

# **RETROAKTIV MPG-7 Polyphonic Synthesizer Programmer User Manual**

Home » RETROAKTIV » RETROAKTIV MPG-7 Polyphonic Synthesizer Programmer User Manual







**RETROAKTIV MPG-7 USER'S MANUAL** 

#### **Contents**

- 1 MPG-7 Polyphonic Synthesizer
- **Programmer**
- **2 FRONT PANEL & JACKS**
- **3 MENUS AND NAVIGATION**
- **4 MIDI MODES & CONFIGURATION**
- **5 MIDI SETTINGS MENUS**
- **6 CC TO SYSEX TRANSLATE**
- **7 EDITING THE SYNTH**
- **8 MEMORY AND STORAGE**
- 9 WEIGHT AND DIMENSIONS
- 10 Documents / Resources
  - 10.1 References

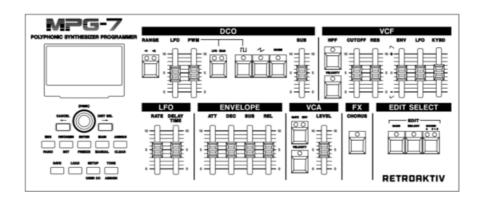
# **MPG-7 Polyphonic Synthesizer Programmer**

- MPG-7 allows full integration of MKS-7 and Juno106 synthesizers into modern DAW setups. The controller acts
  as a brand new operating system for the synth, giving users full control over automation, object storage,
  layering, and more.
- Adds much needed patch storage to the MKS-7.
   Store individual BASS, MELODY, and CHORD tones, or save all three in a single SETUP. MPG-7 has onboard memory, allowing banks of MKS-7 or Juno106 objects to be imported and exported.
- Multi-unit Poly Mode allows users who own two of MKS-7/J106 synths (And it can be any synth, not just a JX!) to daisy chain them and double the polyphony. This will turn 2 MKS-7/J106s into a 12-voice polyphonic synth!
- Any parameter on the synth can now be controlled using any CC, an expression pedal, or aftertouch. The
  powerful ASSIGN modulation matrix found on all Retroaktiv controllers lets users create custom complex
  modulation settings in seconds flat.
  - Want the filter to sweep from 50% to 60% while the resonance sweeps from 40% to 0? MPG-7 can do it!
- Create an INIT tone at any time from the front panel. No more wasted time "zeroing" all of the panel parameters. One button press and a new tone is initialized and ready for you to create!
- MPG-7 can be powered with a 9V DC adapter or a USB cable.
- MPG-7 has both USB MIDI and DIN MIDI for easy integration into any MIDI setup. USB MIDI makes DAW integration even easier.
- Update the MPG-7 software by simply dragging a file onto the device using your computer.
- All MPG-7 objects (SETUP, TONE, ASSIGN, and USER CC MAP) can be imported and exported for easy backup and archiving of sounds.
- MPG-7 has a full featured patch generator, which can generate gorgeous patches of many different types.

  Users can choose from basses, pads, polysynths, strings, brass, bells, pianos, and noise/fx. It can also create variations on a patch that you like.
- Create and store your own User CC maps us- ing the MPG-7 control surface, to control other synths and plugins.
- All patch and tone parameters are immediately accessible from the front panel, without any menu diving.
- Control combinations of any 2 MKS-7 or Juno106 units independently. The states of both synths can be stored as a SETUP, allowing users to create large multitimbral textures.
- Recessed compartment for MIDI, USB, and power jacks allows MPG-7 to be rack mounted without requiring additional rack space above it. Optional 3U rack ears are available from Retroaktiv.

- Memory capacity can be expanded using option MXB-1 memory cards from Retroaktiv.
- OLED screen displays critical information such as waveforms and envelope shapes, and allows users to easily navigate the menu system
- Available in white or black enclosures (To match the two color variants of MKS-7).

#### **FRONT PANEL & JACKS**



#### **OLED DISPLAY**

OLED display presents information about the operation being performed. This can display the current parameter value being edited, or a menu.

