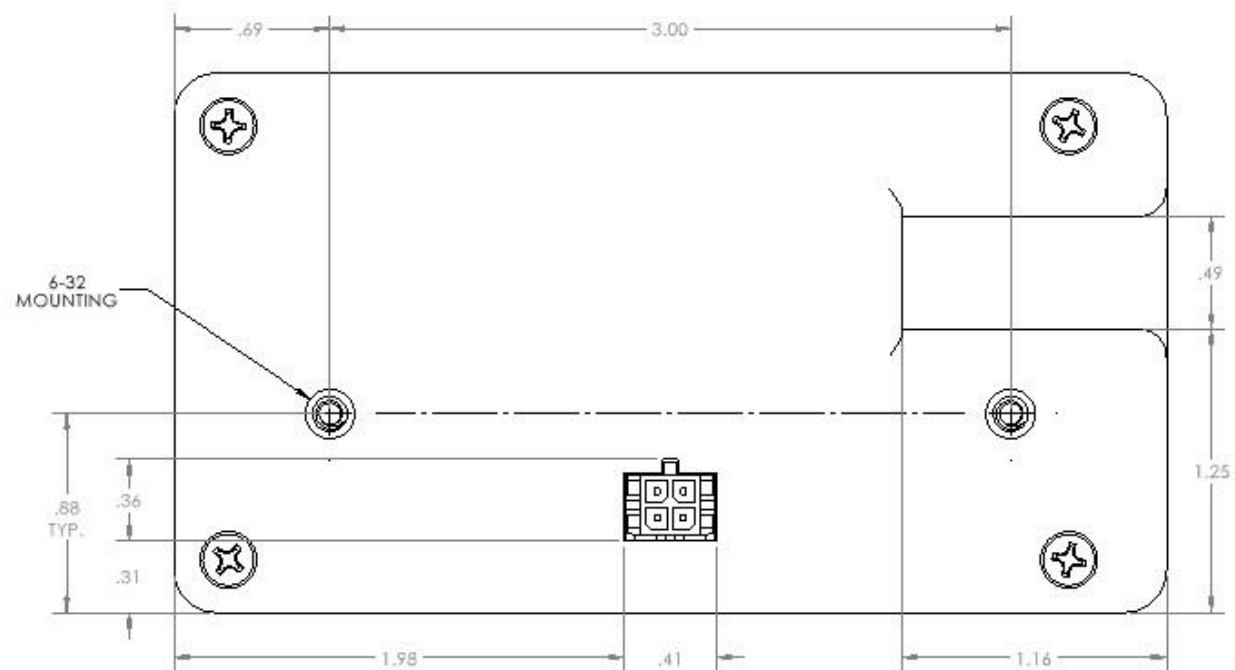


## TINKER ELECTRONICS LITE DASH MANUAL

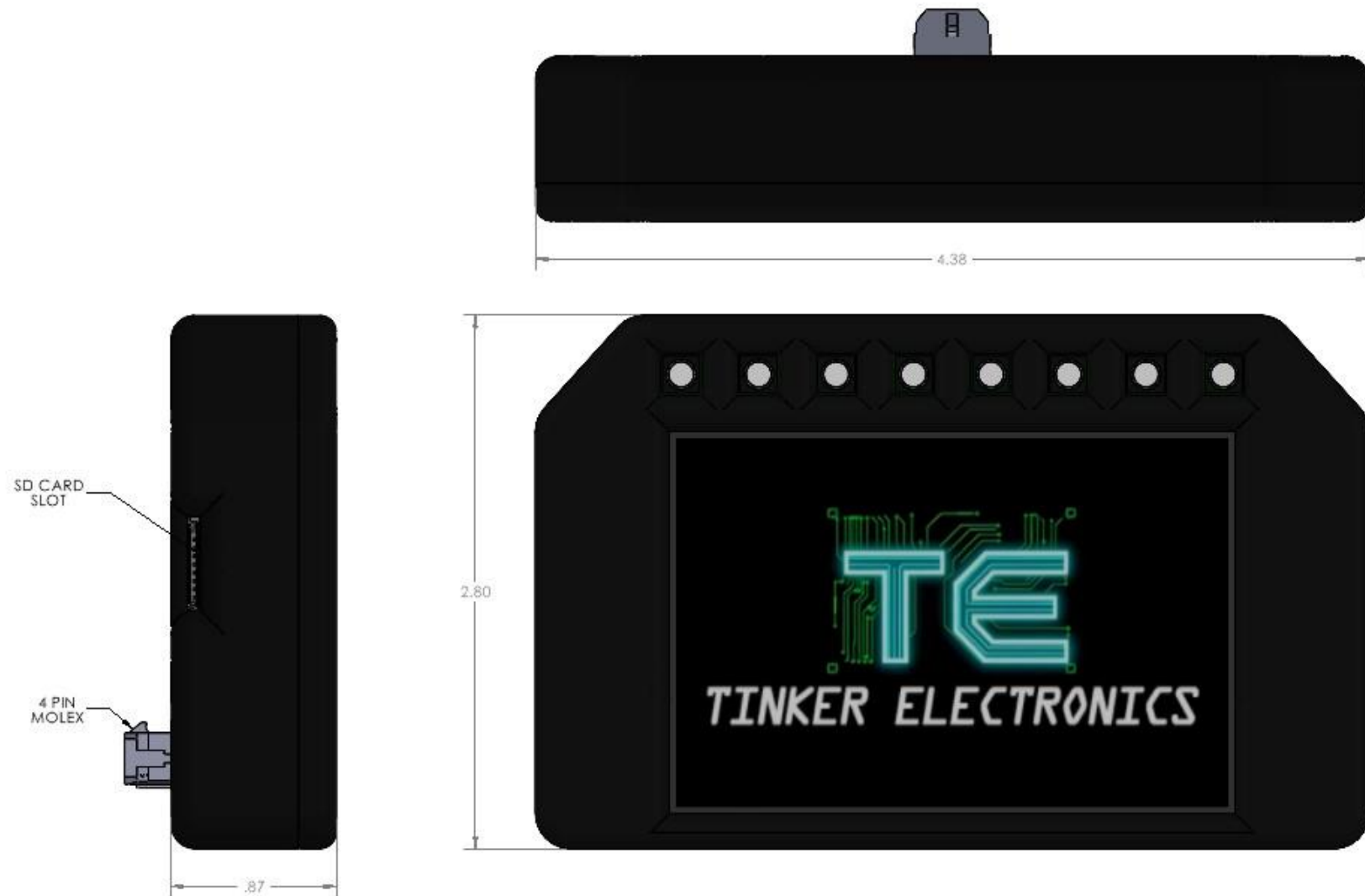


# TINKER ELECTRONICS LITE DASH MANUAL

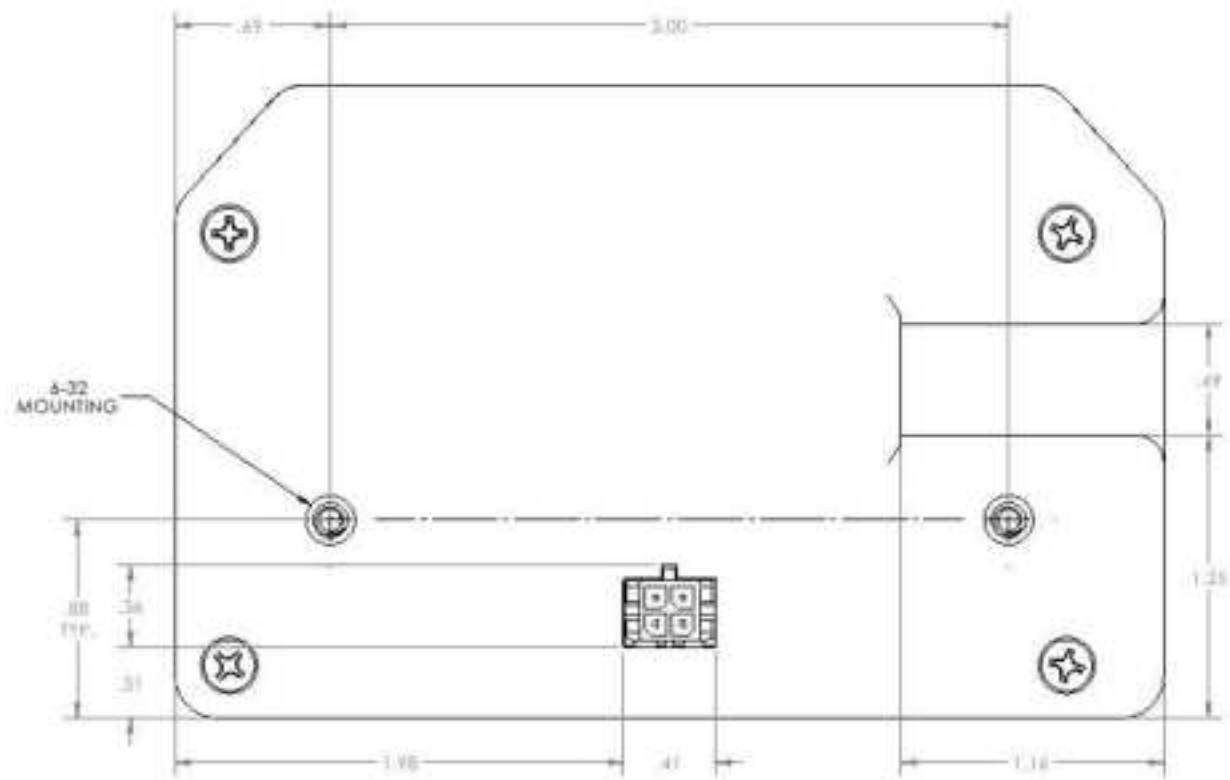


**3.5" MINI**

## TINKER ELECTRONICS LITE DASH MANUAL



**3.5" MINI SHIFT**



**3.5" MINI SHIFT**

# WIRING INFO

PIN	FUNCTION	COLOR	NOTES
1	CAN L	WHITE	
2	CAN H	YELLOW	
3	SWITCHED 12V	RED	
4	GROUND	BLACK	

- CAN wires depending on ECU will have to be pinned into the ECU connector.
- **DO NOT** CONNECT 12V CAN LINES.
- If driving relays with outputs, the relay coil should get switched 12v on the coil from the same source as dash.



