

E-Synth ROM Upgrade Installation Instructions for E6400 Ultra & E4X Ultra

6870

The E-Synth ROM Upgrade kit adds the 16MB E-Synth sound set to the E6400 Ultra or E4X Ultra.

The modification is fairly easy to install, however if you are unsure of your abilities, please contact E-mu for referral to an authorized service center..

Tools Needed:

Phillips head screwdriver #2

Kit Contents:

- (1) These installation instructions
- (1) E-Synth ROM SIMM
- (1) E-Synth Ultra Production Set disk
- (1) E-Synth/Sessions factory preset disk

These instructions are not provided as a guarantee against improper installation. When in doubt, contact: E-mu Customer Service at (831) 438-1921. Contact E-mu UK at +44 (0) 131-653-6556.

WARRANTY MAY BE VOIDED IF DAMAGE IS CAUSED BY IMPROPER INSTALLATION, IMPROPER OR INADEQUATE MAINTENANCE, ACCIDENT, ABUSE, MISUSE, ALTERATION, UNAUTHORIZED REPAIRS, TAMPERING, OR FAILURE TO FOLLOW PROCEDURES OUTLINED IN THESE INSTRUCTIONS.

—————> **WARNING** <—————

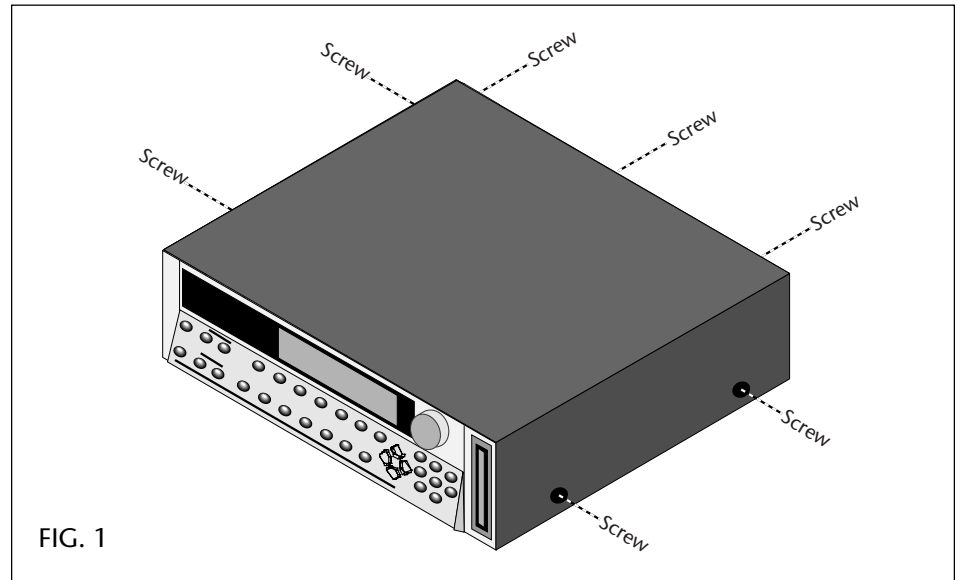
UNPLUG THE AC CORD BEFORE DOING ANY WORK!

Groundwork

Before you begin, find a clean, well lit place in which to work. This procedure requires that you periodically “Ground” yourself, by touching a grounded object such as a water pipe or a grounded piece of equipment. Grounding yourself prevents the static charge in your body from damaging the sensitive memory chips. When you are asked to “Ground” yourself, simply reach over and touch the grounded metal. Do not walk across the room or a rug, as this will defeat the purpose of grounding.

Remove the Top Cover

To gain access to the interior of the unit, the top panel must first be removed. The top panel is attached to the main chassis by means of (7) screws. There are three screws along the back of the unit and two on each side. When all the screws are removed, slide the metal top backwards and up off the unit, exposing the main circuit board. Set the top cover aside in a safe place and put the screws into a cup so they will not get lost. The power supply is covered by a metal box. Do not remove this metal cover!



