

LASER SHOW SYSTEM

BEAM & TWINKLING STAR

& FIREFLY LASER SERIES

TRACY TRIO 800RGB

User Guide

This chart lists the DMX dipswitch setting for DMX address 1 through 511. Follow the inst
ructions below to configure fixture dipswitches with you desired DMX address.
DMX Address Quick Reference Chart
DipSwitch Position
O=OFF #8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1=0N #7 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1
X=0FF or ON #6 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1
#1 #2 #3 #4 #5
0 0 0 0 0 0 32 64 96 128 160 192 224 256 288 320 352 384 416 448 480
1 0 0 0 0 0 1 33 65 97 129 161 193 225 257 289 321 353 385 417 449 481
0 1 0 0 0 2 34 66 98 130 162 194 226 258 290 322 354 386 418 450 482
1 1 0 0 0 0 3 35 67 99 131 163 195 227 259 291 323 355 387 419 451 483
0 0 1 0 0 4 36 68 100 132 164 196 228 260 292 324 356 388 420 452 484
1 0 1 0 0 5 37 69 101 133 165 197 229 261 293 325 357 389 421 453 485
0 1 1 0 0 6 38 70 102 134 166 198 230 262 294 326 358 390 422 454 486
1 1 1 0 0 7 39 71 103 135 167 199 231 263 295 327 359 391 423 455 487
0 0 0 1 0 8 40 72 104 136 168 200 232 264 296 328 360 392 424 456 488
1 0 0 1 0 9 41 73 105 137 169 201 233 265 297 329 361 393 425 457 489
0 1 0 1 0 1 0 10 42 74 106 138 170 202 234 266 298 330 362 394 426 458 490
1 1 0 1 0 1 0 1 1 43 75 107 139 171 203 235 267 299 331 363 395 427 459 491 0 0 1 1 1 0 12 44 76 108 140 172 204 236 268 300 332 364 396 428 460 492
0 0 1 1 1 0 12 44 76 108 140 172 204 236 268 300 332 364 396 428 460 492 1 0 1 1 0 1 3 45 77 109 141 173 205 237 269 301 333 365 397 429 461 493
0 1 1 1 0 14 46 78 110 142 174 206 238 270 302 334 366 398 430 462 494
1 1 1 1 0 15 47 79 111 143 175 207 239 271 303 335 367 399 431 463 495
0 0 0 0 1 16 48 80 112 144 176 208 240 272 304 336 368 400 432 464 496
1 0 0 0 1 17 49 81 113 145 177 209 241 273 305 337 369 401 433 465 497
0 1 0 0 1 18 50 82 114 146 178 210 242 274 306 338 370 402 434 466 498
1 1 0 0 1 19 51 83 115 147 179 211 243 275 307 339 371 403 435 467 499
0 0 1 0 1 20 52 84 116 148 180 212 244 276 308 340 372 404 436 468 500
1 0 1 0 1 21 53 85 117 149 181 213 245 277 309 341 373 405 437 469 501
0 1 1 0 1 22 54 86 118 150 182 214 246 278 310 342 374 406 438 470 502
1 1 1 0 1 23 55 87 119 151 183 215 247 279 311 343 375 407 439 471 503
0 0 0 1 1 2 24 56 88 120 152 184 216 248 280 312 344 376 408 440 472 504
1 0 0 1 1 2 5 57 89 121 153 185 217 249 281 313 345 377 409 441 473 505
0 1 0 1 1 26 58 90 122 154 186 218 250 282 314 346 378 410 442 474 506
1 1 0 1 1 27 59 91 123 155 187 219 251 283 315 347 379 411 443 475 507
0 0 1 1 1 1 28 60 92 124 156 188 220 252 284 316 348 380 412 444 476 508
1 0 1 1 1 29 61 93 125 157 189 221 253 285 317 349 381 413 445 477 509
0 1 1 1 1 30 62 94 126 158 190 222 254 286 318 350 382 414 446 478 510
1 1 1 1 1 1 31 63 95 127 159 191 223 255 287 319 351 383 415 447 479 511 DipSwitch Position DMX Address
DipSwitch Position DMX Address

4. Turn on the all units' power, the units begins reset, then the unit begins working.

5. Use DMX console to control your units.

Notes:

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General instructions

Unpacking:

- 1. DMX console can not be used in Master-Slave operation (Sound Active or AUTO mode).
- 2. There should be only one master unit in Master-Slave operation.

