

# INSPECTION

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## **1. Set Inspection**

### **1.1. Application**

The inspection procedures specified in this item shall be applied to the inspection of the LCD1560VM unit.

### **1.2. Inspection Conditions**

Unless otherwise specified, inspection shall be carried out under the following conditions.

#### **1.2.1. Power Source Voltage**

AC voltage: AC 100 - 120V/ 220 - 240V  $\pm$  5%, 50/60Hz

#### **1.2.2. Equipment to be Used**

Equipment that can generate an output of the adjusted VG-819 unit or equivalent.

The signal timing for the inspection ROM shall conform to the table provided in Paragraph 1.2.8 herein.

#### **1.2.3. Inspection Cables/Connections**

- 1) Connections between the unit under inspection and the VG-819 shall be made through D-SUB connector of the unit under inspection and the cable that can carry each output of the VG-819, as specified below.

BNC-DSUB (female) connector

- 2) For connections to the power supply, an AC cable for LCD1560VM shall be used.

#### **1.2.4. Brightness Setting**

Unless otherwise specified, inspection shall be carried out under the condition that the LCD brightness is set at the highest level.

#### **1.2.5. Inspection Mode**

Each inspection shall be carried out in the inspection mode specified in each relevant inspection item.

The detailed setting for each mode shall be specified in Paragraph 1.2.8 herein.

#### **1.2.6. OSM Functions**

If checking and operation by OSM are specified in each inspection item, display and operation of the OSM shall be carried out by operating the push switches of the unit under inspection, according to the instructions.

Outline operation is described in Item 1.3, "Operation of OSM control."

#### **1.2.7. Configuration of Inspection Jigs**

Signal source

- 1) A video signal generator shall be used, which can generate an output of the VG-819 unit or equivalent.

### 1.2.8. Inspection Mode Setting

The respective setting data shall be the data for the VG-819.

Signal		VG-819 setting values				
Mode		01	02	03 Not used	04	05
H	CLOCK [MHz]	28.322	35.500	21.053	28.322	35.500
	HPERIOD [DOT]	900	936	848	900	936
	HDISP [DOT]	720	720	640	720	720
	HSYNC [DOT]	108	72	64	108	72
	HBACKP [DOT]	54	108	84	54	108
	HDSTART [DOT]	0	0	0	0	0
	HDWIDTH [DOT]	0	0	0	0	0
V	VTOTAL [H]	449	446	440	449	446
	VDISP [H]	350	350	400	400	400
	VSYNCR [H]	2	3	8	2	3
	VBACKP [H]	60	61	25	35	42
	EQP FP [H]	0	0	0	0	0
	EQP BP [H]	0	0	0	0	0
	SERRATION	OFF	OFF	OFF	OFF	OFF
	EQP	OFF	OFF	OFF	OFF	OFF
	VDSTART [H]	0	0	0	0	0
	VDLINE [H]	0	0	0	0	0
	SCAN	Nonint	Nonint	Nonint	Nonint	Nonint
OUTPUT	NRZ/RZ	NRZ	NRZ	NRZ	NRZ	NRZ
	HS	POSI	POSI	NEGA	NEGA	NEGA
	VS	NEGA	NEGA	NEGA	POSI	POSI
	CS	NEGA	NEGA	NEGA	NEGA	NEGA
	HD	NEGA	NEGA	NEGA	NEGA	NEGA
	VD	NEGA	NEGA	NEGA	NEGA	NEGA
	CLOCK	NEGA	NEGA	NEGA	NEGA	NEGA
	SYNC ON					
	RGB	POSI	POSI	POSI	POSI	POSI
	VIDEO	0.70V	0.70V	0.70V	0.70V	0.70V
	SETUP	OFF	OFF	OFF	OFF	OFF
	CLKMODE	1/2	1/2	1/2	1/2	1/2
	CLKOUT	ALL	ALL	ALL	ALL	ALL
	DISP,1CH,2CH	POSI	POSI	POSI	POSI	POSI
	SW0,SW1	OFF	OFF	OFF	OFF	OFF
	RGB	8 bit	8 bit	8 bit	8 bit	8 bit
	R(7-0),G(7-0),B(7-0)	11111111	11111111	11111111	11111111	11111111
	DELAY	ON	ON	ON	ON	ON
	CLOCK DELAY	4 nsec	4 nsec	4 nsec	4 nsec	4 nsec
PAT SEL		OPTION 2	OPTION 2	OPTION 2	OPTION 2	OPTION 2
CHRA PATTERN	Format	1	1	1	1	1
	Code	82	82	82	82	82
	Font	16*16	16*16	16*16	16*16	16*16
	Cell	16*16	16*16	16*16	16*16	16*16
GRAY	Direction : 0	L0: 0 L1: 17 L2: 34 L3: 51 L4: 68 L5: 85 L6: 102 L7: 127 L8: 143 L9: 159 LA: 175 LB: 191 LC: 207 LD: 223 LE: 239 LF: 255				
OPTION 2		(Note 2)				

Signal			VG-819 setting values				
Mode			06	07	08	09	10
H	CLOCK	[MHz]	25.18	30.24	31.5	31.5	36.0
	HPERIOD	[DOT]	800	864	832	840	832
	HDISP	[DOT]	640	640	640	640	640
	HSYNC	[DOT]	96	64	40	64	56
	HBACKP	[DOT]	48	96	128	120	80
	HDSTART	[DOT]	0	0	0	0	0
	HDWIDTH	[DOT]	0	0	0	0	0
V	VTOTAL	[H]	525	525	520	500	509
	VDISP	[H]	480	480	480	480	480
	VSYNC	[H]	2	3	3	3	3
	VBACKP	[H]	33	39	28	16	25
	EQP FP	[H]	0	0	0	0	0
	EQP BP	[H]	0	0	0	0	0
	SERRATION		OFF	OFF	OFF	OFF	OFF
	EQP		OFF	OFF	OFF	OFF	OFF
	VDSTART	[H]	0	0	0	0	0
	VDLINE	[H]	0	0	0	0	0
	SCAN		Nonint	Nonint	Nonint	Nonint	Nonint
OUTPUT	NRZ/RZ		NRZ	NRZ	NRZ	NRZ	NRZ
	HS		NEGA	NEGA	NEGA	NEGA	NEGA
	VS		NEGA	NEGA	NEGA	NEGA	NEGA
	CS		NEGA	NEGA	NEGA	NEGA	NEGA
	HD		NEGA	NEGA	NEGA	NEGA	NEGA
	VD		NEGA	NEGA	NEGA	NEGA	NEGA
	CLOCK		NEGA	NEGA	NEGA	NEGA	NEGA
	SYNC ON			G			
	RGB		POSI	POSI	POSI	POSI	POSI
	VIDEO		0.70V	0.70V	0.70V	0.70V	0.70V
	SETUP		OFF	OFF	OFF	OFF	OFF
	CLKMODE		1/2	1/2	1/2	1/2	1/2
	CLKOUT		ALL	ALL	ALL	ALL	ALL
	DISP,1CH,2CH		POSI	POSI	POSI	POSI	POSI
	SW0,SW1		OFF	OFF	OFF	OFF	OFF
	RGB		8 bit	8 bit	8 bit	8 bit	8 bit
	R(7-0),G(7-0),B(7-0)		11111111	11111111	11111111	11111111	11111111
	DELAY		ON	ON	ON	ON	ON
	CLOCK DELAY		4 nsec	4 nsec	4 nsec	4 nsec	4 nsec
PAT SEL			OPTION 2	OPTION 2	OPTION 2	OPTION 2	OPTION 2
CHRA PATTERN	Format		1	1	1	1	1
	Code		82	82	82	82	82
	Font		16*16	16*16	16*16	16*16	16*16
	Cell		16*16	16*16	16*16	16*16	16*16
GRAY	Direction : 0		L0: 0 L1: 17 L2: 34 L3: 51 L4: 68 L5: 85 L6: 102 L7: 127 L8: 143 L9: 159 LA: 175 LB: 191 LC: 207 LD: 223 LE: 239 LF: 255				
OPTION 2			(Note 2)				

