

# USER'S MANUAL

**19 inch SXGA TFTLCD Color Monitor**

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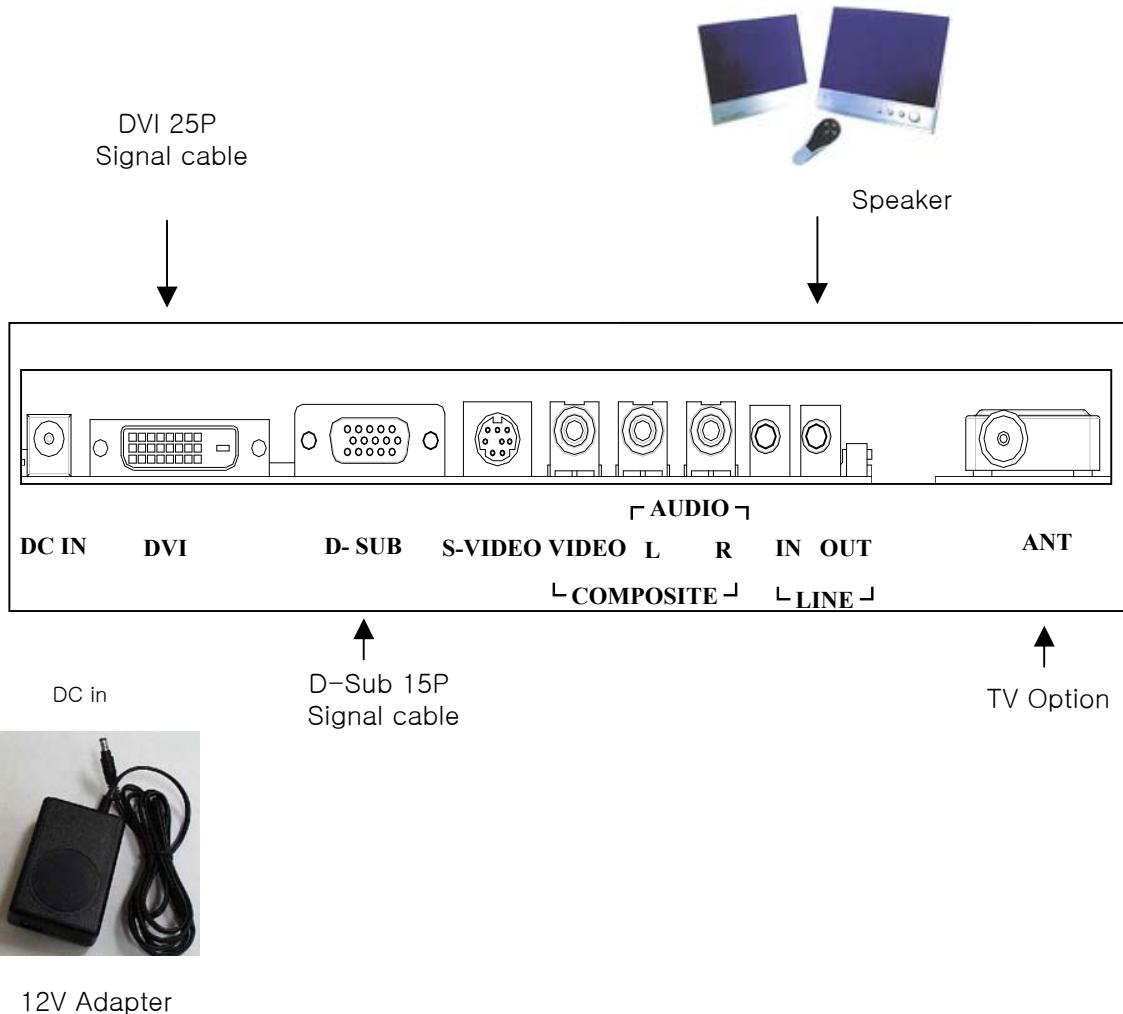
## LIFE SUPPORT APPLICATIONS

These products are not designed for use in life support appliances, devices, or systems where malfunction of these products can reasonably be expected to result in personal injury. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify for any damage resulting from such improper use or sale.

The information presented in this document may form a part of quotation or contract under the agreement of both parties. Otherwise, this datasheet is subjected to be changed without notice.

