

4. Touch Control

Vibe is equipped with an infrared touch display and can be operated by fingertips or a Vibe stylus. The following descriptions illustrate typical operations. More Vibe software manuals and guides can be found at <https://knowledge.vibe.us>.

4.1. Draw & Erase with Vibe Stylus



Write or draw

Select a pen tool and use the stylus to write or draw.



Erase

Select the eraser tool and use the stylus to erase markers on screen.

4.2. Canvas Operation by Fingertips



Pan the canvas

Use one finger and touch a blank area of the screen—without losing direct contact—to move the canvas.



Pinch to zoom

On a touchscreen, move one's finger and thumb apart or together to zoom into and out of the canvas.

4.3. Other Operations

The following operations can be done either with fingertip or Vibe stylus.

Choose a tool or select an option

Touch the target on the screen for one quick tap, then release.

Select an object

Touch and hold the target (e.g., an image or a Sticky-Note) on the screen.

Move an object

Touch the selected target and move across the screen without losing direct contact, then release when reaching the new location.

Note: Avoid scratching with sharp objects on the touch display. Only use fingertips and the Vibe stylus are for touch control.

5. Pixel Defect Policy

We strive to deliver the highest quality products and use some of the industry's most advanced manufacturing processes whilst practicing stringent quality control. However, pixel or sub-pixel defects on the PDP / TFT panels used in Plasma & LCD displays are sometimes unavoidable. No manufacturer can guarantee that all panels will be free from pixel defects, but can guarantee that any Plasma & LCD displays with an unacceptable number of defects will be repaired during the warranty period in line with your local warranty.

This notice explains the different types of pixel defects and defines the acceptable defect level for the LCD screen. To qualify for repair under warranty, the number of pixel defects must exceed a certain level as shown in the reference table. If the LCD screen is within specification, a warranty exchange or claim will be denied.

5.1. Pixels and Subpixels



A pixel, or picture element, is composed of three sub-pixels in the primary colors of red, green and blue. Many pixels together form an image. When all sub-pixels of a pixel are lit, the three colored sub-pixels together appear as a single white pixel. When all are dark, the three colored sub-pixels together appear as a single black pixel. Other combinations of lit and dark sub-pixels appear as single pixels of other colors.

5.2. Types of Pixel Defects + Dot Definition

Pixel and sub-pixel defects appear on the screen in different ways. There are three categories of pixel defects and several types of sub-pixel defects within each category.

Dot definition = What is a defective "Dot"?

One or more defective, adjacent sub-pixel are defined as one "dot". The number of defective sub-pixels are not relevant to define a defective dot. This means that a defective dot can consist of one, two or three defective sub-pixels which can be dark or lit.



One dot = One Pixel; consists of three sub-pixels of Red, Green, and Blue.

5.3. Dark Dot Defects

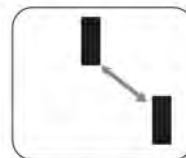
Black dot defects appear as pixels or sub-pixels that are always dark or "off." These are the examples of black dot defects:



One dark dot



Two adjacent dark dots =
1 pair of dark dots



Two dark dots,
specifications define the
minimum distance
between dark dots

5.4. Proximity of Pixel Defects

Because pixel and sub-pixel defects of the same type that are nearby one another may be more noticeable, there are specific tolerances for the proximity of pixel defects. In the table below you can find specifications about:

- Allowed amount of adjacent dark dots (adjacent dark dots = 1 pair of dark dots)
- Minimum distance between dark dots
- Total number of all defective dots

5.5. Pixel Defect Tolerances

In order to qualify for repair due to pixel defects during the warranty period, a PDP / TFT panel in a Plasma / LCD display must have pixel or sub-pixel defects exceeding the tolerances listed in the following table.

BRIGHT DOT EFFECT	ACCEPTABLE LEVEL
1 lit sub pixel	2
BLACK DOT EFFECT	ACCEPTABLE LEVEL
1 dark sub pixel	10
TOTAL DOT DEFECTS	12

5.6. Mura

Dark spots or patches may occasionally appear on some LCD panels. This is known within the industry as Mura, which is a Japanese term for “unevenness.” It is used to describe an irregular pattern or area in which uneven screen uniformity appears under certain conditions. Mura is a result of the deterioration of the liquid crystal alignment layer and is most commonly caused by long-term operation under high ambient temperatures. It is an industry-wide phenomenon and Mura is not repairable or covered by our warranty terms. Mura has been around since the introduction of LCD technology and with screens getting bigger and in operation 24/7, many displays are running in low light conditions. This all adds to the possibility of Mura affecting displays.

