

Operation Instructions

Thank you for purchasing this monitor, a high-resolution multi-scan color LCD-TV-monitor.

Please read this guide thoroughly before installation.

FCC RADIO FREQUENCY INTERFERENCE STATEMENT WARNING: (FOR FCC CERTIFIED MODELS)

This monitor has been tested and found compliant with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide proper protection against harmful interference to a residential installation. This monitor generates, uses, and can radiate radio frequency energy. Harmful interference to radio communication may be led as a result if it's not properly installed and used. However, there is no guarantee that interference will not occur in a particular installation. If this monitor does cause serious interference to radio or television reception, resetting the monitor may determine it. Moreover, users are encouraged to correct interference by doing one or more of the following:

- Reorient or relocate the receiving antenna.
- Move the monitor and the receiver further away from each other.
- Connect the monitor into an outlet on a circuit different from that to which the receiver is connected.
- Consult your local dealer or an qualified technician.

FCC Warning:

To assure a continued FCC compliance, a user must use a grounded power supply cord and the provided shielded video interface cable with bonded ferrite cores. Also, any unauthorized changes or modifications to this monitor would void the user's authority to operate this device.

Note: If necessary, shielded interface cables and AC power cord must be used to meet the emission level limits.

EMI Certification:

The Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulation.

Cet appareil numerique de class B respecte toutes les exigences du Reglement sur le materiel brouilleur du Canada.

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First Step

Thank you for purchasing this monitor of high performance!
This monitor package comes with:

- ◆ Power Cable
- ◆ User Guidebook or CD-ROM (You're reading now)
- ◆ Remote control 29 key
- ◆ Audio Cable for PC type 1.5m.
- ◆ VGA Cable

Quick Installation

1. Connect TV ANTANA or CATV Cable or Connect video cable

Make sure both the monitor and computer are powered OFF.
Connect to TV antenna jack or CATV box by 75-ohm coaxial cable. Connect the VGA cable to the computer, then to the monitor.

2. Connect Power Cord

Connect the power cord to a properly grounded AC outlet, then to the monitor.

3. Power-ON computer and monitor

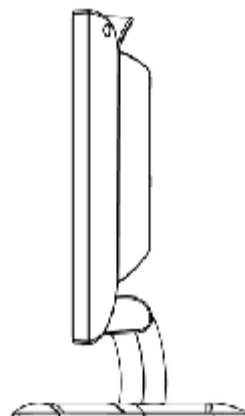
Power-ON the computer, then
Power-ON the monitor.

4. Setting input source for LCD-TV-monitor from source of remote, or OSD menu.

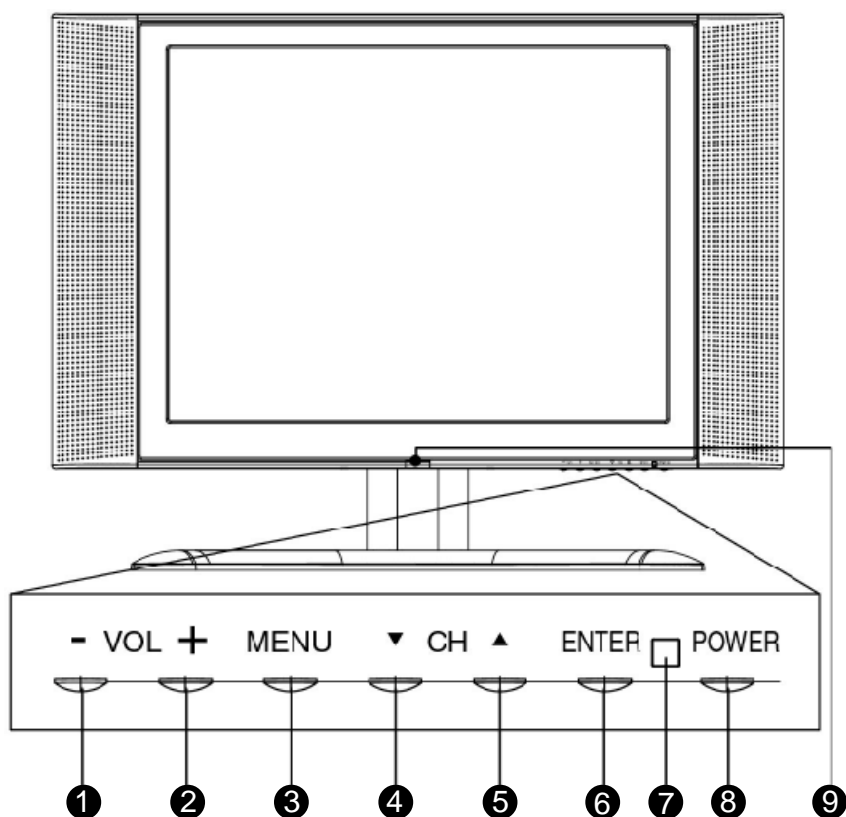
5. If in PC mode Windows Users:

Setting the Timing Mode
(Resolution and Refresh Rate)
Example: 800 x 600 @ 75 Hz
Resolution Right-click on the Windows desktop > Properties > Settings > "Desktop Area". Set the resolution.
Refresh Rate (vertical frequency)
See your graphic card's user guide for instructions.

6. If in TV mode you can auto scan TV channel from OSD menu (page 7.)

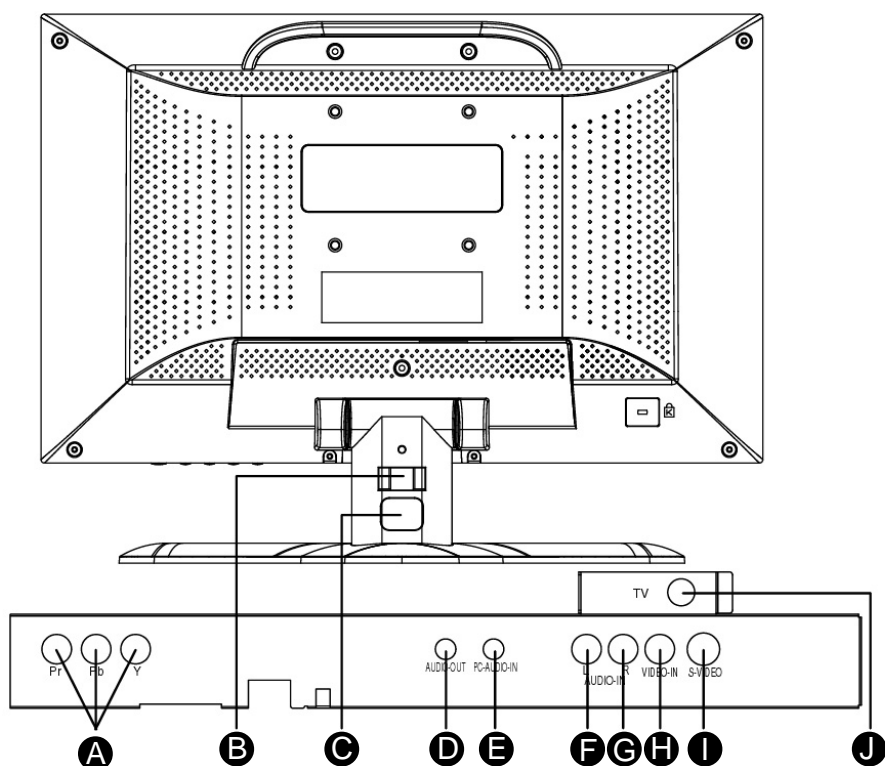


Front Panel Control



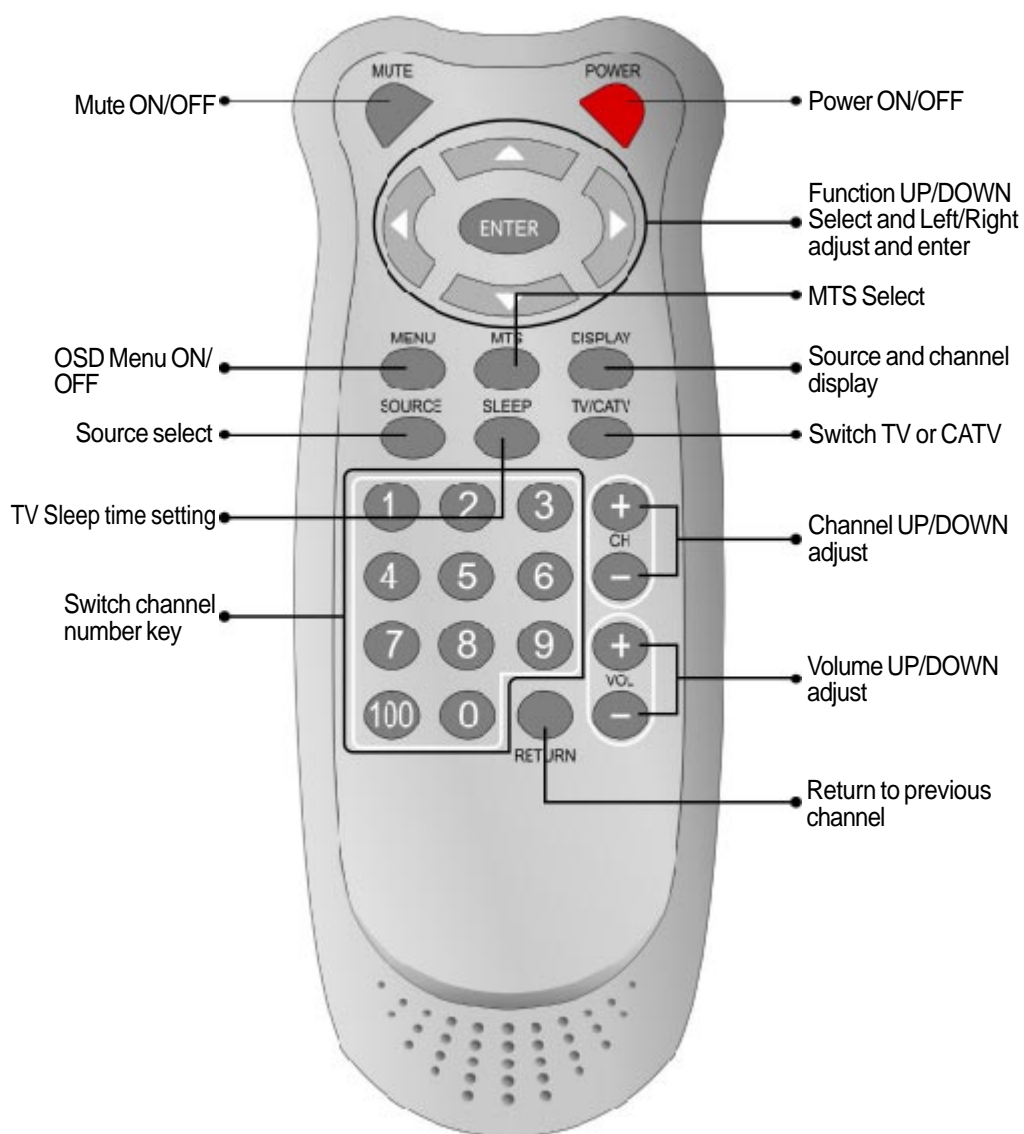
①	Volume Down or adjust decrease
②	Volume Up or adjust increase
③	Menu Key OSD ON/OFF
④	Scroll Down
⑤	Scroll UP
⑥	Enter
⑦	Power LED indicator
⑧	Power ON/OFF switch
⑨	Remote control receiver

Installation



A	YPbPr signal input
B	VGA signal input
C	Power input (AC input)
D	Audio output
E	Audio input of PC
F	Video signal Audio input (left)
G	Video signal Audio input (right)
H	AV Video input
