LightLEEDer EVO-W Controller Instructions for LSG3-W Switches, WR5D, WR20D, WR20D-2 and WR20D-EM Relays

The LightLEEDer EVO-W wireless controller can connect to 64 relays and 64 LightSync input devices such as LSG3-W switches, photosensors, and wireless occupancy sensors. The LLEVO-W controller can then be configured to control these devices in the same manner as any ILC controller using the stand alone or network software.

The LLEVO-W controller is equipped with a 900MHz radio with standard 50' line of sight range for communication with ILC wireless devices. The devices cannot be "Direct Linked" when connected to a LLEVO-W controller.

Recommended Procedure for Installation and Linking Devices to LLEVO-W:

- 1. Install the wireless relay and connect to the load to be controlled.
- 2. Test operation using relay Control/Link button to toggle the relay On/Off.
- 3. Record the relays unique ID 8-digit code for reference during programming.
- 4. Install the LSG3-W wireless switch, with the provided battery.
- 5. Record the switch's unique ID 8-digit code for reference during programming.
- 6. Use the LightLEEder-Pro Single Panel or Network Configuration Software to link devices.

To Clear All Settings in the Relay's Direct Link Memory:

This will be needed if the relay has been previously direct linked.

1. Hold the link button for 8 seconds or until the red and green LEDs flash alternately, and then release the button to clear the memory.

LL-Pro or LL-Pro Network Configuration Software

The Software contains a wireless link control screen found under "Tools" for finding wireless devices and linking devices to the LLEVO-W panel, after this is completed the control mapping of the LS devices and relays is done in the same manner as with wired LightSync CAT-5 devices and relays in a standard wired LLEVO panel.

Navigate to "Tools" on the top menu bar, then select "Wireless Links" (see Figure 1).

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Auto Map Tools Add MZD Device
Add SM2D Device Add Scene Device Add Echo Device Add Echo Device Auto Configure Relay Power-On For Occupancy Sensors Export Names to CSV File Export to InSite Wireless Links



Figure 1

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The Wireless Link page in the LightLEEDer Pro software will display all 64 possible LS switch addresses and relay/dimmer outputs. It also has buttons at the bottom of the page for "Get Links" and "Send Links" to the LLEVO-W, and a "Read UID's" button to start a scan for the unique ID broadcast by the devices (see Figure 2).

