

# LightLEEDer EVO-INT Hospital Switch Control Technical Bulletin

The LightLEEDer EVO-INT panel provides control of multiple lighting loads with dimming from a single button in a hospital patient room. This input can sequence the dimmer scenes or ramp cycle the dimming level using a single input or push button.

The four hardwired inputs on the LLEVO-INT can be configured as a momentary push button input for a nurse-call system, bedrail, or from a pillow switch that provides an isolated dry contact closure. The LLEVO-INT internal operation of the four inputs utilize two LightSync addresses LS:02 (maintained motion sensor) and LS:03 (momentary push button) that are programmed independently for the same four hardwire connection points.

## EVO-INT Scene Sequence / Ramp Cycle Input Configuration:

The Internal LS:03 uses the four hardwire inputs in two sets. The first four (inputs 1 to 4) are intended for a momentary push button closure. These are used to trigger the “Scene Sequence” operation for the dimmer scenes. When the same input is held the 2<sup>nd</sup> set of points are triggered (inputs 5 to 8), these are programmed for “Ramp Cycle” control of the dimmer outputs in the scene. This allows a patient to step through a sequence of dimmer scenes with each momentary push, and when held the outputs will dim Up/Down, with a pause at the top or bottom before dimming in the opposite direction.

This operation will support a single button dry contact closure from a nurse-call system, bedrail, or pillow switch wired to an input. These 4 inputs are shared between the two sets of input points. In this example I will use a matching input set. For hardwire input-2 (LS:03.2 and LS:03.6) the internal LS Device is set as a “Type: 6 button / 8 Input”. Input 2 (LS:03.2) is set for “Scene Sequence” to trigger “Sequence: 01”. Refer to Figure 1 below.

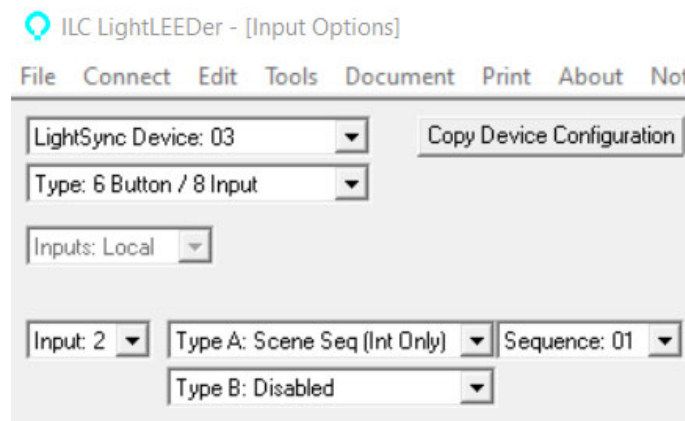


Figure 1 – Input Options

**Setting Up the Scene Sequence control:**

1. Map the scenes to the dimmer outputs to be controlled using “Dimmer Scene Mapping” under “Dimmer Outputs”. Refer to Figure 2.
2. Repeat this for each scene used in the sequence.
3. Set the dimmer levels per output for each scene using “Dimmer Scenes” under “Tools”. Refer to Figure 3.
4. Repeat this for each scene and then click “Send Scenes To LightLEEDer / EVO”.
5. Create the scene sequence, using “Scene Sequences (EVO-INT)” under “Other Devices” then “Dimmer Outputs”. Refer to Figure 4.

