

LightLEEDer Software Programming Tools for LightSync G3 Technical Bulletin

The LightLEEDer Pro software has shortcut tools to creating the programming for a LightSync G3 MZD, Scene and Scene-MZD station, or creating Echo Devices. The LightSync device will be configured for the switch type and buttons before shipping. To change the configuration and buttons refer to PD0628 and PD0629.

Using the Software Tools to Configure the LightSync G3 device from the LL-Pro software

- In the menu bar at the top of the screen find Tools.
- Select the tool for the LightSync switch device type: **Add MZD Device, Add SMZD Device, Add Scene Device, Add Echo Device.**

MZD, SMZD and Scene Stations

- For MZD, SMZD and Scene first chose the matching device type.
Example: **4 Button Dim (3-Scene) or MZD 3-Zone.**
- Select the LightSync Device hex number to be used for this station, the software will display the set of addresses used by the device.
- Select the device type or button count needed, for a Scene and Scene-MZD station select the Scenes to be used as a set.
- The Check Box for **Configure matching relays and pilots** is automatically checked, or you can un-check this option and manually set these items later.
- Use the selection table at the right to link the Zones to the Dimmer. See Figure 1 and 2

Add MZD Device

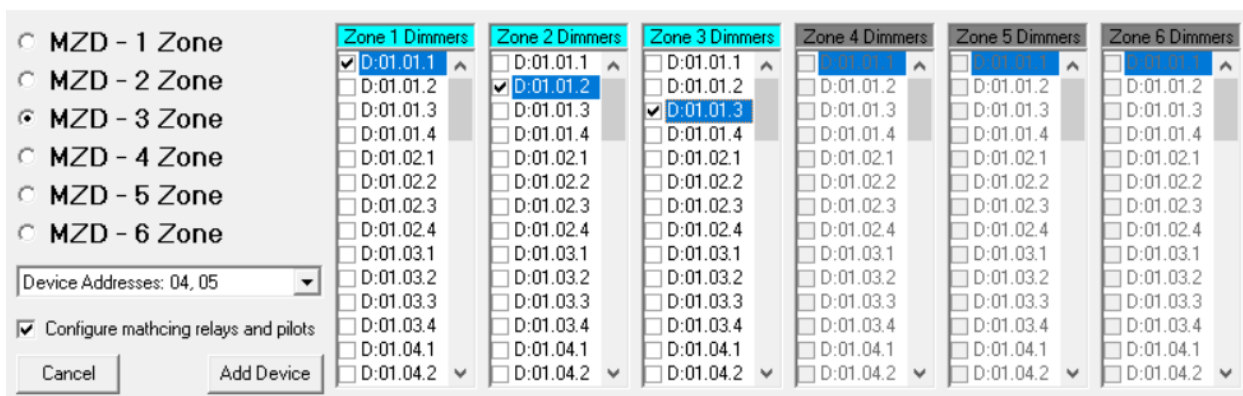


Figure 1

Add SMZD Device

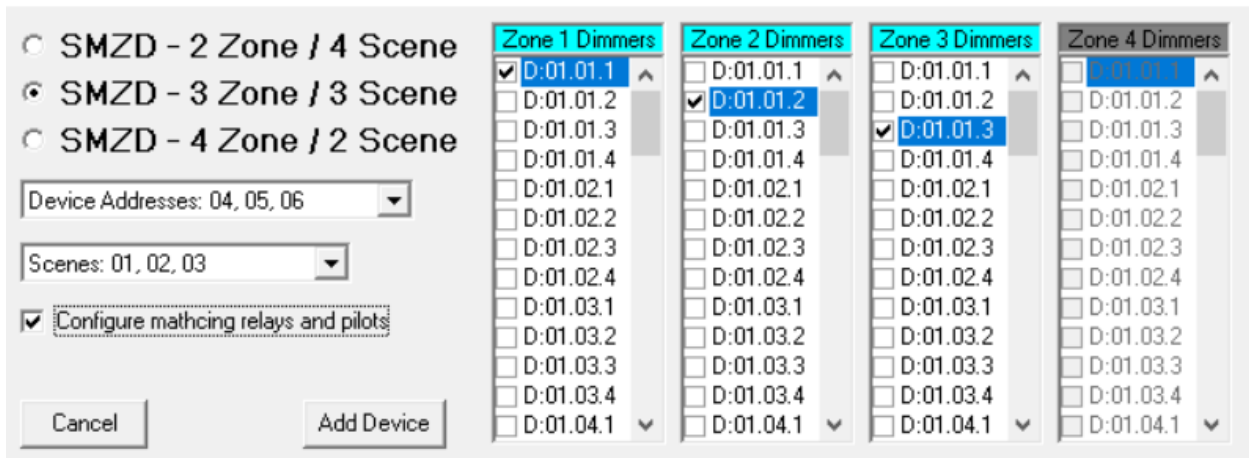


Figure 2

- In the Add Scene Device tool you will be selecting the dimmer zones to be controlled by the scenes. See Figure 3
- Use the Add Device button to create the station configuration and control mapping.
- When completed a **Add Device Complete** box will appear, click **OK**. See Figure 4

