USER MANUAL

High Definition Multimedia
Pure Flat Monitor

DM-5952KF / DM-6952KF
1. FCC STATEMENT

This equipment has been tested and found to comply within regulations for a Class B digital device, pursuant to Part 15 of the FCC rules. These regulations are designed to provide protection against harmful interference in a residential installation. This equipment can generate, use and radiate radio frequency energy, and if not installed and/or used in accordance with the instructions provided, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for assistance.

Warning:

Only use shielded cable to connect I/O devices to this equipment. Changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate this equipment.
2. SAFETY INSTRUCTIONS

1. Read all of these instructions.

2. Save these instructions for later use.

3. Follow all warnings and instructions marked on the product.

4. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

5. Do not use this product near water.

6. Do not place this product on an unsuitable cart, stand or table; the product may fall causing damage or injury.

7. Slots and openings in the cabinet and the back or bottom are provided for ventilation. To ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered. Placing the product on a bed, sofa, rug, or other similar surface should never block the openings. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.

8. This product should be operated from the type of power source indicated on the marking label. If you are not sure what type of power available, consult your dealer or local Power Company.

9. This equipment is to be electrically grounded. This product is equipped with a three-wire plug with a third (grounding) pin. This plug will only fit into a grounded AC outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact a licensed electrician to replace the outlet with a properly grounded outlet. Do not defeat the purpose of the grounding plug!

10. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.

11. If an extension cord is used with this product, make sure that the total of the ampere ratings on the products plugged into the extension cord does not exceed the extension cord ampere rating. Make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.

12. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

13. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to qualified service personnel.

14. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

a. When the power cord or plug is damaged or frayed.

b. If liquid has been spilled into the product.

c. If the product has been exposed to rain or water.

d. If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.

e. If the product has been dropped or the cabinet has been damaged.

f. If the product exhibits a distinct change in performance, indicating a need for service.
3. README FIRST

These easy start-up tips will guide you in making the connections to get you up and running.

**USING WITH A DESKTOP PC OR LAPTOP**

1. Prior to connecting the monitor, if you have a desktop monitor connected to your PC, please insure that the video card refresh rate is set within the Monitors frequency range by going to:
   
   **Start…Settings…Control Panel…Display…Settings…Advanced…Adapter.**

   Set the Adapter refresh rate to 60Hz or “Adapter Default”. This applies to the three supported resolutions of 640×480, 800×600 and 1024×768.

   **Otherwise, the monitor will not display and the unit will go into standby mode (Yellow-orange LED).**

2. Plug the AC power cord from the power source (outlet) to the AC input of the monitor.

3. Connect the VGA cable provided from your computer’s VGA output to the input on the monitor.

   **VGA 1** VGA 1 input port located in the rear of the monitor.
   
   **VGA 2** VGA 2 input port located in the front of the monitor.

**Note:** Be sure the PC is powered on before the monitor.

   Press the VGA1 / VGA2 select button, located next to the front VGA connector and on the Remote Control until the computer image is displayed.

**SIMULTANEOUS VIEWING OF THE MONITOR AND STANDARD PC MONITORS**

Connect the VGA cable from the PC’s VGA output to the VGA input. Then plug the desktop monitor’s VGA cable to the monitor VGA output.

**USING WITH A LAPTOP**

If you are using Notebook; Press Fn. + F5 (or Fn. + F3) to output the display to CRT only (CRT output combination key might be different on every notebook), or press combination key again to show on both CRT and LCD display.

**USING WITH A MAC**

1. Plug the AC power cord from the power source (outlet) to the AC input of our monitor.

2. Connect the MAC adapter to the MAC monitor output (if required the MAC model). Refer to the adapter user’s manual for the proper dipswitch settings. The optimum setting for the monitor is a resolution setting of 800×600 and a refresh rate of 60Hz. Make sure the display settings of the MAC is set to 800×600 at 60Hz as well.

   **Note:** You need a MAC adapter when using the monitor with older MAC Computers. The MAC adapter converts the output to VGA HD-15 pin out. *This adapter is available at an additional cost.*

3. Connect the VGA cable from the monitor to the MAC adapter.
4. WITHOUT VISION CONVERTER

FIGURE 1: DM-XX52KF W/O VISION CONVERTER CONNECTION

5. WITH [CT-1871] VISION CONVERTER

Note: Only for Rev.K-1 or higher.

FIGURE 2: DM-XX52KF CONNECT WITH CT-1871 VISION CONVERTER
6. WITH 【CT-1890 / CT-1892】 VISION CONVERTER

Note: Only for Rev.K-1 or higher.

