LightSync G2 Multi Zone Dimmer (MZD)
Programming Guide

Overview:
This LightSync G2 Multi Zone Dimmer (LS-G2-MZD) switch station allows control of 1, 2, 3 or 4 zones of dimming in a single station. Each station provides on/off control and zone selection. It incorporates the press-and-hold raise/lower buttons that can dim one zone at a time or any combination of the zones selected.

Operation:
The first 1 to 4 buttons are used for both on/off control and allow for zone selection for group dimming. When a button is held, the zone button LED will flash letting the operator know it has been selected into the dimming group. This is done for each zone desired to be controlled as a group. Pressing and holding a raise or lower button will dim all the selected zones. Pressing any of the selected zone buttons again will clear the selected group dimming operation. If no action is detected for 10 seconds, the switch will return to normal operation where the raise/lower buttons automatically control all dimming outputs at the same time.

Programming the LightSync G2 Multi 2-4 Zone Dimmer:
The 2 to 4 zone LS-G2-MZD switches use two LightSync device addresses per switch. Set the LS-G2-MZD station to the base or the first LS address, the second address is automatically set to the next address. The first LS address is used for the button on/off relay control, and the second address is used for the dimmer raise and lower control.

Program the First LS address:
- Configuring the on/off button control of relays for the first LS address set on the device.
- Set each input as a “Push Button Toggle” and assign the “Input Toggle Source Relay” to the relay you want to track for the on/off command.
- Set the “Pilot Configuration” for “Relay On” and to the same relay as controlled. Note: That the last 2 inputs are not used for relay control but the LED status should be programmed as “Always Off”.
- Map the input to relay control for the relay(s) to be controlled.

Program the Second LS Address:
- Program each input to “Push Button On”.

Configuring the Dimmer Outputs:
- Enable the dimmer output for the device used. See Figure 1.
- Set the Control Options lines (1-16) to map the MZD inputs to the dimmer outputs, matching the related relay loads to create the control zone.
• Select the “Ramp Up” for the raise button, and “Ramp Down” for the lower button. Selecting this option, allows push-and-hold raise/lower control for continuous dimming when the button is held at the LS-G2 MZD station.

![Dimmer Output Table]

Figure 1 Dimmer Output

The standard dimming fade rate will typically be set for 10 seconds to reduce the possible flicker-effect generally seen when using a LED type fixture. The fade rate can be set for 0 to 10 seconds. At 10 seconds or below the output will maintain a near instantaneous response rate to the button action. If set for 12 to 20 seconds you will start to see an increase in the delayed response time between switch and output. If a smoother LED light response is required on problematic fixtures, you can increase the fade rate as needed.

Default setting on products like the EVO panel “Lighting Applications” will come with a 10 second fade rate.

**Programming the LightSync G2 Multi 1 Zone Dimmer:**

When programming a 1 zone MZD station, a standard 3-Button G2 station is used and only a single address is required. Programming is the same as above, with the raise and lower button being inputs 2 & 3 of the same device.

Rooms requiring more than one stations for control the same relays and dimmer outputs from multiple locations can be done by repeating the programming process for each station.