you — no, let's be honest, most of you — are going to skip over this section.

That's probably okay, assuming you've had prior experience with audio gear and electronic instruments. This is basic stuff that you most likely already know. Feel free to leap to the next section (CONNECTIONS) and begin hooking up and playing your new NanoBass.

Beginners, however, are strongly advised to read the **Important Safety Instructions**. A little basic knowledge is a good thing.

# Important Safety Instructions

**WARNING** — When using your NanoBass, certain precautions should always be followed, such as:

- 1) Read all the instructions first.
- 2) Do not use your NanoBass near water. Why? Water is a terrific conductor of electricity. You risk damaging your NanoBass and shocking yourself if you use it near things like bathtubs, washbowls, and kitchen sinks, or in wet basements or around swimming pools.
- 3) Your NanoBass doesn't make any sound by itself — no built-in speakers — but *be careful* when you are setting the volume levels of anything you plug it into. If your amplifier, headphones, or speakers are set too loud, then you could produce sound levels capable of causing permanent hearing loss. That's "permanent" as in "forever," which is definitely not something you want. So be cautious. Don't play your NanoBass for long periods of time at uncomfortably high volume levels. And if you ever experience any hearing loss or ringing in your ears, consult an audiologist immediately.
- 4) Don't put your NanoBass on or near any radiators, heat registers, or other strong heat sources.
- 5) The "wall-wart" AC power supply for your NanoBass should be unplugged from the outlet whenever the unit is going to go unused for a long period of time.
- 6) Be careful that you don't drop things on, or spill liquids into, your NanoBass. (If you have to drink something while in the vicinity of your NanoBass, then avoid glasses and soda cans in favor of portable plastic bottles with quick-snap lids, like the kind you'd use when bicycling or at the gym.)
- 7) If for any reason your NanoBass is damaged, or stops working, don't try to fix it yourself. All repairs should be handled by Alesis-qualified service personnel. If the store where you bought your NanoBass can't help, contact Alesis directly for the name and number of the authorized service location nearest you.

# Instructions To The User

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment has been verified to comply with the limits for a class B computing device, pursuant to FCC Rules. In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.



# 1: CONNECTIONS

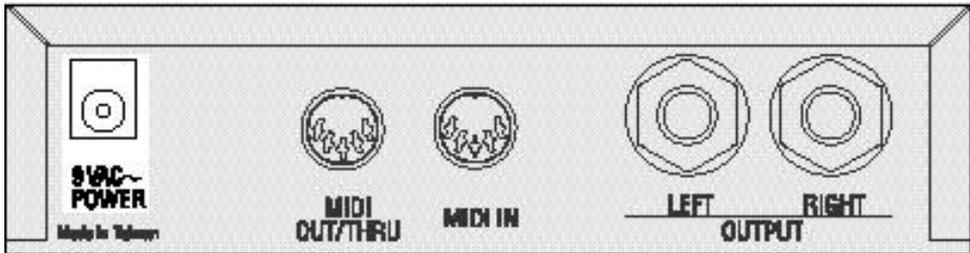
**Power**  
**Audio**  
**MIDI**  
**Rackmounting**

In this section, I'll show you how to put it all together.

**TIP:** Don't discard your NanoBass box and packing materials. Instead, tuck them away someplace safe (they won't take up much room). In the unlikely event that you need to return your unit to your dealer or to Alesis for servicing, they'll come in handy.

# Power

Included with your NanoBass is a “wall-wart” style power adapter which is already set for the voltage of the country your unit was shipped to. Connecting it is simple: just insert the prongs on the wall-wart end into an electrical outlet, and the single plug on the adapter end into the 9VAC~ POWER jack on the NanoBass’s back panel.



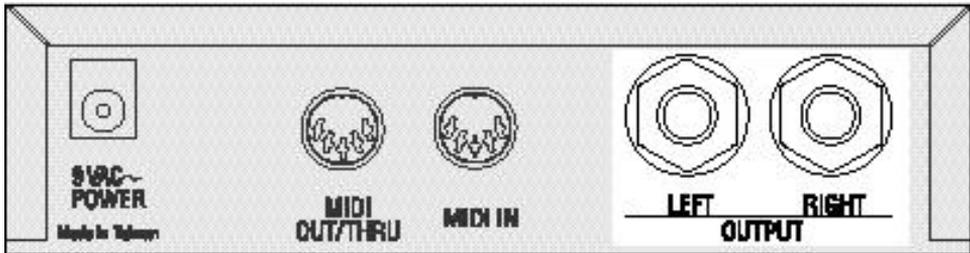
That’s all it takes. Be aware, though, that there is no ON/OFF switch on the NanoBass. Whenever it is plugged into an active outlet, the unit is on. (To check this, look at the POWER indicator LED on the front panel. It will glow whenever your NanoBass is getting electricity.)

Leaving your NanoBass on all the time won’t hurt it. You won’t use up much electricity, either, since the NanoBass operates on a miniscule amount of power.

If you’d prefer to turn the unit off when you aren’t working with it, instead of leaving it on, there’s a simple solution. Plug the unit into a power strip with a built-in ON/OFF switch, and use the power strip switch to turn off the juice when required.

# Audio

There are two quarter-inch audio output jacks on the back of the NanoBass. One of them is marked LEFT and the other is marked RIGHT. To get set up for audio, just run mono audio cables from these outputs to the corresponding LEFT and RIGHT input jacks on your mixer, amplifier, power amp, or powered speakers.



In a pinch you can get by with hooking up only one of the audio outputs, but I don't recommend it. If you do that you'll be missing out on half the true-stereo sound in each program, not to mention big chunks of stereo reverb and effects. If only one audio jack is in use, then the NanoBass automatically sums its output signal to mono.

And besides — with all the money you saved buying the NanoBass in the first place, you really ought to be able to afford two audio cables (preferably good ones).

## TIPS:

Here are some things to avoid when working with audio cables. You experienced folks should check these out, too, instead of rushing ahead, because this is an area where you may know less than you think you do. (I can't begin to tell you how many supposedly "professional" musicians and recording engineers I've seen break the following rules, to their very real regret.)

- Do NOT bundle audio cables and AC power cords together. The field from the alternating current in the power cord will leak through even well-shielded cables, inducing noise and distortion in your audio signal.

- Do NOT run audio cables near other sources of obvious electromagnetic interference such as monitors, computers, and power transformers (including the wall-wart end of the NanoBass's own AC adapter).
- Do NOT run audio cables where they can be stepped on or tripped over. Falling and hurting yourself is an obvious danger, of course. Less obvious is the invisible damage done to the cable itself. Every time you step on a cable you compress the insulation between center conductor and the shield, degrading performance and reducing the cable's reliability. You may not notice a problem right away, but eventually you will.
- Do NOT twist the cable if you can possibly avoid it, or force it to make sharp right angle turns. Doing these things will damage the insides of the cable even faster than stepping on them.
- NEVER unplug a cable by pulling on the cable itself. This puts a dangerous strain on the soldered connections between the cable and the plug, and can easily make a cable go bad (or at least intermittent) on you. The proper way to take a plug out of a jack is the same way you put it in — with a firm grasp on the body of the plug itself.
- ALWAYS keep your plugs and jacks clean and unoxidized. Occasional use of solvent cleaners like Tweek and Cramolin, which are available at any electronics shop, can greatly improve the electrical contact between your connectors.

