27” Digital Photo Frame

Revision History

File Name	27” Digital Photo Frame User Guide
Version	1.0
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1. Product Brief

1.1 Overview

27” Digital Photo frame---Settle a space in a twinkling at your happy time! Need not a computer, need not to hurdle to print, re-appear fascinating appearance at any time!

1.2 Appearance

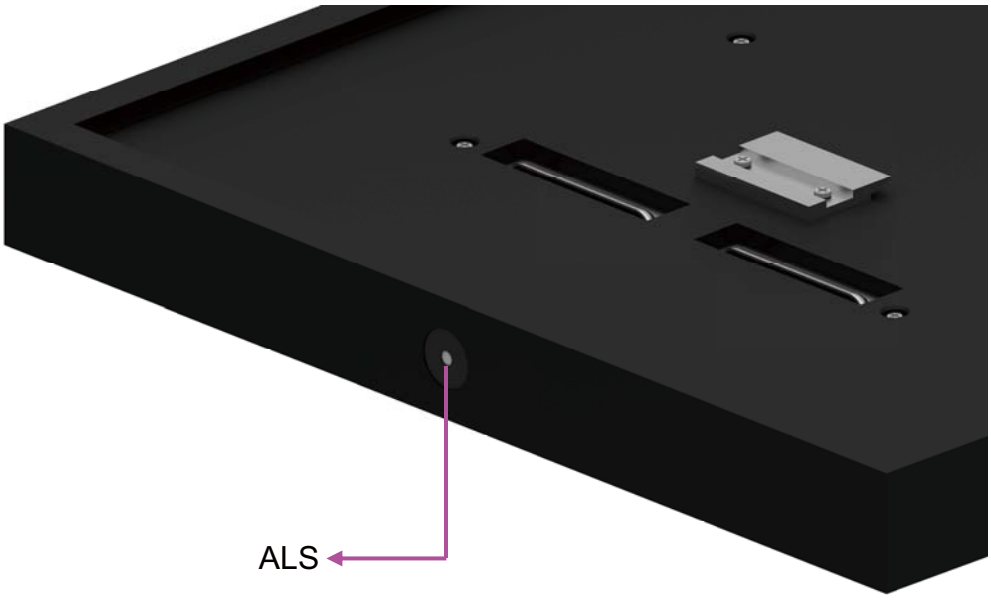
1.2.1 Front View

Picture1-1-1 DPF27 Front view

1.2.2 Back View

Picture 1-1-2 DPF27 Back view

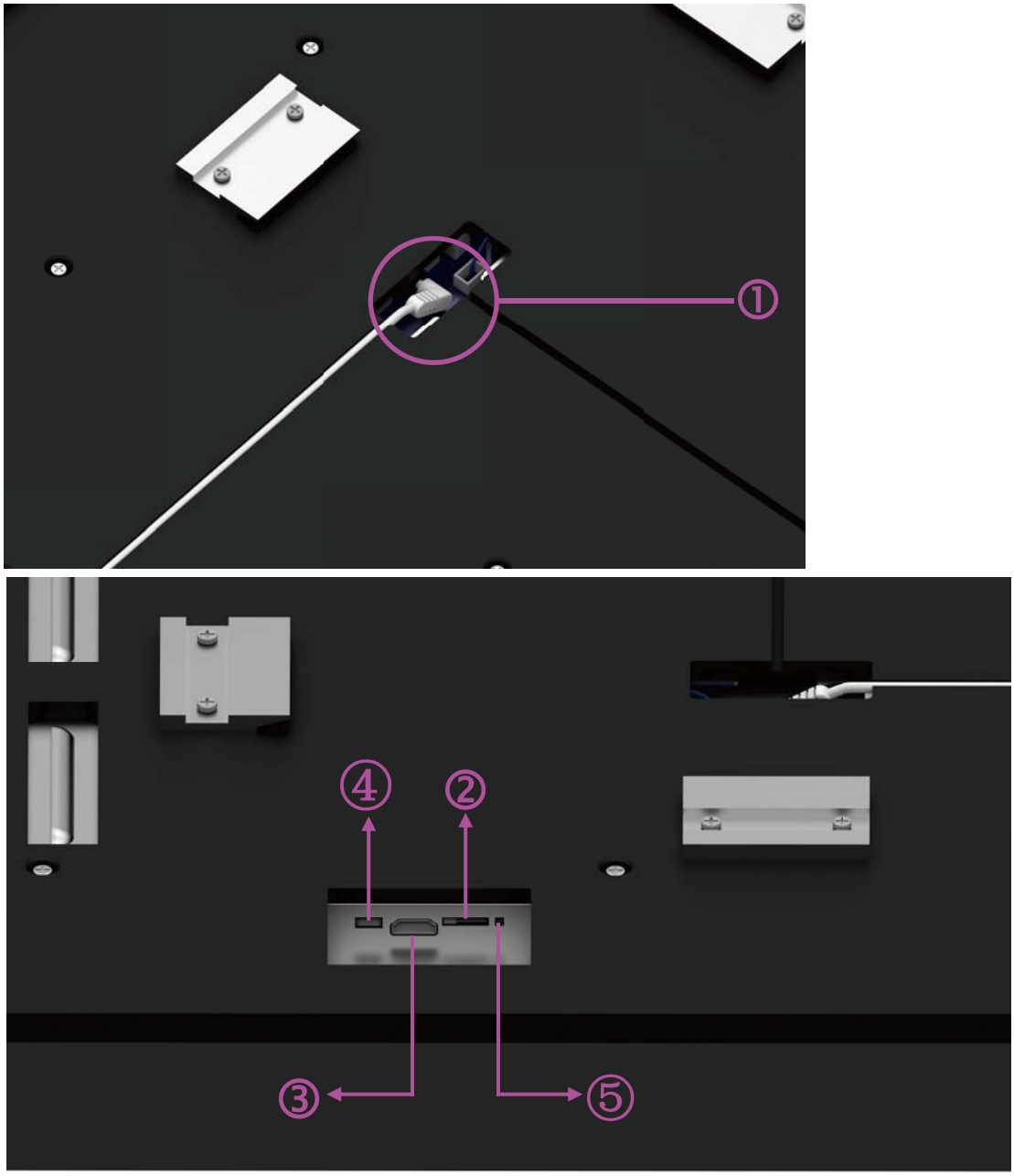
1.2.3 Detailed Drawing



Picture 1-1-3 Left view

Table1-1-1 Left view

ALS	1 * ALS (Ambient Light Sensor)



Picture 1-1-4 Rear view

Table 1-1-2 Back view description

No.	Name	Description	Detailed
①	Power Port	DC 12V 4A	
②	TF card slot	1 * TF card slot	Debug Only
③	HDMI	1 * HDMI out	Debug Only
④	Micro USB	1 * Micro USB port	Debug Only
⑤	Burning Key	1 * burning key	Debug Only

* Debug only functions as for developer use only, the customer can't use.

1.3 Feature

- 27”1080p IPS Display with Anti-Glare Technology
- 1920 x 1080 Full HD Resolution
- 300 cd/m2 Brightness
- 1.8 GHz Quad Core ARM Cortex-A17
- 1GB DDR3 RAM
- 8GB Storage
- 802.11 b/g WiFi + Bluetooth

2. Key Parameters

Hardware Specification	
Product Feature	
Screen	27” 1920 x 1080 Full HD Resolution
CPU	RK3288 Quad Core ARM Cortex-A17 1.8 GHz
GPU	Mali 400 Quad
System	Ubuntu
RAM	1GB/DDR3
Flash memory	8GB/eMMC
Hard disk	NA
wireless network	802.11 1x1 BG+BT
Interface	
Micro USB 2.0	1
Card reader	TF/Micro SD 2.0
HDMI	1
Power	1
Buttons	
buttons	Burning key
Accessories	
Power adapter	DC 12V/ 4A 48W
Other	
Cercification	CCC,FCC,CE

