

**SPECIAL OPERATIONS
FIELD MANUAL
PHANTASMAL FORCE**

Button Mode	Glyph	Menu Name	Knob Modes	LED Color
CC Momentary	M	mmt	val, cc#, sol	yellow
CC Toggle	T	tgl	val, cc#, sol	yellow
Note	N	not	not, ARP, vel	blue
Chord	≡	crd	tsp, vel , rnd	blue
Start	▶	ply	n/a	green
Stop	■	stp	n/a	green
PC +	+	pc+	pc#, ch#	red
PC -	-	pc -	pc#, ch#	red
PC #	#	pc #	pc#, ch#	red
Transpose	↕	tsp	inc	white
Pitch Bend	◊	ptb	pit, wav, rat	purple
CC LFO	L	lfo	rat, wav	yellow
ARP	A	arp	tpS, tpO, len, ply, rat, P %, N %, V %, rot, scl, spn	blue
CC Sequencer	S	ccs	cc#, len, rat, P %, V %,	yellow

FOREWORD

As we reach what appears to be the peak in the age of mass production, each operative maneuvering within the theater of global consumption must make informed decisions, equip the best-suited implement, and undergo the proper training in order to succeed in their objectives.

The Phantasmal Force MIDI controller offers an operative a great deal of customization in a miniature package, without the need for external editors or configuration tools. Each button can be configured independently, from the device itself, while in the field. Operatives can save up to 16 different configurations and burn a default startup configuration to the embedded firmware. Phantasmal Force transmits MIDI messages via USB-C and TRS-A connections. A USB-C power source is required.

This Special Operations Field Manual is published for the information and guidance of all concerned and will be used as the basic doctrine for Phantasmal Force training for such subjects.

It should be carefully noted that this manual covers the following subjects: (1) description of all hardware & software interfaces; (2) detailed parameter information; (3) full MIDI implementation data. The Special Operations Field Manual does not include promotion of, or engagement in non-MIDI activities.

PHANTASMAL FORCE



SPECIFICATIONS:

Width: 52mm

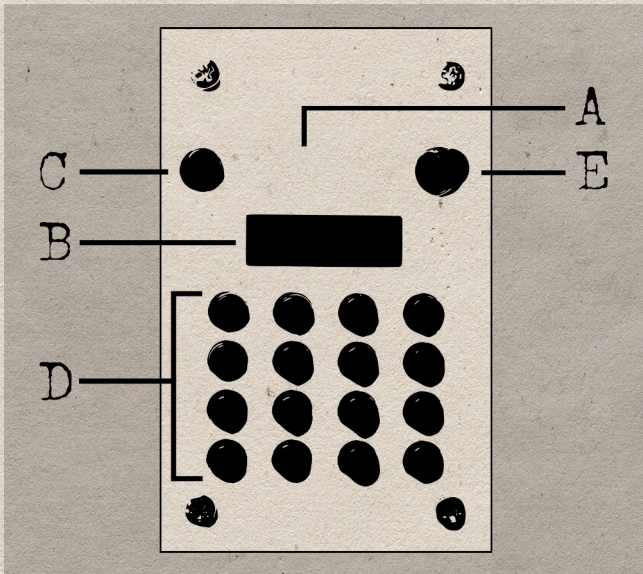
Length: 81.5mm

Height: 22.5mm

Weight: 57g

TABLE OF CONTENTS

1. FRONT PANEL.....	2
2. DISPLAY DETAIL	4
3. REAR PANEL.....	5
4. BUTTON MODES.....	6
I) CC MOMENTARY.....	7
II) CC TOGGLE.....	10
III) NOTE.....	13
IV) CHORD.....	16
V) TRANSPORT PLAY.....	19
VI) TRANSPORT STOP.....	20
VII) PROGRAM CHANGE UP.....	22
VIII) PROGRAM CHANGE DOWN.....	24
IX) PROGRAM CHANGE NUMBER.....	26
X) TRANSPOSE.....	28
XI) PITCH BEND.....	30
XII) CC LFO.....	34
XIII) ARP.....	38
XIV) CC SEQUENCER.....	44
5. LOADING & SAVING	49
6. PANIC.....	49
7. GENERATIVE PRESETS.....	50
8. KNOB MODES.....	52
9. ASSISTANCE.....	54



1. FRONT PANEL

A) CENTRAL ILLUMINATOR ZONE

The CENTRAL ILLUMINATOR is a multi-color Light Emitting Diode (LED) located within the Phantasmal Force. When an agent or operative triggers a command from the unit, the LED emits a color coded signal. The color code matrix is located on the inner front flap of this manual.

B) DISPLAY

The Phantasmal Force has an 128x32 pixel OLED display that is visible in most lighting conditions and has two distinct modes of operation. Pressing the SHIFT BUTTON switches between the MAIN SCREEN and the MENU SCREEN, which are illustrated and described henceforth.

C) SHIFT BUTTON

The **SHIFT BUTTON** is located to the left of the display. Pressing it toggles between the **MAIN SCREEN** and the **MENU SCREEN**. Holding the **SHIFT BUTTON** down while viewing the **MAIN SCREEN** activates the **LOAD/SAVE** menu.

D) COMMAND BUTTONS

16 tactile, non-velocity sensitive **COMMAND BUTTONS** can be configured individually to send **MIDI CC**, **MIDI NOTE**, **MIDI START/STOP**, **MIDI PROGRAM CHANGE** and **PITCH BEND** messages via **USB** and **TRS-A MIDI** connection. Buttons can also be configured to send internal **TRANSPOSE**, **ARP**, **CC LFO** and **CC SEQUENCER** commands. **BUTTON MODES** are outlined in detail later in this manual.

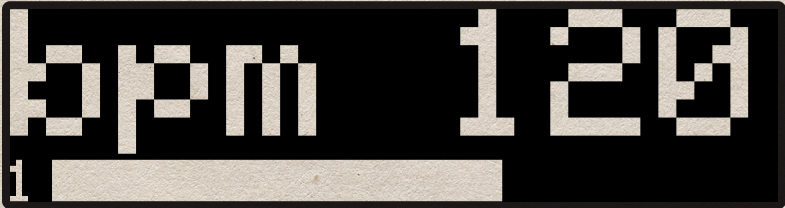
E) KNOB

The **KNOB** located on the front panel is a potentiometer that can control various aspects of the **Phantasmal Force**. Unlike an endless encoder, it has hard stops when rotated either left or right. On the **MAIN SCREEN**, the **KNOB** can be configured to behave differently based on the mode of the last button pressed. When in the **MENU SCREEN**, the **KNOB** is used to select and adjust parameters. **KNOB MODES** and **PARAMETER LISTS** are outlined later in this manual.

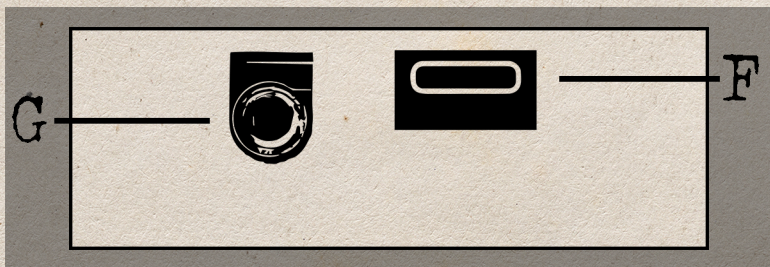


2. DISPLAY DETAIL

The MAIN SCREEN (above) displays detailed information corresponding to the last button pressed. The matrix on the left side of the screen represents the 16 button grid. Each BUTTON MODE is displayed with a corresponding glyph. Parameter values for the current button are displayed to the right of the button matrix.



The MENU SCREEN (above) displays the parameters for the current button. The button number is displayed in the lower left corner. Use the KNOB to select a parameter to edit. The bar on the bottom of the display represents the current menu position. To edit a selected parameter, press the SHIFT BUTTON. The parameter being adjusted will be highlighted. Adjust the parameter with the KNOB. To stop editing a parameter, press the SHIFT BUTTON or rotate the KNOB to the right and select "ex". To exit the MENU SCREEN, rotate the KNOB clockwise until the display reads "exit" and press the SHIFT BUTTON. You can change the button being edited by pressing the desired button in the MENU SCREEN.



3. REAR PANEL

F) USB-C PORT

The USB-C port located on the back of the Phantasmal Force is utilized for both powering the unit, and communicating MIDI messages (if so desired). To transceive MIDI data in this way, an operative must use a Universal Serial Bus (USB) cable that is capable of passing data. Be advised that many USB-C cables out in the field are of questionable origin and quality and may only power the device, leading to detrimental results when attempting to transceive MIDI data via USB.