Signal			VG-819 setting values				
Mode			11	12	13	14	15
H	CLOCK	[MHz]	36.0	40.0	49.5	50.0	56.25
	HPERIOD	[DOT]	1024	1056	1056	1040	1048
	HDISP	[DOT]	800	800	800	800	800
	HSYNC	[DOT]	72	128	80	120	64
	HBACKP	[DOT]	128	88	160	64	152
	HDSTART	[DOT]	0	0	0	0	0
	HDWIDTH	[DOT]	0	0	0	0	0
V	VTOTAL	[H]	625	628	625	666	631
	VDISP	[H]	600	600	600	600	600
	VSYNC	[H]	2	4	3	6	3
	VBACKP	[H]	22	23	21	23	27
	EQP FP	[H]	0	0	0	0	0
	EQP BP	[H]	0	0	0	0	0
	SERRATION		OFF	OFF	OFF	OFF	OFF
	EQP		OFF	OFF	OFF	OFF	OFF
	VDSTART	[H]	0	0	0	0	0
	VDLINE	[H]	0	0	0	0	0
	SCAN		Nonint	Nonint	Nonint	Nonint	Nonint
OUTPUT	NRZ/RZ		NRZ	NRZ	NRZ	NRZ	NRZ
	HS		POSI	POSI	POSI	POSI	POSI
	VS		POSI	POSI	POSI	POSI	POSI
	CS		NEGA	NEGA	NEGA	NEGA	NEGA
	HD		NEGA	NEGA	NEGA	NEGA	NEGA
	VD		NEGA	NEGA	NEGA	NEGA	NEGA
	CLOCK		NEGA	NEGA	NEGA	NEGA	NEGA
	SYNC ON						
	RGB		POSI	POSI	POSI	POSI	POSI
	VIDEO		0.70V	0.70V	0.70V	0.70V	0.70V
	SETUP		OFF	OFF	OFF	OFF	OFF
	CLKMODE		1/2	1/2	1/2	1/2	1/2
	CLKOUT		ALL	ALL	ALL	ALL	ALL
	DISP,1CH,2CH		POSI	POSI	POSI	POSI	POSI
	SW0,SW1		OFF	OFF	OFF	OFF	OFF
	RGB		8 bit	8 bit	8 bit	8 bit	8 bit
	R(7-0),G(7-0),B(7-0)		11111111	11111111	11111111	11111111	11111111
	DELAY		ON	ON	ON	ON	ON
	CLOCK DELAY		4 nsec	4 nsec	4 nsec	4 nsec	4 nsec
PAT SEL			OPTION 2	OPTION 2	OPTION 2	OPTION 2	OPTION 2
CHRA PATTERN	Format		1	1	1	1	1
	Code		82	82	82	82	82
	Font		16*16	16*16	16*16	16*16	16*16
	Cell		16*16	16*16	16*16	16*16	16*16
GRAY	Direction : 0		L0:0 L1:17 L2:34 L3:51 L4:68 L5:85 L6:102 L7:127 L8:143 L9:159 LA:175 LB:191 LC:207 LD:223 LE:239 LF:255				
OPTION 2			(Note 2)				

Signal			VG-819 setting values				
Mode			16	17	18	19	20
H	CLOCK [MHz]		57.28	65.0	70.49	75.0	78.75
	HPERIOD [DOT]		1152	1344	1344	1328	1312
	HDISP [DOT]		832	1024	1024	1024	1024
	HSYNC [DOT]		64	136	136	136	96
	HBACKP [DOT]		224	160	160	144	176
	HDSTART [DOT]		0	0	0	0	0
	HDWIDTH [DOT]		0	0	0	0	0
V	VTOTAL [H]		667	806	806	806	800
	VDISP [H]		624	768	768	768	768
	VSYNC [H]		3	6	6	6	3
	VBACKP [H]		39	29	29	29	28
	EQP FP [H]		0	0	0	0	0
	EQP BP [H]		0	0	0	0	0
	SERRATION		OFF	OFF	OFF	OFF	OFF
	EQP		OFF	OFF	OFF	OFF	OFF
	VDSTART [H]		0	0	0	0	0
	VDLINE [H]		0	0	0	0	0
	SCAN		Nonint	Nonint	Nonint	Nonint	Nonint
OUTPUT	NRZ/RZ		NRZ	NRZ	NRZ	NRZ	NRZ
	HS		NEGA	NEGA	NEGA	NEGA	POSI
	VS		NEGA	NEGA	NEGA	NEGA	POSI
	CS		POSI	NEGA	NEGA	NEGA	NEGA
	HD		POSI	NEGA	NEGA	NEGA	NEGA
	VD		POSI	NEGA	NEGA	NEGA	NEGA
	CLOCK		POSI	NEGA	NEGA	NEGA	NEGA
	SYNC ON		G				G
	RGB		POSI	POSI	POSI	POSI	POSI
	VIDEO		0.70V	0.70V	0.70V	0.70V	0.70V
	SETUP		OFF	OFF	OFF	OFF	OFF
	CLKMODE		1/2	1/2	1/2	1/2	1/2
	CLKOUT		ALL	ALL	ALL	ALL	ALL
	DISP,1CH,2CH		POSI	POSI	POSI	POSI	POSI
	SW0,SW1		OFF	OFF	OFF	OFF	OFF
	RGB		8 bit	8 bit	8 bit	8 bit	8 bit
	R(7-0),G(7-0),B(7-0)		11111111	11111111	11111111	11111111	11111111
	DELAY		ON	ON	ON	ON	ON
	CLOCK DELAY		4 nsec	4 nsec	4 nsec	4 nsec	4 nsec
PAT SEL			OPTION 2	OPTION 2	OPTION 2	OPTION 2	OPTION 2
CHRA PATTERN	Format		1	1	1	1	1
	Code		82	82	82	82	82
	Font		16*16	16*16	16*16	16*16	16*16
	Cell		16*16	16*16	16*16	16*16	16*16
GRAY	Direction : 0		L0:0 L1:17 L2:34 L3:51 L4:68 L5:85 L6:102 L7:127 L8:143 L9:159 LA:175 LB:191 LC:207 LD:223 LE:239 LF:255				
OPTION 2			(Note 2)				