3. Use profile

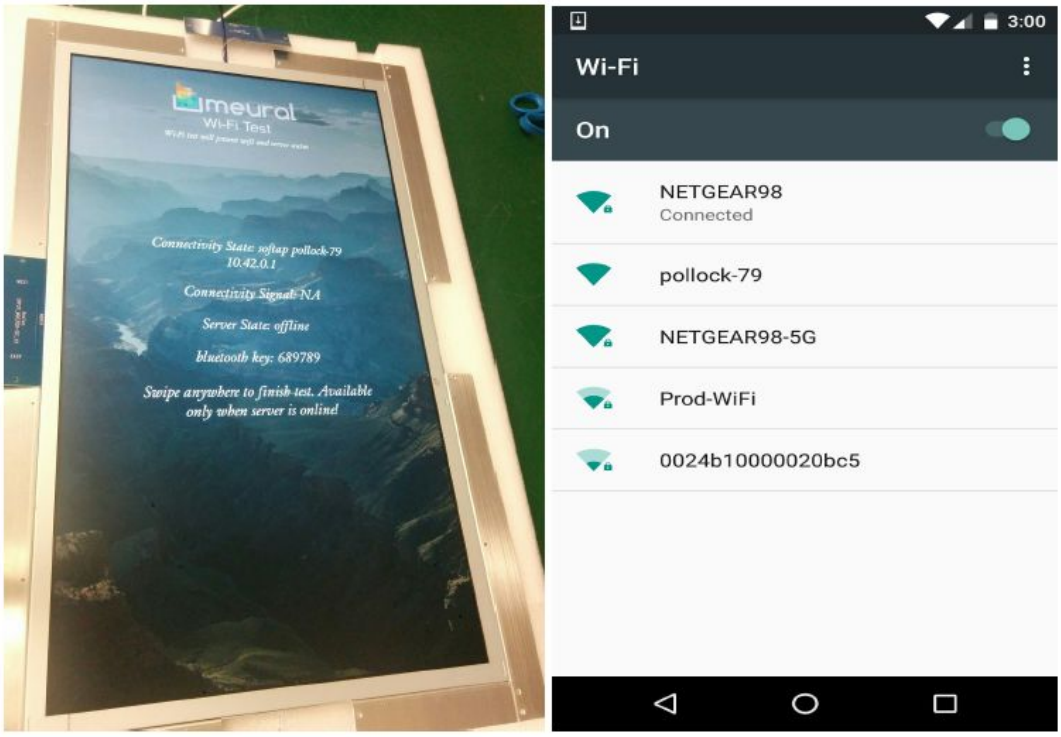
3.1 WIFI&BT

The following is a summary of the components tests and expected results:

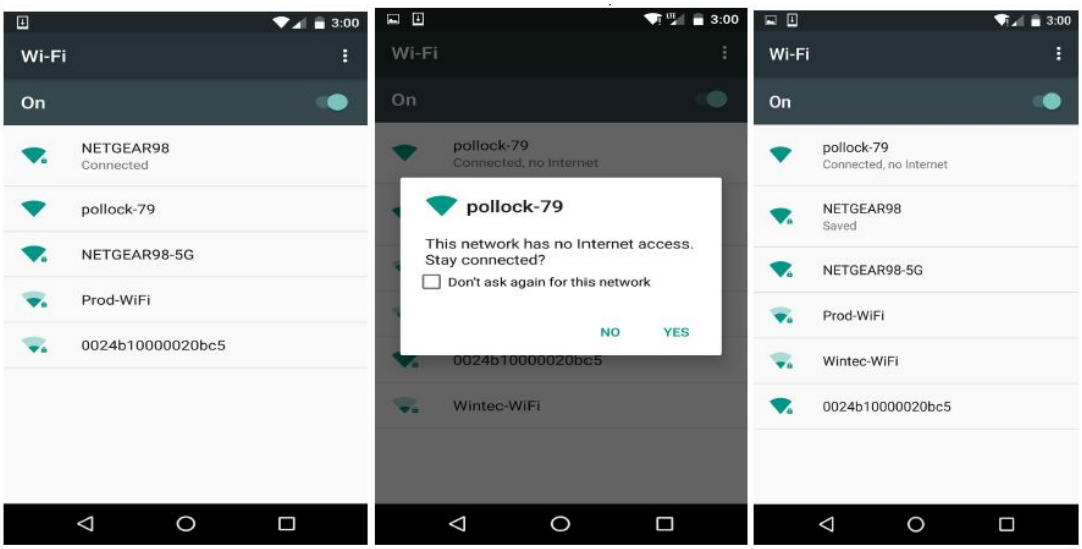
Component	Used for	Expected	Failure
Bluetooth	Android device is connected to frame using application	App is able to connect between mobile and frame	Connection between app and frame not working or bluetooth is not available
Wifi SoftAP	Check frame wifi access point on the mobile app	Mobile wifi manager shows the frame AP as available	Frame Wifi AP doesn’t appear on mobile
Wifi client	Connect the frame to the network	Connection success. Signal values are high	Connection fail or signal values are low
Server	Server status change from offline to online	status changes from offline, product, frame, creators, gallery and then online	No change in status or server status is Error.