G) TRS-A PORT

The TRS-A port located on the back of the Phantasmal Force conforms to the international standard for 3.5mm MIDI transmission. A stereo TRS 3.5mm cable is required to connect the Phantasmal Force to external MIDI equipment that uses TRS-A communication. An appropriate TRS-A to 5-Pin DIN adapter is needed if connecting the Phantasmal Force to MIDI equipment requiring DIN connection. A TRS-A to TRS-B cable will be needed if connecting the Phantasmal Force to a device utilizing TRS-B communication.



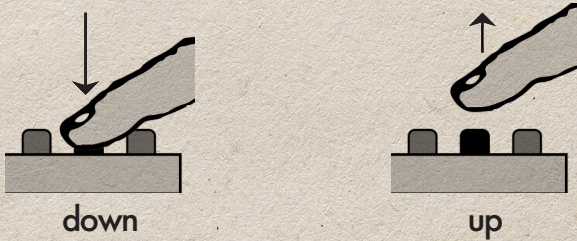
4. BUTTON MODES

The 16 non-velocity sensitive, tactile switches on the face of the Phantasmal Force can be configured in any number of ways. The following pages detail all MENU SCREEN parameters, by BUTTON MODE, for your reference. When navigating the MENU SCREEN with the KNOB, keep in mind that the position of the KNOB (and related data) will not update until the KNOB is rotated a small amount. The current position in the MENU SCREEN is displayed as a white bar on the bottom of the display.

To back out of a parameter menu without changing the selected parameter, rotate the KNOB to the right until the selection screen reads "ex". Selected parameters appear highlighted until the operative exits the parameter selection screen.

I) CC MOMENTARY [mmt]

A situation may arise when an operative needs to transmit separate and distinct messages upon pressing and/or releasing one of the COMMAND BUTTONS. In CC MOMENTARY mode, allows for a wide degree of functionality between the COMMAND BUTTON and the KNOB. The value of these messages can be set independently in the MENU SCREEN. The "dwn" and "up" parameters can each be set to produce a specific value, produce a random value (rnd), produce the value determined by the KNOB (cur), or do nothing at all (off).



While on the MAIN SCREEN, after pressing a COMMAND BUTTON in CC MOMENTARY mode, the KNOB MODE can be configured to send CC values (val), to change the CC number (cc#), or send CC values only when the button is held down (sol).

CC MOMENTARY - MENU SCREEN PARAMETERS

- mod- Changes the BUTTON MODE.
- cc#- The CC NUMBER sent.
- ch#- The MIDI CHANNEL (1-16) the CC message is sent on.
- min- The minimum limit of the random number generator.
- max- The maximum limit of the random number generator.

dwn- The CC value sent when the button is pressed. Turning the value above 127 will cycle through some additional modes:

*RANDOM (rnd) The action will send random values constrained by the MIN and MAX settings.

*CURRENT KNOB VALUE (cur) The action will send the current KNOB VALUE.

*OFF (off) The action will not send a value.

up- The CC value sent when the button is released. Turning the value above 127 will cycle through some additional modes:

*RANDOM (rnd) The action will send random values constrained by the 'min' and 'max' settings.

*CURRENT KNOB VALUE (cur) The action will send the current KNOB VALUE.

*OFF (off) The action will not send a value.

knb- Sets the KNOB to control the CC value (val) or CC number (cc#). In solo (sol) mode, the the KNOB will only send CC values while the COMMAND BUTTON is held.

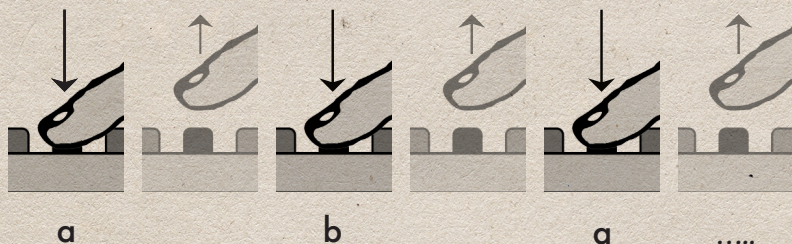
kRD- The KNOB READ setting determines if the KNOB will JUMP (jmp) to the current value when rotated, or wait for it to CATCH (cat) the stored value to start updating.

bpm- This global parameter adjusts the internal tempo from 10-240 beats per minute. The internal tempo can be used to drive CC LFO, PITCH BEND, ARP and CC SEQUENCER modes as well as send MIDI CLOCK out to other devices.

- clk- This global parameter adjusts if and where the Phantasmal Force sends MIDI CLOCK. Options include 'off', 'trs', 'usb' and 't&u' (both TRS & USB). MIDI clock operates at 24 PPQN.
- tps- This per-button parameter controls how many TAPS it takes to activate a button. When set to '1', a single tap will activate the button. When set to '2', the first tap will switch the focus of the MAIN SCREEN to the button pressed without activating the button. All subsequent presses of the button will send the corresponding messages from that button.
- boot- Sets default **STARTUP CONFIGURATION** that is loaded when the unit is powered on. An operative can select from the 16 **SAVE SLOTS**.
- cpy- The COPY parameter allows the user to copy the current button across a ROW, down a COLUMN or to ALL buttons. The user can also COPY a button to any other button. GEN or GENERATIVE PRESETS are described at the end of this manual.

II) CC TOGGLE [tgl]

It may be necessary or desirable for an operative to send alternating CC values ("a" & "b") on each successive press of a COMMAND BUTTON. These values can be set independently in the MENU SCREEN. The "a" and "b" parameters can be set to produce a specific value, produce a random value (rnd), produce the value determined by the KNOB (cur), or do nothing at all (off).



While on the MAIN SCREEN, after pressing a COMMAND BUTTON in CC TOGGLE mode, the KNOB MODE can be configured to produce CC values (val) or to change the CC number (cc#). In SOLO (sol) mode, MIDI CC messages from the KNOB are only sent while the COMMAND BUTTON is held down.

CC TOGGLE - MENU SCREEN PARAMETERS

- mod- Changes the BUTTON MODE.
- cc#- The CC number sent.
- ch#- The MIDI channel (1-16) the CC message is sent on.
- min- The minimum limit of the random number generator.
- max- The maximum limit of the random number generator.

a- Set the initial CC value sent when the button is pressed. Turning the value above 127 will cycle through some additional modes:

*RANDOM (rnd) The action will send random values constrained by the MIN and MAX settings.

*CURRENT KNOB VALUE (cur) The action will send the current KNOB VALUE.

*OFF (off) The action will not send a value.

b- Set the alternate CC value sent when the button is pressed. Turning the value above 127 will cycle through some additional modes:

*RANDOM (rnd) The action will send random values constrained by the 'min' and 'max' settings.

*CURRENT KNOB VALUE (cur) The action will send the current KNOB VALUE.

*OFF (off) The action will not send a value.

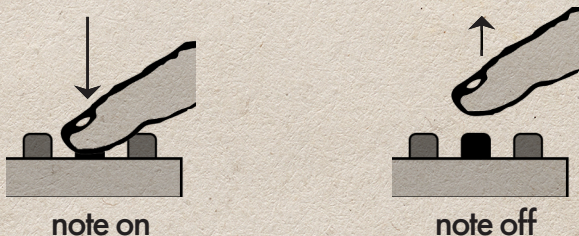
knb- Sets the KNOB to control the CC value (val) or number (cc#). In solo (sol) mode, the COMMAND BUTTON does not send CC data, but the KNOB will send CC values while the COMMAND BUTTON is held.

kRD- The POT VALUE setting determines if the KNOB will JUMP (jmp) to the current value when rotated, or wait for it to CATCH (cat) the stored value to start updating.

- bpm- This global parameter adjusts the internal tempo from 10-240 beats per minute. The internal tempo can be used to drive CC LFO, PITCH BEND, ARP and CC SEQUENCER modes as well as send MIDI CLOCK out to other devices.
- clk- This global parameter adjusts if and where the Phantasmal Force sends MIDI CLOCK. Options include 'off', 'trs', 'usb' and 't&u' (both TRS & USB). MIDI clock operates at 24 PPQN.
- tps- This per-button parameter controls how many TAPS it takes to activate a button. When set to '1', a single tap will activate the button. When set to '2', the first tap will switch the focus of the MAIN SCREEN to the button pressed without activating the button. All subsequent presses of the button will send the corresponding messages from that button.
- boot- Sets default **STARTUP CONFIGURATION** that is loaded when the unit is powered on. An operative can select from the 16 **SAVE SLOTS**.
- cpy- The COPY parameter allows the user to copy the current button across a ROW, down a COLUMN or to ALL buttons. The user can also COPY a button to any other button. GEN or GENERATIVE PRESETS are described at the end of this manual.