# MIDI

Ten years ago MIDI was still a strange new thing to most musicians and computer users. Not any more, so I'll keep this part short.

The basics: MIDI stands for Musical Instrument Digital Interface, which is a 16-channel serial data exchange and control system for musical devices. MIDI works by supplying a way for the microprocessors in your various electronic musical devices to pass messages back and forth over a special network of cables. These cables, which are used only for MIDI data and nothing else, plug into special five-pin DIN jacks which are typically labeled IN, OUT, and THRU. The IN jack receives MIDI data. The OUT jack transmits it. And the THRU jack automatically echoes and re-transmits whatever data is being received at the IN jack (this last function has a special use I'll get to in a minute).

One of the important things to remember about MIDI is that data flow is strictly one-way. Make sure you always plug the OUT jack of one instrument into the IN jack of another, and vice-versa. The other choices — OUT to OUT, or IN to IN — won't work.

If you'll look on the back of your NanoBass you'll see that it doesn't have an IN, and OUT, and a THRU. Instead it has an IN and a combined OUT/THRU. There are good reasons for this: (1) the NanoBass doesn't have a built-in keyboard or anything else to play, so it doesn't really need an OUT jack; (2) combining OUT and THRU jacks saves a little on the cost, bringing the unit's price down; and (3) it makes the back panel less crowded.

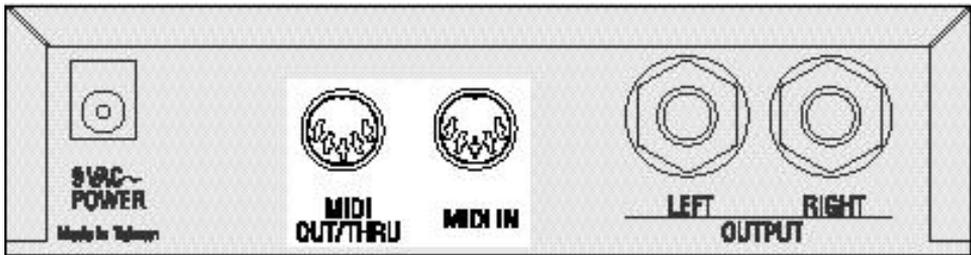
How should you hook your NanoBass into your MIDI system? That depends on how you intend to use it.

## AS A SINGLE SLAVE (the IN Jack)

To play your NanoBass directly from any MIDI source — keyboard, drum pads, woodwind controller, guitar controller, computer, etc. — just run a MIDI cable from the MIDI OUT of the controlling device to the MIDI IN jack on the back of the NanoBass. Then turn the NanoBass's MIDI CHANNEL knob to the same MIDI channel (from 1-16) that the controlling instrument is transmitting on.

**PLEASE NOTE:** This is important to remember. The NanoBass can only respond to one MIDI channel at a time. If it is set to receive on MIDI channel 2,

for example, it will ignore MIDI messages coming in over channel 1, or channels 3-16.

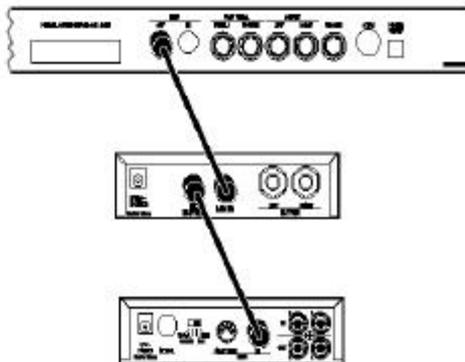


To make sure the NanoBass is receiving data, play the controlling instrument while watching the MIDI indicator LED on the NanoBass's front panel. If everything is set properly, the LED should light up. If you don't see the light, double-check your cable connections and MIDI channel settings.

### AS PART OF A DAISY-CHAIN (the OUT Jack, Part 1)

When you want to control several MIDI devices at the same time, there are two ways to do it. The first is to buy a MIDI interface with multiple OUTs, and then run separate MIDI cables from this interface to all the different devices. This is called a "star" network and it is the preferable way to go, if you can afford it.

The second way is to "daisy-chain" several units together.



A daisy-chain is where the OUT/THRU jack on the NanoBass comes into use. After connecting the controller's OUT to the NanoBass's IN, you'd continue the

chain by running a MIDI cable from the NanoBass's OUT/THRU to the next instrument's IN jack, then another cable from that instrument's THRU to the next instrument's IN, and so on down the line until you were finished. Now when you play your controller, each device will respond to the MIDI data and "pass it on down" the line.

**PLEASE NOTE:** As a general rule of thumb, daisy chains should be no longer than three instruments in a row. Any more than that and you risk accumulating data transmission errors that could cause stuck notes, unexpected program changes, and inaccurate control.

In really big MIDI setups, you might find yourself combining a basic star network with selected short daisy-chains, usually of instruments which you either can't (or don't want to) edit with your computer. Which brings us to...

## LIMITED COMPUTER EDITING (The OUT Jack, Pt. 2)

The NanoBass's 256 programs are stored on the circuitboard as EPROM data, and can't be changed. You can still use a computer, though, to edit one program at a time.

Here's the trick. If you connect your computer's MIDI OUT to the NanoBass's MIDI IN, and the NanoBass's OUT to the computer's IN, then you can use a commercial librarian/editor program (such as Mark of the Unicorn's Unisyn) to edit the contents of the NanoBass's edit buffer. This would allow you, for example, to change the samples in a program, pick a new LFO waveform, adjust its attack envelope, radically alter its effects settings, and so forth. Then you could save this new program in your computer and download it into the NanoBass's edit buffer any time you wanted.

What you *can't* do is permanently store this changed sound in the NanoBass itself, because the unit has no battery-backed RAM. Whatever editing you did would vanish when you turned the unit's power off.

## Rackmounting

Your NanoBass will sit happily on any flat surface, and thanks to its four rubber feet it won't slide around too much (even though it's so light). But if you are interested in a more secure and permanent installation, then rackmounting is the way to go.

On the underside of your unit you will find a mounting nut already built into the box. This nut is positioned so it will line up with the hole in most standard rack-mount adapters for one-third-rack sized products. Simply place the NanoBass on the adapter tray, line up the mounting nut with the hole in the adapter, and screw the unit into place using the mounting screw that came with your NanoBass at purchase.

Your local music store can certainly supply you with an adapter that will work to mount your NanoBass into a rack. Ask for a single-space rack shelf, rack tray, or universal rack adapter, and make sure it has pre-drilled holes in the bottom that match up with the NanoBass's mounting nut.