Install the E-Synth ROM SIMM

1. Is the unit unplugged? Make sure it is before continuing.
2. Ground yourself, then remove the E-Synth ROM SIMM from the antistatic packaging.
3. Locate the six SIMM sockets at the left of the main circuit board. If the Orbit/Phatt ROM is already installed, you'll need to remove the Orbit/Phatt ROM as well as the sound RAM SIMMs before installing the E-Synth ROM.

To Remove a SIMM: On each end of the SIMM socket there is a silver or plastic tab. Use a screwdriver or a ball point pen to squeeze the tabs toward the outside of the socket while gently pushing the SIMM towards the right side of the unit (*when facing the front of the unit*). The SIMM should "hinge" to the right and can now be removed.

4. **The E-Synth ROM must be installed in the ROM 1 location.** To install the SIMM, refer to figures 2 & 3.

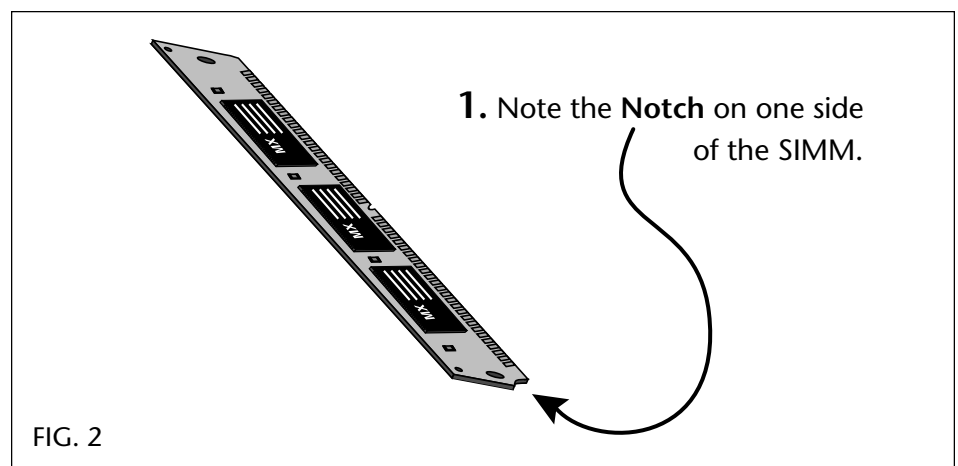
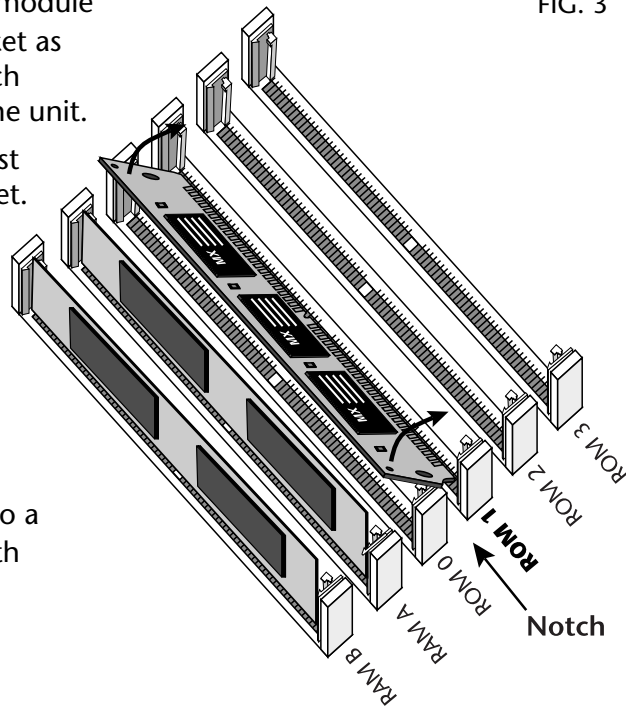


FIG. 3

2. Insert the SIMM module into the ROM 1 socket as shown with the notch toward the rear of the unit.

The SIMM should rest naturally in the socket.