I	S-Video input
J	TV signal input

Remote Control



Using the OSD Functions

Press menu key to display OSD Menu, and press menu key again to change menu page.

TV mode

Picture Menu:



This submenu is to adjust Contrast, Brightness, Color, Tint and sharpness.

Contrast: To adjust the contrast of the video. (right: low contrast, left: high contrast)

Brightness: To adjust the Luminance of the Video. (right: low, left: Max)

Color: To adjust color saturation. (right: pale color, left: brilliant color)

Tint: To adjust the tint level. (right: greenish tone, left: reddish tone)

Sharpness: To adjust the picture sharpness of display.



This submenu can adjust MTS, Balance, Bass, Treble, and mute ON/OFF.

Using the OSD Functions

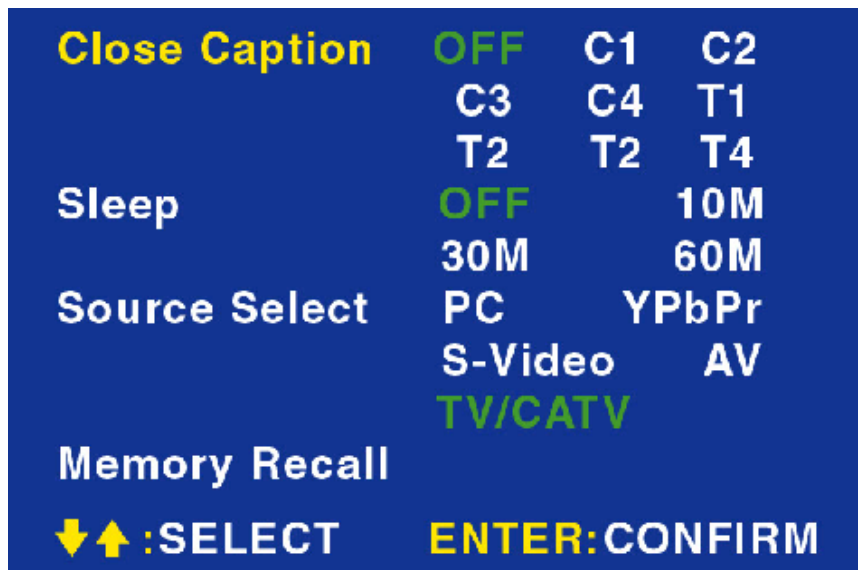
MTS: To select audio output condition to stereo, SAP or mono.