# 2: INSTANT FUN

## **Demo Sequence Playing It Yourself**

Once you're set up, this section will show you the two quickest ways to explore the programs in your NanoBass.

# Demo Sequence

Built into your NanoBass is a musical demo showcasing seven of the unit's 256 programs, one after the other.

To run it:

- 1) Make sure your audio is hooked up and the power on.
- 2) Set the CHANNEL, CATEGORY, and PROGRAM knobs straight up, to the "twelve o'clock" position.
- 3) Set the EFFECTS knob all the way counter-clockwise. Then...
- 4) Turn EFFECTS all the way to the right in one quick turn.

At this point the MIDI indicator LED will turn on, and you will hear Dave Bryce and Taiho Yamada wig out on bass. (The reason the indicator light is flashing is because the demo is playing from MIDI data stored in the NanoBass ROM.)

To shut the demo off, either turn the EFFECTS knob all the way to the left again in one quick turn, or turn the unit's power off.

Having an on-board sequence like this is useful because it allows you to check your NanoBass at any time in order to make sure it's working, and to help set audio levels during soundchecks or recording sessions.

Here are the seven different programs, in order, just in case you particularly like one and want to find it quickly:

<b>BANK SELECT</b>	<b>MIDI PROGRAM</b>	<b>CATEGORY SETTING</b>	<b>KNOB NUMBER</b>	<b>PROGRAM NAME</b>
0 or 1	001	ACOUSTIC	2	StereoAcou
0 or 1	103	ACID	8	RaveSaw MW
0 or 1	089	FUNK	10	FunkMan
2	110	DRONE	15	The Swell
2	031	INDUSTRIAL	16	CyberBass
0 or 1	032	ELEC 1	1	Jaco
2	121	EFFECT	10	FM Pulse
2	002	RAP	3	SuperNotch

## Playing It Yourself

That's what you bought it for, isn't it?

Go right ahead, then. Double-check all the necessary connections — power, audio, MIDI — and start playing! When you get tired of a particular program, just use the CATEGORY and PROGRAM knobs to shift to something new.



# 3: GET TO KNOW YOUR NANO

**The Specs**

**The Front**

**The Back**

**The Programs and ROM sounds**

In this section I'll quickly step you through the basic features, specs, and controls of the NanoBass. You'll also find a reference section listing all of the sounds in the on-board ROM and all 256 programs (with room to take some notes of your own).

# The Specs

**Sound Generation Method:** sample playback 16 bit Linear 48kHz Sample ROM

**Synthesis:** QS Composite Synthesis™

**Voices:** 64, each with sweepable lowpass filter, 3 envelope generators, 3 LFOs, programmable effects send and QS Modulation Matrix, dynamic voice allocation

**Waveform Memory:** 4 Megabytes, 264 samples

**Program Memory:** 256 presets

**Effects:** QS Parallel Matrix Effects™ (4 independent stereo multieffect processing busses)

**MIDI Connections:** MIDI In, MIDI Out/Thru

**Audio Outputs:** Stereo Left and Right outputs, 1/4" unbalanced

**Power Requirements:** 9 VAC, 5 Volt Amps external Transformer, UL and CSA Approved

**Dimensions:** (WxHxD) 5.5" x 1.5" x 4.5"

**Weight:** 1.25 lbs.

## What They Mean When They Say "64 Voices"

Once upon a time it was simple. A "voice," in synth parlance, meant a single note of polyphony. A five voice instrument like the Sequential Circuits Prophet 5™ could play five simultaneous notes. A 16 voice instrument like the Yamaha DX7™ could play 16 notes. And so on.

Then things got complicated, when synth programmers got deep into digital design and figured out how to create even more complicated and interesting

sonic textures by stacking voices together in combination. Suddenly the “number of voices = polyphony” equation didn’t directly apply anymore.

In one program on an instrument, for example, playing a single key might trigger a flute voice and a choir voice simultaneously: one note, two voices. Another program in the same instrument might stack another two voices into the mix: one note, four voices. If such an instrument had 16 voices to start with, playing just four notes would max it out.

It’s important for you to understand that interaction.

The NanoBass is a 64-voice instrument. Some of its programs trigger only one voice per note played. With those programs, you’ll have 64 notes of available polyphony. Other programs trigger two voices per note, giving you 32 voices of available polyphony. Still others trigger four voices per note, allowing you 16 notes of polyphony.

## Why In The World Would I Want 64 Voices Of Bass?

Excellent question. The answer, of course, is that making the NanoBass capable of generating 64 simultaneous voices is a severe case of technical overkill. But since Alesis had to design one basic Nano hardware package for all the products in the line, and the others did need 64 voices, the engineers figured “What the heck! Somebody out there might just feel like pushing the envelope.”

Off the top of my head, I can think of one definite benefit that having 64 available voices provides, and three experiments you ought to consider trying.

The definite benefit: Some of the programs use multiple voices per note, making for a fatter, richer sound.

Experiment #1: Along that line, you might try sending the same Note On message repeatedly, at increments only a few MIDI ticks apart. Depending on how many Note Ons you send, you can thicken the sound (or blur its attack) in interesting ways. Yamaha DX7 owners use to do this deliberately by routing the DX7’s MIDI OUT jack directly into the instrument’s MIDI IN jack, which caused voices to automatically double up on playing.

Experiment #2: Explore the upper registers of programs. Just because a program is useful for bass lines doesn’t mean it is automatically devoid of useful

high notes. Play around with the full range of the clavinet programs, for example, and you'll see what I mean.

Experiment #3: Here's a radical idea — chords! They worked for Chris Squire and Jaco Pastorius, didn't they?

# The Front

The front of the NanoBass has two indicator LEDs and five knobs. Taking them from left to right...

**POWER:** This indicator will glow whenever the NanoBass is hooked up to a live electrical outlet.

**MIDI:** This indicator will flash whenever the NanoBass is either receiving or sending MIDI data. (You'll notice that it lights up when the unit is playing its onboard demo sequence.)

**VOLUME:** This knob controls the stereo output volume. All the way to the left is off. All the way to the right is full on. For maximum audio quality I recommend turning the volume knob to full on, and lowering the NanoBass's signal to proper levels at your mixer or amp input.

**EFFECT:** Although many NanoBass programs have more than one effect built into them, each program has one *specific* effect that can be adjusted in real time from this knob. Turning it all the way to the left lowers the specified effect to nothing, while turning it all the way to the right takes the effect to its maximum programmed level. (The other effects in any given program are also adjustable, but only via MIDI.)

**CHANNEL:** This knob sets which MIDI channel the NanoBass will respond to, from 1 to 16. (It also has an impact on the function of the MIDI indicator LED, which will only flash if there is MIDI data coming in over the selected channel. Data coming in over other channels will be ignored.)