7. INSTALLATION

Precautions
Monitor shall be placed at least 6 inches away from the obstructor.

a. Monitor will work well when connect with computer and any high definition receiver. With a high definition resolution, Monitor is designed without video converter with it. To work as a TV or using with VCR and DVD, you must to connect with a video converter.

b. The following descriptions are based on Monitor connected with video converter ready. 【See Figure 2 ~ 3】

Television
1. Install cable from antenna or cable TV to the “F” connector labeled “ANT IN”.
2. Press the Power ON, and the Red LED Indicator should be lit on the monitor, and the monitor is on STAND BY mode.
3. Press the POWER button on the Remote-controller; the Red indicator should turn into green.
4. Press TV / PC / AV button or press TV button on Remote-Controller until the monitor displays MAIN NTSC TV.
5. To switch to TV / CATV mode, select TV if you are using an antenna, or select CATV if you have a cable service.
6. Press AUTO button with your remote control, and Monitor will now preset all active channels into memory.
7. Selecting a channel.
   a. Press CH▲ / ▼ to select channels on Remote control or on the front panel.
   b. Press the numeric key to select a desired channel.
8. Press VOL + / VOL - to adjust the volume on remote control or the front panel.

Video Recorder (VCR)
1. To connect the signal by F Connector, following the instruction to setup your Television.
2. If using the Video (Composite) from the VCR, connect the Video input with Left, and Right Speaker.
3. Start the VCR.
4. Using the Remote control press TV / PC / AV button until or press VIDEO button until VIDEO appears on the screen.
5. If using the S-Video output of the VCR. Connect an S cable from the VCR to Monitor.
6. Connect the Left and the Right audio channel to monitor.
7. Start the VCR.
8. Press the TV / PC / AV button or press S-VHS button by remote control until S-VHS appears on the screen.

**DVD player**

1. Connect the Video input with Left and Right speaker on DVD.
2. Start the DVD player.
3. Press the TV / PC / AV button or press VIDEO button by Remote control until VIDEO appears on the screen.
4. If using the S-Video output of the DVD, connect an S cable from the DVD with monitor.
5. Connect the Left with the Right audio channel.
6. Start the DVD player.
7. Press TV / PC / AV button or S-VHS button until appears on the screen.
8. If using the component output of the DVD, connect a component video cable from the DVD with monitor.
9. Connect the left with the right audio channel.
10. Start the DVD player.
11. Using the Remote Control, press the TV / PC / AV button or the Component button until Y, Cb, Cr / Y, Pb, Pr appears on the screen.

**Computer**

1. Connect the computer with the monitor by using VGA1 that located on the rear panel, or VGA2 that located on the front panel.
2. Connect the Audio to the appropriate audio connector next to the VGA connector.
3. Press the TV / PC / AV button or press VGA1 / VGA2 button until VGA1 / VGA2 appears on the screen.
4. If monitor has no display, check your video card on the appendix B.
5. If there is no display on the screen, verify if the proper input VGA1 / VGA2 has been manually selected.

**High Definition Receiver**

1. If your HD receiver has a VGA connector, it can be used to input monitor.
2. Connect a Receiver to the monitor using the VGA1 located on the rear panel or VGA2 located on the front panel.
3. Connect the Audio to appropriate audio connectors next to the VGA connector.
4. Using the Remote control, press the TV / PC / AV button or press VGA1 / VGA2 button until VGA1 / VGA2 appears on the screen.
5. Press MENU, then press the right arrow key on the picture to adjust the geometry controls for a good picture.
6. If using the component output of the DVD, connect a component video cable from the DVD with monitor.
7. Connect the left with the right audio channel.
8. Start the DVD player.
9. Using the Remote Control, press the TV / PC / AV button or the Component button until Y,Cb,Cr / Y,Pb,Pr appears on the screen.
8. USING THE MONITOR

This section describes how to use and make adjustments to the monitor. It also provides a reference to the control panel and the remote control.

Using the Control Panel

Using control panel to control the monitor instead of the remote control. However, some other functions are not set on control panel. There are 7 panel keys, and following lists the function buttons on the control panel:

![DM-XX52KF VGA2 IN & PANEL KEYS](image)

**Indicators**

a. Power LED shows power on / off, and power saving status.
b. Stereo LED is lit when the TV programs being received.
c. SAP LED is lit when the program is broadcast in Sub-audio.(2nd audio program)

<table>
<thead>
<tr>
<th>Power LED</th>
<th>Stereo LED</th>
<th>SAP LED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal on</td>
<td>Green</td>
<td>Main Audio Off</td>
</tr>
<tr>
<td>Stand by</td>
<td>Amber</td>
<td>Mono Off</td>
</tr>
<tr>
<td>Suspend / Active off</td>
<td>Red</td>
<td>Sub Audio On (Yellow)</td>
</tr>
<tr>
<td>Power off</td>
<td>Red</td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 1 : INDICATOR OPERATION DESCRIPTION**

- **POWER** (Toggle) Starts or stops the monitor function.
- **DEGAUSS** *This is a dual function key:*
  - a. Switch the input source through TV / PC / VIDEO / S-Video / COMPONENT / TV while connect with a vision converter.
  - b. Press this key to execute degaussing while in normal status. Each degauss is lasting for 4 seconds, and waiting for 5 minutes to re-do degauss.
- **MENU** (Toggle) Enables/Disables the on-screen display menu, or return to the upper level menu in the menu mode.
- **SEL+ / CH+** *This is a dual function key:*
  - a. Press SEL+ / – to serve as menu item selection.
  - b. Press CH+ / – to adjust the channel.