Balance: To adjust the left and right audio balance.

Bass: To adjust the bass.

Treble: To adjust the treble.

Mute: To adjust the Mute ON/OFF.



This submenu can set Close Caption, Sleep time, and Source Select (PC, YPbPr, S-Video, AV)

Close Caption: To select the close caption.

Sleep: To select the TV sleep time.

Source Select: To select the input source (PC, YPbPr, S-Video, AV).

Memory Recall: Recall factory setting condition, about video & Audio setting.

Using the OSD Functions



TV/CATV SELECT: To select TV signal input between TV and CATV.

AutoScan: To autoscan the TV channel (TV or CATV).

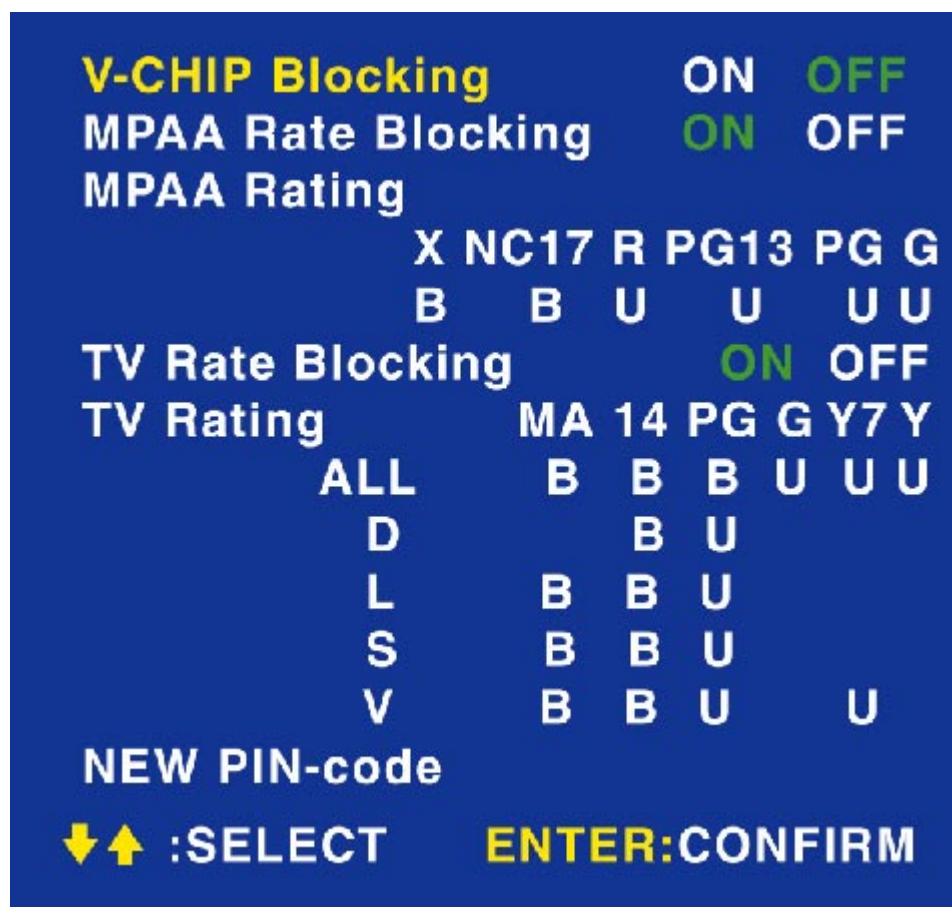
Channel: Add or delete TV channel.

V-CHIP Control: To set V-Chip condition and password.



V-Chip setting: To enable V-Chip functions, please enter 1234 if you have not assigned the special password.

Using the OSD Functions



Use remote control ▲, ▼, ◀, ▶ and enter key to set parental guidelines.

- Press ▲, ▼, ◀, ▶ key to move the cursor.
- When the text is yellow, press enter key to set block or unblock condition.
- New PIN-Code: You can change the password.

