

High End Systems Reference Guide

DMX Channel Map

TurboRay DMX Channel Map

| Reduced Profile | |
|-----------------|-------------------|
| Channel | Function |
| 1 | Pan Coarse |
| 2 | Pan Fine |
| 3 | Tilt Coarse |
| 4 | Tilt Fine |
| 5 | Mix Color Mode |
| 6 | Red |
| 7 | Green |
| 8 | Blue |
| 9 | White |
| 10 | CTO |
| 11 | Static Color Mode |
| 12 | Static Color |
| 13 | Gobo Mode |
| 14 | Gobo |
| 15 | Diffuser |
| 16 | Zoom |
| 17 | Zoom Fine |
| 18 | Strobe Mode |
| 19 | Strobe |
| 20 | Dim Coarse |
| 21 | Dim Fine |
| 22 | Macro Mode |
| 23 | Macro Speed |
| 24 | Macro Crossfade |
| 25 | Control |

| Standard Profile | | | |
|------------------|-------------------|---------|-------------------|
| Channel | Function | Channel | Function |
| 1 | Pan Coarse | 28 | LED 2 Green |
| 2 | Pan Fine | 29 | LED 2 Blue |
| 3 | Tilt Coarse | 30 | LED 2 White |
| 4 | Tilt Fine | 31 | LED 2 CTO |
| 5 | Mix Color Mode | 32 | LED 2 Strobe Mode |
| 6 | Static Color Mode | 33 | LED 2 Strobe |
| 7 | Static Color | 34 | LED 2 Dim Coarse |
| 8 | Gobo Mode | 35 | LED 2 Dim Fine |
| 9 | Gobo | 36 | LED 3 Red |
| 10 | Diffuser | 37 | LED 3 Green |
| 11 | Zoom Coarse | 38 | LED 3 Blue |
| 12 | Zoom Fine | 39 | LED 3 White |
| 13 | Macro Mode | 40 | LED 3 CTO |
| 14 | Macro Speed | 41 | LED 3 Strobe Mode |
| 15 | Macro Crossfade | 42 | LED 3 Strobe |
| 16 | Mspeed | 43 | LED 3 Dim Coarse |
| 17 | Control | 44 | LED 3 Dim Fine |
| 18 | LED 1 Red | 45 | LED 4 Red |
| 19 | LED 1 Green | 46 | LED 4 Green |
| 20 | LED 1 Blue | 47 | LED 4 Blue |
| 21 | LED 1 White | 48 | LED 4 White |
| 22 | LED 1 CTO | 49 | LED 4 CTO |
| 23 | LED 1 Strobe Mode | 50 | LED 4 Strobe Mode |
| 24 | LED 1 Strobe | 51 | LED 4 Strobe |
| 25 | LED 1 Dim Coarse | 52 | LED 4 Dim Coarse |
| 26 | LED 1 Dim Fine | 53 | LED 4 Dim Fine |
| 27 | LED 2 Red | | |

HIGH END SYSTEMS



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 TurboRay ■ Rev B ■ Released 2019-09

High End Systems Reference Guide

DMX Channel Map

TurboRay Reduced Profile

| Channel | Function | Description | Dec Low | Dec High | % Low | % High | Hex Low | Hex High | Default | |
|--------------|-------------------|----------------------------------------------------------|---------|----------|-------|--------|---------|----------|---------|-----|
| 1 | Pan | Coarse | 0 | 255 | 0% | 100% | 00h | FFh | 128 | |
| 2 | | Fine | | | | | | | 0 | |
| 3 | Tilt | Coarse | 0 | 255 | 0% | 100% | 00h | FFh | 128 | |
| 4 | | Fine | | | | | | | 0 | |
| 5 | Mix Color Mode | RGB | 0 | 15 | 0% | 6% | 00h | 0Fh | 0 | |
| | | CMY | 91 | 105 | 36% | 41% | 5Bh | 69h | | |
| | | Cycle | 181 | 195 | 71% | 76% | B5h | C3h | | |
| | | Random | 196 | 210 | 77% | 82% | C4h | D2h | | |
| | | Reserved (See note 3 on page 14) | 226 | 255 | 89% | 100% | E2h | FFh | | |
| 6 | Red | RGB | | | | | | | | 255 |
| | | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | | |
| | | CMY | | | | | | | | |
| | | Full saturation to open | 0 | 255 | 0% | 100% | 00h | FFh | | |
| | | Cycle & Random | | | | | | | | |
| Slow to fast | 0 | 255 | 0% | 100% | 00h | FFh | | | | |
| 7 | Green | RGB | | | | | | | | 255 |
| | | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | | |
| | | CMY | | | | | | | | |
| | | Full saturation to open | 0 | 255 | 0% | 100% | 00h | FFh | | |
| 8 | Blue | RGB | | | | | | | | 255 |
| | | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | | |
| | | CMY | | | | | | | | |
| | | Full saturation to open | 0 | 255 | 0% | 100% | 00h | FFh | | |
| 9 | White | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | 255 | |
| 10 | CTO | Disabled | 0 | 4 | 0% | 2% | 00h | 04h | 0 | |
| | | Warm to cool (See note 5 on page 14) | 5 | 255 | 2% | 100% | 05h | FFh | | |
| 11 | Static Color Mode | Indexed (See note 4 on page 14) | 0 | 15 | 0% | 6% | 00h | 0Fh | 48 | |
| | | Forward Spin | 16 | 31 | 6% | 12% | 10h | 1Fh | | |
| | | Reverse Spin | 32 | 47 | 13% | 18% | 20h | 2Fh | | |
| | | Continuous (See note 4 on page 14) | 48 | 63 | 19% | 25% | 30h | 3Fh | | |
| | | Fast Scan | 64 | 79 | 25% | 31% | 40h | 4Fh | | |
| | | Random | 80 | 95 | 31% | 37% | 50h | 5Fh | | |
| | | Reserved (See note 3 on page 14) | 96 | 255 | 38% | 100% | 60h | FFh | | |