# 19 inch SXGA TFT LCD Color Monitor

## 0. CONNECTIONS



## 1. QUICK START

- Connect the 15-pin D-sub connector to the VGA port of PC.
- Connect the opposite side of VGA cable to TFT LCD monitor.
- Plug in the Audio cables to the proper connector of your monitor.
- Plug in the power cord to AC/DC adapter power inlet and 110V / 220V consent.
- Plug in the 12V DC output to TFT LCD monitor.
- Turn on PC and TFT LCD monitor.
- Adjust the display. (SXGA, 1280x1024 pixels, 24 bit color)

## 2. PRODUCT OVERVIEW

This 19" SXGA TFT LCD Monitor, accepts standard analog RGB signal. This monitor supports SXGA and lower resolutions at the frame frequency up to 75Hz. Lower resolution modes can be expanded to full screen through the expansion algorithm. The user interface includes Audio, Display, Scaling, Control, Auto Adjust, and additional features.

This monitor contains high-end LCD controller, which have high performance and user friendly interfaces. Fancy design monitor makes your desk simple and luxury.

The LCD monitor neither emits harmful rays nor requires space. Moreover, it conforms to VESA DPMS (Display Power Management Signaling) requirement, therefore energy consumption is remarkably little. Actual power consumption of LCD monitor is less than 48 watts during the operation, in contrast CRT monitor. These features guarantee you with safe, clean, and healthy environment.

## 3. PLUG & PLAY

This monitor supports VESA DDC 1/2B requirements, therefore it is truly Plug-and-Play for all PCs. No hardware or software change needed. It finds optimum setting value automatically without any diskette installation by DDC process.

- DDC Process

Abbreviation of 'Display Data Channel'.

The format of data exchange between Monitor & VGA Card.

## 4. USAGE NOTICE

### **Warning**

Please do not open or disassemble the products, because it may cause electric shock. Please be advised all the warnings, precautions, and maintenance advice as recommended in this user's manual in order to maximize the life of your monitor.

#### Do:

- Turn off the monitor before cleaning its surface.
- Periodically wipe its surface with a soft and dry cloth.
- Use the quality and safety-approved AD/DC adapter.
- Disconnect the power plug from the AC outlet when the product is not in use for long time.

#### Do not expose the monitor to:

- Extremely hot, cold, and humid environments during operation.
- Area susceptible to dust.
- Direct sunlight
- Abrasive cleaners, waxes, and solvents

# 19 inch SXGA TFT LCD Color Monitor

## 5. PACKAGE CHECKLIST

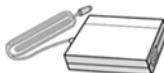
\* After open the box, check if all the package is included. If there is missing package, contact the purchase Shop.



19" TFT LCD MONITOR



User's Manual



AC/DC Adaptor



Power Cord



Audio Cable



VGA Cable



DVI Cable  
(Option)



RCA Cable  
(Video Option)



S-VHS Cable  
(Video Option)

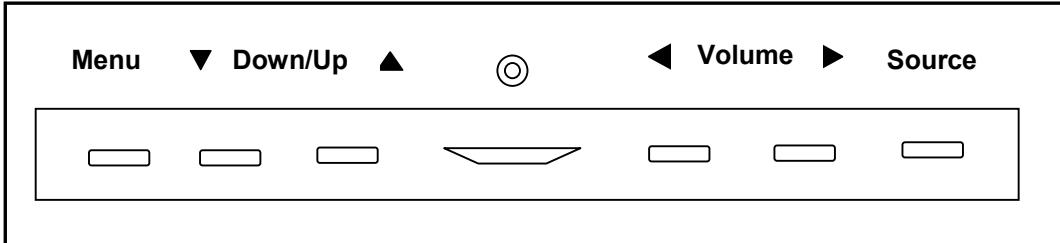


TV Antenna  
Connector  
(TV Option,  
NTSC Only)



Remote  
Controller  
(TV Option)

## 6. FRONT BUTTON & FUNCTION



### **(1) POWER**

Turn On/ Turn Off the Monitor

### **(2) LED**

Operation Status of the Monitor. (Green : ON / Red : No Signal)  
Orange (Flickering) : Suspend Mode or Disconnect of VGA Cable

