

Attachment

User's Manual

TE995B

Color Monitor

Table of Contents

FCC Information	1
Important Safeguards	1
Introduction	3
Installation	4
Monitor Connection	5
Pin Assignment	5
On Screen Display	7
Specifications	14
Technical Support	16

Color Monitor

FCC Information

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

Notice:

- (1) The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- (2) Shielded interference cables must be used in order to comply with the emission limits.

Important Safeguards

1. Read all of these instructions.
2. Save these instructions for later use.
3. Unplug this video monitor from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use attachments not recommended by the video monitor manufacturer as they may cause hazards.
5. Do not use this video monitor near water for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.
6. Do not place this video monitor on an unstable cart, stand, or table. The video monitor may fall, causing serious injury to child or adult, and serious damage to the appliance. Use only with a cart or stand recommended by the manufacturer, or sold with the video monitor. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.

Color Monitor

7. Slots and openings in the cabinet and the back or bottom are provided for ventilation, and to ensure reliable operation of the video monitor and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the video monitor on a bed, sofa, rug, or other similar surface. This video monitor should never be placed near or over a radiator or heat register. This video monitor should not be placed in a built-in insulation such as a bookcase unless proper ventilation is provided.
8. This video monitor should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company. For video monitor designed to operate from battery power, refer to the operating instructions.
9. This video monitor is equipped with a three-wire grounding type plug a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.
10. Do not allow anything to rest on power cord. Do not locate this video monitor where the cord will be abused by persons walking on it.
11. Follow all warnings and instructions marked on the video monitor.
12. For added protection for this video monitor during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent the monitor from damage due to lightning and power line surges.
13. Do not overload wall outlets and extension cords as this can result in fire or electric shock.
14. Never push objects of any kind into this video monitor 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 video monitor.
15. Do not attempt to service this video monitor yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified personnel.
16. Unplug this video monitor 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 video monitor.
 - c. If the video monitor has been exposed to rain or water.

Color Monitor

- d. If the video monitor does not operate normally by the following operating instructions. Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video monitor to normal operation.
 - e. If the video monitor has been dropped or the cabinet has been damaged.
 - f. When the video monitor exhibits a distinct change in performance—this indicates a need for service.
- 17. Keep the monitor away from heating apparatus or other heat-generating equipment.
 - 18. Avoid installing the monitor with a bright background, as such installation makes your eyes weary.
 - 19. Set the monitor slightly below your eye level as it is much easier to view.
 - 20. The power cable connector is the primary means of detaching system from power supply. The power outlet should be installed near the system and easily reachable.
 - 21. **CAUTION:**
Unplug for disconnecting power input.

Introduction

Congratulations on purchasing the color display monitor. We are confident that you will be pleased with the performance of your monitor. Please take a few minutes to read this manual as it will help you make the most of this product.

The 19" high resolution color display monitor is designed to be used with a wide range of auto-synchronization.

The microprocessor-based design can provide digital user controls for precision, auto-synchronization, auto-sizing and auto-centering for convenience and user-programmability for flexibility.

Color Monitor

Installation

Attaching the Monitor to Its Base

Follow the steps below to attach the monitor to its base.

1. Turn the monitor upside down.
2. Turn the base upside down. Insert its four hooks into the four slots on the bottom of the monitor and then press down. (Point the hooks on the base toward the front of the monitor).

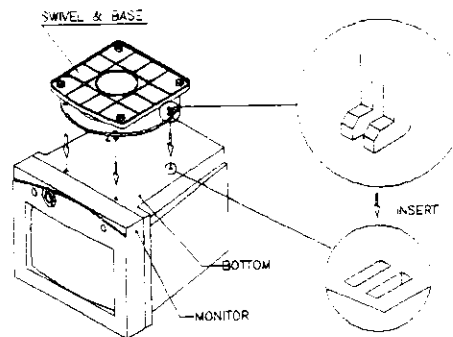


Figure 1

3. Push this assembly in the direction of arrow (←) as indicated in Figure 2 to lock the hooks.

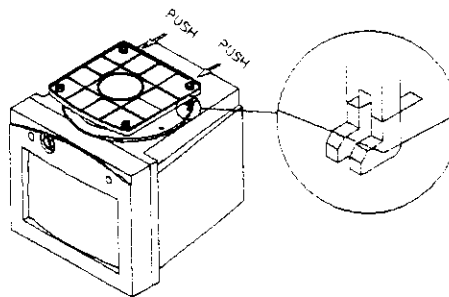


Figure 2 : Attaching the monitor to its base

Monitor connection

To attach the monitor to your system, follow the steps as described below:

