

GROUND CONTROL

Programmable MIDI Foot Controller

Owner's Manual

DIGITAL MUSIC CORPORATION

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Introduction

Overview

The Ground Control is a programmable MIDI foot controller which allows you to control up to eight MIDI devices at once. It will also control our System Mix Plus and up to four GCX Guitar Audio Switchers.

The Ground Control lets you use standard guitar volume pedals to add real-time control of your sound with MIDI continuous controller messages.

You can create presets which will select programs on each of your devices and specify the function of the two expression pedals. With the addition of the GCX Guitar Audio Switcher your presets can also turn pedal effects on or off, select amp channels, plus many other functions.

You can name each of your presets on the Ground Control's bright, stage-friendly alphanumeric display. Presets can then be recalled instantly with a single button to completely redefine your sound.

The Ground Control has three basic modes: Setup mode, Program Devices mode and Preset mode.

Setup Mode

Setup mode lets you configure the Ground Control for your system. This is done only once when you start using the Ground Control, and then only when you add or change devices.

Program Devices Mode

You use Program Devices to actually create your presets. This is where you:

- Select Programs for each MIDI device.
- Specify the function of the two Expression Pedals.
- Set the System Mix Plus volume.
- Turn loops on or off in the GCX Guitar Audio Switcher.

When you have finished creating your sound, you can name and save it as a preset. You can store up to 100 different presets, or 360 with the optional expanded memory.

Preset Mode

This is how you use the Ground Control when you are playing. You simply select the preset, and the Ground Control recalls the information you specified in Program Devices mode.

About This Manual

If you only want to quickly use your Ground Control to call up the programs on one MIDI device, just read "Connections" and "Quick Start".

To get the maximum use and flexibility from your Ground Control, skip "Quick Start" and proceed to "Setup Mode". If you are not familiar with MIDI, you may want to read Appendix A: About MIDI first.

Connections

Power

To use the supplied Power Adaptor, plug the body of the adaptor into a suitable power receptacle. Then plug the cable into the jack marked "Power" on the Ground Control.

If you have the GCX Guitar Audio Switcher, you don't need to use the supplied power adapter. The GCX will phantom power the Ground Control through a standard 5-pin MIDI cable.

If you are not using the GCX, but have a device that supports phantom power via a 7-pin MIDI cable, this device can power the Ground Control. Connect the 7-pin MIDI cable from your Ground Control's MIDI Out to the 7-pin MIDI In on the device. Then connect the Ground Control's Power Adaptor to the phantom power jack on the device.

MIDI

Connect a 5-pin MIDI cable from the Ground Control MIDI Out to the MIDI In of your first device. If you are using the GCX, it should always be your first device.

If you have additional devices, connect the MIDI Thru of the first device to the MIDI In of the next device. If the device has no MIDI Thru, then use its MIDI Out. Continue to chain your devices until they are all connected. If you are chaining more than three devices, using a MIDI Thru box like the Digital Music MX-28S will eliminate possible data errors.

Expression Pedals

There are two Pedal inputs on the back of the Ground Control. Many devices allow you to change parameters in "real-time" via MIDI Continuous Controllers.

Any passive guitar volume pedal can be used. Guitar volume pedals always have high impedance pots, typically 250K.

To connect your pedal, simply plug a guitar cord between Pedal jacks 1 and 2 on the Ground Control and the AMP or OUT jack of your volume pedal(s).

Quick Start

Quick Start lets you use your Ground Control in a very limited manner. It is provided for those users who want to just plug it in and use it as quickly as possible. It is highly recommended that you proceed to the following section, SETUP MODE.

To use Quick Start, the Ground Control must have its original factory settings. To restore to factory settings, see Initialize Memory on page 18.

Changing MIDI Programs

Your device must be set to respond to MIDI channel 1 or "omni", which means that it will respond to any MIDI channel.

To call up a program on your device, choose a BANK for the first digit by pressing [SELECT ^ or v], and press [0-9] to choose the second digit.

For example, to call up program #21:

1. Press [SELECT ^] until you reach BANK 2. (The BANK number is the leftmost digit in the display).
2. Press [1] to Load (activate) Preset 21; the display says:

21. INIT

Your device should change to #21.

Note: If you press [SELECT v] from BANK 0, nothing will happen. If you press *and hold* [SELECT v] for a few seconds, you will enter PROGRAM DEVICES. You can return to Preset mode by pressing [SELECT ^].