Using the OSD Functions



In case TV receives V-Chip protected program, following message appears on the screen.



If you want to release V-Chip protection.

1. Press Menu-Key.
2. Press password from remote control, The V-Chip block OSD will disappear.

Using the OSD Functions

Press menu key to display OSD Menu.

Video mode (Include-YPbPr, AV)

Picture Menu:



This submenu can to adjust Contrast, Brightness, Color, Tint and sharpness.

Contrast: To adjust the contrast level.

Brightness: To adjust the brightness level.

Color: To adjust color saturation. (right: pale color, left: brilliant color)

Tint: To adjust the tint level. (right: greenish tone, left: reddish tone)

Sharpness: To adjust the picture sharpness of display. (right: soft, left: sharper)



This submenu can to adjust Balance, Bass, Treble, and to mute ON/OFF.

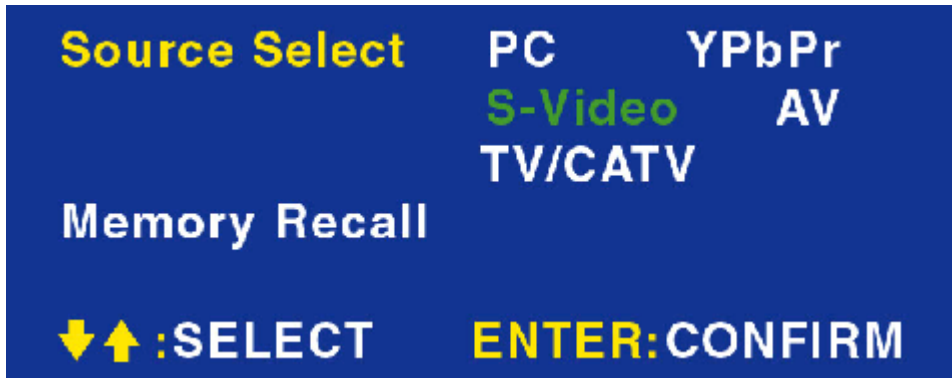
Balance: To adjust the left and right audio balance.

Bass: To adjust the bass.

Using the OSD Functions

Treble: To adjust the treble.

Mute: To select the Mute ON/OFF.



Source Select: To select the source (PC, YPbPr, S-Video, AV).

Memory Recall: Recall factory setting condition, about video & Audio setting.

Using the OSD Functions

Press menu key to display OSD Menu.

PC mode

Main Menu:



Adjusting

Auto Adjust: Auto adjust picture's horizontal position, vertical position, fine tune and H-Size.

Memory Recall

Memory Recall: Restore default settings of contrast (Max), brightness (Middle), color temperature (preset color), OSD Position (Center), Sharpness (Min) and Volume (Middle).

Using the OSD Functions



Contrast: To adjust the contrast level.

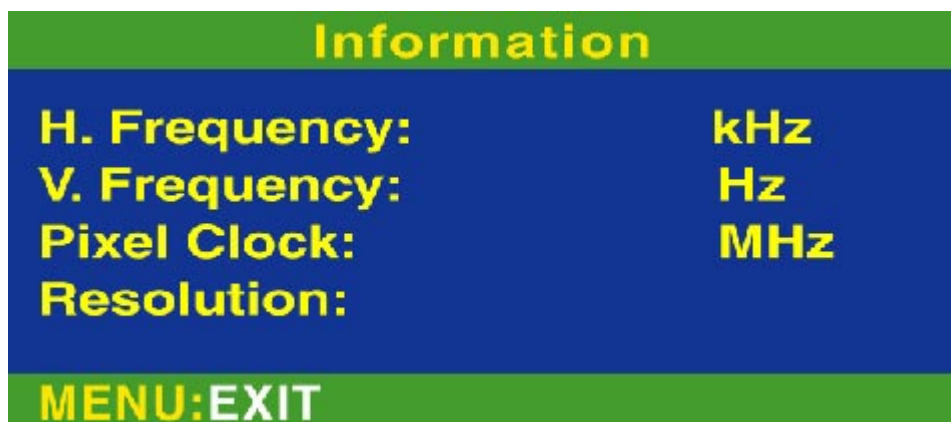


Brightness: To adjust the brightness level.



Color Adjust: To select the preset color temperature or user color setting.

Using the OSD Functions



Information: Show current mode condition.



Image adjust: adjust horizontal /vertical position ,fine tune and H-size and sharpness.