**CATEGORY:** This knob has no printed name on the front panel — there wasn't room — but its function should be rapidly apparent once you start playing around with it. The 256 programs in the NanoBass are organized in 16 sets of 16 programs each. This is the knob you turn to select which set the PROGRAM knob will be selecting from.

**PROGRAM:** You'll turn this one a lot. It selects which program in a given category will play in response to incoming MIDI data.

# The Back

The back of the NanoBass has five connectors: one for power, two for MIDI, and two for audio.

**POWER:** This jack supplies electricity to the NanoBass through the 9-volt AC adapter supplied by Alesis.

**MIDI OUT/THRU:** The only original MIDI messages sent out by this 5-pin DIN jack are certain responses to commands from an external source (sequencer, editor/librarian, etc.). At all other times what it does is automatically echo and re-transmit any MIDI data entering through the MIDI IN jack.

**MIDI IN:** This 5-pin DIN jack receives incoming MIDI data from external sources and controllers.

**LEFT/RIGHT OUTPUT:** These are the main audio outputs of the NanoBass. Use the Left output alone if you need a mono output.

## The Programs and ROM Sounds

On the following pages you will find reference charts for all 256 NanoBass programs, organized by category. The chart shows the MIDI bank select command and MIDI program number for each program, its number on the front panel PROGRAM knob, and its name.

There is also a space for you to write in notes of your own regarding what you think of each sound, or any ideas you might have for using it.

# Acoustic

BANK SELECT	MIDI PROGRAM	KNOB NUMBER	PROGRAM NAME
0 or 1	000	1	Acoustic 1
0 or 1	001	2	StereoAcou
0 or 1	002	3	VeloAcoust
0 or 1	003	4	Acoust Prs
0 or 1	004	5	Prc Acoust
0 or 1	005	6	Acoustic 2
0 or 1	006	7	UpriteJazz
0 or 1	007	8	Acoustic 3
0 or 1	008	9	Upright 1
0 or 1	019	10	Upright 2
0 or 1	010	11	UprightVel
0 or 1	011	12	Pick Me
0 or 1	012	13	PickMeLite
0 or 1	013	14	Stinger
0 or 1	014	15	AcouPickup
0 or 1	015	16	VelAcouSlp

PROGRAM NAME	NOTES
Acoustic 1	
StereoAcou	
VeloAcoust	
Acoust Prs	
Prc Acoust	
Acoustic 2	
UpriteJazz	
Acoustic 3	
Upright 1	
Upright 2	
UprightVel	
Pick Me	
PickMeLite	
Stinger	
AcouPickup	
VelAcouSlp	

# Fretless/Harmonic

BANK SELECT	MIDI PROGRAM	KNOB NUMBER	PROGRAM NAME
0 or 1	016	1	Fretless 1
0 or 1	017	2	Fretless 2
0 or 1	018	3	WalkinBass
0 or 1	019	4	Fretless 3
0 or 1	020	5	Don'tFret1
0 or 1	021	6	Don'tFret2
0 or 1	022	7	ChrFretles
0 or 1	023	8	Fret Not
0 or 1	024	9	Reggae
0 or 1	025	10	Ballad
0 or 1	026	11	Popless
0 or 1	027	12	Mississippi
0 or 1	028	13	SteelBass1
0 or 1	029	14	Harmonics1
0 or 1	030	15	Harmonics2
0 or 1	031	16	Harmonics3

PROGRAM NAME	NOTES
Fretless 1	
Fretless 2	
WalkinBass	
Fretless 3	
Don'tFret1	
Don'tFret2	
ChrFretles	
Fret Not	
Reggae	
Ballad	
Popless	
Mississippi	
SteelBass1	
Harmonics1	
Harmonics2	
Harmonics3	

# Elec 1

BANK SELECT	MIDI PROGRAM	KNOB NUMBER	PROGRAM NAME
0 or 1	032	1	Jaco
0 or 1	033	2	Stanley
0 or 1	034	3	JazzFingr1
0 or 1	035	4	JazzFingr2
0 or 1	036	5	JazzPick 1
0 or 1	037	6	Jazz Pick 2
0 or 1	038	7	PrecisThmb
0 or 1	039	8	Pea Bass 1
0 or 1	040	9	Jazz Velo
0 or 1	041	10	Cutter
0 or 1	042	11	JazzPick 3
0 or 1	043	12	ClearFrets
0 or 1	044	13	Pea Bass 2
0 or 1	045	14	Fingered
0 or 1	046	15	StudioBass
0 or 1	047	16	Deep Bass

PROGRAM NAME	NOTES
Jaco	
Stanley	
JazzFingr1	
JazzFingr2	
JazzPick 1	
Jazz Pick 2	
PrecisThmb	
Pea Bass 1	
Jazz Velo	
Cutter	
JazzPick 3	
ClearFrets	
Pea Bass 2	
Fingered	
StudioBass	
Deep Bass	

# Elec 2

BANK SELECT	MIDI PROGRAM	KNOB NUMBER	PROGRAM NAME
0 or 1	048	1	SteelBass2
0 or 1	049	2	Fat Bass
0 or 1	050	3	5 String
0 or 1	051	4	5 String V
0 or 1	052	5	MW Xfade
0 or 1	053	6	Thunk
0 or 1	054	7	Big Pick
0 or 1	055	8	SurfBassMW
0 or 1	056	9	Muted Bass
0 or 1	057	10	PaperFrets
0 or 1	058	11	3VeloLayr1
0 or 1	059	12	3VeloLayr2
0 or 1	060	13	3VeloLayr3
0 or 1	061	14	Slp/Studio
0 or 1	062	15	Slap/Harm
0 or 1	063	16	Slap/Pop

PROGRAM NAME	NOTES
SteelBass2	
Fat Bass	
5 String	
5 String V	
MW Xfade	
Thunk	
Big Pick	
SurfBassMW	
Muted Bass	
PaperFrets	
3VeloLayr1	
3VeloLayr2	
3VeloLayr3	
Slp/Studio	
Slap/Harm	
Slap/Pop	

# Elec 3

BANK SELECT	MIDI PROGRAM	KNOB NUMBER	PROGRAM NAME
0 or 1	064	1	Pfilter 1
0 or 1	065	2	Pfilter 2
0 or 1	066	3	Pfilter 3
0 or 1	067	4	SharpStick
0 or 1	068	5	SharpStik2
0 or 1	069	6	StickComp2
0 or 1	070	7	Harm/Stick
0 or 1	071	8	FlangeBass
0 or 1	072	9	FlangeBas2
0 or 1	073	10	Dist Bass
0 or 1	074	11	Fuzz Bass
0 or 1	075	12	Harmn/Pop
0 or 1	076	13	Pop'nFresh
0 or 1	077	14	BostonPops
0 or 1	078	15	Slide
0 or 1	079	16	Release

PROGRAM NAME	NOTES
Pfilter 1	
Pfilter 2	
Pfilter 3	
SharpStick	
SharpStik2	
StickComp2	
Harm/Stick	
FlangeBass	
FlangeBas2	
Dist Bass	
Fuzz Bass	
Harmn/Pop	
Pop'nFresh	
BostonPops	
Slide	
Release	

