## VG-873/874/870B/871B Version Up history

Date	Version	Contents
2012/4/27	Ver.6.00	• Fixed problem of DVI/VGA DDC/CI. (VM-1811)
2012/6/15	Ver.6.10	•Add setting of DisplayPort SSC Disable/Enable (VM-1820/1820A/1826) •Fixed problem of DisplayPort List(EDID) display. (VM-1820) •Fixed problem of SDI Payload Byte1 setting. (VM-1821)
2012/7/6	Ver.6.20	•Add setting of DisplayPort Audio ON/OFF. (VM-1820/1820A/1826) •Fixed problem of DisplayPort Link Set Mode (VM-1820/1820A/1826)
2012/7/31	Ver.6.30	•Add internal sample programs. •Fixed problem of DisplayPort List(Dynamic Range) display. (VM-1820/1820A/1826)
2012/8/30	Ver.6.40	Correct setting value of DisplayPort M audio setting (internal transmitter setting) (VM-1820A/1826) Improve processing of DisplayPort Link Training (VM-1820A/1826) Add setting of SDI Payload (Sampling Structure) (VM-1821) Fixed problem of "Wait"setting of HDCP (by HDMI) processing. (VM-1823)
2012/9/24	Ver.6.50	•Fixed problem of DisplayPort Split mode (VM-1820/1820A) •Fixed problem of 4K/60p Bitmap (3840x2160) display (VM-1824/1824A/1825/1826) •Fixed problem of Inverse display after changing level of the timing format 4Kx2K/60p (VM-1824/1824A/1825/1826) •Fixed problem of HDMI Color Depth setting. (VM-1823)
2012/10/26	Ver6.60	•Add eDP support. When SIG(signal) ON is selected, the power voltage is displayed. •Fixed problem of dot clock of 16-bit outptu (VM-1823) •Fixed HDCP problem (VM-1823) •Fixed problem of 2nd board display problem when installed 2 pcs of VM-1824(A).
2012/11/9	Ver6.61	Update contents:  1. HDCP/CEC/EDID multi display option (VM-1823)  Bug fix  1. Fix following problem.  When using HDCP/CEC/EDID multi-display function,  Program Edit→Output→All Output→HDCP→Display Select  In this case, if HDCP Ri NG (Ri does not match), the result did not show as NG.
2012/11/30	Ver6.70	Update contents:  1. License option: V total, H Backp can be changed by IND/DEC key. This is effective by "Variable Dot Clock" lisence.  2. VT-7004 license support: pattern 16  Bug fix  1. Correct the symptom that when using 4Kx2K timing and use "drawing clear" command, the window pattern appears.  2. Correct the symptom that in HDCP certification, even if Ri is matched, "NG" appears occasionally.
2012/12/17	Ver6.80	Update contents:  1. "APDC 4K" pattern is added in "Monoscope" area. No.1196-1199. License option for APDC pattern is necessary.  2. VM-1824, 1824-A: License option "Disp Over 4K". It supports 5K x 1.5K. Only available for Octal (8-bit) – Mode 2 and 3.  3. VM-1825: 3D flag is supported.
2013/1/25	Ver6.90	Update contents: Add internal pattern Problem fix: It is correctly output now from DisplayPort YC422(170MHz or higher frequency) (VM-1820/1820A/1826)
2013/3/12	Ver 7.00	[Problem fix] Correct the setting value of DisplayPort Secondary Data Packet(VM-1820A/1826)
2013/5/23	Ver7.10	[Problem fix and change operation] • Correct HDMI AVI InfoFrame Video Code from 32 to 33 in timing # 1216, 1236 and 1256. • VM-1825 (V-by-One): when bit-width is over 10-bit, it stops output. (spec limit is 10-bit).

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	Ver7.20	[Problem fix]
2010/0/21	1017.120	•Correct the symptom that picture of one of VM-1825 delays in timing 4K2K 120p Mode7 (Prog#1397).
		• Dot Clock correction (Timing # 1012,1014,1016,1018,1020,1022,1201,1261)
		TV Mode correction (Timing # 1201-1209,1216,1261-1269,1389-1392)
		•VM-1820 & VM-1826
		Correct the symptom that Link Training was executed twice when HPD changes.
		Correct the symptom that inproper value of VB-ID Interlace_Flag, FieldID_Flag is output in interlace timing.
		Correct the symptom that HDCP is not executed correctly when connecting with Repeater.
		Correct the symptom that FEDID Read ACK Error appears when reading the EDID of devices that can respond to AUX DEFER.
2013/11/25	Ver.7.30	[Function add]
		• Add terminal command
		QHPD4[30H 81H]: receive HPD status.
		SCON4[20H BBH]: set output terminal
		LCON4[20H BCH]: receive output terminal
		EXCON4[24H 4CH]: set output terminal.
