
# Chroma-Q Mark II User Manual
# The “Digital” Version

Version 4.0 January 1999

# *NOTE:*

**This version of the Chroma-Q uses a "digital" card, a binary DMX address switch and a different method of gel string calibration and fixing.**
**Please read the manual before using the product.**



## Table of DMX Binary Address Settings 385-512

| DMX ADDRESS | BINARY SWITCH SETTING | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 |
| 385 | ON | | | | | | | ON | ON |
| 386 | | ON | | | | | | ON | ON |
| 387 | ON | ON | | | | | | ON | ON |
| 388 | | | ON | | | | | ON | ON |
| 389 | ON | | ON | | | | | ON | ON |
| 390 | | ON | ON | | | | | ON | ON |
| 391 | ON | ON | ON | | | | | ON | ON |
| 392 | | | | ON | | | | ON | ON |
| 393 | ON | | | ON | | | | ON | ON |
| 394 | | ON | | ON | | | | ON | ON |
| 395 | ON | ON | | ON | | | | ON | ON |
| 396 | | | ON | ON | | | | ON | ON |
| 397 | ON | | ON | ON | | | | ON | ON |
| 398 | | ON | ON | ON | | | | ON | ON |
| 399 | ON | ON | ON | ON | | | | ON | ON |
| 400 | | | | | ON | | | ON | ON |
| 401 | ON | | | | ON | | | ON | ON |
| 402 | | ON | | | ON | | | ON | ON |
| 403 | ON | ON | | | ON | | | ON | ON |
| 404 | | | ON | | ON | | | ON | ON |
| 405 | ON | | ON | | ON | | | ON | ON |
| 406 | | ON | ON | | ON | | | ON | ON |
| 407 | ON | ON | ON | | ON | | | ON | ON |
| 408 | | | | ON | ON | | | ON | ON |
| 409 | ON | | | ON | ON | | | ON | ON |
| 410 | | ON | | ON | ON | | | ON | ON |
| 411 | ON | ON | | ON | ON | | | ON | ON |
| 412 | | | ON | ON | ON | | | ON | ON |
| 413 | ON | | ON | ON | ON | | | ON | ON |
| 414 | | ON | ON | ON | ON | | | ON | ON |
| 415 | ON | ON | ON | ON | ON | | | ON | ON |
| 416 | | | | | | ON | | ON | ON |
| 417 | ON | | | | | ON | | ON | ON |
| 418 | | ON | | | | ON | | ON | ON |
| 419 | ON | ON | | | | ON | | ON | ON |
| 420 | | | ON | | | ON | | ON | ON |
| 421 | ON | | ON | | | ON | | ON | ON |
| 422 | | ON | ON | | | ON | | ON | ON |
| 423 | ON | ON | ON | | | ON | | ON | ON |
| 424 | | | | ON | | ON | | ON | ON |
| 425 | ON | | | ON | | ON | | ON | ON |
| 426 | | ON | | ON | | ON | | ON | ON |
| 427 | ON | ON | | ON | | ON | | ON | ON |
| 428 | | | ON | ON | | ON | | ON | ON |
| 429 | ON | | ON | ON | | ON | | ON | ON |
| 430 | | ON | ON | ON | | ON | | ON | ON |
| 431 | ON | ON | ON | ON | | ON | | ON | ON |
| 432 | | | | | ON | ON | | ON | ON |
| 433 | ON | | | | ON | ON | | ON | ON |
| 434 | | ON | | | ON | ON | | ON | ON |
| 435 | ON | ON | | | ON | ON | | ON | ON |
| 436 | | | ON | | ON | ON | | ON | ON |
| 437 | ON | | ON | | ON | ON | | ON | ON |
| 438 | | ON | ON | | ON | ON | | ON | ON |
| 439 | ON | ON | ON | | ON | ON | | ON | ON |
| 440 | | | | ON | ON | ON | | ON | ON |
| 441 | ON | | | ON | ON | ON | | ON | ON |
| 442 | | ON | | ON | ON | ON | | ON | ON |
| 443 | ON | ON | | ON | ON | ON | | ON | ON |
| 444 | | | ON | ON | ON | ON | | ON | ON |
| 445 | ON | | ON | ON | ON | ON | | ON | ON |
| 446 | | ON | ON | ON | ON | ON | | ON | ON |
| 447 | ON | ON | ON | ON | ON | ON | | ON | ON |
| 448 | | | | | | | ON | ON | ON |

| DMX ADDRESS | BINARY SWITCH SETTING | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 |
| 449 | ON | | | | | | ON | ON | ON |
| 450 | | ON | | | | | ON | ON | ON |
| 451 | ON | ON | | | | | ON | ON | ON |
| 452 | | | ON | | | | ON | ON | ON |
| 453 | ON | | ON | | | | ON | ON | ON |
| 454 | | ON | ON | | | | ON | ON | ON |
| 455 | ON | ON | ON | | | | ON | ON | ON |
| 456 | | | | ON | | | ON | ON | ON |
| 457 | ON | | | ON | | | ON | ON | ON |
| 458 | | ON | | ON | | | ON | ON | ON |
| 459 | ON | ON | | ON | | | ON | ON | ON |
| 460 | | | ON | ON | | | ON | ON | ON |
| 461 | ON | | ON | ON | | | ON | ON | ON |
| 462 | | ON | ON | ON | | | ON | ON | ON |
| 463 | ON | ON | ON | ON | | | ON | ON | ON |
| 464 | | | | | ON | | ON | ON | ON |
| 465 | ON | | | | ON | | ON | ON | ON |
| 466 | | ON | | | ON | | ON | ON | ON |
| 467 | ON | ON | | | ON | | ON | ON | ON |
| 468 | | | ON | | ON | | ON | ON | ON |
| 469 | ON | | ON | | ON | | ON | ON | ON |
| 470 | | ON | ON | | ON | | ON | ON | ON |
| 471 | ON | ON | ON | | ON | | ON | ON | ON |
| 472 | | | | ON | ON | | ON | ON | ON |
| 473 | ON | | | ON | ON | | ON | ON | ON |
| 474 | | ON | | ON | ON | | ON | ON | ON |
| 475 | ON | ON | | ON | ON | | ON | ON | ON |
| 476 | | | ON | ON | ON | | ON | ON | ON |
| 477 | ON | | ON | ON | ON | | ON | ON | ON |
| 478 | | ON | ON | ON | ON | | ON | ON | ON |
| 479 | ON | ON | ON | ON | ON | | ON | ON | ON |
| 480 | | | | | | ON | ON | ON | ON |
| 481 | ON | | | | | ON | ON | ON | ON |
| 482 | | ON | | | | ON | ON | ON | ON |
| 483 | ON | ON | | | | ON | ON | ON | ON |
| 484 | | | ON | | | ON | ON | ON | ON |
| 485 | ON | | ON | | | ON | ON | ON | ON |
| 486 | | ON | ON | | | ON | ON | ON | ON |
| 487 | ON | ON | ON | | | ON | ON | ON | ON |
| 488 | | | | ON | | ON | ON | ON | ON |
| 489 | ON | | | ON | | ON | ON | ON | ON |
| 490 | | ON | | ON | | ON | ON | ON | ON |
| 491 | ON | ON | | ON | | ON | ON | ON | ON |
| 492 | | | ON | ON | | ON | ON | ON | ON |
| 493 | ON | | ON | ON | | ON | ON | ON | ON |
| 494 | | ON | ON | ON | | ON | ON | ON | ON |
| 495 | ON | ON | ON | ON | | ON | ON | ON | ON |
| 496 | | | | | ON | ON | ON | ON | ON |
| 497 | ON | | | | ON | ON | ON | ON | ON |
| 498 | | ON | | | ON | ON | ON | ON | ON |
| 499 | ON | ON | | | ON | ON | ON | ON | ON |
| 500 | | | ON | | ON | ON | ON | ON | ON |
| 501 | ON | | ON | | ON | ON | ON | ON | ON |
| 502 | | ON | ON | | ON | ON | ON | ON | ON |
| 503 | ON | ON | ON | | ON | ON | ON | ON | ON |
| 504 | | | | ON | ON | ON | ON | ON | ON |
| 505 | ON | | | ON | ON | ON | ON | ON | ON |
| 506 | | ON | | ON | ON | ON | ON | ON | ON |
| 507 | ON | ON | | ON | ON | ON | ON | ON | ON |
| 508 | | | ON | ON | ON | ON | ON | ON | ON |
| 509 | ON | | ON | ON | ON | ON | ON | ON | ON |
| 510 | | ON | ON | ON | ON | ON | ON | ON | ON |
| 511 | ON | ON | ON | ON | ON | ON | ON | ON | ON |
| 512 | | | | | | | | | |