# Funk

BANK SELECT	MIDI PROGRAM	KNOB NUMBER	PROGRAM NAME
0 or 1	080	1	JazzSlaps
0 or 1	081	2	Slap Combo
0 or 1	082	3	PeaBassPop
0 or 1	083	4	AcousSlap
0 or 1	084	5	GothamBass
0 or 1	085	6	Fuzz Slap
0 or 1	086	7	5StrngSlap
0 or 1	087	8	LowEndSlap
0 or 1	088	9	Velo Slap
0 or 1	089	10	Funkman
0 or 1	090	11	FretFuzz
0 or 1	091	12	Dubble FM
0 or 1	092	13	FM Bass1
0 or 1	093	14	FM Bass 2
0 or 1	094	15	Deep Clav
0 or 1	095	16	ClassiClav

PROGRAM NAME	NOTES
JazzSlaps	
Slap Combo	
PeaBassPop	
AcousSlap	
GothamBass	
Fuzz Slap	
5StrngSlap	
LowEndSlap	
Velo Slap	
Funkman	
FretFuzz	
Dubble FM	
FM Bass1	
FM Bass 2	
Deep Clav	
ClassiClav	

# Acid

BANK SELECT	MIDI PROGRAM	KNOB NUMBER	PROGRAM NAME
0 or 1	096	1	Funky Acid
0 or 1	097	2	Acidous
0 or 1	098	3	Fast Sweep
0 or 1	099	4	Super Rez
0 or 1	100	5	Gargoyle
0 or 1	101	6	Dragon
0 or 1	102	7	HyperActiv
0 or 1	103	8	RaveSaw MW
0 or 1	104	9	RaveSqr MW
0 or 1	105	10	Bad Acid
0 or 1	106	11	MW Sweep 1
0 or 1	107	12	Woozy
0 or 1	108	13	Heavy Rez
0 or 1	109	14	Syndicate
0 or 1	110	15	Oh3TomBass
0 or 1	111	16	Trance 1

PROGRAM NAME	NOTES
Funky Acid	
Acidous	
Fast Sweep	
Super Rez	
Gargoyle	
Dragon	
HyperActiv	
RaveSaw MW	
RaveSqr MW	
Bad Acid	
MW Sweep 1	
Woozy	
Heavy Rez	
Syndicate	
Oh3TomBass	
Trance 1	

# House

BANK SELECT	MIDI PROGRAM	KNOB NUMBER	PROGRAM NAME
0 or 1	112	1	Trance 2
0 or 1	113	2	VeloTrance
0 or 1	114	3	DeutschBas
0 or 1	115	4	Bessie
0 or 1	116	5	Woody
0 or 1	117	6	Triangle
0 or 1	118	7	UnderDub
0 or 1	119	8	Bombastic
0 or 1	120	9	In The Bag
0 or 1	121	10	HollowBass
0 or 1	122	11	501
0 or 1	123	12	Euro Bass
0 or 1	124	13	Quack
0 or 1	125	14	Ultra Deep
0 or 1	126	15	House
0 or 1	127	16	ArndsHouse

PROGRAM NAME	NOTES
Trance 2	
VeloTrance	
DeutschBas	
Bessie	
Woody	
Triangle	
UnderDub	
Bombastic	
In The Bag	
HollowBass	
501	
Euro Bass	
Quack	
Ultra Deep	
House	
ArndsHouse	



# Rap

BANK SELECT	MIDI PROGRAM	KNOB NUMBER	PROGRAM NAME
2	000	1	SuperBoom
2	001	2	Super Saw
2	002	3	SuperNotch
2	003	4	Super Band
2	004	5	Super Sqr
2	005	6	BigAcoustic
2	006	7	T-Wah
2	007	8	Purrrr
2	008	9	DarkHelmet
2	009	10	Combo Mono
2	010	11	Uniperc V
2	011	12	Rez Pluck
2	012	13	Chirp 1
2	013	14	Chirp 2
2	014	15	Too Cool
2	015	16	Xtra Funky

PROGRAM NAME	NOTES
SuperBoom	
Super Saw	
SuperNotch	
Super Band	
Super Sqr	
BigAcoustic	
T-Wah	
Purrrr	
DarkHelmet	
Combo Mono	
Uniperc V	
Rez Pluck	
Chirp 1	
Chirp 2	
Too Cool	
Xtra Funky	

# Industrial

BANK SELECT	MIDI PROGRAM	KNOB NUMBER	PROGRAM NAME
2	016	1	Vel Sweep
2	017	2	Mega Rez
2	018	3	RubbrPhase
2	019	4	Lo Megarez
2	020	5	Hi Tek
2	021	6	IndstryRes
2	022	7	Sharpness
2	023	8	Thwap
2	024	9	Hyper
2	025	10	Tech 1
2	026	11	Tech 2
2	027	12	Tech 3
2	028	13	Res Tube
2	029	14	Stereo !
2	030	15	Nazty
2	031	16	CyberBass



PROGRAM NAME	NOTES
Vel Sweep	
Mega Rez	
RubbrPhase	
Lo Megarez	
Hi Tek	
IndstryRes	
Sharpness	
Thwap	
Hyper	
Tech 1	
Tech 2	
Tech 3	
Res Tube	
Stereo !	
Nazty	
CyberBass	

# Synth 1

BANK SELECT	MIDI PROGRAM	KNOB NUMBER	PROGRAM NAME
2	032	1	Buzzz
2	033	2	BuzzStack
2	034	3	Wide Bass
2	035	4	Triple Osc
2	036	5	Press 5th
2	037	6	VeloFunk
2	038	7	Cognitive
2	039	8	SqrTrance
2	040	9	AnalogSqrV
2	041	10	VeloFilter
2	042	11	ResModWhl!
2	043	12	Filter Wow
2	044	13	SynthBass1
2	045	14	Fat Man
2	046	15	Shark
2	047	16	Bumper

PROGRAM NAME	NOTES
Buzzz	
BuzzStack	
Wide Bass	
Triple Osc	
Press 5th	
VeloFunk	
Cognitive	
SqrTrance	
AnalogSqrV	
VeloFilter	
ResModWhl!	
Filter Wow	
SynthBass1	
Fat Man	
Shark	
Bumper	



# Synth 2

BANK SELECT	MIDI PROGRAM	KNOB NUMBER	PROGRAM NAME
2	048	1	Uni
2	049	2	Stevie
2	050	3	Uni Chords
2	051	4	Uni Pluck
2	052	5	Way Cool
2	053	6	Modular M
2	054	7	Chirp 3
2	055	8	SeqBass 1V
2	056	9	Fat Mini
2	057	10	Cool Fat
2	058	11	Trap Bass
2	059	12	Spike Bass
2	060	13	Ana Mega
2	061	14	Funk SynBs
2	062	15	Rezidue
2	063	16	Mute Bass

