RCP-NK1 Function Key Program Mode

The Function Key Program Mode of the RCP-NK1 allows a user to program, directly from the panel, the eight keys on the right side of the panel as function keys. This allows a panel to be used with routers levels not available from the default panel layout.

Entering Function Key Program Mode

The Function Key Program Mode is accessed while powering up the RCP-NK1. The RCP-NK1 draws its power from other devices such as the NK-IPS or NK Series routers.

To enter the Function Key Program Mode:
1. Connect the RCP-NK1, via T-Bus, to an NK-IPS or NK Series router to power up.
2. Power up the device while holding down one of the eight right side keys for three seconds.
   The eight right side keys will flash once and the selected right side key will continue to flash.

Programming Function Keys

The eight keys on the right side of the RCP-NK1 are the default function keys. The function keys on the RCP-NK1 have the following default configuration:

If the RCP-NK1 is attached, for example, to an NK-3G16 or NK-3G164, all function keys are unassigned:

Once the RCP-NK1 has entered Function Key Program Mode, the function keys can be assigned custom functions using the 32 keys on the left side of the panel. On the panel, the function key on the right side that is flashing is the key that will be programmed. The selected left side key shows which function has been assigned to that key. Breakaway values will flash and light the current level-mask for that breakaway on the level keys.

To assign a function to a key:
1. Enter Function Key Program Mode.
2. Press one of the 8 function keys on the right side to select it to be assigned a function.
3. Press one of the 32 left side keys to assign the function to the selected right side key.
   The left side keys indicate the new function.
   * The shift function can be assigned to function keys. For example, if using a 34x34 router, two shift function keys (Shift 1 and Shift 2) would be required to access all 34 sources.
   * Macros can be assigned to function keys, after which the macro can be programmed through normal operation of the RCP-NK1. If the macro events have already been programmed, then the defined events will be available. This does not erase existing macros, but assigns the key.

To set a breakaway:
1. Enter Function Key Program Mode.
2. Press one of the 8 function keys on the right side to select it.
3. From the 32 left side keys, press the Breakaway key.
   The Breakaway key will flash and levels will show in this breakaway.
4. Add or remove levels from this breakaway using level keys.
   The breakaway has been stored and the function key can now be assigned a different function if required. Including the default breakaway, up to eight breakaways can be set.
   * The default breakaway should only include levels present in the NK system.
Default Breakaway

Breakaway 1 is known as the default breakaway. The default breakaway has some distinct properties:

- It is selected on panels from the factory that have no breakaway key assigned.
- If Breakaway Reset mode is enabled, it is the breakaway that will be returned to.

Aside from these properties, it functions as a normal breakaway.

The default breakaway should only include levels present in the NK system. For example, if the system has a single NK-3G16, the default breakaway should be set to Level 1 only. Otherwise, the panel will take longer to perform switches as it retries non-existent levels.

Key Function Layout

The following image displays the key function layout:

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
<th>Level 6</th>
<th>Level 7</th>
<th>Level 8</th>
<th>Dest</th>
<th>Dest</th>
<th>Src</th>
<th>Src</th>
<th>Take</th>
<th>Chop</th>
<th>Protect</th>
<th>Lock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Break 1</td>
<td>Break 2</td>
<td>Break 3</td>
<td>Break 4</td>
<td>Break 5</td>
<td>Break 6</td>
<td>Break 7</td>
<td>Break 8</td>
<td>Mach</td>
<td>Ctrl</td>
<td>Macro 1</td>
<td>Macro 2</td>
<td>Macro 3</td>
<td>Macro 4</td>
<td>De-assign</td>
<td>De-assign</td>
</tr>
</tbody>
</table>

For More Information on...

- the default breakaway, refer to the section “Default Breakaway” below.
- the various key functions available to be programmed on the RCP-NK1, refer to the information on the RCP-NK1 in the NK Series User Guide.