III) NOTE [not]

In this mode, an operative may send a single MIDI NOTE ON message when a COMMAND BUTTON is pressed. A corresponding MIDI NOTE OFF message is sent when the COMMAND BUTTON is released. Notes can be quantized to 43 different scales. MIDI VELOCITY can be set in the MENU SCREEN and can be randomized between the "min" and "max" values to create a more dynamic sound. To enable random value generation, turn the KNOB past the value 127 when setting the "vel" parameter.



While on the MAIN SCREEN, after pressing a COMMAND BUTTON in NOTE mode, the KNOB can be configured to change MIDI NOTE (not) or MIDI VELOCITY (vel) values. The KNOB can also be set to trigger notes in as a rotational arpeggiator (arp).

NOTE - MENU SCREEN PARAMETERS

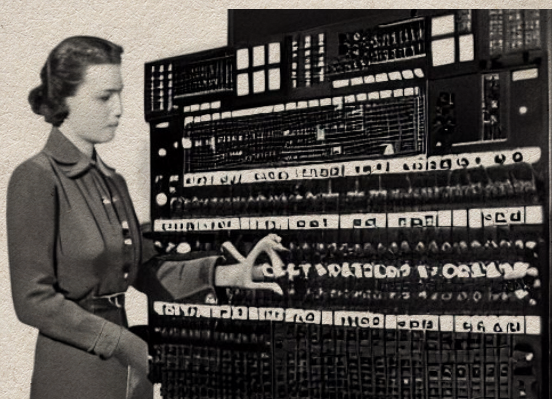
mod- Changes the BUTTON MODE.

not- The MIDI NOTE sent.

ch#- The MIDI CHANNEL (1-16) the note message is sent on.

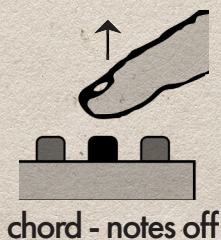
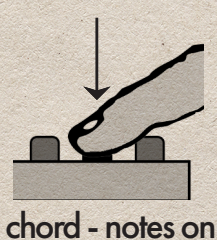
- scale- The currently selected SCALE will be displayed. Note selection from the MENU SCREEN or from a KNOB MODE will be locked to this SCALE and ROOT. Scales are listed at the end of this manual.
- rot- The ROOT NOTE from which the SCALE is derived.
- top- The upper limit of the scale range.
- min- The minimum limit of the random number generator.
- max- The maximum limit of the random number generator.
- vel- The velocity at which the MIDI note is sent. If set above 127, velocity values will be randomly generated between the "min" and "max" settings.
- knb- Sets the KNOB to control either the MIDI NOTE (not), KNOB ARP (arp), or MIDI VELOCITY (vel). The KNOB ARP will sound each note in the SCALE, from the ROOT note to the TOP note when the KNOB is rotated.
- kRD- The KNOB READ setting determines if the KNOB will JUMP (jmp) to the current value when rotated, or wait for it to CATCH (cat) the stored value to start updating.
- bpm- This global parameter adjusts the internal tempo from 10-240 beats per minute. The internal tempo can be used to drive CC LFO, PITCH BEND, ARP and CC SEQUENCER modes as well as send MIDI CLOCK out to other devices.

- clk- This global parameter adjusts if and where the Phantasmal Force sends MIDI CLOCK. Options include 'off', 'trs', 'usb' and 't&u' (both TRS & USB). MIDI clock operates at 24 PPQN.
- tps- This per-button parameter controls how many TAPS it takes to activate a button. When set to '1', a single tap will activate the button. When set to '2', the first tap will switch the focus of the MAIN SCREEN to the button pressed without activating the button. All subsequent presses of the button will send the corresponding messages from that button.
- boot- Sets default **STARTUP CONFIGURATION** that is loaded when the unit is powered on. An operative can select from the 16 **SAVE SLOTS**.
- cpy- The COPY parameter allows the user to copy the current button across a ROW, down a COLUMN or to ALL buttons. The user can also COPY a button to any other button. GEN or GENERATIVE PRESETS are described at the end of this manual.



IV) CHORD [crd]

In this mode, the Phantasmal Force is capable of simultaneously transmitting four MIDI NOTE ON messages when a **COMMAND BUTTON** is pressed. Corresponding MIDI NOTE OFF messages are sent when the **COMMAND BUTTON** is released. Each of the four notes can be configured independently. There are also 16, predefined chord types. MIDI VELOCITY can be set in the **MENU SCREEN** and can be randomized between the "min" and "max" values to create a more dynamic sound. To enable random value generation, turn the **KNOB** past the value 127 when setting the "vel" parameter. The velocity of each note in the chord will be calculated independently.



While on the **MAIN SCREEN**, after pressing a **COMMAND BUTTON** in **CHORD** mode, the **KNOB MODE** can be change the **ROOT NOTE** (rot), adjust the **VELOCITY** of the notes being sent (vel), create **INVERSIONS** by randomly shifting the octave of each **NOTE** up or down, or change the **CHORD** (chd).

CHORD - MENU SCREEN PARAMETERS

- mod- Changes the BUTTON MODE.
- nt1- The first note of the CHORD.
- nt2- The second note of the CHORD.
- nt3- The third note of the CHORD.
- nt4- The fourth note of the CHORD.
- ch#- The MIDI channel (1-16) the note messages are sent on.
- rot- The ROOT NOTE from which the CHORD is derived.
- ch- Selects the preset CHORD. Options include, maj, maj7, maj6, maj9, min, min7, min6, min9, dim, dim7, m7b5, aug7, 7, 9, sus4, sus2.
- min- The minimum limit of the random number generator.
- max- The maximum limit of the random number generator.
- vel- The velocity at which the MIDI note is sent. If set above 127, velocity values will be randomly generated between the "min" and "max" settings.
- knb- Sets the KNOB to control the ROOT NOTE (rot), the MIDI VELOCITY (vel), INVERSION (inv), or CHORD (chd).

- kRD- The KNOB READ setting determines if the KNOB will JUMP (jmp) to the current value when rotated, or wait for it to CATCH (cat) the stored value to start updating.
- bpm- This global parameter adjusts the internal tempo from 10-240 beats per minute. The internal tempo can be used to drive CC LFO, PITCH BEND, ARP and CC SEQUENCER modes as well as send MIDI CLOCK out to other devices.
- clk- This global parameter adjusts if and where the Phantasmal Force sends MIDI CLOCK. Options include 'off', 'trs', 'usb' and 't&u' (both TRS & USB). MIDI clock operates at 24 PPQN.
- tps- This per-button parameter controls how many TAPS it takes to activate a button. When set to '1', a single tap will activate the button. When set to '2', the first tap will switch the focus of the MAIN SCREEN to the button pressed without activating the button. All subsequent presses of the button will send the corresponding messages from that button.
- boot- Sets default **STARTUP CONFIGURATION** that is loaded when the unit is powered on. An operative can select from the 16 **SAVE SLOTS**.
- cpy- The COPY parameter allows the user to copy the current button across a ROW, down a COLUMN or to ALL buttons. The user can also COPY a button to any other button. GEN or GENERATIVE PRESETS are described at the end of this manual.

V) PLAY [ply]

In this mode, the COMMAND BUTTON can send a MIDI TRANSPORT PLAY message and/or start any of the internal, tempo-based BUTTON MODES.

PLAY - MENU SCREEN PARAMETERS

- mod- Changes the BUTTON MODE.
- out- Determines where the PLAY message is sent. It can be sent to any combination of MIDI, ARP, CC LFO, CC SEQUENCER or PITCH BEND buttons.
- bpm- This global parameter adjusts the internal tempo from 10-240 beats per minute. The internal tempo can be used to drive CC LFO, PITCH BEND, ARP and CC SEQUENCER modes as well as send MIDI CLOCK out to other devices.
- clk- This global parameter adjusts if and where the Phantasmal Force sends MIDI CLOCK. Options include 'off', 'trs', 'usb' and 't&u' (both TRS & USB). MIDI clock operates at 24 PPQN.
- tps- This per-button parameter controls how many TAPS it takes to activate a button. When set to '1', a single tap will activate the button. When set to '2', the first tap will switch the focus of the MAIN SCREEN to the button pressed without activating the button. All subsequent presses of the button will send the corresponding messages from that button.

boot- Sets default **STARTUP CONFIGURATION** that is loaded when the unit is powered on. An operative can select from the 16 **SAVE SLOTS**.

cpy- The **COPY** parameter allows the user to copy the current button across a **ROW**, down a **COLUMN** or to **ALL** buttons. The user can also **COPY** a button to any other button. **GEN** or **GENERATIVE PRESETS** are described at the end of this manual.

VI) STOP [stp]

In this mode, the **COMMAND BUTTON** can send a **MIDI TRANSPORT STOP** message and/or stop any of the internal, tempo-based **BUTTON MODES**.