## **ENCODER & SHIFT BUTTON**

The encoder is the black knob located directly below the OLED screen. This can be turned to edit parameters on the screen. Pressing the encoder in [SHIFT] will act as a shift function. For example, holding this while moving a slider will display that slider parameter's current value without editing it. (PEEK mode) Buttons that have a second function will be labeled in blue underneath the button. For example, pressing [SHIFT] + [MIDI] button will send a "MIDI Panic" (All Notes Off) message.

# **USB JACK & POWER**

MPG-7 has a power connector for a 9VDC barrel plug (Center positive, sleeve ground) as well as a USB C jack. MPG-7 can be powered from either the USB bus or the wall adapter. The USB jack is also used for USB MIDI and updating the firmware on the MPG-7.

## **NAVIGATION**

The menu navigation buttons are used to select editor pages and navigate the cursor. The [LEFT] and [RIGHT] buttons are used to move the cursor.

The [ENTER] button is used to execute a variety of operations within a menu. [MIDI], [PATCHGEN], [MAIN], and [ASSIGN] buttons are used to navigate to their respective menus. Special functions (marked in blue) are accessed by pressing a button while holding [SHIFT].

# MIDI JACKS & USB MIDI

MPG-7 has 2 MIDI ports: Port 1 is a 5-pin DIN port, and USB is a USB C port. MIDI data can be sent or recieved by one or both of these ports.

## **EDIT SELECT**

[BASS], [MELODY], and [CHORD] buttons are used to select which layer of the multi-timbral MKS-7 is being edited. These are not used if editing a Juno 106.

#### **MEMORY**

[STORE] and [LOAD] buttons are used for object recall and storage. [SETUP] (USER CC) and [TONE] (ASSIGN) are used to select the object type.

#### **POWERING THE MPG-7**

MPG-7 can be powered by USB bus or by a 6VDC - 9VDC,  $2.1mm \times 5.5mm$ , center-pin positive, wall adapter. The USB port will still receive and transmit data when the unit is being powered by a wall adapter.

⚠ Warning! Plugging in an adapter with the wrong polarity can damage the MPG-7. A DC wall adapter should show the ♠ symbol on the adapter, indicating that the center pin is the positive terminal. Retroaktiv sells wall adapters on thewebsite.

If USB and wall plug are both connected at the same time, power will be drawn from the wall plug, not the USB

On power up, a splash screen will be shown on the OLED display. The current version of firmware will be displayed at the bottom of the screen. Check the MPG-7 listing on the Retroaktiv website for the latest



MPG-7 splash screen. Firmware version displayed beneath logo.

#### **UPDATING THE MPG-7 FIRMWARE**

To update the firmware (Firmware is the software that runs on the MPG-7's CPU), follow the steps below:

- 1. Connect and Power On: Connect the MPG-7 to your computer using the USB port and power on the controller
- 2. Access the System Update Menu: Once the MPG-7 has booted, press the [ASSIGN] and [CHORD] buttons simultaneously to open the System Update
- 3. Initiate Update Mode: Press [ENTER] to proceed. The MPG-7 will now appear as a USB device on your computer.
- 4. Download and Transfer Firmware: Visit the Retroaktiv website, download the latest firmware, and drag the file onto the MPG-7.
- 5. Complete the Update: Once the update is applied, the MPG-7 will reboot automatically, and the new firmware version will be displayed.

# **MENUS AND NAVIGATION**

The MPG-7 will boot up and display the MAIN menu screen.



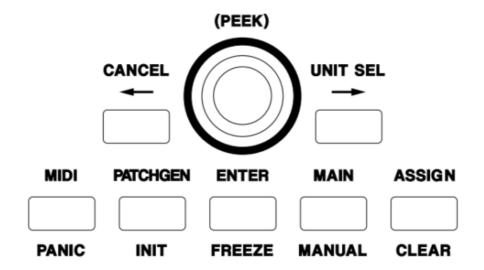
MPG-7 MAIN Screen

The MAIN screen displays the following information:

- 1. Current active parameter name and value
- 2. Unit: The box in the lower left corner of the screen displays the unit currently being controlled by the MPG.
- 3. Synth Type The center box on the bottom of the MAIN screen shows the current synth type being edited (MKS-7, Juno 106 or User CC)
- 4. MIDI Input Monitor Displays channel of incoming MIDI activity received at MPG-7 MIDI IN port.

