



Model 2439MA Display User Manual

March 2021



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Some components may not have been manufactured by Daisy Data Displays, Inc. If not, Daisy has been advised by the manufacturer of the component that the component has been tested and complies with the Class A computing device limits as described above.

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Initial Release

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To the original purchaser, Daisy Data Displays, Inc., hereinafter referred to collectively as SELLER, warrants each of its manufactured products, and all components therein contained to be free from defects in materials and/or workmanship for a period of 24 months from the date of purchase.

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LIMITATION OF LIABILITY

The Seller shall not under any circumstances be liable for special or consequential damages, such as, but not limited to, damage or loss of other property or equipment, loss of profits or revenues, cost of capital, cost of purchased or replacement goods or claims of customers of Purchaser for service interruptions. The remedies of the Purchaser set forth herein are exclusive, and the liability of Seller respect to any contract, or anything done in connection therewith such as the performance or breach thereof, of from the manufacture, sale, delivery, resale, installation or use of any goods covered by or furnished under this contract whether arising out of contract, negligence, strict tort or breach of warranty or otherwise, shall not, except as expressly provided herein, exceed the price of the goods upon which such liability is based.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. Seller makes every effort to provide clear and accurate technical information on the application of its products in the Operator's Manual and assumes no liability for misuse of the information.



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1. Introduction

Thank you for selecting a Daisy solution for your operator interface needs. This manual contains drawings and component descriptions for setting up and operating your Daisy Data Model 2439MA Lightweight flat panel Display. In addition, Daisy Data provides warnings, precautions, and procedures to ensure reliable and safe operation of your display. This will help you understand how your product operates and what you should expect during normal operating conditions. And if any problems would arise, help you get the service or help you require in a timely manner should you have any inquiries or concerns.



For more information contact:



Daisy
DATA DISPLAYS

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2. Customer Service

All Daisy systems pass detailed quality control configuration and inspection before being shipped. Daisy strives to create the highest quality systems and chooses top quality parts. However, like most electronic devices, units may experience issues over time. Should you experience problems, or have any further inquiries or comments, please contact Daisy's customer service department:

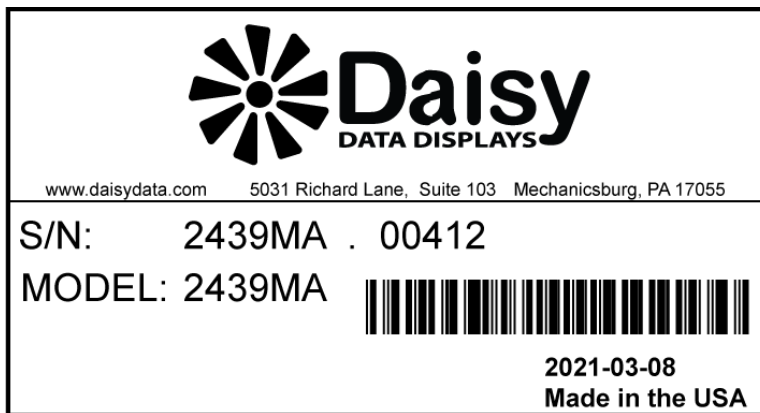
Business Phone: 717.796.9999 (x222)

Fax: 717.796.9000

Email: support@daisydata.com

Equipment returned to Daisy for service must be accompanied by a valid return merchandise authorization (RMA) number. Items or products shipped to Daisy without a valid RMA number will be refused. An RMA will be generated upon receipt of Company Name, Address, Contact, Product Model and Serial Numbers.

Daisy Data Displays Inc. prides itself on offering best in class support for your products. Our technical support team can help you with installation, configuration, troubleshooting, and other support issues for all Daisy's products.



Typical Model/Serial No. Tag

3. **Hardware/Software**

Daisy data should be contacted if any hardware or software questions/issues arise. Additional software can be supplied as needed. Be aware that any modifications or alterations without the assistance of Daisy Data may affect unit certifications and/or implied warranty that apply to your specific unit.