Expression Pedals

If you plugged a volume pedal into the Ground Control to use as an Expression Pedal, set your device to respond to MIDI Continuous Controller 007. If you don't know how to do this, see the owner's manual for your device.

Your volume pedal must be plugged into the Ground Control's "PEDAL 1" jack. Enable the Expression Pedal from Setup mode. Here's how:

1. Press both [SETUP MODE] buttons (numbers 5 and 0) at the same time to enter Setup mode.
2. Press [LEARN PEDAL] (button 7).
3. The Ground Control will display "P1 IS OFF". Press [+ / YES] to turn Pedal #1 ON.
4. Exit Setup mode by pressing either [SETUP MODE] button, then press [+ / YES].

If Program Numbers Don't Match

Some devices number their programs starting at 0 instead of 1. If your programs are off by 1 you can correct it as follows:

1. Press both [SETUP MODE] buttons at the same time.
2. Press [DEVICE NAME / MIDI CHANNEL].
3. The Ground Control displays "1.DEVICE /01". Press and hold [CURSOR >] until the display says "STARTS AT 01".
4. Press [- / NO] to set the start number to 00.
5. Exit SETUP MODE by pressing either [SETUP MODE] button, then press [+ / YES].

SETUP MODE

Setup mode is used to tell the Ground Control about your system. In Setup mode you will:

- Assign names and channels to each of your MIDI controlled devices.
- Enable and calibrate any guitar volume pedals being used as MIDI expression pedals.
- Enable control of the GCX Guitar Audio Switcher(s) and the System Mix Plus.
- Define the function of each Ground Link button.
- Select other options or restore factory settings.

Entering SETUP MODE

To enter Setup mode, press both [SETUP MODE] buttons at the same time. The Ground Control will display:

SETUP MODE SELECT 6-9

Setup mode is divided into the following functions:

- DEVICE NAME/MIDI CHANNEL [6]
- LEARN PEDAL [7]
- EXPANDERS [8]
- UTILITY [9]

You will access each of these functions by pressing its corresponding button.

Device Names & MIDI Channels

You must specify a name and channel for each MIDI device in your system.

After entering Setup mode, activate this function by pressing [DEVICE NAME/MIDI CHANNEL]. The display will read:

1.	DEVICE	/ 01
↑	↑	↑
Number	Name	Channel

Number

You can define devices 1-8. This number tells you which device you are defining. Press [SELECT ^ or v] to choose the number of each device.

Name

You should enter the actual name of your devices, such as "MPX-1", "EVENTIDE" or "TRIAXIS".

The Ground Control starts with device #1 named "DEVICE". Devices 2-8 are blank. You change the name using the [DATA] and [CURSOR] buttons.

Note: If you press and hold a button it will repeat. You can press both [DATA] buttons at the same time for a space.

Channel

Each of your devices must be set to respond to a particular MIDI channel, 1-16. The channel must match the number you enter here.

Each of the devices (1-8) which are not being used must be set to "--". This turns off the device.

To set the channel:

1. Press [CURSOR >] until the channel is blinking.
2. Press [DATA +/-] to select the desired channel number or "--" for off.

Note: Each device in your system must be set to its own MIDI channel to respond properly.

Start Number

Most devices number their programs starting from 1. If your device starts numbering its programs from 0, then the device will always be off by 1 from what is displayed on the Ground Control. You can fix this by telling the Ground Control that it should "start at 0". Here's how:

1. Press [SELECT ^ or v] to choose the device 1-8 that you need to change.
2. Press and hold [CURSOR >] until the display reads:

STARTS AT 01

3. Press [-/NO] to select "STARTS AT 00" or press [+/YES] for "STARTS AT 01".

Expression Pedals

To use guitar volume pedals as MIDI expression pedals, you must enable and calibrate them here.

After entering Setup mode, activate this function by pressing [LEARN PEDAL]. The display should read:

P1 IS OFF

To enable (turn on) the pedal connected to "PEDAL 1", press [+/YES]. To disable (turn off), press [-/NO].

Slew

Now press [CURSOR >]. The Ground Control will display:

P1 SLEW=NORM

Slew refers to the response of the Pedal as you sweep it from full off to full on. You can select between Normal and Fast. In

most cases the Normal setting is preferred, but you may want to try the Fast setting.

Press [-/NO] or [+ /YES] to select between NORM and FAST.

