

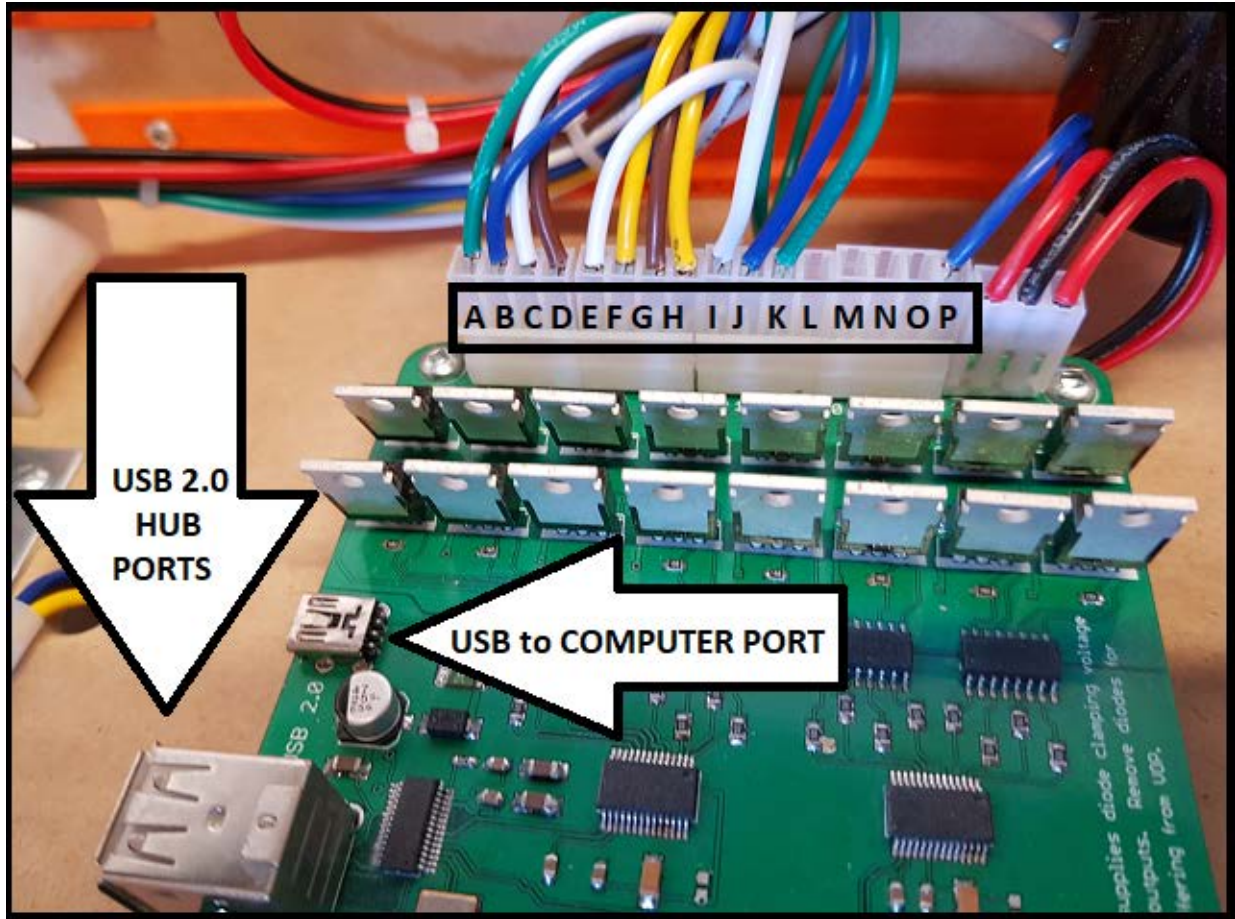


EZINSTALL BASIC ADDENDUM

Starting in January 2018 the pacled64 controller has been replaced with a dual FTDI controller board designed and produced by Zebsboards.com on the EZINSTALL BASIC kits.

While the majority of the kit design and connection remains the same, there are several differences in the actual configuration of the wiring connections and DOF software configuration.

Since the board is based around the FTDI 245RL chip, the controller selection in DOF is referenced as Sainsmart Board 1 and Sainsmart board 2 in this manual.



WIRING CONNECTIONS:

Sainsmart Board 1 Assignment

A	Left Flipper	-	Port 4
B	Left Slingshot	-	Port 7
C	Middle Bumper Left	-	Port 8
D	Middle Bumper Center	-	Port 6
E	Middle Bumper Right	-	Port 2
F	Back Bumper Left	-	Port 3
G	Back Bumper Center	-	Port 5
H	Back Bumper Right	-	Port 1

Sainsmart Board 2 Assignment

I	Shaker Motor	-	Port 4
J	Right Slingshot	-	Port 7
K	Right Flipper	-	Port 8
L	OPEN	-	Port 6
M	OPEN	-	Port 2
N	OPEN	-	Port 3
O	OPEN	-	Port 5
P	Replay Knocker	-	Port 1

USB Hub Properties

The onboard hub is USB 2.0 and is protected against reverse voltage and power surge by onboard diodes and a self resetting PTC fuse. The hub is capable of supporting devices up to 500ma as per the USB 2.0 specification and is suitable for Zebsboards plungers, keyboard, mouse, USB thumbdrive devices, etc. It is NOT designed to supply enough power to effectively run the ledwiz or other output controllers without supplemental power connections.

DOF Installation

Installation of the Direct Output Framework (DOF) is essentially the same as with previous versions of the kit. DOFConfigTool examples for the current revision are illustrated in the following pages.



