



Orbit the Dance Planet™ V2 has landed and is ready to groove your world. With over 600 of the earth's most cutting edge samples and the introduction of new rhythmic features, Orbit V2 blasts its way to the forefront as the dance music machine. Orbit V2 features 32 voices of polyphony, 640 presets (384 ROM, 256 RAM), is 16 part multitimbral and has 6 analog outputs. Edit and tweak Orbit V2's sounds to express your unique creative vision by using its powerful filters, MIDI synchronized LFOs, and MIDIPatch™ Modulation System. If that's not enough, Orbit V2 is also equipped with plenty of user-editable "BEATS". With its unique sounds and flexibility, you can alter Orbit V2's "BEATS" to fit your innovative style.

**Orbit V2**  
The Dance Planet

#### ▼ Sounds

Talented E-mu® sound designers, along with programmers from the European company, Control Synthesis LTD., spent thousands of hours sampling, researching and creating Orbit V2's tremendous sound set. Orbit V2's waveforms were gathered from all around the world, and were especially chosen to exploit Orbit V2's dynamic synth parameters. Deep, pulsating basses, ambient, melodic pads, cutting edge percussion and drums, in your face synths and massive effects and hits – they are all here and carefully prepared to be the ideal sound set for dance music.

#### ▼ BEATS Mode – the heart of Orbit V2

Orbit V2's BEATS Mode has 100 drum loops which have been programmed by some of the world's best programmers, and as cool as these drum loops are, they only scratch the surface of what Orbit V2 can do. BEATS Mode drum loops are not just static samples that lock you into only one tempo and sound set – they use sequenced drum parts that can play any of the sounds in Orbit V2. This means you can change the tempo of a beat without changing the pitch, you can change any or all of the sounds triggered and you can route any or all of the sounds

through Orbit V2's powerful synthesis functions. The level of interactivity that BEATS Mode provides is unprecedented in a sound module, and the control over drum loops that BEATS Mode provides puts Orbit in a totally different galaxy from other dance sound modules.

#### ▼ Filters

Filters are an integral part of dance music, and E-mu's world famous filters are a perfect fit for Orbit V2. There are 32 6-pole resonant filters in Orbit V2 with 17 different types consisting of low-pass, high-pass, band-pass, phaser, flanger, EQ, morphing and more. By using Orbit V2's MIDIPatch Modulation System, filters can be routed to real time controllers for complete expressiveness. Also, by using the two synchronized LFOs as modulation sources to the filter, Orbit V2 can create cool and interesting rhythmic filter lines.

Orbit V2's features and sound set are perfect for the dance musician, but the synthesizer enthusiast will also find that Orbit V2 is out of this world. It's here, it's loud, it's monstrous and it grooves – **Feel the energy.**

## Orbit V2 Specifications and Menus

### Master Menu

Master Tune, Transpose, Global Bend, Global Velocity Curve, Mix Output, MIDI Mode, MIDI Mode Change, MIDI Overflow, MIDI Enable, Preset Change, Controller #A/B, Controller #C/D, Footswitch #, MIDI Program -> Preset, Send MIDI Data, User Key Tuning, Viewing Angle, Demo Sequence, BEATS Mode, Global Tempo, Bank Select, Song Start/Stop, BEATS MIDI Out, X-Factor Control, BEAT Control, Retrigger, Scratch Control

### Edit Menu

Preset Name, Primary Instrument, Secondary Instrument, Key Range, Volume, Pan, Coarse Tuning, Fine Tuning, Alternate Volume Envelope, Primary Envelope Parameters (AHDSR), Secondary Envelope Parameters (AHDSR), Delay, Sound Start, Reverse Sound, Solo Mode, Portamento Rate, Chorus, XFade Mode, XFade Direction, XFade Balance, XFade Amount, Switch Point, Primary Filter Type, Primary Filter Fc&Q, Secondary Filter Type, Secondary Filter Fc&Q, Alternate Envelope, Amount Delay, Alternate Envelope (AHDSR), LFO1 Shape Amount, LFO2 Rate-Delay-Variation, LFO2 Shape Amount, LFO2 Rate-Delay-Variation, Key/Velocity Control, Real-time Control, Footswitch Control, Pitch Bend Range, Pressure Amount, Controller Amount A/B, Controller Amount C/D, Velocity Curve, Keyboard Center, Keyboard Tuning, Mix Output, Link 1, Link 2, Link 3, Save Presets.

### MIDI Patch™ Modulation System

#### Key Number and Velocity Modulation Control

Up to six simultaneous patches per preset may be programmed.  
Sources: 2 (Key Number and Key Velocity)  
Destinations: 42

### Realtime Modulation Control

Up to eight simultaneous patches per preset may be programmed.  
Sources: 10  
Destinations: 33

### Footswitch Control

Up to three simultaneous switches per preset may be programmed.  
Sources: 3 (Footswitch 1, Footswitch 2, Footswitch 3)  
Destinations: 10

### Technical Specifications

Audio Channels: 32  
Presets: 640  
Beats: 100  
Songs: 28  
Filter types: 17  
Data Encoding: 16-bit, linear, 18-bit DACs  
Sound Memory: 8 MB  
Signal to Noise: >90dB  
Dynamic Range: >90dB  
Frequency Response: 20Hz-18kHz (+/- 6dB)  
Distortion: <.05% THD  
Power Consumption: 15 Watts  
Voltage Input: 90VAC-260VAC at 50Hz-60Hz  
Maximum Output Level: +4dB into 600 Ohms  
Output Impedance: 100 Ohms

### Inputs

Effects Return 1 In (stereo), Effects Return 2 (stereo), MIDI In

### Outputs

Six, polyphonic (configurable as three pairs of stereo outputs w/programmable panning), mono mix, MIDI out, MIDI thru

### Rack Dimensions

Height: 1.75", Width: 19", Depth 8.5"

## Launch Pad

Add **Launch Pad™**, E-mu Systems' new performance controller to your Orbit V2 and create an all-in-one Dance Music Performance System. Orbit V2's presets, filters, LFOs, volume, tempo, BEATS Mode and much more can be controlled by Launch Pad's intuitive user interface. It is ideal for live performance and sequencing. Launch Pad is not just exclusive to Orbit V2 — it provides real-time controllers and a one-octave keyboard which extend the flexibility and control of any MIDI system.



## Launch Pad Features

- Fast, intuitive user interface
- Compact, durable package
- One-octave, velocity-sensitive drum pad keyboard
- +5 octaves, -4 octaves transposition range
- +12 semitone fine tuning range
- Five real-time programmable sliders
- Pitch knob, Thumbly Button™, Footswitch, and expression pedal input
- Six trigger buttons with independent MIDI channels
- MIDI Machine Control
- Sends MIDI clock
- Sends Preset, Bank, and Song change commands
- MIDI Input Merge Function
- Setups can be saved or restored via SysEx

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