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File	Connect	Edit	Favor	ites	Tools S	earch	Doc	ument	Α	bout	Help	Note	es													
LSO	1 00 00	00	00 1	ILC	LS 2	00	00	00 00	1	ILC		T R:	01 D:01	:1 0	0 0	0 00	00	Out 1	TR	:33 D	:09:1	00	00 0	0 00		ut 1
LSO	2 00 00	00	00 1	ILC	LS 2	2 00	00	00 00	1	ILC		T R:	02 D:01	:2 0	0 0	0 00	00	Out 1	TR	:34 D	:09:2	00	00 0	0 00	0	ut 1
LSO	3 00 00	00 (00 1	ILC	LS 2	3 00	00	00 00	1	ILC		T R:	03 D:01	:3 0	0 0	0 00	00	Out 1	TF	:35 D	:09:3	00	00 0	0 00	0	ut 1
LSO	4 00 00	00 (00 1	ILC	LS 24	1 00	00	00 00	1	ILC		T R:	04 D:01	:4 0	0 0	0 00	00	Out 1	TR	:36 D	:09:4	00	00 0	0 00	0	ut 1
LSO	5 00 00	00 (00 1	ILC	LS 2	5 00	00	00 00	1	ILC		T R:	05 D:02	:1 0	0 0	0 00	00	Out 1	TR	:37 D	:0A:1	00	00 0	0 00	0	ut 1
LSO	6 00 00	00 (00 1	ILC	LS 2	5 00	00	00 00	1	ILC		TR:	06 D:02	:2 0	0 0	0 00	00	Out 1	TR	:38 D	:0A:2	00	00 0	0 00	0	ut 1
LSO	7 00 00	00 (00 1	ILC	LS 2	7 00	00	00 00	1	ILC		TR:	07 D:02	:3 0	0 0	0 00	00	Out 1	TR	:39 D	:0A:3	00	00 0	0 00) Οι	ut 1
LSO	8 00 00	00 (00 1	ILC	LS 2	3 00	00	00 00	1	ILC		TR:	08 D:02	:4 0	0 0	0 00	00	Out 1	TR	:40 D	:0A:4	00	00 0	0 00	0	ut 1
LSO	9 00 00	00	00 1	ILC	LS 2	00	00	00 00	1	ILC		T R:	09 D:03	:1 0	0 0	0 00	00	Out 1	TR	:41 D	:0B:1	00	00 0	0 00	0	ut 1
LSO	A 00 00	00	00 1	ILC	LS 2/	00	00	00 00	1	ILC		TR:	10 D:03	:2 0	0 0	0 00	00	Out 1	TR	:42 D	:0B:2	00	00 0	0 00	0	ut 1
LSO	B 00 00	00	00 1	ILC	LS 2	B 00	00	00 00	1	ILC		TR:	11 D:03	:3 0	0 0	0 00	00	Out 1	TF	1:43 D	:0B:3	00	00 0	0 00) Oi	ut 1
LSO	C 00 00	00	00 1	ILC	LS 2	00 0	00	00 00	1	ILC		T R:	12 D:03	:4 0	0 0	0 00	00	Out 1	TF	1:44 D	:0B:4	00	00 0	0 00) Oi	ut 1
LSO	D 00 00	00 (00 1	ILC	LS 21	00	00	00 00	1	ILC		TR:	13 D:04	:1 0	0 0	0 00	00	Out 1	TF	:45 D	:0C:1	00	00 0	0 00	0	ut 1
LSO	E 00 00	00 (00 1	ILC	LS 2	00	00	00 00	1	ILC		TR:	14 D:04	:2 0	0 0	0 00	00	Out 1	TR	:46 D	:0C:2	00	00 0	0 00	0	ut 1
LSO	F 00 00	00 (00 1	ILC	LS 2	00	00	00 00	1	ILC		T R:	15 D:04	:3 0	0 0	0 00	00	Out 1	TF	:47 D	:0C:3	00	00 0	0 00	0	ut 1
LS 1	0 00 00	00 (00 1	ILC	LS 3	00	00	00 00	1	ILC		TR:	16 D:04	:4 0	0 0	0 00	00	Out 1	TF	1:48 D	:0C:4	00	00 0	0 00	0	ut 1