### **(3) SOURCE**

Rotate signal source (Analog RGB/Digital/S-Video/Composite Video)  
Select OSD Menu/ Save the changed value

### **(4) AUTO**

Select OSD Menu/ Save the changed value  
Auto Adjust (PC only model)

### **(5) MENU**

Activate OSD Menu/ Exit Menu

### **(6) DOWN/UP (▼▲)**

Move menu (OSD Menu)  
Brightness Control Hot Key

### **(7) VOLUME(◀▶)**

Move menu/ Decrease and Increase Menu value (OSD Menu)  
Volume Control Hot Key

### **(8) Auto Adjust Hot Key ( ▼ )**

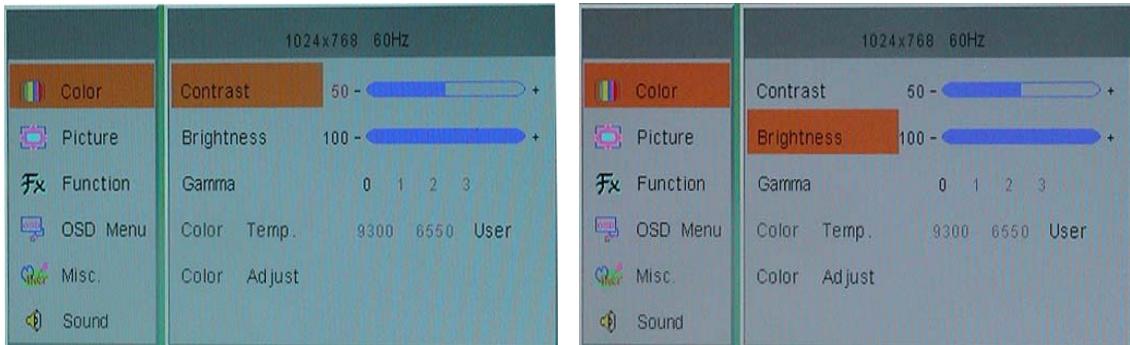
From Video model

### **(9) Brightness Control Hot Key ( ▲ )**

From Video model

## 7. OSD OPERATION

### 7.1 Color Control



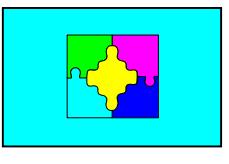
This control allows you to make adjustment to Contrast & brightness of the display screen.

