

Part Number: **4175801XX-3**

Model: **HE-1400v2 General**

DATE	VERSION	SUMMARY OF CHANGES	NOTE
		Conformal Coating Required	
27 June 2017	20	<p>Production release HE-1400v2 which can support wider temperature range</p> <ul style="list-style-type: none"> <li>- most component used can be operated at wider temperature range</li> <li>- add conformal coating</li> </ul> <p>Firmware V1.03.00 used on U10 (same as standard ALR-1400, 417580022-3)</p> <p><b>Bare PCB: 017580002-5; P/N 417280120-3</b></p> <p>BIOS: U10, V1.03.00 (Flash GD25Q40C)(same as 417580022-3)            U14, Checksum:B0 (ARGB DDC, 24C02) (same as 417580022-3)            U15, Checksum: 2C (DVI DDC, 24C02) (same as 417580022-3)</p>	ECN# TW0688007
12 September 2017	20 to 21	<p><b>Hardware change :</b></p> <p>Running change on C32 capacitor from 22uF/0603 to 47uF/0603 to improve the ripple voltage of the D/A conversion circuit for analog backlight brightness control (when JB5 3-4 closed).</p> <p><b>Upgrade firmware on U10 to V1.06.00</b></p> <ol style="list-style-type: none"> <li>1) Changed Gamma values from (0.4,0.6,1.0,1.6,2.2) to (1.8,2.0,2.2,2.4,2.6) with also changing it's corresponding Gamma RS-232 command from 0x9D,(0x30,0x31,0x32,0x33,0x34) to 0x9D,(0x35,0x37,0x32,0x41,0x43).</li> </ol> <p>Bug fixed</p> <ol style="list-style-type: none"> <li>2) Correct the RS-232 command range of Backlight brightness control (0xe0) from '0"0' ~ 'F"F' to '0"0'~'6"4'.</li> <li>3) Fixed 0xC1 UART acknowledge bug.</li> </ol> <p>New panel supported:</p> <ol style="list-style-type: none"> <li>4) Kyocera TCG121XGLPBPNN-AN40 1024x768 panel. (SW1=0110 001x, SW2=11, 3.3V LVDS)</li> <li>5) LG LM190E09-TLD1 1280x1024 panel. (SW1=0110 010x, SW2=01, 5V LVDS) (Tested by DV-UK customer)</li> <li>6) Kyocera T51750GD065J-LW-BGN 640x480 panel (SW1=1001 011x, SW2=11, 3.3V TTL)</li> <li>7) AUO G121XN01.0 1024x768 panel (SW1=1010 001x, SW2=11, 3.3V LVDS) (Tested by UK customer)</li> </ol> <p><b>Bare PCB: 017580002-3; P/N 417580121-3</b></p> <p>BIOS: U10, V1.06.00 (Flash GD25Q40C)(changed)            U14, Checksum:B0 (ARGB DDC, 24C02)(no change)            U15, Checksum: 2C (DVI DDC, 24C02)(no change)</p>	ECN# TW0688013

<p>14 April 2021</p>	<p>21 to 22</p>	<p><b>Upgrade firmware on U10 to V1.08.00</b></p> <ol style="list-style-type: none"> <li>1) Support 'menu/power' key for 5 button switch mount control operation: Uses 'MENU' button to control the power on/off function: <ul style="list-style-type: none"> <li>- Power on : Press 'MENU' button</li> <li>- Power off : Hold 'MENU' button for 3 - 4 secs.</li> <li>- And the jumper JP6 must be always closed.</li> </ul> </li> <li>2) Support Default Power on/off selection on the OSD menu and added RS-232 commands : <ul style="list-style-type: none"> <li>Default Power On ('0xEE 0x6B 0x50 0x31') ;</li> <li>Default Power Off ('0xEE 0x6B 0x50 0x30') ;</li> <li>Default Power Query ('0xEE 0x6B 0x50 0x3F').</li> </ul> </li> <li>3) Added 0xC9 RS-232 command for Query video input status.</li> <li>4) Make RS-232 command (0xF7) can be controlled when no signal state.</li> <li>5) Make 'No signal' message displayed on screen without OSD menu displayed under no signal state be reported 0xBB 0x30.</li> </ol> <p>Bug fixed :</p> <ol style="list-style-type: none"> <li>6) Fixed the controller will turn 'ON' again after using 'MENU' button to control the power on/off function when unplug and plug back the input signal MENU button On/Off issues.</li> </ol> <p>New panel supported :</p> <ol style="list-style-type: none"> <li>7) Support AUO G104STN01V0 (800x600) panel. (SW1=0100 1010, SW2=11)</li> <li>8) Fixed the image flicker issues on NEC NL8060BC31-47D panel (SW1=1110 1010, SW2=10).</li> <li>9) Support NEC NL10276BC24-21 1024x768 panel. (SW1=1001 001x, SW2=10) Tested 640x480, 800x600 and 1024x768 60Hz input modes on VGA and DVI ports.</li> <li>10) Support Sharp LQ121S1LG81 panel. (SW1=1100 1010, SW2=10) Support 800x600 resolution input mode only.</li> <li>11) Support NEC NL10276BC20-04 panel (SW1=0101 0010, SW2=10).</li> <li>12) Support Mitsubishi AA050AA11 640x640 panel (SW1=1011 0110, SW2=11).</li> <li>13) Support Ampire AM-1024768V1TZQW-A0H 1024x768 panel (SW1=0111 0010, SW2=11). (1 = ON, 0 = OFF)</li> </ol> <p><b>Hardware no change</b></p> <p><b>Bare PCB: 017580002-5; P/N 417580122-3</b></p> <p>BIOS: U10, V1.08.00 (Flash GD25Q40C)(new) U14, Checksum:B0 (ARGB DDC, 24C02)(no change) U15, Checksum: 2C (DVI DDC, 24C02)(no change)</p>	<p>ECN# TW0688126</p>
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**Prepared by: DV-HK**

**Date: 14 April 2021**