LS 1	1 00 00	00 (00 1	ILC	LS 3	00	00	00 00	1	ILC		TR:	17 D:05	:1 0	0 0	0 00	00	Out 1	TR	:49 D	:0D:1	00	00 0	0 00	0	ut 1
LS 1	2 00 00	00 (00 1	ILC	LS 3	2 00	00	00 00	1	ILC		TR:	18 D:05	:2 0	0 0	0 00	00	Out 1	TR	:50 D	:0D:2	00	00 0	0 00	0	ut 1
LS 1	3 00 00	00 (00 1	ILC	LS 3	3 00	00	00 00	1	ILC		TR:	19 D:05	:3 0	0 0	0 00	00	Out 1	TR	:51 D	:0D:3	00	00 0	0 00	0	ut 1
LS 1	4 00 00	00 (00 1	ILC	LS 34	1 00	00	00 00	1	ILC		TR:	20 D:05	:4 0	0 0	0 00	00	Out 1	TR	:52 D	:0D:4	00	00 0	0 00	0	ut 1
LS 1	5 00 00	00 (00 1	ILC	LS 3	5 00	00	00 00	1	ILC		TR:	21 D:06	:1 0	0 0	0 00	00	Out 1	TF	1:53 D	:0E:1	00	00 0	0 00	0	ut 1
LS 1	6 00 00	00 (00 1	ILC	LS 3	5 00	00	00 00	1	ILC		TR:	22 D:06	:2 0	0 0	0 00	00	Out 1	TF	1:54 D	:0E:2	00	00 0	0 00	0	ut 1
LS 1	7 00 00	00 (00 1	ILC	LS 3	7 00	00	00 00	1	ILC		TR:	23 D:06	:3 0	0 0	0 00	00	Out 1	TP	1:55 D	:0E:3	00	00 0	0 00	0	ut 1
LS 1	8 00 00	00 (00 1	ILC	LS 3	B 00	00	00 00	1	ILC		TR:	24 D:06	:4 0	0 0	0 00	00	Out 1	TF	1:56 D	:0E:4	00	00 0	0 00	0	ut 1
LS 1	9 00 00	00 (00 1	ILC	LS 3	00	00	00 00	1	ILC		TR	25 D:07	:1 0	0 0	0 00	00	Out 1	TF	1:57 D	:0F:1	00	00 0	0 00	0	ut 1
LS 1	A 00 00	00 (00 1	ILC	LS 3/	00	00	00 00	1	ILC		TR	26 D:07	:2 0	0 0	0 00	00	Out 1	TF	1:58 D	:0F:2	00	00 0	0 00	0	ut 1
LS 1	B 00 00	00 (00 1	ILC	LS 3	B 00	00	00 00	1	ILC		TR	27 D:07	:3 0	0 0	0 00	00	Out 1	TP	1:59 D	:0F:3	00	00 0	0 00	0	ut 1
LS 1	C 00 00	00 (00 1	ILC	LS 3	00	00	00 00	1	ILC		TR	28 D:07	:4 0	0 0	0 00	00	Out 1	TP	1:60 D	:0F:4	00	00 0	0 00	0	ut 1
LS 1	D 00 00	00 (00 1	ILC	LS 31	00	00	00 00	1	ILC		TR:	29 D:08	:1 0	0 0	0 00	00	Out 1	TIP	:61 D	:10:1	. 00	00 0	0 00	0	ut 1
LS 1	E 00 00	00 (00 1	ILC	LS 3	00	00	00 00	1	ILC		TR:	30 D:08	:2 0	0 0	0 00	00	Out 1	TF	1:62 D	:10:2	00	00 0	0 00	101	ut 1
LS 1	F 00 00	00 0	00 1	ILC	LS 3	- 00	00	00 00	1	ILC		TR:	31 D:08	:3 0	00	0 00	00	Out 1	IF	1:63 D	:10:3	00	00 0	0 00) Oi	ut 1
LS 2	0 00 00	00	00 1	ILC	LS 4	00	00	00 00	1	ILC		TR:	:32 D:08	:4 0	0 0	0 00	00	Out 1	TR	1:64 D	:10:4	00	00 0	0 00	0	ut 1
	otlinks	From	EVO		Sond Li	nks Tr	- EVC				Road	LIIDe	G	3 0	0 0	0 00	00	Rly	/Dim	00	00	00 (00			
	et LINKS	TOM			Senu Li	142 10	J EVU				nedu	0105	Photo	0 0	0 0	0 00	00	Ge	neric	00	00	00 (00			