3. Tilt the SIMM into a vertical position. Both tabs should lock.



5. And that, as they say, is that! The Sound ROM is installed.
6. Remember to replace your sound RAM SIMMs if you had to remove them. The memory chart on the next page shows most of the possible memory configurations. If two different sized SIMMs are installed, the larger SIMM goes in RAM A.

Replace the Top Cover

Place the metal top cover on the box with the screw holes toward the rear. Lift the rear of the top cover and slide it forward UNDER the lip of the front panel bezel, then set the rear down. The screw holes should all be perfectly aligned. Replace the (7) screws.

At this point, the installation is finished. The Emulator should boot up normally when power is applied. It does? Congratulations! During the boot-up process, the display should read, "Sound ROM 1 Installed".

Problems?

If the unit doesn't display the "Sound ROM 1 Installed" message, or if you have less sound RAM than before, disconnect power and try the following:

- Open the unit, and re-seat the SIMMs in their sockets.
- If you have less Sample RAM than when you started, and you have two different sized SIMMs, install the larger SIMM in RAM A. See the memory chart on the next page.
- Try returning the unit to it's original configuration.

If all else fails, call E-mu Customer Service at (831) 438-1921. Telephone support hours are 8:00-5:00 PST, Monday through Friday.

WARNING: Your Sound ROM SIMM might be **FLASH Memory** instead of a ROM part.

If you accidentally Save a bank to the FLASH Disk it will be erased!

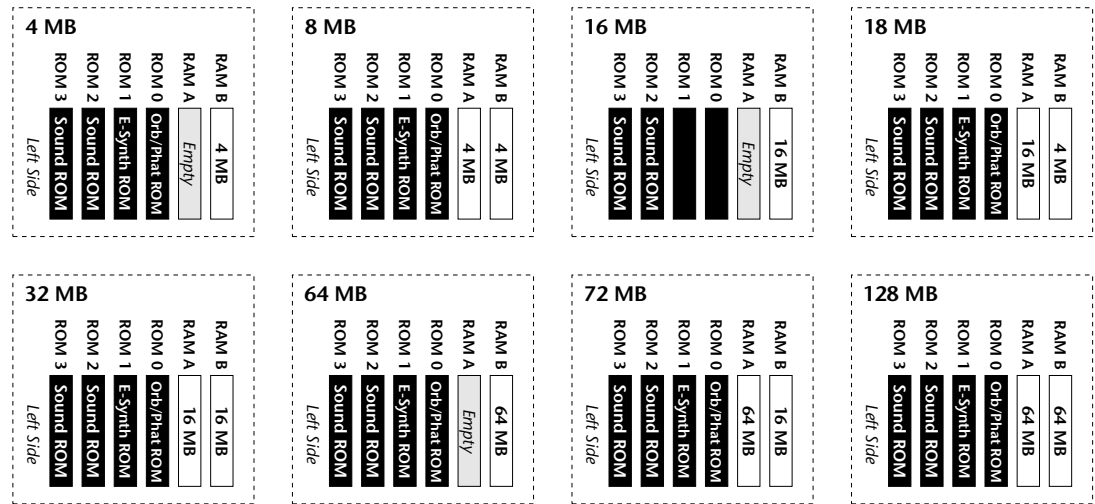
• To prevent accidental erasure of the FLASH SIMM you should **LOCK** the FLASH Disk. Follow these instructions:

1. Press **Disk Browse**.
2. Select the FLASH Disk using the cursor keys.
3. Press **Info (F6)**.
4. Press **Lock (F4)**.

Now the FLASH SIMM will be write-disabled until you enable it again.

The FLASH DISK can be used to store your own banks, but be sure to back up the bank to your hard disk first.

RAM & ROM Memory Chart



Load the Presets

There are two disks included with this kit: the **E-Synth Ultra** disk and the **E-Synth/Sessions** disk.