Add Scene Device

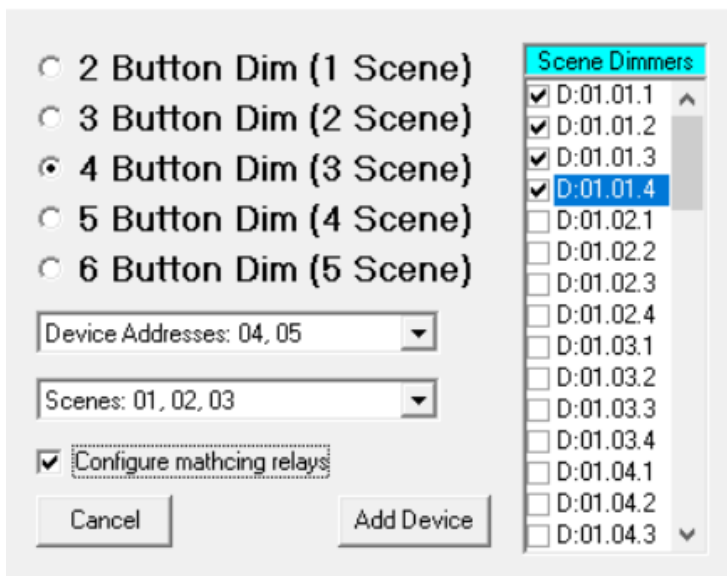


Figure 3

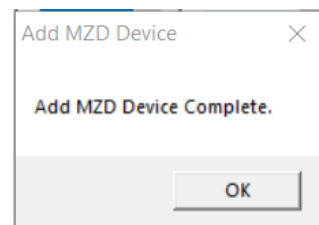


Figure 4

- The software will then take you to the LightSync device that you have created.
- You can then check the LightSync device configuration, these tools will populate information in order as selected and will set the relay control and pilots, toggle source, On/Off action.
- Dimmer control will take the first two available control lines for mapping the Ramp Up and Ramp Down functions. Without overwriting existing operations. See Figure 5

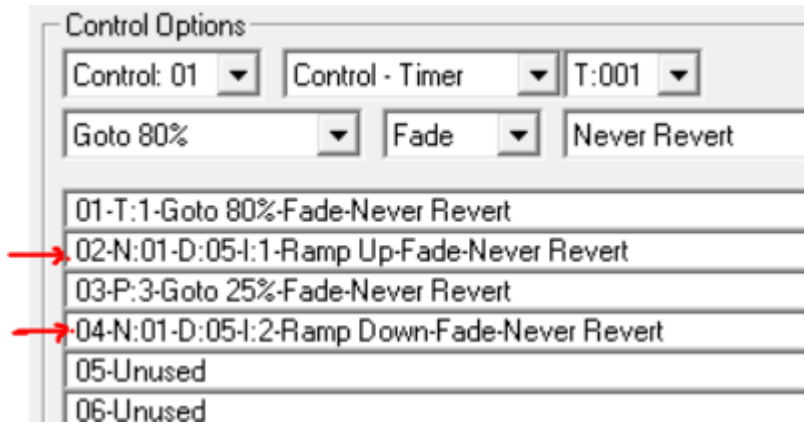


Figure 5

- A Scene Tool will set the Dimmers selected for the Scene and set dimmer to relay control On/Off points, On at 8%, Off at 6%. This accounts for lighting that is capped at a 5% min level. See Figure 6 and Figure 7