# Table of DMX Binary Address Settings 257-384

| DMX ADDRESS | BINARY SWITCH SETTING | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 |
| 257 | ON | | | | | | | | ON |
| 258 | | ON | | | | | | | ON |
| 259 | ON | ON | | | | | | | ON |
| 260 | | | ON | | | | | | ON |
| 261 | ON | | ON | | | | | | ON |
| 262 | | ON | ON | | | | | | ON |
| 263 | ON | ON | ON | | | | | | ON |
| 264 | | | | ON | | | | | ON |
| 265 | ON | | | ON | | | | | ON |
| 266 | | ON | | ON | | | | | ON |
| 267 | ON | ON | | ON | | | | | ON |
| 268 | | | ON | ON | | | | | ON |
| 269 | ON | | ON | ON | | | | | ON |
| 270 | | ON | ON | ON | | | | | ON |
| 271 | ON | ON | ON | ON | | | | | ON |
| 272 | | | | | ON | | | | ON |
| 273 | ON | | | | ON | | | | ON |
| 274 | | ON | | | ON | | | | ON |
| 275 | ON | ON | | | ON | | | | ON |
| 276 | | | ON | | ON | | | | ON |
| 277 | ON | | ON | | ON | | | | ON |
| 278 | | ON | ON | | ON | | | | ON |
| 279 | ON | ON | ON | | ON | | | | ON |
| 280 | | | | ON | ON | | | | ON |
| 281 | ON | | | ON | ON | | | | ON |
| 282 | | ON | | ON | ON | | | | ON |
| 283 | ON | ON | | ON | ON | | | | ON |
| 284 | | | ON | ON | ON | | | | ON |
| 285 | ON | | ON | ON | ON | | | | ON |
| 286 | | ON | ON | ON | ON | | | | ON |
| 287 | ON | ON | ON | ON | ON | | | | ON |
| 288 | | | | | | ON | | | ON |
| 289 | ON | | | | | ON | | | ON |
| 290 | | ON | | | | ON | | | ON |
| 291 | ON | ON | | | | ON | | | ON |
| 292 | | | ON | | | ON | | | ON |
| 293 | ON | | ON | | | ON | | | ON |
| 294 | | ON | ON | | | ON | | | ON |
| 295 | ON | ON | ON | | | ON | | | ON |
| 296 | | | | ON | | ON | | | ON |
| 297 | ON | | | ON | | ON | | | ON |
| 298 | | ON | | ON | | ON | | | ON |
| 299 | ON | ON | | ON | | ON | | | ON |
| 300 | | | ON | ON | | ON | | | ON |
| 301 | ON | | ON | ON | | ON | | | ON |
| 302 | | ON | ON | ON | | ON | | | ON |
| 303 | ON | ON | ON | ON | | ON | | | ON |
| 304 | | | | | ON | ON | | | ON |
| 305 | ON | | | | ON | ON | | | ON |
| 306 | | ON | | | ON | ON | | | ON |
| 307 | ON | ON | | | ON | ON | | | ON |
| 308 | | | ON | | ON | ON | | | ON |
| 309 | ON | | ON | | ON | ON | | | ON |
| 310 | | ON | ON | | ON | ON | | | ON |
| 311 | ON | ON | ON | | ON | ON | | | ON |
| 312 | | | | ON | ON | ON | | | ON |
| 313 | ON | | | ON | ON | ON | | | ON |
| 314 | | ON | | ON | ON | ON | | | ON |
| 315 | ON | ON | | ON | ON | ON | | | ON |
| 316 | | | ON | ON | ON | ON | | | ON |
| 317 | ON | | ON | ON | ON | ON | | | ON |
| 318 | | ON | ON | ON | ON | ON | | | ON |
| 319 | ON | ON | ON | ON | ON | ON | | | ON |
| 320 | | | | | | | ON | | ON |

