Default Function Assignments:

- **F0** = Headlight
- **F1** = Bell
- **F2** = Horn/Whistle
- **F3** = Coupler
- **F4** = Aux 1
- **F5** = Dynamic Brake/Injector
- **F6** = Detector
- **F7** = Shunting Mode
- **F8** = Extended Mute
- **F9** = Rail Joint Sound
- **F10** = Short air let-off
- **F11** = Short Horn/Whistle

Programming Hints:

Only certain CVs can be programmed in OPS mode, the sound control and lighting effect CVs can only be programmed on the programming track or using the ESU LokSound Programmer.

**Volume Control:**

The LokSound volume-control CVs all have a range of 0 through 64, with the default setting being 64.

- **CV 63** controls the Exhaust volume.
- **CV 121** controls the Whistle/Horn volume.
- **CV 122** controls the Bell volume.
- **CV 123** controls the Auxiliary sound effects volume.

**Programming Lighting Effects:**

- **CV 113** controls the headlight (white wire)
- **CV 114** controls the back up light (yellow wire)
- **CV 115** controls AUX 1 (green wire)
- **CV 116** controls AUX 2 (purple wire)

The table below has the list of values for the given lighting output options at maximum brightness.

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-off light</td>
<td>15</td>
</tr>
<tr>
<td>Phase 1 ditch light</td>
<td>31</td>
</tr>
<tr>
<td>Phase 2 ditch light</td>
<td>47</td>
</tr>
<tr>
<td>Strobe light</td>
<td>63</td>
</tr>
<tr>
<td>Double Strobe light</td>
<td>79</td>
</tr>
<tr>
<td>Firebox Flicker</td>
<td>95</td>
</tr>
<tr>
<td>Smoke Generator</td>
<td>111</td>
</tr>
<tr>
<td>Headlight Bright/dim</td>
<td>127</td>
</tr>
<tr>
<td>Mars light</td>
<td>143</td>
</tr>
<tr>
<td>Gyra light</td>
<td>159</td>
</tr>
</tbody>
</table>

**Factory reset of CVs:**

Set **CV 8** to 8. This will set the CVs to the values listed as default in the LokSound Manual, which differ in some cases with the values programmed into the decoder for a given locomotive sound.

**Programming alternating ditch lights:**

Set **CV 113** to 127; **CV 114** to 127; **CV 115** to 223; **CV 116** to 239; **CV 141** to 13; **CV 144** to 14; **CV 153** to 48; **CV 156** to 16; **CV 112** to 18.

**Programming Chuff Rate:**

**CVs 57** and **58** control the chuff rate; **CV 57** controls the chuff rate at speed step 1; **CV 58** controls the rate at which the chuff sound increases as the speed steps increase. The range of values is from 0 through 127.

**Mapping AUX 2 to Function 7**

Set **CV 183** to 8 maps AUX 2 to the F7 key in the forward direction
Set **CV 184** to 0 removes shunting mode and Acceleration/Break time from the F7 key in the forward direction
Set **CV 186** to 8 maps AUX 2 to the F7 key in the reverse direction
Set **CV 187** to 0 removes shunting mode and Acceleration/Break time from the F7 key in the reverse direction

**To Mute when turning on system:**

**CV130=0; CV133=70; CV190=4; CV193=4.**

**F8** will mute idle sound after running.