How to Spot Mura

There are many symptoms of Mura and also multiple causes. Several of these are listed below:

- Impurities or foreign particles in the crystal matrix
- Uneven distribution of LCD matrix during manufacturing
- Non-uniform luminance distribution of the backlight
- Panel assembly induced stress
- Flaws within the LCD cells
- Thermal induced stress - high temperature operation over long periods of time

How to Avoid Mura

Although we can not guarantee the complete eradication of Mura every time, the appearance of Mura can be minimized by using these methods:

- Lower the backlight brightness
- Use a screen saver
- Reduce the ambient temperature around the unit

6. Cleaning and Troubleshooting

6.1. Cleaning

Caution When Using the Display

- Do not bring your hands, face or objects close to the ventilation holes of the display. The top of the display is usually very hot due to the high temperature of exhaust air being released through the ventilation holes. Burns or personal injuries may occur if any body parts are brought too close. Placing any object near the top of the display could also result in heat-related damage to the object as well as the display itself.
- Be sure to disconnect all cables before moving the display. Moving the display with its cables attached may damage the cables and thus cause fire or electric shock.
- Disconnect the power plug from the wall outlet as a safety precaution before carrying out any type of cleaning or maintenance procedure.

Front Panel Cleaning Instructions

- The front of the display has been specially treated. Wipe the surface gently using only a cleaning cloth or a soft, lint-free cloth.
- If the surface becomes dirty, soak a soft, lint-free cloth in a mild detergent solution. Wring the cloth to remove excess liquid. Wipe the surface of the display to remove dirt. Then use a dry cloth of the same type to dry.
- Do not scratch or hit the surface of the panel with fingers or hard objects of any kind.
- Do not use vaporous substances such as insert sprays, solvents and thinners.

Back Panel Cleaning Instructions

- If the cabinet becomes dirty, wipe the cabinet with a soft, dry cloth.
- If the cabinet is extremely dirty, soak a lint-free cloth in a mild detergent solution. Wring the cloth to remove as much moisture as possible. Wipe the cabinet. Use another dry cloth to wipe over until the surface is dry.
- Do not allow any water or detergent to come into contact with the surface of the display. If water or moisture gets inside the unit, operating problems and electrical and shock hazards may result.
- Do not scratch or hit the cabinet with fingers or hard objects of any kind.
- Do not use corrosive substances such as insert sprays, solvents and thinners on the cabinet.
- Do not place anything made from rubber or PVC near the cabinet for extended periods of time.

6.2. Troubleshooting

Symptom	Possible Cause	Remedy
No picture is displayed.	1. The power cord is disconnected 2. The power switch is not switched on 3. The display is in standby mode	1. Plug in the power cord 2. Make sure the power switch is on 3. Touch the display to exit standby
Interference on the display or audible noise.	Caused by surrounding electrical appliances or fluorescent lights.	Move the display to another location to see if the interference is reduced.
No sound is heard.	1. Volume is turned all the way down 2. MUTE is turned on.	1. Press [+] or [-] button to hear sound. 2. Switch MUTE off
After-images can still be seen on the display after the display is turned off.	A still picture is displayed for an over extended period of time.	Do not allow a still image to be displayed for an extended period of time as this can cause a permanent after-image to remain on the display.

7. Technical Specifications

Panel	
Diagonal Screen Size	55"
Optimum Resolution	3840 (H) X 2160 (V) @ 60Hz
Brightness	Typ 350cd/m2; min 300cd/m2;
Contrast Ratio (Typical)	4500 : 1
Analog	72% NTSC
Response Time (Typical)	6.5ms
Pixel Pitch	0.315 mm x 0.315 mm
Anti-Glare Coating	Yes (with Anti-Fingerprint Coating)
Aspect Ratio	16 : 9
Color Depth	10-bit
Viewing Angle	178°(H) / 178°(V)

Touch	
Multi-Touch Technology	Infrared Touch
Touch Points	20 Simultaneous Touch Points
Protection Glass	3mm Tempered Glass
Refresh Rate	> 130Hz
Minimum Touch Object	2mm
Response Time	< 8ms

System	
CPU	Arm RK3588 Processor
RAM	8GB DDR4
Storage	128GB EMMC
Wireless	Wi-Fi 6: IEEE 802.11 ^a x/ac/a/b/g/n Compatible Bluetooth Version: 5.2
Operating System	VibeOS (Based on Chromium OS)

Power	
Power Source	AC 100-240V, 50-60 Hz
Consumption (Typical)	≤ 200 W
Consumption (Standby)	≤ 0.5 W
Speaker	2*10W

