

Expository Statements for Application

1. This is to make an application for certification of following models,

Original basic model No.TX-D9S45NMB(No-Brand) and similar model No.TX-D9S45MB (Panasonic) are FCC ID : ACJ93312141.

2. This application is submitted pursuant to the Federal Register, Rules and Regulation, Title 47, Chapter 1, Part 2, Section 2.1033.

3. This is to certify that color multi scan monitor FCC ID : ACJ93312141 (Model No. : TX-D9S45NMB properly complied with New Part 15, Subpart B, Computing Devices as shown in the attached documents.)

Maximum Resolutions up to 1600 x 1200, Hf : 30-97 kHz, Vf : 50-180 Hz.

4. Model No. TX-D9S45NMB has been tested in accordance with the requirements contained in Subpart B of New Part 15 of FCC Regulations.

These tests are performed using measurement procedures consistent with ANSI C63.4 (1992) of FCC standards and demonstrate that the equipment complies with the appropriate standards.

Each unit manufactured, imported or marketed, as defined in the Commission's Regulations, will conform to the sample(s) tested within the variations that can be expected due to quantity production and testing on a statistical basis.

Comparison Information for Models TX-D9S45NMB and Added model TX-D9S45MB

<u>Model Name</u> <u>Item</u>	<u>Basic Model</u> <u>TX-D9S45NMB</u>	<u>Added Model</u> <u>TX-D9S45MB</u>
1. Brand Name	No-Brand	Panasonic

**Comparison Information for Basic Model and Modified Model**

Followings are comparison information of a basic and modified construction details of the same designated model TX-D9S45NMB.

		<i>FVD99-F014 / ORIGINAL</i>	<i>FVD99-F014 / CLASS II CHANGE</i>
No.	ITEMS	BASIC MODEL : TX-D9S55NM	SIMILAR MODEL : TX-D9S45NMB
1	Capacitor (C802)	Type : XG-VS Rated : 0.1 $\mu$ F, 275V	Type : XG-VS Rated : 0.1 $\mu$ F, 275V -or- Not Provided
2	Capacitor (C805)	Type : RS Rated : 2200pF, 250V	Not Provided
3	Capacitor (C823)	Type : Ceramic Rated : 470pF, 1kV	Not Provided
4	Capacitor (C803, C804)	Type : RS Rated : 2200pF, 250V	Type : RS Rated : 2200pF, 250V -or- Type : TS Rated : 2200pF, 250V
5	Capacitor (C831, C832)	Type : RS Rated : 4700pF, 250V	Type : RS Rated : 4700pF, 250V -or- Type : TS Rated : 4700pF, 250V
6	Thermistor (TH801)	Type : ERTB6SFL100P Rated : 10ohms, 3.8W	Type : ERTB6SFL100P Rated : 10ohms, 3.8W -or- Type : N20SP010 Rated : 10ohms, 6A
7	BNC Connector for Signal Cable	Provided	Provided
8	Ferrite Beads Inductor (L803)	Provided	Provided -or- Not Provided
9	Shape of Shield Case	Please refer to attached photograph.	
10	Shape of Heat Sink for Q550 & D550	Please refer to attached photograph.	
11	USB CIRCUIT IN PEDESTAL	NOT PROVIDED. SIMILAR MODEL TX-D9S55M HAS USB	NOT PROVIDED.

DISPLAY MONITOR DIVISION  
 AVC COMPANY  
 MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

ENGINEERING SPECIFICATIONS (TENTATIVE)  
**TX-D9S45MB (HV12HB 19") DIGITAL MULTI-SCAN CHASSIS**

- |                         |  |
|-------------------------|--|
| <b>&lt;FEATURES&gt;</b> | (1) SHORTER DEPTH WITH LARGE SCREEN<br>(2) FLICKER FREE SCREEN AT 75Hz FOR 1600 x 1200 RESOLUTION<br>(3) ORIGINAL SSP III LSI ( Super Signal Processor )<br>(4) HIGH CONTRAST/BRIGHTNESS WITH CRYSTAL PIGMENT PHOSPHOR<br>(5) NEW ON-SCREEN DISPLAY CONTROL ( 5 LANGUAGES )<br>(6) SELF TEST FUNCTION ( NON-CONNECTION WITH COMPUTER )<br>(7) DDC1/2B AND GTF COMPLIANCE BASED ON VESA STANDARDS<br>(8) POWER MANAGEMENT BASED ON VESA STANDARD WITH 3W MAX. |
|-------------------------|--|

