

# GROUND LINK

Owner's Manual

DIGITAL MUSIC CORPORATION

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# 1. Introduction

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## 1.1 Overview

The Ground Link provides direct on/off control of the eight audio loops in the GCX Guitar Audio Switcher. Also, if used in conjunction with Ground Control Version 2.00 or higher, each button can be assigned to any loop of up to four GCXs, any MIDI controllers, or Sequencer Start/Stop.

The Ground Link can be used with Ground Control, other MIDI controllers, or as a stand-alone controller for the GCX. The Ground Link can store 128 combinations of GCX loop settings for recall by *any* MIDI controller.

The Ground Link is powered by the GCX using a standard 5-pin MIDI cable.

## 1.2 Top Panel

- **Foot Buttons** - control GCX loops or user-defined functions.
- **Status LEDs** - show current status of each button function.

## 1.3 Rear Panel

- **MIDI IN\*** - receives MIDI data *from* the Ground Control or other MIDI controller.
- **GCX OUT** - sends MIDI data to the GCX, and echoes data from the MIDI IN.
- **STORE** - stores combinations of GCX loop settings.

**\* Warning:** *The MIDI IN jack is not standard MIDI. To avoid damage, please refer to Section 3, "Using Ground Link Without a Ground Control", before connecting this jack to anything other than a Ground Control.*

## **1.4 Unpacking**

Your factory carton should contain:

1. This manual
2. Ground Link
3. Warranty card

Please fill out the enclosed warranty card and return it to Digital Music Corp. By registering, you enable us to send you important information about related products, updates and accessories.

## 2. Using Ground Link With a Ground Control

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The Ground Link is an optional part of the Ground Control System, and is most conveniently used with the Ground Control Programmable MIDI Foot Controller. The Ground Link is connected between the Ground Control and the GCX as follows with standard 5-pin MIDI cables.

1. Connect a MIDI cable from the MIDI Out of the Ground Control to the MIDI In of the Ground Link.
2. Connect another MIDI cable from the GCX Out of the Ground Link to the Pedal In of the GCX.

Because the GCX powers the Ground Control and Ground Link through the MIDI cables, both cables must have all five pins wired. You do not need the power adapter that comes with the Ground Control.

GCX loop settings are stored by Ground Control, therefore the STORE button is not used.

### 2.1 Quick Setup

If you are already using a Ground Control and GCX, adding Ground Link to the system will not affect their operation. Now with Ground Link, you have direct control over individual loops of the GCX. To change the state of a GCX loop (turn it ON or OFF), press the foot button on the Ground Link that corresponds to that GCX loop (button 1 controls loop 1, button 2 controls loop 2, etc.). The LEDs on the Ground Link indicate whether loops are ON or OFF.

Using the Ground Link does not affect the Ground Control presets. If you use the Ground Link to turn GCX loops on or off, and then select a Ground

Control preset, the GCX will change to the loop settings defined in the preset. The Ground Link LEDs will show the present loop status.

## 2.2 Advanced Setup

**Note:** The following advanced setup options require Ground Control version 2.00 or higher. If your Ground Control has version 1.00, contact the factory for update information.

You can use Ground Control to redefine the functions of the Ground Link buttons. Each Ground Link button can be used to control either:

- one loop on any of four GCXs
- any ON/OFF MIDI Controller
- Sequencer start/stop

Please refer to the Ground Control manual (or addendum) for instructions on redefining Ground Link button functions.

## 3. Using Ground Link Without a Ground Control

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With the Ground Link, you can control the GCX Guitar Audio Switcher from any MIDI foot controller. You can also use the Ground Link as a stand-alone controller for the GCX. However, because the GCX powers the Ground Link through the MIDI cable, you must connect the Ground Link directly to the GCX with a standard MIDI cable. Also, all five pins of the MIDI cable must be wired. The MIDI OUT of your foot controller, if you are using one, is connected to the MIDI IN of the Ground Link.

### 3.1 Single-Channel MIDI Foot Controllers

This section applies to foot controllers that send MIDI Program Change messages on one MIDI channel only. After connecting your MIDI foot controller, Ground Link, and GCX as described above, you can control the GCX by pressing the Ground Link foot buttons to turn GCX loops on and off. When you change programs with your MIDI foot controller, the Ground Link responds by changing the GCX loop settings. Program the desired GCX loop settings as follows:

1. Select a program on your MIDI foot controller.
2. Use the Ground Link buttons to turn GCX loops on or off as desired.
3. Press and hold the STORE button on the Ground Link until the LEDs flash.

Now, when you select that program, the Ground Link and GCX will revert to the loop settings you have just programmed.

### 3.2 Multiple-Channel MIDI Foot Controllers

When using MIDI foot controllers that send Program Change messages on more than one MIDI Channel, the Ground Link and GCX will function as described in section 3.1 above, but only respond to MIDI channel 1.

(Actually, until the Ground Link receives a Program Change message on MIDI channel 1, it will respond to all Program Change messages.)

### **3.3 No MIDI Controller**

The Ground Link can be used as a stand-alone controller for your GCX simply by using the Ground Link buttons to control the GCX loops individually. What you sacrifice by not using the Ground Link with a MIDI foot controller is the ability to store preset combinations of GCX loop settings.

Connect a standard 5-pin MIDI cable from the GCX OUT of the Ground Link to the PEDAL IN of the GCX. Because the GCX powers the Ground Link through the MIDI cable, the cable must have all five pins wired.

To change the state of a GCX loop (turn it ON or OFF), press the foot button on the Ground Link that corresponds to that GCX loop (button 1 controls loop 1, button 2 controls loop 2, etc.). The LEDs on the Ground Link indicate whether loops are ON or OFF.

The STORE button on the rear panel of the Ground Link is non-functional when used without a MIDI foot controller.



## Warranty Information

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Digital Music Corp. 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, and is valid only to the original retail purchaser.

If the product should become defective within the warranty period, Digital Music Corp. will repair it or elect to replace it free of charge, provided it is returned freight pre-paid to Digital Music Corp. with a valid Return Merchandise Authorization number (RMA#).

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.

### How to Reach Us

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