- Use the **E-Synth Ultra Production Set Disk** if you DON'T already have the Orbit/Phatt ROM set installed.
- Use the **E-Synth/Sessions Disk** if you have the Orbit/Phatt ROM set installed in addition to the E-Synth ROM set.

To Upload the Factory Presets into Flash:

1. Power up the machine and wait for it to finish booting.
2. Press the **Master** button.
3. Press the **Setup** function key (F3).
4. Press the **Memory** function key (F6).
5. **Set the Memory Configuration.** Make sure you have at least 1400K of Preset Memory.
6. Press the **Save** function key (F6).
7. Press the **Master** button again to exit the Master module.
8. **Insert the floppy disk** containing the factory presets into the drive with the label side towards the center of the unit.
9. Press the **Load** function key (F4). The pop-up Load window appears.
10. **Set the Drive to "Floppy"** using the cursor buttons and Data Entry Control.
11. Press the **Load** function key (F6).
12. When the bank has finished loading, press the **Master** button.
13. Press the **Bank** function key (F2).
14. Press the **Flash** function key (F6).
15. Press the **RAM->F** function key (F3). A warning screen appears advising you that you are about to overwrite Flash RAM.
16. Press **OK** (F6) to write the bank to Flash RAM.

E-Synth Sound ROM Presets

E-Synth Ultra comes with the E-SYNTH ROM bank and 500 presets. The SESSIONS ROM upgrade adds another 16 MB of ROM and 500 additional presets. Flash presets are designated by the prefix "I" in the displayed preset number.

