

Part Number: **4175801XX-3/5**

Model: **HE-1400v2 General**

DATE	VERSION	SUMMARY OF CHANGES	NOTE
		Conformal Coating Required	
27 June 2017	20-3	Production release HE-1400v2 which can support wider temperature range - most component used can be operated at wider temperature range - add conformal coating Firmware V1.03.00 used on U10 (same as standard ALR-1400, 417580022-3) Bare PCB: 017580002-5; P/N 417580120-3 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)	ECN# TW0688007
12 September 2017	20-3 to21-3	Hardware change : 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). Upgrade firmware on U10 to V1.06.00 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). Bug fixed 2) Correct the RS-232 command range of Backlight brightness control (0xe0) from '0"0' ~ 'F"F' to '0"0'~'6"4'. 3) Fixed 0xC1 UART acknowledge bug. New panel supported: 4) Kyocera TCG121XGLPBPNN-AN40 1024x768 panel. (SW1=0110 001x, SW2=11, 3.3V LVDS) 5) LG LM190E09-TLD1 1280x1024 panel. (SW1=0110 010x, SW2=01, 5V LVDS) (Tested by DV-UK customer) 6) Kyocera T51750GD065J-LW-BGN 640x480 panel (SW1=1001 011x, SW2=11, 3.3V TTL) 7) AUO G121XN01.0 1024x768 panel (SW1=1010 001x, SW2=11, 3.3V LVDS) (Test by UK customer) Bare PCB: 017580002-5; P/N 417580121-3 BIOS: U10, V1.06.00 (Flash GD25Q40C)(changed) U14, Checksum:B0 (ARGB DDC, 24C02)(no change) U15, Checksum: 2C (DVI DDC, 24C02)(no change)	ECN# TW0688013

14 April 2021	21-3 to 22-3	Upgrade firmware on U10 to V1.08.00 1) Support 'menu/power' key for 5 button switch mount control operation: Uses 'MENU' button to control the power on/off function: - Power on : Press 'MENU' button - Power off : Hold 'MENU' button for 3 - 4 secs. - And the jumper JP6 must be always closed. 2) Support Default Power on/off selection on the OSD menu and added RS-232 commands : - Default Power On ('0xEE 0x6B 0x50 0x31') ; - Default Power Off ('0xEE 0x6B 0x50 0x30') ; - Default Power Query ('0xEE 0x6B 0x50 0x3F'). 3) Added 0xC9 RS-232 command for Query video input status. 4) Make RS-232 command (0xF7) can be controlled when no signal state. 5) Make 'No signal' message displayed on screen without OSD menu displayed under no signal state be reported 0xBB 0x30. Bug fixed : 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. New panel supported : 7) Support AUO G104STN01V0 (800x600) panel. (SW1=0100 1010, SW2=11) 8) Fixed the image flicker issues on NEC NL8060BC31-47D panel (SW1=1110 1010, SW2=10). 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. 10) Support Sharp LQ121S1LG81 panel. (SW1=1100 1010, SW2=10) Support 800x600 resolution input mode only. 11) Support NEC NL10276BC20-04 panel (SW1=0101 0010, SW2=10). 12) Support Mitsubishi AA050AA11 640x640 panel (SW1=1011 0110, SW2=11). 13) Support Ampire AM-1024768V1TZQW-A0H 1024x768 panel (SW1=0111 0010, SW2=11). (1 = ON, 0 = OFF) Hardware no change Bare PCB: 017580002-5; P/N 417580122-3 BIOS: U10, V1.08.00 (Flash GD25Q40C)(new) U14, Checksum:B0 (ARGB DDC, 24C02)(no change) U15, Checksum: 2C (DVI DDC, 24C02)(no change)	ECN# TW0688126
27 February 2023	22-3 to 23-3	Upgrade firmware on U10 to V1.09.00 (1) Improve EDID update process to set EDID data will not read/write until the panel DIP switch setting has been changed to other resolution. (2) Changed "+" / "-" button and RS-232 command to control the Backlight brightness hotkey function. (3) Changed "Up" / "Down" button and RS-232 command to control the Source select hotkey function. Hardware no change Bare PCB: 017580002-5; P/N 417580123-3 BIOS: U10, V1.09.00 (Flash GD25Q40C)(new) U14, Checksum:B0 (ARGB DDC, 24C02)(no change) U15, Checksum: 2C (DVI DDC, 24C02)(no change)	ECN# TW0688171

19 February 2023	23-3 to 24-3	Upgrade firmware on U10 to V1.10.00 (1) Fixed the picture noise for double pixel panels. (2) Add AUO G190EG02-V1 and G190ETN01.601 1280x1024 panels support Use SW1=1001 0100, SW2: 01 (1=ON, 0=OFF) dip switch setting. Hardware no change Bare PCB: 017580002-5; P/N 417580124-3 BIOS: U10, V1.10.00 (Flash GD25Q40C)(new) U14, Checksum:B0 (ARGB DDC, 24C02)(no change) U15, Checksum: 2C (DVI DDC, 24C02)(no change)	ECN# TW0688190
		Start produce REACH version HE-1400v2	
13 March 2025	24-5	Production release REACH version of HE-1400v2 - No hardware and firmware change. - Updated all production document's P/N with suffix(-5) for REACH materials if applicable. Hardware and firmware no change (same as 417580124-3) Bare PCB: 017580002-5; P/N 417580124-5 BIOS: U10, V1.10.00 (Flash GD25Q40C)(no change) U14, Checksum:B0 (ARGB DDC, 24C02)(no change) U15, Checksum: 2C (DVI DDC, 24C02)(no change)	ECN# TW0688218

Prepared by: DV-HK
Date: 13 March 2025