1. Turn off the monitor and computer.
2. Connect one end of the power cable to your monitor and the other end to the power outlet.
3. Connect the signal cable (from the monitor) to the D-connector on the back of PC.
See figure 1 as shown below.
4. Turn on the monitor and the computer. Wait about 30 seconds to adjust the picture with the adjustment controls to obtain optimum picture.

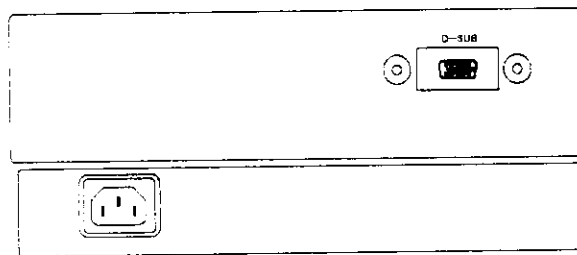
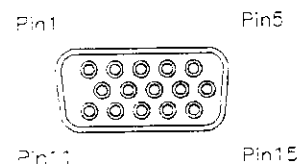


Figure 3 :Connecting the monitor

Pin Assignment

Pin	Signal	Pin	Signal
1	R	9	No Pin
2	G	10	Digital Ground
3	B	11	Sync Ground
4	Ground	12	SDA
5	DDC Return	13	H-Sync
6	Video Return	14	V-Sync
7	Video Return	15	SCL
8	Video Return		

Figure4 Pin assignment:



Color Monitor

1. Power Switch / Power ON Indicator

This switch is used to turn on / off the power. Once you press the power switch, the power will be turned on and the power-on indicator will be lit accordingly.

2. Power-On Indicator

This indicator will be lit when the power is on and extinguish when the power is off.