- | | | |
|---------------------------------|---------------------------------|------------------------------|
| 0. <i>Extreme Ultra</i> | 44. <i>Piano & Strng Hi</i> | 88. <i>Breath Organ</i> |
| 1. <i>Machine Blitz</i> | 45. <i>Chime Piano</i> | 89. <i>Air Pockets</i> |
| 2. <i>Flute & Orch</i> | 46. <i>Bouncing Piano</i> | 90. <i>Dawn Organ</i> |
| 3. <i>Ode to You & I</i> | 47. <i>PianoWaveSurfer</i> | 91. <i>Club Organ</i> |
| 4. <i>Piano & Vox</i> | 48. <i>Electric Piano 1</i> | 92. <i>Perky B3</i> |
| 5. <i>Big Wave Kit</i> | 49. <i>Electric Piano 2</i> | 93. <i>B Jazz</i> |
| 6. <i>Dynamo Split</i> | 50. <i>Electric Piano 3</i> | 94. <i>Org Jerky</i> |
| 7. <i>Orgo Manic</i> | 51. <i>Electric Piano 4</i> | 95. <i>Perky SynthOrgan</i> |
| 8. <i>UK Grand</i> | 52. <i>Electric Piano 5</i> | 96. <i>Tone Organ I</i> |
| 9. <i>Synchromatic</i> | 53. <i>Electric Piano 6</i> | 97. <i>Tone Organ II</i> |
| 10. <i>Orchestra</i> | 54. <i>Electric Piano 7</i> | 98. <i>Tone Organ III</i> |
| 11. <i>Wildlife</i> | 55. <i>Electric Piano 8</i> | 99. <i>Tone Organ IV</i> |
| 12. <i>Blue Jazz</i> | 56. <i>Garage EP</i> | 100. <i>B3 Phase Spread</i> |
| 13. <i>Cape Fear</i> | 57. <i>Traditional EP 1</i> | 101. <i>Buzz Organ</i> |
| 14. <i>Intrigue</i> | 58. <i>Traditional EP 2</i> | 102. <i>Could B a 3</i> |
| 15. <i>Full Monty</i> | 59. <i>Warm Elec Piano</i> | 103. <i>Vari Air Organ</i> |
| 16. <i>Mixed Kit</i> | 60. <i>Basic X-Swtch EP</i> | 104. <i>New Age Pipes</i> |
| 17. <i>Hypnotic</i> | 61. <i>Dyno X-Switch</i> | 105. <i>Home Pipes</i> |
| 18. <i>Sweepsrape</i> | 62. <i>Wurly X-Switch</i> | 106. <i>Mellow Organ</i> |
| 19. <i>Gothic Nature</i> | 63. <i>Wurly XS Phased</i> | 107. <i>Soft Jammies</i> |
| 20. <i>Stereo Grand 1</i> | 64. <i>FM El Piano</i> | 108. <i>Farfisa 1</i> |
| 21. <i>Stereo Grand 2</i> | 65. <i>FM Saw Piano</i> | 109. <i>Farfisa 2</i> |
| 22. <i>Stereo Grand 3</i> | 66. <i>FM and more FM</i> | 110. <i>Farfisa 3</i> |
| 23. <i>Stereo Grand 4</i> | 67. <i>Dyno Split</i> | 111. <i>Vox 1</i> |
| 24. <i>Grand Piano</i> | 68. <i>Mystic Roads</i> | 112. <i>Vox 2</i> |
| 25. <i>Ambient Grand</i> | 69. <i>Stellar Keys</i> | 113. <i>Vox 3</i> |
| 26. <i>Punchy Grand</i> | 70. <i>EP Fantasy</i> | 114. <i>Gritty Vox</i> |
| 27. <i>Upright Piano</i> | 71. <i>Clavinet 1</i> | 115. <i>Phazi-Cheeze</i> |
| 28. <i>Dunked Piano</i> | 72. <i>Clavinet 2</i> | 116. <i>Slap/Pop Bass 1</i> |
| 29. <i>Winter Piano</i> | 73. <i>Clavinet 3</i> | 117. <i>Slap/Pop Bass 2</i> |
| 30. <i>Piano & Pad</i> | 74. <i>Clavinet 4</i> | 118. <i>Slap/Pop Bass 3</i> |
| 31. <i>Octave Piano</i> | 75. <i>Power Clav</i> | 119. <i>Dynmo Bass</i> |
| 32. <i>Keys Ole'</i> | 76. <i>Clav Up Front</i> | 120. <i>Finger Bass 1</i> |
| 33. <i>Grand Illusion</i> | 77. <i>Rezzo Clav</i> | 121. <i>FingBass1 w/Hrms</i> |
| 34. <i>Tack Piano</i> | 78. <i>Synth Clav</i> | 122. <i>Finger Bass 2</i> |
| 35. <i>San Diego Piano</i> | 79. <i>Phased Clav</i> | 123. <i>Picked Bass</i> |
| 36. <i>Perc Piano 1</i> | 80. <i>Acidic Clav</i> | 124. <i>Finger/PickBass1</i> |
| 37. <i>Perc Piano 2</i> | 81. <i>B X-Session</i> | 125. <i>Finger/PickBass2</i> |
| 38. <i>NY Grand</i> | 82. <i>Kingdom Of B</i> | 126. <i>FingerBass 1 Alt</i> |
| 39. <i>LA Grand</i> | 83. <i>Enhanced B</i> | 127. <i>FingerBass 2 Alt</i> |
| 40. <i>Piano Space</i> | 84. <i>Smokin' B</i> | 128. <i>FingeredFretless</i> |
| 41. <i>Piano & Organ</i> | 85. <i>Dyna Perc Organ</i> | 129. <i>Fretless 1</i> |
| 42. <i>Piano & Strings</i> | 86. <i>Rockin' Organ</i> | 130. <i>Fretless 2</i> |
| 43. <i>Piano & Strng Lo</i> | 87. <i>Mega Drawbars</i> | 131. <i>Fretless'd Pad</i> |