Current Version: 2755

- Home
- Port Assignments
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Account Settings

My API Key: WumfitsyW7U09XfYbW

Config Contributions: 0

Number of Ledwiz Devices: 0

Number of PacDrive Devices: 0

Number of WS2811 Devices: 0

Number of ArtNet Devices: 0

Number of PacLed Devices: 0

Number of SainSmart Devices: 2

Number of Pinscape Devices: 0

Number of FRDM-KL25Z Devices: 0

Number of Ultimate/IO Devices: 0

Number of Philips_Hue Devices: 0

Generate nofeedback files: No

Remove fade from Front Buttons: Yes

Ledwiz Framework: DirectOutput

Notification Options

Receive Email Notifications

Account Settings

Select **2** devices in the **Number of Sainsmart Devices** drop down menu as shown in the preceding example.

If you will be using the open ports to flash the front panel buttons of your cab, select **YES** in the **Remove Fade From Front Buttons** drop down menu.

Select **DIRECT OUTPUT** in the **Ledwiz Framework** drop down menu.

Port Assignments

Sainsmart 1 Configuration

Select SainSmart 1 – directoutputconfigini40 in the Device drop down menu and assign ports as follows:

- Port 1 - 10 Bumper Back Right
- Port 2 - 10 Bumper Middle Right
- Port 3 - 10 Bumper Back Left
- Port 4 - Flipper Left
- Port 5 - 10 Bumper Back Center
- Port 6 - 10 Bumper Middle Center
- Port 7 - Slingshot Left
- Port 8 - 10 Bumper Middle Left



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Device: SainSmart 1 - directoutputconfig140

Save Config Generate Config Clear Fields

Shaker Motor
 Min Intensity: 48 Max Intensity: 48

Fan
 Min Intensity: 48 Max Intensity: 48

Custom Brightness
 Strobe: 48 PF Strobe: MX FF: Flasher: FF LED Strip: Flasher: FF

Contactors variables
 Set Intensity and Duration to 0 if you don't want feedback to these events

Targets

Port 1	10 Bumper Back Right	Duration: 60	Intensity: 48
Port 2	10 Bumper Middle Right	Duration: 60	Intensity: 48
Port 3	10 Bumper Back Left	Duration: 60	Intensity: 48
Port 4	Flipper Left	Duration: 60	Intensity: 48
Port 5	10 Bumper Back Center	Duration: 60	Intensity: 48
Port 6	10 Bumper Middle Center	Duration: 60	Intensity: 48
Port 7	Slingshot Left	Duration: 60	Intensity: 48
Port 8	10 Bumper Middle Left	Duration: 60	Intensity: 48

Ledstrip variables Revert Default [Check here for explanation of the positioning parameters](#)

Strobe: MX Left	AH 30	AL 0	AT 0	AW 9	Color White	SHP Circle3
Strobe: MX Right	AH 30	AL 91	AT 0	AW 9	Color White	SHP Circle3
Flasher: MX Left Out	AH 100	AL 0	AT 0	AW 19	SHP Circle3	
Flasher: MX Left	AH 100	AL 20	AT 0	AW 19	SHP Circle3	
Flasher: MX Center	AH 100	AL 40	AT 0	AW 19	SHP Circle3	
Flasher: MX Right	AH 100	AL 60	AT 0	AW 19	SHP Circle3	
Flasher: MX Right Out	AH 100	AL 80	AT 0	AW 19	SHP Circle3	
Flasher: MX Character Left Out	AH 100	AL 0	AT 0	AW 14	SHP Circle3	

Sainsmart 2 Configuration

Select SainSmart 2 – directoutputconfigini41 in the Device drop down menu and assign ports as follows:

- Port 1 - Knocker
- Port 2 - Empty
- Port 3 - Empty
- Port 4 - Shaker
- Port 5 - Empty
- Port 6 - Empty
- Port 7 - Slingshot Right
- Port 8 - Flipper Right



- Home
- Port Assignments
- Table Configs
- Version History
- My Account
- Stats
- Combine Toys
- Logout

Device: SainSmart 2 - directoutputconfig141 Save Config Generate Config Clear Fields

Shaker Motor
 Min Intensity: 48 Max Intensity: 48

Fan
 Min Intensity: 48 Max Intensity: 48

Custom Brightness
 Strobe 48 PF Strobe MM FF Flasher FF Ledstrip Flasher FF

Targetors variables
 Set Intensity and Duration to 0 if you don't want feedback to these events

Targets
 Duration: 60 Intensity: 48

Drop Targets
 Duration: 60 Intensity: 48

Ledstrip variables Revert Default [Check here for explanation of the positioning parameters](#)

Strobe MX Left	AH	30	AL	0	AT	0	AW	9	Color	White	SHP	Circle3
Strobe MX Right	AH	30	AL	91	AT	0	AW	9	Color	White	SHP	Circle3
Flasher MX Left Out	AH	100	AL	0	AT	0	AW	19	SHP	Circle3		
Flasher MX Left	AH	100	AL	20	AT	0	AW	19	SHP	Circle3		
Flasher MX Center	AH	100	AL	40	AT	0	AW	19	SHP	Circle3		
Flasher MX Right	AH	100	AL	60	AT	0	AW	19	SHP	Circle3		
Flasher MX Right Out	AH	100	AL	80	AT	0	AW	19	SHP	Circle3		
Flasher MX Character Left Out	AH	100	AL	0	AT	0	AW	14				

- Port 1 Knocker
- Port 2
- Port 3
- Port 4 Shaker
- Port 5
- Port 6
- Port 7 Slingshot Right
- Port 8 Flipper Right