H. Position: To adjust the horizontal position of the video.

Using the OSD Functions

V. Position



MENU:EXIT

ENTER: 

V. Position: To adjust the vertical position of the video.

Fine Tune



MENU:EXIT

Fine Tune: To adjust the delay time.

H. Size



MENU:EXIT

H. Size: To adjust the delay time between horizontal synchronous signal and video.

Sharpness



MENU:EXIT

Sharpness: To adjust the picture sharpness of display.

Using the OSD Functions



Volume: To adjust the volume.

Mute: To select the Mute ON/OFF.



Source Select: To select input source is PC, YPbPr, S-Video, AV, or TV/CATV.

Using the OSD Functions



Setup Menu: To setting text mode, OSD position, OSD timeout.

Text Mode: To switch DOS Text and graphic mode for 640x400 and 720x400.



OSD Position: To adjust OSD H/V position.



OSD Timeout: Setting OSD display time.

Timing Modes

VESA	640 x 400 @ 70HZ
VESA	640 x 480 @ 60HZ
VESA	640 x 480 @ 67HZ
VESA	640 x 480 @ 75HZ
VESA	800 x 600 @ 56HZ
VESA	800 x 600 @ 60HZ
VESA	800 x 600 @ 72HZ
VESA	800 x 600 @ 75HZ
MAC	832 x 624 @ 75HZ
VESA	1024 x 768 @ 60HZ
VESA	1024 x 768 @ 70HZ
VESA	1024 x 768 @ 75 Hz

TV Frequency Table

U.S.A Channel

VIF 45.75 MHZ, SIF 41.25 MHZ

Ch.	Freq.range	f _p (picture)	f _s (sound)	f _{osc}	Ch.	Freq.range	f _p (picture)	f _s (sound)	f _{osc}
2	54 – 60	55.25	59.75	101.00	43	644 – 650	645.25	649.75	691.00
3	60 – 66	61.25	65.75	107.00	44	650 – 656	651.25	655.75	697.00
4	66 – 72	67.25	71.75	113.00	45	656 – 662	657.25	661.75	703.00
5	76 – 82	77.25	81.75	123.00	46	662 – 668	663.25	667.75	709.00
6	82 – 88	83.25	87.75	129.00	47	668 – 674	669.25	673.75	715.00
7	174 – 180	175.25	179.75	221.00	48	674 – 680	675.25	679.75	721.00
8	180 – 186	181.25	185.75	227.00	49	680 – 686	681.25	685.75	727.00
9	186 – 192	187.25	191.75	233.00	50	686 – 692	687.25	691.75	733.00
10	192 – 198	193.25	197.75	239.00	51	692 – 698	693.25	697.75	739.00
11	198 – 204	199.25	203.75	245.00	52	698 – 704	699.25	703.75	745.00
12	204 – 210	205.25	209.75	251.00	53	704 – 710	705.25	709.75	751.00
13	210 – 216	211.25	215.75	257.00	54	710 – 716	711.25	715.75	757.00
14	470 – 476	471.25	475.75	517.00	55	716 – 722	717.25	721.75	763.00
15	476 – 482	477.25	481.75	523.00	56	722 – 728	723.25	727.75	769.00
16	482 – 488	483.25	487.75	529.00	57	728 – 734	729.25	733.75	775.00
17	488 – 494	489.25	493.75	535.00	58	734 – 740	735.25	739.75	781.00
18	494 – 500	495.25	499.75	541.00	59	740 – 746	741.25	745.75	787.00
19	500 – 506	501.25	505.75	547.00	60	746 – 752	747.25	751.75	793.00
20	506 – 512	507.25	511.75	553.00	61	752 – 758	753.25	757.75	799.00
21	512 – 518	513.25	517.75	559.00	62	758 – 764	759.25	763.75	805.00
22	518 – 524	519.25	523.75	565.00	63	764 – 770	765.25	769.75	811.00
23	524 – 530	525.25	529.75	571.00	64	770 – 776	771.25	775.75	817.00
24	530 – 536	531.25	535.75	577.00	65	776 – 782	777.25	781.75	823.00
25	536 – 542	537.25	541.75	583.00	66	782 – 788	783.25	787.75	829.00
26	542 – 548	543.25	547.75	589.00	67	788 – 794	789.25	793.75	835.00
27	548 – 554	549.25	553.75	595.00	68	794 – 800	795.25	799.75	841.00
28	554 – 560	555.25	559.75	601.00	69	800 – 806	801.25	805.75	847.00
29	560 – 566	561.25	565.75	607.00					
30	566 – 572	567.25	571.75	613.00					
31	572 – 578	573.25	577.75	619.00					
32	578 – 584	579.25	583.75	625.00					
33	584 – 590	585.25	589.75	631.00					
34	590 – 596	591.25	595.75	637.00					
35	596 – 602	597.25	601.75	643.00					
36	602 – 608	603.25	607.75	649.00					
37	608 – 614	609.25	613.75	655.00					
38	614 – 620	615.25	619.75	661.00					
39	620 – 626	621.25	625.75	667.00					
40	626 – 632	627.25	631.75	673.00					
41	632 – 638	633.25	637.75	679.00					
42	639 – 644	639.25	643.75	685.00					