PROGRAM NAME	NOTES
Uni	
Stevie	
Uni Chords	
Uni Pluck	
Way Cool	
Modular M	
Chirp 3	
SeqBass 1V	
Fat Mini	
Cool Fat	
Trap Bass	
Spike Bass	
Ana Mega	
Funk SynBs	
Rezidue	
Mute Bass	



# Synth 3

BANK SELECT	MIDI PROGRAM	KNOB NUMBER	PROGRAM NAME
2	064	1	FM Bass
2	065	2	Larger FM
2	066	3	Fuzz Pluck
2	067	4	Pulse Bass
2	068	5	Box Synth
2	069	6	AT Bass 1
2	070	7	Snappy M
2	071	8	AnaMonoPia
2	072	9	Crow Bass
2	073	10	Big Emo
2	074	11	Rogue Bass
2	075	12	AT Bass 2
2	076	13	AT Bass 3
2	077	14	Microwave V
2	078	15	SynthBass2
2	079	16	PressCog

PROGRAM NAME	NOTES
FM Bass	
Larger FM	
Fuzz Pluck	
Pulse Bass	
Box Synth	
AT Bass 1	
Snappy M	
AnaMonoPia	
Crow Bass	
Big Emo	
Rogue Bass	
AT Bass 2	
AT Bass 3	
Microwave V	
SynthBass2	
PressCog	

# Layer

BANK SELECT	MIDI PROGRAM	KNOB NUMBER	PROGRAM NAME
2	080	1	Lurker
2	081	2	CableRun
2	082	3	PurpleBass
2	083	4	Big Stick
2	084	5	FatHybrid
2	085	6	FatSynSlap
2	086	7	Rez Punch
2	087	8	TubeOBass
2	088	9	Pyro Bass
2	089	10	Saturnia
2	090	11	SwarmBass 1
2	091	12	Tundra
2	092	13	Additive
2	093	14	MetalNotch
2	094	15	8 Bit
2	095	16	Diamonds

PROGRAM NAME	NOTES
Lurker	
CableRun	
PurpleBass	
Big Stick	
FatHybrid	
FatSynSlap	
Rez Punch	
TubeOBass	
Pyro Bass	
Saturnia	
SwarmBass 1	
Tundra	
Additive	
MetalNotch	
8 Bit	
Diamonds	

# Drone

BANK SELECT	MIDI PROGRAM	KNOB NUMBER	PROGRAM NAME
2	096	1	TaurusSplt
2	097	2	PedalDrone
2	098	3	TaursSplt2
2	099	4	Flanged
2	100	5	8va
2	101	6	Big Fuzz
2	102	7	Synth Bite
2	103	8	The Sweep
2	104	9	SwarmBass2
2	105	10	Ana Tick
2	106	11	MeanMetal
2	107	12	The End
2	108	13	Millenium
2	109	14	Ominous
2	110	15	The Swell
2	111	16	Trem Rez

PROGRAM NAME	NOTES
TaurusSplt	
PedalDrone	
TaurusSplt2	
Flanged	
8va	
Big Fuzz	
Synth Bite	
The Sweep	
SwarmBass2	
Ana Tick	
MeanMetal	
The End	
Millenium	
Ominous	
The Swell	
Trem Rez	



# Effect

BANK SELECT	MIDI PROGRAM	KNOB NUMBER	PROGRAM NAME
2	112	1	S & H MW
2	113	2	MudPots
2	114	3	PulseFlute
2	115	4	Underground
2	116	5	Seek Pulse
2	117	6	Buzzerflex
2	118	7	Frankfurt
2	119	8	DiscoPulse
2	120	9	Quasar
2	121	10	FM Pulse
2	122	11	Rez Pulse
2	123	12	Ripples
2	124	13	Bellicose1
2	125	14	Bellicose2
2	126	15	Homer
2	127	16	CrackleNow

PROGRAM NAME	NOTES
S & H MW	
MudPots	
PulseFlute	
Underground	
Seek Pulse	
Buzzerflex	
Frankfurt	
DiscoPulse	
Quasar	
FM Pulse	
Rez Pulse	
Ripples	
Bellicose1	
Bellicose2	
Homer	
CrackleNow	

# Sound ROM

This is a list of the sample families that are built in to the NanoBass's 8 megabytes of sound ROM. They are the “raw materials” that the programs combine, in different ways, to create the unit's 256 programs.

**AcElec** JayBs Fngd  
 JazzFingrd  
 B Bass 1  
 JACOBS  
 StudioBass  
 JayBs Pick  
 JazzPicked  
 Jazz Velo  
 Impossibl1  
 Impossibl2  
 Impossibl3  
 ImpossiblV  
 Muted Bass  
 Jaco Bass  
 FiveStrng1  
 FiveStrng2  
 FiveStrngV  
 JazzSlaps  
 ABass Slap  
 FiveStrSla  
 SlapBass3B  
 SklavSlap1  
 SklavSlap2  
 SklavSlapV  
 Slap Bass  
 PBasThmbdA  
 PBasThmbdC  
 Bass Pops  
 Fretless 1  
 Fretless 2  
 AcousBass1  
 AcousBass2  
 AcousBas3A  
 AcousBas3B  
 AcousBas3V  
 PFiltBass1  
 PFiltBass2  
 PFiltBass3  
 Stik Bass  
 BassHarm 1  
 BassHarm 2

Clavinet  
 ClavntWave  
 Pop 1  
 Pop 2  
 StringSlyd  
 Release  
 Harm/Pop  
 Pop/Harm  
 Harm/Stik  
 Stik/Harm  
 Pop/Slap  
 Slap/Pop  
 Slap/Harm  
 Slp/Studio  
 Studio/Hrm  
 VelAcoBass  
 3-VelBass1  
 3-VelBass2  
 3-VelBass3

**FstEnv** AnalogSqr1  
 AnalogSqr2  
 AnalogSqr3  
 AnalogSqr4  
 AnalogSqrV  
 AT Bass 1A  
 AT Bass 1B  
 AT Bass 1C  
 AT Bass 1V  
 AT Bass 2A  
 AT Bass 2B  
 AT Bass 2C  
 AT Bass 2V  
 AT Bass 3A  
 AT Bass 3B  
 AT Bass 3C  
 AT Bass 3V  
 Cool Bass  
 SynAcoustic  
 Elec Banjo  
 Tuned Pipe

Fat Synth  
FM Bass 1  
MSweep  
MicroWave1  
MicroWave2  
MicroWave3  
MicroWave4  
MicroWaveV  
Seq Bass  
Seq BassV1  
Seq BassV2  
Rez Pluck1  
Rez Pluck2  
Rez Pluck3  
Rez Pluck4  
Rez PluckV  
MicroPerc1  
MicroPerc2  
MicroPerc3  
MicroPercV  
UniPerc 1A  
UniPerc 1B  
UniPerc 1C  
UniPerc 1V  
UniPerc 2A  
UniPerc 2B  
UniPerc 2C  
UniPerc 2V  
Perc Organ  
Percus 3rd  
TranceBas1  
TranceBas2  
Velo Tranc  
FM/TrncVel  
Rez Zip 1  
Rez Zip 2  
Rez Zip 3  
Rez Zip V  
RezAttack1  
RezAttack2  
RezAttack3  
RezAttackV