Signal			VG-819 setting values				
Mode			21	22	23	24	25 Not used
H	CLOCK [MHz]		94.5	94.50	108.00	126.00	107.50
	HPERIOD [DOT]		1376	1528	1800	1680	1664
	HDISP [DOT]		1024	1152	1280	1280	1280
	HSYNC [DOT]		96	128	112	144	192
	HBACKP [DOT]		208	208	312	224	160
	HDSTART [DOT]		0	0	0	0	0
	HDWIDTH [DOT]		0	0	0	0	0
V	VTOTAL [H]		808	937	1000	1000	1078
	VDISP [H]		768	900	960	960	1024
	VSYNC [H]		3	4	3	3	4
	VBACKP [H]		36	31	36	36	43
	EQP FP [H]		0	0	0	0	0
	EQP BP [H]		0	0	0	0	0
	SERRATION		OFF	OFF	OFF	OFF	OFF
	EQP		OFF	OFF	OFF	OFF	OFF
	VDSTART [H]		0	0	0	0	0
	VDLINE [H]		0	0	0	0	0
	SCAN		Nonint	Nonint	Nonint	Nonint	Nonint
OUTPUT	NRZ/RZ		NRZ	NRZ	NRZ	NRZ	NRZ
	HS		POSI	POSI	POSI	NEGA	POSI
	VS		POSI	POSI	POSI	NEGA	POSI
	CS		NEGA	NEGA	NEGA	NEGA	NEGA
	HD		NEGA	NEGA	NEGA	NEGA	NEGA
	VD		NEGA	NEGA	NEGA	NEGA	NEGA
	CLOCK		NEGA	NEGA	NEGA	NEGA	NEGA
	SYNC ON						
	RGB		POSI	POSI	POSI	POSI	POSI
	VIDEO		0.70V	0.70V	0.70V	0.70V	0.70V
	SETUP		OFF	OFF	OFF	OFF	OFF
	CLKMODE		1/2	1/2	1/2	1/2	1/2
	CLKOUT		ALL	ALL	ALL	ALL	ALL
	DISP,1CH,2CH		POSI	POSI	POSI	POSI	POSI
	SW0,SW1		OFF	OFF	OFF	OFF	OFF
	RGB		8 bit	8 bit	8 bit	8 bit	8 bit
	R(7-0),G(7-0),B(7-0)		11111111	11111111	11111111	11111111	11111111
	DELAY		ON	ON	ON	ON	ON
	CLOCK DELAY		4 nsec	4 nsec	4 nsec	4 nsec	4 nsec
PAT SEL			OPTION 2	OPTION 2	OPTION 2	OPTION 2	OPTION 2
CHRA PATTERN	Format		1	1	1	1	1
	Code		82	82	82	82	82
	Font		16*16	16*16	16*16	16*16	16*16
	Cell		16*16	16*16	16*16	16*16	16*16
GRAY	Direction : 0		L0:0 L1:17 L2:34 L3:51 L4:68 L5:85 L6:102 L7:127 L8:143 L9:159 LA:175 LB:191 LC:207 LD:223 LE:239 LF:255				
OPTION 2			(Note 2)				

Signal			VG-819 setting values				
Mode			26	27	28	29	30
H	CLOCK	[MHz]	108.00	117.00	135.00	135.00	94.50
	HPERIOD	[DOT]	1688	1632	1688	1664	1480
	HDISP	[DOT]	1280	1280	1280	1280	1152
	HSYNC	[DOT]	112	112	144	64	96
	HBACKP	[DOT]	248	224	248	288	200
	HDSTART	[DOT]	0	0	0	0	0
	HDWIDTH	[DOT]	0	0	0	0	0
V	VTOTAL	[H]	1066	1067	1066	1066	912
	VDISP	[H]	1024	1024	1024	1024	864
	VSYNC	[H]	3	8	3	8	3
	VBACKP	[H]	38	33	38	32	44
	EQP FP	[H]	0	0	0	0	0
	EQP BP	[H]	0	0	0	0	0
	SERRATION		OFF	OFF	OFF	OFF	OFF
	EQP		OFF	OFF	OFF	OFF	OFF
	VDSTART	[H]	0	0	0	0	0
	VDLINE	[H]	0	0	0	0	0
	SCAN		Nonint	Nonint	Nonint	Nonint	Nonint
OUTPUT	NRZ/RZ		NRZ	NRZ	NRZ	NRZ	NRZ
	HS		POSI	POSI	POSI	POSI	POSI
	VS		POSI	POSI	POSI	POSI	POSI
	CS		NEGA	NEGA	POSI	POSI	POSI
	HD		NEGA	NEGA	NEGA	NEGA	NEGA
	VD		NEGA	NEGA	NEGA	NEGA	NEGA
	CLOCK		NEGA	NEGA	NEGA	NEGA	NEGA
	SYNC ON						
	RGB		POSI	POSI	POSI	POSI	POSI
	VIDEO		0.70V	0.70V	0.70V	0.70V	0.70V
	SETUP		OFF	OFF	OFF	OFF	OFF
	CLKMODE		1/2	1/2	1/2	1/2	1/2
	CLKOUT		ALL	ALL	ALL	ALL	ALL
	DISP,1CH,2CH		POSI	POSI	POSI	POSI	POSI
	SW0,SW1		OFF	OFF	OFF	OFF	OFF
	RGB		8 bit	8 bit	8 bit	8 bit	8 bit
	R(7-0),G(7-0),B(7-0)		11111111	11111111	11111111	11111111	11111111
	DELAY		ON	ON	ON	ON	ON
	CLOCK DELAY		4 nsec	4 nsec	4 nsec	4 nsec	4 nsec
PAT SEL			OPTION 2	OPTION 2	OPTION 2	OPTION 2	OPTION 2
CHRA PATTERN	Format		1	1	1	1	1
	Code		82	82	82	82	82
	Font		16*16	16*16	16*16	16*16	16*16
	Cell		16*16	16*16	16*16	16*16	16*16
GRAY	Direction : 0		L0:0 L1:17 L2:34 L3:51 L4:68 L5:85 L6:102 L7:127 L8:143 L9:159 LA:175 LB:191 LC:207 LD:223 LE:239 LF:255				
OPTION 2			(Note 2)				



Signal			VG-819 setting values				
Mode			31	32	33	34	35
H	CLOCK	[MHz]	108.00	162.00	108.00		
	HPERIOD	[DOT]	1600	2160	1688		
	HDISP	[DOT]	1152	1600	1280		
	HSYNC	[DOT]	128	192	112		
	HBACKP	[DOT]	256	304	248		
	HDSTART	[DOT]	0	0	0		
	HDWIDTH	[DOT]	0	0	0		
V	VTOTAL	[H]	900	1250	1066		
	VDISP	[H]	864	1200	1024		
	VSYNC	[H]	3	3	3		
	VBACKP	[H]	32	46	6380		
	EQP FP	[H]	0	0	0		
	EQP BP	[H]	0	0	0		
	SERRATION		OFF	OFF	OFF		
	EQP		OFF	OFF	OFF		
	VDSTART	[H]	0	0	0		
	VDLINE	[H]	0	0	0		
	SCAN		Nonint	Nonint	Nonint		
OUTPUT	NRZ/RZ		NRZ	NRZ	NRZ		
	HS		POSI	POSI	POSI		
	VS		POSI	POSI	POSI		
	CS		POSI	POSI	NEGA		
	HD		NEGA	NEGA	NEGA		
	VD		NEGA	NEGA	NEGA		
	CLOCK		NEGA	NEGA	NEGA		
	SYNC ON						
	RGB		POSI	POSI	POSI		
	VIDEO		0.70V	0.70V	0.70V		
	SETUP		OFF	OFF	OFF		
	CLKMODE		1/2	1/2	1/2		
	CLKOUT		ALL	ALL	ALL		
	DISP,1CH,2CH		POSI	POSI	POSI		
	SW0,SW1		OFF	OFF	OFF		
	RGB		8 bit	8 bit	8 bit		
	R(7-0),G(7-0),B(7-0)		11111111	11111111	11111111		
	DELAY		ON	ON	ON		
	CLOCK DELAY		4 nsec	4 nsec	4 nsec		
PAT SEL			OPTION 2	OPTION 2	OPTION 2		
CHRA PATTERN	Format		1	1	1		
	Code		82	82	82		
	Font		16*16	16*16	16*16		
	Cell		16*16	16*16	16*16		
GRAY	Direction : 0		L0:0 L1:17 L2:34 L3:51 L4:68 L5:85 L6:102 L7:127 L8:143 L9:159 LA:175 LB:191 LC:207 LD:223 LE:239 LF:255				
OPTION 2			(Note 2)				

