

Digitrax Detection & Signaling Specification Sheet

SE8C Signal Decoder



| | |
|-----------------------------------|-----------------------------------------------------------------|
| Turnout/Semaphore Control | Yes, 8 With Slow Motion Machines |
| Inputs for Occupancy Sensor Links | Yes, 8 |
| Inputs for Control Lines | Yes, 8 |
| DC and DCC Compatible | Yes |
| Interface | 44 Pin Connector |
| External Power | Yes, (PS14) |
| Controls Signals | Yes, Manually with Throttle or with Computer Detection Software |
| Controls Signal Heads | Yes, 32 (4 Signals per Signal Driver Cable) |

| | | | | | |
|------------------|------------|---------------------|---------|--------------------|---------|
| Prod Date | 06/15/2003 | Discontinued | Current | Replaced By | Current |
| MSRP | US\$125.00 | | | SKU | |

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SE8C Factory Default Settings for Board ID 01

| SE8C Driver Socket | Lighting Aspect | | “A” Orientation Signals | | | | “B/C” Orientation Signals | | | |
|--------------------|-----------------|---------|-------------------------|-----|---------------------------|-----|---------------------------|-----|----------|-----|
| | | | A ₁ -Main | | A ₂ -Diverging | | B-Main | | C-Siding | |
| | | | Switch | t/c | Switch | t/c | Switch | t/c | Switch | t/c |
| DRV1 | 1 | Red | 257 | t | 259 | t | 261 | t | 263 | t |
| | 2 | Green | 257 | c | 259 | c | 261 | c | 263 | c |
| | 3 | Yellow | 258 | t | 260 | t | 262 | t | 264 | t |
| | 4 | Fl Yel* | 258 | c | 260 | c | 262 | c | 264 | c |
| DRV2 | 1 | Red | 265 | t | 267 | t | 269 | t | 271 | t |
| | 2 | Green | 265 | c | 267 | c | 269 | c | 271 | c |
| | 3 | Yellow | 266 | t | 268 | t | 270 | t | 272 | t |
| | 4 | Fl Yel* | 266 | c | 268 | c | 270 | c | 272 | c |
| DRV3 | 1 | Red | 273 | t | 275 | t | 277 | t | 279 | t |
| | 2 | Green | 273 | c | 275 | c | 277 | c | 279 | c |
| | 3 | Yellow | 274 | t | 276 | t | 278 | t | 280 | t |
| | 4 | Fl Yel* | 274 | c | 276 | c | 278 | c | 280 | c |
| DRV4 | 1 | Red | 281 | t | 283 | t | 285 | t | 287 | t |
| | 2 | Green | 281 | c | 283 | c | 285 | c | 287 | c |
| | 3 | Yellow | 282 | t | 284 | t | 286 | t | 288 | t |
| | 4 | Fl Yel* | 282 | c | 284 | c | 286 | c | 288 | c |
| DRV5 | 1 | Red | 289 | t | 291 | t | 293 | t | 295 | t |
| | 2 | Green | 289 | c | 291 | c | 293 | c | 295 | c |
| | 3 | Yellow | 290 | t | 292 | t | 294 | t | 296 | t |
| | 4 | Fl Yel* | 290 | c | 292 | c | 294 | c | 296 | c |
| DRV6 | 1 | Red | 297 | t | 299 | t | 301 | t | 303 | t |
| | 2 | Green | 297 | c | 299 | c | 301 | c | 303 | c |
| | 3 | Yellow | 298 | t | 300 | t | 302 | t | 304 | t |
| | 4 | Fl Yel* | 298 | c | 300 | c | 302 | c | 304 | c |
| DRV7 | 1 | Red | 305 | t | 307 | t | 309 | t | 311 | t |
| | 2 | Green | 305 | c | 307 | c | 309 | c | 311 | c |
| | 3 | Yellow | 306 | t | 308 | t | 310 | t | 312 | t |
| | 4 | Fl Yel* | 306 | c | 308 | c | 310 | c | 312 | c |
| DRV8 | 1 | Red | 313 | t | 315 | t | 317 | t | 319 | t |
| | 2 | Green | 313 | c | 315 | c | 317 | c | 319 | c |
| | 3 | Yellow | 314 | t | 316 | t | 318 | t | 320 | t |
| | 4 | Fl Yel* | 314 | c | 316 | c | 318 | c | 320 | c |