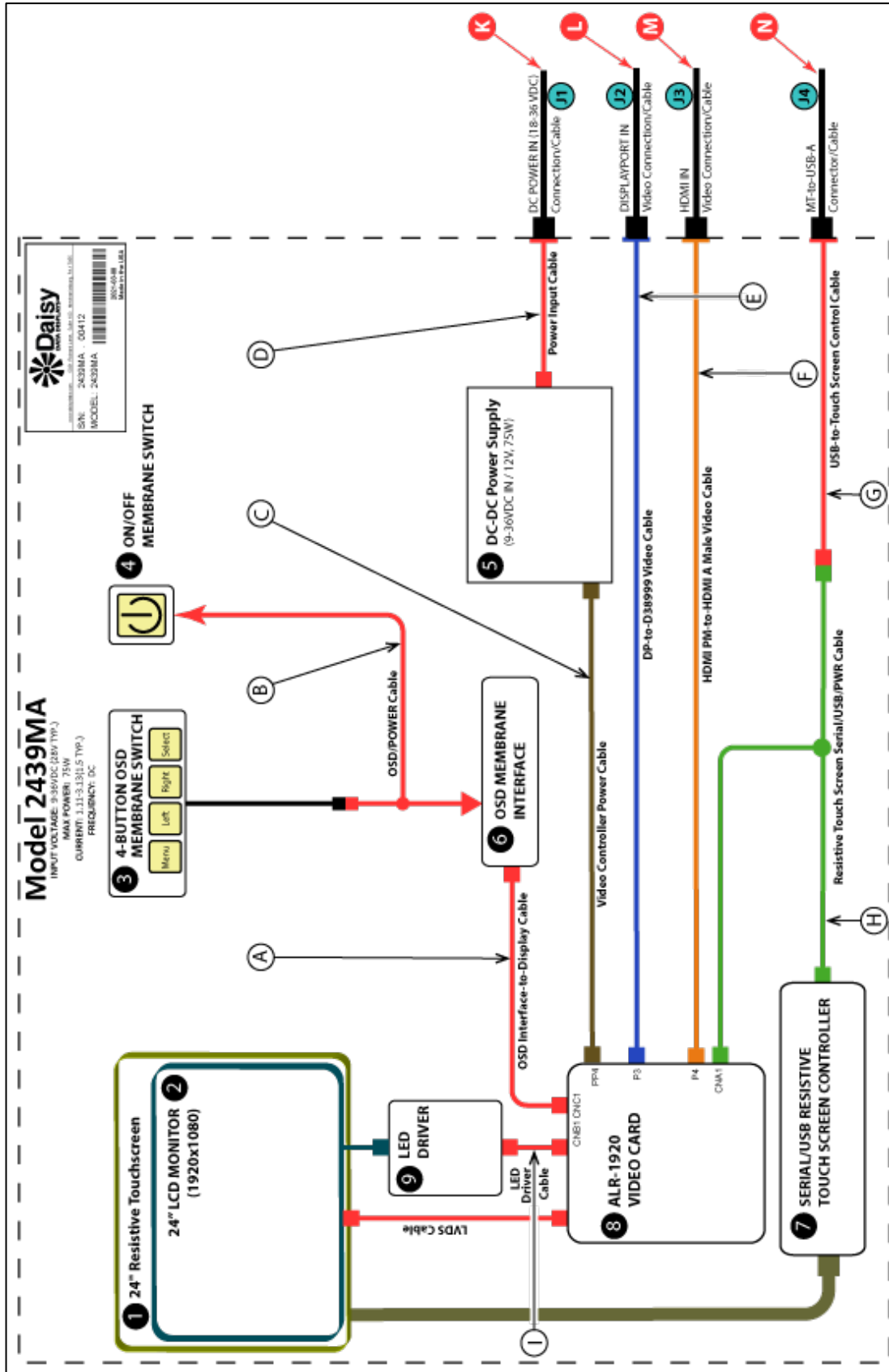
4. **Specifications**

MATERIALS	
All materials comply with IEC 60529 IP64 Standards	
Enclosure and Hardware	Powder-coated Nickel-plated machined Aluminum, Plated CRS, Stainless Steel
Weight	24.40 lbs.
MECHANICAL	
Unit Dimensions (See Section 6 – Unit Dimensions for detailed unit drawings/VESA plate information)	
ENVIRONMENTAL	
Ingress Protection	Copper-impregnated Silicone Gasketing
Operating Temperature	-20° C to +50° C
Storage Temperature	-30° C to +80° C
Relative Humidity	95% (non-condensing)
ELECTRICAL	
Supply Input Voltage	110VAC (Bench-top Power Supply)
Unit Input Voltage	18-36VDC
Current	1.11-3.13 A (1.5 Typical)
AIR REQUIREMENTS	
Air Pressure	N/A
DISPLAY	
Resolution (max)	1920 x 1080
Viewing Angle (Typical)	89/89/89/89
Brightness (Standard)	1000 nits
Color Depth	8-bit
Backlight	LED

Note: Due to frequent technological advances, please contact Daisy for latest model specifications.

