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## INTRODUCTION

# Congratulations on the purchase of your G•Minor MIDI Foot Controller

The G•Minor is a multi purpose MIDI Foot Controller that sends and receives MIDI information. The G•Minor will control any MIDI device using MIDI Control and Program Changes and when used with the TC Electronic G•Major and G•Force\* Guitar Processors; certain specific features are available.

#### When used with the G•Major or the G•Force\* you can:

- Tap Global Tempo
- · Switch Effect blocks on and off via MIDI Control Changes
- Select presets via Program Changes
- · Mute the Outputs for silent tuning
- Switch channels on your combo or preamp via the G•Major Relay Switch function
- Use the Preset level function on the G•Major e.g. for instant change of level for solos etc.
- Any other functions that are controlled via a MIDI CC or a Program Change command

Furthermore several G•Minors can be "daisy-chained" giving you more "on the fly" options.

Translated versions of this manual can be downloaded from our web-site at: www.tcelectronic.com

\* Please note that your G•Force must run with software 2.04 or higher to utilize the functions described.

## **G**•MINOR - OVERVIEW



# **OVERVIEW**

## **Connecting the G•Minor**

- Connect the MIDI Out of the G•Minor to MIDI In on the MIDI device you wish to control.
- Connect the supplied power supply. The power Input of the G•Minor is compatible with commonly used 9V DC Power Supplies.
- At startup the display will show the current software version.

# The G•Minor Display and Switches

### Display + Tuner LEDs

The seven segment display of the G-Minor changes indication according to the G-Minor operation mode. Detailed explanations will follow.

### **UP Switch**

Various functions but in general the UP switch is used to step up in program numbers or send a pre-programmed Control Change value.

### **DOWN Switch**

Various functions but in general the DOWN switch is used to step down in program numbers or send a pre-programmed Control Change value.

## SQUARE Switch

- · Switches between Online/Offline modes
- · Activates Tuner Mute mode when pressed and held for 1 second
- · Various others functions

# **OVERVIEW**

## SELECT Switch

With the SELECT switch you select between:

- Program Change mode
- Control Change mode
- Off Mode

- Down position
- Up position
- Middle position
- In **Program Change mode** you can send program changes to any receiving MIDI device.

-

- In Control Change mode the G•Minor can be programmed to send out any CC value via the UP and DOWN switch. When used with the G•Major or G•Force various functions such as Effect block On/Off, Bypass All, Relay 1&2 On/Off and other Effect specific parameters can be controlled.
- A Setup Mode for all MIDI settings etc. This mode is accessed from Off mode (SELECT switch in middle position) by pressing the UP or DOWN switch while turning the G•Minor on.
- **Tuning mode** can be accessed from both Control Change mode and Program Change mode. It allows you to have a Tuner visible in the G•Minor pedal but only when hooked up with a G•Major or a G•Force.
  - connect G•Minor MIDI Out to G•Major/G•Force\* MIDI In
  - connect G•Major/G•Force\* MIDI Out to G•Minor MIDI In.
- \* Please note that to utilize these functions with a G•Force, the G•Force must run software version 2.04 or higher.

# **PROGRAM CHANGE MODE**

## Program Change mode (SELECT switch in "down-position")

This mode holds three sub-modes; Online, Offline and Tuner

- Press the SQUARE switch with a single touch to switch between the Online and Offline modes.
- Press and hold the SQUARE switch for one second to select Tuner mode. Please read the description of the Tuner mode for further instructions.

#### Online

Online mode is selected when the preset number is steady in the display. Press the UP or DOWN switch to select and <u>instantly</u> recall the adjacent presets. The display always indicates current program number.

#### Offline

Offline mode is selected when the display is blinking. You can scroll through presets by pressing the UP or DOWN switch. Once you have found the desired preset number press SQUARE to activate/recall the preset. The displayed preset number will then be steady !

#### Example

You want to go from preset 2 to 5 without recalling/activating presets 3 and 4 on the way to 5.

- With preset 2 active press the SQUARE switch once to access Offline Mode (display is blinking). Now press the UP SWITCH three times. Preset number 5 is now blinking indicating that the preset is not yet recalled/activated.
- To activate preset number 5 press SQUARE.

Tip! For fast scrolling through presets; press and hold the UP or DOWN switch.

## **PROGRAM CHANGE MODE**



Program Change mode can also be accessed from Control Change mode by a single tap on the SQUARE switch.

### **Number of Presets**

Via the G•Minor you can recall up to 999 presets. A G•Minor preset recall consists of a Control Change 0 message selecting bank and a Program Change message selecting preset.