		•CEA-861F timing support
		Add program data (Prg.1701 to 1768, 1771 to 1779, 1781 to 1789, 1791 to 1799, 1801 to 1824, 1826 to 1849)
		Color difference ITU-R BT.2020 support
		HF-VSIF support
		Audio InfoFrame(Coding ExtType)
		Terminal command supported.(SIF4/LIF4/ SVIF4/ LVIF4)
		NAME/LIST: EDID(GUI)
		•ON/OFF setting and version in AVI InfoFrame can be changed. (VM-1823)
		[Problem fix]
		•Correct the operation to: when Program Edit: HDMI Mode is 3(HDMI1.1), it is worked as HDMI.
		• Correct the symptom of eDP of VM-1826(DP)
		Correct the operation to: when SIG ON is set, power control can not be changed.
		•VM-1817
		When terminal command SHDMI4 [20H 36H](HDMI data registration) set HDMI Mode as 0, change the symptom
		to make HDMI output becomes OFF. (VM-1817, 1822, 1823)
		• Correct the symptom that when InfoFrame output setting is changed likeON->OFF->ON, InfoFrame was not sent out. (VM-1817, 1822)
		• Correct the symptom that in 4K timing, after YCbCr4:2:2 10bit or higher signal is output, then, 8bit signal is output, the video is not output.(VM-1823)
		In 8bit mode, correct the situation to me PB1 of GCP packet becomes 0x00.
2013/12/26	Ver7.40	[Problem fix]
2013/12/20	VEI7.40	• Correct internal program data (Index Data Hdisp 4096>3840)
		(Prg.1766, 1777, 1787, 1797, 1822, 1847)
		• Correct the output data when the setting is HDMI:VSIF: Video Format=3D
		• Fix the problem when switching program of 4096 colors mode in PAL timing.
		• Corret the below problems in the NAME/LIST: HDMI LIST.
		-Problem that YCbCr 4:2:0 is displayed as YC444.
		-Problem that dB value of Audio level changes when chainging "Audio output:Width".
		-Problem that there is no HD DVD and PMP in the item of SPD InfoFrame:Source Device.
		-Problem that there is no Refer Extention in the item of Audio InfoFrame: Coding Type.
		-Problem that there is no Coding Extention Type in the Audio InfoFrame.
		-Problem that there is not LFE PB Level in the Audio InfoFrame.
		-Problem that DVD-Audio can not be set in the item of ACP Packet: ACP Type.
		-Problem that number is displayed instead of GUI in the item of ACP Packet: CopyPermission and CopyNumber.
		-Problem that only 14:9 is displayed in the item of AVI InfoFrame: Acitve Aspect.
		-Problem that H and V is oppositely displayed in the item of AVI InfoFrame: Scaling.
		-Problem that there is no Extended in the item of AVI InfoFrame: Colorimetery.
		-Problem that up to xvYCC709 is displayed in the item of AVI InfoFrame: Extended Colorimetry.
		-Problem that there is no YCC Quantization Range in the AVI InfoFrame.
		-Problem that there is no IT Content Type in the AVI InfoFrame.
		-Problem that menu of GamutMetaData: Packet_GBD_Vertices_Data is displayed as Data1 to 8, but pattern is displayed as Data0 to 7.
		-Problem that number is displayed in the item of GamutMetaData: PacketSeq instead of GUI.
		-Problem that the value can not be set in the item of GamutMetaData: NoCurrentGBD.
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		Problem that if user does the following operation, eDP can not be set anymore.  VM-1826(DP) unit is installed.  Execute program.  Configration -> eDP:Enable Configration -> General -> CUSTOM Key1:SIG ON Program Edit -> Digital Output -> eDP -> PowerSupplyControl:Manual -> PowerSupplySelect:SV or 3.3 By pressing CUSTOM Key1, SIG ON status. Program Edit -> Digital Output -> eDP When it is SIG ON, user can not enter setting menu of eDP.  Execute program again. By pressing CUSTOM Key1, user can not switch SIG ON and OFF, and can not set eDP setting again.  (VM-1823)Fix the problem that in the RGB/YCbCr setting of AVI InfoFrame, the item (reserved1) to (IDO-Defined) is not output based on standard.  (VM-1823) Fix the problem that when EDID check sum error appears, all data becomes 00.
2014/2/4	Ver7.50	[Problem fix] • Fix the problem of displaying Opt40 "Seisyun no Uta" by the timing of 5K3K and 4K. • Correct the internal program data. (DP: Audio InfoFrame: CodingType EXT: Setting range of DP should be 1 to 3. So, change 4 to 1 (not use). [Function add] • Name/List: HDMI • Add page of Vendor Specific InfoFrame. • Add display of setting of ACP Packet:Super Audio (e.g. Count_A). (Add display of Count_A to S, CCI_Flags_Q_A to S, Move_A to S). • Add display of Video Width (output bit number). (Add display of Auto/8/10/12/16bit).