**Note:** When you are adjusting a function under the magnitude bar, you may also adjust other items in the same group by pressing the up / down keys. *Don't go back to the previous menu by way of the MENU key.*

- **VOL+ / –** *This is a dual function key:*
  - a. Press VOL+ / – to control volume in any mode, except in menu function. *(optional)*
  - b. Press VOL+ / – to control the selection function while in menu mode.
- **TV / CATV** Select TV or CATV pair as inputs. While in the TV/CATV mode; the VGA 1 / VGA 2 key serves as TV / CATV key.

**Note :** Auto-switch function : On VGA mode, upon POWER-ON, and at POWER-ON only, the monitor will automatically switch to the other port when NO signal appears after 8 seconds. On other words, VGA1 will switch to VGA2, and vice versa. But if ports have NO input, this monitor will switch back to the original default port.
9. Using the Remote Control

Using remote control instead of the control panel is convenient to operate the monitor. Some of the keys must to work by connect with MATE, and these are DISP, SLEEP, MTS, JUMP, ADD / ERASE, AUTO, TV, VIDEO, S-VHS, COMPONENT, TV / PC / AV, TV / CATA, PIC-STD, PIC / PAGE, PIC-SEL, SYSTEM, FINE TUNING, CH-LOCK, FIELD, LANG, CAP / TXT, CCD.

Note: The mute function will automatically unlock if any adjusts are made related to audio (i.e., volume, bass, etc.)

Following lists the function keys on the remote control:

**POWER** Starts or stops the monitor function.

**POWER ON / OFF** To Start or stop the multiple monitors function in the meanwhile. In general, this function is used well with multiple monitors' control.

**DISP** Display the current mode on the present status.

**SLEEP** To set the sleep timer, each press will increase the sleep timer in 10-minute intervals up to 120 minutes (then back to 00). When the sleep count reaches the last 5 minutes, the screen will show up every minute for 3 seconds. During the last minute, it will display every 10 seconds.

**MTS** Multi-Sound selection.

**MUTE** Cuts audio and turns audio back on.

**JUMP** Returns to the previous channel.

**ADD / ERASE** Allows the user to Add / Erase channels manually.

**AUTO** Automatically scan all the channels by signal responds, and to set them on the preset mode.

**MENU** Enable/Disables the On-Screen Display Menu.

**MIC / SEL +** *This is a dual function key:*

- a. Press SEL + / - to serve as menu item selection.
- b. MIC for R mode.

**MIC / SEL –**

**VOL + / –** *This is a dual function key:*

- a. Press VOL + / - to control volume in any mode. *(optional)*
- b. Press VOL + / - to control the selection function while in menu mode.
Note: Volume control function will effect while connect with Vision Converter.

SET
Through DM RS232 V0.9 (Serial Transmission Communication interface) to remote control the device. To identify the monitor, you must set an ID number (ID=1~99) to each of the monitor under DM RS232 V0.9 Control page.

ID
To set the ID number to control the monitor from the other.

TV
Select TV source.

VIDEO
Select VIDEO source.

S-VHS
Select S-VHS source.

Component
Select a Compound signal source:

Y,Pb,Pr—For High definition component inputs. (CT-1890).

Y,Cb,Cr—For Conventional component inputs. (CT-1890 / CT-1892).

VGA 1
Select VGA 1 source.

VGA 2
Select VGA 2 source.

TV / PC / AV
Select TV / PC / VIDEO / S-Video / COMPONENT / switch source.

TV / CATV
Select TV / CATV source.

CH+ / CH-
Steps through the channels.

PIC-STD
Factory preset.

PIC / PAGE ▲▼
Control and select items PIC-SEL button.

PIC-SEL
User video adjustment screens.

SYSTEM
Changes the video system on TV, Video, and S-VHS. System types are PAL, PAL-M, PAN-N, and SECAM.

FINE TUNING
Allows for fine-tuning of channels.

CH-LOCK
For Parental Control.

FIELD
A FIELD 1 or FIELD 2 toggle. (Useable only when CCD is on).

LANG
Language Selection (1 or 2).

CAP / TXT
Accessible only when CCD is on.

CCD
Caption control.
10. ACCESSING THE MAIN MENU

Access the OSD Menu by control panel on the monitor or the remote control to make the operation.

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**Note:**
- Press the Menu button on the control panel or the remote control to display the main menu.
- Press the SEL +/- buttons on the control panel or remote control to scroll through the menu.
- Press the VOL +/-buttons on the control panel or remote control to adjust the setting values.
- Press Sub-menu to return to upper level while in any sub-menu. To exit the menu mode, press the menu button while in the top-level menu.

**MAIN MENU**

**Picture Menu**
*Fine tunes the Picture image quality manually:*
- CONTRAST, BRIGHTNESS, H / V SIZE, H / V POSITION, PINCUSHION, TRAPEZOID, TOP-CORNER, BOTTOM-CORNER, PIN-BALANCE, PARALLELOGRAM, ROTATION and RECALL.

**Note:**
- Recall will replace current settings by the factory-preset values. You can only recall factory settings when the PC mode is in one of the 14 predefined modes. See *Table 3* appendix B for preset modes. Color recall is used to call back the factory setting of R.G.B.
- Above parameters is for PC mode only, and can’t be reached in TV / AV mode. In TV / AV mode, you can adjust the TV parameters by remote control.