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DMX Channel Map

| Channel | Function | Description | Dec Low | Dec High | % Low | % High | Hex Low | Hex High | Default | |
|-------------------------------|--------------|--------------------------------------------------------|---------|----------|-------|--------|---------|----------|---------|--|
| 12 | Static Color | Indexed | | | | | | | 0 | |
| | | Open | 0 | 27 | 0% | 11% | 00h | 1Bh | | |
| | | Open/Dark Blue | 28 | 55 | 11% | 22% | 1Ch | 37h | | |
| | | Dark Blue | 56 | 83 | 22% | 33% | 38h | 53h | | |
| | | Dark Blue/CTO | 84 | 111 | 33% | 44% | 54h | 6Fh | | |
| | | CTO | 112 | 139 | 44% | 55% | 70h | 8Bh | | |
| | | CTO/Red | 140 | 167 | 55% | 65% | 8Ch | A7h | | |
| | | Red | 168 | 195 | 66% | 76% | A8h | C3h | | |
| | | Red/Open | 196 | 223 | 77% | 87% | C4h | DFh | | |
| | | Open | 224 | 255 | 88% | 100% | E0h | FFh | | |
| | | Scan | | | | | | | | |
| | | Open/Dark Blue (slow to fast) | 0 | 63 | 0% | 25% | 00h | 3Fh | | |
| | | Dark Blue/CTO (slow to fast) | 64 | 127 | 25% | 50% | 40h | 7Fh | | |
| | | CTO/Red (slow to fast) | 128 | 191 | 50% | 75% | 80h | BFh | | |
| | | Red/Open (slow to fast) | 192 | 255 | 75% | 100% | C0h | FFh | | |
| | | Spin & Random | | | | | | | | |
| | | Stop | 0 | 0 | 0% | 0% | 00h | 00h | | |
| | | Slow to fast | 1 | 255 | 0% | 100% | 01h | FFh | | |
| | | Continuous | | | | | | | | |
| Positioning from 0-90 degrees | 0 | 255 | 0% | 100% | 00h | FFh | | | | |
| 13 | Gobo Mode | Indexed | 0 | 15 | 0% | 6% | 00h | 0Fh | 16 | |
| | | Continuous (See note 4 on page 14) | 16 | 31 | 6% | 12% | 10h | 1Fh | | |
| | | Forward wheel spin | 32 | 47 | 13% | 18% | 20h | 2Fh | | |
| | | Reverse wheel spin | 48 | 63 | 19% | 25% | 30h | 3Fh | | |
| | | Animate | 64 | 79 | 25% | 31% | 40h | 4Fh | | |
| | | Reserved (See note 3 on page 14) | 80 | 255 | 31% | 100% | 50h | FFh | | |

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DMX Channel Map

| Channel | Function | Description | Dec Low | Dec High | % Low | % High | Hex Low | Hex High | Default | |
|-------------------|-------------------|---------------------------------------------------|---------|----------|-------|--------|---------|----------|---------|--|
| 14 | Gobo | Indexed | | | | | | | | |
| | | Secondary Diffusion | 0 | 31 | 0% | 12% | 00h | 1Fh | 0 | |
| | | Open | 32 | 63 | 13% | 25% | 20h | 3Fh | | |
| | | Hash | 64 | 95 | 25% | 37% | 40h | 5Fh | | |
| | | Dots | 96 | 127 | 38% | 50% | 60h | 7Fh | | |
| | | Reserved (See note 3 on page 14) | 128 | 255 | 50% | 100% | 80h | FFh | | |
| | | Continuous | | | | | | | | |
| | | Positioning from 0-90 degrees | 0 | 255 | 0% | 100% | 00h | FFh | | |
| | | Spin | | | | | | | | |
| | | Rotate Stop | 0 | 0 | 0% | 0% | 00h | 00h | | |
| | | Slow to fast | 1 | 255 | 0% | 100% | 01h | FFh | | |
| | | Animate | | | | | | | | |
| | | Hash stop | 0 | 0 | 0% | 0% | 00h | 00h | | |
| | | Hash slow to fast | 1 | 127 | 0% | 50% | 01h | 7Fh | | |
| Dots stop | 128 | 128 | 50% | 50% | 80h | 80h | | | | |
| Dots slow to fast | 129 | 255 | 51% | 100% | 81h | FFh | | | | |
| 15 | Primary Diffusion | Removed to full diffusion | 0 | 255 | 0% | 100% | 00h | FFh | 0 | |
| 16 | Zoom | Coarse | 0 | 255 | 0% | 100% | 00h | FFh | 127 | |
| 17 | Zoom | Fine | 0 | 255 | 0% | 100% | 00h | FFh | 255 | |
| 18 | Strobe Mode | Synchronous | 0 | 15 | 0% | 6% | 00h | 0Fh | 0 | |
| | | Random | 16 | 31 | 6% | 12% | 10h | 1Fh | | |
| | | Random Pixel | 32 | 47 | 13% | 18% | 20h | 2Fh | | |
| | | Random Pixel/Color | 48 | 63 | 19% | 25% | 30h | 3Fh | | |
| | | Reserved (See note 3 on page 14) | 64 | 255 | 25% | 100% | 40h | FFh | | |
| 19 | Strobe | Closed | 0 | 0 | 0% | 0% | 00h | 00h | 255 | |
| | | Strobe Rate (slow to fast) | 1 | 254 | 0% | 100% | 01h | FEh | | |
| | | Open | 255 | 255 | 100% | 100% | FFh | FFh | | |
| 20 | Dimmer | Coarse | 0 | 255 | 0% | 100% | 00h | FFh | 0 | |
| 21 | Dimmer | Fine | 0 | 255 | 0% | 100% | 00h | FFh | 0 | |

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DMX Channel Map

| Channel | Function | Description | Dec Low | Dec High | % Low | % High | Hex Low | Hex High | Default |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------|---------|----------|-------|--------|---------|----------|---------|
| 22 | Macro Mode (See TurboRay Macros on page 15 and Note 1 on page 14) | Macro off | 0 | 0 | 0% | 0% | 00h | 00h | 0 |
| | | Macro 1 | 1 | 1 | 0% | 0% | 01h | 01h | |
| | | Macro 2 | 2 | 2 | 1% | 1% | 02h | 02h | |
| | | Macro 3 | 3 | 3 | 1% | 1% | 03h | 03h | |
| | | ... | - | - | - | - | - | - | |
| | | Macro 12 | 12 | 12 | 5% | 5% | 0Ch | 0% | |
| | | Reserved (See note 3 on page 14) | 13 | 255 | 5% | 100% | 0Dh | FFh | |
| 23 | Macro Speed (See note 1 on page 14) | Reverse fast to slow | 0 | 126 | 0% | 49% | 00h | 7Eh | 128 |
| | | Stop | 127 | 128 | 50% | 50% | 7Fh | 80h | |
| | | Forward slow to fast | 129 | 255 | 51% | 100% | 81h | FFh | |
| 24 | Macro Crossfade (See note 1 on page 14) | Static | | | | | | | 128 |
| | | Stop | 0 | 128 | 0% | 50% | 00h | 80h | |
| | | Slow to fast (63.8 - 0.15 s) | 129 | 255 | 51% | 100% | 81h | FFh | |
| | | Animated | | | | | | | |
| | | Stop | 0 | 1 | 0% | 0% | 00h | 01h | |
| | | Slow to fast | 1 | 255 | 0% | 100% | 01h | FFh | |
| 25 | Control (See note 6 on page 14) | Safe (normal operation) | 0 | 15 | 0% | 6% | 00h | 0Fh | 0 |
| | | Reserved (See note 3 on page 14) | 16 | 31 | 6% | 12% | 10h | 1Fh | |
| | | Display/LEDs off | 32 | 47 | 13% | 18% | 20h | 2Fh | |
| | | Display/LEDs on | 48 | 63 | 19% | 25% | 30h | 3Fh | |
| | | Home all | 64 | 79 | 25% | 31% | 40h | 4Fh | |
| | | Shutdown | 80 | 95 | 31% | 37% | 50h | 5Fh | |
| | | Studio fan mode | 96 | 101 | 38% | 40% | 60h | 65h | |
| | | Continuous fan mode | 102 | 107 | 40% | 42% | 66h | 6Bh | |
| | | Standard fan mode | 108 | 113 | 42% | 44% | 6Ch | 71h | |
| | | Studio continuous fan mode | 114 | 119 | 45% | 47% | 72h | 77h | |
| | | Red shift on | 120 | 123 | 47% | 48% | 78h | 7Bh | |
| | | Red shift off | 124 | 126 | 49% | 49% | 7Ch | 7Eh | |
| | | Dim frequency (1.1 kHz) | 127 | 128 | 50% | 50% | 7Fh | 80h | |
| | | Dim frequency (2.2 kHz) | 129 | 131 | 51% | 51% | 81h | 83h | |
| | | Dim frequency (4.4 kHz) | 132 | 133 | 52% | 52% | 84h | 85h | |
| | | Dim frequency (17.6 kHz) | 134 | 136 | 53% | 53% | 86h | 88h | |
| Reserved (See note 3 on page 14) | 137 | 255 | 54% | 100% | 89h | FFh | | | |

