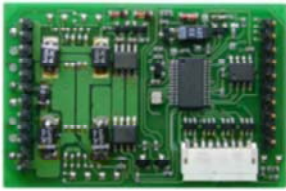


Digitrax Decoder Index

DG583AR



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| | | | |
|----------------------|--|-----------------------|------------------|
| Physical Size | 1.45" x 2.23" with Plug 36.83mm x 56.64mm | Current Rating | 5.0/10.0 Amps |
| Interface | Decoder End | Wires | End/Plug |
| IP | Integrated Aristo Plug | None | None |

| | | | | | |
|--------------------|------------|--------------------------------|---------|----------------------|--------------------------------|
| # Functions | 8 | Function Current Rating | 2 Amps | Function Type | FX³ |
| Prod Date | 03-30-2002 | Discontinued | Current | Replaced By | N/A |

[FX³ Motor Isolation Protection Note](#)

| CV# | Feature | Default | Range | Notes |
|--|-----------------------------------|---------|--------------------------|---|
| 2 Digit and 4 Digit Addressing | | | | |
| 01 | 2 Digit Decoder Address | 003/x03 | 001-127 | |
| 17 | 4 Digit Address Hi Byte | 000/x00 | 0128-9983 | CV17 & 18 are used together |
| 18 | 4 Digit Address Lo Byte | 000/x00 | 0128-9983 | |
| 29 | Configuration Register | 006/x06 | Table 29 | |
| Configuration Register | | | | |
| 29 | Configuration Register | 006/x06 | Table 29 | |
| | Address Selection, 2 or 4 digit | 2 Digit | 2 or 4 Digit | |
| | Normal Direction of Travel (NDOT) | Fwd | Fwd/Rev | |
| | Speed Step Control | 28/128 | 14 or 28/128 | |
| | Speed Table On/Off | Off | Speed Table On or Off | |
| | Analog Mode Conversion On/Off | On | On or Off | |
| LocoMotion™ | | | | |
| Acceleration & Deceleration | | | | |
| 03 | Acceleration Rate | 000/x00 | 000/x00 to 031/x1F | 128 Steps |
| 04 | Deceleration Rate | 000/x00 | 000/x00 to 031/x1F | 128 Steps |
| Three Step Speed Table & Start Voltage | | | | |
| 02 | Start Voltage | 000/x00 | 000/x00 to 255/xFF | 128 Steps |
| 05 | Maximum Voltage | 000/x00 | 000/x00 to 255/xFF | 128 Steps 000/x00, 001/x01 & 255/xFF= max voltage at step 28 |
| 06 | Mid Point Voltage | 000/x00 | 000/x00 to 255/xFF | 128 Steps 000/x00 & 001/x01= straight line curve |
| 28 Step Speed Tables -256 step resolution | | | | |
| 65 | Kick Start value | 000/x00 | | 128 Step Interpolated |
| 66 | Forward Trim | 000/x00 | | 128 Step Interpolated |

| | | | | |
|---|--|-------------|---|--|
| 67 | First Speed Table Entry | 000/x00 | | 128 Step Interpolated |
| 68-93 | 28 Step Speed Table Entries | 000/x00 | | 128 Step Interpolated |
| 94 | Maximum Speed Table Step | 000/x00 | | 128 Step Interpolated |
| 95 | Reverse Trim | 000/x00 | | 128 Step Interpolated |
| 29 | Configuration Register | 006/x06 | Table 29 | Set to enable speed tables |
| Torque Compensation & Switching Speed | | | | |
| 53 | Not Used in FX ³ Decoders | | | Not Available |
| 54 | Torque Compensation Switching Speed | 000/x00 | Table 54 | |
| Functions | | | | |
| 13 | DC Functions ON Not Used in FX ³ | | Automatic | Not Used FX ³ |
| FX³ Functions | | | | |
| 49 | F0F, forward light effect white | 000/x00 | FX³ Effects Table | |
| 50 | F0R, reverse light effect yellow | 000/x00 | FX³ Effects Table | |
| 51 | F1, Function 1 green | 000/x00 | FX³ Effects Table | |
| 52 | F2, Function 2 violet | 000/x00 | FX³ Effects Table | |
| 113 | F3, Function 3 brown | 000/x00 | FX³ Effects Table | |
| 114 | F4, function 4 white/yellow | 000/x00 | FX³ Effects Table | |
| 115 | F5, Function F5 white/green | 000/x00 | FX³ Effects Table | |
| 116 | F6, Function F6 white/blue | 000/x00 | FX³ Effects Table | |
| 62 | FX Rate and Keep alive adjust | 000/x00 | 000/x00 to 255/xFF | |
| 63 | Ditch Light Blink hold time | 000/x00 | 000/x00 to 255/xFF | |
| Directional Headlights, Transponding, Split Field Motor | | | | |
| 61 | Directional Headlight | Directional | Remap F0 Forward & Reverse | Not controlled by CV61 in FX ³ Decoders |
| | Transponding | Off | Off or On See Table 61 | |
| | Split Field Motor | Off | Off or On See Table 61 | |
| Scaleable Speed Stabilization | | | | |
| 55 | Static Compensation | 128/x80 | 000/x00 to 255/xFF | |
| 56 | Dynamic Compensation | 048/x30 | 000/x00 to 255/xFF | |
| 57 | Speed Stabilizer-Droop | 006/x06 | 000/x00 to 015/x0F | |
| SuperSonic | | | | |
| 09 | Motor Frequency SuperSonic | 000/x00 | 000/x00 to 255/xFF | Default is MAX |
| Advanced Consisting | | | | |
| 19 | Advanced Consist Address | 000/x000 | 000/x00 to 255/xFF | Default is OFF |
| 21 | Advanced Consist Function Control Override for F1-F8 | 000/x000 | Table 21-22 | |
| 22 | Advanced Consist Function Control Override for F0 & F9-F12 | 000/x000 | Table 21-22 | |
| Function Remapping | | | | |
| 33-46 | Function Remapping CVs | 000/x000 | Function Remapping Table | |
| Decoder Factory Reset | | | | |
| 08 | Reset Decoder to Factory Default CV Values | 129/x81 | Set to 008/x08 to reset all CV Values. Set to 009/x09 to reset all CV Values except 28 step speed table values. | |
| IDs | | | | |
| 105 | User Private ID #1 | 000/x00 | | |
| 106 | User Private ID #2 | 000/x00 | | |
| 07 | Version ID | 031/x1F | Read Only | |
| 08 | Manufacturer ID | 129/x81 | Not affected by CV reset | |

Information provided here is correct to the best of our knowledge.
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