STOP - MENU SCREEN PARAMETERS

mod- Changes the **BUTTON MODE**.

out- Determines where the **STOP** message is sent. It can be sent to any combination of **MIDI**, **ARP**, **CC LFO**, **CC SEQUENCER** or **PITCH BEND**.

noff- Sends **MIDI ALL NOTES OFF** and **MIDI NOTE OFF** for any sounding notes if enabled.

bpm- This global parameter adjusts the internal tempo from 10-240 beats per minute. The internal tempo can be used to drive **CC LFO**, **PITCH BEND**, **ARP** and **CC SEQUENCER** modes as well as send **MIDI CLOCK** out to other devices.

clk- This global parameter adjusts if and where the Phantasmal Force sends **MIDI CLOCK**. Options include 'off', 'trs', 'usb' and 't&u' (both **TRS** & **USB**). **MIDI clock** operates at 24 **PPQN**.

tps- This per-button parameter controls how many TAPS it takes to activate a button. When set to '1', a single tap will activate the button. When set to '2', the first tap will switch the focus of the MAIN SCREEN to the button pressed without activating the button. All subsequent presses of the button will send the corresponding messages from that button.

boot- Sets default **STARTUP CONFIGURATION** that is loaded when the unit is powered on. An operative can select from the 16 **SAVE SLOTS**.

cpy- The COPY parameter allows the user to copy the current button across a ROW, down a COLUMN or to ALL buttons. The user can also COPY a button to any other button. GEN or GENERATIVE PRESETS are described at the end of this manual.



VII) PROGRAM CHANGE UP [pc+]

In this mode, the COMMAND BUTTON will send a MIDI PROGRAM CHANGE (PC) message incremented from the current value by one.

While on the MAIN SCREEN, after pressing a COMMAND BUTTON in PROGRAM CHANGE UP mode, the KNOB can be rotated to alter the PC NUMBER (pc#) or change the MIDI CHANNEL (ch#).

PROGRAM CHANGE UP - MENU SCREEN PARAMETERS

- mod- Changes the BUTTON MODE.
- ch#- The MIDI channel (1-16) the PROGRAM CHANGE are sent on.
- knb- Sets the KNOB to control the PC NUMBER (pc#) or MIDI CHANNEL (ch#).
- kRD- The KNOB READ setting determines if the KNOB will JUMP (jmp) to the current value when rotated, or wait for it to CATCH (cat) the stored value to start updating.
- bpm- This global parameter adjusts the internal tempo from 10-240 beats per minute. The internal tempo can be used to drive CC LFO, PITCH BEND, ARP and CC SEQUENCER modes as well as send MIDI CLOCK out to other devices.

- clk- This global parameter adjusts if and where the Phantasmal Force sends MIDI CLOCK. Options include 'off', 'trs', 'usb' and 't&u' (both TRS & USB). MIDI clock operates at 24 PPQN.
- tps- This per-button parameter controls how many TAPS it takes to activate a button. When set to '1', a single tap will activate the button. When set to '2', the first tap will switch the focus of the MAIN SCREEN to the button pressed without activating the button. All subsequent presses of the button will send the corresponding messages from that button.
- boot- Sets default **STARTUP CONFIGURATION** that is loaded when the unit is powered on. An operative can select from the 16 **SAVE SLOTS**.
- cpy- The COPY parameter allows the user to copy the current button across a ROW, down a COLUMN or to ALL buttons. The user can also COPY a button to any other button. GEN or GENERATIVE PRESETS are described at the end of this manual.

VIII) PROGRAM CHANGE DOWN [pc-]

In this mode, the COMMAND BUTTON will send a MIDI PROGRAM CHANGE (PC) message decremented from the current value by one.

While on the MAIN SCREEN, after pressing a COMMAND BUTTON in PROGRAM CHANGE DOWN mode, the KNOB can be rotated to alter the PC NUMBER (pc#) or change the MIDI CHANNEL (ch#).

PROGRAM CHANGE DOWN - MENU SCREEN PARAMETERS

mod- Changes the BUTTON MODE.

ch#- The MIDI channel (1-16) the PROGRAM CHANGE are sent on.

knb- Sets the KNOB to control the PC NUMBER (pc#) or MIDI CHANNEL (ch#).

kRD- The KNOB READ setting determines if the KNOB will JUMP (jmp) to the current value when rotated, or wait for it to CATCH (cat) the stored value to start updating.

bpm- This global parameter adjusts the internal tempo from 10-240 beats per minute. The internal tempo can be used to drive CC LFO, PITCH BEND, ARP and CC SEQUENCER modes as well as send MIDI CLOCK out to other devices.

- clk- This global parameter adjusts if and where the Phantasmal Force sends MIDI CLOCK. Options include 'off', 'trs', 'usb' and 't&u' (both TRS & USB). MIDI clock operates at 24 PPQN.
- tps- This per-button parameter controls how many TAPS it takes to activate a button. When set to '1', a single tap will activate the button. When set to '2', the first tap will switch the focus of the MAIN SCREEN to the button pressed without activating the button. All subsequent presses of the button will send the corresponding messages from that button.
- boot- Sets default **STARTUP CONFIGURATION** that is loaded when the unit is powered on. An operative can select from the 16 **SAVE SLOTS**.
- cpy- The COPY parameter allows the user to copy the current button across a ROW, down a COLUMN or to ALL buttons. The user can also COPY a button to any other button. GEN or GENERATIVE PRESETS are described at the end of this manual.



IX) PROGRAM CHANGE NUMBER [pc#]

In this mode, the COMMAND BUTTON will send MIDI PROGRAM CHANGE values between 0-1 27.

While on the MAIN SCREEN, after pressing a COMMAND BUTTON in PROGRAM CHANGE NUMBER mode, the KNOB can be rotated to alter the PC NUMBER (pc#) or change the MIDI CHANNEL (ch#).

PROGRAM CHANGE # - MENU SCREEN PARAMETERS

- mod- Changes the BUTTON MODE.
- ch#- The MIDI channel (1-16) the PROGRAM CHANGE are sent on.
- pc#- The specific PC number to be sent.
- knb- Sets the KNOB to control the PROGRAM CHANGE # (pc#) or MIDI CHANNEL (ch#).
- kRD- The KNOB READ setting determines if the KNOB will JUMP (jmp) to the current value when rotated, or wait for it to CATCH (cat) the stored value to start updating.
- bpm- This global parameter adjusts the internal tempo from 10-240 beats per minute. The internal tempo can be used to drive CC LFO, PITCH BEND, ARP and CC SEQUENCER modes as well as send MIDI CLOCK out to other devices.
- clk- This global parameter adjusts if and where the Phantasmal Force sends MIDI CLOCK. Options include 'off', 'trs', 'usb' and 't&u' (both TRS & USB). MIDI clock operates at 24 PPQN.

tps- This per-button parameter controls how many TAPS it takes to activate a button. When set to '1', a single tap will activate the button. When set to '2', the first tap will switch the focus of the MAIN SCREEN to the button pressed without activating the button. All subsequent presses of the button will send the corresponding messages from that button.

boot- Sets default **STARTUP CONFIGURATION** that is loaded when the unit is powered on. An operative can select from the 16 **SAVE SLOTS**.

cpy- The COPY parameter allows the user to copy the current button across a ROW, down a COLUMN or to ALL buttons. The user can also COPY a button to any other button. GEN or GENERATIVE PRESETS are described at the end of this manual.





X) TRANSPOSE [tsp]

In this mode, the COMMAND BUTTON will increment or decrement the internal transposition of all NOTE, CHORD and ARP messages by a specified value between +24/-24 steps. The min/max transposition is +/- two octaves.

While on the MAIN SCREEN, after pressing a COMMAND BUTTON in TRANSPOSE mode, the KNOB can be rotated to alter the TRANSPOSE INCREMENT.

TRANSPOSE - MENU SCREEN PARAMETERS

mod- Changes the BUTTON MODE.

inc- Determines the INCREMENT (+/-24 steps) by which the internal note generators are TRANSPOSED.

- kRD- The KNOB READ setting determines if the KNOB will JUMP (jmp) to the current value when rotated, or wait for it to CATCH (cat) the stored value to start updating.
- bpm- This global parameter adjusts the internal tempo from 10-240 beats per minute. The internal tempo can be used to drive CC LFO, PITCH BEND, ARP and CC SEQUENCER modes as well as send MIDI CLOCK out to other devices.
- clk- This global parameter adjusts if and where the Phantasmal Force sends MIDI CLOCK. Options include 'off', 'trs', 'usb' and 't&u' (both TRS & USB). MIDI clock operates at 24 PPQN.
- tps- This per-button parameter controls how many TAPS it takes to activate a button. When set to '1', a single tap will activate the button. When set to '2', the first tap will switch the focus of the MAIN SCREEN to the button pressed without activating the button. All subsequent presses of the button will send the corresponding messages from that button.
- boot- Sets default **STARTUP CONFIGURATION** that is loaded when the unit is powered on. An operative can select from the 16 **SAVE SLOTS**.
- cpy- The COPY parameter allows the user to copy the current button across a ROW, down a COLUMN or to ALL buttons. The user can also COPY a button to any other button. GEN or GENERATIVE PRESETS are described at the end of this manual.