High End Systems Reference Guide

DMX Channel Map

TurboRay Standard Profile

| Channel | Function | Description | Dec Low | Dec High | % Low | % High | Hex Low | Hex High | Default |
|---------|-------------------|-----------------------------------------------------|---------|----------|-------|--------|---------|----------|---------|
| 1 | Pan | Coarse | 0 | 255 | 0% | 100% | 00h | FFh | 128 |
| 2 | | Fine | | | | | | | 0 |
| 3 | Tilt | Coarse | | | | | | | 128 |
| 4 | | Fine | | | | | | | 0 |
| 5 | Mix Color Mode | RGB | 0 | 14 | 0% | 5% | 00h | 0Eh | 0 |
| | | CMY | 15 | 29 | 6% | 11% | 0Fh | 1Dh | |
| | | Cycle | 30 | 44 | 12% | 17% | 1Eh | 2Ch | |
| | | Random | 45 | 59 | 18% | 23% | 2Dh | 3Bh | |
| | | Reserved (See note 3 on page 14) | 60 | 255 | 24% | 100% | 3Ch | FFh | |
| 6 | Static Color Mode | Indexed (See note 4 on page 14) | 0 | 15 | 0% | 6% | 00h | 0Fh | 48 |
| | | Forward Spin | 16 | 31 | 6% | 12% | 10h | 1Fh | |
| | | Reverse Spin | 32 | 47 | 13% | 18% | 20h | 2Fh | |
| | | Continuous (See note 4 on page 14) | 48 | 63 | 19% | 25% | 30h | 3Fh | |
| | | Fast Scan | 64 | 79 | 25% | 31% | 40h | 4Fh | |
| | | Random | 80 | 95 | 31% | 37% | 50h | 5Fh | |
| | | Reserved (See note 3 on page 14) | 96 | 255 | 38% | 100% | 60h | FFh | |

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DMX Channel Map

| Channel | Function | Description | Dec Low | Dec High | % Low | % High | Hex Low | Hex High | Default | |
|---------|--------------|--------------------------------------------------------|---------|----------|-------|--------|---------|----------|---------|--|
| 7 | Static Color | Indexed | | | | | | | 0 | |
| | | Open | 0 | 27 | 0% | 11% | 00h | 1Bh | | |
| | | Open/Dark Blue | 28 | 55 | 11% | 22% | 1Ch | 37h | | |
| | | Dark Blue | 56 | 83 | 22% | 33% | 38h | 53h | | |
| | | Dark Blue/CTO | 84 | 111 | 33% | 44% | 54h | 6Fh | | |
| | | CTO | 112 | 139 | 44% | 55% | 70h | 8Bh | | |
| | | CTO/Red | 140 | 167 | 55% | 65% | 8Ch | A7h | | |
| | | Red | 168 | 195 | 66% | 76% | A8h | C3h | | |
| | | Red/Open | 196 | 223 | 77% | 87% | C4h | DFh | | |
| | | Open | 224 | 255 | 88% | 100% | E0h | FFh | | |
| | | Scan | | | | | | | | |
| | | Open/Dark Blue (slow to fast) | 0 | 63 | 0% | 25% | 00h | 3Fh | | |
| | | Dark Blue/CTO (slow to fast) | 64 | 127 | 25% | 50% | 40h | 7Fh | | |
| | | CTO/Red (slow to fast) | 128 | 191 | 50% | 75% | 80h | BFh | | |
| | | Red/Open (slow to fast) | 192 | 255 | 75% | 100% | C0h | FFh | | |
| | | Spin & Random | | | | | | | | |
| | | Stop | 0 | 0 | 0% | 0% | 00h | 00h | | |
| | | Slow to fast | 1 | 255 | 0% | 100% | 01h | FFh | | |
| | | Continuous | | | | | | | | |
| | | Positioning from 0-90 degrees | 0 | 255 | 0% | 100% | 00h | FFh | | |
| 8 | Gobo Mode | Indexed | 0 | 15 | 0% | 6% | 00h | 0Fh | 16 | |
| | | Continuous (See note 4 on page 14) | 16 | 31 | 6% | 12% | 10h | 1Fh | | |
| | | Forward wheel spin | 32 | 47 | 13% | 18% | 20h | 2Fh | | |
| | | Reverse wheel spin | 48 | 63 | 19% | 25% | 30h | 3Fh | | |
| | | Animate | 64 | 79 | 25% | 31% | 40h | 4Fh | | |
| | | Reserved (See note 3 on page 14) | 80 | 255 | 31% | 100% | 50h | FFh | | |