Signal			VG-819 setting values				
Mode			36	37	38	39	40
H	CLOCK	[MHz]				34.40	34.40
	HPERIOD	[DOT]				800	800
	HDISP	[DOT]				640	640
	HSYNC	[DOT]				96	96
	HBACKP	[DOT]				48	48
	HDSTART	[DOT]				0	0
	HDWIDTH	[DOT]				0	0
V	VTOTAL	[H]				1024	1024
	VDISP	[H]				480	480
	VSYN	[H]				2	2
	VBACKP	[H]				33	33
	EQP FP	[H]				0	0
	EQP BP	[H]				0	0
	SERRATION					OFF	OFF
	EQP					OFF	OFF
	VDSTART	[H]				0	0
	VDLINE	[H]				0	0
	SCAN					Nonint	Nonint
OUTPUT	NRZ/RZ					NRZ	NRZ
	HS					NEGA	NEGA
	VS					POSI	NEGA
	CS					NEGA	NEGA
	HD					NEGA	NEGA
	VD					POSI	POSI
	CLOCK					NEGA	NEGA
	SYNC ON						
	RGB					POSI	POSI
	VIDEO					0.70V	0.70V
	SETUP					OFF	OFF
	CLKMODE					1/2	1/2
	CLKOUT					ALL	ALL
	DISP,1CH,2CH					POSI	POSI
	SW0,SW1					OFF	OFF
	RGB					8 bit	8 bit
	R(7-0),G(7-0),B(7-0)					11111111	11111111
	DELAY					ON	ON
	CLOCK DELAY					4 nsec	4 nsec
PAT SEL						CHARA <input type="checkbox"/>	CHARA <input type="checkbox"/>
CHRA PATTERN	Format					1	1
	Code					82	82
	Font					16*16	16*16
	Cell					16*16	16*16
GRAY	Direction : 0		L0:0 L1:17 L2:34 L3:51 L4:68 L5:85 L6:102 L7:127 L8:143 L9:159 LA:175 LB:191 LC:207 LD:223 LE:239 LF:255				

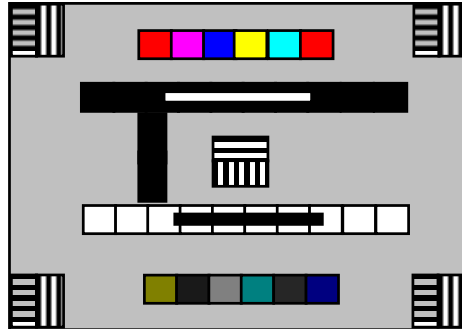
Note 1:

According to the designation of sync signals and the setting of each inspection mode, the analog outputs (BNC) of the signal generator shall be connected as specified below. (Except the cases when otherwise specified)

- |   |                                   |
|---|-----------------------------------|
| 1) SEPARATE: R/G/B CONNECTION, HS $\longleftrightarrow$ H, VS $\longleftrightarrow$ V, CS not connected |                                   |
| 2) COMPOSITE: R/G/B CONNECTION, CS $\longleftrightarrow$ H  | No connections for HS and VS      |
| 3) SYNC ON GREEN: R/G/B CONNECTION,   | No connections for HS, VS, and CS |

Note 2:

Screen of Option 2



### 1.3. OSM Control Operation

Each OSM function is available by pressing the push-button switches ( EXIT, ( < ) LEFT, ( > ) RIGHT, ( + ) PLUS, ( - ) MINUS, SELECT/1↔2, RESET/MUTE) allocated in the lower section of the front bezel (or the control PWB when a PWB unit only is furnished).

#### 1.3.1. Switch Functions

The basic functions of the respective push-button switches (or called the keys, but in the same meaning) are described below.

In a mode where no OSM display is presented, the main menu of the OSM menu can be displayed when any key out of ( < ) LEFT or ( > ) RIGHT or ( + ) PLUS or ( - ) MINUS is pressed.

EXIT	: Menu Open and Close, Sub menu exit
CONTROL ( < , > )	: Menu Open, Move the NEXT tag, Item Select
ADJUST ( + , - )	: Menu Open, Adjust select item.
SELECT/ 1↔2	: Input signal select, Enter Sub menu
RESET/MUTE	: Open reset menu, Sound Mute

#### 1.3.2. Basic operational Procedures



- 1) Press any key out of ( < ) LEFT or ( > ) RIGHT or ( + ) PLUS or ( - ) MINUS , and confirm that a menu as shown below is displayed.
- 2) It becomes the move screen of the tag chosen by the EXIT key, and a tag moves by the ( < ) LEFT and ( > ) RIGHT key. With the adjusting screen selected, It moves to the class of an adjustment screen by the SELECT key and use the keys ( < ) LEFT and ( > ) RIGHT to select the adjusting item (simply "item" hereafter) and set the adjusting value by the use of the keys ( + ) PLUS and ( - ) MINUS. To execute an automatic adjustment function (CONTRAST AUTO ADJUST, AUTO ADJUST), press the SELECT key in the state of item highlight. Then, auto adjust are carried out.  
When the adjusting item is present in TOOL or INFO., move to the selecting item with the ( < ) LEFT and ( > ) RIGHT key and moves to the class of an adjustment screen by the SELECT key and select the wanted item with the keys ( < ) LEFT and ( > ) RIGHT. In the state that the wanted item is highlighted in green, press the key ( + ) PLUS or ( - ) MINUS in order to get the adjusting screen displayed for each item.
- 3) When inspection is finished, press the EXIT key to withdraw from the OSM menu.

## 1.4. Power ON

- 1) Connect an AC power cable to the unit being inspected.
- 2) Connect the VG-819 cable to the unit being inspected. Any input connector is acceptable.
- 3) Turn on the POWER switch of the VG-819 to generate an output of Signal 17.
- 4) There is a vacation switch (a seesaw switch) at the left side of the unit being inspected. Confirm that this switch is set at the “|” side. Press the POWER key at the right end of the front to turn on the unit being inspected.
- 5) The LED is then lit in green and a screen is displayed.

## 1.5. Inspection

### 1.5.1. Inspection of LCD Brightness and Contrast

- 1) Enter Signal 17 through INPUT. The screen display is made in all white.
- 2) Display the BRIGHTNESS/CONTRAST tag of the OSM menu and the SELECT key is pushed.
- 3) Get BRIGHTNESS highlighted with the ( < ) LEFT and ( > ) RIGHT keys.



Brightness adjust menu

- 4) Confirm that the green bar is changed by the operation of the ( + ) PLUS and ( - ) MINUS keys, and that the screen brightness is changed.
- 5) Confirm that the highlight display is for BRIGHTNESS. Press the RESET key. Then, the confirmation screen is displayed. Press the SELECT key to make resetting. (The BRIGHTNESS bar is returned fully to the right.)
- 6) Use the ( < ) LEFT and ( > ) RIGHT keys to obtain CONTRAST displayed in the highlight mode.



Contrast adjust menu

- 7) Confirm that the green bar is changed and the screen contrast is also changed when the ( + ) PLUS and ( - ) MINUS keys are operated.

8) Get AUTO ADJUST highlighted with the ( < ) LEFT and ( > ) RIGHT keys.



Contrast Auto Adjust menu

9) Press the SELECT key and wait until the OSM display is restored to the former display. At that time, confirm that the screen is normally displayed.

### 1.5.2. Inspection of Automatic Adjustment Function

- 1) Enter Signal 17 through INPUT. (1-dot loss + External frame screen)
- 2) Display the OSM menu. Use the ( < ) LEFT and ( > ) RIGHT keys to move as far as to the POSITION tag. And pushed by SELECT key.



