

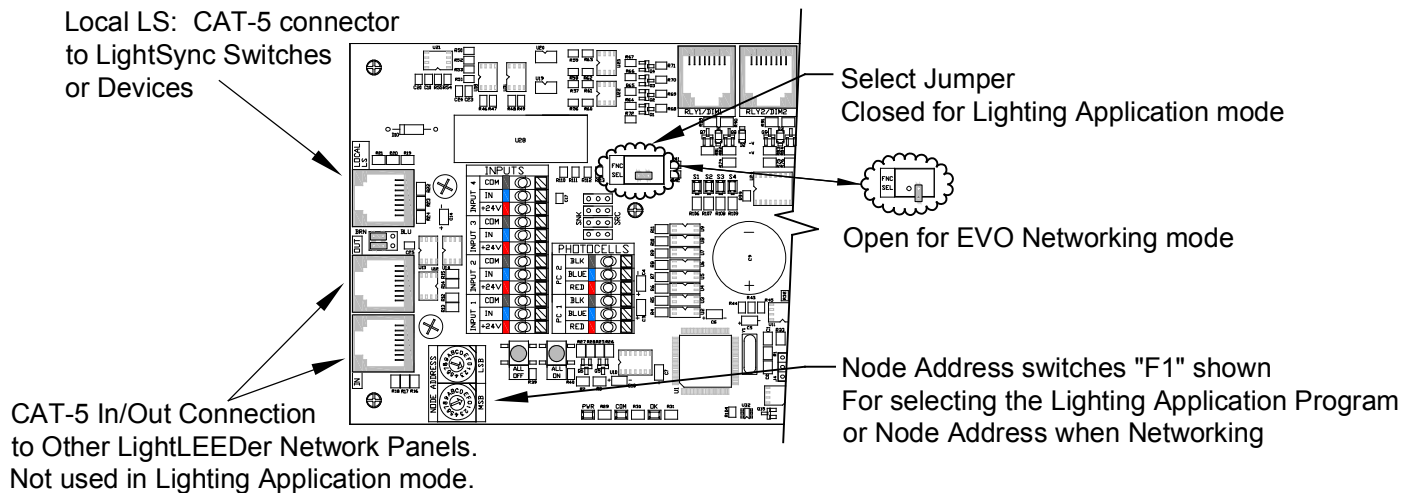
LightLEEDer EVO Lighting Application for Stand-Alone and Conversion to Network Operation

Technical Bulletin

The LightLEEDer EVO panel can operate as a stand-alone controller or as a network panel. We ship the EVO as a stand alone panel set for Lighting Application mode "F1", and you can change the EVO to any of the 16 internal programs using the Node Address switches. Below you will find set-up steps for both stand-alone and networking an EVO panel.

Stand Alone EVO Set-up

- First review the Lighting Application Control Mapping Matrix and the Lighting Application drawing PDF sheets and determine the Lighting Application that matches your needs.
 - Do not connect any LightLEEDer network CAT-5 cables to the Network In/Out RJ-45 ports.
 - The Select (SEL) jumper should be installed placing the EVO panel into the Stand Alone Lighting Application mode.
 - The Node Address switches will set the panel for the Lighting Application program required.
 - Verify all wiring connections and test operation. See Wiring Details WD0002.
- The EVO panel will now operate using the Lighting Application selected from the internal memory.



Network EVO Set-up:

- Record the application code (F4) for each EVO before converting from stand alone to network operation.
- Connect the LightLEEDer network CAT-5 data cable from the LL-Network to each EVO and LightLEEDer panel in the system - see system Riser diagram.
- The Select (SEL) jumper should be removed or opened.
- Using the Node Address switches set the panel for the Node address required.
- Verify with the LightLEEDer Network Controller Keypad or LL Pro-Net software that the system acknowledges all of the EVO and LightLEEDer panels.
- Using the LightLEEDer Pro-Net software you can download to the network EVO with the same Lighting Application type used in stand alone mode. From the "Tools' pull down menu in the LL-Pro Net software use the "Import Node Settings" option and select the Lighting Application required for each panel.
- Check the operation of all local devices connected, and make adjustment to program if needed.

