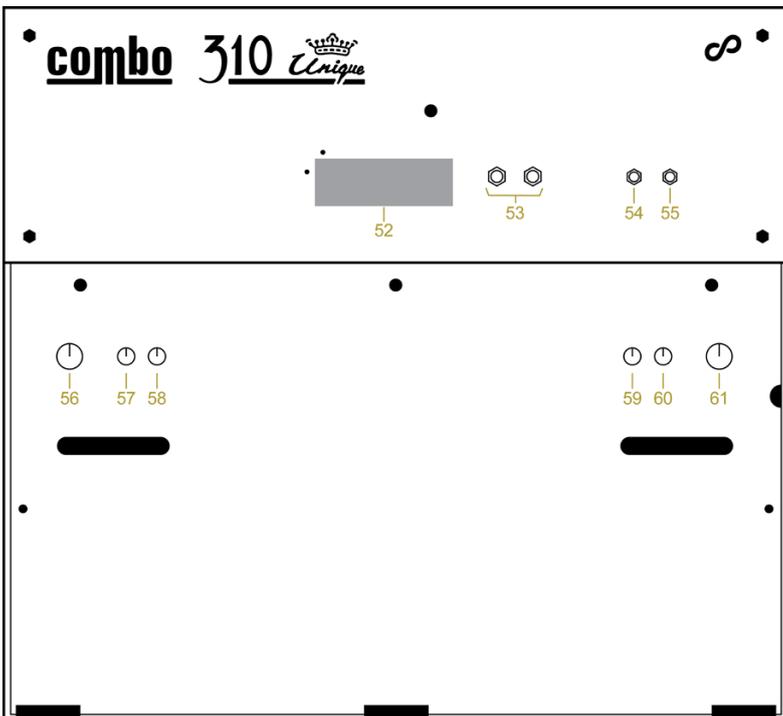
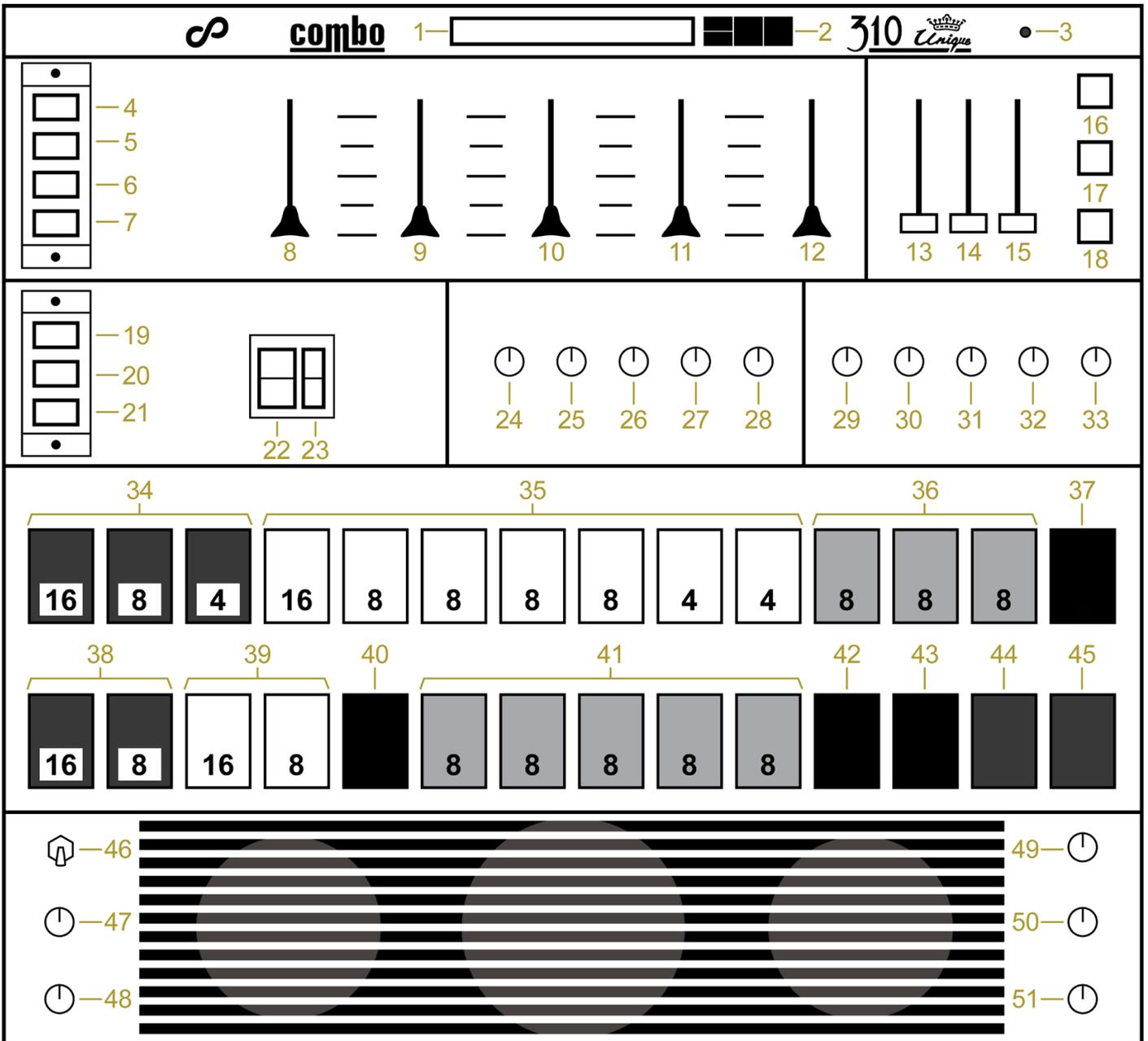