About WIFI

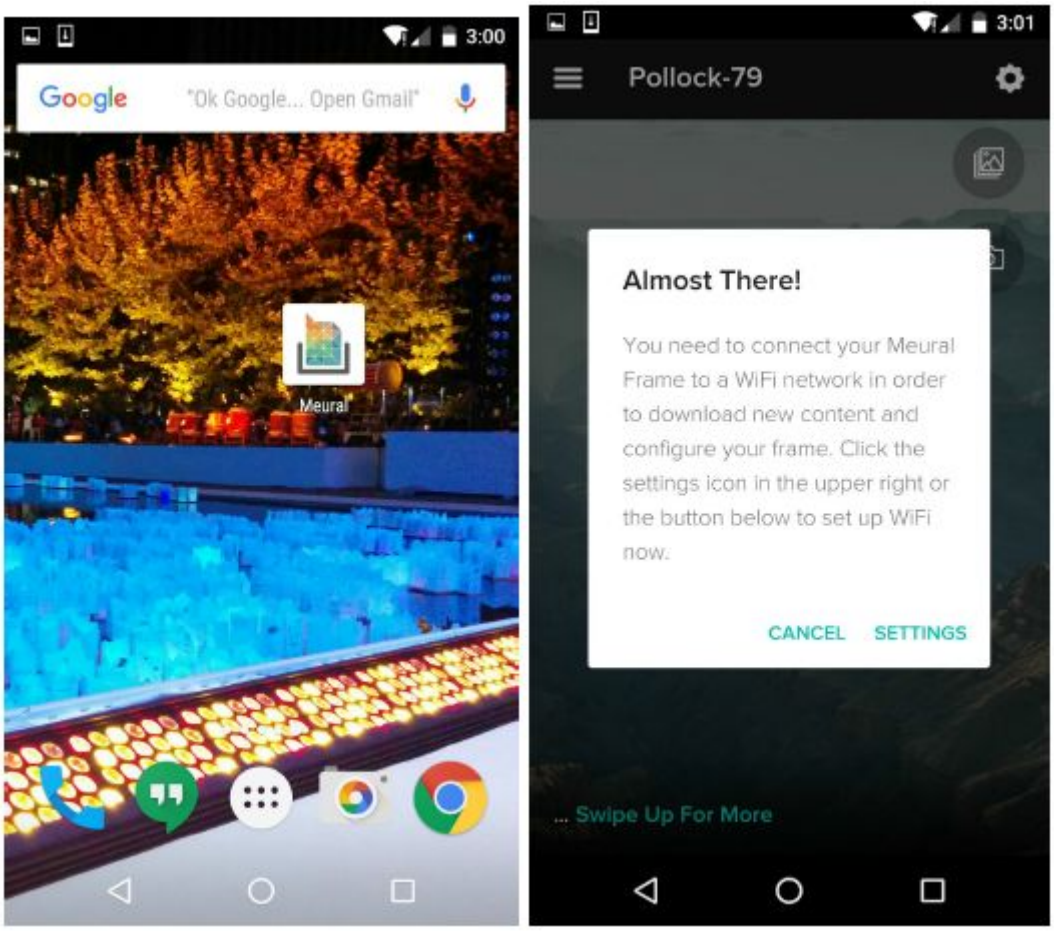
- Get an Android device and install the Meural Application from the play store (https://play.google.com/store/apps/details?id=com.meural.Meural)
- The frame has its own open Wifi access point. If not previously connected to any Wifi network, the frame will open it 30 seconds after boot. You can see the name and the connection status on the Frame screen
- Check you can see the frame name on the mobile WiFi manager as an available connection (pollok79 in the image below)