E-Synth ROM Presets

132. *Slither Bass*
133. *Acoustic Bass 1*
134. *Acoustic Bass 2*
135. *Stogey Bass*
136. *Pitz'd Fretless*
137. *Below Bass*
138. *Super Sub Bass*
139. *SE Bass*
140. *V Bass*
141. *Thunder Bass*
142. *Humm Bass*
143. *Fat Mini Bass*
144. *Classic MiniBass*
145. *Dyna Q Mini Bass*
146. *Warm 303 Bass*
147. *Touch Bass*
148. *VP Bass*
149. *Rapture Bass*
150. *Cue Bass*
151. *Flange Bass*
152. *Hard 303 Bass*
153. *House Bass*
154. *FilterDanceBass*
155. *Dig Bass*
156. *Ambient Bass*
157. *Goliath Bass*
158. *LoggerBass&Harms*
159. *Dist Logger Bass*
160. *Church Bass*
161. *Under & Over*
162. *Flexi Plexi*
163. *VP Bass Mod*
164. *Nylon Guitar 1*
165. *Nylon Guitar 2*
166. *Chorused Nylon*
167. *Paco's Pluck*
168. *Steel Guitar 1*
169. *Steel Guitar 2*
170. *Chorused Steel*
171. *NylonSteel Combo*
172. *Thin'd Steel Gtr*
173. *Slide Gtr.Xswtch*
174. *Ambient Guitar*
175. *Steel Steel*
176. *A.Gtr's w/MTap*
177. *Acoustic Trails*
178. *StringShimmer*
179. *Jazz Guitar 1*
180. *Jazz Guitar 2*
181. *Auto Wah Jazz*
182. *Jazzertized*
183. *Xpressive E.Gtr1*
184. *Chorused E.Gtr 1*
185. *Xpressive E.Gtr2*
186. *Chorused E.Gtr 2*
187. *El.Gtr 2 Plus*
188. *Guitar & Clav*
189. *E.Gtr 1 & Jazz*
190. *Wah Wheel E.Gtr*
191. *Bass & E.Guitar*
192. *Star Guitar*
193. *Guitar Sweeper*
194. *Sitaur*
195. *Muted E.Gtr 1*
196. *Muted E.Gtr 2*
197. *Muted Gtr Delays*
198. *Mutent Behavior*
199. *Chorused Axe*
200. *Great Leader*
201. *Brothers Lead*
202. *Can Ya Bender?*
203. *Diss Tort*
204. *Triller*
205. *Stereo Strings*
206. *Dynamic Strings*
207. *Slow Strings*
208. *Emotion Strings*
209. *Finale Strings*
210. *String Orchestra*
211. *Viking Strings*
212. *Phase Strings*
213. *Flanger Strings*
214. *Queen's Hall*
215. *Synth Strings 1*
216. *Synth Strings 2*
217. *Synth Strings 3*
218. *Synth Strings 4*
219. *Strings Y2K*
220. *Tron Strings*
221. *Phase Tron*
222. *Syntron*
223. *Quartet w/Tron*
224. *Solo Strings*
225. *PairedSoloStrngs*
226. *Solo w/Ensemble*
227. *Cello & Friends*
228. *Inspired Chamber*
229. *Chamber Group*
230. *Enhanced Quartet*
231. *PizzicatoStrings*
232. *Pitz Wood*
233. *Trumpet 1*
234. *Trumpet 2*
235. *Trumpet 3*
236. *Two Trumpets*
237. *Trumpets*
238. *Trumped*
239. *Brass Sonics*
240. *Mute Trumpet 1*
241. *Mute Trumpet 2*
242. *Mute & No Mute*
243. *Mute Trump & Sax*
244. *Trombone*
245. *Trombone Section*
246. *Bone Over Brass*
247. *Trumpet/Trombone*
248. *Trump/Tromb/Sax*
249. *Tuba*
250. *Brass Section*
251. *Brass Boys*
252. *Big Top Brass*
253. *Big City Orch*
254. *Horn Hits*
255. *Wow Horn Hits*
256. *Synthetic Brass*
257. *Synth Brass*
258. *Dominant Brass*
259. *ThumbbyBrass*
260. *Nitro Brass*
261. *Brass Fire*
262. *Soprano Sax*
263. *Alto Sax*
264. *Tenor Sax*
265. *Baritone Sax*
266. *Tenor & Alto*
267. *Saxtet*
268. *Wild Sax*
269. *Sax 4 Piece*
270. *Sax Saxion*
271. *World O' Sax*
272. *Flute 1*
273. *Flute 2*
274. *Flute Pudding*
275. *Toot Sweet*
276. *Toot Aloos*
277. *Bottle Lead*