Horizontal Position adjust menu



Vertical Position adjust menu



H.SIZE adjust menu



FINE adjust menu

- 3) Move the cursor to the HORIZONTAL POSITION, using the ( < ) LEFT and ( > ) RIGHT keys. Operate the ( + ) PLUS and ( - ) MINUS keys to shift the POSITION to an extent so that the caused difference can be visually perceived.
- 4) In the same manner, shift the VERTICAL POSITION, H. SIZE, and FINE from their initial levels.
- 5) Use EXIT and ( < ) LEFT key to move as far as to the AUTO ADJUST adjusting tag.



Auto Adjust menu

6) After pushing the SELECT key, automatic adjustment is again performed by the SELECT key.

Confirm that the screen ( POSITION / SIZE / PHASE ) is normally adjusted.

### 1.5.3. Inspection of Input Signal Identification

Purpose of inspection: Confirming that a normal display is obtainable for each signal input.

Unless otherwise specified, the display pattern is as shown in the initial screen, conforming to 0 [Inspection mode setting].

--- D-sub (analog) input signal inspection ---

- 1) According to the table below, make setting of the input connector and the signal, and enter a signal input.

Item No.	INPUT	Inspection signal No.	SYNC
1	INPUT 1	<u>1</u>	SEPARATE
2	INPUT 1	<u>4</u>	SEPARATE
3	INPUT 1	<u>6</u>	SEPARATE
4	INPUT 1	<u>11</u>	SEPARATE
5	INPUT 1	<u>14</u>	SEPARATE
6	INPUT 1	<u>17</u>	SEPARATE

- 2) When a screen is displayed, visually check whether the display is free from abnormality.  
(Freedom from any extreme displacement in position, size, and phase, flickering in the screen, and extreme color deterioration)
- 3) Check the OSM menu for the signals that have signal numbers underlined. Display the OSM information screen (the rightmost tag). Get the [DISPLAY MODE] highlighted with the SELECT and ( < ) LEFT or ( > ) RIGHT keys. Then, display the [DISPLAY MODE] screen with the SELECT key. Confirm that the displayed definition coincides with the definition of the input signal.

--- Inspection of POWER SAVE ---

- 4) Remove the output signal of the VG-819 from H.sync and V.sync connector. Confirm that the screen disappears and the OSM menu of the [NO SIGNAL] is displayed. Wait in this state for about 5 seconds, and confirm that the LED display is turned into amber and the POWER SAVE mode is assumed.

### 1.5.4. Inspection of Video Detect Function

This inspection shall be carried out of confirm that the [VIDEO DETECT] function is normally available and that the video input port is automatically changed according to the combination of video input.

Signal : 17 (XGA, separate) : All black

Signal : Digital signal

Equipment to be used for inspection:

Signal source 1 : Analog output

Signal source 2 : Graphic Board Model : Matrox Millennium G550 (Manufactured Matrox Electronic Systems Ltd.) or equivalent.

PC/AT interchange personal computer

DVI-D to DVI-D signal cable

Initial conditions :

Signal source 1 : Set at signal 17

Signal source 2 : Digital signal

The video input shall be available at D-SUB input.

[Method of inspection]

In the procedures specified in the table below, try to connect and disconnect the cable for signal exchange in order to confirm whether the resultant operation is the same as described in the "result" shown in the table below. In the column on the right side of the table below, the conditions of connections at that time are described for the respective ports.

Operation	Result	Signal Source 1	Signal Source 2
	Selected port	INPUT1(D-SUB)	INPUT2(DVI-D)
INITIAL STATE	ANALOG	Signal 17	Digital signal
Pull out the D-SUB connector	DIGITAL	×	Digital signal
Connect the D-SUB connector	DIGITAL	Signal 17	Digital signal
Pull out the DVI connector	ANALOG	Signal 17	×
Connect the DVI connector	ANALOG	Signal 17	Digital signal

" × " indicates that no connector is connected.

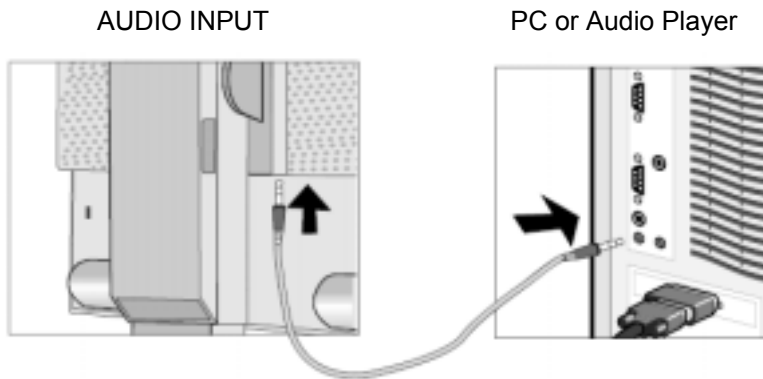
The selected port can be examined according to the [VIDEO INPUT] OSD that is displayed at the time of signal changeover. (Displays of [NO SIGNAL], [OUT OF RANGE], etc. are regarded as rejection.)



### 1.5.5. Inspection of Audio function

Purpose of inspection: Confirming that the audio function works normally.

- 1) It connects audio-in with the PC or the audio player and it enters a sound.

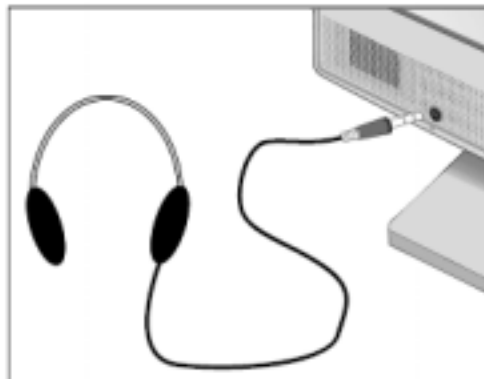


- 2) Enter Signal 17 through INPUT.
- 3) Display the OSM menu. It confirming that cursor is in a volume tag.



Sound Volume menu

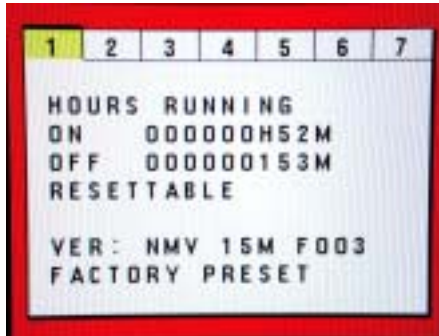
- 4) Confirm that the green bar is changed and the audio volume is also changed when the ( + ) PLUS and ( - ) MINUS keys are operated.
- 5) It confirms that sound is outputted from the left-right speakers and headphones.



## 1.6. Setting Before Shipment

In order to recover the initial conditions of all settings, the contents of the memory are reset before shipment. This reset process involves actions in regard to the memory of signal modes. Therefore, these actions should be taken after the completion of all electrical inspection and display inspection.

- 1) Enter an input of Signal 4 through INPUT. Operate the OSM to enter the service mode, and display a service menu.
- 2) After pushing the SELECT key, adjust the cursor to [FACTORY PRESET] by the use of the ( < ) LEFT or ( > ) RIGHT keys, and pushed by ( + ) PLUS or ( - ) MINUS key.



Service menu

- 3) When the OSM is displayed again, the resetting process has been finished. Press the EXIT key to withdraw from the service mode.

Note 1: After the completion of this process, confirm, without fail, that the present condition is surely after the withdrawal from the service mode.

## 1.7. Safety Test

- Destination : All over the world
- Applicable standards : UL1950/C-UL/EN60950
- Unit class : Class I units (the units protected against electric shocks by protective earthing, or those equipped with 3-core power cords)
- Ratings : AC100-120/220-240V 50/60Hz 0.7A/0.35A

### 1.7.1. Input Current Measurements

Under the measuring conditions specified below, an input current shall be measured while the 50Hz input voltage is maintained at 220V AC (+0 to -5V). The input currents measured shall be confirm so they satisfy the judgment standard. (The rear rating plates are the same as those for North America and Europe. Therefore, measurements should also be based on this setting.)