5. Block Diagram/Components

Per Control Drawing D303-100500, review the following sections to identify Model 2439MA components. ([Internal Hardware](#), [Internal Cable Assemblies](#), [External Cables/Connectors](#)).



5.1 Internal Hardware

No.	Part No.	Description
1	P040-900108	24" Resistive Touch Screen (EMI MESH)
2	P000-000163	24" LCD Monitor
3	I301-000029-02	4-Button Membrane Switch Assembly
4	I100-002483-02	ON/OFF Membrane Switch
5	P310-046000	Power Supply DC-DC (9-36V in, 12V out, 75W)
6	P310-036000	OSD Membrane Interface
7	P040-100023-01	Resistive Touch Screen Controller (Serial/USB)
8	P050-000303-01	Video Card (DIGI-VIEW ALR-1920)
9	P005-000021	LED Driver (24", HI-BRT)

5.2 Internal Cable Assemblies

No.	Part No.	Description
A	P130-000162	OSD Interface-to-Display Card Cable
B	I100-002478-01	OSD/POWER Cable
C	I100-002449	Video Controller Power Cable
D	I100-002481-01	Power Input Cable/338999 Connector
E	P131-000181	DP-to-D38999 Cable
F	P131-000181	HDMI PM-to-HDMI A Male Cable
G	P130-000189	USB-TO-Touch Screen Control Cable
H	I100-002078	Resistive Touch Screen Serial/USB/PWR Cable
I	I100-002640	LED Driver Cable
J	P130-000088	DIGITALVIEW LVDS Cable

5.3 External Cables/Connectors

No.	Part No.	Description
K (J1)	I100-002539	DC POWER IN Connection/Cable
L (J2)	P130-00190	DISPLAYPORT IN Video Connector/Cable
M (J3)	P131-00182	HDMI IN Video Connector/Cable
N (J4)	I100-002639	USB Touch Screen Connector/Cable



Model 2439MA External Connections

5.4 Jumpers/Pin Settings

JUMPERS/PIN SETTINGS FOR MODEL 2439MA

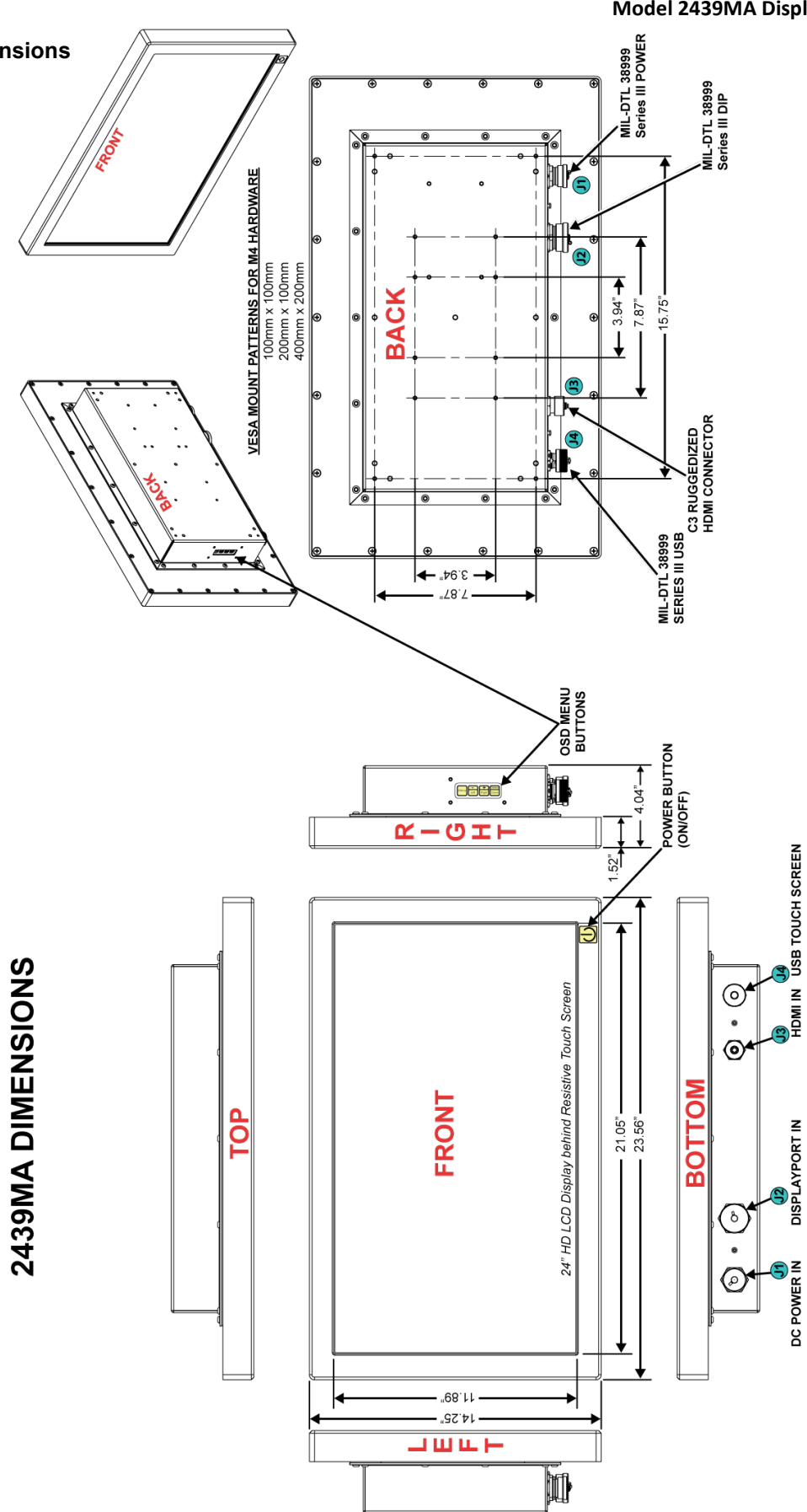
P000-000163 TO P050-000303-01 (ALT-1920)