| DMX ADDRESS | BINARY SWITCH SETTING | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 |
| 321 | ON | | | | | | ON | | ON |
| 322 | | ON | | | | | ON | | ON |
| 323 | ON | ON | | | | | ON | | ON |
| 324 | | | ON | | | | ON | | ON |
| 325 | ON | | ON | | | | ON | | ON |
| 326 | | ON | ON | | | | ON | | ON |
| 327 | ON | ON | ON | | | | ON | | ON |
| 328 | | | | ON | | | ON | | ON |
| 329 | ON | | | ON | | | ON | | ON |
| 330 | | ON | | ON | | | ON | | ON |
| 331 | ON | ON | | ON | | | ON | | ON |
| 332 | | | ON | ON | | | ON | | ON |
| 333 | ON | | ON | ON | | | ON | | ON |
| 334 | | ON | ON | ON | | | ON | | ON |
| 335 | ON | ON | ON | ON | | | ON | | ON |
| 336 | | | | | ON | | ON | | ON |
| 337 | ON | | | | ON | | ON | | ON |
| 338 | | ON | | | ON | | ON | | ON |
| 339 | ON | ON | | | ON | | ON | | ON |
| 340 | | | ON | | ON | | ON | | ON |
| 341 | ON | | ON | | ON | | ON | | ON |
| 342 | | ON | ON | | ON | | ON | | ON |
| 343 | ON | ON | ON | | ON | | ON | | ON |
| 344 | | | | ON | ON | | ON | | ON |
| 345 | ON | | | ON | ON | | ON | | ON |
| 346 | | ON | | ON | ON | | ON | | ON |
| 347 | ON | ON | | ON | ON | | ON | | ON |
| 348 | | | ON | ON | ON | | ON | | ON |
| 349 | ON | | ON | ON | ON | | ON | | ON |
| 350 | | ON | ON | ON | ON | | ON | | ON |
| 351 | ON | ON | ON | ON | ON | | ON | | ON |
| 352 | | | | | | ON | ON | | ON |
| 353 | ON | | | | | ON | ON | | ON |
| 354 | | ON | | | | ON | ON | | ON |
| 355 | ON | ON | | | | ON | ON | | ON |
| 356 | | | ON | | | ON | ON | | ON |
| 357 | ON | | ON | | | ON | ON | | ON |
| 358 | | ON | ON | | | ON | ON | | ON |
| 359 | ON | ON | ON | | | ON | ON | | ON |
| 360 | | | | ON | | ON | ON | | ON |
| 361 | ON | | | ON | | ON | ON | | ON |
| 362 | | ON | | ON | | ON | ON | | ON |
| 363 | ON | ON | | ON | | ON | ON | | ON |
| 364 | | | ON | ON | | ON | ON | | ON |
| 365 | ON | | ON | ON | | ON | ON | | ON |
| 366 | | ON | ON | ON | | ON | ON | | ON |
| 367 | ON | ON | ON | ON | | ON | ON | | ON |
| 368 | | | | | ON | ON | ON | | ON |
| 369 | ON | | | | ON | ON | ON | | ON |
| 370 | | ON | | | ON | ON | ON | | ON |
| 371 | ON | ON | | | ON | ON | ON | | ON |
| 372 | | | ON | | ON | ON | ON | | ON |
| 373 | ON | | ON | | ON | ON | ON | | ON |
| 374 | | ON | ON | | ON | ON | ON | | ON |
| 375 | ON | ON | ON | | ON | ON | ON | | ON |
| 376 | | | | ON | ON | ON | ON | | ON |
| 377 | ON | | | ON | ON | ON | ON | | ON |
| 378 | | ON | | ON | ON | ON | ON | | ON |
| 379 | ON | ON | | ON | ON | ON | ON | | ON |
| 380 | | | ON | ON | ON | ON | ON | | ON |
| 381 | ON | | ON | ON | ON | ON | ON | | ON |
| 382 | | ON | ON | ON | ON | ON | ON | | ON |
| 383 | ON | ON | ON | ON | ON | ON | ON | | ON |
| 384 | | | | | | | | ON | ON |



## *Product Overview*

The Chroma-Q is designed to be one of the most reliable colour changers available. The utilization of digital circuitry and high technology composite materials, produces an affordable colour changer which is capable of scrolling gel strings ofvarious lengths from 2 to 16 colours.

The Chroma-Q is designed to give years of trouble free use, providing that it is regularly adjusted and used in accordance with the instructions detailed in this manual. If you should experience any problems which fall outside of the scope of this manual, contact the selling dealer for further details.

If the selling dealer is unable to satisfy your servicing needs, contact A.C. Lighting directly for full factoryservice:

Outside USA:
A.C. Lighting Ltd
Unit 3, Spearmast Industrial Park
Lane End Road, Sands
High Wycombe, Bucks
HP12 4JG England
Tel: +44 (0)1494 446000
Fax: +44 (0)1494 461024

USA:
A.C. Lighting Inc
5308 Derry Avenue, Unit R
Agoura Hills, CA 91301
USA

Tel: 1 818 707 0884
Fax: 1 818 707 0512

## *Product Description*

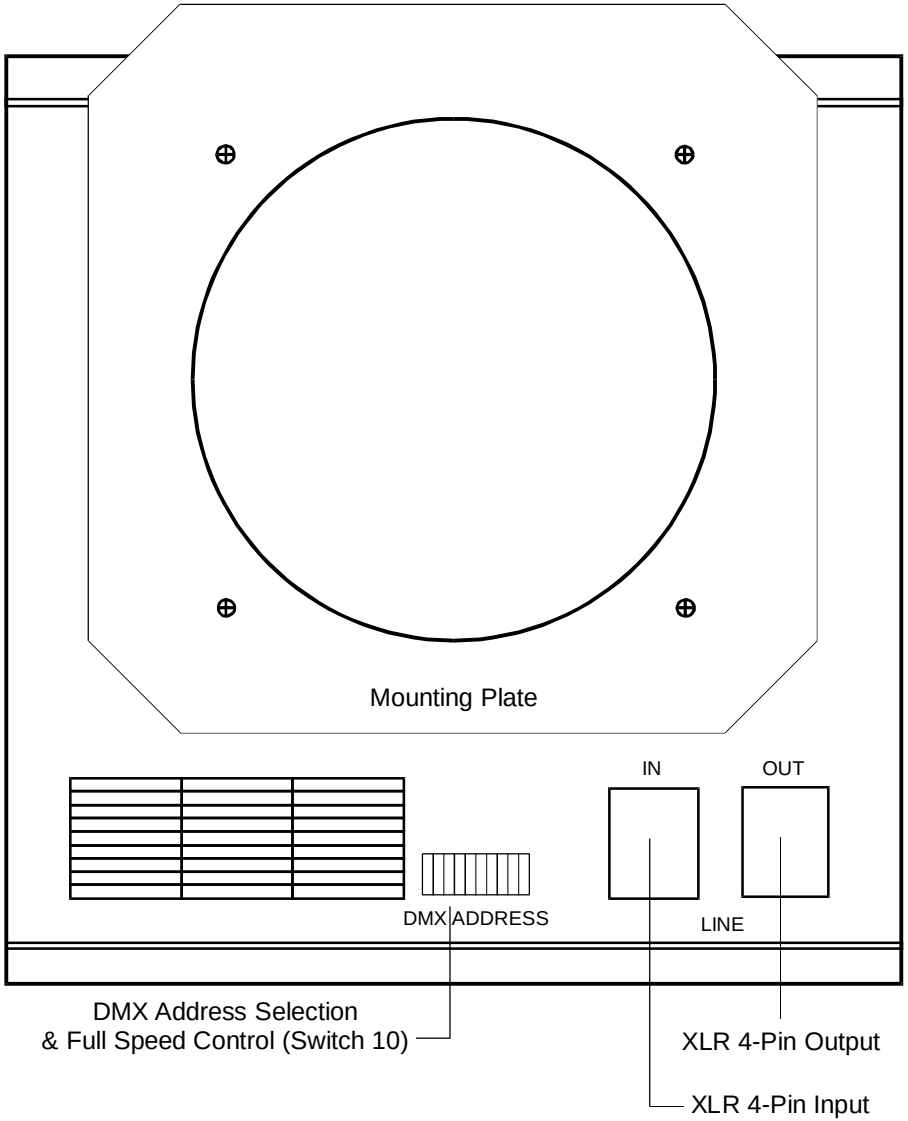
The Chroma Q will read USITT DMX512 (1990) protocol, which enables individual addressing of each unit. This allows for easy grouping of multiple units. The units are individually addressed by setting the 10 pin binary dip switch, as displayed in the Rear Panel Viewon page 4 and the instructions on page 8 section f.