#### (1) Measuring conditions

- Condition of the set : ON mode
- Measuring conditions : The inspection signal is set at "17" and "white" is displayed throughout the screen.  
At that time, the brightness and contrast shall be kept under the brightest condition.

#### (2) Judgment standard

- The input current shall be kept below 0.35A +10%.

### 1.7.2. Power Source/Earth Connections

#### a. Checks on the power source/earth connections

The earth side of the cord or the earth wire of the inlet filter for the cord set shall be visually checked to see that it is connected to the chassis block of the unit as specified below.

1) The earth wire color shall be spiral of green and yellow.

[Units applicable to UL1950 or IEC60950 (EN60950)]

2) The earth wire shall be firmly connected to the chassis block by the use of a screw (See Note) of 3.5mm $\varnothing$  in diameter.

Note: Spring washers or star washers shall be used, without fail.

#### b. Earth resistance testing

This testing shall be carried out prior to the dielectric strength test.

The earth resistance shall be 0.1 $\Omega$  or less when a current of 25A AC is carried between the earth side of the cord (the plug block or the section closest to the plug where no plug is provided) and the metallic block (the DVI connector) that is used as a safety earth for the unit.

Where the earth resistance exceeds 0.1 $\Omega$ , the condition shall be still acceptable if the earth resistance is 0.1 $\Omega$  or less when the resistance of the power cord is excepted.

### 1.7.3. Dielectric Strength Test

To confirm the freedom from insulation breakdown, testing shall be carried out under the conditions specified below.

#### 1) Measuring conditions

- Measuring instrument : Dielectric strength tester (The specified voltage shall be maintained in the state that a current of 10mA is carried.)
- Testing point : Between the electrical circuit block and the exposed metallic block (D-SUB connector)

Note: The electrical circuit block shall mean the power input block (primary side). Testing shall be carried out under the condition that both poles of the power plug are short-circuited. (Where a 3-core cord is used, the two poles other than the earth terminal shall be short-circuited.)

#### 2) Judgment standard

The freedom from insulation breakdown shall be confirmed under the condition that the applied voltage is maintained at 1500V AC (+0 to 50V) for one minute.

Even though the result of this testing is OK, such a condition shall be regarded as unacceptable if there is a leakage (flashing) around the section where the test voltage has been applied.

If the result of insulation resistance test is found unacceptable, to be carried out after this testing, such a condition shall be regarded as that an insulation breakdown has occurred.

#### 1.7.4. Leakage Current Test

A leakage current shall be measured under the conditions specified below, in order to confirm that the requirements of the judgment standard are met.

##### 1) Measuring conditions

- Measuring instrument : Leakage current meter (A 1500Ω resistor shall be incorporated, together with a bypass capacitor of 0.15μF.)
- Testing point : Between the exposed metallic block (D-SUB connector) and Phases A and B of the power source.
- Condition of the set : A power cable shall be connected without connecting a signal generator. The see-saw switch on the set side shall be turned ON and OFF.

##### 2) Judgment standard

The leakage current measured shall be 1.5mA or less with an input of 240V AC × 1.06 +5/-0V (60Hz).

#### 1.7.5. Insulation Resistance Test

An insulation resistance shall be measured under the conditions specified below, in order to confirm that the requirements of the judgment standard are met.

##### (1) Measuring conditions

- Measuring instrument : 500V DC megger
- Testing point : Between the power circuit block and the exposed metallic block (D-SUB connector)
- Measured value readout : A test voltage shall be applied for one minute and the resistance value shall be read out thereafter.

##### (2) Judgment standard : 10MΩ or more

## **2. External Inspection on the LCD Module**

### **2.1. External Inspection of the Display Surface**

The display surface shall be visually inspected according to the inspection items specified below. In cases of the discovery of extreme defects or doubtful judgment, final judgment should be made on the basis of relevant detailed standards for inspection.

Unless otherwise specified, the inspection signals shall be used at the timing of Signal 17 specified in Paragraph 0 herein. However, the inspection screen shall be arranged according to the "Instructions 1) to 5) of the Inspection Standard" set forth in Paragraph 0 (1).

#### **2.1.1. Inspection Items**

- 1) Examination of the missing of lines (horizontal or vertical lines failing to be displayed).
- 2) Presence of extreme missing of dots (bright dots and black dots), or conspicuous ones.
- 3) Presence of extreme flaws, wrinkles, air bubble, dents, lint, foreign matter, and conspicuous abnormality on the display surface.

#### **2.1.2. Inspection Standards**

Inspection standards for external appearance and display conditions

##### **(1) Inspection standards**

Use a fluorescent lamp of 20w1 (for the inspection of external appearance) or the display plane illuminance of 60 to 75lx (for the inspection of display conditions). Secure a distance of 20cm between the eyes and the sample, and that of 20 to 30cm between the fluorescent lamp and the sample. Under the above-mentioned conditions or better, inspections shall be carried out in the direction specified below.

A: Angle of visibility for inspection (Right and left: 30°/Up and down: 20° to 0°)

The direction of application shall be recorded in the column of direction. Inspection shall be carried out at a room temperature of  $25 \pm 5^{\circ}\text{C}$ .

The following screen shall be used for the inspection.

- 1) All black or gray in 3 gradations
- 2) 15-gradation dot checkers (R,G,B in single color each)
- 3) 15-gradation dot checkers reversal screen
- 4) All red, all green, or all blue screen in solid color each
- 5) All white solid screen

(2) Standards for display conditions

Standard for errors (defects)

Item			Standard	Remarks
Dot defects		1 bright dots	$\leq 4$	
		1 black dots	$\leq 4$	
		Total dots	$\leq 4$	
		Continuous 2 bright dots	R+G, 2 continued horizontally	$\leq 2$ pairs
		Continuous 2 black dots		$\leq 2$ pairs
		Continuous 3 or more bright dots	Both the same color and different colors are counted.	$\leq 0$ pair
		Continuous 3 or more black dots		$\leq 0$ pair
		Distance between bright dot defects		$\geq 15\text{mm}$
		Distance between black dot defects		$\geq 15\text{mm}$

 :Bright dot 
  :Black dot

(3) Standard for external inspection

Inspection item	Standard values (Conditions)	
Straight line wound	$0.01\text{mm} \leq W \leq 0.05\text{mm}$ $L \leq 10\text{mm}$	$N \leq 4$
	$0.01\text{mm} \leq W$ $10\text{mm} < L$	$N = 0$
	$0.05\text{mm} < W$	$N = 0$
Wound of circle	$0.02\text{mm} \leq \phi \leq 0.4\text{mm}$	$N \leq 4$
	$0.4\text{mm} < \phi$	$N = 0$
Strip air bubble of slant board	$0.02\text{mm} < \phi < 0.5\text{mm}$	$N \leq 3$
	$0.5\text{mm} < \phi$	$N = 0$
Circular black alien substance or it becomes dirty	$0.02\text{mm} \leq \phi \leq 0.4\text{mm}$	$N \leq 5$
	$0.4\text{mm} < \phi$	$N = 0$
Fibroid alien substance Straight line becomes dirty.	$L \leq 2\text{mm}$ $W \leq 0.1\text{mm}$	$N \leq 4$
	$2\text{mm} < L$ $W \leq 0.1\text{mm}$	$N = 0$
	$0.1\text{mm} < W$	Note1
	Conspicuous one is impossible.	

Note1: Same condition Circular black alien substance or it becomes dirty

3. Inspection of PLUG & PLAY Communication and OSM “MONITOR INFORMATION”  
for model Name/ Serial Number

3.1. A construction of System

This system should be connected as shown below.