Note: The EVO panel will not retain the Lighting Application operation during the transition from stand alone to network operation and will require programming. You will find a copy of the 16 programs in the Lighting Applications folder in the "C" drive under the ILC LightLEEDer Net software, you can also make changes to the programs and save to the EVO panel or Export the node settings into the Lighting Applications folder.



EVO Lighting Application Control Mapping Matrix

EVO Lighting Application F0 is used for a EVO panel supporting 2 rooms with 1 or 2 R20D relay zones per room.
 Photo sensor inputs for 1 daylight zone per room, motion sensor inputs for Occupancy or Vacancy control,
 Remote digital CAT-5 LightSync MZD or standard button switches for local room control

Node Address:	EVO Photocells				Remote LightSync Input Devices														
	Output:	EVO Inputs - 24V Motion Sensor			IN-4	LS: MZD1	LS: MZD1	LS: MZD1	LS: MZD1	LS: MZD1	LS: MZD2	LS: MZD2	LS: MZD2	LS: MZD2	LS: MZD2	LS: MZD2	LS: MZD2	LS: MZD2	LS: MZD2
F0	Relay #	PC-1	IN-1	IN-2	IN-3	IN-4	LS: 03.4	LS: 05	LS: 06	LS: 07	LS: 08/09	LS: 0A/0B	LS: 0C58	LS: 0C58	LS: 0C58	LS: 0C58	LS: 0C58	LS: 0C58	LS: 0C58
MSB / LSB	Dimmer #	LS: 01	LS: 03.1	LS: 03.2	LS: 03.3	LS: 03.4	LS: 04	LS: 05	LS: 06	LS: 07	LS: 08/09	LS: 0A/0B	LS: 0C58	LS: 0C58	LS: 0C58	LS: 0C58	LS: 0C58	LS: 0C58	LS: 0C58
	Relay 1		Occ-on/off	Vacancy-off			PB:1-on/off Ramp Up/Dn				PB:1-on/off Ramp Up/Dn								
	Dim 01.1	Full scale																	
	Relay 2		Occ-on/off	Vacancy-off			PB:1-on/off Ramp Up/Dn		PB:1-on/off Ramp Up/Dn										
	Dim 01.2																		
	Relay 3		Occ-on/off	Vacancy-off	Occ-on/off	Vacancy-off			PB:1-on/off Ramp Up/Dn										
	Dim 01.3	Full scale																	
	Relay 4		Occ-on/off	Vacancy-off	Occ-on/off	Vacancy-off			PB:1-on/off Ramp Up/Dn										
	Dim 01.4																		

EVO Lighting Application F1 is used for a EVO panel supporting 1 room with 1 to 4 R20D relay zones.
 Photo sensor inputs for 1 daylight zones, motion sensor inputs for Occupancy or Vacancy control,
 Remote digital CAT-5 LightSync MZD or standard button switches for local room control

Node Address:	EVO Photocells				Remote LightSync Input Devices														
	Output:	EVO Inputs - 24V Motion Sensor			IN-4	LS: MZD1	LS: MZD2	LS: MZD3	LS: MZD4	LS: MZD4	LS: MZD4	LS: MZD4	LS: MZD4	LS: MZD4	LS: MZD4	LS: MZD4	LS: MZD4	LS: MZD4	LS: MZD4
F1	Relay #	PC-1	IN-1	IN-2	IN-3	IN-4	LS: 03.4	LS: 05/06	LS: 07/08	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A
MSB / LSB	Dimmer #	LS: 01	LS: 03.1	LS: 03.2	LS: 03.3	LS: 03.4	LS: 04	LS: 05/06	LS: 07/08	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A
	Relay 1	Full scale	Occ-on/off	Vacancy-off	Occ-on/off	Vacancy-off	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn
	Dim 01.1				On-50%/PC1														
	Relay 2		Occ-on/off	Vacancy-off	Occ-on/off	On-50%	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn
	Dim 01.2				On-50%														
	Relay 3		Occ-on/off	Vacancy-off	Occ-on/off	Vacancy-off	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn
	Dim 01.3				50%														
	Relay 4		Occ-on/off	Vacancy-off	Occ-on/off	On-50%	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn
	Dim 01.4				On-50%														