The Chroma-Q is supplied power and control signals by means of a XLR 4-pin input connector. The XLR 4-pin output may then be used to connect other units in turn to the same line. Each chain line must be terminated by patching the output from the last unit in the chain to it's corresponding return connection on the PSU / Splitterbox, as shown in theSystem Diagramon page 7.

***Note:*** *The quantity of Chroma-Q colour changers andmaximum cable length per distribution line is dependent upon the size of PSU / Splitterbox used and the collective amperage draw of theunitsconnected (see page 7 for full details).*

The Chroma-Q is equipped with an integral cooling fan. Each unit is also equipped with three diagnostic LED indicators (found on the underside of the unit); showing Power, DMX signal and DMX level (see section j - Troubleshooting on page 11 for full details).

## *Rear Panel View*




***Note:*** *A range of mounting plates are available to suit most fixtures (see Price List for current selection).*



## Table of DMX Binary Address Settings 129-256

| DMX ADDRESS | BINARY SWITCH SETTING | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 |
| 129 | ON | | | | | | | ON | |
| 130 | | ON | | | | | | ON | |
| 131 | ON | ON | | | | | | ON | |
| 132 | | | ON | | | | | ON | |
| 133 | ON | | ON | | | | | ON | |
| 134 | | ON | ON | | | | | ON | |
| 135 | ON | ON | ON | | | | | ON | |
| 136 | | | | ON | | | | ON | |
| 137 | ON | | | ON | | | | ON | |
| 138 | | ON | | ON | | | | ON | |
| 139 | ON | ON | | ON | | | | ON | |
| 140 | | | ON | ON | | | | ON | |
| 141 | ON | | ON | ON | | | | ON | |
| 142 | | ON | ON | ON | | | | ON | |
| 143 | ON | ON | ON | ON | | | | ON | |
| 144 | | | | | ON | | | ON | |
| 145 | ON | | | | ON | | | ON | |
| 146 | | ON | | | ON | | | ON | |
| 147 | ON | ON | | | ON | | | ON | |
| 148 | | | ON | | ON | | | ON | |
| 149 | ON | | ON | | ON | | | ON | |
| 150 | | ON | ON | | ON | | | ON | |
| 151 | ON | ON | ON | | ON | | | ON | |
| 152 | | | | ON | ON | | | ON | |
| 153 | ON | | | ON | ON | | | ON | |
| 154 | | ON | | ON | ON | | | ON | |
| 155 | ON | ON | | ON | ON | | | ON | |
| 156 | | | ON | ON | ON | | | ON | |
| 157 | ON | | ON | ON | ON | | | ON | |
| 158 | | ON | ON | ON | ON | | | ON | |
| 159 | ON | ON | ON | ON | ON | | | ON | |
| 160 | | | | | | ON | | ON | |
| 161 | ON | | | | | ON | | ON | |
| 162 | | ON | | | | ON | | ON | |
| 163 | ON | ON | | | | ON | | ON | |
| 164 | | | ON | | | ON | | ON | |
| 165 | ON | | ON | | | ON | | ON | |
| 166 | | ON | ON | | | ON | | ON | |
| 167 | ON | ON | ON | | | ON | | ON | |
| 168 | | | | ON | | ON | | ON | |
| 169 | ON | | | ON | | ON | | ON | |
| 170 | | ON | | ON | | ON | | ON | |
| 171 | ON | ON | | ON | | ON | | ON | |
| 172 | | | ON | ON | | ON | | ON | |
| 173 | ON | | ON | ON | | ON | | ON | |
| 174 | | ON | ON | ON | | ON | | ON | |
| 175 | ON | ON | ON | ON | | ON | | ON | |
| 176 | | | | | ON | ON | | ON | |
| 177 | ON | | | | ON | ON | | ON | |
| 178 | | ON | | | ON | ON | | ON | |
| 179 | ON | ON | | | ON | ON | | ON | |
| 180 | | | ON | | ON | ON | | ON | |
| 181 | ON | | ON | | ON | ON | | ON | |
| 182 | | ON | ON | | ON | ON | | ON | |
| 183 | ON | ON | ON | | ON | ON | | ON | |
| 184 | | | | ON | ON | ON | | ON | |
| 185 | ON | | | ON | ON | ON | | ON | |
| 186 | | ON | | ON | ON | ON | | ON | |
| 187 | ON | ON | | ON | ON | ON | | ON | |
| 188 | | | ON | ON | ON | ON | | ON | |
| 189 | ON | | ON | ON | ON | ON | | ON | |
| 190 | | ON | ON | ON | ON | ON | | ON | |
| 191 | ON | ON | ON | ON | ON | ON | | ON | |
| 192 | | | | | | | ON | ON | |

| DMX ADDRESS | BINARY SWITCH SETTING | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 |
| 193 | ON | | | | | | ON | ON | |
| 194 | | ON | | | | | ON | ON | |
| 195 | ON | ON | | | | | ON | ON | |
| 196 | | | ON | | | | ON | ON | |
| 197 | ON | | ON | | | | ON | ON | |
| 198 | | ON | ON | | | | ON | ON | |
| 199 | ON | ON | ON | | | | ON | ON | |
| 200 | | | | ON | | | ON | ON | |
| 201 | ON | | | ON | | | ON | ON | |
| 202 | | ON | | ON | | | ON | ON | |
| 203 | ON | ON | | ON | | | ON | ON | |
| 204 | | | ON | ON | | | ON | ON | |
| 205 | ON | | ON | ON | | | ON | ON | |
| 206 | | ON | ON | ON | | | ON | ON | |
| 207 | ON | ON | ON | ON | | | ON | ON | |
| 208 | | | | | ON | | ON | ON | |
| 209 | ON | | | | ON | | ON | ON | |
| 210 | | ON | | | ON | | ON | ON | |
| 211 | ON | ON | | | ON | | ON | ON | |
| 212 | | | ON | | ON | | ON | ON | |
| 213 | ON | | ON | | ON | | ON | ON | |
| 214 | | ON | ON | | ON | | ON | ON | |
| 215 | ON | ON | ON | | ON | | ON | ON | |
| 216 | | | | ON | ON | | ON | ON | |
| 217 | ON | | | ON | ON | | ON | ON | |
| 218 | | ON | | ON | ON | | ON | ON | |
| 219 | ON | ON | | ON | ON | | ON | ON | |
| 220 | | | ON | ON | ON | | ON | ON | |
| 221 | ON | | ON | ON | ON | | ON | ON | |
| 222 | | ON | ON | ON | ON | | ON | ON | |
| 223 | ON | ON | ON | ON | ON | | ON | ON | |
| 224 | | | | | | ON | ON | ON | |
| 225 | ON | | | | | ON | ON | ON | |
| 226 | | ON | | | | ON | ON | ON | |
| 227 | ON | ON | | | | ON | ON | ON | |
| 228 | | | ON | | | ON | ON | ON | |
| 229 | ON | | ON | | | ON | ON | ON | |
| 230 | | ON | ON | | | ON | ON | ON | |
| 231 | ON | ON | ON | | | ON | ON | ON | |
| 232 | | | | ON | | ON | ON | ON | |
| 233 | ON | | | ON | | ON | ON | ON | |
| 234 | | ON | | ON | | ON | ON | ON | |
| 235 | ON | ON | | ON | | ON | ON | ON | |
| 236 | | | ON | ON | | ON | ON | ON | |
| 237 | ON | | ON | ON | | ON | ON | ON | |
| 238 | | ON | ON | ON | | ON | ON | ON | |
| 239 | ON | ON | ON | ON | | ON | ON | ON | |
| 240 | | | | | ON | ON | ON | ON | |
| 241 | ON | | | | ON | ON | ON | ON | |
| 242 | | ON | | | ON | ON | ON | ON | |
| 243 | ON | ON | | | ON | ON | ON | ON | |
| 244 | | | ON | | ON | ON | ON | ON | |
| 245 | ON | | ON | | ON | ON | ON | ON | |
| 246 | | ON | ON | | ON | ON | ON | ON | |
| 247 | ON | ON | ON | | ON | ON | ON | ON | |
| 248 | | | | ON | ON | ON | ON | ON | |
| 249 | ON | | | ON | ON | ON | ON | ON | |
| 250 | | ON | | ON | ON | ON | ON | ON | |
| 251 | ON | ON | | ON | ON | ON | ON | ON | |
| 252 | | | ON | ON | ON | ON | ON | ON | |
| 253 | ON | | ON | ON | ON | ON | ON | ON | |
| 254 | | ON | ON | ON | ON | ON | ON | ON | |
| 255 | ON | ON | ON | ON | ON | ON | ON | ON | |
| 256 | | | | | | | | | ON |