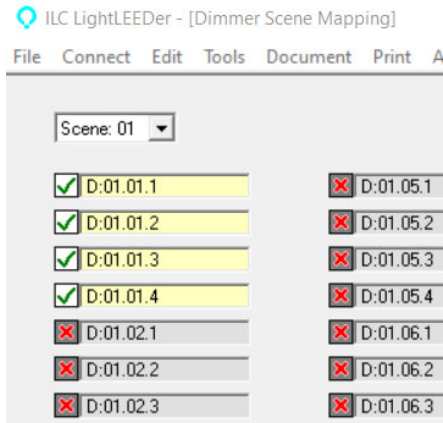


Figure 2 - Dimmer Scene Mapping

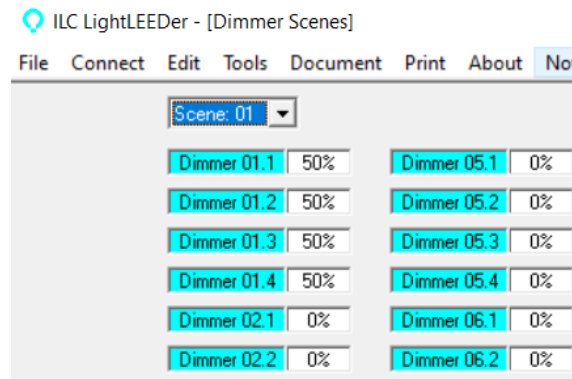


Figure 3 – Dimmer Scenes

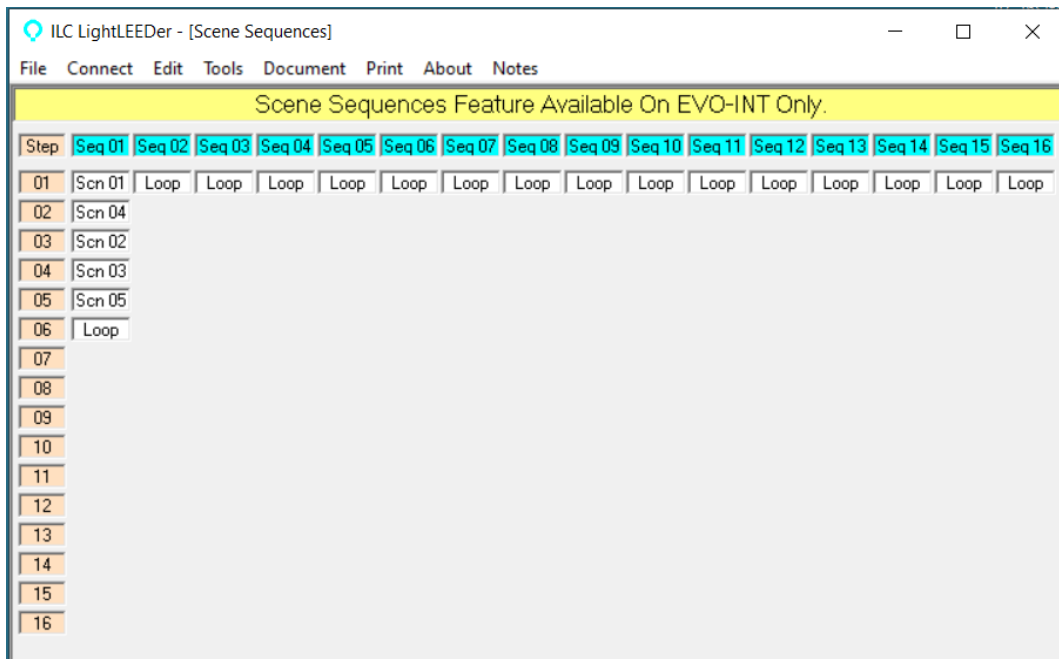


Figure 4 – Scene Sequences

The LLEVO-INT can be programmed with up to 16 Scene Sequences, each sequence can have up to 16 scenes in any order. The last scene will automatically be set for “Loop” to repeat the sequence. If you have used all 16 as a scene, the sequence will still loop on the 17<sup>th</sup> trigger.

Scene Sequencing is only supported within the LLEVO-INT panel and will not be available in LightLEEDer or standard LLEVO panels, or over the LightLEEDer network between panels.

### Setting Up the EVO-INT Ramp Cycle control:

“Ramp Cycle” dimming control is configured for the matching internal LS device inputs used for scene sequencing (inputs 5 to 8). The LLEVO-INT automatically triggers the matching input when the button is held. In this example the matching input would be LS:03.6 matching LS:03.2 used above. This input is set for “Push Button On” type as shown in Figure 5. Then it is mapped to the dimmers to be controlled in the “Dimmer Output” screen as a “Ramp Cycle” control option. See to Figure 6 below.

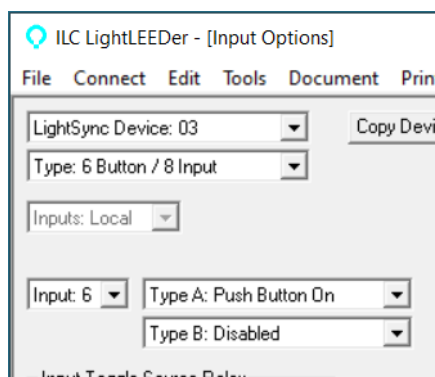


Figure 5 – Input Options

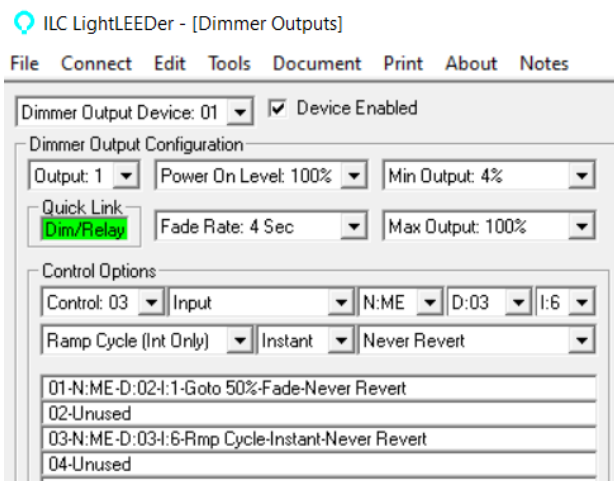


Figure 6 – Dimmer Outputs

A LLEVO-INT will also support this operation using a LSG3 switch. With a Scene switch or Scene/MZD switch you can use one Scene button dedicated for the Scene Sequence and Ramp Cycle operation. With a Scene Non-Capture or Non-Dim station you can dedicate one button for triggering the Scene Sequence, and another button for Ramp Cycle.

### Note:

The LLEVO-INT’s four internal hardwire inputs can be used for the above defined hospital switch operation or for motion sensor control of relays and dimmers. Each input can only be used for one operation at a time without causing programming conflicts. For motion sensor programming refer to EVO-INT Motion Sensor Control Technical Bulletin (TB0025).