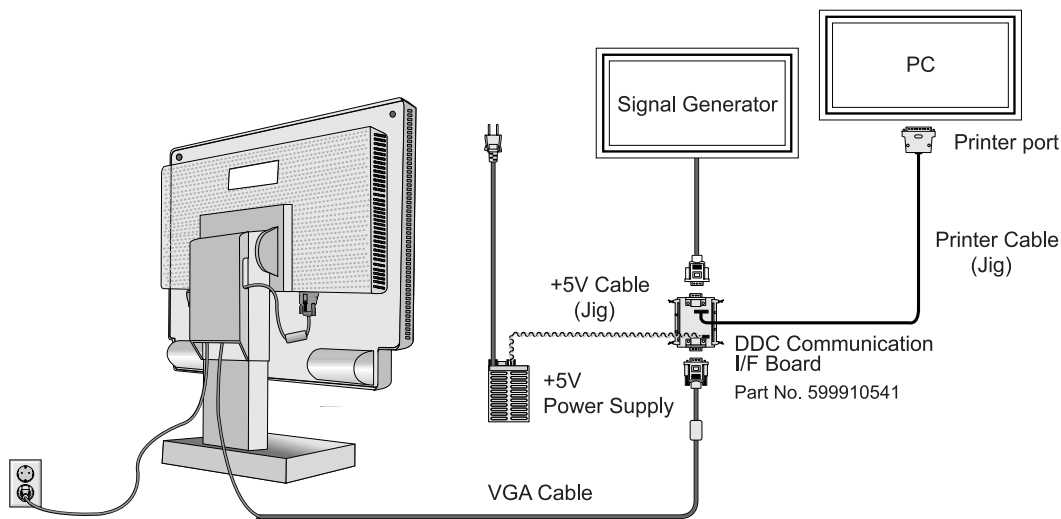


Fig 3.1.1 D-SUB connector connection

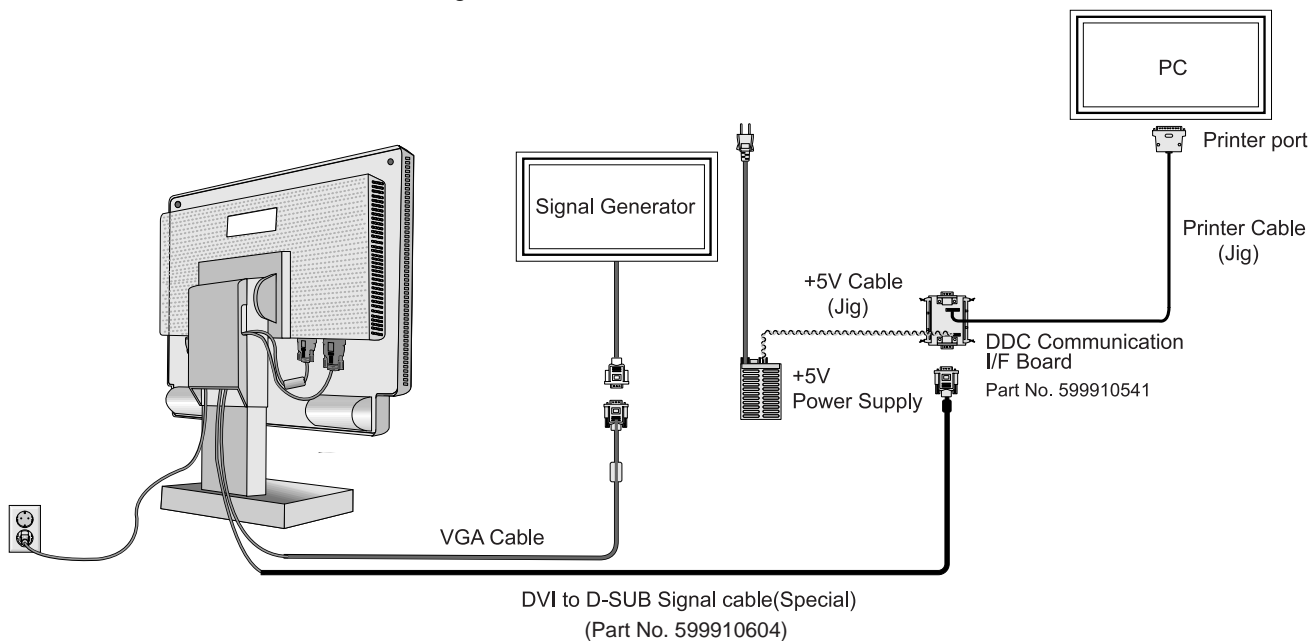


Fig 3.1.2 DVI connector connection



DDC Communication I/F BOARD

### 3.2. Input signal

Horizontal synchronization frequency : 31kHz(Negative)

Vertical synchronization frequency : 42Hz(Negative)

### 3.3. Program

Service tool Ver. 3.14 (Parameter ver. 2.0-S4) (Part No. 599910612)

### 3.4. Operation

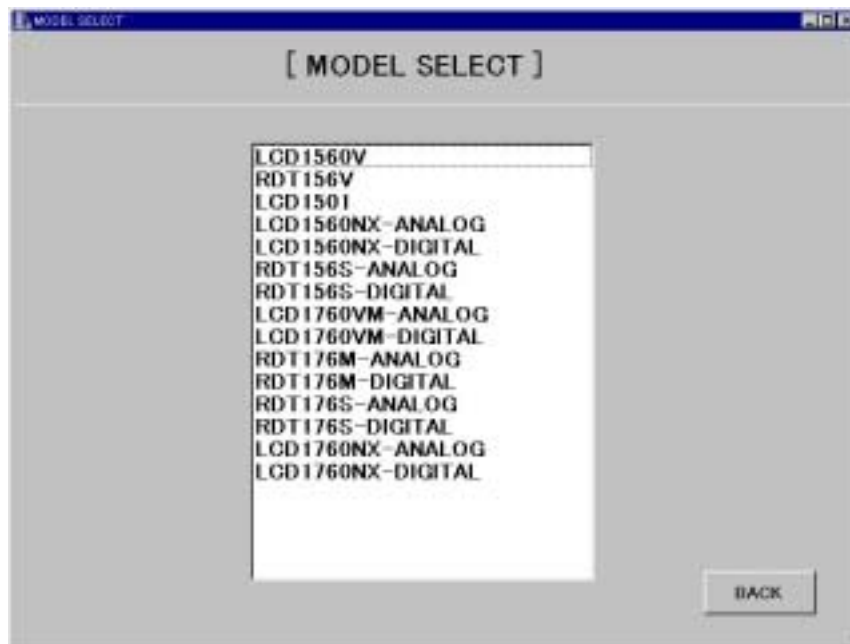
#### 3.4.1. EDIE date writing for the D-SUB (ANALOG)

- 1) Copy all the files of the service tool Ver. 3.14 (Parameter ver. 2.0-S4) in a proper directory.
- 2) Connect the EDID data writing unit with jigs, etc. (Fig 3.1.1 Refer to a connector connection.)
- 3) Start [Service2.EXE] of the service tool Ver. 3.14.
- 4) When the screen as shown below appears, give a check to [LCD] of [Monitor Type] and press the [START] button.





- 5) When the screen as shown below appears, adjust the cursor to [LCD1560VM-ANALOG] and make a double click.



- 6) When the screen as shown below appears, give a check to [EDID\_READ] and press the [OK] button.



- 7) When the screen as shown below appears, confirm that the correct data are displayed in the columns of EDID DATA CONTENTS and Serial information.

If all the displayed data are [FF] or the like, or if the serial number is different from that of the corresponding unit, then EDID data writing should be carried out.