<p>P000-000157</p> <p>MFR & MFR P/N: AUO G240HW01-V0</p> <p>SIZE: 24"</p> <p>RESOLUTION: 1920x1080</p> <p>PANEL VOLTAGE: 5VDC</p> <p>INPUT VOLTAGE: +12VDC</p> <p>VIDEO INTERFACE: LVDS</p>	<p>JA6</p>	<p>JA3: +5V</p> <p>JB1: 2-3</p> <p>JB2: 2-3</p> <p>JB3: 1-2</p> <p>JB4: OPEN</p> <p>JB5: 5-6</p> <p>JP6: OPEN</p>
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<p>SW1</p>	<p>SW2</p>
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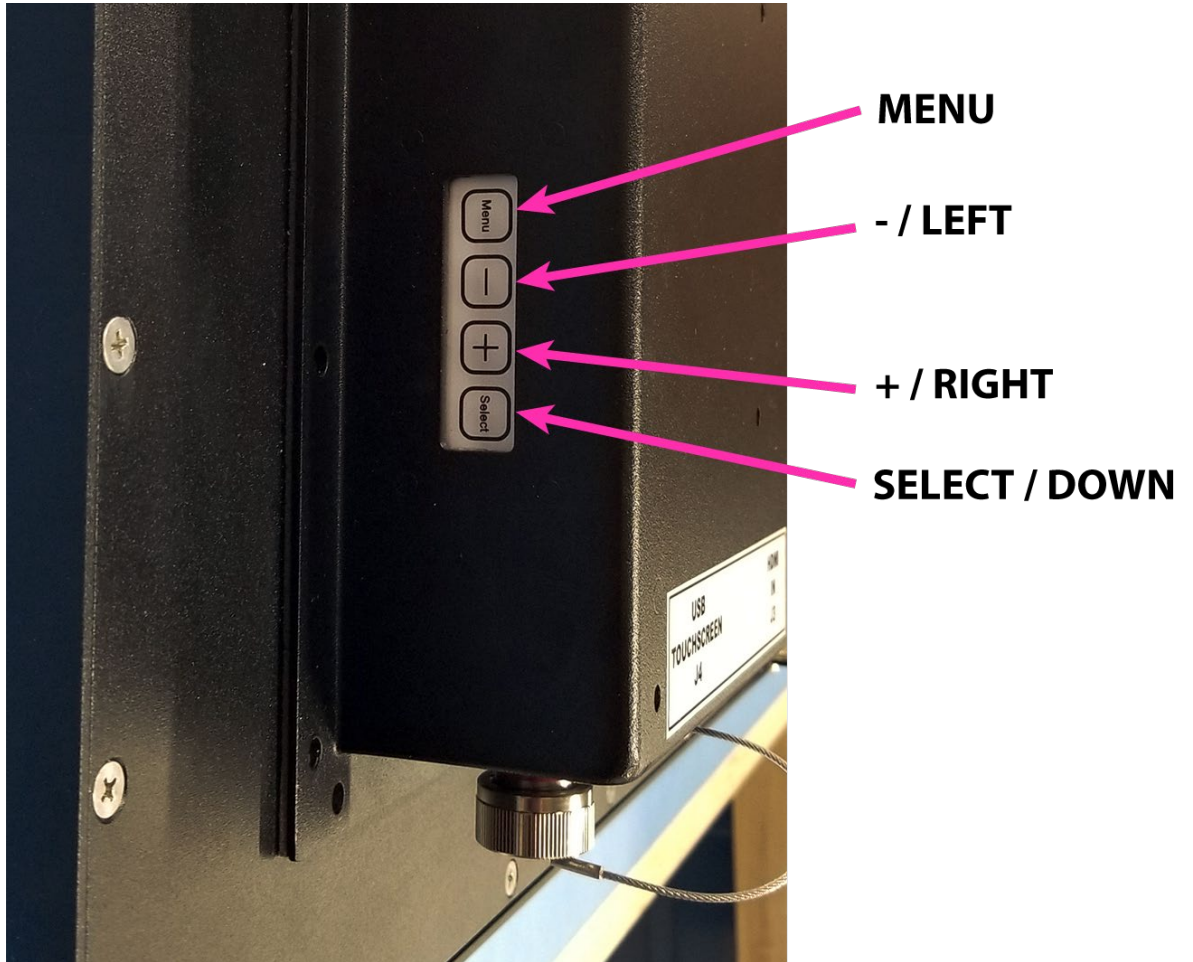
RED MARKS THE OPERATIONAL POSITION