**Wire End Of Connector**

## MAIN LAYOUTS



EXTENDED DATA PAGES



ALL 4 OF THE MAIN PAGES CONTAIN 3 OR 4 BUTTONS AND EACH REDIRECT TO ANOTHER PAGE.

1. Button 1 will take you to the switches page.
2. Button 2 will take you to the extended data pages.
3. Button 3 will take you to the dedicated EGT page.
4. Button 4 will take you to all the various settings.
5. You can select any parameter to change it.
6. Quick toggle between layouts.

SWITCHES PAGE



EGT PAGE



# MAIN SETTINGS



1. Brightness slider.
2. Layout selector.
3. Button to take you to the various input settings.
4. Button to take you to the shift light settings page.
5. Button to take you to the Dash Update page.
6. Button to reset the dash settings. Holding down will start the on screen counter and if released after 5 seconds a reset will begin.
7. Save button to commit all changes to be used on startup.
8. Current Firmware and UI version.

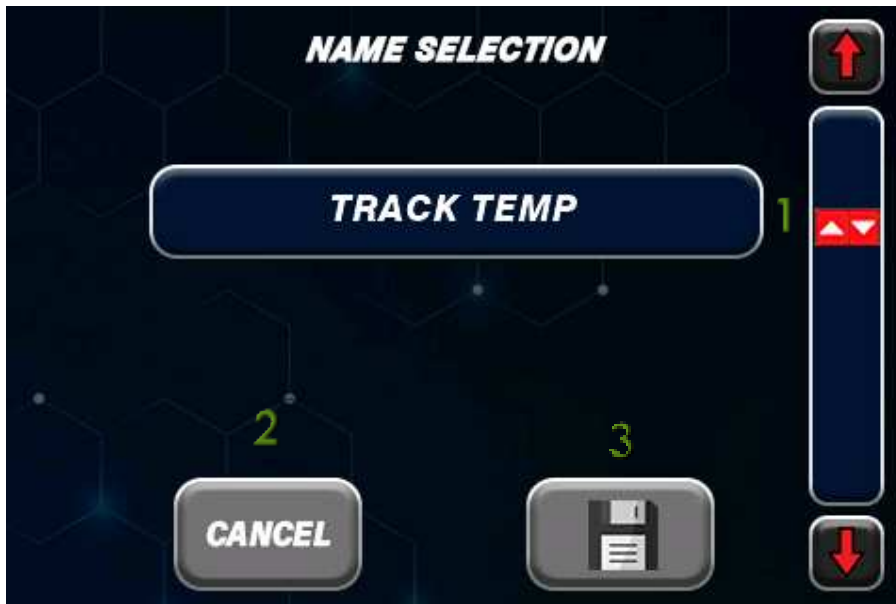
# INPUT SETTINGS



1. Buttons to change name of all custom inputs. Selecting one of the name boxes will take you to the name selection screen where you can choose a new name for the input.
2. Toggle between input settings pages.

