

## 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-2031 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.

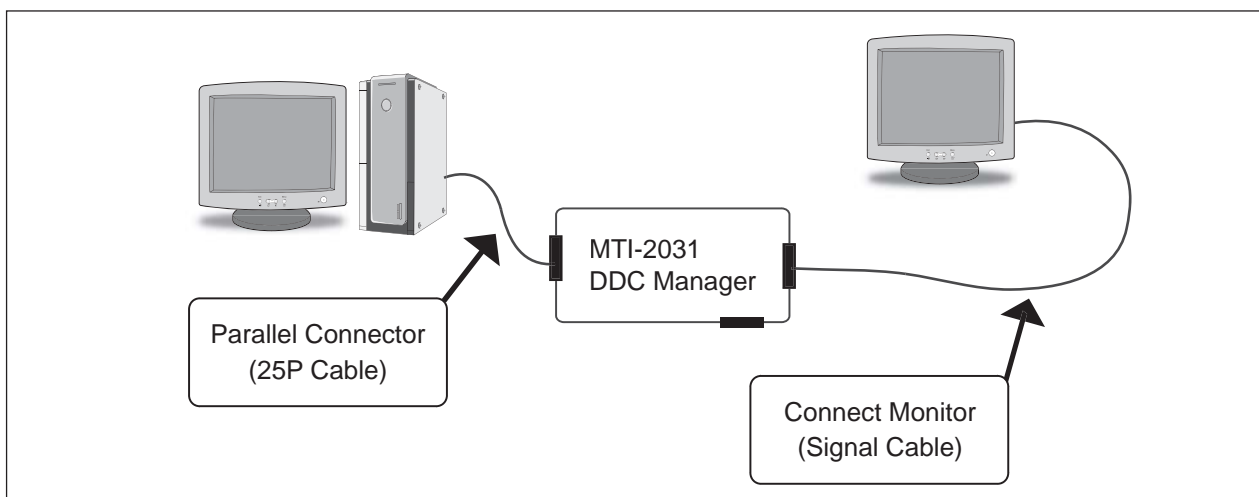


Figure 1.

### 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.



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.

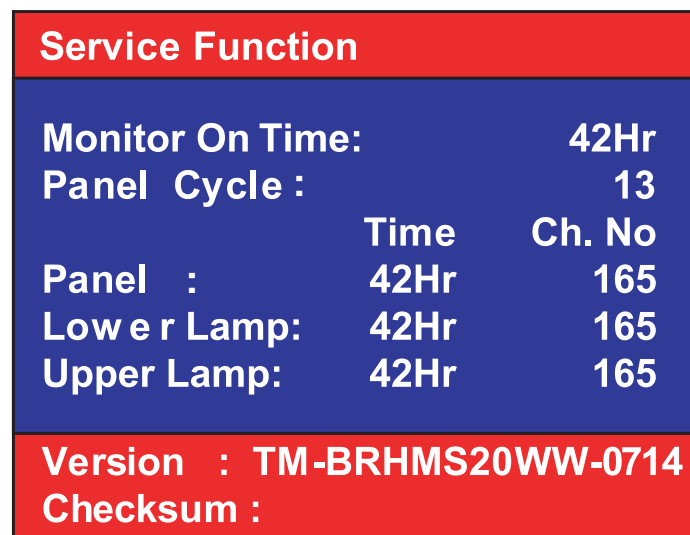
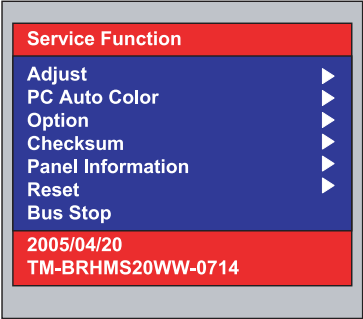
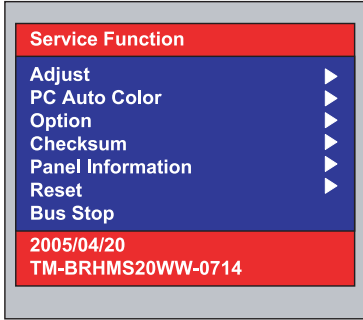
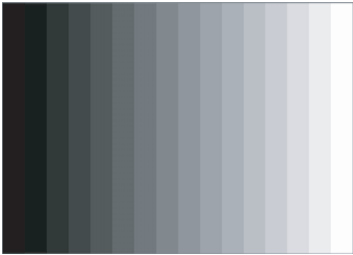
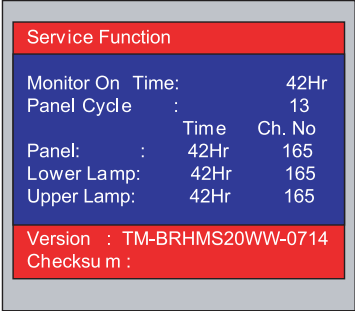