High End Systems Reference Guide

DMX Channel Map

| Channel | Function | Description | Dec Low | Dec High | % Low | % High | Hex Low | Hex High | Default |
|-------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------|---------|----------|-------|--------|---------|----------|---------|
| 9 | Gobo | Indexed | | | | | | | 0 |
| | | Secondary Diffusion | 0 | 31 | 0% | 12% | 00h | 1Fh | |
| | | Open | 32 | 63 | 13% | 25% | 20h | 3Fh | |
| | | Hash | 64 | 95 | 25% | 37% | 40h | 5Fh | |
| | | Dots | 96 | 127 | 38% | 50% | 60h | 7Fh | |
| | | Continuous | | | | | | | |
| | | Positioning from 0-90 degrees | 0 | 255 | 0% | 100% | 00h | FFh | |
| | | Spin | | | | | | | |
| | | Stop | 0 | 0 | 0% | 0% | 00h | 00h | |
| | | Slow to fast | 1 | 255 | 0% | 100% | 01h | FFh | |
| | | Animate | | | | | | | |
| | | Hash stop | 0 | 0 | 0% | 0% | 00h | 00h | |
| | | Hash slow to fast | 1 | 127 | 0% | 50% | 01h | 7Fh | |
| | | Dots stop | 128 | 128 | 50% | 50% | 80h | 80h | |
| Dots slow to fast | 129 | 255 | 51% | 100% | 81h | FFh | | | |
| 10 | Primary Diffusion | Removed to full diffusion | 0 | 255 | 0% | 100% | 00h | FFh | 0 |
| 11 | Zoom | Coarse | 0 | 255 | 0% | 100% | 00h | FFh | 127 |
| 12 | Zoom | Fine | 0 | 255 | 0% | 100% | 00h | FFh | 255 |
| 13 | Macro Mode (See TurboRay Macros on page 15 and Note 1 on page 14) | Macro off | 0 | 0 | 0% | 0% | 00h | 00h | 0 |
| | | Macro 1 | 1 | 1 | 0% | 0% | 01h | 01h | |
| | | Macro 2 | 2 | 2 | 1% | 1% | 02h | 02h | |
| | | Macro 3 | 3 | 3 | 1% | 1% | 03h | 03h | |
| | | ... | - | - | - | - | - | - | |
| | | Macro 12 | 12 | 12 | 5% | 5% | 0Ch | 0Ch | |
| | | Reserved (See note 3 on page 14) | 13 | 255 | 5% | 100% | 0Dh | FFh | |
| 14 | Macro Speed (See note 1 on page 14) | Reverse fast to slow | 0 | 126 | 0% | 49% | 00h | 7Eh | 128 |
| | | Stop | 127 | 128 | 50% | 50% | 7Fh | 80h | |
| | | Forward slow to fast | 129 | 255 | 51% | 100% | 81h | FFh | |
| 15 | Macro Crossfade (See note 1 on page 14) | Static | | | | | | | 0 |
| | | Stop | 0 | 128 | 0% | 50% | 00h | 80h | |
| | | Slow to fast (63.8 - 0.15 s) | 129 | 255 | 51% | 100% | 81h | FFh | |
| | | Animated | | | | | | | |
| | | Stop | 0 | 0 | 0% | 0% | 00h | 00h | |
| Slow to fast | 1 | 255 | 0% | 100% | 01h | FFh | | | |
| 16 | Mspeed | Disable | 0 | 3 | 0% | 1% | 00h | 03h | 0 |
| | | Slow to fast (252.7 - 0.15 s) | 4 | 255 | 2% | 100% | 04h | FFh | |

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DMX Channel Map

| Channel | Function | Description | Dec Low | Dec High | % Low | % High | Hex Low | Hex High | Default |
|----------------------------------|------------------------------------|----------------------------------|---------|----------|-------|--------|---------|----------|---------|
| 17 | Control (See note 6 on page 14) | Safe (normal operation) | 0 | 15 | 0% | 6% | 00h | 0Fh | 0 |
| | | Reserved (See note 3 on page 14) | 16 | 31 | 6% | 12% | 10h | 1Fh | |
| | | Display/LEDs off | 32 | 47 | 13% | 18% | 20h | 2Fh | |
| | | Display/LEDs on | 48 | 63 | 19% | 25% | 30h | 3Fh | |
| | | Home all | 64 | 79 | 25% | 31% | 40h | 4Fh | |
| | | Shutdown | 80 | 95 | 31% | 37% | 50h | 5Fh | |
| | | Studio fan mode | 96 | 101 | 38% | 40% | 60h | 65h | |
| | | Continuous fan mode | 102 | 107 | 40% | 42% | 66h | 6Bh | |
| | | Standard fan mode | 108 | 113 | 42% | 44% | 6Ch | 71h | |
| | | Studio continuous fan mode | 114 | 119 | 45% | 47% | 72h | 77h | |
| | | Red Shift on | 120 | 123 | 47% | 48% | 78h | 7Bh | |
| | | Red Shift off | 124 | 126 | 49% | 49% | 7Ch | 7Eh | |
| | | Dim frequency 1 | 127 | 128 | 50% | 50% | 7Fh | 80h | |
| | | Dim frequency 2 | 129 | 131 | 51% | 51% | 81h | 83h | |
| | | Dim frequency 3 | 132 | 133 | 52% | 52% | 84h | 85h | |
| | | Dim frequency 4 | 134 | 136 | 53% | 53% | 86h | 88h | |
| Reserved (See note 3 on page 14) | 137 | 255 | 54% | 100% | 89h | FFh | | | |

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DMX Channel Map

| Channel | Function | Description | Dec Low | Dec High | % Low | % High | Hex Low | Hex High | Default |
|---------|-------------------------------------------------------|----------------------------------------------------------|---------|----------|-------|--------|---------|----------|---------|
| 18 | LED 1 Red (See note 2 on page 14) | RGB | | | | | | | 255 |
| | | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | |
| | | CMY | | | | | | | |
| | | Full saturation to open | 0 | 255 | 0% | 100% | 00h | FFh | |
| | | Cycle & Random | | | | | | | |
| | | Slow to fast | 0 | 255 | 0% | 100% | 00h | FFh | |
| 19 | LED 1 Green | RGB | | | | | | | 255 |
| | | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | |
| | | CMY | | | | | | | |
| | | Full saturation to open | 0 | 255 | 0% | 100% | 00h | FFh | |
| 20 | LED 1 Blue | RGB | | | | | | | 255 |
| | | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | |
| | | CMY | | | | | | | |
| | | Full saturation to open | 0 | 255 | 0% | 100% | 00h | FFh | |
| 21 | LED 1 White | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | 255 |
| 22 | LED 1 CTO | Disabled | 0 | 4 | 0% | 2% | 00h | 04h | 0 |
| | | Warm to cool (See note 5 on page 14) | 5 | 255 | 2% | 100% | 05h | FFh | |
| 23 | LED 1 Strobe Mode | Synchronous | 0 | 15 | 0% | 6% | 00h | 0Fh | 0 |
| | | Random | 16 | 31 | 6% | 12% | 10h | 1Fh | |
| | | Random Pixel | 32 | 47 | 13% | 18% | 20h | 2Fh | |
| | | Random Pixel/Color | 48 | 63 | 19% | 25% | 30h | 3Fh | |
| | | Reserved (See note 3 on page 14) | 64 | 255 | 25% | 100% | 40h | FFh | |
| 24 | LED 1 Strobe Rate | Closed | 0 | 0 | 0% | 0% | 00h | 00h | 255 |
| | | Strobe Rate (slow to fast) | 1 | 254 | 0% | 100% | 01h | FEh | |
| | | Open | 255 | 255 | 100% | 100% | FFh | FFh | |
| 25 | LED 1 Dimmer | Coarse | 0 | 255 | 0% | 100% | 00h | FFh | 0 |
| 26 | LED 1 Dimmer | Fine | 0 | 255 | 0% | 100% | 00h | FFh | 0 |