MODEL: RDT176M-ANALOG EDID: R40SET MONITOR TYPE: R40SET ON: SELECTION AREA

Input Serial No. [ ] 10 bytes [Input OK] [EDID-TXT LOAD] [Select File]

### EDID DATA CONTENTS

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
00	00	FF	FF	FF	FF	FF	FF	00	38	A3	EA	ED	01	01	01	01
10	24	0C	01	03	0E	22	18	06	EE	1E	4E	A5	58	48	88	24
20	14	4F	53	BF	EF	80	71	4F	81	80	01	01	01	01	01	01
30	01	01	01	01	01	01	30	2A	00	00	51	00	2A	40	30	70
40	13	00	52	0E	11	00	00	1E	00	00	00	FD	00	38	48	1F
50	31	0E	00	0A	20	20	20	20	20	20	00	00	00	FC	00	4E
60	43	20	4C	43	44	31	37	38	30	58	40	00	00	00	FF	
70	00	32	39	30	30	30	30	32	38	54	4E	0A	20	20	00	33

Serial information

Year of Manufacture: 2002 Year=> [ ]

Week of Manufacture: 35 Month=> [ ]

Serial No.1 => NONE

Serial No.2 => 29000026TA [Input OK]

[Discrimination No.] [Read EDID]

STATUS: EDID Monitor read OK

[BACK] [Exit]

- 8) When a screen of Item 7 is displayed by pressing the [BACK] button, give a check to [EDID\_WRITE] and press the [OK] button.

- 9) When the screen as shown below appears, examine the serial number of the unit, enter an input in the column of [Input Serial No.] through the keyboard, and press the [Input OK] button.

Enter an input in the column of [.Year=> ] in manufactured year(A.D. four digits) and [Month=> ] in manufactured month through the keyboard, and press the [Input OK] button.

MODEL: RDT176M-ANALOG EDID: R40SET MONITOR TYPE: R40SET ON: SELECTION AREA

Input Serial No. 29000026TJ 10 bytes [Input OK] [EDID-TXT LOAD] [Select File]

### EDID DATA CONTENTS

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
00	00	FF	FF	FF	FF	FF	FF	00	38	A3	EA	ED	01	01	01	01
10	24	0C	01	03	0E	22	18	06	EE	1E	4E	A5	58	48	88	24
20	14	4F	53	BF	EF	80	71	4F	81	80	01	01	01	01	01	01
30	01	01	01	01	01	01	30	2A	00	00	51	00	2A	40	30	70
40	13	00	52	0E	11	00	00	1E	00	00	00	FD	00	38	48	1F
50	31	0E	00	0A	20	20	20	20	20	20	00	00	00	FC	00	52
60	44	54	31	37	38	40	0A	20	20	20	20	20	00	00	00	FF
70	00	32	39	30	30	30	30	32	38	54	4A	0A	20	20	00	A8

EDID CODE => RDT176M-ANALOG

Serial information

Year of Manufacture: 2002 Year=> 2002

Week of Manufacture: 35 Month=> 3

Serial No.1 => NONE

Serial No.2 => 29000026TJ [Input OK]

[Discrimination No.] [Read EDID]

STATUS: Input OK OK OK OK

[BACK] [Exit]

- 10) When the [WRITE EDID] button is pressed, writing of the EDID data only is carried out. Upon the completion of correct writing, a display of [EDID Monitor Write OK] is presented in the column of [STATUS].

MODEL: RDT176M-ANALOG EDID: RDT176M-ANALOG MONITOR TYPE: LCD DVI SELECTION: VGA

Input Serial No =>  10 bytes Input OK EDID-TEXT LOAD [Select File]

EDID DATA CONTENTS EDID CODE => RDT176M-ANALOG

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
00	00	FF	FF	FF	FF	FF	FF	00	34	AC	42	48	0E	00	01	01
10	24	0C	01	03	0E	2F	10	96	EE	1E	9E	A3	30	40	99	24
20	14	4F	53	BF	EF	80	71	4F	81	90	01	01	0E	00	01	01
30	0E	00	01	01	01	01	20	2A	00	08	31	00	2A	40	30	70
40	12	00	52	0E	11	00	00	1E	00	00	00	FD	00	38	40	1F
50	51	0E	00	0A	20	20	20	20	20	00	00	00	FC	00	52	
60	44	54	31	37	38	40	0A	20	20	20	20	20	00	00	00	FF
70	00	22	38	30	30	30	30	32	36	54	4A	5A	20	20	00	A8

EDIT

EDID Complete

WRITE EDID

Serial information

Year of Manufacture : 2002 Year =>

Week of Manufacture : 36 Month =>

Serial No1 => NONE

Serial No2 => 29000025TJ

Input OK

[Discrimination No.]

Read EDID

STATUS

EDID Monitor Write OK

BACK Exit

- 11) One of preset signal is received. At this time, since equipment is automatically contained in factory mode, the EXIT key is pushed several times and it escapes from it from factory mode.

### 3.4.2. EDID date writing for the DVI-D (DIGITAL)

- 1) Connect the EDID data writing unit with jigs, etc. (Fig. 3.1.2 Refer to a DVI connector connection.)
- 2) The "BACK" button is pushed twice, the [MODEL SELECT] screen is displayed, and cursor is united and double-clicked to "LCD1560VM-DIGITAL."
- 3) Henceforth, 6) to 11) are carried out in the procedure of the 3.4.1st clause [EDID data writing for the D-SUB (ANALOG)].

### 3.4.3. Model name and serial number checking for the OSM

Display "MONITOR INFORMATION" of the OSM, and confirm that the model name (LCD1560VM) and serial number have been correctly written. (Check that it is also in agreement with the written-in serial number.)

### 3.5 EDID Data File

EDID data : LCD1560VM\_A.edid(ANALOG)

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
00	00	FF	FF	FF	FF	FF	FF	00	38	A3	F1	65	01	01	01	01
10	25	0C	01	03	08	1E	17	78	EA	94	F9	A3	55	47	99	24
20	0D	4D	50	BF	EE	00	01	01	01	01	01	01	01	01	01	01
30	01	01	01	01	01	01	C3	1E	00	20	41	00	20	30	10	60
40	13	00	30	E4	10	00	00	1E	00	00	00	FD	00	37	4B	1F
50	3C	08	00	0A	20	20	20	20	20	20	00	00	00	FC	00	4E
60	45	43	20	4C	43	44	31	35	36	30	56	4D	00	00	00	FF
70	00	32	35	30	30	30	30	31	55	41	0A	20	20	20	00	7F

EDID data : LCD1560VM\_D.edid(DIGITAL)

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
00	00	FF	FF	FF	FF	FF	FF	00	38	A3	F1	65	01	01	01	01
10	25	0C	01	03	80	1E	17	78	EA	94	F9	A3	55	47	99	24
20	0D	4D	50	BF	EE	00	01	01	01	01	01	01	01	01	01	01
30	01	01	01	01	01	01	C3	1E	00	20	41	00	20	30	10	60
40	13	00	30	E4	10	00	00	1E	00	00	00	FD	00	37	4B	1F
50	3C	08	00	0A	20	20	20	20	20	20	00	00	00	FC	00	4E
60	45	43	20	4C	43	44	31	35	36	30	56	4D	00	00	00	FF
70	00	32	35	30	30	30	30	31	55	41	0A	20	20	20	00	07

Note 1: address 10h                      Week of manufacture = Month of manufacture × 4

Note 2: address 11h                      Year of manufacture - 1990

Note 3: address 71h ~ 7Dh    Serial Number (ASCII coded)  
If less than 13 char, terminate with 0Ah and fill the rests with 20h.

Note 4: address 7Fh                      Checksum  
The sum of entire 128 byte shall be equal to 00h.