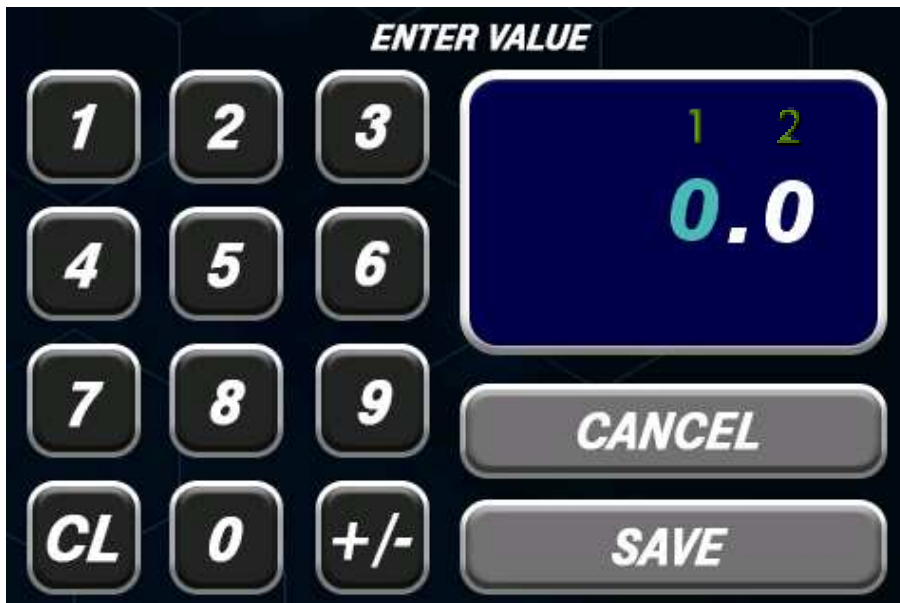


## TINKER ELECTRONICS LITE DASH MANUAL



1. Select the desired name from the list of commonly used input names.
2. Cancel name selection.
3. Save button commits the naming.

- Name changes go into effect on all main pages as well as limit pages. For example if AS1 (analog sensor 1) name is changed to "OIL" it will appear as "OIL" everywhere used.



1. Select to enter values in front of decimal point.
2. Select to enter values behind decimal point.

- All number input buttons will take you to the value entry page.
- CL will set the value back to 0.00.
- +/- will toggle the value from positive to negative.
- Cancel will not commit values and return to page where the value was selected.
- Save will commit value and return to the page where the value was selected.

# PARAMETER CONFIG



1. Slider/Selector to choose what parameter is shown in the selected position.
2. Enable/Disable the limit warning for the selected parameter. When on it will change parameter to red when rules are satisfied.
3. Argument for the limit rule.
4. Value for the limit rule.
5. Commit parameter changes.
6. Easily view custom inputs that have names assigned to easier select data desired. Use arrows to toggle pages of inputs.



- Example showing the triggered analog input parameters.

# SHIFT LIGHT SETTINGS



1. Set each individual LED color.
2. RPM setting to activate shift light.
3. Color Preset. This will change all led colors to the preset color.
4. Static or progressive options. Static activates all the LEDs at once while progressive starts a LED sweep at a lower value depending on interval and works its way to fully lit and eventually flashing.
5. This will enable a warning LED when any of the limit settings are triggered.

## CAN OUTPUT

ID HEX(DEC)	STD/EXT	BYTE 0	BYTE 1	BYTE 2	BYTE 3	BYTE 4	BYTE 5	BYTE 6	BYTE 7
0x672 (1650)	Standard	AS1		AS2		AS3		AS4	
0x673 (1651)	Standard	AS5		RS1		RS1		MPH	Level Slider
0x674 (1652)	Standard	CAN Switch 1	CAN Switch 2	CAN Switch 3	CAN Switch 4	CAN Switch 5			
DATA	TYPE	OFFSET	MULTIPLY	DIVIDE					
AS1 - AS5	16 bit Signed	0	0.1	0					
RS1 - RS2	16 bit Signed	0	0.1	0					
MPH	8 bit Unsigned	0	1	0					
Level Slider	8 bit Unsigned	0	1	0					
CAN SW1 - SW5	8 bit Unsigned	0	1	0					

# UPDATING THE GAUGE

## Firmware/Interface Update

1. The update process requires a Micro SD card less than 32gb and formatted as FAT32
2. Download the appropriate update zip file from the website and extract the contents of the zip file. [DOWNLOADS LINK](#)
3. The SD card should be empty and copy the correct .tft file to the SD card at the root of the SD card.
4. Once the file is on the SD card rename the file to "update.tft".
5. Copy "update.bin" from the download zip file to the SD card.
6. You should now have two update files on the SD card named correctly.
7. Insert the SD card in the SD card slot at the back of the display.
8. Power the display on, go into the settings, select update, and select firmware update.
9. The display will go through its routine and then reboot which will conclude the firmware update.
10. Once back on return to the update page of the display and select Interface Update.
11. The screen will go white and start updating.
12. Once complete turn off the display and remove the SD card.
13. Power the display back on and check for the new UI/FW number in the settings indicating the update was completed. Example of FW and UI numbers on next page.