Example: Via the G•Minor you send what is displayed as Program Change 347 in the G•Minor display. This actually means that a value 3 is send via Control Change 0 for bank selection and Program Change 47 is send for program-recall in bank 3. If using the G•Minor with the TC Electronic G•Force please read pages 22 and 23 in this manual.

#### Program Change mode and Tap Tempo function

Tap the SQUARE switch consecutively in the tempo of the song you are playing. If the connected Guitar processor is a G•Major the tapped tempo will automatically be perceived as the Global Tempo. If using a G•Force the Tempo parameter must be setup to respond to CC 80. This is easily done via the I/O Setup-Control menu in the G•Force using the learning function.

The tapped tempo is global but the preset algorithms in the G•Major and G•Force can be set up to respond in various ways to this tempo via the Subdivision parameter. Read more about this in the respective manuals.

As explained above the Tap Tempo function sends MIDI CC 80 pr default and any connected MIDI device that can utilize a Tap function via CC 80, can therefore use this.

# CONTROL CHANGE MODE

## Control Change Mode (SELECT switch in "up-position")

In this mode the UP/DOWN switches can be programmed to send specific Control Change values. This programming is done in the Setup Mode - please see next pages for information on how to do this.

When used in conjunction with the G•Major or the G•Force, various functions such as Effect Block bypass, Tap Tempo, Relay 1&2 On/Off and other Effect specific parameters can be controlled.

Given that the G•Major/G•Force MIDI Out is connected to the G•Minor MIDI In, the LED status of the G•Minor will be update according to preset status.

#### **Tuner access in Control Change Mode**

Pressing and holding the "Square" switch for approximately 1 second will cause muting of the G•Major Outputs allowing you to tune your guitar silently. The G•Minor Tuner LEDs are always active but when the G•Minor is in Tuner Mute mode the display will allow more accurate response of the tune of the currently played note.

Pressing any switch once will un-mute the G•Major Outputs.

#### Accessing Program Change Online mode from Control Change mode

It is conveniently possible to access the Program Change Online mode from Control Change mode.

- Tap the SQUARE switch once, and you are in Program Change Online mode
- Now select preset using the UP and DOWN switches
- · Press SQUARE once more and you are back in Control Change mode

## Setup Mode

To enter Setup Mode:

- Turn off the G•Minor by setting the MODE selector in the middle position.
- Then press and hold the UP switch while powering on the G•Minor by moving the MODE selector either up or down.
- The G•Minor is now in Setup Mode

The display now reads "Ch" indicating that you are about to setup on which MIDI channel the G-Minor should send.



- Use the UP and DOWN switch to select the G•Minor sending MIDI channel
- · Press the SQUARE switch to confirm your channel selection

The display now reads "C1" indicating that you are about to setup Controller 1 - which we previously have referred to as the DOWN switch.



- Use the UP and DOWN switch to select which Control Change number you wish to send when pressing the DOWN switch/Controller 1
- · Press SQUARE to confirm

The display now reads "C2" indicating that you are about to setup Controller 2 - which we previously have referred to as the UP switch.



- Use the UP and DOWN switch to select which Control Change number you wish to send when pressing the UP switch/Controller 2
- · Then press SQUARE to confirm

The display now reads "Ct" indicating that you are about to setup the Controller type.



You can switch between having the UP and DOWN switches work as momentary or alternating type switches.

A momentary switch is to be compared to keyboard hold pedal. Connection is made when pressed and no connection is present when released.

An alternating type switch is a toggle switch. When pressed once and released immediately the connection is held. When repressed the switch is disconnected.

· Press either the UP or the DOWN switch to switch between

Momentary type indicated by:



Or the alternating type indicated by:



• Press SQUARE again to confirm your choice.

The display now reads FAC giving you the option of doing a factory reset.



• Press and hold the UP or DOWN switch for approx 1 second to perform the factory reset.

All LEDs in the pedal will be lit when the Factory reset is performed.

 To NOT perform the factory reset simply press SQUARE once when the display reads FAC.

Depending on the position of the MODE toggle switch on the back of the G•Minor you are now either in Program Change mode or in Control Change mode.

# THE TUNER MODE

## Tuner

· To access the Tuner Mode press and hold the SQUARE switch for 1 second



The Tuner will only be displayed in the G•Minor if both MIDI In and MIDI Out on the G•Minor are connected to a G•Major or a G•Force.