# Table of DMX Binary Address Settings 1-128

| DMX ADDRESS | BINARY SWITCH SETTING 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ON | | | | | | | | |
| 2 | | ON | | | | | | | |
| 3 | ON | ON | | | | | | | |
| 4 | | | ON | | | | | | |
| 5 | ON | | ON | | | | | | |
| 6 | | ON | ON | | | | | | |
| 7 | ON | ON | ON | | | | | | |
| 8 | | | | ON | | | | | |
| 9 | ON | | | ON | | | | | |
| 10 | | ON | | ON | | | | | |
| 11 | ON | ON | | ON | | | | | |
| 12 | | | ON | ON | | | | | |
| 13 | ON | | ON | ON | | | | | |
| 14 | | ON | ON | ON | | | | | |
| 15 | ON | ON | ON | ON | | | | | |
| 16 | | | | | ON | | | | |
| 17 | ON | | | | ON | | | | |
| 18 | | ON | | | ON | | | | |
| 19 | ON | ON | | | ON | | | | |
| 20 | | | ON | | ON | | | | |
| 21 | ON | | ON | | ON | | | | |
| 22 | | ON | ON | | ON | | | | |
| 23 | ON | ON | ON | | ON | | | | |
| 24 | | | | ON | ON | | | | |
| 25 | ON | | | ON | ON | | | | |
| 26 | | ON | | ON | ON | | | | |
| 27 | ON | ON | | ON | ON | | | | |
| 28 | | | ON | ON | ON | | | | |
| 29 | ON | | ON | ON | ON | | | | |
| 30 | | ON | ON | ON | ON | | | | |
| 31 | ON | ON | ON | ON | ON | | | | |
| 32 | | | | | | ON | | | |
| 33 | ON | | | | | ON | | | |
| 34 | | ON | | | | ON | | | |
| 35 | ON | ON | | | | ON | | | |
| 36 | | | ON | | | ON | | | |
| 37 | ON | | ON | | | ON | | | |
| 38 | | ON | ON | | | ON | | | |
| 39 | ON | ON | ON | | | ON | | | |
| 40 | | | | ON | | ON | | | |
| 41 | ON | | | ON | | ON | | | |
| 42 | | ON | | ON | | ON | | | |
| 43 | ON | ON | | ON | | ON | | | |
| 44 | | | ON | ON | | ON | | | |
| 45 | ON | | ON | ON | | ON | | | |
| 46 | | ON | ON | ON | | ON | | | |
| 47 | ON | ON | ON | ON | | ON | | | |
| 48 | | | | | ON | ON | | | |
| 49 | ON | | | | ON | ON | | | |
| 50 | | ON | | | ON | ON | | | |
| 51 | ON | ON | | | ON | ON | | | |
| 52 | | | ON | | ON | ON | | | |
| 53 | ON | | ON | | ON | ON | | | |
| 54 | | ON | ON | | ON | ON | | | |
| 55 | ON | ON | ON | | ON | ON | | | |
| 56 | | | | ON | ON | ON | | | |
| 57 | ON | | | ON | ON | ON | | | |
| 58 | | ON | | ON | ON | ON | | | |
| 59 | ON | ON | | ON | ON | ON | | | |
| 60 | | | ON | ON | ON | ON | | | |
| 61 | ON | | ON | ON | ON | ON | | | |
| 62 | | ON | ON | ON | ON | ON | | | |
| 63 | ON | ON | ON | ON | ON | ON | | | |
| 64 | | | | | | | ON | | |

| DMX ADDRESS | BINARY SWITCH SETTING 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 |
|---|---|---|---|---|---|---|---|---|---|
| 65 | ON | | | | | | ON | | |
| 66 | | ON | | | | | ON | | |
| 67 | ON | ON | | | | | ON | | |
| 68 | | | ON | | | | ON | | |
| 69 | ON | | ON | | | | ON | | |
| 70 | | ON | ON | | | | ON | | |
| 71 | ON | ON | ON | | | | ON | | |
| 72 | | | | ON | | | ON | | |
| 73 | ON | | | ON | | | ON | | |
| 74 | | ON | | ON | | | ON | | |
| 75 | ON | ON | | ON | | | ON | | |
| 76 | | | ON | ON | | | ON | | |
| 77 | ON | | ON | ON | | | ON | | |
| 78 | | ON | ON | ON | | | ON | | |
| 79 | ON | ON | ON | ON | | | ON | | |
| 80 | | | | | ON | | ON | | |
| 81 | ON | | | | ON | | ON | | |
| 82 | | ON | | | ON | | ON | | |
| 83 | ON | ON | | | ON | | ON | | |
| 84 | | | ON | | ON | | ON | | |
| 85 | ON | | ON | | ON | | ON | | |
| 86 | | ON | ON | | ON | | ON | | |
| 87 | ON | ON | ON | | ON | | ON | | |
| 88 | | | | ON | ON | | ON | | |
| 89 | ON | | | ON | ON | | ON | | |
| 90 | | ON | | ON | ON | | ON | | |
| 91 | ON | ON | | ON | ON | | ON | | |
| 92 | | | ON | ON | ON | | ON | | |
| 93 | ON | | ON | ON | ON | | ON | | |
| 94 | | ON | ON | ON | ON | | ON | | |
| 95 | ON | ON | ON | ON | ON | | ON | | |
| 96 | | | | | | ON | ON | | |
| 97 | ON | | | | | ON | ON | | |
| 98 | | ON | | | | ON | ON | | |
| 99 | ON | ON | | | | ON | ON | | |
| 100 | | | ON | | | ON | ON | | |
| 101 | ON | | ON | | | ON | ON | | |
| 102 | | ON | ON | | | ON | ON | | |
| 103 | ON | ON | ON | | | ON | ON | | |
| 104 | | | | ON | | ON | ON | | |
| 105 | ON | | | ON | | ON | ON | | |
| 106 | | ON | | ON | | ON | ON | | |
| 107 | ON | ON | | ON | | ON | ON | | |
| 108 | | | ON | ON | | ON | ON | | |
| 109 | ON | | ON | ON | | ON | ON | | |
| 110 | | ON | ON | ON | | ON | ON | | |
| 111 | ON | ON | ON | ON | | ON | ON | | |
| 112 | | | | | ON | ON | ON | | |
| 113 | ON | | | | ON | ON | ON | | |
| 114 | | ON | | | ON | ON | ON | | |
| 115 | ON | ON | | | ON | ON | ON | | |
| 116 | | | ON | | ON | ON | ON | | |
| 117 | ON | | ON | | ON | ON | ON | | |
| 118 | | ON | ON | | ON | ON | ON | | |
| 119 | ON | ON | ON | | ON | ON | ON | | |
| 120 | | | | ON | ON | ON | ON | | |
| 121 | ON | | | ON | ON | ON | ON | | |
| 122 | | ON | | ON | ON | ON | ON | | |
| 123 | ON | ON | | ON | ON | ON | ON | | |
| 124 | | | ON | ON | ON | ON | ON | | |
| 125 | ON | | ON | ON | ON | ON | ON | | |
| 126 | | ON | ON | ON | ON | ON | ON | | |
| 127 | ON | ON | ON | ON | ON | ON | ON | | |
| 128 | | | | | | | | ON | |