To return to the MAIN screen at any time, press the [MAIN] button in the navigation console. Pressing MAIN repeatedly will cycle between editing the Unit1, Unit2, or BOTH synths. (If Unit 2 is enabled) SHIFT + RIGHT will also toggle the unit select.

The encoder and arrow buttons are used to navigate menus and change settings. The SHIFT function refers to the switch on the encoder knob. To engage the SHIFT function (used for double-button combos such as SHIFT+MIDI button = MIDI Panic), press and hold the encoder knob. To increment a value with the encoder, simply turn the encoder knob. To increment or decrement by 8, hold the SHIFT button in while turning the encoder.



Use the [MIDI], [PATCHGEN], [ASSIGN], and [MAIN] buttons to navigate to the different menu pages. To move the cursor on a menu page, use the [LEFT] and [RIGHT] buttons. To change the value of a highlighted menu setting, use the [ENCODER] dial.

# **MIDI MODES & CONFIGURATION**

- 1. Connections How to connect MPG-7 using MIDI
- 2. MIDI Settings Configuring MPG-7 and the synth
- 3. Global Settings Multi-unit mode, Program Changes, Chord Mode

# **CONNECTIONS**

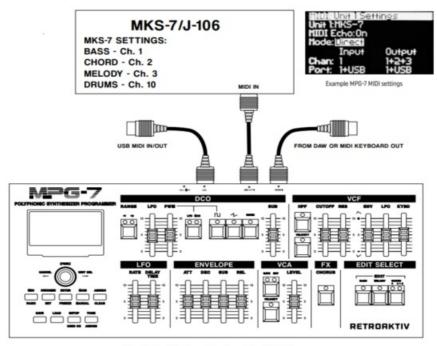


Figure 1: Example MIDI connections for controlling MKS-7/3106

# **MIDI SETTINGS MENUS**

The MPG-7 MIDI communication settings must be configured for the controller to edit the synth. To navigate to the MIDI Settings page, press [MIDI] button once. The settings menu will be displayed on the screen.



Basic MIDI menu settings on the PG-2K

# **MIDI SETTINGS PAGES**

Unit 1 Settings: Settings for Unit 1 synthesizer Unit 2 Settings: Settings for Unit 2 synthesizer

Global Settings: Poly-chain mode, chord mode, and program change settings You can cycle through these pages by pressing the [MIDI] button repeatedly.

# **UNIT 1 AND 2**

Sets the model of synth being edited. Choose between MKS-7, Juno-106, or User CC Map for each unit.

# **INPUT PORT**

Sets the port for receiving incoming MIDI data. Options are USB MIDI, PORT 1 (The 5-pin DIN MIDI IN), or both ports. If MIDI Echo is enabled, the received data will be sent to the connected synth.

# **INPUT CHANNELS**

Determines the MIDI channel that the MPG-7 will listen to for MIDI note and controller data. If using MKS-7, you will see 3 channels displayed. This is because the MKS-7 has 3 layers (Bass, Chord, Melody), each of which must be on its own MIDI channel. For example, if set to 1 (2) (3), the MPG-7 will receive note and controller data on

channels 1, 2, and 3, and will pass those messages to the MIDI OUT on the corresponding MIDI OUT channels. Drums on the MKS-7 should be set to channel 10.

#### **OUTPUT PORT**

Sets the port for outgoing MIDI messages from MPG-7. Choose between USB MIDI, 5-Pin MIDI OUT or both.

#### **OUTPUT CHANNELS**

Sets the MIDI channels the MPG-7 will use to send data to the synth. The connected synth should be set to receive on these channels. Valid note and controller data received on the IN channels will be transmitted to the synth on the OUT channels.