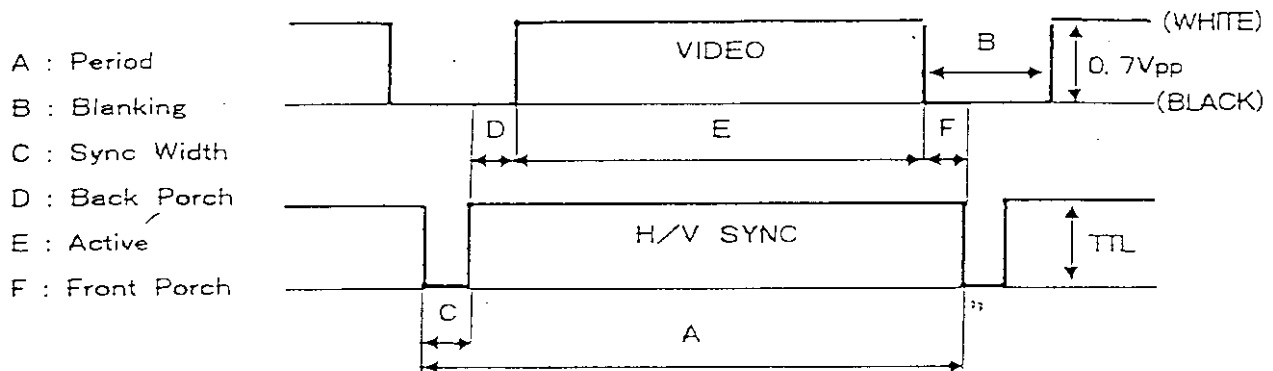
- |                               |   |  |
|-------------------------------|---|--|
| [1] CRT :                     | TYPE<br>PHOSPHOR<br>GLASS, SURFACE                                      | 19" ( 18.0" Viewable ), 0.25mm Dot Pitch, 100Deg, Dia. 29mm<br>RGB Medium Short Persistence ( Hi-Eu Red ), Crystal Pigment<br>Dark Tint ( TM = 45% ), B-AGRAS Coat<br>( Anti-Glare, anti-Reflection & Anti-Static )  |
| [2] INPUT SIGNAL :            | VIDEO<br>SYNC<br><br>PRESET MODES<br>H.BLANKING TIME<br>V.BLANKING TIME | RGB Analog ( 75 Ohms, 0.7/1.0Vp-p )<br>H/V Separate (TTL), H/V Composite (TTL), Sync-on-Green<br>fH=30 - 97kHz, fV=50 - 180Hz<br>1600 x 1200 ( Non-I/L ), etc. / Factory : 1+(7) User : 20<br>2.7u sec. ( min. )<br>0.5m sec. ( min. )   |
| [3] CONNECTOR :               | SIGNAL INPUT<br>POWER   | BNC ( x5 ) & 15Pin mini D-Sub ( IBM PS/2 Compatible )<br>3-Pin Plug ( CEE22 )  |
| [4] POWER :                   | VOLTAGE<br>CONSUMPTION<br>POWER SAVE                                    | 90 - 132, 198 - 264Vac ( Auto-switching )<br>125W (typ.)<br>VESA STANDARD ( DPMS ) Suspend:<=10W, Off:<=3W   |
| [5] CONTROLS :                | FRONT<br>OSD  | Power ON/OFF<br>Contrast, Brightness, H/V Size, H/V Position, V.Pincushion<br>Pincushion Balance/Top & Bottom Corner/S-Curve1 & 2<br>Trapezoid, Parallelogram, Degauss, Color, Video Level, Recall<br>Input Select, Disp Frequency, H/V Moire, Rotation<br>OSD Language/Position, Zoom, H/V Convergence, V.Linearity |
| [6] VIDEO :                   | MAX. VIDEO CLOCK  | 202MHz ( typ. )  |
| [7] MAX. BRIGHTNE:            | ( 9300k + 8MPCD )   | 115 cd/m <sup>2</sup> ( typ. ) at White Flat Field<br>130 cd/m <sup>2</sup> ( typ. ) at White Window   |
| [8] MISCONVERGENCE :          |   | 0.3mm ( max. ) at Center Area<br>0.4mm ( max. ) at Corner Area ( Factory setting display area )  |
| [9] DISPLAY AREA :            | FACTORY SETTING<br>FULL SCAN  | 352(H) x 264(V) mm ( typ. )<br>366(H) x 274(V) mm ( typ. )   |
| [10] OPERATING<br>CONDITION : | TEMPERATURE<br>HUMIDITY   | 5 - 35Deg. C<br>5 - 90% ( Non-condensation )   |
| [11] DIMENSIONS :             |   | 448(W) x 454(H) x 415(D) mm  |
| [12] WEIGHT :                 | NET   | 20.5kg ( typ. )  |
| [13] SAFETY/REGULATIONS :     |   | UL, CSA, TUV/GS, NORDIC, FCC-B, IC-B, CISPR-B, DHHS<br>IEC, RTN, CE  |

### 7. 3 STANDARD TIMING

- Following MODE1 is preset in the memory as standard timing at the factory and other 7 modes are roughly aligned as RESERVATION TIMING.
- Fig - 1 shows a definition of timing and signal level
- Electrical performance is specified based on MODE1(1280×1024 @85Hz) unless otherwise mentioned.