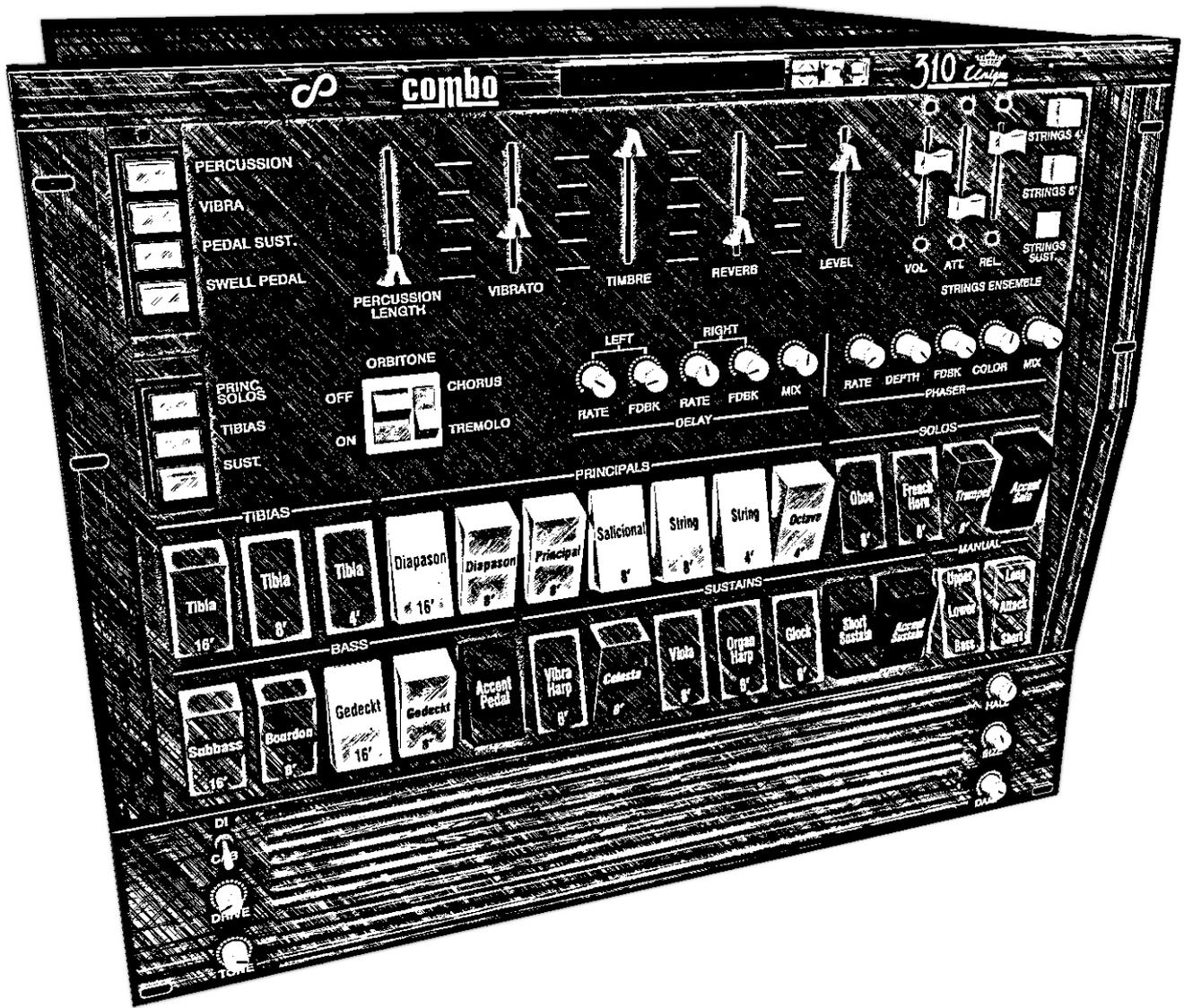