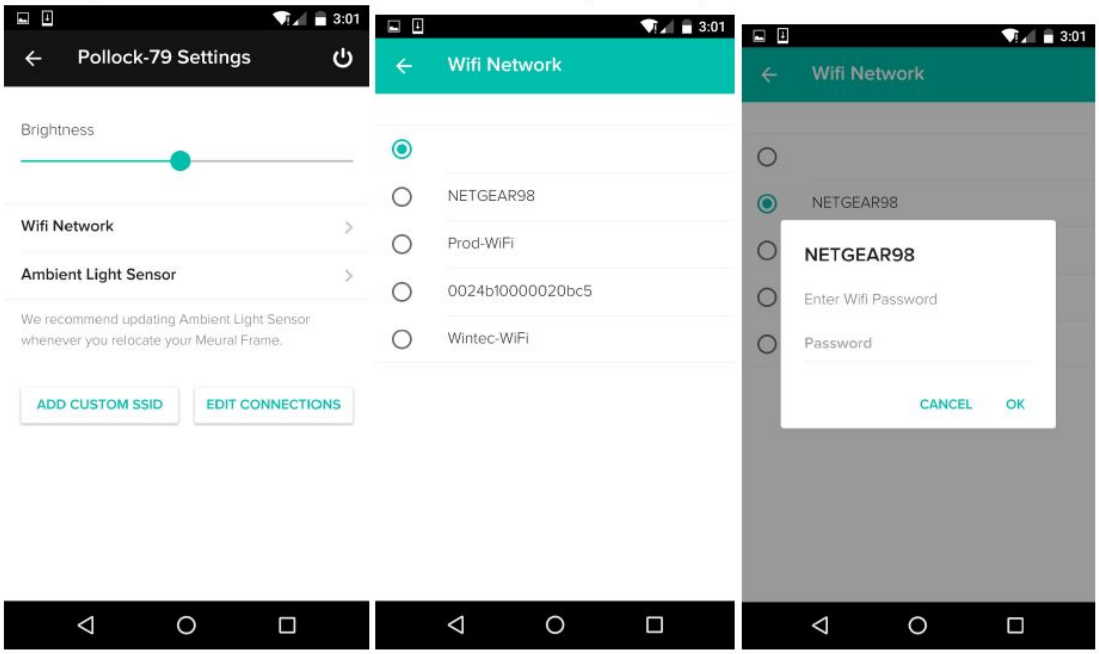
- Connect the mobile to the frame access point. You might be prompt to approve this connection since it doesn’t include internet



- Open the Meural application. You should see that the frame is connected. If not, try to rescan and check you are indeed connected to the frame access point



- Go to settings and select the factory/office/home Wifi network and enter password (NETGEAR98 and 12345678 in the example below)