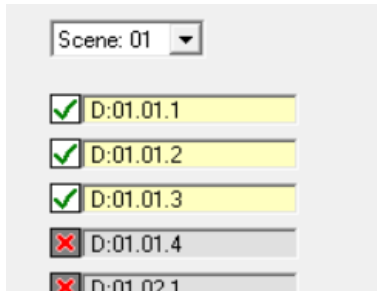


Figure 6

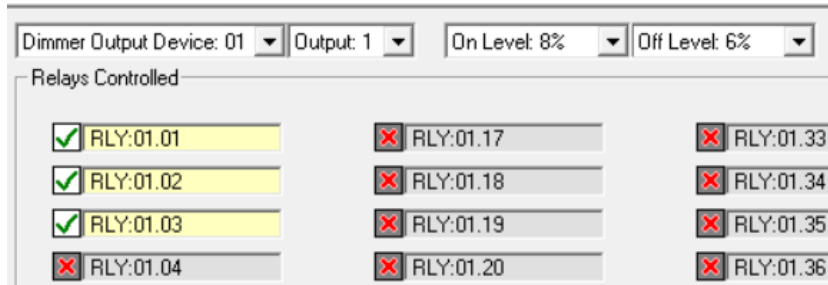


Figure 7

- The Scene switch has an OFF button that will be configured as a Set Scene for the next available scene in sequence, this Off button will not have a Capture operation for the 2nd address input. You can change the Scene to be any number from 41 to 64 to get the default 0%
- The memory for Scenes does have a Default setting for the first 4 sets of 10 Scenes Scene 01 to 40 as Levels from 10% to 100%, Scene 41 to 64 are all at 0%. See Chart 1

Default Scene % level configuration				
Scene - %	Scene - %	Scene - %	Scene - %	Scene - %
1 – 10%	11 – 10%	21 – 10%	31 – 10%	41 to 64 – 0%
2 – 20%	12 – 20%	22 – 20%	32 – 20%	
3 – 30%	13 – 30%	23 – 30%	33 – 30%	
4 – 40%	14 – 40%	24 – 40%	34 – 40%	
5 – 50%	15 – 50%	25 – 50%	35 – 50%	
6 – 60%	16 – 60%	26 – 60%	36 – 60%	
7 – 70%	17 – 70%	27 – 70%	37 – 70%	
8 – 80%	18 – 80%	28 – 80%	38 – 80%	
9 – 90%	19 – 90%	29 – 90%	39 – 90%	
10 – 100%	20 – 100%	30 – 100%	40 – 100%	

Chart 1

- You may wish to change the auto-mapped scene number from the Tool programming to one of the default scene numbers as a starting point, this would allow for a known level before a user captures a new levels at the scene switch.
- If using an EVO Application program, the Scene buttons are pre-set for the default levels See example preset to levels in chart 2

Pre-loaded Scene levels in Application FC		
Scene Button – Action	(Scene #)	= %
Scene 1 – Full	(10)	= 100%
Scene 2 – High	(70)	= 70%
Scene 3 – Medium	(50)	= 50%
Scene 4 – Low	(30)	= 30%
Scene 5 – Dim	(10)	= 10%
Off (Scene 6) – Off	(41)	= 0%

Chart 2

- All controls that are set by the tools can be changed by the programmer after using the tool.

ECHO Device

- The Add Echo Device tool is used to create a Virtual station that will Echo the physical button actions in one room and provide control for another room based on its programmed station.
- The first step is creating the LightSync devices for the two rooms, in my example I will create a 6 Button Dim (5 Scene) station in each room at address 04 in room A (LS:04,05 to Scene 1,2,3,4,5 and S6 for Off) and 24 in room B. (LS:24,25 to Scene 11,12,13,14,15 and S16 for Off). See Figure 8