# *Operation*

A summary of Chroma-Q's operations has been divided into the following sections:

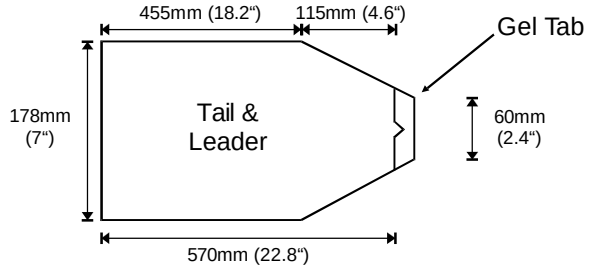


## a) Gel Description

The standard gel string consists of a leader, gel frames and a tail. Procolor HT+, Rosco Supergel and GAMcolor are the recommended brands. The leader and tail are taped to gel tabs which are inserted into the slots on each of the rollers.

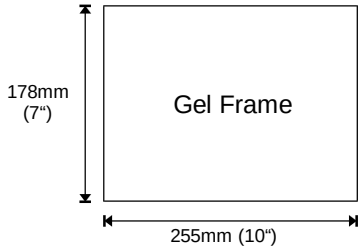
## b) Gel Dimensions

The leader and tail dimensions are as follows:



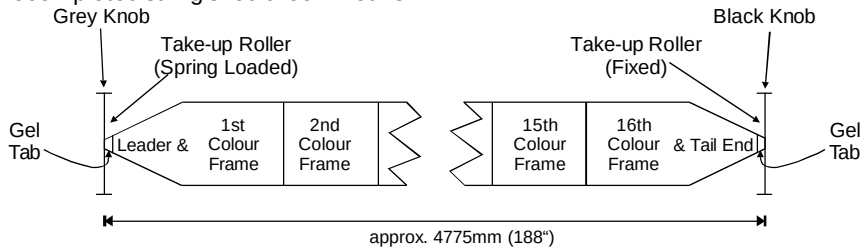

***Note:*** *The tail and leader include the first/last frame.*

The gel frame dimensions are as follows:



## c) Gel String Assembly

To join a leader, tail, gel and tab together, a high temperature, clear gel tape is recommended (see Product Ordering List on page15).
To join leader and tail to rollers, gel tabs are required (see Product Ordering List on page 15).
The completed string should look like this:




***Note:*** *A range of completed gel strings are available (see Product Ordering List on page 15). Custom gel strings are available upon request. Contact the selling dealer for details.*

When ordering gel strings please ensure you state which type of Chroma-Q you require them for, either an "original" Mark I Chroma-Q, or the Mark II "Digital" Chroma-Q.

***Note:*** *Gel strings prepared for the Mark II Chroma-Q can be used in a Mark I unit. To do this remove the pre-fixed metal gel tab (but do not throw this away as it may be useful at a later date) and simply tape the gel to the Mark I (non-slotted) take up reels.*

## d) Control and Power cables

Only genuine Tourflex Data Safe cable is recommended for use with the Chroma-Q colour changing System (see Product Ordering List on page15).

The Chroma-Q utilizes an XLR 4-pin cable system. This is used for power and data transfer. Pins 1 and 4 serve as 24VDC power. Pins 2 and 3 are used for USITT 1990 DMX512 control protocol.

***Note:*** *It is very important to ensure that the drain wire from the cable shield is connected to* ***both*** *connector cases.*

When assembling XLR 4-pin cables, heat shrink should be used on each individual pin to prevent short circuits.

***Note:*** *Damage will occur if power connections short-circuit to control protocol or ground shield connections.*

The pins are wired one to one, in the following format:

| Pin | Function |
|---|---|
| 1 | 0V DC |
| 2 | Control Data Minus |
| 3 | Control Data Plus |
| 4 | Plus 24V DC |
| Chassis | Ground Bonding |



# *Product Ordering List*

| | |
|---|---|
| CQ1/D | Chroma-Q Digital Colour Changer |
| MP1 | Mounting Plate for Par 64, aperture 165mm |
| MP2 | Mounting Plate for Source 4 Par |
| MP3 | Mounting Plate for Source 4 / Shakespeare |
| MP4 | Mounting Plate for 6" Leko / 360Q, aperture 190mm |
| MP5 | Mounting Plate 185mm × 185mm |
| MP6 | Mounting Plate 254mm × 254mm, aperture 190mm |
| PS08 | 6.5 Amp PSU / Splitterbox |
| PS18/2 | 13 Amp PSU / Splitterbox |
| GST16 | 16 frame "Theatre" Gel String for original Chroma-Q |
| GST16/D | 16 frame "Theatre" Gel String for digital Chroma-Q |
| GSR16 | 16 frame "Rock & Roll" Gel String for original Chroma-Q |
| GSR16/D | 16 frame "Rock & Roll" Gel String for digital Chroma-Q |
| GTI | Gel tabs |
| ST | High Temperature Clear Tape |

## Chroma-Q Data Safe Cables

| | |
|---|---|
| CQC3 | 1m / 3ft Chroma-Q Colour Changer Cable |
| CQC5 | 1.5m / 5ft Chroma-Q Colour Changer Cable |
| CQC10 | 3m / 10ft Chroma-Q Colour Changer Cable |
| CQC25 | 7.5m / 25ft Chroma-Q Colour Changer Cable |
| CQC50 | 15m / 50ft Chroma-Q Colour Changer Cable |
| CQC100 | 30m / 100ft Chroma-Q Colour Changer Cable |