#### Contrast (Common)

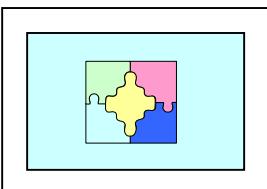
##### Contrast



◀ Distinct



▶ Vague



#### Brightness (Common)

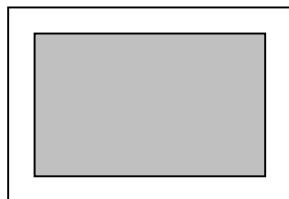
##### Brightness



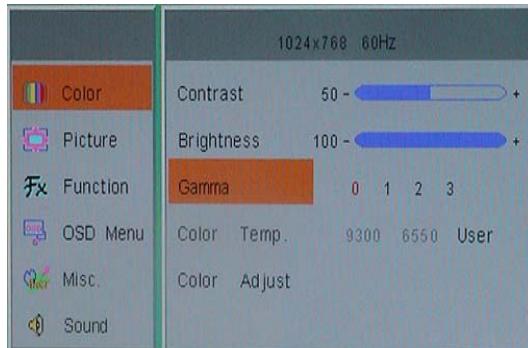
◀ Dark



▶ Bright

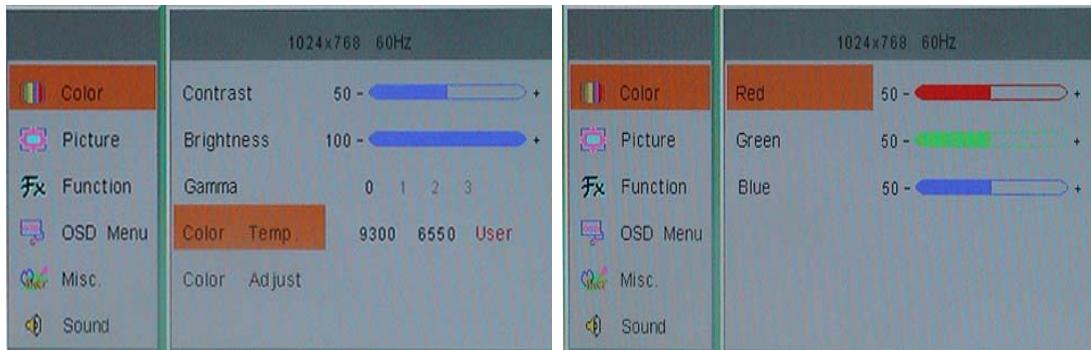


# 19 inch SXGA TFT LCD Color Monitor



## Gamma Correct.

Corret.Gamma  
o0 o1 ✓2 o3



## Color Temp. & Adjust

Function Select this control menu, then move to the desired color temperature among 9300K, 6500K or USER for custom setting. In User Mode, adjust R,G,B color control.

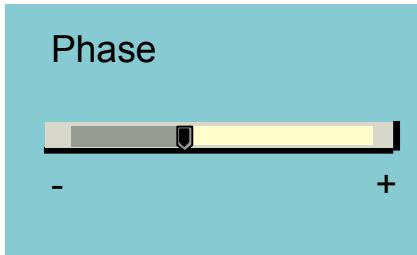
## 7.2 Picture



## H.Position & V.Position

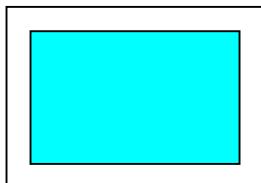
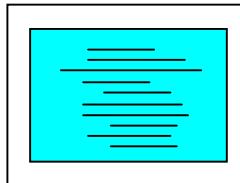
Function Select this control menu, and then use **◀ ▶** buttons to center the image horizontally on the screen.

### Phase



Mismatch

Match



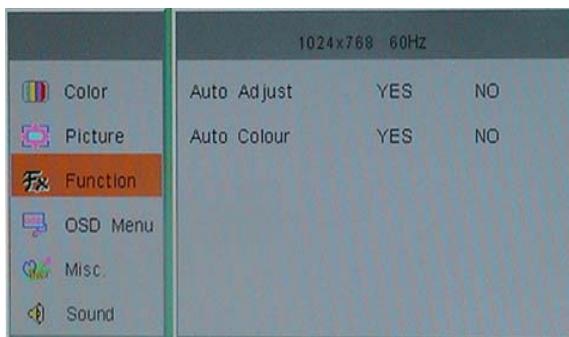
### Colck

Function Select this control menu, and then use **◀ ▶** buttons to optimize screen quality by removing noise.

### Sharpness



## 7.3 Function

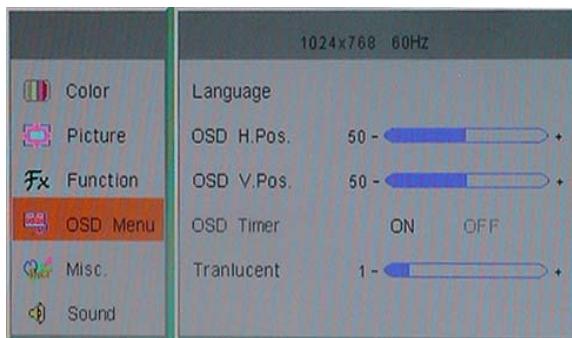


### Auto Adjust & Auto Color

Function This control will automatically make adjustments to the horizontal and vertical size, horizontal and vertical position, phase and color.

Hot Key Auto Adjust can be operated by **▲** button from Video model.

## 7.4 OSD Menu

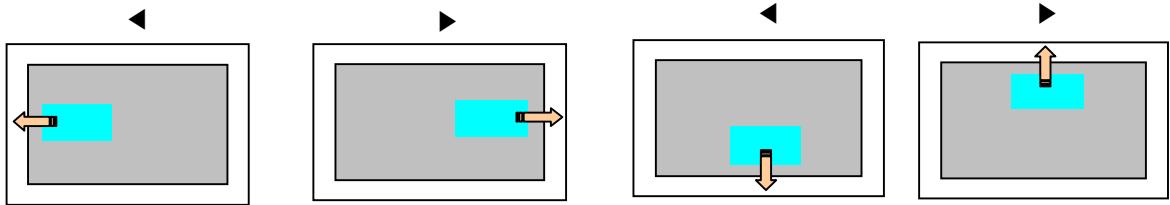


### Language

**Function** Use **◀ ▶** buttons to choose language from English, Spanish (*ESPAÑOL*), German (*DEUTSCH*), Italian (*ITALIANO*), French (*FRANÇAIS*)