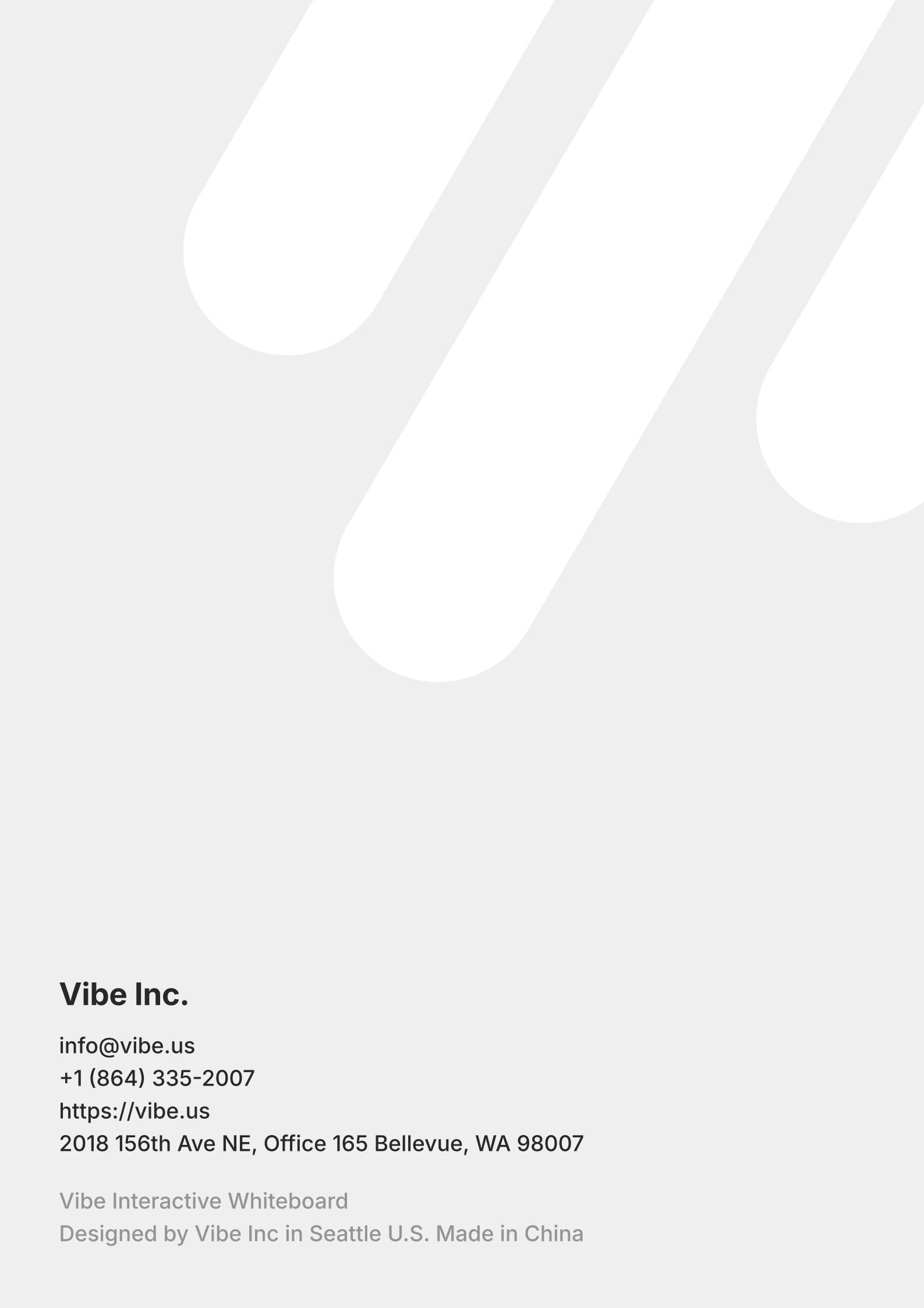
Connections	
① USB-C	SuperSpeed USB3.0
② USB-C	SuperSpeed USB3.0/ Displayport out
③ USB-C	DisplayPort in for touchback control
④ HDMI-in	HDMI 2.0

Board	
Product Size	50.7 (W) x 29.3 (H) x 3.0 (D) in
Package Size	55.9 (W) x 34.5 (H) x 7.5 (D) in
Product Weight	50.7 lb
Gross Weight	64.6 lb
Accessories	Passive stylus * 2 Power cable*1 Quick start*1
VESA Mount	200 x 200 mm

Stand	
Product Size	50.0 (W) x 56.5 (H) x 26.4 (D) in
Package Size	46.1 (W) x 29.4 (H) x 8.5 (D) in
Product Weight	25.4 lb
Accessories	Installation manual

Tap (optional)	
Video input interface	USB-C (DisplayPort 1.2)
Maximum input resolution	4K@30 FPS
Transmission distance	15m
Touchback	Support

Camera (optional)	
Image Sensor	Sony CMOS, 8.42MP (4K) 1/2.8 inch
Sensor Resolution	3840 (H) x 2160 (V)
Frames Per Second	30 fps
Video Format	M-JPEG 4K@30fps 1080P@30fps 720P@30fps
Field of View	diagonal: 117.1°
Interface	USB2.0 Type-C
IR Filter	400-700nm
Lens	2G5P
Focal range	30cm-5m
Color	Silver
Power	5V-900mA (USB-Powered)



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Vibe Interactive Whiteboard

Designed by Vibe Inc in Seattle U.S. Made in China