## DMX Data Safe Cables

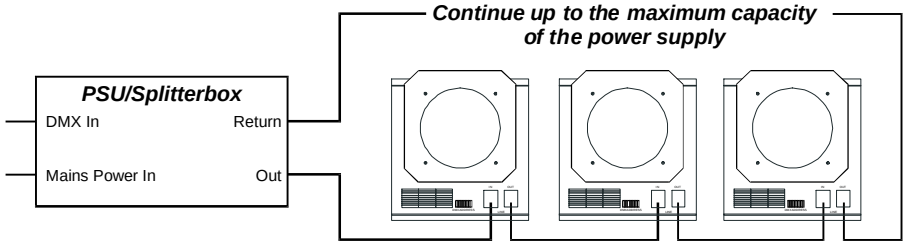
| | |
|---|---|
| DS10 | 3m / 10ft Data Safe 5 pin DMX Cable |
| DS25 | 7.5m / 25ft Data Safe 5 pin DMX Cable |
| DS50 | 15m / 50ft Data Safe 5 pin DMX Cable |
| DS100 | 30m / 100ft Data Safe 5 pin DMX Cable |
| TP | 5 pin DMX Termination Plug |

## *Chroma-Q PS18/2 PSU/Splitterbox Specification*

| | |
|---|---|
| Dimensions: | 300mm (w) x 68.75mm (h) x 281.25mm (d)<br>12" (w) x 2.75" (h) x 11.25" (d) |
| Weight: | 3.3kg / 7.3 lbs |
| Power Requirements: | 115 / 230V AC (internally switchable, isolate from mains before removing cover) |
| Power Consumption: | 6.4 Amperes at 115V AC with 13 Amps at 24V DC<br>3.2 Amperes at 230V AC with 13 Amps at 24V DC |
| Protocol Requirements: | USITT DMX512 (1990) |
| Body Material: | Powder-coated Aluminium |
| Mounting Options: | Either freestanding or can be hung from a bolt |
| Colour: | Black |
| Circuit Out Connector: | XLR 4-pin female (power and control protocol) |
| Return Connector: | XLR 4-pin male (power and control protocol) |
| Power Input Connector: | IEC 10A, UL rated supplied with detachable power cord |
| Control Out Connector: | XLR 5-pin female (DMX link) |
| Control Input Connector: | XLR 5-pin male (protected with clamping diodes) |
| European Approvals: | Complies with EU directives: EMC 89/336/EEC and LVD 73/23/EEC. Harmonized standards applied in order to verify compliance with directives: EN 50081-1 & EN 50082-1: 1992 |
| North American Approvals: | Radiated Emissions: Complies with FCC part 15, subpart B, class A for unintentional radiators |



### *System Diagram*



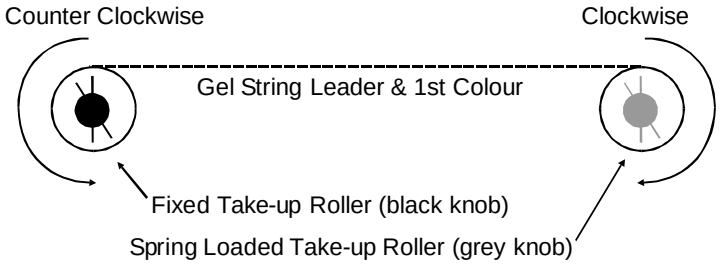

***Note:*** *Total cable length per circuit must not exceed 60m / 200' on the PS08 PSU / Splitterbox and 105m / 350' on the PS18/2 PSU / Splitterbox.*

*The total amperage draw, at 24V DC, of the connected units must not exceed 6.5 Amps on the PS08 unit PSU / Splitterbox and 13 Amps on the PS18/2 PSU / Splitterbox.*

## e) Loading Gel Strings and Calibration

In order to load gel strings, clip the gel tab after frame 16 to the fixed take-up roller (black knob) and hand roll the scroll on to it. Then clip the gel tab before frame 1 on to the spring loaded take-up roller (grey knob) and place the string into the Chroma-Q.

The gel string should be positioned approximately at the first colour frame and inserted as shown by the following diagram. This is done to avoid trapping the spring when applying tension to the gel string.



To apply tension to the gel string being loaded, the following procedure should be followed:

1) Hold fixed roller (roller with black knob).
2) Lift spring-loaded roller (roller with grey knob) until it rotates freely.
3) Rotate spring-loaded roller clockwise while lifted.
4) Replace spring-loaded roller securely on shaft base.
5) Repeat procedure as required, until excess slack is removed
   ***Note:*** *No more than three turns or revolutions of the spring loaded roller are required to tension the gel.*
   ***Do not Over Tension.*** *This will cause damage to the unit, ie broken springs, bent shafts and premature wear on mechanical components. It will also increase the ambient noise level of the unit. Always ensure that fixed roller does not rotate while completing this procedure.*
6) Power up the unit and a self calibration procedure will be completed to set the 100% and 0% gel string settings (It is advisable to have control protocol at the zero level to verify the gel string has been loaded properly).

***Note:*** *The slotted take up rollers on the Mark II can be fitted to the Mark I unit. We offer a cost effective part exchange service for these rollers. If you would like to fit your Mark I units with Mark II rollers, please contact our sales staff for advice and a quotation.*

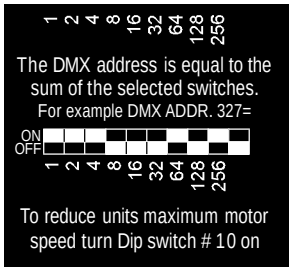
## f) Setting the Address

The Chroma-Q can be addressed easily by setting the binary dip switches located on the rear panel (see diagram page 4). To set your desired address, move the appropriate switches to either the on (up) position or the off (down) position.

***Note:*** *All switches in the down position is 0.*

For example:

Switch position = ☐




A complete chart of dip switch settings for DMX channels 1-511 is available on pages 16-19.

The Chroma-Q can also be set to a second default motor speed. By moving switch 10 on the binary dip switch to the on (up) positon, the inherent speed of the Chroma-Q will decrease by approximately 50% (ideal for environments that are particularly noise sensitive).

## g) PSU / Splitterbox Options

The Chroma-Q PSU / Splitterboxes are the only units suitable to be connected to Chroma-Q colour changers. Connection to other units will invalidate the warranty and may cause serious damage to Chroma-Q colour changers and / or Chroma-Q PSU / Splitterbox.