Ana Kick1  
oh8 Tom 1  
oh8 Tom 2  
oh8 Tom V

**Sweep** AcidSweep1  
AcidSweep2  
AcidSweep3  
AcidSweep4  
AcidSweep5  
VeloAcid 1  
VeloAcid 2  
VeloAcid 3  
VeloAcid 4  
Chirp Rez1  
Chirp Rez2  
Chirp RezV  
KarnBass1  
KarnBass2  
KarnBass3  
KarnBassV  
MegaRez 1  
MegaRez 2  
MegaRez 3  
MegaRez 4  
MegaRez 5  
MegaRez 6  
MegaRez V1  
MegaRez V2  
oh3SawRez1  
oh3SawRez2  
oh3SawRez3  
oh3SawRez4  
oh3SqrRez1  
oh3SqrRez2  
oh3SqrRez3  
oh3SqrRez4  
HP Sweep 1  
HP Sweep 2  
HP Sweep 3  
HP Sweep 4

HP Swp V1  
HP Swp V2  
UniBass 1  
UniBass 2  
UniBass 3  
UniBass V1  
UniBass V2  
UniDist 1  
UniDist 2  
UniDist 3  
UniDist V1  
UniDist V2  
Uni Rez 1  
Uni Rez 2  
Uni Rez 3  
Uni Rez V

**Wave** Pure Sine  
Mini Tri  
Tri Filter  
Velo Tri  
Mini Saw  
Filt Saw  
oh3 Saw  
Diet Saw  
Notch Saw  
Band Saw  
RezSaw UK  
RezSaw USA  
Saw Fltr 1  
Saw Fltr 2  
Saw Fltr 3  
Saw Fltr 4  
Saw Fltr 5  
Saw Fltr 6  
Saw Fltr 7  
HipassSaw1  
HipassSaw2  
HipassSaw3  
HipassSaw4  
HPSaw Vel1

HPSaw Vel2  
HPSaw Vel3  
HPSaw Vel4  
HPSaw Vel5  
HPSaw Vel6  
Velo Saw 1  
Velo Saw 2  
Velo Saw 3  
Velo Saw 4  
Velo Saw 5  
VeloSawUK  
MiniSquare  
oh3Rez Sqr  
Sqr Fltr 1  
Sqr Fltr 2  
Velo Sqare  
oh3 Velo  
Bass Wave1  
Bass Wave2  
Bass Wave3  
FretIsTone  
HP Wave 1  
HP Wave 2  
HP Wave 3  
HP Wave 4  
HP Wave 5  
HP Wave V1  
HP Wave V2  
HP Wave V3  
HP Wave V4  
10% Pulse  
20% Pulse  
50% Pulse  
Velo Pulse  
BrightSync  
Hard Sync  
Rectanglar  
HSync/Rect  
Metal Wave  
OctLoc Wav  
Rez Sync  
Ring Mod

RingMod V1  
RingMod V2  
Additive 2  
Cognitive  
Inharmonic  
Digital 1  
Digital 2  
Digital 3  
Digital 4  
VeloDigitl  
Science 2  
Science 4  
J Pad  
M Pad  
X Pad  
Velo Pad 1  
Velo Pad 2  
Velo Pad 3  
MWave

# 4: MIDI RULES

**The Basics**

**The Not-So-Basics**

**MIDI Implementation Chart**

# The Basics

The NanoBass receives on one MIDI channel at a time, which is set by the CHANNEL knob on the front panel.

During MIDI playback you can change categories and programs at any time, either by sending Bank Select or Program Change messages, or by turning the CATEGORY or PROGRAM knobs on the front panel.

There are 256 programs in the NanoBass. But there are only 128 MIDI program numbers (000-127). To make it possible to activate any of the 256 programs via MIDI, they have been separated into two BANKS of 128 programs each.

The first bank is selected by sending a Controller 0 command (Bank Select) with a value of either 0 or 1. This bank consists of the eight categories listed on the right side of the CATEGORY knob:

- Acoustic
- Fretless / Harmonic
- Elec 1
- Elec 2
- Elec 3
- Funk
- Acid
- House

The second bank is selected by sending a Controller 0 command (Bank Select) with a value of 2. This bank consists of the eight categories listed on the left side of the CATEGORY knob:

- Rap
- Industrial
- Synth 1
- Synth 2
- Synth 3
- Layer
- Drone
- Effect

**PLEASE NOTE:** It's possible to get confused here, if you don't pay attention, by the interaction of the CATEGORY knob and incoming MIDI Program Change commands.

First, when you send Bank Select and Program Change commands, the front panel knobs don't move. This means that you could easily be playing ACID 1 via MIDI, say, while the two knobs point toward RAP 12. Don't be fooled.

Secondly, the latest Bank Select command that the NanoBass receives, either from its front panel or over MIDI, is what it pays attention to. For an example of this, consider the following situation. Using MIDI, you select Bank 1 and a certain program you like. Then someone comes along (while you aren't looking) and turns the CATEGORY knob to one of the Bank 2 categories. Now Bank 2 is selected, and if all you send the NanoBass is a Program Change command (instead of a Bank Select followed by a Program Change) you won't get the program you wanted. Instead, you'll get the same-numbered program in Bank 2.

**TIP:** Because of this, I suggest that you always send both a Bank Select command and a Program Change command, together, when controlling your NanoBass via MIDI.

**CONTROLLER 0 vs. CONTROLLER 32:** Some sequencers automatically use Controller 32 commands for selecting banks on an instrument. Please be aware that the NanoBass does *not* respond to Controller 32 commands. The only way to select banks on a NanoBass via MIDI is to use Controller 0.

## The Not-So-Basics

I mentioned earlier that using MIDI gives you real-time control over lots more program parameters than you can adjust from the front panel. Here I'd like to encourage you to experiment with just that.

Sending Mod Wheel data, for example, does some very neat things in various programs. In some (like most of the electric pianos) it will adjust tremolo. In organs it will speed up and slow down the lezlie speaker effect. In other programs it will open the filter for a nice *waaah* sound. Try it and see.

But don't stop there. The four MIDI controllers used across the board in the Alesis QS series of synthesizers will yield great results, too. These controllers are 12 (often filter control), 13, 91 (often envelope length), and 93.