#### **MIDI ECHO**

Enable MIDI ECHO to pass note and controller data received on MIDI IN channels to the synth on the MIDI OUT channels. This is a "MIDI pass-thru" function.

There are two echo modes that are available when using an MKS-7 multitimbral synth. These modes determine how the MPG-7 passes incoming note data to the synth.

AUTO MODE: In auto mode, the MPG-7 listens for valid note data on the "base channel" (If set to receive on channels 1 (2) (3), then the base channel would be 1). Notes received on the base channel will be passed to the synth based on which layer is currently being edited on the MPG-7 (BASS, MELODY, or CHORD). This allows the user to hear only the layer being edited without having to send note data in on 3 separate channels. Only one layer can be played at a time using this mode.

MULTITIMBRAL MODE: In multitimbral mode the MPG-7 will pass incoming note data to the synth on any of the 3 input channels. If MIDI IN channels are set to 1 (2) (3), incoming notes on channel 1 would play the BASS, channel 2 would play CHORD, and channel 3 would play MELODY. Multitimbral mode allows all 4 layers of MKS-7 to be played at once.

#### **CC TRANSLATE**

This setting toggles CC Translate Mode. When the MPG-7 is in CC translate mode, moving the sliders willtransmit their corresponding CCs. These can be recorded by a DAW or sequencer and played back to MPG7 with CC Translate enabled, and the MPG-7 will

translate them into system exclusive messages and pass them on to the synth. Use this feature to automate parameter movements.



CC Translate Enabled

# **CC TO SYSEX TRANSLATE**

The chart below shows the MIDI CC implementation of the MKS-7/Juno-106 parameters. CC translate must be enabled for the parameters to respond to the MIDI CCs.

LFO Rate: 12 LFO Delay: 13 LFO -> DCO: 14 DCO PWM: 15 VCF cutoff: 16 Resonance: 17 ENV -> VCF: 18
ENV Polarity: 19
LFO -> VCF: 20
VCF Key Track: 21
VCA level: 22
Attack: 23
Decay: 24
Sustain: 25
Release: 26
SubOsc Level: 27
Velocity -> VCF: 28

Chorus: 30

Sawtooth Wave : 31 Square/PWM Wave : 70

Velocity -> VCA: 29

Octave: 71 Noise: 72

Highpass Filter: 73 VCA Mode: 74 PWM Mode: 75

#### **GLOBAL SETTINGS PAGE**

This menu contains special functions that affect all layers of the MPG-7. This is where Multi-unit Poly Mode (Polychain mode), Chord Mode, and program change settings are toggled.



The Global Settings Menu

# **MULTI-UNIT POLY MODE**

MPG-7 has the unique ability to turn 2 of any synth (Including synths that aren't Juno-106 or MKS-7) into a single synth with double the polyphony. This can be used to turn 2 MKS-7/J-106 synths into a single 12-voice synth. When MUPM is enabled, the MPG-7 will only listen for notes on the Unit 1 "base channel". MPG-7 will interleave these messages and assign them to the two synths. To use MUPM, we recommend using the settings shown in Figure 2 below.

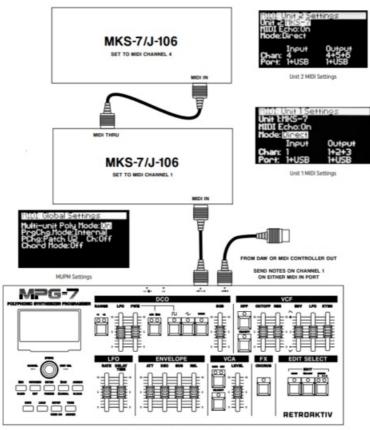


Figure 2. Multi-Unit Poly Mode Connection Diagram

#### PROGRAM CHANGE MODE

This setting determines how MPG-7 will handle MIDI program change messages. MIDI program changes can be blocked, echoed, or can be used to select objects in MPG-7's internal on-board memory.