Calibrate

You should calibrate your volume pedals so that they will track properly. Here's how:

1. Press [CURSOR >] to display "SET MIN/PRESS YES".
2. Set your volume pedal to its minimum position (i.e. volume all the way down) and press [+ /YES].
3. When the display reads "SET MAX/PRESS YES" set your volume pedal to its maximum position (volume all the way up) and press [+ /YES].

If the Ground Control can't read your volume pedal, it will say "CHECK PEDAL". If you see this message, check that your patch cord is connected from the OUT or AMP jack of the volume pedal to the correct pedal jack on the Ground Control, and that you are using a good cord.

If you get the message "TOO LOW", then your volume pedal has the wrong value potentiometer in it. This is most likely because it is a low impedance type intended for keyboards or just isn't a volume pedal at all.

Pedals 1 and 2

If you are using two volume pedals, select the second pedal by pressing [SELECT √]. The Ground Control will display:

P2 IS OFF

Repeat the above procedure for this pedal.

Expanders

Expanders allows you to configure your Ground Control for use with the following:

- GCX Guitar Audio Switcher(s)
- Ground Link
- System Mix Plus

GCX Guitar Audio Switcher

The Ground Control can control up to 4 GCXs to provide any combination of 32 audio loops and switches. To control GCXs from your Ground Control, they must be enabled here.

After entering Setup mode, activate this function by pressing [EXPANDERS]. The display should read:

GCX-1 IS OFF

To enable the GCX, press [+ / YES] to turn GCX #1 on. If you have more than one GCX, press [SELECT ∨] to access the next GCX. The display will show:

GCX-2 IS OFF

You can continue to enable GCXs #2 through #4.

For most applications, you will use loops as either audio loops or latching switches. If you need to control a momentary switch function with one of the GCX loops, you must configure it as follows:

1. Press [SELECT ^ or ∨] to select the appropriate GCX.
2. Press [CURSOR >] to access the desired loop. The display will look like:

LOOP4=NORMAL

3. Press [+ / YES] to select "MOM SW" for momentary switch operation. Press [- / NO] to return to normal.

Ground Link

Normal operation of the Ground Link is to control loops 1-8 of GCX #1. You can redefine each button on the Ground Link to control one of the following:

- Any loop of the GCX(s).
- Start and Stop a MIDI sequencer.
- Send MIDI continuous controller on/off messages.

To redefine Ground Link buttons, enter Setup mode and activate this function by pressing [EXPANDERS]. Then press [SELECT √] until you see:

G.LINK=NORMAL

Press [+ / YES] and [- / NO] to toggle between Normal and Programmed ("PROGRAM") mode.

Once you have selected programmed mode, you can specify button function by pressing [CURSOR >] to access the display for each button. The first digit always indicates which button you are programming.

GCX Loops:

The basic display reads:

3.GCX-1 LOOP6

This indicates that Ground Link button #3 will control loop 6 on GCX #1. Use [CURSOR < or >] to move the cursor and select each parameter (Ground Link button #, GCX # or Loop #). Then use [- / NO] and [+ / YES] to alter them.

MIDI Sequencer Start/Stop:

With the cursor on the GCX #, such as:

3.GCX-1 LOOP6

Press [+ / YES] until the display shows:

3. SEQ S/S

Now Ground Link button #3 will start and stop your sequencer.

MIDI Continuous Controller On/Off:

With the cursor on the GCX #, press [+ / YES] until the display shows:

1.CH01 CTL004

This indicates that Ground Link button #1 will control MIDI continuous controller #004 on channel 1. You can use [CURSOR < or >] to move the cursor and select each parameter. Then use [- / NO] and [+ / YES] to select MIDI channels 1-16 and continuous controllers 0-120.

Invert Controllers:

Controllers are turned on and off by sending a value of 0 or 127. Normally the Ground Link LED is off with a value of 0 and on with 127. If this is backwards for your processor, then you can invert the polarity by pressing [CURSOR >] until you see:

CTL NORMAL

Then press [+ / YES] to change it from "normal to "invert".

System Mix Plus VCA

The System Mix Plus includes a stereo volume control (VCA) which can be accessed remotely with your Ground Control. A VCA is a Voltage Controlled Amplifier which is just a fancy name for a type of volume control. For the VCA to be controlled by your Ground Control, it must be enabled here.

To enable the VCA, enter Setup mode and activate this function by pressing [EXPANDERS]. Then press [SELECT ∨] until you see:

VCA IS OFF

Press [+ / YES] to turn VCA control on.

Note: When the VCA is enabled ("VCA IS ON"), you can only use devices 1 through 7. Memory for device #8 is used to store volume levels.

