3 Alignments and Adjustments

This section of the service manual explains how to use the RS232 JIG.
This function is needed for AD board change and program memory (IC200) change.

3-1 Required Equipment

The following equipment is necessary for adjusting the monitor:

· Computer with Windows 95, Windows 98, Windows NT, Windows 2000, or Windows XP.

· MTI-2050/MTI-2055 DDC MANAGER JIG

3-2 Automatic Color Adjustment

To input video, use 16 gray or any pattern using black and white.

1. Press and hold down both the MENU and the ▲ keys at the same time for about 5 seconds.

2. A blinking display informs you that the automatic color adjustment process is completed.

3. The automatic color adjustment feature is also available in the service function.

3-3 DDC EDID Data Input

1. Input DDC EDID data when replacing AD PCB.

2. Receive/Download the proper DDC file for the model from HQ quality control department.
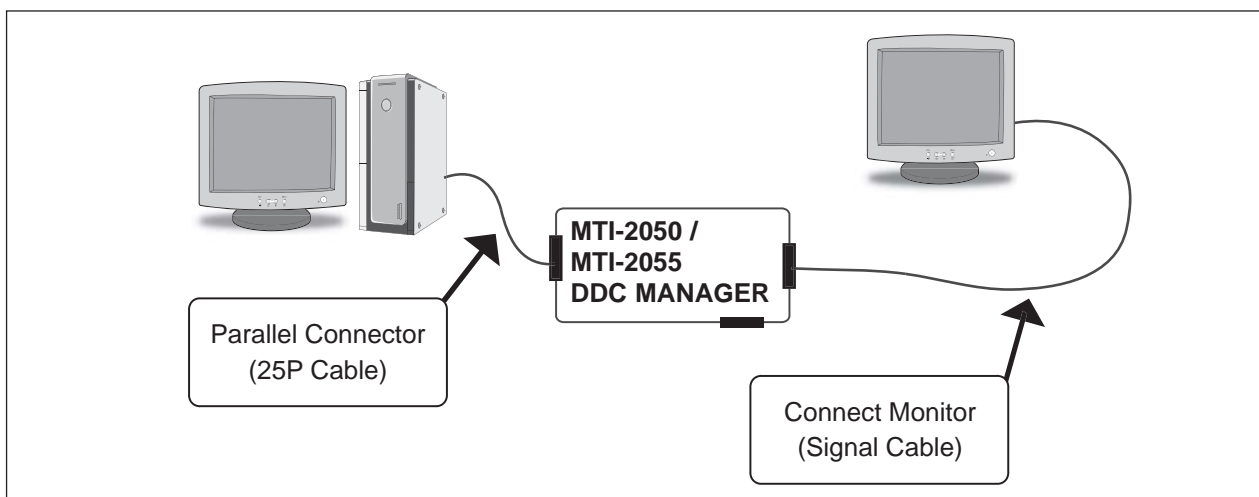   Install the below jig (Figure 1) and enter the data.

Parallel Connector
(25P Cable)

MTI-2050 /
MTI-2055
DDC MANAGER

Connect Monitor
(Signal Cable)

Figure 1.

3-4 OSD Adjustment When Replacing Panel

1. Set the Brightness and Contrast to zero,
   and push the MENU button more than 5 seconds.
   The Function OSD is displayed like Figure 2.

2. Select the Panel Information.

3. Select a panel that you want to replace with.

3-5 OSD Adjustment When Replacing Lamp Only

1. Set the Brightness and Contrast to zero,
   and push the MENU button more than 5 seconds.
   The Function OSD is displayed like Figure 2.

2. Select the Panel Information.

3. Select the upper lamp/ lower lamp.

-. Note : Please perform Automatic Color Adjustment when replacing the panel and main board.

3-6 Service Function Spec.