**combo**

**310** *Unique*





### An adventure with the Jiggery-Pokery organ

You now have an organ with almost unlimited possibilities. An organ filled with melodious treasures, rich in new and fascinating sounds. Read this instruction manual while sitting in front of your organ. You will obtain the utmost pleasure from your instrument by following and executing the instructions given in this booklet. Only then will you be able to use all the possibilities this organ provides and soon you will be familiar with your new Jiggery-Pokery. Jiggery-Pokery wishes you lots of pleasure and success with your musical adventure.

### Guarantee

This organ has been constructed with the utmost care, electronically as well as mechanically. We guarantee this instrument for one year from delivery date against all deficiencies resulting from demonstrable faulty factory assembly. This guarantee is valid only when the guarantee registration card (located at the back of the organ in an envelope (52)) is returned to us within eight days.

### **Where to place the instrument?**

Attach the device securely to your Reason rack using the six screws provided. Ensure the speakers are not obstructed in any way. It should not be placed against a wall or a piece of furniture. A minimum distance of 50cm should be maintained, so that the sound of the Orbitone system will be at its best. Connect the three-channel amp output 53 to your recording device or mixing console. An external sequencer may be connected to control voltage inputs 54–55 comprising pitch and gate signals respectively. If the noise output is too much, twist Fuse 2A (61) until satisfaction is achieved.

### **Switching on**

Carefully check to which voltage your organ has been adjusted, this may be done by comparing the voltage specified on the nameplate located at the back of the organ with the mains. If your screen shows a different interface to Reason, your dealer must adapt the instrument to fit that screen.

If the organ is set up correctly, Note On lamp 3 will momentarily light with each note pressed. Be sure to test the pitch bend amount and set a range value using the Bend Range potentiometer 56.

### **Preset (1)**

The Combo 310 Unique supports use of presets. The current preset name is displayed in the preset window and alternative presets can be accessed via the Patch Selection group 2.

## **REGISTRATION**

The organ consists of a three section registration and has three register groups (34, 35 and 36).

### **Solo group (36)**

Oboe 8'  
French Horn 8'  
Trumpet 8'

### **Accent Solos (37)**

By using the register "Accent Solos" the solo voices will be accentuated.

### **Principal group (35)**

In this group are to be found the specific classical organ voices, also suitable for modern music.

Diapason 16'  
Diapason 8'  
Principal 8'  
Salicional 8'  
String 8'  
String 4'  
Octave 4'

### **Tibia group (34)**

Tibia 16'  
Tibia 8'  
Tibia 4'

The registers in this group produce a warm round tone and combine perfectly with the solo and principal groups.

## REGISTRATION PEDAL

The pedal registration consists of a two section registration and has two register groups.

Subbass 16'	}	38	Gedeckt 16' <sup>1</sup>	}	39
Bourdon 8'			Gedeckt 8'		

### Accent Pedal (40)

By using the register "Accent Pedal" the pedal registers will be given extra volume.

### Pedal Sustain (6)

By depressing push-button 6 a sustain effect on the pedal registers Subbass 16' and Bourdon 8' will be obtained. "Sustain" means that the tone will be retained for a short period of time after releasing the pedal.

### Pedal Percussion

A percussion effect on the pedal registers Gedeckt 16' and Gedeckt 8' can be obtained by depressing push-button Pedal Sustain 6.

The pedal-percussion effect comes about whenever a pedal key is depressed and held.

The percussion and sustain effect may also be combined whenever both register groups (38–39) are used simultaneously.