BLOCK - When this setting is selected, all MIDI program changes received will be blocked.

ECHO – With echo enabled, any received program change message will be passed thru the MPG-7 to the synth. This setting should be used when you want to select a program on the synth using program change messages. INTERNAL – When internal is selected, received program change messages are used to select and recall objects stored in MPG-7 memory.

When INTERNAL is selected, each object type (TONE, SETUP, ASSIGN, USER CC) can be programmed to receive program changes on a specific channel.

## **CHORD MODE**

On the MPG-7, Chord Mode allows you to play chords with a single keypress, and it works by "memorizing" a chord shape that you define and then applying it to every subsequent note you play. Chord mode can be applied to one or both synth layers.

To input a chord, play the individual notes of the chord you want to memorize whilde holding the [SHIFT] button. For example, you might press the notes C, E, and G to form a C major chord. To erase the current chord, tap the [SHIFT] button.

## **EDITING THE SYNTH**

When the MIDI settings are configured, the synth can be edited from the front panel of the MPG-7. If editing a Juno 106, the EDIT SELECT buttons on the front panel will not be used. If editing an MKS-7 synthesizer, the EDIT SELECT buttons are used to indicate the current layer being edited.

#### WHOLE MODE

MKS-7 has the ability to treat the MELODY and CHORD sections as a single 6-voice synthesizer. This is called WHOLE MODE (or 4+2 as indicated on the CHORD button). Use the CHORD button to toggle between normal mode and WHOLE MODE.

**Note:** The CHORD section of MKS-7 does not include NOISE. When in WHOLE mode, the NOISE function is not used.

#### **BASS MODE**

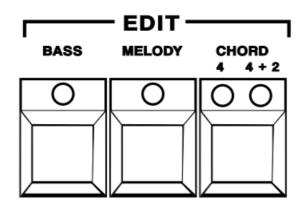
The BASS section of MKS-7 is velocity sensitive, and this can not normally be toggled. MPG-7 has an internal workaround that allows you to use the VCA VELOCITY button to enable velocity sensitivity, or if disable, will take any incoming note and automatically transmit it with a velocity of 127. This gives the user the option of disabling the velocity sensitivity if needed.

BASS has limited parameters available. There is no LFO or CHORUS, and the VCA can only be controlled with the envelope. HPF and VCF VELOCITY are unavailable, as is NOISE and RANGE. The BASS waveform can be either SAW or PULSE, but not both at once. PWM is adjustable, but changes to this parameter will not be heard until the note is keyed again.

#### **UNIT SELECT**

If using more than one synth, switch between editing UNIT 1 and UNIT 2 by using [SHIFT] + [RIGHT] buttons. The currently edited unit will be displayed in the lower left of the OLED screen.





**EDIT SELECT buttons** 

#### **MANUAL MODE**

To transmit the current position of all buttons and sliders, press [SHIFT] + [MAIN] buttons.

#### **INIT PATCH**

To generate an "init patch", press [SHIFT] + [PATCHGEN] buttons. This will transmit the default tone on the currently selected synth layer.

#### **FREEZE**

[SHIFT] + [ENTER] to enable. When enabled, any parameter changes on the panel will be queued (not sent) until [ENTER] button is pressed. This allows users to send multiple parameter changes to the synth all at once.

# **MIDI PANIC (ALL NOTES OFF)**

In the event of a hung note or MIDI data issue, press [SHIFT] + [MIDI] buttons to send an ALL NOTES OFF message on all active channels.

#### **PEEK MODE**

To view the settings of a parameter without changing that parameter, hold [SHIFT] while moving the associated parameter. The value of that parameter will be displayed on the screen.

#### **MEMORY AND STORAGE**

MPG-7 has onboard storage, allowing you to save your presets and setups. This is a much needed feature for the MKS-7, which doesn't allow presets to be saved at all. MPG-7 comes with 128 KB of storage space, expandable to 256 KB with the optional plug in memory card.