### MIDI Out to MIDI In MIDI In to MIDI Out

The two red Tuner LEDs are constantly showing the tune of the current note. When G•Minor is switched to Tuner mode (by pressing and holding the SQUARE switch for approximately 1 second), the three dots in the lower half of the display will scroll with varying speed according to the distance to the closest note.

- · When the three digits scrolls to the right, the note is too high
- · When the three digits scrolls to the left, the note is too low
- When the three digits and two triangular TUNER LEDs are steady the Input note is in tune

The mid bar of the three seven segments indicates the current note

#### **Switching Mode**

The display permanently indicates Tuner info, given that proper connection is provided.

## **USING SEVERAL G-MINORS**



#### **Daisy Chaining Several G-Minors**

You can connect several G•Minors in a daisy-chain as illustrated above to increase the "on-the-fly" options.

If using e.g. two G•Minors you could use one of them to send program changes for preset change and the other for activating/ deactivating a few effect blocks or tapping in a tempo.

## **TECHNICAL SPECIFICATIONS**

Control Interface MIDI:	In/Out : 5 Pin DIN
EMC Complies with:	EN 55103-1 and EN 55103-2 FCC part 15, Class B, CISPR 22, Class B
Safety Certified to:	IEC 65, EN 60065, UL6500 and CSA E65
Environment Operating Temperature: Storage Temperature: Humidity:	32° F to 122° F (0° C to 50° C) -22° F to 167° F (-30° C to 70° C) Max. 90 % non-condensing
<b>General</b> Finish:	Dark color polycarbonate cover
Display Dimensions: Weight:	3 x 7 - Segment LED display 2 LED's for tuner Ø129.14 x 39.2 mm (Ø5.08" x 1.54") G - Minor : 395 g (0.871 lb ) Adapter 120 V: 182 g (0.401 lb ) Adapter 230 V: 212 g (0.467 lb)
Supply Voltage: Power Consumption: Warranty Parts and labor:	9 V DC, Adapter for 230 V or 120 V included 2 W @ 9 V DC, 4 W @ 120/230 V 1 year

Due continuous development these specifications are subject to change without notice.

# IMPORTANT SAFETY INSTRUCTIONS

Please read, keep, and follow these instructions before connecting this unit. Heed all warnings and instructions. Retain this notice and the owner's manual for future reference.

#### Warning!

- · To reduce the risk of fire or electric shock, do not expose this unit to rain or moisture.
- · Do not open the unit risk of electric shock inside.
- Be advised that different operating voltages require the use of different types of mains adapters and attachment plugs. If in doubt please contact your TC distributor.
- · Check the voltage in your area and use the correct type. See table below:
- Do not install near heat source, such as radiators, heat registers, stoves or other apparatus.

(including amplifiers) that produce heat.

- · Clean only with a damp cloth.
- Do not defeat the safety purpose of a polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades/prongs and a third grounding prong.
  The wide blade or the third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Voltage	Adapter according to standard.
110-125V	UL817 and CSA C22.2 no 42.
220-230V	CEE 7 page VII, SR section 107-2-D1/IEC 83 page C4
240V	BS 1363 of 1984. Specification for 13A fused plugs and switched and un-switched socket outlets.

- Protect the power cord from being walked on or pinched particularly at plugs convenience receptacles.
- · Only use attachments/accessories specified by the manufacturer.
- · Unplug this apparatus during lightning storms or when unused for long periods of time.

#### Service

There are no user-serviceable parts inside. All service must be performed by qualified personnel. Servicing is required when:

- the unit has been damaged in any way, such as when the power-supply cord or plug is damaged.
- · the unit has been exposed to rain or moisture, or liquid has been spilled into the unit.
- · objects have fallen into the unit.
- · the unit does not work properly.
- · the unit has been dropped.

## IMPORTANT SAFETY INSTRUCTIONS

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 installations.

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 to 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.

The user may find the following booklet, prepared by the Federal Communications Commission, helpful: "How to identify and Resolve Radio/TV interference Problems."

This booklet is available from the US. Government Printing Office, Washington, DC 20402, Stock No. 004-000-0034-4.

#### Caution:

You are cautioned that any change or modifications not expressly approved in this manual could void your authority to operate this equipment.

#### For the customers in Canada:

This Class B Digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la classe B respecte toutes les exigences du Réglement sur le matériel brouilleur du Canada.