2014/3/7	Ver7.60	[Function add] • Add 8-lane (8-split) mode of VM-1825(V-by-One HS) • Improve display of NAME/LIST: HDMI List • Improve display of NAME/LIST: EDID(GUI)
2014/4/16	Ver7.70	[Function add] •HDMI CTS Tool supported (Option) • New command support DDC data send command (SDDC4[30H 82H]) DDC data receive command(LDDC4[30H 83H])
2014/4/24	Ver7.80	[Function add] HDMI2.0 CTS functions 1.HDMI2.0 CTS TOOL license(option) and command supported Notice: HDMI2.0 CTS TOOL is GUI in SP-8870 software(Ver.7.50 or upper). 2.YC420 Test Pattern (OPT 79 [Colorbar & Burst])
2014/5/12	Ver 7.90	[Improvement & Function add] 1. Operation improvement of Configration> DP> Link Set Mode 2. Program execution speed of DisplayPort(VM-1820A, VM-1826) becomes faster. [Problem fix] 1. VM-1820A: when HPD is LOW (Unplug), correct the situation that DP Output ON/OFF setting is not reflected. 2. VM-1820A: correct the situation that EDID Block1 data is not written. 3. VM-1820A/1826: when polarity of Hsync/Vsync changes, Idle pattern is newly inserted. 4. VM-1820: after power on, when the program is output first time, correct the situation that V back porch value is output over 1 than the actual value.
2014/6/24	Ver 7.92	[Problem fix]  1. Sample program data fixed : Program # 1630's Hbp fixed to 216(218 is wrong)  2. HDMI CTS : Fixed below Vendor Spec. InfoFrame problems ;  a)3D pattern could not change in HF-VSIF 3D Structure b)Fixed Disparity Length and Data number when Disparity version of HF-VSIF is 3.  3.Main board FPGA fixed(DDR access error)

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2014/8/8	Ver 8.00	[Function add]
		SP-8871 support (option license Pattern 17) [Problem fix]
		Fix the problem of split mode setting of DisplayPort and V-by-One unit.
2014/9/17	Ver 8.10	[Function add]
		HDCP : improve DETAIL mode.     Improve HDMI list. (it becomes same as Program List)
2014/12/10	Ver8.20	[Improvement]
2014/12/10	VC10.20	1. Terminal command: COLOR [26H]. It became same operation as older models.
		[Problem fix] 1. VM-1824: Correct problem of pattern change.
		2. VM-1824: Correct problem in the split mode Quad(8bit) + Split4.
		3. Fix the problem that Bitmat image disappeared when HDCP is set ON during displaying YCbCr4:2:0 bitmap.
2015/1/5	Ver8.30	[Improvement] 1. NAME/LIST: output bit of each interface unit is displayed with program name.
		[Problem fix]
		1. Internal program data for SDI is modified. Video format is fixed at YCbCr 4:2:2 when "SD Format" is set as SD/HD.
		2. Add new mode to change pixel allocation in order to avoid problem of BMP display of 4K picture.
2015/2/2	Ver8.40	[Problem fix]
		1. Correct the symptom that Dot Clock is not output correctly. (127.3MHz to 127.9MHz, 135.8MHz to 135.9MHz).
2015/2/17	Ver8.50	[Problem fix] 1.Correct the problem of scrolling of 30p60i.
2015/2/24	Ver8.60	Custom made support.
2015/6/30	Ver8.70	[Improvement] 1. "Bit" display can be set ON/OFF by configuration.
		[Problem fix]
		<ol> <li>VM-1821 (SDI): correct the symptom that when several interfaces are installed, audio is not output.</li> <li>VM-1816 (Parallel): correct the problem of Enable/Disable setting of CLK signal.</li> </ol>
2045/0/20	\/a=0.00	
2015/9/28	Ver8.80	[Improvement] 1. Add new command, QEDID4[24H 4EH]: EDID Read (even it detects error, it will read EDID.)
		[Problem fix] 1. Fix the problem of Command: LKSV4[24H 34H] (Get KSV).
		When HDCP status is NG, it returns zero now.
		2. Correct the problem of H RAMP Down Up Pattern.
2015/11/17	Ver.8.90	[Improvement] 1. Change the digit of V-sync setting from 2 to 3.
2016/5/9	Ver.9.00	[Problem fix] 1. VM-1825: correct the problem of level change. Timing# 1381 (3840x2160/60p S0), Pattern# 1060 (256 ramp) The level change from
		254 to 255 was not normal.
2016/6/3	Ver9.10	[Problem fix]
		1. VM-1820A: correct problem of abnormal display of user edit timing.
2016/6/29	Ver9.20	[Problem fix]
		1. VM-1825: correct the symptom that image remained in Window pattern after pressing RGB keys.
2016/8/12	Ver9.30	[Improvement]
		1. Add new font (32*32, 64*64) for 4K display. It is used in Name, Character and List patterns.
2016/10/12	Ver9.40	[Improvement]
		1. 4K supported board: improve control of split mode.

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2017/6/21	Ver9.50	[Improvement]
		1. Support VM-1821-Z (SDI unit).
2019/1/16	Ver9.60	[Problem fix]
		1. The AVI InfFrame setting is changed from "3" to "2". (only applied the program that has AVI InfoFrame setting as "3" originally.)
2019/12/26	Ver9.70	[Improvement]
		1. VM-1815: add LVDS 165MHz support option.