XI) PITCH BEND [ptb]

In this mode, the COMMAND BUTTON will send continuous MIDI PITCH BEND messages via an internal LFO, drawing from a variety of selectable waveforms. The LFO can be latched and looped. The rate of the LFO can be set to subdivisions of the TEMPO or be semi-free-running. DOWN (d), CENTER (c) and UP (u) positions are configurable.

While on the MAIN SCREEN, after pressing a COMMAND BUTTON in PITCH BEND mode, the KNOB can be configured to change the PITCH BEND value (pit), the WAVEFORM of the LFO (wav) or the RATE (rat).



PITCH BEND - MENU SCREEN PARAMETERS

- mod- Changes the BUTTON MODE.
- ch#- The MIDI CHANNEL (1-16) the PC message is sent on.
- d- The "down" or bottom position of the MIDI PITCH BEND parameter.
- c- The "center" or middle position of the MIDI PITCH BEND parameter.

- u- The "up' or top position of the MIDI PITCH BEND parameter
- rtc- The "return to center" parameter (yes or no) determines if the button returns to the 'c' value after the button has been released.
- wav- Selects the WAVEFORM through which the PITCH BEND values travel. WAVEFORMS include saw, triangle, square, sine, random, zag (linear travel between random points) and exponential.
- loop- Determines if a WAVEFORM traversed once, or LOOPED (yes or no) for continuous values.
- osc- Determines if the frequency of the LFO is derived from subdivisions (sub) of the clock source or is semi-free running (inc).
- rt - The RATE at which the PITCH PENDING progresses through the selected WAVEFORM. It is displayed as beats/subdivisions when the 'osc' setting is set to 'sub' and displayed as clock pulses when the 'osc' setting is set to 'inc'.
- snc- Determines if the clock source is INTERNAL or from a USB MIDI host sending a clock signal. When set to 'INT', the Phantasmal Force will follow the internal clock and TEMPO. When set to 'USB', the Phantasmal Force button will respond to incoming MIDI CLOCK, MIDI START and MIDI STOP messages.

- lck- Determines if a tempo-based button will be synced to a LEAD button. When multiple buttons are set to LOCK mode, the first button pressed becomes the LEAD button and is represented by a diamond '♦'. All subsequent buttons pressed that are in LOCK mode will start in step with the LEAD button. If the LEAD button is deactivated, all buttons LOCKED to the LEAD button will be stopped.
- ltc- Determines if a button is LATCHED (yes or no). When a button is LATCHED, it can be toggled on and off with a single button press. This allows your fingers to do other things while the button remains engaged. When used in conjunction with the SYNC > LOCK parameter, 16 buttons can be activated and synced without holding each one of them down. If synced to USB clock, buttons that are LATCHED will start when a MIDI START message is received.
- phz- The PHASE from which the current WAVEFORM starts. It can be rotated from 0-359 degrees.
- knb- Sets the KNOB to control the PITCH BEND (pit), WAVEFORM (wav), or RATE (rat).
- kRD- The KNOB READ setting determines if the KNOB will JUMP (jmp) to the current value when rotated, or wait for it to CATCH (cat) the stored value to start updating.

- bpm- This global parameter adjusts the internal tempo from 10-240 beats per minute. The internal tempo can be used to drive CC LFO, PITCH BEND, ARP and CC SEQUENCER modes as well as send MIDI CLOCK out to other devices.
- clk- This global parameter adjusts if and where the Phantasmal Force sends MIDI CLOCK. Options include 'off', 'trs', 'usb' and 't&u' (both TRS & USB). MIDI clock operates at 24 PPQN.
- tps- This per-button parameter controls how many TAPS it takes to activate a button. When set to '1', a single tap will activate the button. When set to '2', the first tap will switch the focus of the MAIN SCREEN to the button pressed without activating the button. All subsequent presses of the button will send the corresponding messages from that button.
- boot- Sets default **STARTUP CONFIGURATION** that is loaded when the unit is powered on. An operative can select from the 16 **SAVE SLOTS**.
- cpy- The COPY parameter allows the user to copy the current button across a ROW, down a COLUMN or to ALL buttons. The user can also COPY a button to any other button. GEN or GENERATIVE PRESETS are described at the end of this manual.

XII) CC LFO [lfo]

In this mode, the COMMAND BUTTON will send continuous MIDI CC messages via an internal LFO, drawing from a variety of selectable waveforms. The LFO can be latched to send continuous messages. The rate of the LFO can be set to subdivisions of TEMPO or be semi-free-running. The 'min' and 'max' values of the CC LFO can be configured in the MENU SCREEN.

While on the MAIN SCREEN, after pressing a COMMAND BUTTON in CC LFO mode, the KNOB can be configured to change the CC# (cc#), RATE of the LFO (rat) or the WAVEFORM of the LFO (wav).

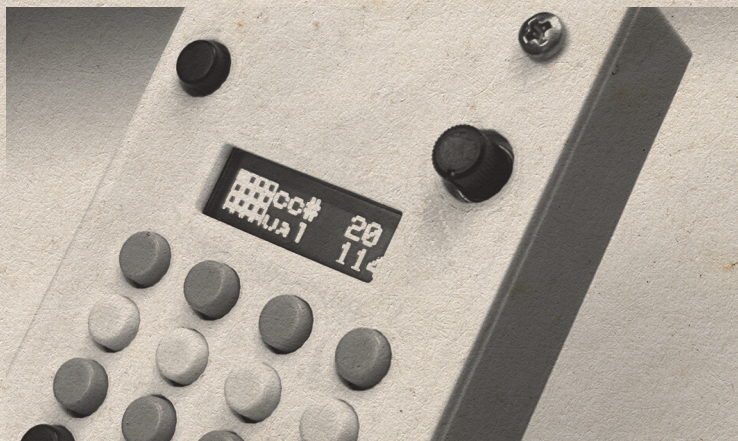
CC LFO - MENU SCREEN PARAMETERS

- mod- Changes the BUTTON MODE.
- cc#- The CC number sent.
- ch#- The MIDI channel (1-16) the CC message is sent on.
- min- The minimum limit of the random number generator.
- max- The maximum limit of the random number generator.
- wav- Selects the WAVEFORM through which the CC values travel. WAVEFORMS include saw, triangle, square, sine, random, zag (linear travel between random points) and exponential.
- osc- Determines if the frequency of the LFO is derived from subdivisions (sub) of the clock source or is semi-free running (inc).

- rt- The RATE at which the CC VALUES progresses through the selected WAVEFORM. It is displayed as beats/subdivisions when the 'osc' setting is set to 'sub' and displayed as clock pulses when the 'osc' setting is set to 'inc'.
- snc- Determines if the clock source is INTERNAL or from a USB MIDI host sending a clock signal. When set to 'INT', the Phantasmal Force will follow the internal clock and TEMPO. When set to 'USB', the Phantasmal Force button will respond to incoming MIDI CLOCK, MIDI START and MIDI STOP messages.
- lck- Determines if a tempo-based button will be synced to a LEAD button. When multiple buttons are set to LOCK mode, the first button pressed becomes the LEAD button and is represented by a diamond '◆'. All subsequent buttons pressed that are in LOCK mode will start in step with the LEAD button. If the LEAD button is deactivated, all buttons LOCKED to the LEAD button will be stopped.
- rtg- Determines if the WAVEFORM will RETRIGGER (yes, no) with each button press.

- rst- Determines what value the LFO will RESET to when the button is released or unlatched. Setting this parameter to 'off' results in no RESET value being sent. Setting this parameter to either 'min' or 'max' will send either corresponding value when the button is released or unlatched.
- ltc- Determines if a button is LATCHED (yes or no). When a button is LATCHED, it can be toggled on and off with a single button press. This allows your fingers to do other things while the button remains engaged. When used in conjunction with the SYNC > LOCK parameter, 16 buttons can be activated and synced without holding each one of them down. If synced to USB clock, buttons that are LATCHED will start when a MIDI START message is received.
- phz- The PHASE from which the current WAVEFORM starts. It can be rotated from 0-359 degrees.
- knb- Sets the KNOB to control the CC# (cc#), RATE (rat), or WAVEFORM (wav).
- kRD- The KNOB READ setting determines if the KNOB will JUMP (jmp) to the current value when rotated, or wait for it to CATCH (cat) the stored value to start updating.
- bpm- This global parameter adjusts the internal tempo from 10-240 beats per minute. The internal tempo can be used to drive CC LFO, PITCH BEND, ARP and CC SEQUENCER modes as well as send MIDI CLOCK out to other devices.