EVO Lighting Application F2 is used for a EVO panel supporting 1 room with 1 to 4 R20D relay zones.
 Photo sensor inputs for 2 daylight zones, motion sensor inputs for Occupancy or Vacancy control,
 Remote digital CAT-5 LightSync MZD or standard button switches for local room control

Node Address:	EVO Photocells				Remote LightSync Input Devices														
	Output:	EVO Inputs - 24V Motion Sensor			IN-4	LS: MZD1	LS: MZD2	LS: MZD3	LS: MZD4	LS: MZD4	LS: MZD4	LS: MZD4	LS: MZD4	LS: MZD4	LS: MZD4	LS: MZD4	LS: MZD4	LS: MZD4	LS: MZD4
F2	Relay #	PC-1	IN-1	IN-2	IN-3	IN-4	LS: 03.4	LS: 05/06	LS: 07/08	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A
MSB / LSB	Dimmer #	LS: 01	LS: 03.1	LS: 03.2	LS: 03.3	LS: 03.4	LS: 04	LS: 05/06	LS: 07/08	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A	LS: 09/0A
	Relay 1	Full scale	Occ-on/off	Vacancy-off	Occ-on/off	Vacancy-off	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn
	Dim 01.1				On-50%/PC1														
	Relay 2		Occ-on/off	Vacancy-off	Occ-on/off	On-50%/PC1	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn
	Dim 01.2	-10% scale			On-50%/PC1														
	Relay 3		Occ-on/off	Vacancy-off	Occ-on/off	Vacancy-off	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn
	Dim 01.3				On-50%														
	Relay 4		Occ-on/off	Vacancy-off	Occ-on/off	On-50%	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn	PB:4-on/off Ramp Up/Dn
	Dim 01.4				On-50%														



INTELLIGENT LIGHTING CONTROLS, INC.
 6229 Edina Industrial Boulevard
 Edina, MN 55425
 Phone 952.829.1900
 Fax 952.829.1901
 www.ilc-usa.com

EVO Lighting Application Control Mapping Matrix

EVO Lighting Application F3 is used for a EVO panel supporting 2 rooms with 1 or 2 R20D relays zones per room.
 Photo sensor inputs for 1 daylight zone per room, motion sensor inputs for Occupancy or Vacancy control,
 Remote digital CAT-5 LightSync MZD or standard button switches for local room control

Node Address:	EVO Photocells				Remote LightSync Input Devices										
	Output:	PC-1	PC-2	IN-1	IN-2	IN-3	IN-4	LS-MZD1	LS-MZD1	LS-MZD1	LS-MZD1	LS-MZD2	LS-MZD2	LS-MZD2	LS-
F3	Relay #	LS: 01	LS: 02	LS: 03.1	LS: 03.2	LS: 03.3	LS: 03.4	LS: 04	LS: 05	LS: 06	LS: 07	LS: 08/09	LS: 0A/0B	LS:	LS:
MSB / LSB	Relay 1	Full scale		Occ-on/off	Vacancy-off			PB:1-on/off				PB:1-on/off			
	Dim 01.1	Full scale		On-50%/PC1				Ramp Up/Dn				Ramp Up/Dn			
	Relay 2			Occ-on/off	Vacancy-off				PB:1-on/off					PB:1-on/off	
	Dim 01.2			On-50%/PC2					Ramp Up/Dn					Ramp Up/Dn	
	Relay 3	Full scale		Occ-on/off	Vacancy-off					PB:1-on/off				PB:2-on/off	
	Dim 01.3			On-50%						Ramp Up/Dn				Ramp Up/Dn	
	Relay 4			Occ-on/off	Vacancy-off						PB:1-on/off			PB:2-on/off	
	Dim 01.4			On-50%							Ramp Up/Dn			Ramp Up/Dn	