Utility

Utility allows you to change certain default settings for the Ground Control. Enter Setup mode and press [UTILITY] to activate this function.

Directory Speed

This lets you control how fast the directory of presets scrolls when you enter a new Bank.

Press [SELECT] until the display reads:

DIR SPEED=2

Press [DATA] to enter a value from 1 (slowest) to 4 (fastest).

Preset Access

There are three different ways of accessing presets, "Bank", "Bank4" or "Direct".

Bank mode lets you access your presets as 10 banks of 10 presets each. This way you use [SELECT ^ or v] to choose the bank, then [0-9] to call up each preset within that bank.

Bank4 mode lets you access your presets as 25 banks of 4 presets each. You still use [SELECT ^ or v] to choose the bank, but only [1-4] to call up the presets. This frees up the upper row of buttons for instant access to other functions. This mode is most commonly used if you have a GCX Guitar Audio Switcher and you want to have instant control over the loops.

Direct mode let you access your presets by directly entering the number of the preset. For example, to recall preset 37, you would press [3] then [7]. In this mode, [SELECT] acts as increment and decrement. This mode is used if you have a rigid set list and want to pre-program all of the changes.

The Ground Control is initially set to "Bank". To select a different preset access mode, press [SELECT] until the display reads:

P. ACC.=BANK

Press [DATA] to select between Bank, Bank4 or Direct.

If you choose Bank4 mode, the Ground Control will default to the upper row of buttons controlling GCX #1 loops 1-6. You can redefine these buttons by pressing [CURSOR >] to select each button. Read the section above under Expanders titled "Ground Link" for a description of reprogramming buttons.

Initialize Memory

This function restores the Ground Control's memory to the factory settings.

1. Press [SELECT] until the display reads:

INIT MEM Y/N

2. Press [+ / YES].
3. After the warning, if you still want to continue, press [+ / YES] again.

Exiting SETUP MODE

To exit SETUP MODE, press either [SETUP MODE] button and answer [+ / YES] to the prompt. The Ground Control will return to Preset mode.

PROGRAM DEVICES

This is where you will:

- Select the Program for each MIDI controlled device.
- Specify what each Expression Pedal will control.
- Set the System Mix Plus volume.
- Setup audio loops and switches on the GCX(s).
- Name and save each combination as a Preset.

The changes occur in "real time" while you edit your presets, so you can experiment with new tone combinations before you save them.

Entering PROGRAM DEVICES

When you power up the Ground Control, it starts out in Preset mode. After displaying a startup message (which you can skip by pressing any button), a directory of the presets in bank #0 will begin to scroll.

Before you enter Program Devices mode, you should select the preset you want to edit. You can do this by pressing any button [0-9]. The display will show that preset, for example:

01. INIT

Now to edit preset 01, you will press and hold [SELECT √] until the Program Devices light (in the upper right) comes on.

If you were in a bank other than 0, you would press and hold [SELECT √] until you reach bank 0. Then press and hold a second time until the Program Devices light comes on.

Note: The delay in entering Program Devices is so that you don't accidentally enter this mode during performance.

Assigning MIDI Program Changes

Use the [SELECT] buttons to choose each of your MIDI controlled devices. You will see the names of each device that you entered in Setup mode. It will look something like:

TRIAXIS	-	18
↑		↑
Device Name		Program Number

Now enter the number of the program you want for each device. You can access any program from 0 to 128. For example:

- For program 6, press [0] [6]
- For program 36, press [3] [6]
- For program 112, press [1] [1] [2]

Notice that there is a slight delay when you select programs 10, 11, or 12. This is because the Ground Control is waiting for a third digit in case you wanted programs 100 through 128.

Note: The Ground Control *automatically* filters redundant program changes when Presets are recalled, to avoid audible glitches.

You can also instruct the Ground Control to *not* send a MIDI Program Change. How you do this depends on whether your device numbers programs from 0 to 127, or from 1 to 128 (see "Start Number" on page 11). To *not* send a MIDI Program Change, do one of the following:

- If the device starts at 1, then choose program 0 by pressing [0] [0].

- If the device starts at 0, then choose program 128 by pressing [1] [2] [8].

When *no* program is selected, the display will show "--" instead of a program number.

Using Expression Pedals

Before using Expression Pedals, you need to enable and calibrate them from Setup mode.