TV Frequency Table

Ch.	Freq. range	f _p (picture)	f _s (sound)	f _{osc}	Ch.	Freq. range	f _p (picture)	f _s (sound)	f _{osc}	
2	54 – 60	55.25	59.75	101.00	JJ	46	354 – 360	355.25	359.75	401.00
3	60 – 66	61.25	65.75	107.00	KK	47	360 – 366	361.25	365.75	407.00
4	66 – 72	67.25	71.75	113.00	LL	48	366 – 372	367.25	371.75	413.00
5A	72 – 78	73.25	77.75	119.00	MM	49	372 – 378	373.25	377.75	419.00
5	76 – 82	77.25	81.75	123.00	NN	50	378 – 384	379.25	383.75	425.00
6	82 – 88	83.25	87.75	129.00	OO	51	384 – 390	385.25	389.75	431.00
A-5	90 – 96	91.25	95.75	137.00	PP	52	390 – 396	391.25	395.75	437.00
A-4	96 – 102	97.25	101.75	143.00	QQ	53	396 – 402	397.25	401.75	443.00
A-3	102 – 108	103.25	107.75	149.00	RR	54	402 – 408	403.25	407.75	449.00
A-2	108 – 114	109.25	113.75	155.00	SS	55	408 – 414	409.25	413.75	455.00
A-1	114 – 120	115.25	119.75	161.00	TT	56	414 – 420	415.25	419.75	461.00
A	120 – 126	121.25	125.75	167.00	UU	57	420 – 426	421.25	425.75	467.00
B	126 – 132	127.25	131.75	173.00	VV	58	426 – 432	427.25	431.75	473.00
C	132 – 138	133.25	137.75	179.00	WW	59	432 – 438	433.25	437.75	479.00
D	138 – 144	139.25	143.75	185.00	AAA	60	438 – 444	439.25	443.75	485.00
E	144 – 150	145.25	149.75	191.00	BBB	61	444 – 450	445.25	449.75	491.00
F	150 – 156	151.25	155.75	197.00	CCC	62	450 – 456	451.25	455.75	497.00
G	156 – 162	157.25	161.75	203.00	DDD	63	456 – 462	457.25	461.75	503.00
H	162 – 168	163.25	167.75	209.00	EEE	64	462 – 468	463.25	467.75	509.00
I	168 – 174	169.25	173.75	215.00		65	468 – 474	469.25	473.75	515.00
7	174 – 180	175.25	179.75	221.00		66	474 – 480	475.25	479.75	521.00
8	180 – 186	181.25	185.75	227.00		67	480 – 486	481.25	485.75	527.00
9	186 – 192	187.25	191.75	233.00		68	486 – 492	487.25	491.75	533.00
10	192 – 198	193.25	197.75	239.00		69	492 – 498	493.25	497.75	539.00
11	198 – 204	199.25	203.75	245.00		70	498 – 504	499.25	503.75	545.00
12	204 – 210	205.25	209.75	251.00		71	504 – 510	505.25	509.75	551.00
13	210 – 216	211.25	215.75	257.00		72	510 – 516	511.25	515.75	557.00
J	216 – 222	217.25	221.75	263.00		73	516 – 522	517.25	521.75	563.00
K	222 – 228	223.25	227.75	269.00		74	522 – 528	523.25	527.25	569.00
L	228 – 234	229.25	233.75	275.00		75	528 – 534	529.25	533.75	575.00
M	234 – 240	235.25	239.75	281.00		76	534 – 540	535.25	539.75	581.00
N	240 – 246	241.25	245.75	287.00		77	540 – 546	541.25	545.75	587.00
O	246 – 252	247.25	251.75	293.00		78	546 – 552	547.25	551.75	593.00
P	252 – 258	253.25	257.75	299.00		79	552 – 558	553.25	557.75	599.00
Q	258 – 264	259.25	263.75	305.00		80	558 – 564	559.25	563.75	605.00
R	264 – 270	265.25	269.75	311.00		81	564 – 570	565.25	569.75	611.05
S	270 – 276	271.25	275.75	317.00		82	570 – 576	571.25	575.75	617.00
T	276 – 282	277.25	281.75	323.00		83	576 – 582	577.25	581.75	623.00
U	282 – 288	283.25	287.75	329.00		84	582 – 588	583.25	587.75	629.00
V	288 – 294	289.25	293.75	335.00		85	588 – 594	589.25	593.75	635.00
W	294 – 300	295.25	299.75	341.00		86	594 – 600	595.25	599.75	641.00
AA	300 – 306	301.25	305.75	347.00		87	600 – 606	601.25	605.75	647.00
BB	306 – 312	307.25	311.75	353.00		88	606 – 612	607.25	611.75	653.00
CC	312 – 318	313.25	317.75	359.00		89	612 – 618	613.25	617.75	659.00
DD	318 – 324	319.25	323.75	365.00		90	618 – 624	619.25	623.75	665.00
EE	324 – 330	325.25	329.75	371.00		91	624 – 630	625.25	629.75	671.00
FF	330 – 336	331.25	335.75	377.00		92	630 – 636	631.25	635.75	677.00
GG	336 – 342	337.25	341.75	383.00		93	636 – 642	637.25	641.75	683.00
HH	342 – 348	343.25	347.75	389.00		94	642 – 648	643.25	647.75	689.00
II	348 – 354	349.25	353.75	395.00						