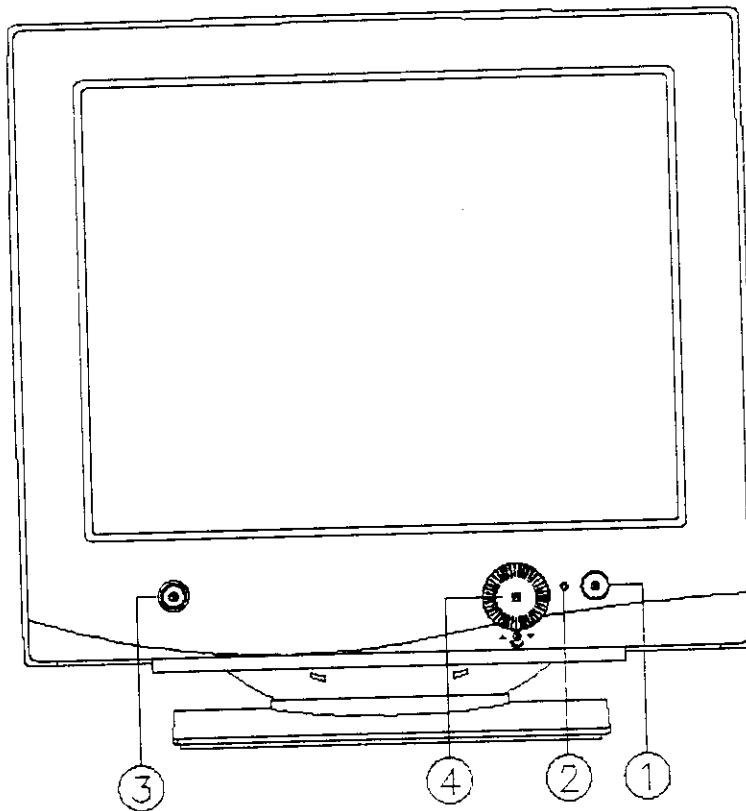


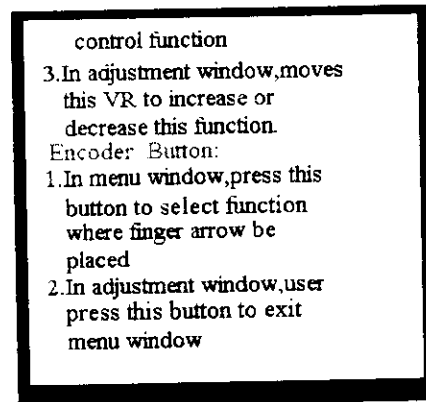
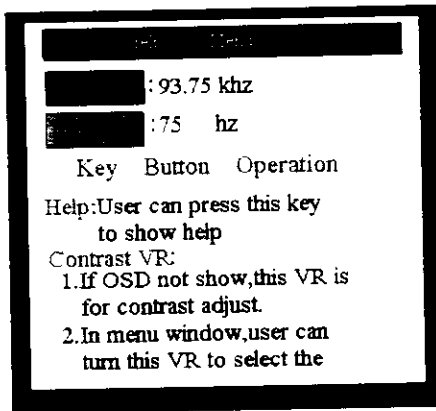
Figure 5 Shows the positions of the following operating units

1. Power Switch
2. Power-on Indicator
3. Help
4. Control Knob

Color Monitor

3. Help

This key is used to show the scanning frequency and function of the control knob. Once you press the Help key, the OSD window containing the horizontal and vertical frequency as well as operation instructions will be prompted.



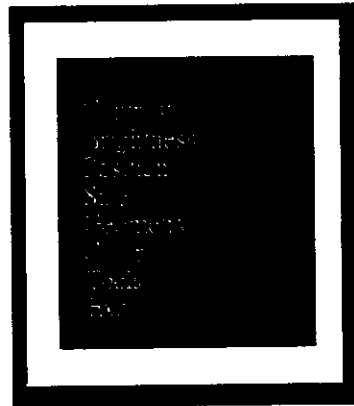
4. Control Knob

Press the control knob to enter the function menu and select your desirous adjustment functions such as contrast, brightness, position, size, geometry, color, degauss, video level, and OSD timer. You can adjust all the settings by selecting the adjustment function that you need as the first step, and then pressing the control knob again to pop up the corresponding scroll bar shown on the adjustment window.

Turn the control knob either clockwise or counterclockwise to move the hand-shaped pointer as to select your desirous adjustment function after entering the function menu.

Select the last icon- EXIT listed in the menu and press the knob to exit the menu.

Color Monitor



You can adjust the Contrast by directly turning the control knob clockwise to increase the contrast and counterclockwise to decrease the contrast without entering the function menu. You can adjust the contrast level adequately according to the ambient light to view the picture properly.

5. Brightness Adjustment

Select the function- Brightness and turn the control knob clockwise to increase the brightness and counterclockwise to decrease the brightness without entering the function menu. You can adjust the black level adequately according to the ambient light to view the picture properly.

6. Position

(1) Horizontal Position

Select the function-Horizontal position and turn the control knob clockwise to move the screen image rightward and counterclockwise to move the screen leftward.

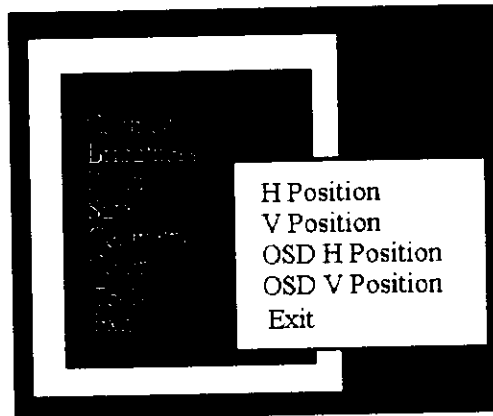
(2) Vertical Position

Select the function-Vertical position and the control knob clockwise to move the screen image upward and counterclockwise to move the screen downward.

(3) OSD Horizontal Position / OSD Vertical Position

Press the Control knob to pop up the OSD. You can move OSD view by turning the control knob clockwise or counterclockwise after selecting the OSD horizontal / vertical position.