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DMX Channel Map

| Channel | Function | Description | Dec Low | Dec High | % Low | % High | Hex Low | Hex High | Default |
|---------|-------------------------------------------------------|----------------------------------------------------------|---------|----------|-------|--------|---------|----------|---------|
| 27 | LED 2 Red (See note 2 on page 14) | RGB | | | | | | | 255 |
| | | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | |
| | | CMY | | | | | | | |
| | | Full saturation to open | 0 | 255 | 0% | 100% | 00h | FFh | |
| | | Cycle & Random | | | | | | | |
| | | Slow to fast | 0 | 255 | 0% | 100% | 00h | FFh | |
| 28 | LED 2 Green | RGB | | | | | | | 255 |
| | | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | |
| | | CMY | | | | | | | |
| | | Full saturation to open | 0 | 255 | 0% | 100% | 00h | FFh | |
| 29 | LED 2 Blue | RGB | | | | | | | 255 |
| | | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | |
| | | CMY | | | | | | | |
| | | Full saturation to open | 0 | 255 | 0% | 100% | 00h | FFh | |
| 30 | LED 2 White | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | 255 |
| 31 | LED 2 CTO | Disabled | 0 | 4 | 0% | 2% | 00h | 04h | 0 |
| | | Warm to cool (See note 5 on page 14) | 5 | 255 | 2% | 100% | 05h | FFh | |
| 32 | LED 2 Strobe Mode | Synchronous | 0 | 15 | 0% | 6% | 00h | 0Fh | 0 |
| | | Random | 16 | 31 | 6% | 12% | 10h | 1Fh | |
| | | Random Pixel | 32 | 47 | 13% | 18% | 20h | 2Fh | |
| | | Random Pixel/Color | 48 | 63 | 19% | 25% | 30h | 3Fh | |
| | | Reserved (See note 3 on page 14) | 64 | 255 | 25% | 100% | 40h | FFh | |
| 33 | LED 2 Strobe Rate | Closed | 0 | 0 | 0% | 0% | 00h | 00h | 255 |
| | | Strobe Rate (slow to fast) | 1 | 254 | 0% | 100% | 01h | FEh | |
| | | Open | 255 | 255 | 100% | 100% | FFh | FFh | |
| 34 | LED 2 Dimmer | Coarse | 0 | 255 | 0% | 100% | 00h | FFh | 0 |
| 35 | LED 2 Dimmer | Fine | 0 | 255 | 0% | 100% | 00h | FFh | 0 |

High End Systems Reference Guide

DMX Channel Map

| Channel | Function | Description | Dec Low | Dec High | % Low | % High | Hex Low | Hex High | Default | |
|---------|-------------------------------------------------------|----------------------------------------------------------|---------|----------|-------|--------|---------|----------|---------|-----|
| 36 | LED 3 Red (See note 2 on page 14) | RGB | | | | | | | | 255 |
| | | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | | |
| | | CMY | | | | | | | | |
| | | Full saturation to open | 0 | 255 | 0% | 100% | 00h | FFh | | |
| | | Cycle & Random | | | | | | | | |
| | | Slow to fast | 0 | 255 | 0% | 100% | 00h | FFh | | |
| 37 | LED 3 Green | RGB | | | | | | | | 255 |
| | | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | | |
| | | CMY | | | | | | | | |
| | | Full saturation to open | 0 | 255 | 0% | 100% | 00h | FFh | | |
| 38 | LED 3 Blue | RGB | | | | | | | | 255 |
| | | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | | |
| | | CMY | | | | | | | | |
| | | Full saturation to open | 0 | 255 | 0% | 100% | 00h | FFh | | |
| 39 | LED 3 White | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | 255 | |
| 40 | LED 3 CTO | Disabled | 0 | 4 | 0% | 2% | 00h | 04h | 0 | |
| | | Warm to cool (See note 5 on page 14) | 5 | 255 | 2% | 100% | 05h | FFh | | |
| 41 | LED 3 Strobe Mode | Synchronous | 0 | 15 | 0% | 6% | 00h | 0Fh | 0 | |
| | | Random | 16 | 31 | 6% | 12% | 10h | 1Fh | | |
| | | Random Pixel | 32 | 47 | 13% | 18% | 20h | 2Fh | | |
| | | Random Pixel/Color | 48 | 63 | 19% | 25% | 30h | 3Fh | | |
| | | Reserved (See note 3 on page 14) | 64 | 255 | 25% | 100% | 40h | FFh | | |
| 42 | LED 3 Strobe Rate | Closed | 0 | 0 | 0% | 0% | 00h | 00h | 255 | |
| | | Strobe Rate (slow to fast) | 1 | 254 | 0% | 100% | 01h | FEh | | |
| | | Open | 255 | 255 | 100% | 100% | FFh | FFh | | |
| 43 | LED 3 Dimmer | Coarse | 0 | 255 | 0% | 100% | 00h | FFh | 0 | |
| 44 | LED 3 Dimmer | Fine | 0 | 255 | 0% | 100% | 00h | FFh | 0 | |

High End Systems Reference Guide

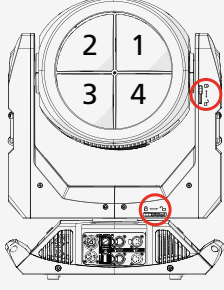
DMX Channel Map

| Channel | Function | Description | Dec Low | Dec High | % Low | % High | Hex Low | Hex High | Default |
|---------|-------------------------------------------------------------|----------------------------------------------------------------|---------|----------|-------|--------|---------|----------|---------|
| 45 | LED 4 Red (See note 2 on the next page) | RGB | | | | | | | 255 |
| | | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | |
| | | CMY | | | | | | | |
| | | Full saturation to open | 0 | 255 | 0% | 100% | 00h | FFh | |
| | | Cycle & Random | | | | | | | |
| | | Slow to fast | 0 | 255 | 0% | 100% | 00h | FFh | |
| 46 | LED 4 Green | RGB | | | | | | | 255 |
| | | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | |
| | | CMY | | | | | | | |
| | | Full saturation to open | 0 | 255 | 0% | 100% | 00h | FFh | |
| 47 | LED 4 Blue | RGB | | | | | | | 255 |
| | | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | |
| | | CMY | | | | | | | |
| | | Full saturation to open | 0 | 255 | 0% | 100% | 00h | FFh | |
| 48 | LED 4 White | Off to full | 0 | 255 | 0% | 100% | 00h | FFh | 255 |
| 49 | LED 4 CTO | Disabled | 0 | 4 | 0% | 2% | 00h | 04h | 0 |
| | | Warm to cool (See note 5 on the next page) | 5 | 255 | 2% | 100% | 05h | FFh | |
| 50 | LED 4 Strobe Mode | Synchronous | 0 | 15 | 0% | 6% | 00h | 0Fh | 0 |
| | | Random | 16 | 31 | 6% | 12% | 10h | 1Fh | |
| | | Random Pixel | 32 | 47 | 13% | 18% | 20h | 2Fh | |
| | | Random Pixel/Color | 48 | 63 | 19% | 25% | 30h | 3Fh | |
| | | Reserved (See note 3 on the next page) | 64 | 255 | 25% | 100% | 40h | FFh | |
| 51 | LED 4 Strobe Rate | Closed | 0 | 0 | 0% | 0% | 00h | 00h | 255 |
| | | Strobe Rate (slow to fast) | 1 | 254 | 0% | 100% | 01h | FEh | |
| | | Open | 255 | 255 | 100% | 100% | FFh | FFh | |
| 52 | LED 4 Dimmer | Coarse | 0 | 255 | 0% | 100% | 00h | FFh | 0 |
| 53 | LED 4 Dimmer | Fine | 0 | 255 | 0% | 100% | 00h | FFh | 0 |