Troubleshooting

- 1. If the power supply indicator doesn't light up and the laser doesn't work, please check the power supply and the input voltage.
- 2. In Stand-Alone operation, if the power supply indicator is light up and sound active indicator isn't light up, but the laser is shut off doesn't work.
- A. Because sound is too small make for laser shut off in sound active, please increase the music volume or increase audio sensitivity with sensitivity knob, please check as below.
- B. Please check if unit has been set up in slave mode, then set up in master mode.
- 3. In Master-Slave operation, slave unit don't function, please check as below.
- A. Make sure to there's only one master in the chain, and the others are set in slave mode.
- B. Make sure to control the unit without DMX console controlling.
- C. Make sure to take a good quality power cable and connection.
- 4. In DMX mode operation, the laser is OFF and the DMX signal indicator is unlighted, please check as below.
- A. Make sure to set up the DMX mode.
- B. Make sure to have a good connection.
- 5. In DMX operation, the unit can't be controlled by the DMX console, but the DMX signal indicator is flashing, please make sure the DMX console and unit have the same channel.
- 6. If the output beam direction above isn't the right way, please restart the unit.
- 7. If the unit is fail, please turn off the unit, then turn on again after 5 minutes.

After trying the above solution you still have a problem, please contact your dealer or our company for service.

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Technical Specification

1. Voltage: AC100V~250V, 50HZ/60HZ, Fuse: 3A/250V

2. Rated Power: 50W

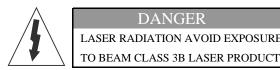
Thank you for purchasing this product. Please read user guide for safety and operations information before using the product. Keep this manual for future reference. This product can create perfect laser programs and effects since it has passed a series of strictly tests before delivery. Please check the attachments listed on the page after opening the carton. In the event of carton damage or attachment missing in transit, please contact your dealer or our after sales service department.

Attachments:

Laser Light: 1PCS
 Power Cable: 1PCS
 User Guide: 1PCS

Notice:

- 1. Do not exposure the human eye direct to laser beam.
- 2. Do not turn on and off the unit frequently.
- 3. Before using this unit make sure the power supply is ground.
- 4. This unit is intended for indoor use only and should be prevented form water, moisture and shake. The working temperature of this unit is $18\sim30^{\circ}$ C, do not use this continuously over 4 hours, otherwise it shortens the lifetime of the unit.
- 5. Use cleaning tissue to remove the dust absorbed on the external lenses periodically to optimize light output.
- 6. Do not remove or break the warranty label, otherwise it void the warranty.
- 7. Always replace with the exact same type fuse, replacement with anything other than the specified fuse can cause fire or electric shock and damage your unit, and will void your manufactures warranty.





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- 3. Use standard XLR microphone cable chain your units together via the XLR connector on the rear of the units. For longer cable runs we suggest a terminator at the last fixture.
- 4. Turn on the all units' power, the units begins reset, then the unit begins working. The slave units will react the same as the master unit.

3. Laser: 100mW@650nm res laser

60mW@532nm green Laser

600mW@450nm blue Laser

4. Working Modes: DMX, Sound Active, AUTO, Master-Slave

5. DMX Control Channel: 9 channels

6. Graphics & Effects: combing the most popular lasers effects together including RGB clour beam lines laser, twinkling star laser, firefly laser and flower laser

7. Interface: 3 pins XLR jack for DMX or Maser-Slave linking

8. Size: L*W*H=585*185*105mm

9. Weight: 5.5Kg

Features

1. Various effect modes

Combing the most popular lasers effects together including RGB clour beam lines laser, twinkling star laser, firefly laser and flower laser

2. Various working modes

Includes four working modes as DMX, Sound Active, AUTO and Master-Slave Control mode, different working modes has different program for different applications.