MPG-7 Storage (Without memory expansion):

- TONE 10 banks of 64
- SETUP 8 banks 64
- ASSIGN 10 bank of 64
- USER CC MAP 10 banks of 64

MPG-7 Storage (With memory expansion):

- TONE 20 banks of 64
- SETUP 16 banks 64
- ASSIGN 20 banks of 64
- USER CC MAP 20 banks of 64

#### **OBJECT TYPES**

MPG-7 can store four types of objects: TONE, SETUP, ASSIGN, and USER CC MAP.

TONE: A single "layer" of the MPG-7 control surface.

ASSIGN: The settings of all assignable MIDI routings (ASSIGNs).

SETUP: The state of all TONES, USER CC MAPS, and ASSIGNS on the MPG-7. (Including BASS, MELODY,

CHORD)

USER CC MAP: User created CC map for using MPG-7 to control other gear.

#### **TONE**

MKS-7/J-106 TONE

#### **SETUP**

UNIT 1 BASS TONE	UNIT 1 MELODY TON E	UNIT 1 CHORD TONE	UNIT 2 BASS TONE	UNIT 2 MELC E
ASSIGN SETTINGS			ASSIGN SETTINGS	
USER CC (IF USED)		USER CC (IF USED)		

#### **ASSIGN**

AFTERTOUCH	CC ASSIGN 1	CC ASSIGN 2	C(
------------	-------------	-------------	----

NOTES FOR MKS-7 NOTES FOR MKS-7 MKS-7 is a multitimbral synth with 7 "voices". There are 3 "sections" on the MKS-7: BASS. CHORD, and MELODY. Each of these sections is what we are calling a TONE. If you want to store the state of all 3 sections, store as a SETUP. A SETUP is a snapshot of all layers. If you want to save a sound from a single layer, that should be stored as a TONE. If using an MKS-7 and a Juno-106, we recommend storing TONE objects for each in their own bank. This is so there will always be 100% translation, since there are a few slight differences between J-106 and MKS-7 tones.

# STORE AND LOAD OPERATIONS

To view the objects stored on MPG-7, use the [SETUP] and [TONE] buttons. Repeatedly pressing will cycle through the banks of that object type. To access USER CC objects, press [SHIFT] + [SETUP]. [SHIFT] + [ASSIGN] navigates to ASSIGN objects.

The [STORE] and [LOAD] buttons will toggle storing and loading. (Indicated at top left of screen) Press [ENTER] to execute the STORE or LOAD operation.

SAVE	LOAD	SETUP	TONE
		USER CC	<b>ASSIGN</b>

# **Object Storage Buttons**

# Store an Object:

- Navigate to the memory location the object will be stored in
- Press [ENTER]. You will be prompted to name the object.
- Press [ENTER] again to save, or [SHIFT] + [RIGHT] to cancel.

# Load an Object:

- Select the destination UNIT and LAYER (If loading a TONE)
- Navigate to the object you want to load.
- Press [LOAD], then press [ENTER].

# Delete an Object:

- · Navigate to the object to be deleted
- Press [SHIFT] + [LEFT].
- Press [ENTER] to delete, or [SHIFT] + [RIGHT] to cancel.

#### Delete a Bank:

- · Navigate to the bank to be deleted
- Press [SHIFT] + [ASSIGN].
- Press [ENTER] to delete, or [SHIFT] + [RIGHT] to cancel.

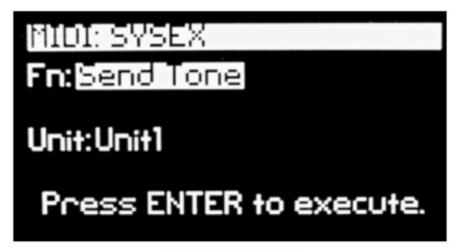
# **IMPORTING AND EXPORTING OBJECTS**

One major issue with the J-106 and MKS-7 is that they do not support MIDI bulk dumps, which makes loading a new bank of sounds tedious. MPG-7 allows users to import and export their banks using sysex bulk dumps, making it simple to transfer sounds and back up their data.