3-6-1 How to Display Service Function OSD

1. The OSD is displayed just like in 3-2.

2. To exit the service function, press the POWER key and restart the Monitor.

<div>

Service Function

Adjust ▶
PC Auto Color ▶
Option ▶
Checksum ▶
Panel Information ▶
Reset ▶
Bus Stop

2006/01/05
TM-Doppler21WW-0714

</div>

Figure 2. The example of service function OSD

3-6-2 How to Control Service Function OSD

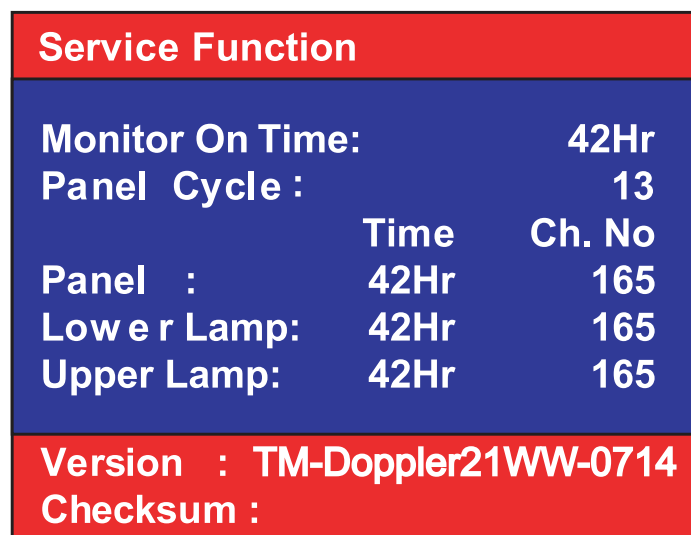Use the ▲ or ▼ buttons to select an item that you want and press the Enter button.

<div>

Service Function

	Time	Ch. No
Monitor On Time:		**42Hr**
Panel Cycle :		**13**
Panel :	**42Hr**	**165**
Lower Lamp:	**42Hr**	**165**
Upper Lamp:	**42Hr**	**165**

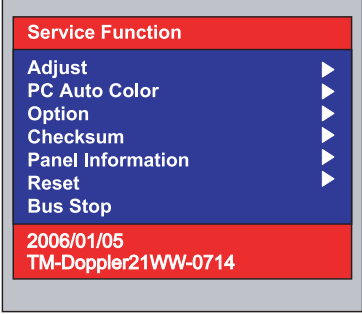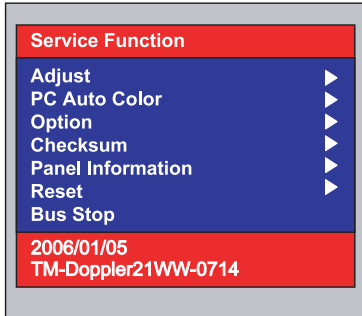**Version : TM-Doppler21WW-0714**
Checksum :

</div>
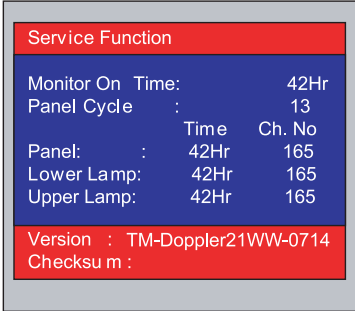
Figure 3. The display of the Panel Information in the Function OSD

# 3-7 Hidden Key list

| No	Function	Action method

1	Hidden Service Function
	
	Service Function
	Adjust ▶
	PC Auto Color ▶
	Option ▶
	Checksum ▶
	Panel Information ▶
	Reset ▶
	Bus Stop
	2006/01/05
	TM-Doppler21WW-0714
		-. After setting in turn on to brightness and contrast '0' ,
		   push the 'menu' button more than 5 seconds
		-. Service Function appear at left upper
		
		-. OSD which the basic adjustment is added
		 1) Adjust
		 2) PC Auto color
		 3) Option
		 4) Checksum
		 5) Panel Information
		 6) Reset
		 7) Bus Stop
		
		*. 2006/01/05: MCU firmware date
		*. TM-Doppler21ww-0714 : MCU firmware version information
		  (this information must be appended due to a compatibility problem report.)

2	**Hidden Service Function (1)**
	
	Service Function
	Adjust ▶
	PC Auto Color ▶
	Option ▶
	Checksum ▶
	Panel Information ▶
	Reset ▶
	Bus Stop
	2006/01/05
	TM-Doppler21WW-0714
		Move to the (-) / (+) key, select the 'Enter' key
		
		1) Auto adjustment
		
		2) PC Auto Color :
		in case that color of all screen is wrong,
		 excute the PC Auto color at 16 gray pattern of 1680*1050/60Hz
		 (refer to attach left 16gray pattern)
		
		3) Option: Spread Step / Spread Span (for EMI test)
		
		4) Checksum: MCU firmware checksum information
		  (this information must be appended due to a compatibility
		      problem report.)