3. DMX control

The unit has 9 channels to control in DMX mode. The unit has BLACK OUT function. The uint will shut OFF if no DMX512 signal.

4. Master-Slave function

The system allow link many units (as slave unit) together to doing synchro job without console in sound active or AUTO mode.

5. LED indicating and shut-off function

In sound active mode, the unit's panel has LED indicating for sound active. The unit will shut off after 8 seconds when the music stops.

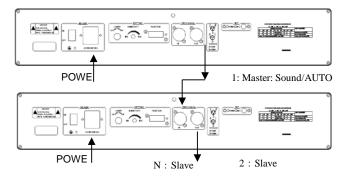
6. DPSS Laser

Use Diode-Pumped Solid State green laser, stable output and long working life.

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Dipswitch	Value	Dipswitch	Value
#1	1	#6	32
#2	2	#7	64
#3	4	#8	128
#4	8	#9	256

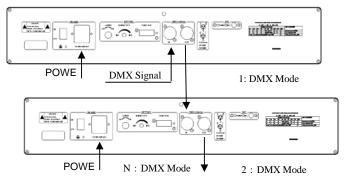
5. The units will react to the low frequencies of music via the internal microphone. Adjust the audio sensitivity knob on the back of the master unit to make the unit more or less sensitive in sound active. The panel has LED indicating for sound active.



Universal DMX Operation (DMX mode)

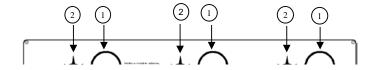
This mode allows you to use universal DMX-512 console to operate.

- 1. Install the units in a suitable position (laying or appending).
- 2. Use standard XLR microphone cable chain your units together via the XLR connector on the rear of the units. For longer cable runs we suggest a terminator at the last fixture.
- 3. Assign a DMX address to each the unit using dipswitches, see the "DMX Address Quick Reference Char".



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Front/Rear Panel



_			ĺ
# 5	16	#10	Set to "0"

One unit has 10 channels, so each unit must be assigns 10 channels at least. We may assign 16 channels for one unit, then DMX address = 16*N + 1, $N=0, 1, 2, 3 \dots$

Example

One loop address=1, two loop address=9, three loop address=17, four loop address=25

Loop	Address	Binary	Dipswitches
1	1	100000000	#1
2	17	100010000	# 1+#5
3	33	100001000	# 1+#6
4	49	100011000	# 1+#5+#6

The dipswitches setting for DMX address see the "DMX Address Quick Reference Chart ".

Operation

Stand-Alone Operation (Sound Active, AUTO mode)

The mode allows a single unit to react to the beat of the music in the master mode.

- 1. Install the units in a suitable position (laying or appending).
- 2. Set dipswitch to select Sound Active or AUTO mode.
- 3. Turn on the unit power, the unit begins reset, then the unit begins working.
- 4. The unit will react to the low frequencies of music via the internal microphone. Adjust the audio sensitivity knob on the back of the unit to make the unit more or less sensitive in sound active. The panel has LED indicating for sound active.

Master-Slave Operation

This mode will allow you to link up to 32 units together without controller.

- 1. Install the units in a suitable position (laying or appending).
- 2. Choose a unit to function as Master mode, set dipswitch to select Sound Active or AUTO mode. The others must be set to Slave mode, set dipswitch to select Slave mode.

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mode, the laser pattern ON /OFF, the size, the position, the speed, the color etc.