## **CERTIFICATE OF CONFORMITY**

#### **Certificate Of Conformity**

TC Electronic A/S, Sindalsvej 34, 8240 Risskov, Denmark, hereby declares on own responsibility that following product:

#### **G**•Minor MIDI Foot Controller

- that is covered by this certificate and marked with CE-label conforms with following standards:

EN 60065 (IEC 60065)	Safety requirements for mains operated electronic and related apparatus for household and similar general use
EN 55103-1	Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use. Part 1: Emission.
EN 55103-2	Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use. Part 2: Immunity.

With reference to regulations in following directives:73/23/EEC, 89/336/EEC

Issued in Risskov, March 2001

Anders Fauerskov

Chief Executive Officer

## **G**•MINOR MIDI IMPLEMENTATION

#### G-MINOR MIDI FOOT CONTROLLER - MARCH-2001

Function		Transmitted	Recognized
Basic Channel	Default	1	1
	Changed	1-16	1-16
Mode	Default		
	Messages	Х	х
	Altered		
Note Number		Х	х
	True Voice	Х	х
Velocity	Note ON	Х	х
	Note OFF	Х	х
After Touch	Key's	Х	х
	Ch's	Х	х
Pitch Bend		Х	х
Control Change		0	0
	Tap Tempo	Ctrl 80 - fixed	
	Tuner Mute	Ctrl 81 - fixed	
	Default In CC mode -		
	Down Switch	Ctrl 82 Changed: 0-12	7
	Default In CC mode -	-	
	Up Switch	Ctrl 83 Changed: 0-12	7
Prog Change		0	0
System Excl.		0	0
Common	:Song Pos	Х	Х
	:Song Sel	Х	Х
	:Tune	Х	Х
System real time	:Clock	Х	Х
	:Commands	Х	Х
Aux Messages	:Local ON/OFF	Х	х
-	:All Notes OFF	Х	х
	:Active Sense	Х	Х
	:Reset	х	Х
O:YES	Mode 1: OMNI ON, POLY	,	Mode 2: OMNI ON, MONO
X:NO	Mode 3: OMNI OFF, POL	Y	Mode 4: OMNI OFF, MONO

# **G•MINOR & G•FORCE**

## Specifically for operating the G•Minor with the G•Force

The functions described below requires G•Force software 2.04 or higher! Please contact you local dealer or TC Electronic for information on how to upgrade your current G•Force software if necessary.

## Setting Up

- Select the G•Minor pedal via the G•Force I/O Setup Control menu
- Set Bank Select to Coarse in I/O Setup - MIDI menu



• Place Cursor at "LOAD INTO BANK" and press ENTER.

By choosing the G•Minor pedal as model the G•Force is automatically setup to use the G•Minor default CC values for Tap Tempo and Tuner Mute.

For recalling presets above 100; select bank size=100 in the I/O Setup-MIDI menu. Then: Bank 1 = ROM 1-100 Bank 4 = User 1-100 Bank 2 = ROM 101-200 Bank 5 to 9 = Card 1 to 5; 1-100 Bank 3 = ROM 201-225

### **Bypassing Effect Blocks**

The G•Force effect blocks can be switched on/off via a received Program Change message or a Control Change value. In the following example we will use the G•Minor Control Change mode to bypass G•Force effect blocks.

#### Example

- · Connect MIDI Out from the G•Minor to MIDI In on the G•Force
- Select Control Change mode on the G•Minor by setting the select switch in "up" position

## **G•MINOR & G•FORCE**

- On the G•Force, press I/O SETUP and select the Control menu
- Scroll down in the parameter list and find the "Effect Bypass" section as illustrated
- Place the cursor at the effect block you wish to bypass and press ENTER to access "learn-mode".
  The display reads "LEARNING"
- Now press either the UP or the DOWN switch on the G•Minor
- The G-Force has now recognized the Control Change number sent by the G-Minor and the number will appear in the menu line (example: 83)

EFFEC	T BYPASS	
GATE	NONE	
CPR	LEARNING	
FIL	NONE	
PAN	NONE	
PIT	NONE	
DLY	NONE	
DRV	NONE	
СНО	NONE	
REV	NONE	

EFFEC	EFFECT BYPASS								
GATE	NONE								
CPR	MIDI CH 1	CONTRL. 83							

## **Tuner Mute**

#### The G•Force Tuner can be shown in the G•Minor display.

- Connect MIDI Out on the G•Minor to MIDI In on the G•Force and MIDI Out on the G•Force to MIDI in on the G•Minor
- Press and hold the G•Minor SQUARE switch for 1 second. The Tuner is now activated. The G•Force can be set to mute the Outputs in Tuner mode if desired. This is done in the menu appearing when you press the TUNER on the g•Force front
- · To release from Tuner mode press any key on the G•Minor