# MIDI Implementation Chart

		Transmitted	Recognized	Remarks
<b>BASIC CHANNEL</b>	Default	1-16	1-16	
	Changed	1-16	1-16	
<b>MODE</b>	Default	X	Modes 3, 4	
	Messages	X	All Notes Off	
	Altered	X	X	
<b>NOTE NUMBER</b>		X	0-127	
	True Voice	X	0-127	
<b>VELOCITY</b>	Note On	X	O	7-bit Resolution
	Note Off	X	O	
<b>AFTERTOUCH</b>	Key's	X	O	
	Ch's	X	O	
<b>PITCH BENDER</b>	X	O		
<b>CONTROL CHANGE</b>	1	X	O	Mod Wheel
	7	X	O	Volume
	10	X	O	Panning
	11	X	O	Expression
	64	X	O	Sustain Pedal
	123	X	O	All Notes Off
	Effect Knob	X	O	CC #12*
			(see note, next page)	
<b>PROGRAM CHANGE</b>	True #	X	0-127	
<b>SYSTEM EXCLUSIVE</b>		O	O	
<b>SYSTEM COMMON</b>	Song Pos	X	X	
	Song Sel	X	X	
	Tune	X	X	
<b>SYSTEM REAL TIME</b>	Clock	X	X	
	Message	X	X	
<b>AUX</b>	Local Control	X	X	
	All Notes Off	X	O	

Active Sense	X	X
Reset	X	X

**Notes:** \* The setting of the effect knob responds to Controller #12 by default on Power-Up. This Controller number may be changed to 0-120 by SysEx.

**X= YES**

**O= NO**

# 5: CREATIVE TIPS

*Those of you familiar with my monthly “Creative Options” essay in Keyboard magazine know that my take on the world is somewhat different than most folks. Please read the following with that in mind. There are a ton of books out there which will teach you how to play bass, and write good solid bass lines. But when you want to take that one step further and make your work really personal, you’re going to have to go a little further out on the limb...*

Fair warning. This is not about slurs, slides, slaps, scales, or signal-processors, except indirectly. It is not about the “how-to” of bass lines, but the “what-to,” and — more importantly — the “why-to.”

A good bass line can’t hide, can’t slide to one side or another of the point, can’t tell anything but the simple truth. It can’t distract or dissemble. It can’t, in fact, play by any of the rules of Proper Behavior that human beings use to grease the friction of everyday life. That doesn’t mean it has to be aggressive and forward; but it can never be polite.

It’s the nature of the beast. Pianists can hide a multitude of sins behind chord clusters, arpeggiations, blitzkrieg runs, and over-pedaling. A stumped sax player can squeal, squawk, and roar his way out of a musical cul-de-sac like a drunk brawling his way out of a bar. Violinists can pretend to be fiddlers. Drummers can sweat with great drama and bash out seizures, rockslides, or both. None of these are really thrilling, any more than jelly donuts are really tasty, but putting up with players who do things badly is the price we pay to have the Chopins and Coltranes who did them well. It is the depressing flipside of technique that pyrotechnics can be used to blow some pretty thick smokescreens. On the bass, however, there are fewer ways to fake it, and tricks which would be easy outs on other instruments become dangerous traps. That trivial three-chord Telecaster *chucka-chucka*? Mud on an electric bass; virtually impossible on an upright. Speed-of-light piano arpeggiations? Messy, indistinguishable, fret-noise-plagued blurs. The relentless arena-style backbeat of a gated snare? Booooooooooring.

Thus, the bass: low in range, limited in timbre, unwieldy to the hand. Thank goodness. Because when those hard limits are pushed by someone who knows how, extraordinary things happen.

What it comes back to is the difference between “how” and “what.” Between saying something...anything...and actually having something to say.

The bass — or so you've been told so many times some of you believe it — is part of the rhythm section. Its primary job is to pump the beat, its secondary job is to reinforce the dominant, and its tertiary job is to stay out of the way of its sonic betters. But it can be so much more, even while doing all those things superbly.

To help keep you out of the rut, I offer you the following brief set of reassuring facts, factoids, tips, and outright cheats. My music teachers won't recognize any of these, but they've proven awfully useful in the real world.

- \* If it doesn't work the first time, do it again (brevity may be the soul of wit, but repetition is the soul of recognition).
- \* If it works the second time, go for three.
- \* If it works the third time, do something else. You are a guest in your audience's head, and the adage about fish and visitors applies.
- \* There are no wrong notes, chords, or rhythms. Only incomplete ones.
- \* When in doubt, play forcefully. When assured, play light.
- \* If you have a trick you especially love, DON'T USE IT.
- \* Use effects sparingly, like pepper in rich soup.
- \* Melody is what happens when you write a sentence using notes.
- \* Harmony is what happens when "words" in your sentences have two meanings.
- \* Structure is what happens when other people think you know what you're doing, whether you really do or not.
- \* Your mother will still love you at tempos below 160.
- \* Do that other thing. You know — that one.
- \* Listen to a bass player you hate, and then never do anything that they do.
- \* Listen to a bass player you really really like, and then never do anything that they do.

- \* Study the bass role in other musical forms: like the bass clarinet and bassoon, or trombone and tuba, in orchestral writing; or the bass voice in vocal works (Handel's *Messiah*; anything by the Bobs, the Nylons, or Bobby McFerrin; any doo-wop groups or barbershop quartets); or the synth bass in dance music.
- \* Break your favorite bass lines and solos down into small sections. Put those sections on flash cards, shuffle the cards, and follow their lead.
- \* Play either a high-hat or bass drum with one foot while playing your bass lines. When this is no longer challenging, sit down and use your two feet to play both.
- \* Focus on smaller and smaller elements. Play a single note repeatedly, trying to pull some meaning out of the rhythmic and timbral variations. Or play quarter notes at a relentlessly slow tempo and search out melodies that are interesting to you anyway.
- \* Edit your sequences to remove one of the “strings,” losing all the notes that would have been played on a real bass minus its E, A, D, or G..
- \* Deliberately listen to music you don't like, and force yourself to understand something in it (you can make this rationalization up if you want; in fact, more points if you do).
- \* Set yourself challenges, like playing against sequenced music with chord clusters so massive there is no clear tonal center, or changes in tempo or rhythm that are tough for you to track. And, of course, as soon as they get easy — make'em worse!
- \* Play beat the clock. Set a timer and give yourself five seconds to improvise a valid musical statement. Record all attempts for later assessment, embarrassment, and enlightenment. Give yourself more and more time, in five second intervals, until you can hold a coherent musical thought for a full 60 seconds. Then go back to the short stuff.
- \* Set up a loud, simple drum machine riff in a time signature you are not comfortable with, and play along with it. For hours.
- \* Wear a blindfold (and then edit out the clunker notes).

\* Pretend you aren't you. Play the way you'd imagine a character from a book or movie might play (Luke Skywalker, Raymond from *Rain Man*, Captain Ahab, Charles Foster Kane, Joan of Arc, Louis XIV, all three Musketeers or all three Marx Brothers).

\* Stare at someone you love all night long, without sleeping, and *then* play.

\* Be glad you have fingers.

# 6: CREDITS

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...and thanks to KEITH BARR, for believing in the vision.

