CARBON8 QUICK START GUIDE

Modal CARBON8 is an 8 voice polyphonic experimental digital synthesiser. It features 2 independant oscillators, each containing 56 complex Digital Core Waveforms incl. 18 Digital Algorithms and 38 sophisticated Wavetables.

Beyond the oscillators CARBON8 features an extensive filter section with 33 different filter types, 3 LFOs, 3 powerful independent and user configurable stereo FX engines, a real-time sequencer, a programmable arpeggiator and an extensive modulation matrix.

Shift functions - parameters in light blue can be accessed by entering 'Shift' mode using the button to the right of the screen with a light blue ring. Shift can be momentary by holding the button and changing a parameter or latched by pressing the shift button.

Alt functions - parameters in light grey can be accessed by holding the button with the light grey ring in the same section (Velo or Arp). 'Alt' mode is always momentary and you will exit 'Alt' mode on release of the button.

Screen Navigation

The two switched-encoders either side of the screen are used for screen navigation and control:

Page/Param - When this encoder is in 'Page' mode it cycles through the parameter pages (e.g. Osc1, Osc2, Filter); when it's in 'Param' mode it cycles through the parameters on that page. Use the switch to toggle between the two modes, the mode is displayed on the screen with a line at top for 'Page' mode and at the bottom for 'Param' mode.

Preset/Edit/Bank - This encoder/switch is used to adjust the value or 'trigger' the currently displayed parameter. When on the 'Load Patch' parameter when the panel is in 'Shift' mode this encoder is used to select the patch bank number.

Presets

Patch/Seq - this button is primarily used to switch the screen to either the 'Load Patch' or 'Load Seq' param for loading patches or sequences, however this button also puts the panel into either 'Patch' mode or 'Seq' mode. This changes the 'Save' and 'Init' buttons to either effect Patch preset management in 'Patch' mode or Sequencer preset management in 'Seq' mode.

'Init / Rand' - this button/function only responds on a button hold.

CARBON8 can have a large dynamic range so there is a Patch Gain control that can be used to equalise patch volumes. Hold the 'Patch' button and turn the 'Volume' encoder to control the 'Patch Gain' parameter.

Connections

Headphones - 1/4" stereo jack socket

Right - Audio Out for right stereo channel. 1/4" unbalance TS jack socket

Left/Mono - Audio Out for left stereo channel. If there is no cable plugged into Right socket then summed to Mono. 1/4" unbalance TS jack socket

Expression - user configurable pedal input, 1/4" TRS jack socket

Sustain - works with any standard, open momentary foot switch, 1/4" TS jack socket

Audio In - stereo audio input, to process your audio source with CARBON8's FX engines, 3.5mm TRS jack socket

Sync In - analogue clock in. 3.3v, rising edge, 1 pulse per 16th note signal, 3.5mm TS jack socket

Sync Out - analogue clock out, same configuration as clock in, 3.5mm TS jack socket

MIDI Out - used to control other MIDI hardware, 5-pin DIN MIDI socket

MIDI In - used to be controlled from other MIDI hardware, 5-pin DIN MIDI socket

USB MIDI - MIDI in/out to a USB MIDI host, connect CARBON8 to a laptop/tablet/mobile device for the optional software editor, MODALapp, full size USB-B socket

Power - 9.0V, 1.5A, centre-positive barrel power supply

CARBON8 UI GUIDE

Preset Saving

Press the 'Save' button to enter the 'full' save procedure or hold the 'Save' button to perform a 'quick' save (saving preset into current slot with current name).

Once you are in the 'full' save procedure, presets are saved in the following way:

Slot selection - Use the 'Edit' encoder to select the preset bank/number to save into, and press the 'Edit' switch to select it

Naming - Use the 'Page/Param' encoder to select the character position and use the 'Edit' encoder to select the character. Press the 'Edit' switch to finish editing the name.

There are a number of panel shortcuts here:

Press 'Oct-' to jump to lowercase characters

Press 'Oct+' to jump to uppercase characters

Press 'Transpose' to jump to numbers

Press 'Chord' to jump to symbols

Press the 'Page/Param' switch to add a space (increment all above characters)

Press 'Init' to delete the current character (decrement all above characters)

Hold 'Init' to delete the entire name

Press the 'Edit' switch to confirm the settings and save the preset.

At any point during the procedure hold the 'Page/Param' switch to move back a step.

To exit/quit the procedure without saving the preset, press the 'Patch/Seq' button.

Quick Recalls

CARBON8 has 8 Quick Recall slots for quickly loading patches. Quick Recalls are controlled using the following button combos:

Hold 'Patch' + hold one of the eight buttons on bottom left of the panel to assign the currently loaded patch to a QR slot

Hold 'Patch' + press one of the eight buttons on bottom left of the panel to load the patch in the QR slot

Filter

Hold the 'Patch' button and turn the 'Cutoff' encoder to control the Filter Type parameter

Envelopes

Hold any of the EG buttons for one second and then turn the ADSR encoders to adjust all envelopes simultaneously

Press the MEG button when MEG is already selected to latch MEG assign

Sequencer

Hold the 'Mute' button to clear the sequencer notes

Hold the Anim1 / Anim2 / Anim3 / Anim4 buttons to clear an animation lane

When the screen is displaying the 'Linked Sequence' parameter, hold the 'Edit' switch to set the value to be the currently loaded sequence.

Arp

Hold the 'Arp' button and press keys on the internal or an external keyboard to add pattern notes or press the 'Rest' button to add a rest to the pattern

Hold the 'Patch' button and turn the 'Division' encoder to control Arp Gate

LFO

Turn the 'Rate' encoders into the negative range to access synced rates

To access LFO3 parameters enter 'Shift' mode and press the LFO2/LFO3 button

Keyboard/Voice

Press 'Unison' repeatedly to cycle through the different unison modes; press 'Stack' repeatedly to cycle through the different stack modes

Press 'Chord' whilst holding a chord on the internal or an external keyboard to set the chord mode chord.

Hold 'Transpose' and press a key on the internal keyboard to transpose all notes, where the central C key is the root note. Press 'Transpose' with no keyboard interaction to reset the transpose value back to 0.

Modulation

To assign a Mod Slot either hold (momentary) or latch the desired Mod source button - then set a depth by turning desired modulation destination parameter

When latched in a Mod Source assign mode pressing the flashing Mod Source button again will exit assign mode

Mod source button + 'Depth' encoder - set global depth for that mod source

Press ModSlot repeatedly to cycle through and view all mod slot settings on the screen

When the screen is displaying a mod slot 'Depth' parameter (most easily accessed via assigning modulation using the panel or via the ModSlot button), hold the 'Edit' switch to clear the mod slot assignment.

To assign a mod source to the global frequency destination, use either of the fine tune controls. 'Tune1' will assign to Osc1 tune, 'Tune2' will assign to Osc2 tune.

FX

Press FX1 / FX2 / FX3 button repeatedly to change the FX type of the slot

Hold FX1 / FX2 / FX3 button to reset the FX type of the slot to 'None'

Turn the 'B' encoder into the negative range for the slot with a Delay FX assigned to access synced delay times

Press FX1 + FX2 + FX3 to jump to the 'FX Preset Load' parameter