The following operations are available in the MIDI: Sysex Utility menu:

- Import and export individual objects
- Import and export banks of objects
- import and export full backup of MPG-7 memory contents

To navigate to the Sysex Utility menu, press [MIDI] button four times. Select the operation to be executed, then hit [ENTER]. Note that all object banks will be in Retroaktiv format, which means they can't be uploaded directly to a J-106/MKS-7. These files only ork with MPG-7.



MIDI: Sysex Utility menu

#### **ASSIGN: MIDI MOD MATRIX**

The ASSIGN function on the MPG-7 a powerful MIDI modulation matrix, which allows users to create complex modulation of multiple synth parameters using one control source, such as aftertouch, mod wheel, or any CC. Each of the 4 assignable control sources can control up to 3 simultaneous parameters independently on any Each of the 4 assignable control sources can control up to 3 simultaneous parameters independently on any layer of either synth plugged into the MPG-7.

layer of either synth plugged into the MPG-7. This allows us to do something like sweep the filter cutoff up on the one layer, while sweeping the cutoff down on another layer. Using the assigns and combinations of assigns, a sound can be animated in ways not possible with other controllers.

To access the ASSIGN menu, press the ASSIGN button once. The ASSIGN menu will be displayed on the OLED. This menu gives us access to all of the parameters contained in the assignable control matrix.





# **ASSIGN SOURCES**

There are 4 different ASSIGNs (Control sources):

- Aftertouch
- CC Source 1 (Any CC# 0-127)
- CC Source 2 (Any CC# 0-127)
- CC Source 3 (Any CC# 0-127)

The Aftertouch ASSIGN responds to incoming aftertouch messages on the UNIT 1 and UNIT 2 MIDI IN channels. CC Source 1-3 are controlled by incoming CC messages (CC#0 – CC#127) on the UNIT 1 and 2 MIDI IN channels.

These ASSIGNs are a great way to create automated "lanes" using a DAW.

#### **DESTINATIONS AND ROUTING**

Each of the four ASSIGN sources has 3 available destinations (parameters on the synth) it can control. Each parameter being controlled by an assign has its own range, polarity, UNIT destination (Unit 1, 2, or BOTH), and layer destination (BASS/MELODY/CHORD)

- Dest (1-3) Dest (1-3): Selects which layer of the assign is being edited
- PARAM PARAM: Selects which parameter will be affected.
- MINMIN: sets the minimum value of the current assign destination.
- MAXMAX: sets the maximum value of the current assign destination.
- UNITUNIT: Selects which units the current destination will be routed to.
- INVERT/NORMAL: INVERT/NORMAL: Sets the direction (up or down) this parameter value will move.

For example, if we use CC #1 (Mod Wheel) as a SOURCE, then select Filter Cutoff as Destination 1, moving the mod wheel will affect the Filter Cutoff parameter. To set the range of the filter control, we select the MIN and MAX values. If MIN = 50 and MAX = 75, then moving the mod wheel from bottom to top of its travel, will sweep the Filter Cutoff between 50 and 75. If we want the response to be inverted, so moving the mod wheel up sweeps the Filter Cutoff down from 75 to 50, then INVERT can be selected.

All of the 3 destinations within each ASSIGN can be routed in this way to any parameters on the synth. This allows the user to create complex real-time modulations, which would normally require many hands or many overdubs to accomplish, in a single movement.

To deactivate an ASSIGN layer, simply select NONE as the destination in a layer, and the routing will be deactivated for that layer.

There are a few guidelines to follow to maximize the MIDI performance of the MPG-7 when using assigns.

An ASSIGN has the potential to generate large amounts of MIDI data. If you're using an ASSIGN with 3 layers, which is routed to BOTH units, this will generate 6 MIDI sysex messages with each movement of the ASSIGN source. This amount of midi data can take many tens of milliseconds to transmit to the synthesizer.

If using many large ASSIGNs at one time, it may even be possible to overflow the synth's MIDI buffer (Which holds incoming MIDI messages while the synth processes each one in the buffer).