High End Systems Reference Guide

DMX Channel Map

TurboRay Notes

| | |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Static macro crossfade and playback operation: When changing between static macros, the crossfade time from channel 14 will be applied to the change. Crossfade will commence when the change is received. |
| 2 | <p>LED modules are arranged according to the following (note the direction of the fixture head, pan, and tilt locks in the image):</p>  |
| 3 | Reserved channel ranges should function the same as the default range. |
| 4 | Continuous / indexed mode take the quickest path from 255-0, and 0-255. |
| 5 | CTO is mixed via RGBW LEDs. CTO will disable at 0-4 and the LED will have full output. |
| 6 | The control channel should not be crossfaded. Hold the value for two seconds. There is no shutter channel requirement. Fan control, red shift, and dim frequency modes are retentive. When the fixture is turned off, the selected mode is retained. |
| 7 | RDM Manufacturers ID: 0x4c52 |
| 8 | RDM Device ID: 0x583 |

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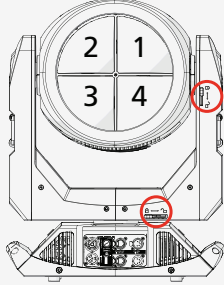
DMX Channel Map

TurboRay Macros

| DMX | Description | LED 1 | LED 2 | LED 3 | LED 4 |
|-----|-------------------------------------------|---------|---------|---------|---------|
| 0 | Macro 01 - Standard Position | Pixel 1 | Pixel 2 | Pixel 3 | Pixel 4 |
| 1 | Macro 02 - Right Position | Pixel 2 | Pixel 3 | Pixel 4 | Pixel 1 |
| 2 | Macro 03- Upside Down Position | Pixel 3 | Pixel 4 | Pixel 1 | Pixel 2 |
| 3 | Macro 04- Left Position | Pixel 4 | Pixel 1 | Pixel 2 | Pixel 3 |
| 4 | Macro 05- 2 Color Top/Bottom | Pixel 1 | Pixel 1 | Pixel 2 | Pixel 2 |
| 5 | Macro 06 - 2 Color Left/Right | Pixel 1 | Pixel 2 | Pixel 2 | Pixel 1 |
| 6 | Macro 07.1 - Four Color Rotation | Pixel 1 | Pixel 2 | Pixel 3 | Pixel 4 |
| | Macro 07.2 - Four Color Rotation | Pixel 4 | Pixel 1 | Pixel 2 | Pixel 3 |
| | Macro 07.3- Four Color Rotation | Pixel 3 | Pixel 4 | Pixel 1 | Pixel 2 |
| | Macro 07.4- Four Color Rotation | Pixel 2 | Pixel 3 | Pixel 4 | Pixel 1 |
| | Macro 07.5- Four Color Rotation | Pixel 1 | Pixel 2 | Pixel 3 | Pixel 4 |
| | Macro 07.6- Four Color Rotation | Pixel 4 | Pixel 1 | Pixel 2 | Pixel 3 |
| | Macro 07.7- Four Color Rotation | Pixel 3 | Pixel 4 | Pixel 1 | Pixel 2 |
| | Macro 07.8- Four Color Rotation | Pixel 2 | Pixel 3 | Pixel 4 | Pixel 1 |
| 7 | Macro 08.1 - 2 Color Rotation | Pixel 1 | Pixel 1 | Pixel 2 | Pixel 2 |
| | Macro 08.2 - 2 Color Rotation | Pixel 2 | Pixel 1 | Pixel 1 | Pixel 2 |
| | Macro 08.3- 2 Color Rotation | Pixel 2 | Pixel 2 | Pixel 1 | Pixel 1 |
| | Macro 08.4- 2 Color Rotation | Pixel 1 | Pixel 2 | Pixel 2 | Pixel 1 |
| | Macro 08.5- 2 Color Rotation | Pixel 1 | Pixel 1 | Pixel 2 | Pixel 2 |
| | Macro 08.6- 2 Color Rotation | Pixel 2 | Pixel 1 | Pixel 1 | Pixel 2 |
| | Macro 08.7- 2 Color Rotation | Pixel 2 | Pixel 2 | Pixel 1 | Pixel 1 |
| | Macro 08.8- 2 Color Rotation | Pixel 1 | Pixel 2 | Pixel 2 | Pixel 1 |
| 8 | Macro 09.1 - 2 Color Single Cell Rotation | Pixel 1 | Pixel 2 | Pixel 2 | Pixel 2 |
| | Macro 09.2 - 2 Color Single Cell Rotation | Pixel 2 | Pixel 1 | Pixel 2 | Pixel 2 |
| | Macro 09.3- 2 Color Single Cell Rotation | Pixel 2 | Pixel 2 | Pixel 1 | Pixel 2 |
| | Macro 09.4- 2 Color Single Cell Rotation | Pixel 2 | Pixel 2 | Pixel 2 | Pixel 1 |
| | Macro 09.5- 2 Color Single Cell Rotation | Pixel 1 | Pixel 2 | Pixel 2 | Pixel 2 |
| | Macro 09.6- 2 Color Single Cell Rotation | Pixel 2 | Pixel 1 | Pixel 2 | Pixel 2 |
| | Macro 09.7- 2 Color Single Cell Rotation | Pixel 2 | Pixel 2 | Pixel 1 | Pixel 2 |
| | Macro 09.8- 2 Color Single Cell Rotation | Pixel 2 | Pixel 2 | Pixel 2 | Pixel 1 |

High End Systems Reference Guide

DMX Channel Map

| DMX | Description | LED 1 | LED 2 | LED 3 | LED 4 |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------|----------------------------------------------------------------------------------|---------|
| 9 | Macro 10.1 - Left and Right | Pixel 1 | Pixel 2 | Pixel 2 | Pixel 1 |
| | Macro 10.2 - Left and Right | Pixel 2 | Pixel 1 | Pixel 1 | Pixel 2 |
| 10 | Macro 11.1 - Top and Bottom | Pixel 1 | Pixel 1 | Pixel 2 | Pixel 2 |
| | Macro 11.2 - Top and Bottom | Pixel 2 | Pixel 2 | Pixel 1 | Pixel 1 |
| 11 | Macro 12.1 - Crosses | Pixel 1 | Pixel 2 | Pixel 1 | Pixel 2 |
| | Macro 12.2 - Crosses | Pixel 2 | Pixel 1 | Pixel 2 | Pixel 1 |
| Notes: | | | | | |
| 1 | LED 1-4 defined by the following: Pixel 1 - DMX channels 18-26 Pixel 2 - DMX channels 27-35 Pixel 3 - DMX channels 36-44 Pixel 4 - DMX channels 45-53 |  | | <p>Note the direction of the fixture head, pan, and tilt locks in the image.</p> | |
| 2 | When the Macro is selected, the Pixel data will be mapped to the LED column. | | | | |
| 3 | Individual pixels must be programmed with different colors for Macros to function. | | | | |