EVO Lighting Application F4 is used for a EVO panel supporting 2 room with 1 to 2 R20D relay zones per room.
 Photo sensor inputs for 2 daylight zones, motion sensor inputs for Occupancy or Vacancy control,
 Remote digital CAT-5 LightSync MZD or standard button switches for local room control

Node Address:	EVO Photocells				Remote LightSync Input Devices										
	Output:	PC-1	PC-2	IN-1	IN-2	IN-3	IN-4	LS-MZD1	LS-MZD1	LS-MZD1	LS-MZD1	LS-MZD2	LS-MZD2	LS-	LS-
F4	Relay #	LS: 01	LS: 02	LS: 03.1	LS: 03.2	LS: 03.3	LS: 03.4	LS: 04	LS: 05	LS: 06/07	LS: 08/09	LS:	LS:	LS:	LS:
MSB / LSB	Relay 1	Full scale		Occ-on/off	Vacancy-off			PB:1-on/off							
	Dim 01.1	Full scale		On-50%/PC1				Ramp Up/Dn							
	Relay 2	-10% scale		Occ-on/off	Vacancy-off					PB:2-on/off					
	Dim 01.2			On-50%/PC1						Ramp Up/Dn					
	Relay 3	Full scale		Occ-on/off	Vacancy-off						PB:1-on/off			PB:1-on/off	
	Dim 01.3			On-50%/PC2						Ramp Up/Dn				Ramp Up/Dn	
	Relay 4			Occ-on/off	Vacancy-off						PB:2-on/off			PB:2-on/off	
	Dim 01.4			On-50%/PC2							Ramp Up/Dn			Ramp Up/Dn	

EVO Lighting Application F5 is used for a EVO panel supporting 2 rooms, one with 1 to 3 R20D relay zones and one with 1 R20D relay zone.
 Photo sensor inputs for 1 daylight zone per room, motion sensor inputs for Occupancy or Vacancy control,
 Remote digital CAT-5 LightSync MZD or standard button switches for local room control

Node Address:	EVO Photocells				Remote LightSync Input Devices										
	Output:	PC-1	PC-2	IN-1	IN-2	IN-3	IN-4	LS-MZD1	LS-MZD1	LS-MZD1	LS-MZD1	LS-MZD2	LS-MZD2	LS-	LS-
F5	Relay #	LS: 01	LS: 02	LS: 03.1	LS: 03.2	LS: 03.3	LS: 03.4	LS: 04	LS: 05	LS: 06/07	LS: 08/09	LS:	LS:	LS:	LS:
MSB / LSB	Relay 1	Full scale		Occ-on/off	Vacancy-off			PB:1-on/off						PB:1-on/off	
	Dim 01.1	Full scale		On-50%/PC1				Ramp Up/Dn						Ramp Up/Dn	
	Relay 2			Occ-on/off	Vacancy-off					PB:2-on/off				PB:2-on/off	
	Dim 01.2			On-50%						Ramp Up/Dn				Ramp Up/Dn	
	Relay 3			Occ-on/off	Vacancy-off						PB:3-on/off			PB:3-on/off	
	Dim 01.3			On-50%							Ramp Up/Dn			Ramp Up/Dn	
	Relay 4	Full Scale		Occ-on/off	Vacancy-off					PB:1-on/off				PB:1-on/off	
	Dim 01.4			On-50%/PC2						Ramp Up/Dn				Ramp Up/Dn	



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EVO Lighting Application Control Mapping Matrix

EVO Lighting Application F6 is used for a EVO panel supporting 2 rooms, one with 1 to 3 R20D relay zones and one with 1 R20D relay zone. Photo sensor inputs for 2 daylight zones - Two in 3-zone room and One in single zone room, motion sensor inputs for Occupancy or Vacancy control, Remote digital CAT-5 LightSync MZD or standard button switches for local room control