Technical Information

Technical Specification

LCD Panel	18.1" TFT	
Power Management	Energy Star compliant VESA	
	DPMS compatible	
	< 8 W (Monitor mode only)	
Displayable Resolution	XVGA 1024 x 768 max. Vertical Frequency 75Hz max.	
Pixel Dimension	0.3585 x 0.3585 mm	
LCD Display Color	16.7M(8 bits/color)	
Viewing Angle		18.1" (typical)
		CR 10
	Horizontal	-75° + 75° (typical)
	Vertical	-50° + 60° (typical)
Tilt	+20° , -5°	
Contrast Ratio	350 : 1 (typical)	
Brightness	450 cd /m ² (typical)	
Response Time	Tr= 6 ms (typical)	
	Tf=19 ms (typical)	
Active Display Area	367 mm x 276 mm	
Temperature	Operating: 0° C ~ +40° C	
	Storage: -20° C ~ +60° C	
Compliance	UL, FCC-B, Energy Star, VCCI	
Power	Voltage 100-240 V	
	Consumption 55 Watts (max)	
Speaker	3W x 2	

Safety Precautions

This monitor is manufactured and tested on a ground principle that a user's safety comes first. However, improper use or installation may result danger to the monitor as well as to the user. Carefully go over the following WARNINGS before installation and keep this guide handy.

WARNINGS:

- ◆ This monitor should be operated only at the correct power sources indicated on the label on the rear end of the monitor. If you're unsure of the power supply in your residence, consult your local dealer or power company.
- ◆ Do not try to repair the monitor yourself as it contains no user-serviceable parts. The monitor should only be repaired by a qualified technician.
- ◆ Do not remove the monitor cabinet. There is high-voltage parts inside that may cause electric shock to human bodies, even when the power cord is disconnected .
- ◆ Stop using the monitor if the cabinet is damaged. Have it checked by a service technician.
- ◆ Put your monitor only in a clean, dry environment. Unplug the monitor immediately if gets wet and consult your service technician.
- ◆ Always unplug the monitor before cleaning it. Clean the cabinet with a clean, dry cloth. Apply non-ammonia based cleaner onto the cloth, not directly onto the glass screen.
- ◆ Keep the monitor away from magnetic objects, motors, TV sets, and transformer.
- ◆ Do not place heavy objects on the cable or power cord.
- ◆ For PLUGGABLE EQUIPMENT, the Socket-outlet shall be installed near the equipment and shall be easily accessible.

Care and Maintenance

Care

- Avoid exposing your monitor directly to sunlight or other heat source.
- Place your monitor away from direct ray of the sun to reduce glare. Put your monitor in a well ventilated area. Do not place anything heavy on top of your monitor.
- Make certain your monitor is installed in a clean and moisture-free area.
- Keep your monitor away from magnets, motors, transformers, speakers, and TV sets.

Safety Tips

- If smoke, abnormal noise or odor came out of your monitor, switch off the power immediately and call your service center.
- Never remove the rear cover of your monitor cabinet. The display unit inside contains high-voltage parts and may cause electric shock to human bodies.
- Never try to repair your monitor yourself. Always call your service center or a qualified technician to fix it.