High End Systems Reference Guide

DMX Channel Map

TurboRay mSpeeds

| DMX | Time (seconds) | DMX | Time (seconds) | DMX | Time (seconds) |
|-----|----------------|-----|----------------|-----|----------------|
| 0 | Off | 36 | 192.4 | 72 | 134.39 |
| 1 | Off | 37 | 190.65 | 73 | 132.93 |
| 2 | Off | 38 | 188.9 | 74 | 131.47 |
| 3 | Off | 39 | 187.17 | 75 | 130 |
| 4 | 252.69 | 40 | 185.44 | 76 | 128.59 |
| 5 | 250.68 | 41 | 183.72 | 77 | 127.15 |
| 6 | 248.68 | 42 | 182.01 | 78 | 125.73 |
| 7 | 246.69 | 43 | 180.31 | 79 | 124.32 |
| 8 | 244.7 | 44 | 178.61 | 80 | 122.91 |
| 9 | 242.73 | 45 | 176.92 | 81 | 121.51 |
| 10 | 240.76 | 46 | 175.24 | 82 | 120.12 |
| 11 | 238.8 | 47 | 173.57 | 83 | 118.74 |
| 12 | 236.85 | 48 | 171.91 | 84 | 117.36 |
| 13 | 234.9 | 49 | 170.25 | 85 | 115.99 |
| 14 | 232.97 | 50 | 168.61 | 86 | 114.64 |
| 15 | 231.04 | 51 | 166.97 | 87 | 113.28 |
| 16 | 229.12 | 52 | 165.33 | 88 | 111.94 |
| 17 | 227.21 | 53 | 163.71 | 89 | 110.61 |
| 18 | 225.3 | 54 | 162.1 | 90 | 109.28 |
| 19 | 223.41 | 55 | 160.49 | 91 | 107.96 |
| 20 | 221.52 | 56 | 158.89 | 92 | 106.65 |
| 21 | 219.64 | 57 | 157.39 | 93 | 105.35 |
| 22 | 217.77 | 58 | 155.71 | 94 | 104.05 |
| 23 | 215.9 | 59 | 154.14 | 95 | 102.77 |
| 24 | 214.05 | 60 | 152.57 | 96 | 101.49 |
| 25 | 212.2 | 61 | 151.01 | 97 | 100.22 |
| 26 | 210.36 | 62 | 149.46 | 98 | 98.95 |
| 27 | 208.53 | 63 | 147.92 | 99 | 97.7 |
| 28 | 206.7 | 64 | 146.38 | 100 | 96.45 |
| 29 | 204.89 | 65 | 144.86 | 101 | 95.21 |
| 30 | 203.08 | 66 | 143.34 | 102 | 93.98 |
| 31 | 201.28 | 67 | 141.82 | 103 | 92.76 |
| 32 | 199.49 | 68 | 140.32 | 104 | 91.55 |
| 33 | 197.7 | 69 | 138.83 | 105 | 90.34 |
| 34 | 195.93 | 70 | 137.34 | 106 | 89.14 |
| 35 | 194.16 | 71 | 135.86 | 107 | 87.95 |

High End Systems Reference Guide

DMX Channel Map

| DMX | Time (seconds) | DMX | Time (seconds) | DMX | Time (seconds) |
|-----|----------------|-----|----------------|-----|----------------|
| 108 | 86.77 | 145 | 48.65 | 182 | 21.51 |
| 109 | 85.59 | 146 | 47.77 | 183 | 20.93 |
| 110 | 84.43 | 147 | 46.9 | 184 | 20.36 |
| 111 | 83.27 | 148 | 46.04 | 185 | 19.79 |
| 112 | 82.12 | 149 | 45.19 | 186 | 19.23 |
| 113 | 80.98 | 150 | 44.34 | 187 | 18.69 |
| 114 | 79.84 | 151 | 43.51 | 188 | 18.14 |
| 115 | 78.72 | 152 | 42.68 | 189 | 17.61 |
| 116 | 77.6 | 153 | 41.85 | 190 | 17.09 |
| 117 | 76.49 | 154 | 41.04 | 191 | 16.57 |
| 118 | 75.38 | 155 | 40.23 | 192 | 16.06 |
| 119 | 74.29 | 156 | 39.44 | 193 | 15.56 |
| 120 | 73.2 | 157 | 38.65 | 194 | 15.07 |
| 121 | 72.13 | 158 | 37.87 | 195 | 14.58 |
| 122 | 71.06 | 159 | 37.09 | 196 | 14.1 |
| 123 | 69.99 | 160 | 36.33 | 197 | 13.63 |
| 124 | 68.94 | 161 | 35.57 | 198 | 13.17 |
| 125 | 67.89 | 162 | 34.82 | 199 | 12.72 |
| 126 | 66.85 | 163 | 34.08 | 200 | 12.28 |
| 127 | 65.82 | 164 | 33.34 | 201 | 11.84 |
| 128 | 64.8 | 165 | 32.62 | 202 | 11.41 |
| 129 | 63.79 | 166 | 31.9 | 203 | 10.99 |
| 130 | 62.78 | 167 | 31.19 | 204 | 10.58 |
| 131 | 61.78 | 168 | 30.49 | 205 | 10.17 |
| 132 | 60.79 | 169 | 29.8 | 206 | 9.77 |
| 133 | 59.81 | 170 | 29.11 | 207 | 9.39 |
| 134 | 58.84 | 171 | 28.43 | 208 | 9 |
| 135 | 57.87 | 172 | 27.76 | 209 | 8.63 |
| 136 | 56.91 | 173 | 27.1 | 210 | 8.27 |
| 137 | 55.96 | 174 | 26.45 | 211 | 7.91 |
| 138 | 55.02 | 175 | 25.8 | 212 | 7.56 |
| 139 | 54.09 | 176 | 25.17 | 213 | 7.22 |
| 140 | 53.16 | 177 | 24.54 | 214 | 6.89 |
| 141 | 52.24 | 178 | 23.92 | 215 | 6.56 |
| 142 | 51.33 | 179 | 23.3 | 216 | 6.25 |
| 143 | 50.43 | 180 | 22.7 | 217 | 5.94 |
| 144 | 49.54 | 181 | 22.1 | 218 | 5.64 |

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DMX Channel Map

| DMX | Time (seconds) |
|-----|----------------|
| 219 | 5.34 |
| 220 | 5.06 |
| 221 | 4.78 |
| 222 | 4.52 |
| 223 | 4.25 |
| 224 | 4 |
| 225 | 3.76 |
| 226 | 3.52 |
| 227 | 3.29 |
| 228 | 3.07 |
| 229 | 2.86 |
| 230 | 2.66 |
| 231 | 2.46 |
| 232 | 2.27 |
| 233 | 2.09 |
| 234 | 1.92 |
| 235 | 1.75 |
| 236 | 1.6 |
| 237 | 1.45 |
| 238 | 1.31 |
| 239 | 1.18 |
| 240 | 1.05 |
| 241 | 0.94 |
| 242 | 0.83 |
| 243 | 0.73 |
| 244 | 0.64 |
| 245 | 0.55 |
| 246 | 0.47 |
| 247 | 0.41 |
| 248 | 0.35 |
| 249 | 0.29 |
| 250 | 0.25 |
| 251 | 0.21 |
| 252 | 0.19 |
| 253 | 0.17 |
| 254 | 0.15 |
| 255 | 0.15 |