**Color Menu**
Select the color temperature to make colors more pure and vivid. Select user item to adjust the color intensity by VOL + / - key.

**Audio Menu**
*Fine tune the audio functions manually:*
- Bass, Treble, Balance, Volume.
**Special Menu**

*Fine tunes and sets the special functions manually:*

ID-NUMBER (1~99) · INSTANT-ON · DEGAUSS · AUTO-SAVING · AUTO DEGAUSS · AUTO SHIFT · OSD BACKGROUND · OSD CONTRAST · AND OSD H/V-POSITION · MOIRE · KEY LOCK · PASSWORD.

---

**a. ID Number**

Through DM RS232 V0.9 *(Serial Transmission Communication interface)* to remote control the device. To identify the monitor, you must set an ID number (ID=1~99) to each of the monitor under DM RS232 V0.9 Control page.

1. Select the ID number (1~99) by ↑ → tab.

2. After you set the ID, choose high/light to identify the monitor with has been set with a valid number. The monitor will correspond with the current status, and this could control the OSD function directly.

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**b. Instant-On**

Enable / Disable the INSTANT-ON. Set the INSTANT-ON YES, the Monitor will start up immediately while the Power switch on, and the green LED is lit on. The monitor will stay in the saving mode till the power be turn-on again while the INSTANT-ON is switch off, and the red LED is lit on.

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**c. Auto Saving**

The power will shut down automatically and be in the power-saving status while the Auto Saving switch on.

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**e. Degauss**

Enable / Disable the AUTO DEGAUSS.

The AUTO DEGAUSS will be executed automatically by every 24 hours since switch on the function.

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**f. Auto Shift**

Active AUTO SHIFT to protect the screen from result in the image-remain. The picture will be auto-shift once every 6 hours.

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**g. Moiré**

For some modes, it is better to switch the moiré off to get better video performance, and this option is provided when Moiré is ON, adjust MOIRE pops out, and adjust moiré by using + / − key. In TV / AV mode, moiré can’t be adjusted.

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**h. Key Lock**

Enable / Disable the front panel function operation.

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**i. Password**

To release the disable front panel function operation by set the password.

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**j. OSD Background**

Switch the OSD background ON or OFF to adapt to different software background of the PC.
11. ENERGY SAVING

All monitor is Energy Star compliant. It contains special hardware that provides energy saving, automatic Stand By and Shut OFF features. After a period of time, the monitor will be in power-saving status automatically until the mouse or use the keyboard. Automatic Stand By and Shut OFF are set through a software program on your computer.

<table>
<thead>
<tr>
<th>Model</th>
<th>MAX. Power on</th>
<th>Stand by</th>
<th>Suspend</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM-6952KF</td>
<td>200W</td>
<td>90W</td>
<td>5W</td>
<td>5W</td>
</tr>
<tr>
<td>DM-5952KF</td>
<td>210W</td>
<td>90W</td>
<td>5W</td>
<td>5W</td>
</tr>
</tbody>
</table>

12. REAR CONNECTORS [CT-1871]

1. AC in
   Connect the power source to the monitor.
2. VGA out
   Video signal connector Output the signal to another monitor.
3. Video out
   Composite Video output to another device.
4. Audio out (Left)
   Left speaker signal to another device.
5. Audio out (Right)
   Right speaker signal to another device.
6. Video in
   Composite from a VCR or DVD player.
7. Audio in (Left)
   Composite, from a VCR or DVD player.
8. Audio in (Right)
   Composite, from a VCR or DVD player.
9. Audio in (Left)
   For S-Video signal.
10. Audio in (Right)
    For S-Video signal.
11. S-Video in
    From a VCR or DVD player.
12. VGA1 in
    From Computer or HDTV receiver.
13. Audio in
    From Computer.
14. Antenna in
    From antenna or cable TV.
15. RS-232 In
    Connect the external source from PC to the monitor.
16. RS-232 Out
    Connect the external source From monitor to other external source.

CT-1871 REAR CONNECTORS
13. REAR CONNECTORS 【CT-1890 / CT-1892】

1. AC in  
Connect the power source to the monitor.

2. VGA out  
Video signal connector Output the signal to another monitor.

3. Video out  
Composite Video output to another device.

4. Audio out (Left)  
Left speaker signal to another device.

5. Audio out (Right)  
Right speaker signal to another device.

6. Video in  
Composite from a VCR or DVD player.

7. Audio in (Left)  
Composite, from a VCR or DVD player.

8. Audio in (Right)  
Composite, from a VCR or DVD player.

9. Audio in (Left)  
For S-Video signal.

10. Audio in (Right)  
For S-Video signal.

11. S-Video in  
From a VCR or DVD player.

12. VGA1 in  
From Computer or HDTV receiver.

13. Audio in  
From Computer.

14. Antenna in  
From antenna or cable TV.

15. Y in  
Component Video Input, from a DVD player or HDTV receiver.

16. Pb / Cb in  
Component Video Input from a DVD player or HDTV receiver.

17. Pr / Cr in  
Component Video Input from a DVD player or HDTV receiver.

18. Audio in (Left)  
For Component Video Signal.

19. Audio in (Right)  
For Component Video Signal.

20. RS-232 In  
Connect the external source from PC to the monitor.

21. RS-232 Out  
Connect the external source From monitor to other external source.

14. SIMPLE TROUBLE SHOOTING TIPS

In the rare occasion, you have might problem with your Monivision monitor, please look at these simple troubleshooting steps to fix the problem.