## SUSTAIN REGISTRATION GROUP (41)

By making use of the sustain group, instruments such as the piano, celesta and clavichord can be imitated. The sustain group consists of the following registrations.

Vibraharp 8'  
Celesta 8'  
Viola 8' <sup>2</sup>  
Organharp 8'  
Glock 8'

The duration of the sustain effect is adjustable by means of register tab 42 ("Short Sustain"). Depressing this register shortens the duration of the sustain effect.

### Accent Pedal (43)

The register "Accent Sustain" enables you to give the sustain registers an extra accent.

### Vibrato (9)

The vibrato control (9) makes the sound of the organ produce a brilliant floating effect. The vibrato is adjustable from zero to maximum. The speed of the vibrato may be adjusted, if desired, using the "Vib. Rate" adjust knob (59).

### Timbre (10)

The timbre regulator (10) makes it possible to control the timbre of the entire organ to suit your taste. With this control you can change from a bright sound to a deeper sound. The affects all registration groups, including pedal and strings ensemble.

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#### Notes

1. Pedal Diapason 16' has been renamed Gedeckt 16' to prevent confusion with Principal Diapason 16' in the sequencer and via Remote™.
2. Sustain String 8' has been renamed Viola 8' to prevent confusion with Principal String 8' in the sequencer and via Remote™.

## Reverberation (49, 11)

In cathedrals, concert-halls and other large areas your organ would benefit from a natural echo. We call this reverberation. In your living room there is no echo present but the rotary control 49 makes it seem as though your organ is located in an immense area. You can regulate the amount reverberation from maximum to zero, and the size of the space with rotary 50. The reverberation can be damped using knob 51. For a simpler reverberation space, leave control 49 at zero and use sliding control 11 instead.

## Level (12)

This slider sets the master output level for your Combo 310 Unique.

## Percussion (4)

What is percussion? Percussion on an electronic organ can be best compared with the striking of the hammer on a piano string or other percussion instruments. When you strike the tone on a piano the sound slowly ebbs away. In an ingenious technical way it has now been made possible to obtain this effect on your Combo 310 Unique. The percussion possibilities are as follows.

By depressing push-button 4, the tibia, principal and solo groups are connected to the percussion system. Furthermore, sliding control 8, "Percussion Length", enables you to regulate the duration of the percussion, from flowing away rather rapidly when in the short position, or being retained much longer in the long position. As if that by itself wasn't enough, you can even adjust knob 58 ("Sust") to determine the held note's sustained level after the percussion has decayed, while control 57 ("Crv.") allows you to tweak the shape of the percussion curve, reaching the sustain level more sharply or softly as appropriate. In which way do you get the most pleasure from the percussion-effect?

## Vibra (5)

The Vibra (5) makes it possible to imitate the striking on, for example, of a violin or cello. You will notice that the tone begins fixed and by means of the vibra effect it begins to float. Set slider 9 to control amount of the effect.

## Pedal Swell (7)

Depress this button to allow the volume of your organ to be controlled via an externally connected expression/swell pedal (not supplied).

The minimum state does not go to complete silence. If you wish to use a full range of control, leave button 6 disabled and manually connect the pedal to slider 12 through Remote™ override.

## REGISTRATION MANUAL (44–45)

The two registrations provide some convenient extra functionality.

## Manual (44)

This three-position tab allows you to transpose the organ to make performance more convenient in some circumstances.

**Upper** (top position): this is the normal position. Pedals are located from C-1 to B0, while the keyboard is available from C1 to C7<sup>3</sup>.

**Lower** (middle position): this setting may be of use when using a split keyboard to transpose the left hand manual **down** an octave, effectively giving you two middle Cs. See "Registration examples".

**Bass** (bottom position): if you require easy access to the pedals, use this position, which transposes the entire organ **up** two octaves, placing the pedals in the keyboard range C1 to B2.

## Attack (45)

This rocker-control lengthens the attack time of all standard registration groups. Drag the rocker up for a longer fade in. A value of about 30 is pleasant for a pipe-organ effect.

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### Note

3. The original 310U range is C0–C1 (pedals), and F1–F5 (manual). To provide an additional range of notes (pedal C0–B2 and manual C1–C7) the last available samples (pedal C1 and manual F1/F5) have been stretched with highest available interpolation quality, then the pedal shave been mapped an octave lower to start at C-1 instead of C0.

### **Orbitone 3D Chorus-Tremolo (22–23)**

This organ has been equipped with an electronic Orbitone 3D system.