E-Synth ROM Presets

- 278. *Strings w/Flute*
- 279. *Strg/Clar/Flute*
- 280. *Clarinet 1*
- 281. *Clarinet 2*
- 282. *Oboe*
- 283. *English Horn*
- 284. *Winds Chooser*
- 285. *Wind Section*
- 286. *Magic Winds*
- 287. *Clarinet&SoprnoSax*
- 288. *Clarinet Soloist*
- 289. *E.Horn Soloist*
- 290. *Oboe Soloist*
- 291. *Divertissement*
- 292. *Pop Aahs*
- 293. *Stereo Aahs*
- 294. *Phased Pop Ahhs*
- 295. *Stereo Oohs*
- 296. *Oohs & Aahs*
- 297. *Big Voice*
- 298. *Stringed Voice*
- 299. *Voice Of Its Own*
- 300. *Throater*
- 301. *Ghost Comp*
- 302. *Vocaleese*
- 303. *Dangle Vox*
- 304. *Swingle Singers*
- 305. *Spirit Vox*
- 306. *Emersonian*
- 307. *Synth Superhero*
- 308. *Outrage*
- 309. *Old Fifty-Five*
- 310. *Megatouch*
- 311. *Synth Orchestra*
- 312. *Touch Jumps*
- 313. *Impulse Saw*
- 314. *Sawy Putty*
- 315. *Synth Tech*
- 316. *Punchy SawPulse*
- 317. *PWM Synth*
- 318. *Seabreeze*
- 319. *Key Sweeper*
- 320. *Pleiades Wave*
- 321. *Oasis II*
- 322. *Resonant Texture*
- 323. *Jay Veeish*
- 324. *Mello Sweep*
- 325. *Sunrise Synth*
- 326. *Trance Seeker*
- 327. *Out of Glass*
- 328. *Spherical Pulse*
- 329. *Basic Pad*
- 330. *Transurround*
- 331. *More Senses*
- 332. *Bi Polar*
- 333. *Steel Lead*
- 334. *Basic Saw Synth*
- 335. *Saw Lead*
- 336. *Saw Lead 4th's*
- 337. *Square Lead*
- 338. *Mini Square*
- 339. *Square Station*
- 340. *PWM Lead*
- 341. *Pulse Workshop*
- 342. *Pulse Encounter*
- 343. *Wall O' Synth*
- 344. *Eraser Wave*
- 345. *Glitzy Lead*
- 346. *Grunger*
- 347. *Razorback Lead*
- 348. *Batsaw*
- 349. *Eye Sham*
- 350. *Chiffon*
- 351. *Brazz Lead*
- 352. *Sax Wave Lead*
- 353. *Viper Drive*
- 354. *Worm Lead*
- 355. *Micro Worm*
- 356. *Triangle Lead*
- 357. *Big Triangle Ld*
- 358. *Medicine Lead*
- 359. *Wah Triangled*
- 360. *DB Shuffle*
- 361. *Pulsin' B*
- 362. *Clocked Organ*
- 363. *Remember Wash*
- 364. *Future Time*
- 365. *Rave Blaster*
- 366. *Dancin' Choir*
- 367. *Bring It Back*
- 368. *Trigger Brass*
- 369. *Open The Door*
- 370. *Don't B Afraid*
- 371. *Rajor*
- 372. *Big Pulsor*
- 373. *Pulse Modified*
- 374. *Pipe Dream*
- 375. *Arctic Pleasure*
- 376. *Deep Chaser*
- 377. *Hero Glyphics*
- 378. *Jump Exciter*
- 379. *Quizzical*
- 380. *Digits*
- 381. *VP Pluck*
- 382. *Pulse Rave*
- 383. *Saw Rave*
- 384. *Super Punch*
- 385. *Octosynth*
- 386. *Seq Synth 1*
- 387. *Seq Synth 2*
- 388. *Seq Synth 3*
- 389. *Seq Synth 4*
- 390. *AcousticKits 1&2*
- 391. *AcousticKits 3&4*
- 392. *Jazz Kit w/Perc*
- 393. *Rock Kit w/Perc*
- 394. *Dance Kits*
- 395. *Pop Kit GM*
- 396. *Heavy Kit GM*
- 397. *Dance Kit GM*
- 398. *Kit GM*
- 399. *Dance Kits Phase*
- 400. *DanceKitsEQClock*
- 401. *Misc. Percussion*
- 402. *Misc.Perc Wild*
- 403. *Dance Percussion*
- 404. *Orch Percussion*
- 405. *Dynamic Perc*
- 406. *Odd Percussion*
- 407. *HndDrums&Timbale*
- 408. *Kick & Snares*
- 409. *High Hats All*
- 410. *Fractal Cymbals*
- 411. *Metal Perc*
- 412. *Tom Tom Club*
- 413. *Tommy Tom Tom*
- 414. *Timpani Deluxe*
- 415. *Orch Bass Drum*
- 416. *Attitude Drum*
- 417. *House Of Thug*
- 418. *Vinyl Set*
- 419. *Scratch N Split*
- 420. *Scratchy Bits*
- 421. *Tub Tone*
- 422. *Tumba Tone*
- 423. *Drum Tones*