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>TROUBLESHOOTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED Not Lit</td>
<td>Check your power cord connection.</td>
</tr>
<tr>
<td>No Display on monitor A.</td>
<td>PC/MAC : Check the resolution settings of the control panel display settings in windows to make sure they are set within the perimeters of our monitors. If you are using a notebook computer with our monitor you need to change the configuration of your notebook. The output needs to be set to CRT.</td>
</tr>
<tr>
<td>B. Video</td>
<td>Check all of the video connections (RCA, S-Video) for proper connection.</td>
</tr>
<tr>
<td>C. Television</td>
<td>Make sure the RF cable is connected properly. Check to see if the monitor is programmed via our auto programming function. The cable might need to be set to the proper carrier: STD, HRC or IRC.</td>
</tr>
<tr>
<td>D. Notebook</td>
<td>If a notebook PC is used, make sure the customer uses the control F function to make sure the external monitor function is being used.</td>
</tr>
<tr>
<td>LED Red</td>
<td>A. Check frequency and resolution settings.</td>
</tr>
<tr>
<td></td>
<td>B. Power down and re-power the monitor. Bypass★ the converter box, if there is one and plug the VGA signal directly into the monitor.</td>
</tr>
<tr>
<td></td>
<td>★ BYPASS THE CT CONVERTER BOX TO MAKE SURE THE PROBLEM IS WITH THE MONITOR.</td>
</tr>
<tr>
<td>Display Color Error</td>
<td>Check the pins of the signal cable; Make sure the monitor is plugged to the PC before the PC is booted up.</td>
</tr>
<tr>
<td>Discoloration</td>
<td>When operating the monitor, users may find out that putting the monitor in different locations or switching directions may render the screen's display colors abnormal. It is caused by the influence of the earth's magnetic field. After you push the &quot;DEGAUSS&quot; key, the colors should become normal again.</td>
</tr>
<tr>
<td>Other Problems</td>
<td>If the display becomes abnormal due to an electrostatic abnormal, turn the power off and wait for five seconds, then turn the power on again and the monitor should function normally.</td>
</tr>
</tbody>
</table>
### 15. Model : DM-6952KF SPECIFICATIONS

<table>
<thead>
<tr>
<th>CRT Size / Type</th>
<th>32V Pure flat square screens with 104-degree magnetic deflection, dynamic focus forming, and 75% transmission.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dot Pitch (mm)</td>
<td>0.9mm</td>
</tr>
<tr>
<td>Maximum Resolution</td>
<td>XGA : 1024×768 (Non-Interlaced)</td>
</tr>
<tr>
<td>Horizontal frequency</td>
<td>30 kHz to 52 kHz Auto Synchronous</td>
</tr>
<tr>
<td>Vertical frequency</td>
<td>50 – 120 Hz</td>
</tr>
<tr>
<td>Bandwidth</td>
<td>65 MHz</td>
</tr>
<tr>
<td>Video input signal</td>
<td>Analog (0.7 Vp-p)</td>
</tr>
<tr>
<td>VGA input / output</td>
<td>15 PIN D-Sub</td>
</tr>
<tr>
<td>RS-232 input/output</td>
<td>9 PIN D-Sub (Female/Male)</td>
</tr>
<tr>
<td>Sync. input</td>
<td>Separate Sync. TTL Level Positive / Negative, Composite Sync. TTL Level Positive / Negative</td>
</tr>
<tr>
<td>Compatibility</td>
<td>VGA, SVGA, XGA, VESA, DTV : 480p, 720p, 1080i (Via VGA Input).</td>
</tr>
<tr>
<td>Speaker &amp; Amplifier</td>
<td>15W×2</td>
</tr>
<tr>
<td>Keys</td>
<td>DEGAUSS (TV / PC / AV), MENU, SEL / CH +, SEL / CH −, VOL +, VOL −, VGA1 / VGA2 (TV / CATV).</td>
</tr>
<tr>
<td>Connectors</td>
<td>AC IN, VGA IN, VGA OUT, Audio IN (R/L), RS232 IN, RS232 OUT.</td>
</tr>
<tr>
<td>Power</td>
<td>AC 100V~240V Universal : 200 W (Max).</td>
</tr>
<tr>
<td>Power Factor</td>
<td>Up to 0.9</td>
</tr>
<tr>
<td>Display area (mm)</td>
<td>620×465 (Factory Default)</td>
</tr>
<tr>
<td>Dimension (mm)</td>
<td>865(W)×680(H)×565(D)</td>
</tr>
<tr>
<td>Net weight (kg)</td>
<td>70/78 Kg</td>
</tr>
<tr>
<td>Operating Environment</td>
<td>T : 5 to 40°C H : 30 to 80 % RH</td>
</tr>
<tr>
<td>Storage environment</td>
<td>T : −20 to +60 °C H : 10 to 90 % RH</td>
</tr>
</tbody>
</table>