The Orbitone effect gives your organ substantial enrichment of the musical possibilities. Switch 22 allows you to engage the Orbitone 3D system. You will hear that the Tibia, Principal, Solo and Sustain groups will appear to be coming from two positions.

By use of the Orbitone push-buttons Principal/Solos 19, Tibias 20 and Sustains 21, you can now further route those specific groups into the chorus-tremolo for a pleasing moving effect on the selected group or groups. Switch 23 gives you the opportunity to choose between Chorus and Tremolo speeds.

**Tremolo:** rapid acoustic tremolo for modern music.

**Chorus:** slow acoustic tremolo for classical music.

## **STRINGS ENSEMBLE**

The Strings Ensemble is a completely new registration which creates a symphony orchestra effect. It enables you to reproduce world famous sounds such as those of Mantovani, The Amsterdam Symphony Orchestra etc. The "Strings Ensemble" registration consists of:

### **Strings**

Cellos 8' (17)

Violins 4' (16)

### **Sustain Strings (18)**

Push-button 18 gives you the opportunity to obtain an additional Strings 8' whereby a sustain is applied. This effect is particularly well suited when imitating, for example, a string orchestra, where the sound of the strings flow simultaneously together. The attack and duration of the string sustain sound may be adjusted with sliders 14 ("Att.") and 15 ("Rel."). Play (or double) an octave up for a 4' registration.

### **Strings Volume (13)**

By means of regulator 13 the volume of the strings ensemble can adapted.

## **GENERAL REMARKS ABOUT THE STRINGS ENSEMBLE**

- The strings ensemble is not affected by the Orbitone 3D system and is always output in stereo.
- However when using the strings ensemble, Vibrato should not or hardly at all be adjusted. It is sufficient to turn the Vibrato knob to no further than  $\frac{3}{4}$ .
- With use of external Rack module Chenille Chorus Ensemble, other registrations can be routed through that to provide the same rich ensemble sound.

### **Output Select (46)**

There are three alternative sound sets available in your 310 Unique via this three-position switcher.

**Direct Input** (top position): use this for high quality recordings using the 310U's low noise direct output.

**Virtual** (middle position): this is a special set of synthesized voices, inspired by the original waveforms.

**Cabinet** (bottom position): for a darker, roomier tone using your 310U's built-in speaker system. Ensure the Orbitone 3D system is turned on to make use of the stereo miking for the standard registrations, otherwise the output is mono. Strings Ensemble output is always stereo.

The Output Select control can be operated remotely, but cannot be internally automated.

### **Drive (47)**

You can apply a heavy distortion effect, suitable for all the latest tastes in modern music, such as Led Zeppelin and Deep Purple.

## Tone (48)

The high frequency of the distortion, when used, can be softened by rotating this potentiometer in a counter-clockwise fashion.

## Delay effect (24–28)

A stereo delay effect provides an easy way to add interest to your organ. The synchronised delay times and feedback amount of the left and right channels are independently adjustable. If you set one channel's rate to its "0" position with zero feedback, and the other with a delay time, and Mix 27 control to full, then the "0" delay time channel effectively becomes a opposably panned dry channel.

## Phaser effect (29–33)

The use of a phaser is an easy method to create a lovely sweeping movement to your organ's sound, and is especially beautiful when using the strings ensemble. Adjust the rate of the sweeping effect with rotary control 29, the depth of the sweep with knob 30, while potentiometers 31 and 32 will adjust the feedback and colouration of the sound. Normally we would expect the Mix knob 33 to be left on full, but you may like to reduce the mix.

## Registration examples

The registration of an organ is very important. Then even more so, when the possibilities are as many as they are with the Combo 310 Unique.

In order to guide you, we have prepared a number of registration examples that can be used as a basis for your own taste and imagination. Using the Preset buttons, guide the preset browser to the folder {E310U Standard Registrations (DI)}. There you will find two sub-folders: {E310U Registration Patches DI} contains patch presets that can be loaded directly in your 310U, while the other folder, {E310U Registration Combis DI}, provides the same presets in a convenient Dual Manual arrangement we call "Combinators". Many of these Combinators feature alternate "Voicings" through the use of an extra set of buttons, labelled from A up to D. These buttons might adjust registrations or push-buttons on either top or bottom manual, or both.

The bottom manual is normally transposed an octave down, enabling you to easily play both manuals at the same pitch, for example, you can play the right hand from C3 to C6 at the standard range, and the left hand can play a different set of registrations from C2 to B3, rather than C1 to B2<sup>4</sup>.