Node Address:	EVO Photocells				Remote LightSync Input Devices											
	Output:	PC-1	PC-2	IN-1	IN-2	IN-3	IN-4	LS-MZD1	LS-MZD1	LS-MZD1	LS-MZD2	LS-MZD3	LS-	LS-	LS-	
F6	Relay #	LS: 01	LS: 02	LS: 03.1	LS: 03.2	LS: 03.3	LS: 03.4	LS: 04	LS: 05	LS: 06/07	LS: 08/09	LS:	LS:	LS:	LS:	
MSB / LSB	Dimmer #	Full scale														
	Relay 1	Occ-on/off On-50%/PC1														
	Relay 2	Occ-on/off On-50%/PC1														
	Relay 3	Occ-on/off On-50%														
	Relay 4	Occ-on/off On-50%/PC2														
	Dim 01.4	Full Scale														

EVO Lighting Application F7 is used for a EVO panel supporting 4 rooms with 1 R20D relay zone each. Photo sensor inputs for 2 daylight zones, motion sensor inputs for Occupancy control, auxiliary inputs for 2 additional daylight zone photo sensors controllers Remote digital CAT-5 LightSync MZD or standard button switches for local room control

Node Address:	EVO Photocells				Remote LightSync Input Devices												Auxiliary remote mount Photo Sensors Controller			
	Output:	PC-1	PC-2	IN-1	IN-2	IN-3	IN-4	LS-MZD1	LS-MZD1	LS-MZD1	LS-MZD1	LS-MZD1	LS-PSC-3	LS-PSC-4	LS-	LS-				
F7	Relay #	LS: 01	LS: 02	LS: 03.1	LS: 03.2	LS: 03.3	LS: 03.4	LS: 04	LS: 05	LS: 06	LS: 07	LS: 08	LS: 09	LS:	LS:	LS:				
MSB / LSB	Relay 1	Full scale																		
	Relay 2	Full scale																		
	Relay 3	Occ-on/off On-50%/PC2																		
	Relay 4	Occ-on/off On-50%/PC3																		
	Dim 01.4	Full Scale																		

EVO Lighting Application F8 is used for a EVO panel supporting 4 room with 1 R20D relay zone each. Photo sensor inputs for 2 daylight zones, motion sensor inputs for Vacancy control, Auxiliary inputs for 2 additional daylight zone photo sensor controllers Remote digital CAT-5 LightSync MZD or standard button switches for local room control

Node Address:	EVO Photocells				Remote LightSync Input Devices												Auxiliary remote mount Photo Sensors Controller			
	Output:	PC-1	PC-2	IN-1	IN-2	IN-3	IN-4	LS-MZD1	LS-MZD1	LS-MZD1	LS-MZD1	LS-MZD1	LS-PSC-3	LS-PSC-4	LS-	LS-				
F8	Relay #	LS: 01	LS: 02	LS: 03.1	LS: 03.2	LS: 03.3	LS: 03.4	LS: 04	LS: 05	LS: 06	LS: 07	LS: 08	LS: 09	LS:	LS:	LS:				
MSB / LSB	Relay 1	Full scale																		
	Relay 2	Full scale																		
	Relay 3	Vacancy-off																		
	Relay 4	Vacancy-off																		
	Dim 01.4	Full Scale																		



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EVO Lighting Application Control Mapping Matrix

EVO Lighting Application F9 is used for a EVO panel supporting 1 room with 1 to 4 R20D relay zones. Occupancy driven dimmer levels Photo sensor inputs for 1 daylight zone, motion sensor inputs for Occupancy control of dimming (ON-High/Low) Remote digital CAT-5 LightSync standard button switches for local room control On/Off