Setting the Board ID

| Board ID <small>(Press ID Button, set Sw# for Board ID number)</small> | Slow Motion Turnout Machine Switch Address Range <small>8 Per SE8C</small> | Signal Control Switch Address Range <small>4 Aspects Per Head 64 Per SE8C</small> | Signal Control Switch Address Range <small>2 Aspects Per Head 32 Per SE8C</small> |
|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| 01 (factory setting) | Sw01-Sw08 | Sw257-Sw320 | Sw257-Sw288 |
| 02 | Sw09-Sw16 | Sw321-Sw384 | Sw289-Sw320 |
| 03 | Sw17-Sw24 | Sw385-Sw448 | Sw321-Sw352 |
| 04 | Sw25-Sw32 | Sw449-Sw512 | Sw353-Sw384 |
| 05 | Sw33-Sw40 | Sw513-Sw576 | Sw385-Sw416 |
| 06 | Sw41-Sw48 | Sw577-Sw640 | Sw417-Sw448 |
| 07 | Sw49-Sw56 | Sw641-Sw704 | Sw449-Sw480 |
| 08 | Sw57-Sw64 | Sw705-Sw768 | Sw481-Sw512 |
| 09 | Sw65-Sw72 | Sw769-Sw832 | Sw513-Sw544 |
| 10 | Sw73-Sw80 | Sw833-Sw896 | Sw545-Sw576 |
| 11 | Sw81-Sw88 | Sw897-Sw960 | Sw577-Sw608 |
| 12 | Sw89-Sw96 | Sw961-Sw1024* | Sw609-Sw640 |

SE8C Option Switch Settings

| OpSw | t - thrown | c - closed |
|-----------|----------------------------------------------------|--------------------------------------------------|
| 01 | SE8C Mode Operation | Reserved |
| 02 | 4 Aspects per head (2 Signal control addresses) | 2 Aspects per head (1 Signal control address) |

| OpSw03 | OpSw04 | OpSw05 | Head Types- for SE8C DRV 1 to 4 |
|--------|--------|--------|--------------------------------------------------|
| t | t | t | DRV1-4 3/3 Dual Heads, Common Anode |
| t | t | c | DRV1-4 3/3 Dual Heads, Common Cathode |
| t | c | t | DRV1-4 Searchlight 3 wire LED, Common Anode |
| t | c | c | DRV1-4 Searchlight 3 wire LED, Common Cathode |
| c | c | t | DRV1-4 Searchlight 2 wire LED, Standard polarity |
| c | c | c | DRV1-4 Searchlight 2 wire LED, Reverse polarity |

| OpSw06 | OpSw07 | OpSw08 | Head Types- for SE8C DRV 5 to 8 |
|--------|--------|--------|--------------------------------------------------|
| t | t | t | DRV5-8 3/3 Dual Heads, Common Anode |
| t | t | c | DRV5-8 3/3 Dual Heads, Common Cathode |
| t | c | t | DRV5-8 Searchlight 3 wire LED, Common Anode |
| t | c | c | DRV5-8 Searchlight 3 wire LED, Common Cathode |
| c | c | t | DRV5-8 Searchlight 2 wire LED, Standard polarity |
| c | c | c | DRV5-8 Searchlight 2 wire LED, Reverse polarity |

| OpSw09 | OpSw10 | Indication of 4 th Aspect |
|--------|--------|---------------------------------------------------------------|
| t | t | 4th Aspect Flashing Yellow |
| t | c | 4 th Aspect Flashing Red |
| c | t | 4th Aspect Dark – Use for approach lighting |
| c | c | 4 th Aspect Flashing Green |

| OpSw | Thrown | Closed |
|-----------|-------------------------|----------------------------------------------------------------|
| 11 | default | Semaphore mode (for slow motion turnout machine output) |
| 13 | default | Disable DS (detection section) reporting input messages |
| 14 | default | Enable SW command from LocoNet (not track packets) |
| 15 | default | Disable local switch toggle command |
| 17 | default | Next SW command sets signal control address range |
| 18 | default | Next SW command sets broadcast address range |
| 19 | default | Next SW command sets semaphore control address range |
| 20 | default | Set FACTORY default settings |
| 21 | Normal operation | Exercise Signal Head Pattern 1 (all heads) |