All the presets in {E310U Standard Registrations (DI)} are duplicated in {E310U Standard Registrations (Cab)} and {E310U Standard Registrations (V)} but with the Output Selector pre-disposed to load the miked Cabinet and Virtual sound sets respectively.

A wide variety of regular patch presets are located in your Combo 310 Unique home folder. Additionally, a small number of demonstration patches with ({RE Combis}) and without ({Standard Combis}) third party add-on modules can be found there as well.

### Note

4. Example assumes a standard five octave (C1–C6) keyboard.



# Remote Mapping

//Remote Map template for Instruments      Jiggery-Pokery Sound: Combo 310 Unique Organ

Scope Jiggery Pokery      com.jiggerypokery.Combo310U

//Control Surface Item      Key      Remotable Item      Scale      Mode

Map	_control_	Level
Map	_control_	Manual
Map	_control_	Attack
Map	_control_	Output Select
Map	_control_	Percussion Length
Map	_control_	Vibrato
Map	_control_	Timbre
Map	_control_	Reverb
Map	_control_	Percussion
Map	_control_	Vibra
Map	_control_	Pedal Sustain
Map	_control_	Swell Pedal
Map	_control_	Orbitone Principles Solos
Map	_control_	Orbitone Tibias
Map	_control_	Orbitone Sustains
Map	_control_	Orbitone
Map	_control_	Orbitone Speed
Map	_control_	Drive
Map	_control_	Hall Amount
Map	_control_	Hall Size
Map	_control_	Hall Damp
Map	_control_	Tone
Map	_control_	Delay Left Rate
Map	_control_	Delay Left Feedback
Map	_control_	Delay Right Rate
Map	_control_	Delay Right Feedback
Map	_control_	Delay Mix
Map	_control_	Phaser Rate
Map	_control_	Phaser Depth
Map	_control_	Phaser Feedback
Map	_control_	Phaser Color
Map	_control_	Phaser Mix
Map	_control_	Ensemble Strings 4
Map	_control_	Ensemble Strings 8
Map	_control_	Ensemble Strings Sustain
Map	_control_	Strings Volume
Map	_control_	Strings Sust Attack
Map	_control_	Strings Sust Release
Map	_control_	Subbass 16
Map	_control_	Bourdon 8
Map	_control_	Gedeckt 16
Map	_control_	Gedeckt 8
Map	_control_	Accent Pedal

Continued overleaf

Map	_control_	Tibia 16
Map	_control_	Tibia 8
Map	_control_	Tibia 4
Map	_control_	Diapason 16
Map	_control_	Diapason 8
Map	_control_	Principal 8
Map	_control_	Salicional 8
Map	_control_	String 8
Map	_control_	String 4
Map	_control_	Octave 4
Map	_control_	Oboe 8
Map	_control_	French Horn 8
Map	_control_	Trumpet 8
Map	_control_	Accent Solo
Map	_control_	Vibraharp 8
Map	_control_	Glock 8
Map	_control_	Organharp 8
Map	_control_	Celesta 8
Map	_control_	Viola 8
Map	_control_	Short Sustain
Map	_control_	Accent Sustain



## Combo 310 Unique v1.0.0



Jiggery-Pokery Combo 310 Unique Organ Rack Extension: user guide adapted from the original Eminent 310 Unique Owner`s Manual.

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Produced and Designed by Matt Black. Special thanks to *alteree*, *NaviRetlav*, and *Shokstar*.

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[www.jiggery-pokery.com](http://www.jiggery-pokery.com)



