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GENERAL INFORMATION

- **C7B** is a 17" Multi-Frequency digital color monitor. It provides a range of scan frequency from 30KHz to 70KHz.

- It is designed with a microprocessor based control allowing it to operate at each mode with a precision display. The **C7B** provides crisp text and vivid color graphic displays when used with Multi-Frequency and compatible graphics adapters.

- A user friendly Power Saving System which complies with VESA standard is incorporated in this monitor. It eliminates unnecessary power consumption and reduces heat within the monitor. We are confident that you will be delighted with the performance of this superb product.

SAFETY PRECAUTIONS

A. To prevent electric shock do not remove screws or back cover. There are no user-serviceable parts inside the monitor. Service should only be carried out by a qualified service person

B. Input power source:
The C7B is designed to full range from AC 100V to AC 240V.
*** WARNING : THIS APPLIANCE SHOULD BE GROUNDED (EARTHED)**

C. The monitor is equipped with a three-pronged grounding plug, which must be used with an easily accessible grounded power outlet located near to your equipment.
This is a safety feature. If you are unable to insert the plug into the outlet, please contact an electrician.

D. Do not place anything on the power cord. A damaged power cord may cause fire or electric shock. If your power cord is damaged, do not use it. Contact your Local Customer Service for information on obtaining a replacement.

E. Keep pets away from the monitor. Do not insert objects into the monitors cabinet, they may touch dangerous voltages which can be harmful and cause electric shock, fire or equipment failure.

F. Do not allow liquids to spill into the cabinet.

G. To reduce eye fatigue, avoid using the display in direct sunlight or under bright lights.

H. Do not operate the monitor beyond the specified temperature and humidity range (see specifications).

I. For correct operation, keep the monitor adequately ventilated.

J. Keep the monitor away from strong magnetic fields produced by transformers, motors, fans or other devices.

K. If the monitor does not operate correctly, turn the power off and unplug the monitor.

L. When an irregular AC Voltage is supplied, a protection circuit may turn off the monitor (the power indicator will also go off). If this happens, turn off the power switch and wait at least 30 seconds before turning it on again.

FEATURES

A. The **C7B** monitor automatically adapts to vertical frequencies from 50Hz to 120Hz and the horizontal frequency range from 30KHz to 70KHz.

B. Advanced DDC1/DDC2B I/O port provide a convenient Plug and Play feature for Window 95/97/98 Systems.

C. Ultra-high resolution of up to 1024 × 768/85Hz, Non Interlaced.

D. Low Radiation complies with MPR II regulation.

E. Approved to universal safety standards, including UL/CSA/TUV.

F. Approved to EMI standard including FCC class B.

G. Meet the VESA DPMS and NUTEK Power Saving standards.

H. Universal power supply with Auto selection.

I. Precision display by digital geometry control functions.

J. All functions controlled by on screen display (OSD).

K. Self test – When you disconnect the signal cable from the PC, the display will produce a self test pattern

L. 3 Color temperature selection - 9300K / 6500 K/and USER definable.

SPECIFICATION

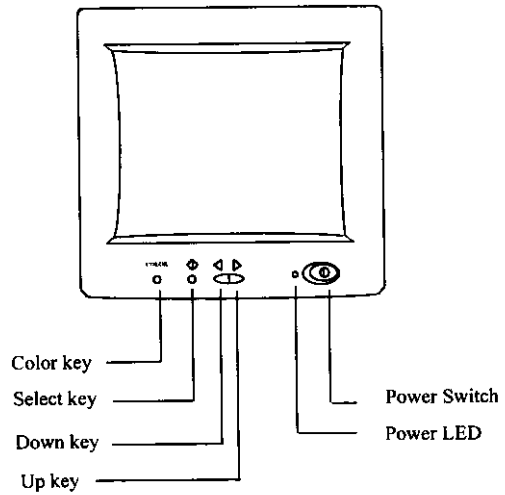
Power Source:	AC 100-240V, 47 - 63Hz (Full Range)
Power Consumption:	Normal: 100W Power saving Mode :Approx. 5W (110V/220VMAX) (VESA DPMS Standard, Auto Off / Recovery)
Picture Tube	90° deflection, 0.25 / 0.27 mm dot pitch , 15.9" Diagonal (Viewable) Low Radiation, Anti-Static
Resolution	1024 × 768/85Hz, Non-Interlaced
Display Colors	UNLIMITED
Display Area	Horizontal : 306 mm Vertical: 230 mm
Video Input	Analog-RGB, 0.7 Vpp (positive)
Video Bandwidth	100 MHz dot frequency
Scanning Frequency	Vertical: 50Hz to 120Hz (Auto) Horizontal: 30KHz to 70KHz (Auto)
Sync. Input Form	Separate Sync. (TTL, Negative or Positive)
Termination	Video Input : 75 ohm Sync Input : 1 K ohm
High Voltage	25.5KV
Weight	17.1kg
Dimension (W × H × D)	416 × 443 × 455
Safety Standard	UL/CSA or TUV
EMI Standard	FCC Class B, MPRII FTZ, CE TCO 95 (TCO 95 Model only)
Standard Accessories	Tilt / Swivel Base Power cord