Color Monitor



7. Size Control

(1) Auto Size

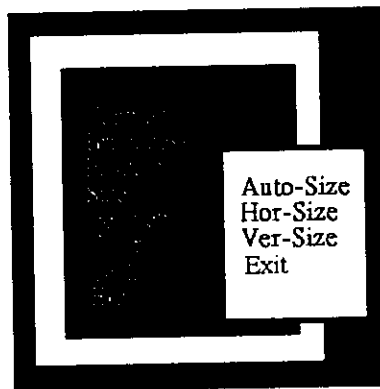
When you adjust the auto sizing, the horizontal and vertical size will be changed accordingly at the same time.

(2) Horizontal Size

To increase the horizontal size, turn the control knob clockwise after Horizontal Size is selected and turn the control knob counterclockwise to decrease the horizontal size.

(3) Vertical Size

To increase the vertical size, turn the control knob clockwise after Vertical Size is selected and turn the control knob counterclockwise to decrease the vertical size.



8. Geometry Control

(1) Pincushion

Select Pincushion function and turn the control knob clockwise to make the pincushion phenomenon become more convex, and turn the control knob counterclockwise to make the pincushion phenomenon become more concave.

(2) Trapezoid

Select the Trapezoid function and turn the control knob clockwise or counterclockwise to adjust the trapezoid distortion until the image becomes precise rectangle.

(3) Parallelogram

Select the Parallelogram function and turn the control knob to adjust the slant screen rightward or leftward.

(4) Pin-unbalance

Select the Pin-unbalance function and turn the control knob clockwise or counterclockwise to adjust the top and bottom of the image more convex or concave.

(5) Rotation

Select the Rotation function and turn the control knob clockwise or counterclockwise to rotate the image rightward or leftward.

(6) Hor. Linear

Select the Hor. Linear function and turn the control knob clockwise or counterclockwise to enlarge or shrink the right side or left side of the screen.

(7) Moire

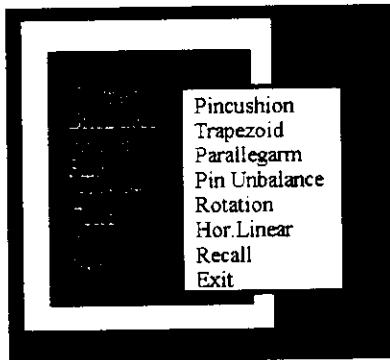
Select the Moire function and turn the control knob clockwise or counterclockwise to adjust the level of moire-clear wave.

(The over adjustment might degrade the quality of the picture.)

Color Monitor

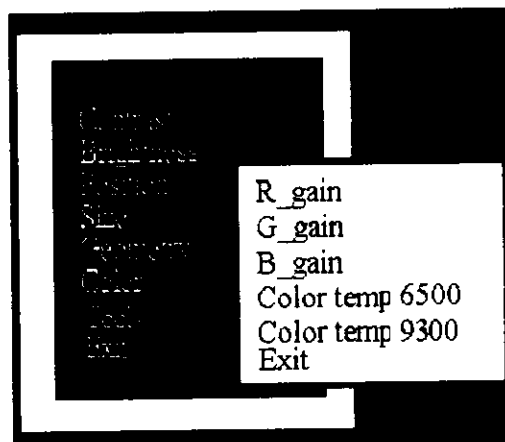
(8) Geometry Recall

In the presetting modes, select the geometry function and turn the control knob as to restore to the factory setting values. The geometry recall function is disabled in the non-presetting modes.



9. Color Control

Turn the control knob clockwise or counterclockwise to increase or decrease the red, green, or blue color. You can check the color change on the screen and color density from the scroll bar. One of the three colors will act as the reference color, therefore it will not change during adjustment.



Color Monitor

10. Tools

(1) Degauss

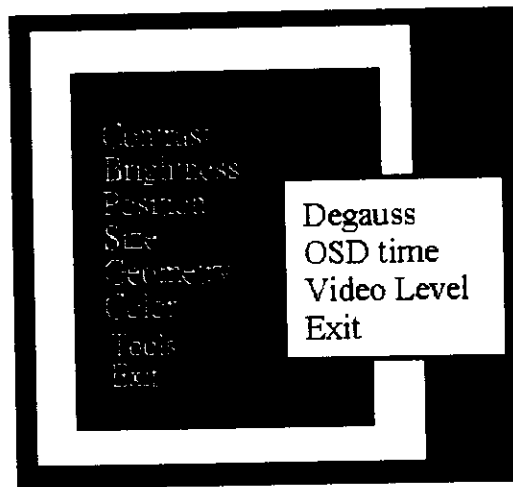
If the color purity or convergence is abnormal, which is caused by the external magnetic field, you can press the control knob to eliminate the interference after the degauss function is selected.