6. Unit Dimensions












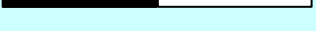



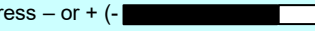

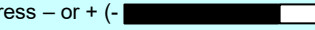






7. Display OSD Operator Control Buttons

The following section is a detailed description on the operation and specific settings of your Model 2439MA Display using the OSD buttons on the left side of the unit.











7.1 OSD Operation/LCD System Settings

OSD Functions

IMAGE		
	Brightness	Increase/decrease brightness level. Press – or + (-  +) Total: 100 steps
	Contrast	Increase/decrease contrast level. Press – or + (-  +) Total: 100 steps
	Sharpness	Increase/decrease sharpness level. Press – or + (-  +) Total: 8 steps
	Color	Auto: Auto RGB Calibration (Function in ARGB mode only)
		Color temp▶ (Adjust the warmness of the image displayed. The higher temperature the coolest image looks like. The lower temperature the warmest image looks like.) 4200k 5000k 6500k 7500k 9300k User ▶ R Press – or + (-  +) Total: 100 steps G Press – or + (-  +) Total: 100 steps B Press – or + (-  +) Total: 100 steps  Reset
DISPLAY (Function in ARGB mode only)		
	Auto Adjust	Auto adjust the positions, phase, frequency
	Phase	Fine tune the data sampling position (adjust image quality) Press – or + (-  +) Total: 100 steps
	Clock	Adjust the image horizontal size Press – or + (-  +) Total: 100 steps
	Display Position	Adjust image position
	Backlight**▶	
	Invert	B/L Invert: Invert for the backlight brightness
	Control	D/A / PWM: Selection for voltage level dimming control / PWM dimming control
	Frequency	Backlight frequency 100 ~ 440Hz in a step of 20
	B/L	Backlight brightness adjustment
SOUND (Function when HDMI and Display Port connected and selected)		
	Volume	Increase/decrease volume level, total: 100 steps Press – or + (-  +) Total: 100 steps
	Mute	Mute
	Output	Select audio output port Speakers: via CN1 & J1 connector PDIF: via CN11 connector

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		 SYSTEM ▶	
		Input: Select the input video signal Display Port VGA DVI/HDMI Autoscan: Enable the Auto source seek function	
		Timer: OSD Timeout in seconds Press – or + (- <input type="text"/> +) From ON, 5 to 60 (Total: 13 steps, ON standard for Always ON)	
	 MENU	Rotation: OSD menu rotation in degree 90 180 270	
	 MENU	Position : Adjust OSD menu position	
		Transparency: Set OSD transparency Press – or + (- <input type="text"/> +) Total: 100 steps	
		Reset: Load factory default settings. Press down on OSD keypad to factory reset	

8. Revision History

REVISION	CHANGE DESCRIPTION	DATE	AUTHOR
-	Initial Release	3/16/2021	BM