Environmental Conditions	Operating Temperature : +5℃~+40℃
	Operating Humidity : 10%~80%
	Storage Temperature : -20℃~+60℃
	Storage Humidity : 5%~95%

Tilt and Swivel Operation:

The swivel range is normally limited to 45 degrees to the right and the left of the front central position .The tilt range is normally limited at an angle of –5 degrees forwards and +15 degrees backwards. This allows you to set the screen angle to the viewing position most comfortable to you.

CONTROL FUNCTION LOCATION



CONTROLS and ADJUSTMENTS

1. Power LED

This indicator will light when the power is ON and the power cord is properly connected.

The state of the LED is dependent on the Power State of the monitor. When the LED is green, the monitor is in the normal state. when the power LED is either Yellow or Amber, it indicates the monitor is in a power saving state.

2. Power Switch

Press to power on the monitor; press again to power off.

We recommend to power your system on first, then the monitor.

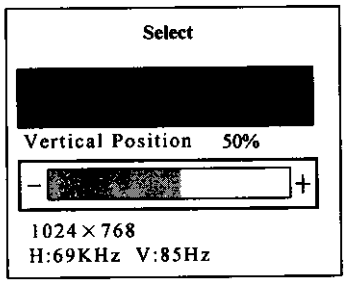
3. GEOMETRIC ADJUST

a. Press the select ◇ key to display the geometric adjustment menu.

b. Press the◇key again to select the function to be adjusted ;the chosen Icon will change in colour from blue to red.

c. Use the up/down (◁ ▷) keys to adjust the setting of the selected function to the desired level

Geometric Adjust Main Menu



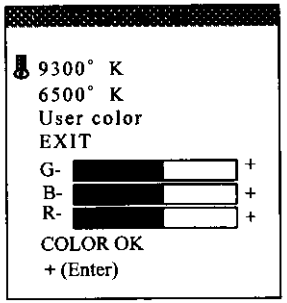
ICON NAME	FUNCTION
: Horizontal position	To adjust the horizontal position of the display
: Horizontal size	To adjust the width of the display
: Vertical position	To adjust the vertical position of the display

: Vertical size	To adjust the height of the display
: Pincushion adjustment	To adjust the straightness of the vertical edges of the display
: Trapezoid adjustment	To adjust the straightness of the vertical adges of the display in conjunction with the pincushion control
: Rotation adjustment	To adjust the display tilt
: OSD horizontal position	To enable the OSD menu to be moved horizontally.
: Side Pin Balance	To adjust the straightness of the vertical edges of the display in conjunction with pincushion and trapezoid
: Parallelogram	To adjust the display squareness.
: DEGAUSS	To manually degauss the display
: OSD DISPLAY TIME	To set "on screen display"time to either 10, 20 or30 seconds.
: Recall	To recall the original factory display settings
: Exit	To quickly remove the OSD menu

4. COLOR TEMPERATURE ADJUST

a. Press the COLOR key to display the colour temperature control menu. as follows:----

Color Temperature Adjust Menu

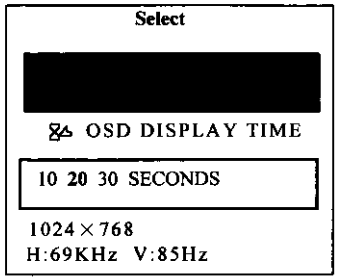


b. To select anyone of the 3 color options press the color key until the blue cursor bar frames the required colour temperature then press the ▷ up key, the icon will indicate the chosen colour.