### 16. Model : DM-5952KF SPECIFICATIONS

<table>
<thead>
<tr>
<th>CRT Size / Type</th>
<th>27V Pure flat square screens with 108-degree magnetic deflection, dynamic focus forming, and 53.5% transmission.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dot Pitch (mm)</td>
<td>0.68mm</td>
</tr>
<tr>
<td>Maximum Resolution</td>
<td>XGA : 1024×768 (Non-Interlaced)</td>
</tr>
<tr>
<td>Horizontal frequency</td>
<td>30 kHz to 52 kHz Auto Synchronous</td>
</tr>
<tr>
<td>Vertical frequency</td>
<td>50 – 120 Hz</td>
</tr>
<tr>
<td>Bandwidth</td>
<td>65 MHz</td>
</tr>
<tr>
<td>Video input signal</td>
<td>Analog (0.7 Vp-p)</td>
</tr>
<tr>
<td>VGA input / output</td>
<td>15 PIN D-Sub</td>
</tr>
<tr>
<td>RS-232 input/output</td>
<td>9 PIN D-Sub (Female/Male)</td>
</tr>
<tr>
<td>Sync. input</td>
<td>Separate Sync. TTL Level Positive / Negative, Composite Sync. TTL Level Positive / Negative</td>
</tr>
<tr>
<td>Compatibility</td>
<td>VGA, SVGA, XGA, VESA, DTV : 480p, 720p, 1080i (Via VGA Input).</td>
</tr>
<tr>
<td>Speaker &amp; Amplifier</td>
<td>15W×2</td>
</tr>
<tr>
<td>Keys</td>
<td>DEGAUSS (TV / PC / AV), MENU, SEL / CH +, SEL / CH −, VOL +, VOL −, VGA1 / VGA2 (TV / CATV).</td>
</tr>
<tr>
<td>Connectors</td>
<td>AC IN, VGA IN, VGA OUT, Audio IN (R/L), RS232 IN, RS232 OUT.</td>
</tr>
<tr>
<td>Power</td>
<td>AC 100V~240V Universal : 210 W (Max).</td>
</tr>
<tr>
<td>Power Factor</td>
<td>Up to 0.9</td>
</tr>
<tr>
<td>Display area (mm)</td>
<td>520×390 (Factory Default)</td>
</tr>
<tr>
<td>Dimension (mm)</td>
<td>750(W)×591(H)×504(D)</td>
</tr>
<tr>
<td>Net weight (kg)</td>
<td>49.5Kg</td>
</tr>
<tr>
<td>Operating Environment</td>
<td>T : 5 to 35°C H : 30 to 80 % RH</td>
</tr>
<tr>
<td>Storage environment</td>
<td>T : −20 to +60 °C H : 10 to 90 % RH</td>
</tr>
</tbody>
</table>
17. VGA CONNECTOR ASSIGNMENT

1. --------------------------- Red
2.              --------------------------- Green
3.              --------------------------- Blue
4.              --------------------------- Ground
5.  --------------------------- No Connection
6.              --------------------------- R-Ground
7.  --------- ------------------  B-Ground
8.  --------------------------- No Connection
9.  --------------------------- No Connection
10  --------------------------- Ground
11             --------------------------- Ground
12  --------------------------- G-Ground
13  --------------------------- H-sync
14  --------------------------- V-sync
15  --------------------------- SCL

18. RS-232 CONNECTOR ASSIGNMENT

1. ----------------------------------- No Connection
2. ----------------------------------- TXD
3. ----------------------------------- RXD
4. ----------------------------------- No Connection
5. ----------------------------------- No Connection
6. ----------------------------------- No Connection
7. ----------------------------------- Ground
8. ----------------------------------- No Connection
9. ----------------------------------- No Connection

Input Connector Assignment

1. ----------------------------------- No Connection
2. ----------------------------------- TXD
3. ----------------------------------- RXD
4. ----------------------------------- No Connection
5. ----------------------------------- No Connection
6. ----------------------------------- No Connection
7. ----------------------------------- Ground
8. ----------------------------------- No Connection
9. ----------------------------------- No Connection

OUT CONNECTOR ASSIGNMENT

1. ----------------------------------- No Connection
2. ----------------------------------- RXD
3. ----------------------------------- TXD
4. ----------------------------------- No Connection
5. ----------------------------------- No Connection
6. ----------------------------------- No Connection
7. ----------------------------------- Ground
8. ----------------------------------- No Connection
9. ----------------------------------- No Connection
19. FACTORY PRESET AND COMPATIBLE MODE