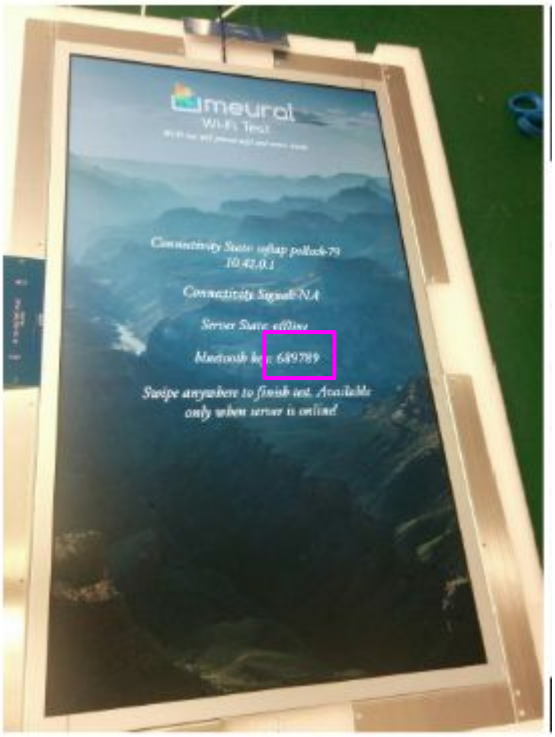


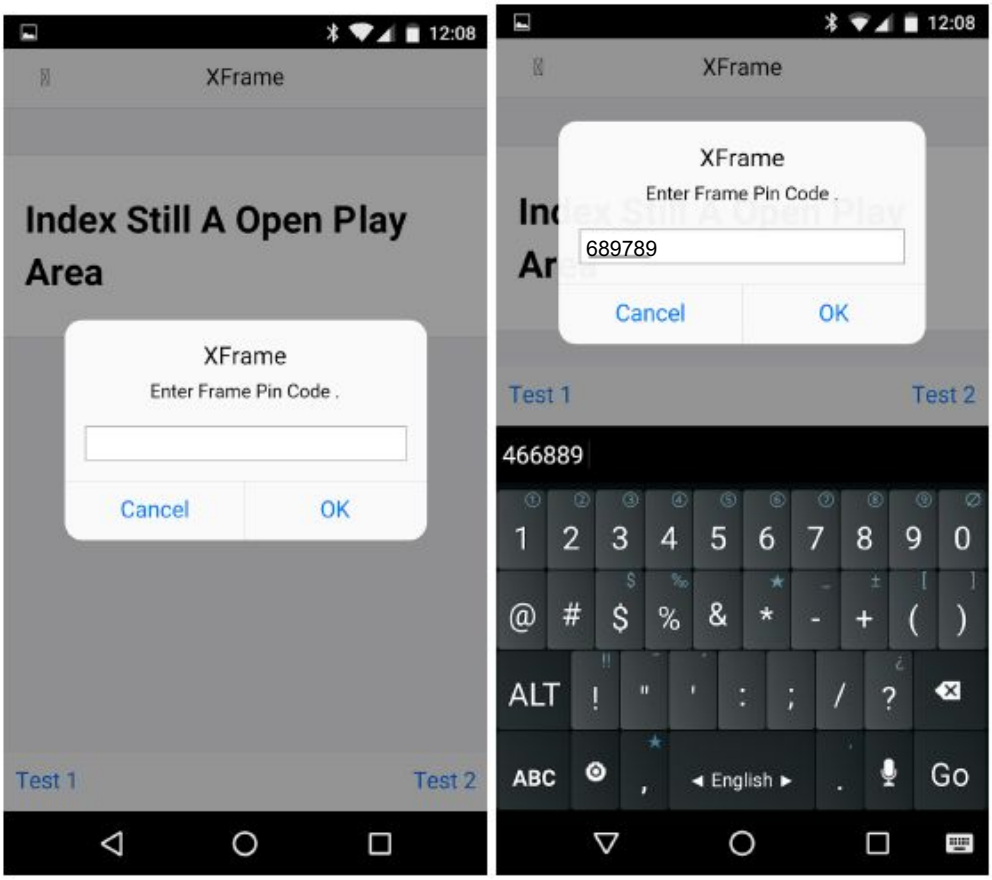
- Frame screen will now show if it is connected including signal values, server status and ip address. Close the application. If frame failed to connect, it will go back to its access point and the above steps should be repeated.

- Now that the frame is connected, make sure the mobile is also connected to that network and open the Meural application. The app will auto scan for your frame and if found will show it on its front page.

About Bluetooth (Bluetooth default is always open)

- If no frame found. You will be prompted to enter a 6 digit pin
  - If the frame is in production mode, this number will be displayed on the screen, and labeled “bt_key” during the wifi test
  - If the frame is post production mode, find settings on your Meural Frame. This is done by swiping DOWN to show settings, and RIGHT to highlight “Wifi”. Swipe DOWN to select “Wifi”





- On success, a wifi connection screen will appear. Select a wifi network, enter password, and click “Next”. If failed, try to repeat the process again.