c. In selecting the "user color" the RG.B colors can be adjusted independently by firstly selecting the color and using the up down keys to either increase or decrease the setting

5. OSD DISPLAY TIME adjust

a. Press the ◇ key to display the geometric adjustment menu as follows:----



b. Continue to press the ◇ key until the function is selected and 10. 20. 30 seconds appears in the OSD as above.

c. Press either the UP/DOWN (◁ ▷) key to select the required time, the chosen time will change in color from white to yellow.
Following completion of any readjustments the OSD will remain on the screen for the chosen period of time and then disappear automatically

6. Degauss control

a. Press the ◇ key to display the geometric adjustment menu.

b. Press the ◇ key to select the degauss icon

c. Press either the UP/DOWN (◁ ▷) key, the degauss function will then automatically occur.

7. Recall control (to recall original factory settings)

a. Press the ◇ key to display the geometric adjustment menu.

b. Press the ◇ key again until the RST function is selected

c. Press either the UP/DOWN (◁ ▷) key , The display will then return to the initial factory settings.

8. EXIT

a. Press the ◇ key to display the geometric adjustment menu

b. Press the ◇ key again until the EXIT function is selected.

c. Press either the UP/DOWN (◁ ▷ key , the OSD menu will immediately disappear

d. If the Exit function is not used the OSD menu will automatically disappear after the timing period has expired.

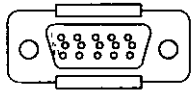
CONNECTIONS

The **C7B** monitor has two connecting cables: a Power Supply Cord, which connects to a wall outlet, surge protector or other power source, and a Signal Cable, which connects to the graphics adapter of your computer. To ensure safe and correct operation, always follow these four steps when connecting the monitor to the P.C system:

1. Disconnect the power supply cords from your computer and monitor.
2. Connect the signal cable from the monitor to the graphics adapter of your computer. The connector is shaped so that it will only fit when properly aligned.
3. Secure the connection by tightening the two screws on the connector.
4. Plug the power supply cords of the computer and monitor into an AC outlet.

PIN ASSIGNMENTS and SIGNAL LEVELS

MINI D-SUB 15 Pin Connection:



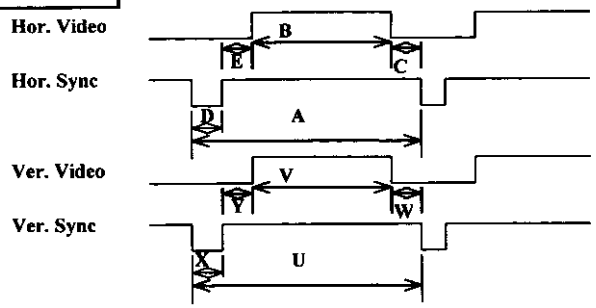
Pin Layout and Pin Assignment Chart

PIN	SIGNAL
1	RED SIGNAL
2	GREEN SIGNAL
3	BLUE SIGNAL
4	DIGITAL GROUND
5	RETURN (DDC2B)
9	PC 5V
10	DIGITAL GROUND
11	MONITOR SENSE 1
12	SDA (DDC 1/2B)
13	HOR. SYNC.
14	VERT. SYNC.
15	SCL (DDC 2B)

⌘ VIDEO SIGNAL LEVEL IS 0.7 Vp-p
⌘ SYNC. SIGNAL LEVEL IS TTL

TIMING CHARTS and SPECIFICATIONS

Separate Sync.



