Track Interface Panels (MicroLok® II Applications)

Track Interface Panels are designed to ensure sharp and reliable injection of wayside-generated codes into the rails and equally dependable detection of received signals from the rails. These panels are designed to isolate MicroLok II systems from any unwanted stray signals or harmonics from other systems also using the rails for communications. Mounting, wiring and adjustment of these panels is easy to perform. Refer to the ordering tabulations for specifications of these panels.

Coded Track Interface Panel
The Coded Track Interface Panel is designed for “MicroTrax” track signals and terminates the track at very low impedance to the frequency components of the track code. This feature enables the use of maximum length track circuits, and ensures that the coded track subsystem is compatible with wide-band terminating shunts. A high impedance is also created at 150 Hz and higher frequencies. This ensures compatibility with highway crossing motion and predictor equipment without the need for external blocking units. Four versions of the Coded Track Interface Panel are available for use with the MicroLok II system. Three of these panels are designed for operation with different cab frequencies (as required).

E-Code Track Interface Panel
The E-Code Track Interface Panel performs the same functions as the standard Coded Track Circuit Interface Panel, but is tailored to carry the Electrocode track signals (see RSE-1A2). This panel is also designed to protect track communications from unwanted transient electrical signals.

Cab Signal Interface Panel
Three different Cab Signal Interface panels are available to interface the system-generated cab signals with the rails for overlay on coded track circuit signals. Each configuration of the interface panel accommodates a different cab signal carrier frequency, including the typical 60 and 100 Hz carriers, and a 40 Hz carrier for special applications.

Advantages
• Compatible with existing track circuits and other signals on the rails.
• Highly immune to potential interference.
• Isolates sensitive control system electronics from transient voltages in the rails.
• Easy installation and adjustment.
**Ansaldo STS USA**  
(Formerly known as Union Switch & Signal)

**RSE-1D3**  
Rev. 4-07

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**Track Interface Panels**  
(MicroLok® II Applications)

**Coded Track Interface Panels**  
At Intermediate Signal Location

- MICROLOK II OR MICROTRAX TRACK CIRCUIT
- MICROLOK II OR MICROTRAX TRACK CIRCUIT

**Coded Track and E-Code™ Interface Panels**  
At Interlocking

- MICROLOK II CARDFILE with E-Code™

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**E-Code and Cab Signal Interface Panels**  
At Intermediate Signal Location

- MICROLOK II INTERMEDIATE CARDFILE

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**Coded Track and Cab Signal Interface Panels**  
At Interlocking

- MICROLOK® II CARDFILE
Coded Track Interface Panel Design

Cab Signal Interface Panel Design

INTERFACE/ADJUSTMENT TERMINALS:
- CAB OUTPUTS FROM CARDFILE
- E/W DIRECTION CONTROL
- CAB RAIL CURRENT (TAPS)
Specifications and Ordering Information

- Refer to tabulations below for MicroLok II Track Interface Panels’ specifications and ordering information.

### Track Interface Panels

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N451835-0101</td>
<td>General applications without cab signal.</td>
</tr>
<tr>
<td>N451835-0102</td>
<td>Non-cab territories with 86 Hz crossing predictors.</td>
</tr>
<tr>
<td>N451835-0103</td>
<td>100 Hz cab signal territories. Use with Signal panel N451835-0802</td>
</tr>
<tr>
<td>N451835-0104</td>
<td>60 Hz cab signal territories. Use with cab panels N451835-0801, -1101</td>
</tr>
<tr>
<td>N17600101</td>
<td>E-Code Track Interface Panel (1)</td>
</tr>
<tr>
<td></td>
<td>Note (1): Requires 10 mH inductor on “+” terminal (in series) for cab signal</td>
</tr>
</tbody>
</table>

### Cab Signal Interface Panels

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N451835-0801</td>
<td>60 Hz cab signal territories. Use with track panel N451835-0104 (1)</td>
</tr>
<tr>
<td>N451835-0802</td>
<td>100 Hz cab signal territories. Use with track panel N451835-0103 (1)</td>
</tr>
<tr>
<td>N451835-1101</td>
<td>40 Hz cab signal territories. Use with track panel N451835-0104</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N451923-2501</td>
<td>Termination Capacitor PCB</td>
</tr>
<tr>
<td>J702288</td>
<td>10 mH inductor for E-Code Panels used in cab territory.</td>
</tr>
</tbody>
</table>

Note (1): Requires Term. Capacitor PCB for application (see tab below.)