# From the maker of ...

## Rack Extensions

- **Ammo 100LA Modulation Oscillator** - Portable single-channel oscillator for audio and CV rate synthesis and LFOs, featuring 128 waveforms
- **Ammo 400R Modulation Oscillators** - 4-channel LFO generator with audio output, featuring 136 waveforms and advanced modulation mixing
- **Ammo 1200BR Modulation Synthesizer** - Advanced 4-channel LFO generator and audio synthesizer adds S&H, Comparator and Electro-Switch
- **Anansi Mid/Side Mastering Router** - Mid/side audio router with mono compatibility check, 3-in merger and 3-out splitter
- **Charlotte Envelope Generator** - 9-stage EG with time, level, curve and velocity control per stage, and a priority-selectable MIDI-to-cv-pitch splitter
- **Chenille BBD Chorus Ensemble** - Realistic BBD chorus device, based on the 70s string synth ensembles and the classic Roland Dimension D rack unit
- **Combo 310 Unique Organ** - The legendary Dutch electronic home/church organ, best known as the "Jarre" organ of Oxygene and Equinoxe.
- **Combo B3T Organ** - The famous American tonewheel organ and Leslie combo in highly tweakable and additive Rack Extension format
- **Combo Compact Organ** - The classic Italian transistor organ now in a brilliant, easy to use and equally compact Rack Extension format. Bags o' fun!
- **Combo Continental Organ** - The classic British transistor organ in a fantastic Rack Extension for that instant 60s feel!
- **Combo X~705 Space Organ** - An inspirational Frankensynth monster: an all-in-one Hammond clone, synthesizer and Rhapsody 610 string ensemble!
- **Itsy Stereo/Phase Inverter** - L/R channel flip, cv-controllable 180° stereo inverting width adjust, stereo phase inverters and phase correlation metering
- **Lolth CV Delay Splitter** - 4x4 channel cv splitter with independently adjustable gain and inversion controls, channel delay, and mirroring
- **Miranda CV Delay Merger** - 4x4 channel cv merger with independently adjustable gain and inversion controls, channel delay, and mirroring
- **Mordred Audio Bypass Merger** - 4 x 5 channel stereo audio merger with independently switchable outputs and autofade control
- **Shelob Audio Bypass Splitter** - 4 x 5 channel stereo audio splitter with independently switchable outputs, mirroring, and autofade control
- **Super-Spider Bundle** - Anansi, Itsy, Lolth, Miranda, Mordred and Shelob: buy all six and get one and a couple of knobs on another absolutely free!
- **Steerpike BBD Delay Ensemble** - Vintage style 6-tap BBD device, with multiple delay modes including parallel, serial, and reverse
- **Titus BBD Delay Line** - A lightweight 1U delay device featuring a single Steerpike delay line, with reverse

## ReFills

- **Guitars vol.1+2: Stratocaster & Telecaster** - Multi-sampled guitars with slides, mutes, signature L6 effects and keyswitching
- **Elements?: Vector Synthesis Workstation** - Massive patch collection featuring Korg Wavestation/MS2000, Waldorf Blofeld and Roland SC-8850
- **Additions: Vintage Additive Synthesizers** - DK Synergy + Kawai K5m + Thor FM.
- **Blue Meanie: Virtually an ARP2600** - Thor and Kong-based analogue synth machine
- **Kings of Kong Classic Drum Machines\*** - the premier ReFill for Reason 5+, with over 50 classic beatboxes for Kong Drum Designer
- **Retro Organs v1.5** - Hammond B3 + Farfisa Combo Compact + Vox Continental in one brilliant ReFill. Also available for Reason Essentials
- **B3 Tonewheels v1.5** - the original 24-bit non-Leslie samples ReFill with advanced rotary speaker emulation
- **Farfisa Combo Compact Deluxe v1.5** - the complete set of original 24-bit Farfisa samples covering, both standard and Deluxe models
- **Vox Continental v1.5** - a complete set of original samples from the classic C300 organ, featuring original and extended Continental footages
- **Hammond Novachord\*** - the near-antique pre-WW2 monster polyphonic valve synthesizer
- **Retrospective: 40 years of Synthesizer History\*** - Over 1Gb of vintage samples from synths and electronic keyboards from the Hollow Sun archive

## FreeFills

- **Additives** - demo version of Additions: the fantastic Additives tracks from PUF Challenge #2 can be found at <http://soundcloud.com/groups/additives>
- **8-BIT Magic: The ZX Spectrum ReFill**
- **Classic Drum Machine Collection v1.1**
- **Eminent 310 Strings\*\* v3** - a very old set of samples of miscellaneous quality, so you don't need this anymore. You've got this lovely Combo 310 Unique Organ for your Rack now, with every note recorded in 24-bit at 96kHz, so it's much better!
- **Harpe Laser\*\*** - the famous Laser Harp sound, the Elka Synthex preset 46 "Ring Mod"
- **Moog Taurus Bass Synthesizer\*\* v1.1**

For more information on these products and for direct downloads of these latest versions, plus a wide range of great Combinator skins, please visit [www.jiggery-pokery.com](http://www.jiggery-pokery.com)

\* Includes samples licensed from HollowSun.com

\*\* demo ReFills for Retrospective