FACTORY PRESET MODES

Mode No.	1	2	3	4	5	Unit
Resolution	640×480	720×400	640×480	800×600	640×480	
Horizontal Frequency	31.469	31.468	37.500	37.878	43.269	KHz
(A)Horizontal	31.778	31.778	26.667	26.4	23.1	usec
(B)Horizontal Pulse Width	3.813	3.813	2.032	3.2	1.556	usec
(C) Horizontal Back Porch	1.907	1.907	3.810	2.2	2.222	usec
(D) Horizontal Active Area	25.422	25.423	20.318	20.0	17.778	usec
(E) Horizontal Front Porch	0.636	0.636	0.18	1.0	1.556	usec
(F) H. Sync. Polarity	-	-	-	+	-	
Vertical Frequency	59.940	70.000	75.000	60.31	85.0	Hz
(O) Vertical Period	16.683	14.286	13.333	16.579	11.764	msec
(P) Vertical Pulse Width	0.064	0.063	0.083	0.1056	0.069	msec
(Q) Vertical Back Porch	1.049	1.143	0.427	0.6072	0.578	msec
® Vertical Active Area	15.253	12.698	12.800	15.84	11.093	msec
(S) Vertical Front Porch	0.318	0.381	0.027	0.0264	0.023	msec
(T) V. Sync. Polarity	-	+	-	+	+	
(U) Interlaced	No	No	No	No	No	

Mode No.	6	7	8	9	10	Unit
Resolution	800×600	1024×768	800×600	1024×768	1024×768	
Horizontal Frequency	46.875	48.363	53.674	56.476	68.6	KHz
(A)Horizontal	21.333	20.677	18.774	17.077	14.52	usec
(B) Horizontal Pulse Width	1.616	2.092	1.138	1.813	1.013	usec
(c) Horizontal Back Porch	3.232	2.462	2.702	1.920	2.2	usec
(D) Horizontal Active Area	16.162	15.754	14.222	13.653	10.36	usec
(E) Horizontal Front Porch	0.323	0.369	0.702	0.320	0.471	usec
(F) H. Sync. Polarity	+	-	+	-	+	
Vertical Frequency	75.000	60.000	85.061	70.069	85	Hz
(O) Vertical Period	13.333	16.667	11.846	14.272	11.764	msec
(P) Vertical Pulse Width	0.064	0.124	0.056	0.106	0.044	msec
(Q) Vertical Back Porch	0.448	0.0600	0.507	0.513	0.524	msec
® Vertical Active Area	12.800	15.880	11.264	13.599	11.182	msec
(S) Vertical Front Porch	0.021	0.062	0.019	0.053	0.014	msec
(T) V. Sync. Polarity	+	-	+	-	+	
(U) Interlaced	No	No	No	No	No	

AUTOMATIC POWER SAVING

Introduction:

The "Green Concept" has prevailed through out the information technology market of the world for some years. EPA(Environmental Protection Agency)stipulates that information products sold to UNITED STATES should meet the requirement of environmental protection. Thus, we promote a series of monitors with power saving features which meet the "EPA" energy star requirement.

Power Management System:

When used in conjunction with a PC having a power saving circuit, it automatically reduces the monitors power consumption when the computer is not in use. There will be no image on the monitor when the power management is working, and is indicated by the power Light-Emitting Diode (LED) on the front panel as shown below. To display the image again, move the mouse or press a key on the keyboard. It may take up to 3 seconds for the image to reappear.

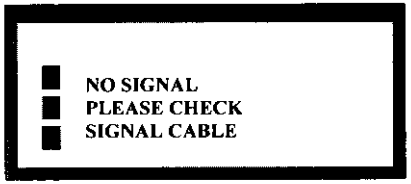
Power management table:

POWER LED COLOR	SYNC CONDITION	POWER STATE
GREEN	H&V PRESENT	NORMAL
YELLOW	NO V.SYNC	STAND BY
YELLOW	NO H.SYNC	SUSPEND
AMBER	NO H&V.SYNC	OFF

Self-test function:

When you disconnect the signal cable from the PC, and power on the monitor, the display will produce a self-test pattern. The self-test function is useful to confirm the monitor is working correctly.

SELF TEST PATTERN



FCC Notice

NOTE: 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.

Caution: To comply with the limits for a FCC Class B with core computing device, always use the shielded signal cord and shielded power cord both supplied with this unit.

Caution to the User:
The Federal Communications Commission warns the user that changes or modifications of the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Canadian Department of Communications compliance statement	This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the canadian department of communications
Avis de conformite aux normes du ministere des Communications du Canada	Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicable aux appareils numeriques de class B prescrites dans le reglement sur le brouillage radioelectrique edicte par le ministere des communications du canade.