When Looking for the UID of a device, first press a button on the LSG3-W wireless switch to initiate a transmit command, at the relay use on/off button to cycle the relay and initiate a transmit command. Then click the "Read UIDs" button in the software to read the unique device ID's for the switch and relay that last transmitted (see Figure 3).



Figure 3

You can left click on the "G3", Rly/Dim", Photo", or Generic locations to copy the currently displayed UID then left click on the light gray LS 01 or R:01 D:01;01 location to paste the 8-digit code into a LS device or Relay/dimmer location. You may also directly type in the 8-digit ID code. This ID code is made of four 2-digit HEX sets (00 to FF).

As an example: my switch is a LSG3-W-2MZD with an ID: 04.CE.86.C4. The LLEVO-W also received a relay/dimmer at ID: 03.24.EE.15. The LLEVO-W panel will always display the last device ID it received within its radio range.

I have assigned the LightSync switch to two lines because it is an MZD-2 type and uses two LightSync device addresses in series. You also need to set the orange count box for "1" on the first device and "2" for 2nd LS address, if the G3 switch uses 3 device addresses such as a MZD-5 then the 3rd sequential LS address would be set for "3".



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I have assigned the 2-load WR20D-2 relay (ID: 03.24.EE.15) to R:01 D01:01 and R:02 D:01:02, you must also selected "**Out 1**" for the first load and "**Out 2**" for the 2nd load using the orange "Out #" box on the right (see Figure 4). The WR5D, WR20D, WR20R-EM relays are all a single load device and use "Out 1" only.

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LS 01	04	CE	86	C4	1	ILC	LS 21	00	00	00	00	1	ILC	Т	F	R:01 D:01:1	03	24	EE	15	Out 1	Т	R:33 I	D:09:1	00	00	00	00	Out 1
LS 02	04	CE	86	C4	2	ILC	LS 22	00	00	00	00	1	ILC	Т	F	R:02 D:01:2	03	24	EE	15	Out 2	Т	R:34 I	D:09:2	00	00	00	00	Out 1
LS 03	00	00	00	00	1	ILC	LS 23	00	00	00	00	1	ILC	Т	F	R:03 D:01:3	00	00	00	00	Out 1	Т	R:35 I	D:09:3	00	00	00	00	Out 1
LS 04	00	00	00	00	1	ILC	LS 24	00	00	00	00	1	ILC	Т	F	R:04 D:01:4	00	00	00	00	Out 1	Т	R:36 I	D:09:4	00	00	00	00	Out 1
LS 05	00	00	00	00	1	ILC	LS 25	00	00	00	00	1	ILC	Т	F	R:05 D:02:1	00	00	00	00	Out 1	Т	R:37 [D:0A:1	00	00	00	00	Out 1
LS 06	00	00	00	00	1	ILC	LS 26	00	00	00	00	1	ILC	Т	F	R:06 D:02:2	00	00	00	00	Out 1	Т	R:38 [D:0A:2	00	00	00	00	Out 1



You can test the relay control to the ID by clicking the "T" test button, the relay should trigger the load Off/On once.

I also have a Single Zone MZD switch and a WR5D relay to be connected. First, cycle the relay Off/On using the relay control button and the press the first button on the LS switch to initiate an ID transmit to the panel. Then press the "Read UID's" button in the software this will give you the two devices 8-digit codes (see Figure 5). These I assigned to LS:03 and R:03 D01:03 (see figure 6).

						Rea	ad UIDs	G Phote	3 (03 00	37 00	46 00	A4 00	Rly/Dim Generic	04 00	D2 00	BD (79 00					
											F	igur	e 5										
	LS 01	04	CE	86	C4	1	ILC	LS 21	00	00	00	00	1	ILC	TR	:01 D	:01:1	03	24	EE	15	Out 1	
	LS 02	04	CE	86	C4	2	ILC	LS 22	00	00	00	00	1	ILC	TR	:02 D	:01:2	03	24	EE	15	Out 2	
1	LS 03	03	37	46	Α4	1	ILC	LS 23	00	00	00	00	1	ILC	TR	:03 D	:01:3	04	D2	BD	79	Out 1	-
		-		00	-			10.04				-			TIN			-	00	-		0.14	

Figure 6

To send the Link information to the LLEVO-W panel press the "Send Links To EVO" button. When activated the button will display a count of the LS Links and then the Relay Links (1 to 64) of 64. If you are connecting to a LLEVO-W panel that has existing Links configured use the "Get Links from EVO" button to retrieve the current Link data into the software.

To Add a wireless photocell sensor or wireless occupancy sensor you would repeat the process above for the LS Inputs and then mapping. If a Sensorworx occupancy sensor or switch with wireless radio is used with the LLEVO-W controller then it will receive a "Generic" link code from the SWX device, you will need to change "ILC" to "Gen" for the LS input line item (see Figure 7)

LS 03	03	37	46	Α4	1	ILC
LS 04	00	00	00	00	1	ILC
LS 05	02	08	65	98	1	Gen

Figure 7

Now that you have assigned the wireless devices to the LLEVO-W panels LS inputs and relay/dimmer outputs you will next map the control configurations in LightLEEDer Pro software the same way that you would for a wired device. I suggest using the Tools menu "Add MZD Devices" option for quick and easy programming.



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