#### QUICK ENTRY OF AN ASSIGN

While users can manually enter all of the necessary information into each ASSIGN layer, this can become tedious when creating many different routing destinations. To speed up the ASSIGN creation process, a shortcut can be used to quickly enter a destination's parameters.

- Navigate to the assign layer being edited. If it's a CC source, hold [SHIFT] and move the source.
- Now move the parameter you want to affect through the range you want it to be affected.

Here is an example of how to use quick entry to make the mod wheel swep the filter cutoff.

- · Navigate to one of the CC assigns
- hold [SHIFT] and move the mod wheel. Source CC# should now read 1.
- Hold [SHIFT] and move the VCF CUTOFF slider through the desired range. Min, Max, and Invert parameters should all auto-fill.
- Choose which layer/layers you want affected. Use "AUTO" if the assign will affect whichever layer is currently being edited.

## **ASSIGN ENABLE**

To enable/disable an assign, navigate to the ASSIGN: Enable menu by pressing [ASSIGN] repeatedly. Each of the four ASSIGNs can be turned on and off.

#### TH E PATCH GENERATOR

The MPG-7 includes a sophisticated Patch Generator designed to create sounds within specific categories such as bells, piano, strings, pads, polysynth, bass, arpeggiated sounds, and brass. This feature is not a simple randomizer. Instead, it uses carefully crafted algorithms to generate sounds that appropriately fit the chosen category. While some choices ae made randomly, the outcome is a musically useful sound. The patch generator is like having a forever-changing bank of presets.



The Patch Generator Menu

#### **CATEGORIES**

- ALL Randomly selects a category
- BASS
- POLYSYNTH
- PAD
- ARPEGGIATE
- PIANO/CLAVICHORD
- STRINGS
- BRASS
- BELLS
- RANDOM Randomizes every parameter.

#### **GENERATING A TONE**

- · Choose a category.
- Disable any section of the synth you don't want affected.
- Press [ENTER] and a tone will be generated on the layers being edited.

#### PATCH GENERATOR "VARIATION" FUNCTION

The MPG-7 patch generator contains many algorithms and makes several "choices" when generating a new sound. Sometimes the patch generator will generate a great sound, which we find ourselves wishing we could hear more variations of. If the patch generator makes a sound that you want to hear variations on, press [SHIFT] + [ENTER] while in the patch generator menu. This will generate a new sound using the same algorithms as the last sound created.

#### WEIGHT AND DIMENSIONS

The MPG-7 is 7 pounds and the enclosure measures 13" x 4" x 3". The enclosure has 4 heavy-duty screw-on rubber feet for no-slip tabletop use. The MPG-7 can also be rackmounted using optional 3U rack mounting brackets, which can be purchased at <a href="https://www.retroaktivsynthesizers.com">www.retroaktivsynthesizers.com</a>.

# **ACCESSORIES**

Memory Expansion Card – These cards expand the MPG-7's memory capacity. Cards are plug and play, and require no soldering. Cards can be installed by user or by Retroaktiv. 3U Rack Bracket – Brackets for mounting MPG-7 into a rack system.

#### THANK YOU!

Thanks for using these Retroaktiv synthesizer products. We are a small company and we appreciate the musicians and artists using this gear. If you have any questions or comments about this or other products, please contact us by visiting <a href="https://www.RetroaktivSynthesizers.com">www.RetroaktivSynthesizers.com</a> and using the CONTACT US link at the top of the page. We want to hear from you about your user experience and feature requests. Sincerely,

Copyright 2024 Retroaktiv LLC. www.retroaktivsynthesizers.com

# **Documents / Resources**



<u>RETROAKTIV MPG-7 Polyphonic Synthesizer Programmer</u> [pdf] User Manual MPG-7 Polyphonic Synthesizer Programmer, MPG-7, Polyphonic Synthesizer Programmer, Synthesizer Programmer, Programmer

# References

- R Retroaktiv retroaktiv
- User Manual

Manuals+, Privacy Policy

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.