E-Synth ROM Presets

424. *Metablocks*
425. *Marimba*
426. *Marimba & Zyló*
427. *Baja Night*
428. *Xylophone 1*
429. *Xylophone 2*
430. *Vibraphone 1*
431. *Vibraphone 2*
432. *Vibrance*
433. *Jazz Combo*
434. *I-Hop Special*
435. *Kalimba*
436. *Kalimbex*
437. *ShamKoto FS Bend*
438. *Shamoto*
439. *Stick Lead*
440. *ShamItsa*
441. *Koto FS Bend*
442. *Ethnic Improv*
443. *Key East*
444. *Kotahh*
445. *Sitar*
446. *Sitar FS Bend*
447. *Ethnic Storm*

448. *Ethnexx*
449. *Pan Ambient*
450. *Earth Flute*
451. *Vulcan Night*
452. *Balirimba*
453. *Wind Ambient*
454. *Novaphone*
455. *Saharan Night*
456. *Langué d'Amour*
457. *Kitatsu*
458. *Dingle Sines*
459. *Noo Bells*
460. *Bell Park*
461. *Bell Joys*
462. *Tibetan Mudra*
463. *Chime Time*
464. *Organic Keys*
465. *Sweegees*
466. *She Just A Girl*
467. *Eastwinds*
468. *Transworlds*
469. *Parallelisms*
470. *Sax 5th Ave*
471. *Hornet*
472. *Spectro Deluxe*
473. *Obylisk Serene*

474. *Give Me More*
475. *Peyote Mirror*
476. *Head Tones*
477. *Waverider*
478. *Crystics*
479. *Light Vision*
480. *Granularity*
481. *Hypnotics*
482. *Free Spirit*
483. *Photosynthesis*
484. *Savanna Breeze*
485. *Swamp Situation*
486. *Landing*
487. *Eosmosis*
488. *OopsWrongGalaxy*
489. *Alien Roll*
490. *Pure Madness*
491. *Photo Phunnel*
492. *Heavy Metals*
493. *Cymbolics*
494. *Lucid Dream*
495. *Departure*
496. *Zoundscape*
497. *Pulsar Noise Efx*
498. *Stepping Stones*
499. *Nightmare Train*



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