<table>
<thead>
<tr>
<th>Mode</th>
<th>Resolution</th>
<th>H freq (kHz)</th>
<th>V freq (Hz)</th>
<th>H polarity</th>
<th>V polarity</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>640×480</td>
<td>31.469</td>
<td>59.941</td>
<td>–</td>
<td>–</td>
<td>VGA</td>
</tr>
<tr>
<td>2</td>
<td>720×400</td>
<td>31.469</td>
<td>70.087</td>
<td>–</td>
<td>+</td>
<td>VGA</td>
</tr>
<tr>
<td>3</td>
<td>640×350</td>
<td>31.469</td>
<td>70.087</td>
<td>+</td>
<td>–</td>
<td>VGA</td>
</tr>
<tr>
<td>4</td>
<td>800×600</td>
<td>37.879</td>
<td>60.317</td>
<td>+</td>
<td>+</td>
<td>VESA</td>
</tr>
<tr>
<td>5</td>
<td>800×600</td>
<td>48.077</td>
<td>72.188</td>
<td>+</td>
<td>+</td>
<td>VESA</td>
</tr>
<tr>
<td>6</td>
<td>1024×768</td>
<td>48.363</td>
<td>60.004</td>
<td>–</td>
<td>–</td>
<td>VESA</td>
</tr>
<tr>
<td>7</td>
<td>480P</td>
<td>31.469</td>
<td>60.000</td>
<td>N/A</td>
<td>N/A</td>
<td>DTV</td>
</tr>
<tr>
<td>8</td>
<td>1080i</td>
<td>33.750</td>
<td>60.000</td>
<td>N/A</td>
<td>N/A</td>
<td>DTV</td>
</tr>
<tr>
<td>9</td>
<td>720P</td>
<td>45.000</td>
<td>60.000</td>
<td>N/A</td>
<td>N/A</td>
<td>DTV</td>
</tr>
<tr>
<td>10</td>
<td>800×600</td>
<td>35.150</td>
<td>56.250</td>
<td>+</td>
<td>+</td>
<td>VESA</td>
</tr>
<tr>
<td>11</td>
<td>640×480</td>
<td>37.860</td>
<td>72.810</td>
<td>–</td>
<td>–</td>
<td>VESA</td>
</tr>
</tbody>
</table>

**TABLE 3 : FACTORY PRESENT**

20. IR REMOTE CONTROLLER CODE

<table>
<thead>
<tr>
<th>CODE</th>
<th>KEY</th>
<th>CODE</th>
<th>KEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>000H</td>
<td>Display</td>
<td>017H</td>
<td>Number key 7</td>
</tr>
<tr>
<td>001H</td>
<td>CH-UP</td>
<td>018H</td>
<td>Number key 8</td>
</tr>
<tr>
<td>002H</td>
<td>CH-DOWN</td>
<td>019H</td>
<td>Number key 9</td>
</tr>
<tr>
<td>005H</td>
<td>AIR/CATV</td>
<td>035H</td>
<td>PIC STD</td>
</tr>
<tr>
<td>006H</td>
<td>SYSTEM</td>
<td>036H</td>
<td>Fine Tuning UP</td>
</tr>
<tr>
<td>007H</td>
<td>SLEEP</td>
<td>037H</td>
<td>Fine Tuning DOWN</td>
</tr>
<tr>
<td>008H</td>
<td>Quick View</td>
<td>058H</td>
<td>PIC SEL (&amp; Parental control)</td>
</tr>
<tr>
<td>00AH</td>
<td>AUTO search</td>
<td>059H</td>
<td>PIC UP (&amp; Parental control)</td>
</tr>
<tr>
<td>00CH</td>
<td>ADD/ERASER</td>
<td>05AH</td>
<td>PIC DOWN (&amp; Parental control)</td>
</tr>
<tr>
<td>00DH</td>
<td>PC/TV/AV SW (&amp; Y,Pb,Pr direct key)</td>
<td>05BH</td>
<td>Parental control menu</td>
</tr>
<tr>
<td>00EH</td>
<td>POWER on/off</td>
<td>09CH</td>
<td>CCD</td>
</tr>
<tr>
<td>00FH</td>
<td>MTS</td>
<td>09DH</td>
<td>CCD CAP/TXT</td>
</tr>
<tr>
<td>010H</td>
<td>Number key 0</td>
<td>09EH</td>
<td>CCD LANG</td>
</tr>
<tr>
<td>011H</td>
<td>Number key 1</td>
<td>09FH</td>
<td>CCD FIELD</td>
</tr>
<tr>
<td>012H</td>
<td>Number key 2</td>
<td>0A0H</td>
<td>Power ON</td>
</tr>
<tr>
<td>013H</td>
<td>Number key 3</td>
<td>0A1H</td>
<td>Power OFF</td>
</tr>
<tr>
<td>014H</td>
<td>Number key 4</td>
<td>034H</td>
<td>TV direct key</td>
</tr>
<tr>
<td>015H</td>
<td>Number key 5</td>
<td>00BH</td>
<td>VIDEO direct key</td>
</tr>
<tr>
<td>016H</td>
<td>Number key 6</td>
<td>01AH</td>
<td>SVHS direct key</td>
</tr>
<tr>
<td>02CH</td>
<td>ID</td>
<td>02FH</td>
<td>Y, Pb, Pr direct key</td>
</tr>
</tbody>
</table>

**VIDEO CONVERTER CODE**

<table>
<thead>
<tr>
<th>CODE</th>
<th>KEY</th>
<th>CODE</th>
<th>KEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>01BH</td>
<td>VGA1 direct key</td>
<td>01CH</td>
<td>VGA2 direct key</td>
</tr>
<tr>
<td>01CH</td>
<td>VGA2 direct key</td>
<td>003H</td>
<td>VOL +</td>
</tr>
<tr>
<td>01DH</td>
<td>MENU</td>
<td>004H</td>
<td>VOL –</td>
</tr>
<tr>
<td>01EH</td>
<td>SEL +</td>
<td>009H</td>
<td>MUTE</td>
</tr>
</tbody>
</table>

**MONITOR KEY CODE**
21. DM RS232 QUICK INSTALLATION

Before install DM RS232 V0.9 software, you must to follow the steps below:
1. Make sure the monitors and computer is turned OFF.
2. Connect the Monitor (COM1/COM2 port) with your computer by DM RS232 V0.9 cable.