3.1 ALS

The following is a summary of the components tests and expected results

Component	Test	Expected	Failure
ALS connectivity	Checks if the ALS has been detected by the firmware and registered as an input device	The ALS page is shown on screen for 20 seconds	ALS page is skipped and go directly to Gesture interface
ALS environment	ALS readings in different environments	ALS is covered --> ALS LUX should be near 0. ALS is lighted --> ALS should be well above 100	No change in backlight settings
Backlight adjustment	Backlight is adjusting according to ALS environment	ALS is covered --> backlight is very dark ALS is lighted --> backlight is very high	No change in backlight settings

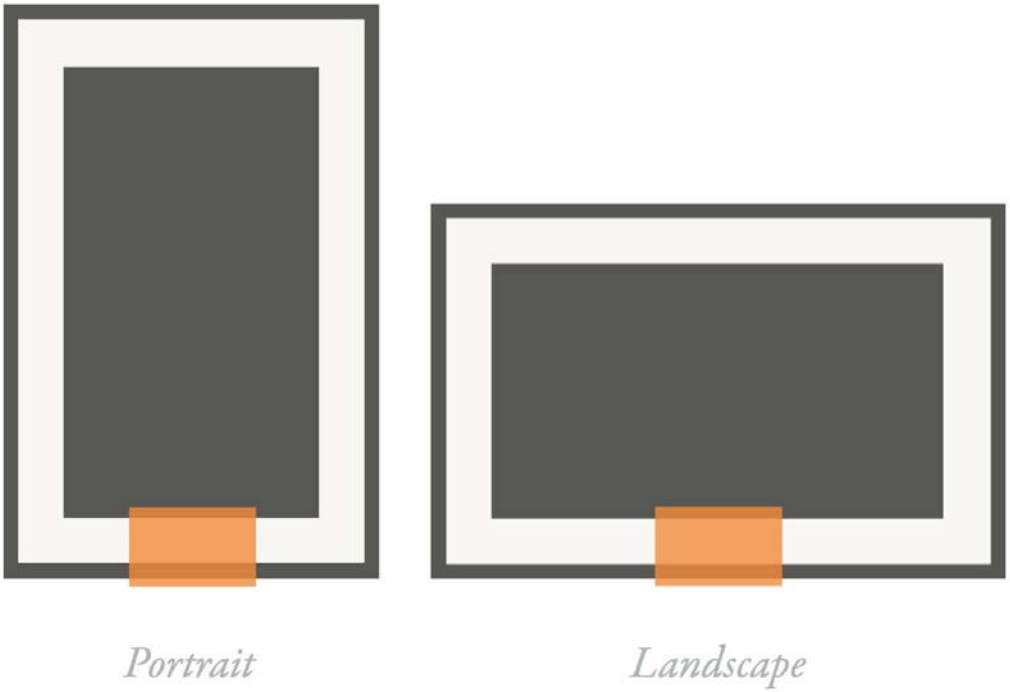
Sequence

- Check that the ALS and Backlight test is being shown on screen
- Cover the ALS and see the following :
  - ALS LUX value changes to near 0
  - Backlight change to 9-10%
  - Screen will get very dark
- Direct Flashlight the ALS(with phone or any other device) and see the following:
  - ALS LUX value is greater or near 1000
  - Backlight change to greater or near 90%
  - Screen will get very bright

- If ALS is not being shown at all, something is wrong with the hardware.

3.1 Gesture Guide

The Meural Frame is equipped with a hidden gesture sensor for each orientation (indicated witha removable sticker) that sits bottom and center.



Holding Your Hand

Gesturing will help you get around the frame.

- To use the gesture sensor, extend your fingers as though shaking a hand, and point them towards the frame, 1” to 2” from the frame.
- To swipe left or right, hold you hand with thumb up and move it horizontally across the entire sensor area.
- To swipe up or down, hold your hand level with the ground and move it vertically through the entire sensor area.

FCC
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received
including interference that may cause undesired operation.
Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions,
may cause harmful interference to radio communications. However, there is no guarantee that interference will not
occur in a particular installation. If this equipment does cause harmful interference to radio or television reception,
which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the
following measures:
-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.