### OSD H.V. Position

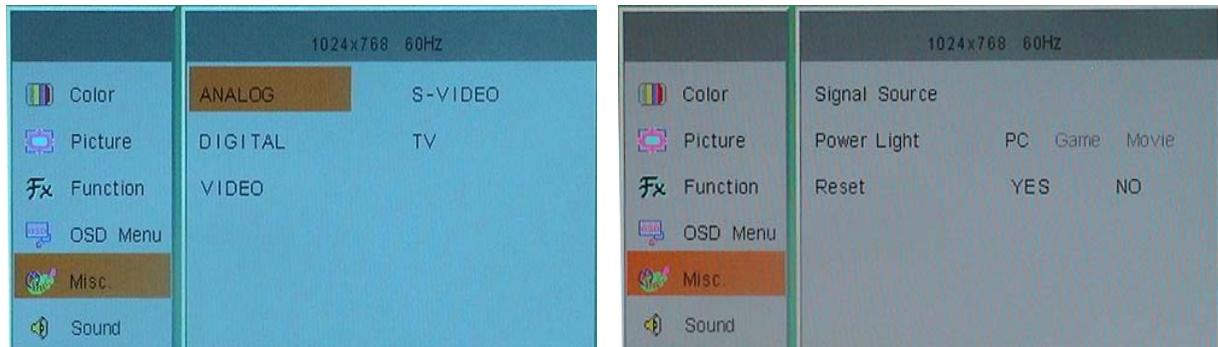
**Function** Moves the OSD window location



### Translucent

**Function** Changes the background color of OSD window. (Translucent / Opaque)

## 7.5. Miscellaneous



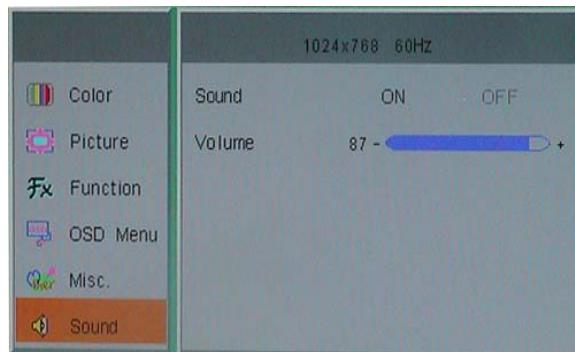
### Signal Source

**Function** Choose from Analog, Digital, Video, S-Video, TV(Option)

### Reset

**Function** User setting becomes invalid, and return to factory default setting.

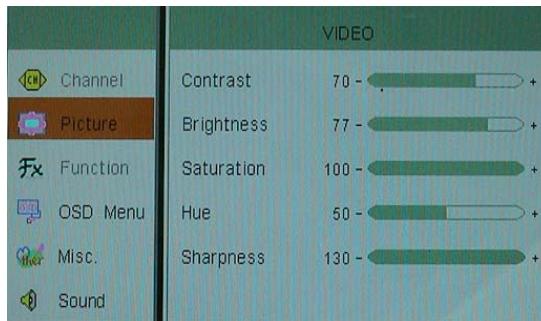
## 7.6. Sound



### Volume

**\* Hot Key** Volume can be controlled directly by **◀ ▶** button

## 7.7. VIDEO Model



### Picture

**Function** In Video Mode, choose from Contrast, Brightness, Saturation, Hue & Sharpness to control screen quality.

## 8. Troubleshooting

### Warning

Please do not open the monitor, because it may cause electric shock to the customer. Also, the warranty program may not support the damages, which user causes. When problem persists in spite of trying the following troubleshooting advice, please contact dealer or the repair center listed in the back side of this manual.

### Trouble and countermeasure

#### LED doesn't lit / No image

Check if the display is in power saving mode.

Check if the display is switched on or the power cable is properly connected.