- clk- This global parameter adjusts if and where the Phantasmal Force sends MIDI CLOCK. Options include 'off', 'trs', 'usb' and 't&u' (both TRS & USB). MIDI clock operates at 24 PPQN.
- tps- This per-button parameter controls how many TAPS it takes to activate a button. When set to '1', a single tap will activate the button. When set to '2', the first tap will switch the focus of the MAIN SCREEN to the button pressed without activating the button. All subsequent presses of the button will send the corresponding messages from that button.
- boot- Sets default **STARTUP CONFIGURATION** of all settings when the unit is powered on. An operative can select from the 16 **SAVE SLOTS**.
- cpy- The COPY parameter allows the user to copy the current button across a ROW, down a COLUMN or to ALL buttons. The user can also COPY a button to any other button. GEN or GENERATIVE PRESETS are described at the end of this manual.

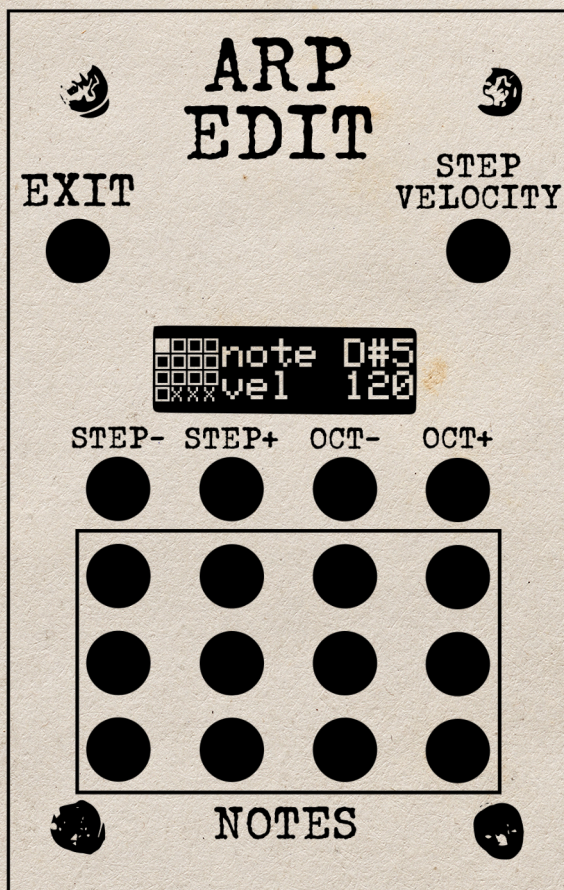


XIII) ARP [arp]

In this mode, the **COMMAND BUTTON** will send a pattern of **MIDI NOTE** messages via the internal 1-16 step sequencer. Each step contains **NOTE** and **VELOCITY** data that can be set on the **EDIT** page for that button. The **NOTE** values can be locked to one of 43 different scales and constrained within a range defined by the **ROOT (rot)** and **SPAN (spn)** parameters. The **VELOCITY** can be set per-step, or be randomized within the "min" and "max" values. Step **PROBABILITY**, **NOTE** and **VELOCITY** randomization can be set between 0-100 percent. The rate of the **SEQUENCER** can be set to subdivisions of the **TEMPO** or be semi-free-running.

While on the **MAIN SCREEN**, after pressing a **COMMAND BUTTON** in **ARP** mode, the **KNOB** can be configured to alter **TRANPOSE** by step (**tps**), **TRANPOSE** by octave (**tpo**), pattern **LENGTH (len)**, **POLYPHONY (ply)**, **RATE (rat)**, step **PROBABILITY (P %)**, step **NOTE** randomization (**N %**), step **VELOCITY** randomization (**V %**), sequence **ROOT (rot)**, **SCALE (scl)**, or **SPAN (spn)**.

When in **ARP EDIT** mode, the functionality of each **COMMAND BUTTON** shifts to accommodate step editing a **SEQUENCE**. The **SEQUENCE** will be shown on the left side of the display. The step being edited is displayed as a partially filled square. If the **SEQUENCE** is less than 16 steps in length, unused steps will be displayed as an "X". **MIDI NOTE** and **VELOCITY** data of the current step are displayed.



Turn the KNOB to adjust the MIDI VELOCITY of the step being edited.

Press the lower 12 buttons to enter a note from the currently selected SCALE.

Use the upper-right two buttons to shift the OCTAVE of the note entry buttons.

Use the upper-left two buttons to move forward and backward through the sequence.

To EXIT ARP EDIT mode, press the SHIFT BUTTON.

ARP - MENU SCREEN PARAMETERS

- mod- Changes the BUTTON MODE.
- ch#- The MIDI channel (1-16) the CC message is sent on.
- edit- Enters EDIT mode described on page 39, enabling the user to create and modify 1-16 step note sequences.
- rnd- Enables RANDOMIZATION for the PROBABILITY (p), NOTE (n), and VELOCITY (v) parameters.
- scale- The currently selected SCALE will be displayed. Note selection from the MENU SCREEN or from a KNOB MODE will be locked to this scale. Scales are listed at the end of this manual.
- rot- The ROOT NOTE from which the SCALE is derived.
- spn- the SPAN, in octaves, above the ROOT NOTE in which a NOTE can be randomized. The available SPAN range is dependent upon the selected ROOT NOTE and cannot be extended beyond the scope of the MIDI spec.
- P %- The PROBABILITY (0-100) that a step will be triggered. This parameter is enabled by the 'rnd' setting 'p'.
- N %- The percent chance (0-100) that the MIDI NOTE of a step will be randomized within the selected ROOT, SCALE and SPAN settings. This parameter is enabled by the 'rnd' setting 'n'.

- V %- The percent chance (0-100) that the MIDI VELOCITY of a step will be randomized within the selected 'min' and 'max' settings. This parameter is enabled by the 'rnd' setting 'v'.
- len- The step LENGTH of the ARP SEQUENCE (1-16).
- poly- The POLYPHONY of the ARP SEQUENCE. The ARP will begin to send MIDI NOTE OFF messages sequentially after the limit is reached.
- osc- Determines if the frequency of the ARP is derived from subdivisions (sub) of the clock source or is semi-free running (inc).
- rt- The RATE at which the ARP progresses through the SEQUENCE. It is displayed as beats/subdivisions when the 'osc' setting is set to 'sub' and displayed as clock pulses when the 'osc' setting is set to 'inc'.
- snc- Determines if the clock source is INTERNAL or from a USB MIDI host sending a clock signal. When set to 'INT', the Phantasmal Force will follow the internal clock and TEMPO. When set to 'USB', the Phantasmal Force button will respond to incoming MIDI CLOCK, MIDI START and MIDI STOP messages.

- lck- Determines if a tempo-based button will be synced to a LEAD button. When multiple buttons are set to LOCK mode, the first button pressed becomes the LEAD button and is represented by a diamond '♦'. All subsequent buttons pressed that are in LOCK mode will start in step with the LEAD button. If the LEAD button is deactivated, all buttons LOCKED to the LEAD button will be stopped.
- ltc- Determines if a button is LATCHED (yes or no). When a button is LATCHED, it can be toggled on and off with a single button press. This allows your fingers to do other things while the button remains engaged. When used in conjunction with the SYNC > LOCK parameter, 16 buttons can be activated and synced without holding each one of them down. If synced to USB clock, buttons that are LATCHED will start when a MIDI START message is received.
- nOFF- Determines if the ARP will send MIDI NOTE OFF (yes or no) messages when the ARP is stopped.
- min- The minimum limit of the random number generator.
- max- The maximum limit of the random number generator.
- knb- Sets the KNOB to control the TRANSPOSE BY STEP (tps), TRANSPOSE BY OCTAVE (tpo), LENGTH (len), POLYPHONY (ply), RATE (rat), STEP PROBABILITY (P %), NOTE RANDOMIZATION (N %), VELOCITY RANDOMIZATION (V %), ROOT NOTE (rot), SCALE (scl) or SPAN (spn).