High End Systems Reference Guide

DMX Channel Map

TurboRay Crossfades

| DMX | Time (seconds) | DMX | Time (seconds) | DMX | Time (seconds) |
|-----|----------------|-----|----------------|-----|----------------|
| 0 | 0 | 36 | 0 | 72 | 0 |
| 1 | 0 | 37 | 0 | 73 | 0 |
| 2 | 0 | 38 | 0 | 74 | 0 |
| 3 | 0 | 39 | 0 | 75 | 0 |
| 4 | 0 | 40 | 0 | 76 | 0 |
| 5 | 0 | 41 | 0 | 77 | 0 |
| 6 | 0 | 42 | 0 | 78 | 0 |
| 7 | 0 | 43 | 0 | 79 | 0 |
| 8 | 0 | 44 | 0 | 80 | 0 |
| 9 | 0 | 45 | 0 | 81 | 0 |
| 10 | 0 | 46 | 0 | 82 | 0 |
| 11 | 0 | 47 | 0 | 83 | 0 |
| 12 | 0 | 48 | 0 | 84 | 0 |
| 13 | 0 | 49 | 0 | 85 | 0 |
| 14 | 0 | 50 | 0 | 86 | 0 |
| 15 | 0 | 51 | 0 | 87 | 0 |
| 16 | 0 | 52 | 0 | 88 | 0 |
| 17 | 0 | 53 | 0 | 89 | 0 |
| 18 | 0 | 54 | 0 | 90 | 0 |
| 19 | 0 | 55 | 0 | 91 | 0 |
| 20 | 0 | 56 | 0 | 92 | 0 |
| 21 | 0 | 57 | 0 | 93 | 0 |
| 22 | 0 | 58 | 0 | 94 | 0 |
| 23 | 0 | 59 | 0 | 95 | 0 |
| 24 | 0 | 60 | 0 | 96 | 0 |
| 25 | 0 | 61 | 0 | 97 | 0 |
| 26 | 0 | 62 | 0 | 98 | 0 |
| 27 | 0 | 63 | 0 | 99 | 0 |
| 28 | 0 | 64 | 0 | 100 | 0 |
| 29 | 0 | 65 | 0 | 101 | 0 |
| 30 | 0 | 66 | 0 | 102 | 0 |
| 31 | 0 | 67 | 0 | 103 | 0 |
| 32 | 0 | 68 | 0 | 104 | 0 |
| 33 | 0 | 69 | 0 | 105 | 0 |
| 34 | 0 | 70 | 0 | 106 | 0 |
| 35 | 0 | 71 | 0 | 107 | 0 |

High End Systems Reference Guide

DMX Channel Map

| DMX | Time (seconds) | DMX | Time (seconds) | DMX | Time (seconds) |
|-----|----------------|-----|----------------|-----|----------------|
| 108 | 0 | 146 | 47.77 | 184 | 20.36 |
| 109 | 0 | 147 | 46.9 | 185 | 19.79 |
| 110 | 0 | 148 | 46.04 | 186 | 19.23 |
| 111 | 0 | 149 | 45.19 | 187 | 18.7 |
| 112 | 0 | 150 | 44.34 | 188 | 18.14 |
| 113 | 0 | 151 | 43.51 | 189 | 17.61 |
| 114 | 0 | 152 | 42.68 | 190 | 17.09 |
| 115 | 0 | 153 | 41.85 | 191 | 16.57 |
| 116 | 0 | 154 | 41.04 | 192 | 16.069 |
| 117 | 0 | 155 | 40.23 | 193 | 15.56 |
| 118 | 0 | 156 | 39.44 | 194 | 15.07 |
| 119 | 0 | 157 | 38.65 | 195 | 14.58 |
| 120 | 0 | 158 | 37.87 | 196 | 14.1 |
| 121 | 0 | 159 | 37.09 | 197 | 13.63 |
| 122 | 0 | 160 | 36.33 | 198 | 13.17 |
| 123 | 0 | 161 | 35.57 | 199 | 12.72 |
| 124 | 0 | 162 | 34.82 | 200 | 12.28 |
| 125 | 0 | 163 | 34.08 | 201 | 11.84 |
| 126 | 0 | 164 | 33.34 | 202 | 11.41 |
| 127 | 0 | 165 | 32.62 | 203 | 10.99 |
| 128 | 0 | 166 | 31.9 | 204 | 10.58 |
| 129 | 63.79 | 167 | 31.19 | 205 | 10.17 |
| 130 | 62.78 | 168 | 30.49 | 206 | 9.77 |
| 131 | 61.78 | 169 | 29.8 | 207 | 9.39 |
| 132 | 60.79 | 170 | 29.11 | 208 | 9 |
| 133 | 59.81 | 171 | 28.43 | 209 | 8.63 |
| 134 | 58.84 | 172 | 27.76 | 210 | 8.27 |
| 135 | 57.87 | 173 | 27.1 | 211 | 7.91 |
| 136 | 56.91 | 174 | 26.45 | 212 | 7.56 |
| 137 | 55.96 | 175 | 25.8 | 213 | 7.22 |
| 138 | 55.02 | 176 | 25.17 | 214 | 6.89 |
| 139 | 54.09 | 177 | 24.54 | 215 | 6.56 |
| 140 | 53.16 | 178 | 23.92 | 216 | 6.25 |
| 141 | 52.24 | 179 | 23.3 | 217 | 5.94 |
| 142 | 51.33 | 180 | 22.7 | 218 | 5.64 |
| 143 | 50.43 | 181 | 22.1 | 219 | 5.34 |
| 144 | 49.54 | 182 | 21.51 | 220 | 5.06 |
| 145 | 48.65 | 183 | 20.93 | 221 | 4.78 |

High End Systems Reference Guide

DMX Channel Map

| DMX | Time (seconds) |
|-----|----------------|
| 222 | 4.52 |
| 223 | 4.25 |
| 224 | 4 |
| 225 | 3.76 |
| 226 | 3.52 |
| 227 | 3.29 |
| 228 | 3.07 |
| 229 | 2.86 |
| 230 | 2.66 |
| 231 | 2.46 |
| 232 | 2.27 |
| 233 | 2.09 |
| 234 | 1.92 |
| 235 | 1.75 |
| 236 | 1.6 |
| 237 | 1.45 |
| 238 | 1.31 |
| 239 | 1.18 |
| 240 | 1.05 |
| 241 | 0.94 |
| 242 | 0.83 |
| 243 | 0.73 |
| 244 | 0.64 |
| 245 | 0.55 |
| 246 | 0.47 |
| 247 | 0.41 |
| 248 | 0.35 |
| 249 | 0.29 |
| 250 | 0.25 |
| 251 | 0.21 |
| 252 | 0.19 |
| 253 | 0.17 |
| 254 | 0.15 |
| 255 | 0.15 |

High End Systems Reference Guide

DMX Channel Map

Revision History

Revision A - Initial release. (August 16th, 2019)

Revision B - Changed section title names and added a third note to TurboRay Macros page. There were no DMX value changes for this revision. (September, 17, 2019)