Node Address:	EVO Photocells				Remote LightSync Input Devices									
	Output:	PC-1	PC-2	IN-1	IN-2	IN-3	IN-4	LS-MZD4	LS-MZD4	LS-MZD4	LS-	LS-	LS-	LS-
F9	Relay #	LS: 01	LS: 02	LS: 03.1	LS: 03.2	LS: 03.3	LS: 03.4	LS: 04/05	LS: 06/07	LS: 08/09	LS:	LS:	LS:	LS:
MSB / LSB	Dimmer #	Occupancy-On												
	Relay 1	On100/Off50%												
	Dim 01.1	Full scale												
	Relay 2	Occupancy-On												
	Dim 01.2	On100/Off20%												
	Relay 3	Occupancy-On												
	Dim 01.3	On100/Off20%												
	Relay 4	Occupancy-On												
	Dim 01.4	On100/Off50%												

EVO Lighting Application FA is used for a EVO panel supporting 1 Classroom with 1 to 4 R20D relay zones. (a,b,c,d zones) - Daylighting at back of room in zone 4 Photo sensor inputs for 1 daylight zone, motion sensor inputs for Occupancy or Vacancy control, Remote digital CAT-5 LightSync MZD or standard button switches for local room control

Node Address:	EVO Photocells				Remote LightSync Input Devices									
	Output:	PC-1	PC-2	IN-1	IN-2	IN-3	IN-4	LS-G2-2	LS-MZD4	LS-MZD3	LS-	LS-	LS-	LS-
FA	Relay #	LS: 01	LS: 02	LS: 03.1	LS: 03.2	LS: 03.3	LS: 03.4	LS: 04	LS: 05/06	LS: 07/08	LS:	LS:	LS:	LS:
MSB / LSB	Relay 1	Occ-on/off												
	Dim 01.1	On-50%												
	Relay 2	Occ-on/off												
	Dim 01.2	On-50%												
	Relay 3	Occ-on/off												
	Dim 01.3	On-50%												
	Relay 4	Occ-on/off												
	Dim 01.4	On-50%/PC1												

EVO Lighting Application FB is used for a EVO panel supporting 1 Classroom with 1 to 4 R20D relay zones. (a, b, & overlap ac, bd daylight zones of lighting with dimmi Photo sensor inputs for 2 daylight zones (ac, bd), motion sensor inputs for Occupancy or Vacancy control, Remote digital CAT-5 LightSync MZD or standard button switches for local room control

Node Address:	EVO Photocells				Remote LightSync Input Devices									
	Output:	PC-1	PC-2	IN-1	IN-2	IN-3	IN-4	LS-G2-2	LS-MZD2	LS-MZD4	LS-	LS-	LS-	LS-
FB	Relay #	LS: 01	LS: 02	LS: 03.1	LS: 03.2	LS: 03.3	LS: 03.4	LS: 04	LS: 05/06	LS: 07/08	LS:	LS:	LS:	LS:
MSB / LSB	(a)Relay 1	Occ-on/off												
	Dim 01.1	On-50%												
	(b)Relay 2	Occ-on/off												
	Dim 01.2	On-50%												
	(ac)Relay 3	Occ-on/off												
	Dim 01.3	On-50%/PC1												
	(bd)Relay 4	Occ-on/off												
	Dim 01.4	On-50%/PC1												

EVO Lighting Application Control Mapping Matrix

EVO Lighting Application FC is used for a EVO panel supporting a Conference room with 1 to 4 R20D relay zones.

Photo sensor inputs for 1 daylight zones, Motion sensor inputs for Occupancy or Vacancy control,

Remote digital CAT-5 LightSync MZD or standard button switches for local room control, 5-button Preset station - P1:40%, P2:20%, P3:60%, P4:100%, P5:0%