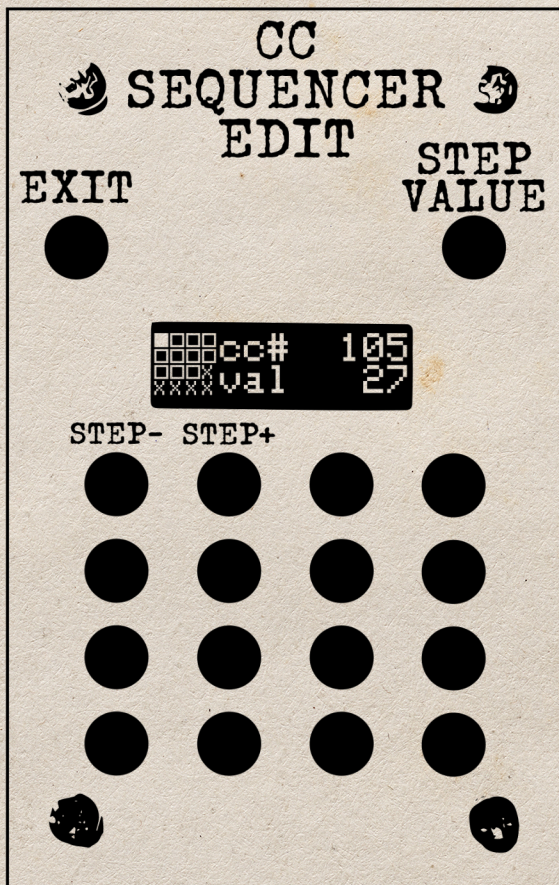
- kRD - The POT VALUE setting determines if the KNOB will JUMP (jmp) to the current value when rotated, or wait for it to CATCH (cat) the stored value to start updating.
- bpm- This global parameter adjusts the internal tempo from 10-240 beats per minute. The internal tempo can be used to drive CC LFO, PITCH BEND, ARP and CC SEQUENCER modes as well as send MIDI CLOCK out to other devices.
- clk- This global parameter adjusts if and where the Phantasmal Force sends MIDI CLOCK. Options include 'off', 'trs', 'usb' and 't&u' (both TRS & USB). MIDI clock operates at 24 PPQN.
- tps- This per-button parameter controls how many TAPS it takes to activate a button. When set to '1', a single tap will activate the button. When set to '2', the first tap will switch the focus of the MAIN SCREEN to the button pressed without activating the button. All subsequent presses of the button will send the corresponding messages from that button.
- boot- Sets default **STARTUP CONFIGURATION** that is loaded when the unit is powered on. An operative can select from the 16 **SAVE SLOTS**.
- cpy- The COPY parameter allows the user to copy the current button across a ROW, down a COLUMN or to ALL buttons. The user can also COPY a button to any other button. GEN or GENERATIVE PRESETS are described at the end of this manual.

XIV) CC SEQUENCER [ccs]

In this mode, the COMMAND BUTTON will send a pattern of MIDI CC messages via the internal 1-16 step SEQUENCER. Each step contains CC VALUE data that can be specified on the EDIT page for that button. The CC VALUES can be set per-step, or be randomized within the 'min' and 'max' values. Step PROBABILITY and CC VALUE randomization can be set between 0-100 percent. The rate of the SEQUENCER can be set to subdivisions of the TEMPO or be semi-free-running.

While on the MAIN SCREEN, after pressing a COMMAND BUTTON in CC SEQUENCER mode, the KNOB caLENGTHn be configured to alter the CC# (cc#), pattern LENGTH (len), RATE (rat), step PROBABILITY (P %), step CC VALUE randomization (V %),

When in CC SEQUENCER EDIT mode, the functionality of each COMMAND BUTTON shifts to accommodate step editing a sequence. The SEQUENCE will be shown on the left side of the display. The step being edited is displayed as a partially filled square. If the SEQUENCER is less than 16 steps in length, unused steps will be displayed as an "X". MIDI CC# and CC VALUE data of the current step are displayed.



Turn the KNOB to adjust the MIDI CC VALUE of the current step.

Use the upper-left two buttons to move forward and backward through the SEQUENCE.

To EXIT CC SEQUENCER EDIT mode, press the SHIFT BUTTON.

CC SEQUENCER - MENU SCREEN PARAMETERS

- mod- Changes the BUTTON MODE.
- cc#- The CC NUMBER sent.
- ch#- The MIDI channel (1-16) the CC message is sent on.
- edit- Enters EDIT mode described on page 45, enabling the user to create and modify 1-16 step CC SEQUENCES.
- rnd- Enables RANDOMIZATION for the PROBABILITY (p), and CC VALUE (v) parameters.
- P %- The PROBABILITY (0-100) that a step will be triggered. This parameter is enabled by the 'rnd' setting 'p'.
- V %- The percent chance (0-100) that the CC VELOCITY of a step will be randomized within the selected 'min' and 'max' settings. This parameter is enabled by the 'rnd' setting 'v'.
- len- The step LENGTH of the CC SEQUENCE (1-16).
- osc- Determines if the frequency of the CC SEQUENCER is derived from subdivisions (sub) of the clock source or is semi-free running (inc).
- rt- The RATE at which the CC SEQUENCER progresses through the SEQUENCE. It is displayed as beats/subdivisions when the 'osc' setting is set to 'sub' and displayed as clock pulses when the 'osc' setting is set to 'inc'.

- snc- Determines if the clock source is INTERNAL or from a USB MIDI host sending a clock signal. When set to 'INT', the Phantasmal Force will follow the internal clock and TEMPO. When set to 'USB', the Phantasmal Force button will respond to incoming MIDI CLOCK, MIDI START and MIDI STOP messages.
- lck- Determines if a tempo-based button will be synced to a LEAD button. When multiple buttons are set to LOCK mode, the first button pressed becomes the LEAD button and is represented by a diamond '◆'. All subsequent buttons pressed that are in LOCK mode will start in step with the LEAD button. If the LEAD button is deactivated, all buttons LOCKED to the LEAD button will be stopped.
- rst- Determines the value (0-127) the SEQUENCER will RESET to when the button is released or unlatched. Rotating the KNOB completely counter-clockwise to the 'off' position results in no RESET value being sent.
- ltc- Determines if a button is LATCHED (yes or no). When a button is LATCHED, it can be toggled on and off with a single button press. This allows your fingers to do other things while the button remains engaged. When used in conjunction with the SYNC > LOCK parameter, 16 buttons can be activated and synced without holding each one of them down. If synced to USB clock, buttons that are LATCHED will start when a MIDI START message is received.

- min- The minimum limit of the random number generator.
- max- The maximum limit of the random number generator.
- knb- Sets the KNOB to control the CC# (cc#), SEQUENCE LENGTH (len), RATE (rat), STEP PROBABILITY (P %), CC VALUE RANDOMIZATION (V %).
- kRD- The KNOB READ setting determines if the KNOB will JUMP (jmp) to the current value when rotated, or wait for it to CATCH (cat) the stored value to start updating.
- bpm- This global parameter adjusts the internal tempo from 10-240 beats per minute. The internal tempo can be used to drive CC LFO, PITCH BEND, ARP and CC SEQUENCER modes as well as send MIDI CLOCK out to other devices.
- clk- This global parameter adjusts if and where the Phantasmal Force sends MIDI CLOCK. Options include 'off', 'trs', 'usb' and 't&u' (both TRS & USB). MIDI clock operates at 24 PPQN.
- tps- This per-button parameter controls how many TAPS it takes to activate a button. When set to '1', a single tap will activate the button. When set to '2', the first tap will switch the focus of the MAIN SCREEN to the button pressed without activating the button. All subsequent presses of the button will send the corresponding messages from that button.

boot- Sets default **STARTUP CONFIGURATION** that is loaded when the unit is powered on. An operative can select from the 16 **SAVE SLOTS**.

cpy- The **COPY** parameter allows the user to copy the current button across a **ROW**, down a **COLUMN** or to **ALL** buttons. The user can also **COPY** a button to any other button. **GEN** or **GENERATIVE PRESETS** are described at the end of this manual.

5. LOADING & SAVING

There are sixteen **SAVE SLOTS** available. To **LOAD** a previously saved configuration, hold the **SHIFT BUTTON** while on the **MAIN SCREEN**, until the phrase '**LOAD? 1-16**' is displayed. Press any **COMMAND BUTTON (1-16)** to **LOAD** from that **SAVE SLOT**.

To **SAVE** a configuration, hold the **SHIFT BUTTON** while on the **MAIN SCREEN** until the unit progresses past the **LOAD** screen, and the phrase '**SAVE? 1-16**' is displayed. Press any **COMMAND BUTTON (1-16)** to **SAVE** the current configuration to that **SAVE SLOT**.

6. PANIC

On occasion, **MIDI NOTES** can get stuck, or hang. If this situation should arise, while on the **MAIN SCREEN**, enter the **SAVE/LOAD** screen by holding down the **SHIFT** button. Rotate the **KNOB** from one side to the other (left-to-right or right-to-left). A **CC 123 - ALL NOTES OFF** message will be sent to **MIDI CHANNELS 1-16**.