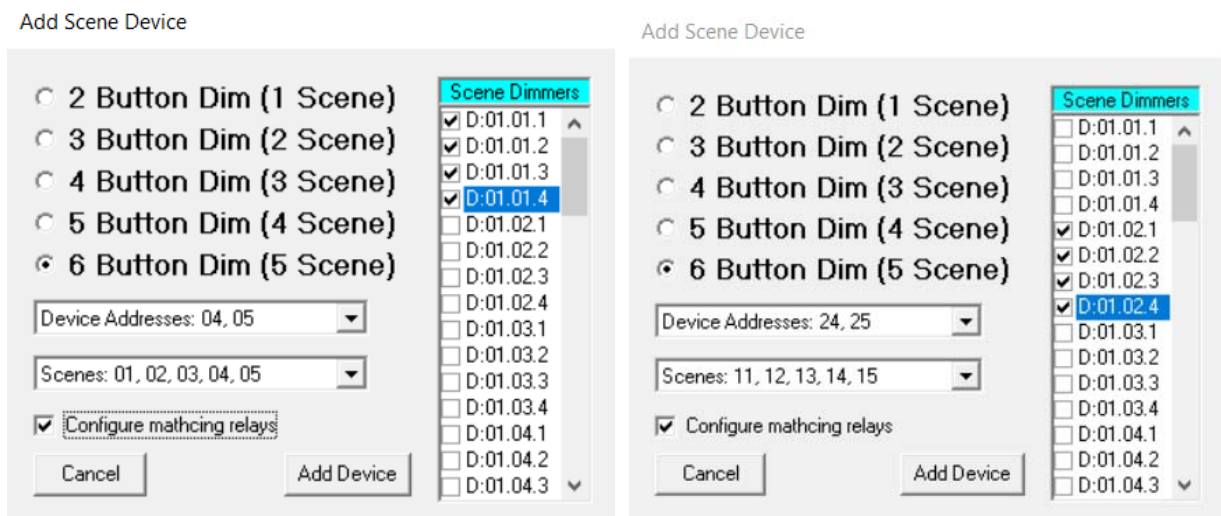


Figure 8 Conference Room A and B Scene Station Programming

- Now we can use the **Add Echo Tool** to create our virtual stations that will echo the physical stations inputs and provide control for the other room (Room A control from Scene station in room B). See Figure 9
- Select **Echo 2 Device** our Scene Switch uses 2 addresses, so we want to Echo both.
- Select **Copy Control Settings From Device Address 04** – The original Room A physical Scene station to copy control from.
- Select the **Physical Echo Device Address: 24** as the original room B station to echo button presses from.
- Select the **New Virtual Device Address: 0E** as the location for the echo control to be programmed into.
- Under **Disable All Echo Inputs if:** Change the **Manual Configure** option to **On Input Open**.
- Enter the input address the room wall divider sensor is connected to, this will typically be a Conditional Occupancy Input module (LS-COS8I) so that conditional commands in the module can be set to automatically combine the occupancy sensor when the dividing wall is Open. For this I have used LS address: 13.8, typically we will use the wall sensor as a *closed contact* when the wall is *closed*, and a *open contact* when the wall is *open*.
- Repeat the process to create the Echo control of room B from room A. See Figure 10

Add Echo Device

Figure 9

Add Echo Device

Figure 10

- The LL-Pro Software will take you to the Echo – **New Virtual Device** programming for review. of the configuration. See Figure 11

The screenshot shows the 'New Virtual Device' configuration window in LL-Pro software. It is divided into several sections:

- Device Selection:** LightSync Device: 0E, Copy Device Configuration: 01, Type: Echo Device, Echo Device: 24, Inputs: Local.
- Input Configuration:** Input: 1, Type A: Set Scene, Scene: 01, Type B: Disabled.
- Input Toggle Source Relay:** Node: 00, Relay: 01, Copy Input Config, D: 01, I: 1.
- Conditionals - Input Disable:** Condition A: On In Open, Node: 01, Device: 13, Input: 8; Condition B: Unused.
- Pilot Configuration:** Last Scene, Scene: 01.
- Quick Links:** Input to Relays, Input to Groups.
- Input Type A/B Times:** Radio buttons for 'Type A/B Based On Time Of Day' (selected) and 'Type A During Open Hours/Type B During Closed Hours'. A 'Prev' button is above the schedule grid.

	Sun	Mon	Tue	Wed	Thr	Fri	Sat
12:00-12:29A	A	A	A	A	A	A	A
12:30-12:59A	A	A	A	A	A	A	A
1:00-1:29A	A	A	A	A	A	A	A
1:30-1:59A	A	A	A	A	A	A	A
2:00-2:29A	A	A	A	A	A	A	A
2:30-2:59A	A	A	A	A	A	A	A
3:00-3:29A	A	A	A	A	A	A	A
3:30-3:59A	A	A	A	A	A	A	A
4:00-4:29A	A	A	A	A	A	A	A
4:30-4:59A	A	A	A	A	A	A	A
5:00-5:29A	A	A	A	A	A	A	A
5:30-5:59A	A	A	A	A	A	A	A
6:00-6:29A	A	A	A	A	A	A	A
6:30-6:59A	A	A	A	A	A	A	A
7:00-7:29A	A	A	A	A	A	A	A
7:30-7:59A	A	A	A	A	A	A	A

A 'Next' button is located below the schedule grid.

Figure 11

Review the Tool created device configuration before creating additional devices. All settings made by the Tools can be manually changed at the panel keypad, or in the LL-Pro software as needed. For more information on configuring a MZD, Non-Dim, Scene or SMZD station see TB0612, TB0613, TB0614 or TB0615.