Node Address:	EVO Photocells										Remote LightSync Input Devices										
	PC-1	PC-2	IN-1	IN-2	IN-3	IN-4	LS-MZD4	LS-G2-5	LS-G2-2B	LS-ISSCM	LS-	LS-	LS-	LS-	LS-	LS-	LS-	LS-	LS-	LS-	
FC	LS: 01	LS: 02	LS: 03.1 (A)	LS: 03.2 (B)	LS: 03.3 (A)	LS: 03.4 (B)	LS: 04/05	LS: 06/07	LS: 08	LS: 08	LS:	LS:	LS:	LS:	LS:	LS:	LS:	LS:	LS:	LS:	
Relay #			Occ-on/off	Vacancy-off	Occ-on/off	Vacancy-off	PB:1-on/2-off	P:1,2,3,4 On	PB:1-on/2-off	P:1,2,3,4 On											
Dim 01.1					On-50%		Ramp Up/Dn	P:1,2,3,4,5 %	On-50%	P:1,2,3,4,5 %											
Relay 2			Occ-on/off	Vacancy-off	Occ-on/off		PB:2-on/off	P:1,2,3,4 On	PB:1-on/2-off	P:1,2,3,4 On											
Dim 01.2					On-50%		Ramp Up/Dn	P:1,2,3,4,5 %	On-50%	P:1,2,3,4,5 %											
Relay 3			Occ-on/off	Vacancy-off	Occ-on/off		PB:3-on/off	P:1,2,3,4 On	PB:1-on/2-off	P:1,2,3,4 On											
Dim 01.3					50%		Ramp Up/Dn	P:1,2,3,4,5 %	On-50%	P:1,2,3,4,5 %											
Relay 4			Occ-on/off	Vacancy-off	Occ-on/off		PB:4-on/off	P:1,2,3,4 On	PB:1-on/2-off	P:1,2,3,4 On											
Dim 01.4					On-50%/PC1		Ramp Up/Dn	P:1,2,3,4,5 %	On-50%/PC1	P:1,2,3,4,5 %											
			Full Scale																		

EVO Lighting Application FD is used for a EVO panel supporting Open Office with 1 to 4 R20D relay zones.

Photo sensor inputs for 1 daylight zones, Open Timer 6:00am ON / Close Timer 10:00pm - Off sweep repeated every 2 hours

Remote digital CAT-5 LightSync MZD or standard button switches for local room control (7-day Open/Close Timer schedule)

Node Address:	EVO Photocells										Remote LightSync Input Devices											
	PC-1	PC-2	IN-1	IN-2	IN-3	IN-4	LS-MZD4	LS-MZD4	LS-	LS-	LS-	LS-	LS-	LS-	LS-	LS-	LS-	LS-	LS-	LS-	LS-	
FD	LS: 01	LS: 02	LS: 03.1 (A)	LS: 03.2 (B)	LS: 03.3 (A)	LS: 03.4 (B)	LS: 04/05	LS: 06/07	LS:	LS:	LS:	LS:	LS:	LS:	LS:	LS:	LS:	LS:	LS:	LS:	LS:	
Relay #			Occ-on/off	Vacancy-off	Occ-on/off		PB:1-on/off	Ramp Up/Dn	PB:1-on/off	Ramp Up/Dn												
Dim 01.1							Full Scale															
Relay 2			Occ-on/off	Vacancy-off	Occ-on/off		PB:2-on/off	Ramp Up/Dn	PB:2-on/off	Ramp Up/Dn												
Dim 01.2																						
Relay 3			Occ-on/off	Vacancy-off	Occ-on/off		PB:3-on/off	Ramp Up/Dn	PB:3-on/off	Ramp Up/Dn												
Dim 01.3																						
Relay 4			Occ-on/off	Vacancy-off	Occ-on/off		PB:4-on/off	Ramp Up/Dn	PB:4-on/off	Ramp Up/Dn												
Dim 01.4																						

EVO Lighting Application FE is used for a EVO panel supporting Open Office with 1 to 4 R20D relay zones.

Photo sensor inputs for 1 daylight zones, Open Timer 6:00am motion sensor ON-Only (type A)/ Close Timer 10:00pm motion sensor inputs for Occupancy On/Off (typ

Remote digital CAT-5 LightSync MZD or standard button switches for local room control (7-day Open/Close Timer schedule)