## *Chroma-Q PS08 PSU/Splitterbox Specification*

| | |
|---|---|
| Dimensions: | 185mm (w) x 65mm (h) x 240mm (d)<br>7¼" (w) x 2½ " (h) x 9½" (d) |
| Weight: | 2.05kg / 4.5lb |
| Power Requirements: | 115 / 230 V AC (internally switchable - isolate from mains before removing cover) |
| Power Consumption: | 3.2 Amperes at 115V AC with 6.5 Amps at 24V DC<br>1.6 Amperes at 230V AC with 6.5 Amps at 24V DC |
| Protocol Requirements: | USITT DMX512 (1990) |
| Body Material: | Powder-coated Aluminum |
| Mounting Options: | Either freestanding or can be hung from a bolt |
| Colour: | Black |
| Circuit Out Connector: | XLR 4-pin female (power and control protocol) |
| Return Connector: | XLR 4-pin male (power and control protocol) |
| Power Input Connector: | IEC 10A, UL rated, supplied with detachable power cord |
| Control Out Connector: | XLR 5-pin female (DMX link) |
| Control Input Connector: | XLR 5-pin male (protected with clamping diodes) |
| European Approvals: | Complies with EU directives: EMC 89/336/EEC and LVD 73/23/EEC. Harmonized standards applied in order to verify compliance with directives: EN 55022 (class B), EN 50082-1 & EN 60950 |
| North American Approvals: | Radiated Emissions: Complies with FCC part 15, subpart B, class A for unintentional radiators |

## *Limited Warranty*

Your Chroma-Q colour changers and PSU / Splitterbox are covered by a 12 month warranty against defects in manufacture. The warranty covers parts and labour but excludes the cost of freight. In the case of any warranty claims, please contact your selling dealer. If the selling dealer is unable to assist you, please contact A.C. Lighting directly at the appropriate address as detailed on page 3.

## *Chroma-Q Colour Changer Specification (CQ1/D)*

| | |
|---|---|
| Dimensions: | 285mm (w) x 295mm (h) x 89mm (d)<br>11¼" (w) x 11 5/8" (h) x 3 ½"(d) |
| Aperture: | 171mm / 6 ¾" diameter |
| Weight: | 2.04kg / 4.5lb (without mounting frame) |
| Gel Frame Capacity: | between 2 - 16 frames |
| Speed:<br>Speed 2: | 1.5 seconds with dip switch 10 to Off<br>3.2 seconds with dip switch 10 to On |
| Address: | 10 pin binary dipswitch address up to 512 channels |
| Power Requirements: | 24VDC |
| Power Consumption: | 0.9 Amperes peak at 24V DC with dip switch 10 to On<br>1.3 Amperes peak at 24V DC with dip switch 10 to Off |
| Protocol Requirements: | USITT DMX512(1990) |
| Body Material: | UL94V0 rated reinforced PBT compound |
| Mounting Plate: | Mounting plates are available to suit numerous fixtures (see separate price list for current selection) |
| Colour: | Black |
| Input Connector: | XLR 4-pin male (power and control protocol) |
| Output Connector: | XLR 4-pin female (power and control protocol) |
| European Approvals: | Complies with EU directives: EMC 89/336/EEC Class A. Harmonized standards applied in order to verify compliance with directives: EN 56022:1994, EN50082-1: 1992 & EN 60950 |
| North American Approvals: | Radiated Emissions: Complies with FCC part 15, subpart B, class A for unintentional radiators. Low Voltage Directive: Complies with CSA 22.2 950, UL1950 |



The Chroma-Q PSU / Splitterbox is available in 2 sizes: One suitable for 6.5 Amps DC and the other suitable for 13 Amps DC total load.

Each Chroma-Q PSU / Splitterbox is equipped with the following:

1) DMX input and thru sockets
2) DMX data indicator
3) Mains power indicator
4) XLR 4-pin output sockets
5) XLR 4-pin return sockets
6) AC mains input

The basic purpose of the PSU / Splitterbox is to combine the DMX control signal and the 24VDC power into individual lines. There are separate circuit outputs for distribution on each PSU / Splitterbox, each capable of supplying power and data for Chroma-Q colour changers. The maximum total cable length for each output circuit is 60M / 200' on the PS08 PSU / Splitterbox and 105M / 350' on the PS18/2 PSU / Splitterbox.

All outputs are independent of one another, and each line has it's own return. The purpose of the return socket is to maintain a constant voltage level across all units on each line, to prevent line loss and to provide DMX signal termination.

The PS08 PSU / Splitterbox has two Chroma-Q circuits and produces 24VDC at 6.5 Amps maximum output. This means a total of 7 Chroma-Q colour changers can be powered through a single PS08 PSU / Splitterbox. The power consumption is approximately 3.2 Amps at 115VAC.

To change the operating voltage on the PS08 PSU / Splitterbox, first isolate the unit from the mains supply, then remove the main body cover by unscrewing the four screws on the side of the cover. Set the voltage selection switch to the desired setting and refit the cover using the four screws.

The PS18/2 PSU / Splitterbox has two Chroma-Q circuits and produces 24VDC at 13 Amps maximum output. This means that a total of 14 Chroma-Q colour changers can be powered through a single PS18/2 PSU / Splitterbox. The power consumption is approximately 6.4 Amps at 115VAC.

To change the operating voltage on the PS18/2 PSU / Splitterbox, first isolate the unit from the mains supply, then remove the main body cover by unscrewing the four screws on the side of the cover. Set the voltage selection switches (two) to the desired setting and refit the cover using the four screws.

## h) Mounting Position

The Chroma-Q is designed to be mounted in an upright position with the base of the unit below the fixture. Do not mount in an inverted position with the base of the unit above the fixture, as the effect of the rising heat from the fixture may cause gel string damage.

Always ensure that the Chroma-Q is powered up before the fixture and that you follow the reverse procedure at the end of the show. Failure to do so may cause gel string damage.

## i) Using Mark I and Mark II Units Together

Mark I and Mark II units can easily be used on the same “show”. If doing this, calibrate your Mark I units first and last frames to the same frames of the Mark II units.



## j) Troubleshooting

Troubleshooting of the Chroma-Q is aided by the indications provided by the 3 diagnostic LED's located on the underside of the Chroma-Q.

All troubleshooting procedures should begin with a LED check.

This section is a guide to solving common problems:

| Symptom | Possible Cause | Solution |
|---|---|---|
| All Chroma-Qs show no power indicator (Red LED). | 24V DC power supply is not providing power to Chroma-Q. | Check if mains power is on and red 24VDC LED is on. |
| Single Chroma-Q power indicator is off (Red LED). | 4-pin XLR cable has broken connection. | Replace 4-pin XLR cable. |
| Power indicator light in flashing. (Red LED). | Gel string is jammed. | Readjust or replace faulty gel string and / or turn power off and then on again. This will reset the unit. |
| Chroma-Q has dim power light (Red LED). | Voltage has dropped below acceptable level. | Check that the return line has been installed. Check maximum cable length has not been exceeded. |
| DMX indicator on all Chroma-Q are off (Green LED). | No DMX is present at the Splitterbox. | Check that the DMX cable is properly connected to DMX input on the Splitterbox. Check that DMX indicator light, located on the Splitterbox, is on. |
| DMX indicator light on one group of Chroma-Q's are off (Green LED). | One output of the Splitterbox has failed.<br>Faulty XLR 4-pin cable at Splitterbox output. | Call selling dealer.<br><br>Test cables. |
| Level indicator does not respond to DMX control signal (Yellow LED). | Improper address. | Reassign unit addressing. |
| Level indication changes intensity, but gel string does not move (Yellow LED). | Mechanical failure. | Call selling dealer. |

***Note:*** *A high percentage of problems are caused by corrupt DMX control protocol. We highly recommend the use of genuine Tourflex Data Safe cables for all Chroma-Q colour changer and DMX control protocol cables.*