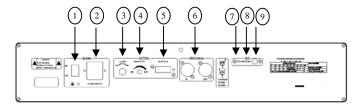
DMX Control Parameter Chart

Channel	Function	Value	Description		
		0~49	Close, laser OFF		
CH1	Mode	50~99	Sound active mode		
CH1 Wode		100~149	Auto mode		



Front Panel Figure

- 1. Laser Pattern Aperture
- 2. Twinkling star laser/Firefly laser/Flower laser Aperture



Rear Panel Figure

1. Power switch 2. Power Jack 3. Laser key

4. Audio Sensitivity Knob 5. Dipswitches: Function Setting

6. DMX or Linking Jack 7. Power indicator:Red

8. Sound active indicator:Blue 9. Sound active microphone

Function & Setting

Sound Active

The change of the laser pattern is controlled by sound, that is, the rhythm of the sound control the effect of the changing laser pattern. Turning the sensitivity knob in the clockwise direction to increase the fixture's sensitivity to sound, the knob in the counter clockwise direction to decrease. The laser diode will automatically turn off after 8 seconds when the music stops.

AUTO

Auto cycles the built-in programs without being controlled externally. It has no laser OFF DMX Control

The system only accepts the DMX512 signal of international standard to control the system

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If Effect Mode Value of CH2 = $60\sim255$, it is grating dot effect					
СН3	Spin Speed	0~255	Spin speed		
СН4	CH4 Strobe	0~9	No Strobe		
СП4		10~255	Strobe (fast to slow)		
			R+G+B		
		40~79	R+G		

		150~255 DMX manual control (CH2-14 valid)		
		0~29	Static patterns of DMX mode	
		30 [~] 59	Dynamic patterns of DMX mode	
		60 [~] 89	Twinkle star effect with Clockwise	
		90 [~] 119	Twinkle star effect with ounter clockwise	
CH2	Effect Mode	120~149	Firefly effect with Clockwise	
		150~179	Firefly effect with ounter clockwise	
		180~209	Line pattren effect with Clockwise	
		210~240	Line pattren effect Stop Spin	
		240 [~] 255	Line pattren effect with ounter clockwise	

	If Effect Mode Value of CH2 = $0\sim59$, it is line pattren effect							
СНЗ	Pattern selection	0~255	52 static/dynamic patterns					
CH4	Position-X	0~255	Adjust position-X					
CH5	Position-Y	0~255	Adjust position-Y					
CH6	Scanning Speed	0~255	0 is speedy, 255 is slow					
CH7	Dynamic Play Speed	0~255	0 is speedy, 255 is slow, has ten grade speed					
CH8	Static pattern size	0~255	0 is small, 255 is big					
		0~39	R+G+B					
	Color Selection	40~79	R+G					
		80 [~] 119	R+B					
CH9		120~159	G+B					
		160~199	R					
		200~239	G					
		240~255	В					

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		80~119	R+B
CH5	Color Selection	120~159	G+B
		160~199	R
		200~239	G
		240~255	В

Function Setting

Uses dipswitches to assign a unit's function: DMX/slave, or sound active, or AUTO mode. For the unit is DMX mode, set the DMX address. Each dipswitch represents a binary value. See the "Function chart".

O=OFF 1=ON X=OFF or ON

	DIPSWITCH CHART							EUNCTION			
#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	FUNCTION	
X	X	X	X	X	X	X	X	0	1	SOUND ACTIVE	
X	X	X	X	X	X	X	X	1	1	AUTO MODE	
	SET DMX ADDRESS FOR DMX MODE						0	DMX / SLAVE			

Function Chart

Dipswitch #10 is use to set master or slave mode. Master modes have sound active and AUTO mode. Slave modes have DMX and Slave mode. The units automatically identify DMX or SLAVE mode by data receives. Dipswitch #9 use to is set sound active or AUTO mode in master mode.

DMX address calculation

For DMX mode, DMX512 address from #1 to 9# dipswitches must be set, the address is set from 1 to 511. Each dipswitch represents a binary value.