You specify what each Expression Pedal will control by pressing [SELECT √] until the following display appears with the desired pedal number:

P1. 064	CTL007
↑	↑
Pedal	Current
	Message Type
	Value

Message Type

Now you need to choose a MIDI message type. It doesn't matter which you choose as long as it matches the message type that your device is set to respond to. The choices are:

- No output: "OFF"
- Pitch Bend: "PITCHB"
- Aftertouch: "AFTERT"
- Continuous Controllers 000 through 120: "CTL007"

To choose the MIDI message type press (or press and hold) [DATA].

Target Device

If you have more than one MIDI device, you must specify which one the Expression Pedal should control. Press [CURSOR >] to get to the following display:

```

P1->TRIAxis
  ↑      ↑
Pedal  Target Device

```

Press [DATA] to choose the desired device.

Controlling the System Mix Plus VCA

Before controlling the System Mix Plus VCA, you need to enable it from Setup mode.

For each Ground Control Preset, you can assign a specific volume level, or you can control the volume with expression pedals, or do both.

Controlling the VCA with Preset Volume Levels

Volume changes can be programmed for each preset. Press [SELECT] until you see the display:

```
VCA LEVEL --
```

A value of "--" means no preset volume change will be sent when the preset is recalled. Press and hold the [DATA] buttons to enter a preset volume level from 00 (off) to 99 (maximum).

Controlling the VCA with Expression Pedals

To control the VCA with expression pedals, you set them up just like in "Using Expression Pedals" above. Press [SELECT] until you get to the pedal display for the desired Pedal (1 or 2):

```
P1. 064 CTL007
```

Press [CURSOR >] to select the target device. Then press [+ / YES] to choose VCA. The display should look like:

P1-> -VCA-

Now press [CURSOR <] to return to the previous screen. Use [DATA] to select Stereo, Left, Right, or Pan. The expression pedal now controls volume from 0 (off) to 127 (maximum).

Using Both Preset Level and Expression Pedals

You may use both the preset level and the expression pedals simultaneously. When a preset is recalled, the preset level will be sent to the System Mix Plus. The expression pedal will override the preset level *only* when the value of its position matches the value of the preset level. This avoids any drastic volume changes when the pedal is moved.

For example, if the Preset Level is 99 (maximum volume), then the expression pedal won't take control of volume until it has reached its full on position. Then the volume will track the movement of the expression pedal.

If the expression pedal is assigned to *Left* or *Right*, the preset level will control *only the other channel* of the volume control. For example, if the expression pedal is assigned to the left channel, then the preset level will control the right channel.

Controlling the GCX Guitar Audio Switcher

The Ground Control is capable of controlling 4 GCX Guitar Audio Switchers for up to 32 loops. However, to control more than one you must have the memory upgrade. Before you can control any GCXs, you must enable them from Setup mode.

To program loops on a GCX, press [SELECT] until you see the correct GCX:

GCX-1

Now press [1] through [8] to turn on or off the appropriate loops. The LEDs next to each button show the current status of the loop. Repeat as necessary for "GCX-2" through "GCX-4".

Naming Presets

To enter the name for your new preset, press [SELECT √] until you see:

"_INIT "

Press [DATA] to change the characters. Press [CURSOR] to move the cursor to each position. To save time, when you press and hold either [DATA] button, it will auto-repeat. Also, if you press both [-/NO] and [+/YES] at the same time, the character is replaced by a space.

Saving Presets

Now that you have named your new preset, it is time to save it. Press [SELECT √] twice to see:

SAVE Y/N

If you change your mind and want to edit it some more, you can press [SELECT ^] to go back to any device. Otherwise, press [+/YES] to save your preset. The Ground Control will display briefly "**SAVING TO 01**", before returning to Preset mode.

Saving to a different location (Copy)

Sometimes you may want to save your preset to a new location. This is useful when you want to start with an existing preset and just change one or two things. Also, it allows you to copy presets from one location to another.

To save to a new location, press [SELECT √] once to see:

SAVE TO 01

The first digit (bank) will be flashing. Press [DATA] to select the new bank. Then press [CURSOR >] and the second digit will flash. Use [DATA] again to set this number. Then press [SELECT √] and the display will flash alternately between:

OVERWRITE Y/N

and the name of the PRESET *currently* in your chosen location. This will keep you from accidentally writing over a preset you want to keep. You can press [+ / YES] to save or press [- / NO] to go back and choose a new location.

PRESET MODE

From Preset mode you can recall any of 100 user programmable presets. This is how you use the Ground Control while you are playing.