7. GENERATIVE PRESETS

GENERATIVE PRESETS exist as an alternative to the more straightforward COPY functions. When selecting the 'GEN' option of the COPY parameter in the MENU SCREEN, a new bank of 16 buttons is created, based on the BUTTON MODE of the currently active button. The following matrix defines the GENERATIVE PRESET resulting from each BUTTON MODE.

CC MOMENTARY

CC#s incremented from source,
starting on button #1

mmt	mmt	mmt	mmt
mmt	mmt	mmt	mmt
mmt	mmt	mmt	mmt
mmt	mmt	mmt	mmt

CC TOGGLE

CC#s incremented from source,
starting on button #1

tgl	tgl	tgl	tgl
tgl	tgl	tgl	tgl
tgl	tgl	tgl	tgl
tgl	tgl	tgl	tgl

NOTE

NOTES incremented from
source ROOT and SCALE,
starting on button #1

not	not	not	not
not	not	not	not
not	not	not	not
not	not	not	not

CHORD

Random chords generated from
source ROOT.

chd	chd	chd	chd
chd	chd	chd	chd
chd	chd	chd	chd
chd	chd	chd	chd

PLAY

NOTES in a random SCALE
incremented from C3, starting
on button #4

tsp (-12)	tsp (+12)	stp	ply
not	not	not	not
not	not	not	not
not	not	not	not

STOP

NOTES in a random SCALE
incremented from C3, starting
on button #4

tsp (-1)	tsp (+1)	stp	ply
not	not	not	not
not	not	not	not
not	not	not	not

PROGRAM CHANGE +
 NOTES in a random SCALE
 incremented from C3, starting
 on button #4

pc-	pc+	stp	ply
not	not	not	not
not	not	not	not
not	not	not	not

PROGRAM CHANGE -
 NOTES in a random SCALE
 incremented from C3, starting
 on button #4

pc-	pc+	tsp (-1)	tsp (+1)
not	not	not	not
not	not	not	not
not	not	not	not

PROGRAM CHANGE #
 PC#s incremented from source,
 starting on button #1

pc#	pc#	pc#	pc#
pc#	pc#	pc#	pc#
pc#	pc#	pc#	pc#
pc#	pc#	pc#	pc#

TRANSPOSE
 NOTES in a random SCALE
 incremented from C3, starting
 on button #4

tsp (-12)	tsp (+12)	tsp (-1)	tsp (+1)
not	not	not	not
not	not	not	not
not	not	not	not

PITCH BEND
 Random CHORDS generated
 from C3. NOTES from a random
 SCALE incremented from C3.

ptb (sqr)	ptb (exp)	ptb (zag)	ptb (rnd)
chd	chd	chd	chd
not	not	not	not
not	not	not	not

CC LFO
 CC#s incremented from source,
 starting on button #1

lfo	lfo	lfo	lfo
lfo	lfo	lfo	lfo
lfo	lfo	lfo	lfo
lfo	lfo	lfo	lfo

ARP
 Random NOTE variations of
 the source.

arp	arp	arp	arp
arp	arp	arp	arp
arp	arp	arp	arp
arp	arp	arp	arp

CC SEQUENCER
 CC#s incremented from source,
 starting on button #1

ccs	ccs	ccs	ccs
ccs	ccs	ccs	ccs
ccs	ccs	ccs	ccs
ccs	ccs	ccs	ccs

BUTTON MODE	KNOB MODE	RANGE
CC MOMENTARY [mmt]	val	CC VALUE (min)-(max) or random
-	cc#	CC # 0-127
-	sol (while button pressed)	CC VALUE (min)-(max) or random
CC TOGGLE [tgt]	val	CC VALUE (min)-(max) or random
-	cc#	CC # 0-127
-	sol (while button pressed)	CC VALUE (min)-(max) or random
NOTE [not]	not	NOTE ROOT NOTE - TOP
-	arp	NOTE ROOT NOTE - TOP
-	vel	VELOCITY (min)-(max) or random
CHORD [crd]	rot	ROOT NOTE C0 - G9
-	vel	CC VALUE (min)-(max) or random
-	inv	INVERSION (random inversions)
-	chd	CHORD (16 preset chords)
PLAY [ply]	N/A	N/A
STOP [stp]	N/A	N/A
PROGRAM CHANGE + [pc+]	PG#	QUEUE NEXT PROGRAM CHANGE
-	CH#	MIDI CHANNEL 1-16
PROGRAM CHANGE - [pc-]	PG#	QUEUE NEXT PROGRAM CHANGE
-	CH#	MIDI CHANNEL 1-16
PROGRAM CHANGE # [pc#]	PG#	QUEUE NEXT PROGRAM CHANGE
-	CH#	MIDI CHANNEL 1-16
TRANSPOSE [tsp]	N/A	INCREMENT +/- 24 steps

BUTTON MODE	KNOB MODE	RANGE
PITCH BEND [ptb]	pit	"pitch down" to "pitch up"
-	wav	LFO WAVEFORM saw,tri,sqr,sin,rnd,zag,exp
-	rat	LFO RATE subdivision or period
CC LFO [lfo]	cc#	CC # 0-127
-	rat	LFO RATE subdivision or period
-	wav	LFO WAVEFORM saw,tri,sqr,sin,rnd,zag,exp
ARP [arp]	tpS	TRANPOSE - STEP +/- 24 semi-tones
-	tpO	TRANPOSE - OCTAVE +/- 2 octaves
-	len	ARP LENGTH 1-16 steps
-	ply	POLYPHONY 1-16 voices
-	rat	ARP RATE subdivision or period
-	P %	STEP PROBABILITY 0-100%
-	N %	NOTE RANDOMIZATION 0-100%
-	V %	VELOCITY RANDOMIZATION 0-100%
-	rot	ARP ROOT NOTE 12 tones
-	scl	ARP SCALE 43 scales
-	spn	ARP SPAN 0-8 octaves above ARP ROOT
CC SEQUENCER [ccs]	cc#	CC # 0-127
-	len	CC SEQUENCE LENGTH 1-16 steps
-	rat	CC SEQUENCE RATE subdivision or period
-	P %	STEP PROBABILITY 0-100%
-	V %	VALUE RANDOMIZATION 0-100%

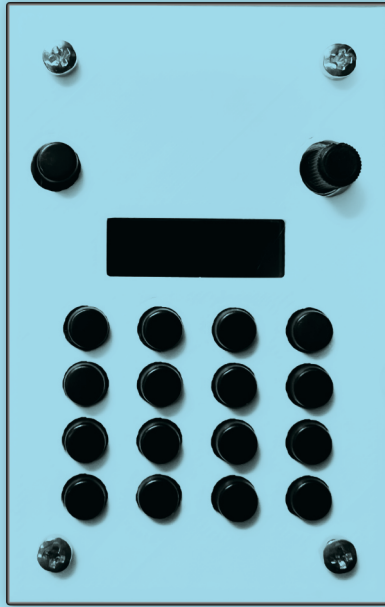
9. ASSISTANCE

Operatives in need of assistance can contact info@distropolisgoods.com for support.

Monitor www.distropolisgoods.com for potential software patches and updates.



mon	Root Note
Maj	Major
Nmn	Natural minor
Hmn	Harmonic Minor
Mmn	Melodic Minor
dor	Dorian
phr	Phrygian
lyd	Lydian
mix	Mixolydian
loc	Locrian
whT	Whole Tone
Mpt	Major Pentatonic
mpt	Minor Pentatonic
Mbb	Major Bebop
alt	Altered
Dbb	Dorian Bebop
Mbb	Mixolydian Bebop
Mbl	Major Blues
mbl	Minor Blues
Dwh	Diminished Whole Half
Dhw	Diminished Half Whole
NeM	Neapolitan Major
HuM	Hungarian Major
HaM	Harmonic Major
Hum	Hungarian Minor
Lym	Lydian Minor
Nem	Neapolitan Minor
LoM	Locrian Major
LWt	Leading Whole Tone
óts	Six Tone Symmetrical
Bal	Balinese
Per	Persian
eip	East Indian Purvi
ori	Oriental
DbH	Double Harmonic
Eni	Enigmatic
Ovr	Overtone
8ts	Eight Tone Spanish
Pro	Prometheus
GRS	Gagaku Ritsu Sen Pou
ISP	In Sen Pou
Oki	Okinawa
Chr	Chromatic



Phantasmal Force - Micro MIDI Controller

- 16 programmable tactile switches
- 1 programmable knob
- OLED display
- USB & TRS-A MIDI out
- 14 Button Modes
- Programmable on the device
- 16 save slots
- Custom startup configuration
- RGB LED status indicator

Arman Bohn,
Distropolis Goods © 2024