(2) OSD Timer

Press the control knob to select the OSD timer function. You can turn the control knob clockwise or counterclockwise to set the duration of OSD for viewing.

(3) Video Level

Turn the control knob clockwise or counterclockwise to select 0.7 V or 1.0V of the video level function listed in the adjustment menu. You can press the knob to select 1.0V of the video level if it is too bright.



Color Monitor

11. Input Selection

Manually select the input connector by switching to "D-SUB" position when the monitor is connected with a D-SUB interface cable. You can switch to the BNC position when the monitor is connected with a BNC interface cable. If the selected connector has no input signal, the monitor will enter the power-saving mode.

12. Save

The monitor will automatically save all the results of the adjustments when OSD adjustments complete.

Color Monitor

Specifications

Picture Tube 19" Diagonal (18" viewable area), 90° deflection, Full Square, High Contrast Dot pitch: 0.26 mm

Input Signal Video: Analog (0.7Vp-p/75 ohm positive)
Selected by OSD control Sync : Separate sync, positive or negative TTL

Input Signal Polarity

Input Signal \ Scanning Lines	VGA			8514/A	Others
	350	400	480		
H-sync	positive	negative	negative	positive	positive/negative
V-sync	negative	positive	negative	positive	positive/negative
Video	Positive	positive	positive	positive	positive

Input Connector 15-pin D-connector
Selected by Manual Control

Scanning frequency (H) 30KHz-95KHz
(V) 50Hz-150Hz

Active Display Area Horizontal: 360 mm
Vertical: 270 mm (changed by data timing)

Resolution 1280x1024 1024x768 1600x1200
800x600 640x480

Pixel Rate 200 MHz (maximum)

Display Color Unlimited

Misconvergence Data area: 0.4 mm (at 20FL)
Center: 0.3 mm (at 20 FL)
Adjust the CRT to face east and turn on the monitor for at least 30 minutes before testing (at 20 FL).

Power Supply Line voltage: 100 VAC- 240 VAC
Frequency: 50±3 Hz ,60±3Hz

Color Monitor

Power Consumption	150W (maximum)
Linearity Distortion	7% maximum for any adjacent character on the screen 10 % maximum for any character on the screen
Geometric Distortion	< 1%
Jitter	No visible jitter occurs on the screen when you view it beyond 50 cm.
Luminance	25FL (minimum), white flat field (at center)
Tilt	< 1°
High Voltage	26KV at beam current 0 μ A
X-Radiation	Meets DHHS requirements
Power Management	Meets EPA/NUTEK requirements
DDC	Satisfies DDC1 and DDC2B specifications
Insulation	More than DC500V, 100M ohm (between AC line and chassis)
Ambient Temperature	0°C - 35°C (operating), -10°C - 60°C (storage)
Humidity	10% - 80%
Safety	UL, CUL, TUV, GS, ERGONOMICS, NORDIC (optional) TCO95(optional)
LED Indicators	Green (ON state), Orange (Stand-by and Suspend), Orange (OFF state)
Weight	NW 22.5 Kg (approx.) GW 27 Kg (approx.)
Dimensions	465mm (H) x 470mm (W) x 470mm (D)

Technical Support

For detailed information, please visit our web site at the following address:

[Http://www.teco-info.com.tw](http://www.teco-info.com.tw)

Please select the following items in sequence:

Products > Monitors > Driver > Download

and then download Relisys.exe, and install onto your personal computer.

This manual for TE995B contains graphics and information which is subject to change without notice.

TECO INFORMATION SYSTEM
1568 Chung Shan Rd., Sec1
Chin Hwu Village, Kuang-in
Taoyuan Hsien, Taiwan, R.O.C.
Tel: 886-3-473-3111
Fax: 886-3-473-3126