Figure 3. The display of the Panel Information in the Function OSD

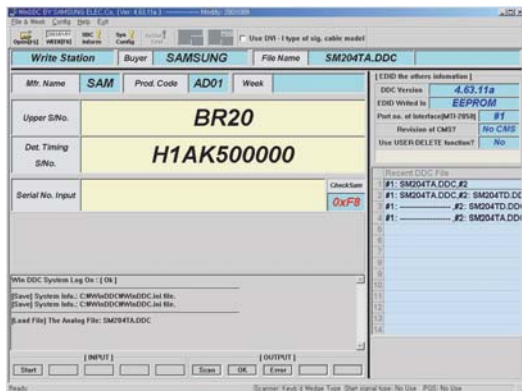
## 3-7 Hidden Key list

No	Function	Action method
1	<p>Hidden Service Function</p> 	<ul style="list-style-type: none"> <li>- After setting in turn on to brightness and contrast '0' , push the 'menu' button more than 5 seconds</li> <li>- Service Function appear at left upper</li> <li>- OSD which the basic adjustment is added               <ol style="list-style-type: none"> <li>1) Adjust</li> <li>2) PC Auto color</li> <li>3) Option</li> <li>4) Checksum</li> <li>5) Panel Information</li> <li>6) Reset</li> <li>7) Bus Stop</li> </ol> </li> <li>*. 2005/04/20: MCU firmware date</li> <li>*. TM-BRHMS20WW-0714: MCU firmware version information (this information must be appended due to a compatibility problem report.)</li> </ul>
2	<p>Hidden Service Function (1)</p>  	<p>Move to the ( - ) / ( + ) key, select the 'Enter' key</p> <ol style="list-style-type: none"> <li>1) Auto adjustment</li> <li>2) PC Auto Color : in case that color of all screen is wrong, excute the PC Auto color at 16 gray pattern of 1600*1200 60Hz (refer to attach left 16gray pattern)</li> <li>3) Option: Spread Step / Spread Span (for EMI test )</li> <li>4) Checksum: MCU firmware checksum information (this information must be appended due to a compatibility problem report.)</li> </ol>

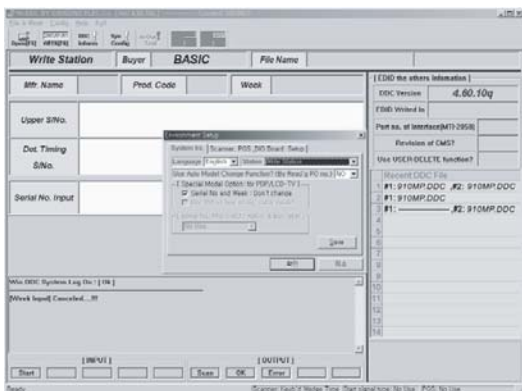
### 3 Alignments and Adjustments

No	Function	Action method
3	<p>Hidden Service Function (1)</p> <p>*.When Panel Information selected</p> 	<p>5) Panel Information various function are included in information.</p> <ol style="list-style-type: none"> <li>1. Monitor On Time : Power On Time</li> <li>2. Panel Cycle : Panel On/off time (Power off, Mode change, DPMS on/off ...)</li> <li>3. Panel : Panel on Time (when the panel is changed , select the Reset )</li> <li>4. Lower lamp : Lower lamp on time (when the Lower lamp is changed , select the Reset )</li> <li>5. Upper lamp : Upper Lamp on time (when the Upper Lamp is changed , select the Reset)</li> </ol> <p>6) Reset: Factory reset</p> <p>7) Bus Stop: The communication Line ON / OFF</p>

## 3-8 EDID Installation with Windows Program



1. Execute "WinDDC.exe"

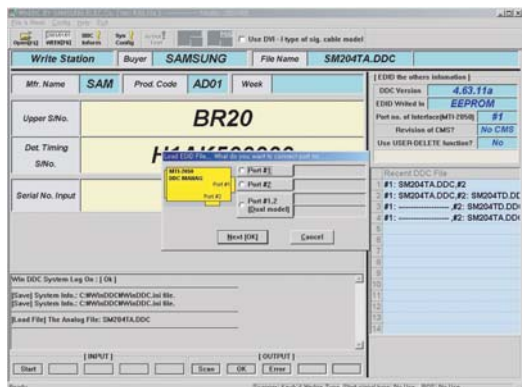


2. Click "Sys Config"

Select "Station : Write station"

Check "Serial No and Week : Don't change"

Click "Save"



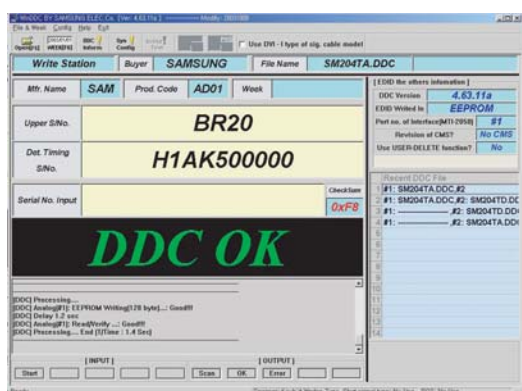
3. Click "Open" icon.

Select "Connected Port #1" and Next "OK".

\* File Name - SM214TA1.DDC : Analog

- SM214TD1.DDC : Digital

Press enter key on your keyboard.



4. Confirm the "DDC OK".

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

Memo