#### Image is unstable (Flicker, Interference, Noise, etc.)

Check if signal cable is secured

Check if frame (vertical) frequency of video signal is lower than 75Hz because this monitor can not run over 75Hz. In this case, please change the setting of 'Display Control Panel' of Windows to 60Hz, that displays the best performance.

#### Dull image

Adjust the Frequency or Phase.

Adjust the frame (vertical) frequency to 60Hz.

Remove any video signal distributor.

#### Dark or saturated image

Adjust the Brightness or Contrast.

## 9. Specifications

<b>Model</b>	19 inch SXGA TFTLCD Color Monitor
<b>Display</b>	
Type	19" Color Active Matrix TFT LCD
Color	16.7Million (8 bit/color)
Pitch	0.294 x 0.294 mm
Resolution (max.)	1280 x 1024(SXGA) at 60 to 75Hz (Optimum 60Hz)
Contrast ratio	500:1
Brightness	300 cd/m <sup>2</sup>
<b>Video</b>	
Sync frequency	Vertical: 56 ~ 75Hz (Optimum 60Hz) Horizontal: 31.5 ~ 80KHz
Input signal	Analog RGB 0.714 V <sub>P-P</sub> , 15 Pin D-sub type
Viewing angle	Up/Down: 170° Right/Left: 170°
<b>Audio</b>	
Speaker	2W x 2
<b>Compatibility</b>	
Plug & Play	VESA DDC 1/2B
Compatibility	VESA / IBM / MAC
Power Management	VESA Standard, DPMS
<b>Operating Conditions</b>	
Power Consumption	Operating: 48 watt max. Stand-by: 4.8 watt max.
Temperature	Operating: 0 °C ~ 40 °C Storage: -20 °C ~ 60 °C
Humidity	Operating: 10% ~ 85% R.H. Non-Operating: 90% R.H. Max.
<b>User control</b>	
OSD	Source(Auto)/ Menu/ Down/ Up/ Left/ Right/ etc.
<b>Mechanical</b>	
Size	Packed : 505 (W) x 235 (D) x 515 (H) mm
Weight	6 kgs

## 10. VIDEO MODE SUPPORT

The modes are detected when presented to the input and previous alignments for setup are automatically recalled. A true multi-sync monitor emulation is implemented.

The factory preset supported modes include:

Mode*1	Resolution	Refresh rate	H-freq.	Pixel freq.	Remarks*1
VGA	640 x 350	70Hz	31.47KHz	25.175MHz	VESA Standard
VGA	720 x 400	59.940HZ	31.469KHZ	25.175MHZ	IBM VGA 3H
VGA	640 x 480	60Hz	31.5KHz	25.175MHz	Industry Standard
VGA	640 x 480	72Hz	37.9KHz	31.500MHz	VESA Standard
VGA	640 x 480	75HZ	37.5KHZ	31.500MHZ	VESA Standard
SVGA	800 x 600	60Hz	37.9KHz	40.000MHz	VESA Guidelines
SVGA	800 x 600	72Hz	48.1KHz	50.000MHz	VESA Standard
SVGA	800 x 600	75HZ	46.9KHZ	49.500MHZ	VESA Standard
XGA	1024 x 768	60Hz	48.4KHz	65.000MHz	VESA Guidelines
XGA	1024 x 768	70Hz	56.5KHz	75.000MHz	VESA Standard
XGA	1024 x 768	75HZ	60KHZ	78.750MHZ	VESA Standard
SXGA	1280 x 1024	60Hz	64.0KHz	108.000MHz	VESA Standard
SXGA	1280 x 1024	75HZ	80KHZ	135.000MHZ	VESA Standard

### Notes:

1. All mentioned modes are non-interlaced. The maximum and minimum frame rates are determined by the TFTLCD.
2. Factory preset modes are overwritten by additional user alignments for automatic recall. At all times it remains possible to recall the initial factory presets.

## 11. FCC NOTICE

- :This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, 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 help.

**THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.  
OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:  
(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND  
(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED,  
INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED  
OPERATION**

**THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV  
INTERFERENCE CAUSED UNAUTHORIZED MODIFICATIONS TO THIS  
EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S  
AUTHORITY TO OPERATE THE EQUIPMENT.**