Starting Setup
Turn ON the monitor, and turn ON the computer.
• Before you can start Setup, the DM RS232 V0.9 software must be installed and running on each computer with windows operation system.

Step 1:
Download the DM RS232 V0.9 driver on ALBATRON Website (http://www.albatron.com.tw/images/product/ia/high_definition_monitor/software/rs232.zip).

Step 2:
Extract Zip file to “RS232” sub-directory.

Step 3:
Following the on-screen instructions.

Step 4:
Installation is complete.

Step 5:
Press START and opening up DM RS232 V0.9 page under Program tools group.

STARTÆPROGRAMÆDM RS232 V0.9ÆDM RS232 V0.9

Enjoy your new DM RS232 V0.9!
★ The version now is V0.9 and will be updated in the future if necessary.

START YOUR DM RS232 V0.9

• Select Serial Port
Under DM RS232 V0.9 Control Page, Select COM1 on the Select Serial Port.

Note: The select serial will be set on COM1 automatically, and you will be warned while the COM1 port has been selected by other interface each time you enter.

• Setting an ID number
Through DM RS232 V0.9 (Serial Transmission Communication interface) to remote control the device. To identify the monitor, you must to set an ID number (ID=1~99) to each of the monitor under DM RS232 V0.9 Control page.

1. Select the ID number (1~99) by tab.
2. After you set the ID, choose high/light to identify the monitor with has been set with a valid number. The monitor will correspond with the current status, and this could control the OSD function directly.

• Select Mate Signal
1. Under Select Mate Signal to select a video signal to each monitor.
2. Wait for 2 seconds to switch the signal while change the Video signal. The system will give you a warning message while an error operation.

• Exit the Setting
Select the Exit tab to quit DM RS232 V0.9 Control page.
STATUS CONTROL
There are 6 control entries under **status control,** the following statements are related to each Control function: *(See Figure A)*

While without setting ID, *(ID=NO)* the Power · VGA · Instant · Auto-Saving · Auto-Degauss · Auto-Shift modes and select mate signal can be controlled to ALL devices.

### Power
1. In general, select **On** to start the multi monitors' functions by DM RS232 V0.9 control.
2. Select **Off** and the power will be in the power-saving status automatically.

### VGA Instant
Select VGA1/VGA2 tab to switch the signal source.

While without setting ID, *(ID=NO)* the Power · VGA · Instant · Auto-Saving · Auto-Degauss · Auto-Shift modes and select mate signal can be controlled to ALL devices.

### Auto-Saving
Select Yes to shut down the power automatically while the current mode without signal responds or detecting a over-frequency, and the system will be in the power-saving status while the Auto Saving switch on.

### Auto-Degauss
Enable/Disable the AUTO DEGAUSS.

1. Select **Yes** and the AUTO DEGAUSS will be executed automatically by every 24 hours while switch on the function.

### Auto-Shift
Active AUTO SHIFT to protect the screen from result in the image-remain.

1. Select Yes to active Auto Shift, and the picture will be auto-shift once for every 6 hours.
2. Select No to quit Auto Shift set

### Background
Switch ON/OFF the OSD background to adapt to different OSD background.

### Moiré
In general, it is better to switch OFF the moiré to get better video performance. For some mode, is provided when Moiré is ON, adjust MOIRE pops out, and adjust moiré by using +/− key. In TV/AV mode, moiré can’t be adjusted.

### Audio Control:
There are 5 entries under Audio control to fine-tune the Audio Volume, Bass, Treble, Balance.

1. Select the option button on the Audio frame
2. Move the H scroll bar to adjust the audio quality.

#### Bass
Control the sub-woofer volume by adjusts the H scroll bar.

#### Treble
Control the Treble volume by adjusts the H scroll bar.

#### Balance
To adjust volume output balance by adjusts the H scroll bar.

#### Volume
Control the volume by adjusts the H scroll bar.
Moire. Degauss Control:

Select Moire. Degauss tab to adjust the H moire / V moire by drag the H scroll in the scroll bar.

Color Control:

1. In the Color frame, select a direct label what you want to adjust to.
2. To adjust the color contrasts by drag the Scroll Bar on the Control page.
3. Press Recall 9300K / 6500K / 5500K/ TV to restore the pre-set the RGB value of 9300K / 6500K / 5500K/ TV.

Picture Control:

1. Select any label on the picture frame to adjust the picture quality.
2. To adjust the color contrasts by drag the Scroll Bar or input an applicable value in each textbox on the control page.
3. Press Recall to restore the pre-set picture quality.