No	Function	Action method
3	Hidden Service Function (1) *.When Panel Information selected Service Function Monitor On Time: 42Hr Panel Cycle : 13 Time Ch. No Panel: : 42Hr 165 Lower Lamp: 42Hr 165 Upper Lamp: 42Hr 165 Version : TM-Doppler21WW-0714 Checksu m :	5) Panel Information various function are included in information. 1. Monitor On Time : Power On Time 2. Panel Cycle : Panel On/off time (Power off, Mode change, DPMS on/off ...) 3. Panel : Panel on Time (when the panel is changed , select the Reset) 4. Lower lamp : Lower lamp on time (when the Lower lamp is changed , select the Reset) 5. Upper lamp : Upper Lamp on time (when the Upper Lamp is changed , select the Reset) 6) Reset: Factory reset 7) Bus Stop: The communication Line ON / OFF

3-8 EDID Installation with Windows Program
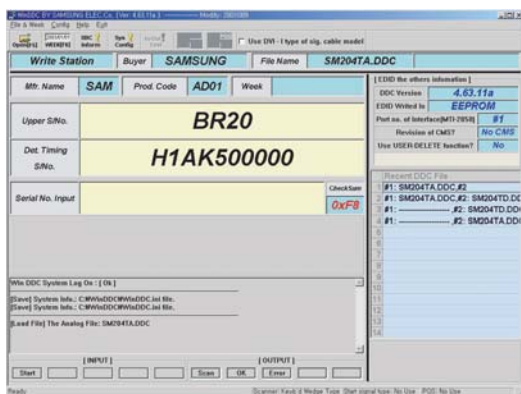
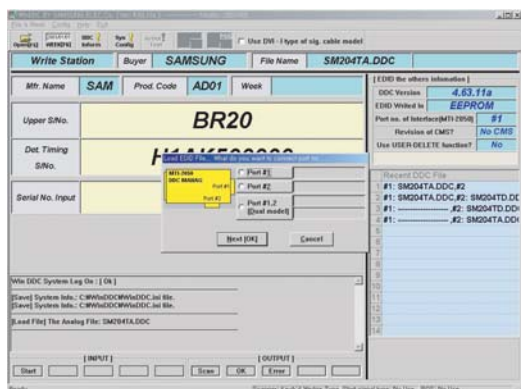1. Execute "WinDDC.exe"
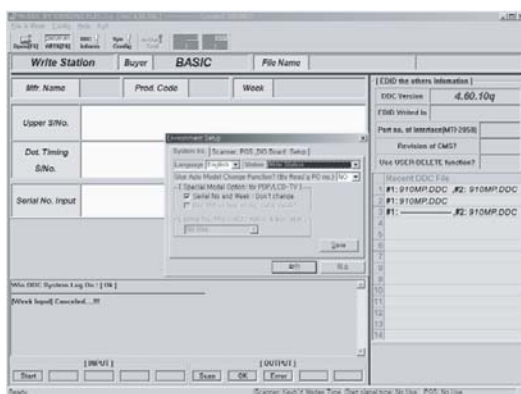
2. Click "Sys Config"
   Select "Station : Write station"
   Check "Serial No and Week : Don't change"
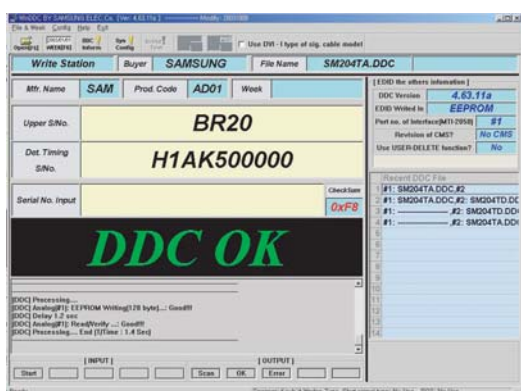   Click "Save"

3. Click "Open" icon.
   Select "Connected Port #1" and Next "OK".
   * File Name - SM215TWA.DDC
                 SM215TWD.DDC
   Press enter key on your keyboard.

4. Confirm the "DDC OK".

- After Replacing the Main Board
- EDID Installation (Analog and Digital)

Memo