When you power up the Ground Control, it starts out in Preset mode. After displaying a startup message (which you can skip by pressing any button), a directory of the presets in Bank 0 will begin to scroll.

If you are in Program Devices, you can change back to Preset mode at any time by pressing [SELECT ^] until the Preset mode light comes on.

You select the Preset Access method in the Utility section of Setup mode. Your selection determines how you will access your presets. If you didn't change the method, then it defaults to Bank.

----- **Preset Access: Bank**

The 100 presets are arranged in 10 banks of 10 presets each. To recall a preset, first select the bank by pressing [SELECT]. Then choose a preset within that bank by pressing [0-9].

For example, if you're currently in bank 0 (Preset mode light is on and the leftmost digit is a 0) and you want to recall preset #21, press [SELECT ^] twice followed by a [1].

Pressing [0-9] recalls presets. Changing banks does not.

When you change banks, the Ground Control displays a directory of presets within the new bank. The directory will

continue to scroll until either a preset is selected, or you return to the original bank. To help you remember which bank you were in, when you change back to the original bank the decimal point following the bank number will light.

Expanded Memory

If you have expanded memory (8K instead of 2K bytes), you have 360 presets. These presets are arranged in 36 banks, 0-9 and A-Z. Each bank contains 10 presets.

Preset Access: Bank4

Bank4 works identical to Bank, except that instead of 10 banks of 10 presets each, you have 25 banks of 4. You choose the bank with [SELECT] and recall the preset by pressing [1-4].

The upper row of buttons, 5 through 9 and 0, are instant access buttons for GCX loops 1-6. You can also redefine each button in setup mode to control any loop of your GCX(s), controller on/off, or sequencer start/stop.

Preset Access: Direct

To recall a preset, directly enter the two-digit preset number by pressing [0-9]. For example, to select preset 69 press [6] [9].

You can use [SELECT] to step through presets one at a time. For example, from preset 69, pressing [SELECT ^] will recall preset 70. Pressing [SELECT v] will recall preset 68.

To enter Program Devices mode press [0] [0].

About MIDI

MIDI (Musical Instrument Digital Interface) is a universal language that allows electronic devices made by different manufacturers to communicate with one another. Although using your Ground Control doesn't require a thorough knowledge of MIDI, it is helpful to understand Channels, Program Changes, and Continuous Controllers.

Channels

MIDI Channels are like channels on your television. When you select a channel on your TV, you only receive the broadcast transmitted on that particular channel. Similarly, when you select the channel on a MIDI device, it will only respond to messages sent on that Channel. MIDI messages can be transmitted on 16 different channels (1-16) through a single MIDI cable.

Program Changes

Your MIDI controlled devices have a series of programs which can be recalled from the front panel. Programs can also be recalled by sending a MIDI Program Change command.

MIDI Program Changes select one of 128 different programs. Also, some manufacturers number their programs starting with 1 (1-128), some start with 0 (0-127).

Continuous Controllers

Unlike Program Changes, which select an entire program, Continuous Controllers change only selected parameters within a program. Also known as Control Changes, these messages are frequently used to add expression to an effect by adjusting parameters like volume, mix, reverb depth, delay time, or EQ to name a few.

There are 121 different MIDI Continuous Controllers, numbered 0 to 120. Each controller is like a slider or a knob; it can transmit a "continuous" stream of values ranging from 0 (all the way off) to 128 (all the way on).

The Ground Control has inputs for two guitar volume pedals which you can define to send any MIDI Continuous Controllers you wish. The position of your pedal is converted into a value from 0 to 127. Whenever the pedal is moved, the Ground Control transmits a Continuous Controller message with the new value.

Each MIDI device supports Continuous Controllers differently, so you should consult the manual for that device to determine which controller to use, and what parameters may be controlled with it.

Warranty

Digital Music Corporation warrants this product against any defects that are due to faulty material or workmanship for a period of five years from the date of original retail purchase. This warranty does not include damage to the product resulting from accident or misuse. This warranty is given to the original purchaser only and it is not assignable to any other person.

If the product should become defective within the warranty period, Digital Music will repair it or replace it free of charge, provided it is returned freight prepaid to Digital Music with a valid RMA (return material authorization) number.

This warranty shall not apply to any goods that have been repaired or altered by anyone other than the manufacturer. There are no warranties which extend beyond the terms described herein.

Should you experience any difficulty with this Digital Music product, contact us as described below. If it is determined that the product must be returned to the factory for repair, you will be issued an RMA and given shipping and packaging instructions.

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