Node Address:	EVO Photocells										Remote LightSync Input Devices											
	PC-1	PC-2	IN-1	IN-2	IN-3	IN-4	LS-MZD4	LS-MZD4	LS-	LS-	LS-	LS-	LS-	LS-	LS-	LS-	LS-	LS-	LS-	LS-	LS-	
FE	LS: 01	LS: 02	LS: 03.1 (A)	LS: 03.1 (B)	LS: 03.2 (A)	LS: 03.2 (B)	LS: 04/05	LS: 06/07	LS: 08/09	LS: 0A/0B	LS:	LS:	LS:	LS:	LS:	LS:	LS:	LS:	LS:	LS:	LS:	
Relay #			Occ-on	Occ-on/off	Occ-on	Occ-on/off	PB:1-on/off	Ramp Up/Dn	PB:1-on/off	Ramp Up/Dn												
Dim 01.1					On-50%		Full Scale															
Relay 2			Occ-on	Occ-on/off	Occ-on		PB:2-on/off	Ramp Up/Dn	PB:2-on/off	Ramp Up/Dn												
Dim 01.2					On-50%																	
Relay 3			Occ-on	Occ-on/off	Occ-on		PB:3-on/off	Ramp Up/Dn	PB:3-on/off	Ramp Up/Dn												
Dim 01.3					On-50%																	
Relay 4			Occ-on	Occ-on/off	Occ-on		PB:4-on/off	Ramp Up/Dn	PB:4-on/off	Ramp Up/Dn												
Dim 01.4					On-50%																	

Note: Motion sensors must be landed at inputs 1 & 2 or 3 & 4 as a combined set for proper Open/Close timer operation

EVO Lighting Application Control Mapping Matrix

EVO Lighting Application FF is used for a EVO panel supporting 1-rooms with 4 R20D relay zones.																																			
Photo sensor inputs for 1 daylight zones, motion sensor inputs for Occupancy timed on 30 Minutes (sensor set for Minimal time duration in field)																																			
Remote digital CAT-5 MZD or standard button switches for local room control, Off operation of each zones gives a 3-33 second Off with revert to Occupancy ON																																			
Node Address:	EVO Photocells				EVO Inputs - 24V Motion Sensor				Remote LightSync Input Devices																										
	Output:	PC-1 LS: 01	PC-2 LS: 02	IN-1 LS: 03.1	IN-2 LS: 03.2	IN-3 LS: 03.3	IN-4 LS: 03.4	LS-MZD4 LS: 04/05	LS-MZD4 LS: 07/08	LS-MZD4 LS: 0A/0B	LS-MZD3 LS: 0D/0E	LS- LS:	LS- LS:																						
FF	Relay #							PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn	PB:1-on/off Ramp Up/Dn																									
	Relay 1							PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn	PB:2-on/off Ramp Up/Dn																									
MSB / LSB	Dim 01.1	Full Scale		Timed On 20min				PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn	PB:3-on/off Ramp Up/Dn																									
	Relay 2			Timed On 20min				PB:4-on/off Ramp Up/Dn																											
	Dim 01.2																																		
	Relay 3																																		
	Dim 01.3																																		
	Relay 4																																		
	Dim 01.4																																		
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PB:3 R7 On/Off	PB:3 R7 On/Off	PB:3 R7 On/Off	PB:3 R7 On/Off																																
PB:4 R8 On/Off	PB:4 R8 On/Off																																		

Available power for Occupancy sensor is effected by the number of LightSync CAT-5 devices connected

- 4 CAT-5 devices, 400' accumulative feet, 200mA occupancy sensor power from EVO inputs 1-4
- 5 CAT-5 devices, 500' accumulative feet, 160mA occupancy sensor power from EVO inputs 1-4
- 6 CAT-5 devices, 600' accumulative feet, 120mA occupancy sensor power from EVO inputs 1-4
- 7 CAT-5 devices, 700' accumulative feet, 90mA occupancy sensor power from EVO inputs 1-4
- 8 CAT-5 devices, 800' accumulative feet, 60mA occupancy sensor power from EVO inputs 1-4

Additional CAT-5 devices can be supported using a PSR (Power Supply Repeater)

one PSR provides power for every 20 devices, EVO supports a total of 61 remote devices addresses

R20/R20D relays connection using CAT-5 cable supported over 100' distance each from EVO panel