Fig - 1 : TIMING CHART

< HORIZONTAL / VERTICAL >



#### 1) PRESET TIMING (STANDARD TIMING)

		MODE 1
		VESA Standard 1280 x 1024 @85Hz
DOT CLOCK		157.500MHz
H O R I Z	fH	91.146kHz
	A-Period	10.971us (1728 dots)
	B-Blanking	2.844us (448 dots)
	C-Sync width	1.016us (160 dots)
	D-Back porch	1.422us (224 dots)
	E-Active	8.127us (1280 dots)
F-Front porch	0.406us (64 dots)	
V E R T		85.024Hz
A-Period	11.761ms (1072 lines)	
B-Blanking	0.527ms (48 lines)	
C-Sync width	0.033ms (3 lines)	
D-Back porch	0.483ms (44 lines)	
E-Active	11.235ms (1024 lines)	
F-Front porch	0.011ms (1 line)	
Sync polarity (H/V)		Positive / Positive

## 2) RESERVATION TIMING

		MODE 2	MODE 3	MODE 4	MODE 5
		VGA 640x480 @60Hz	VESA Standard 800x600 @85Hz	VESA Standard 1024x768 @85Hz	MAC 1152x870 @75Hz
DOT CLOCK		25.1750MHz	56.250MHz	94.500MHz	100.000MHz
H		31.469kHz	53.674kHz	68.677kHz	68.681kHz
O R I Z	A-Period	31.778us (800 dots)	18.631us (1048 dots)	14.561us (1376 dots)	14.560us (1456 dots)
	B-Blanking	6.356us (160 dots)	4.409us (248 dots)	3.725us (352 dots)	3.040us (304 dots)
	C-Sync width	3.813us (96 dots)	1.138us (64 dots)	1.016us (96 dots)	1.280us (128 dots)
	D-Back porch	1.907us (48 dots)	2.702us (152 dots)	2.201us (208 dots)	1.440us (144 dots)
	E-Active	25.422us (640 dots)	14.222us (800 dots)	10.836us (1024 dots)	11.520us (1152 dots)
	F-Front porch	0.636us (16 dots)	0.569us (32 dots)	0.508us (48 dots)	0.320us (32 dots)
V		59.940Hz	85.061Hz	84.997Hz	75.061Hz
E R T	A-Period	16.683ms (525 lines)	11.756ms (631 lines)	11.765ms (800 lines)	13.322ms (915 lines)
	B-Blanking	1.430ms (45 lines)	0.578ms (31 lines)	0.582ms (32 lines)	0.655ms (45 lines)
	C-Sync width	0.064ms (2 lines)	0.056ms (3 lines)	0.044ms (3 lines)	0.044ms (3 lines)
	D-Back porch	1.049ms (33 lines)	0.503ms (27 lines)	0.524ms (28 lines)	0.568ms (39 lines)
	E-Active	15.253ms (480 lines)	11.179ms (600 lines)	11.183ms (1024 lines)	12.667ms (870 lines)
	F-Front porch	0.318ms (10 lines)	0.019ms (1 line)	0.015ms (1 line)	0.044ms (3 line)
Sync polarity (H/V)		Negative / Negative	Positive / Positive	Positive / Positive	Negative / Negative

		MODE 6	MODE 7	MODE 8
		VESA Standard 1280x1024 @75Hz	VESA Standard 1600x1200 @70z	VESA Standard 1600x1200 @75Hz
DOT CLOCK		135.0000MHz	189.000MHz	202.500MHz
H		79.976kHz	87.500kHz	93.750kHz
O R I Z	A-Period	12.504us (1688 dots)	11.429us (2160 dots)	10.667us (2160 dots)
	B-Blanking	3.022us (408 dots)	2.963us (560 dots)	2.765us (560 dots)
	C-Sync width	1.067us (144 dots)	1.016us (192 dots)	0.948us (192 dots)
	D-Back porch	1.837us (248 dots)	1.608us (304 dots)	1.501us (304 dots)
	E-Active	9.481us (1280 dots)	8.466us (1600 dots)	7.901us (1600 dots)
	F-Front porch	0.119us (16 dots)	0.339us (64 dots)	0.316us (64 dots)
V		75.025Hz	70.000Hz	75.000Hz
E R T	A-Period	13.329ms (1056 lines)	14.286ms (1250 lines)	13.333ms (1250 lines)
	B-Blanking	0.525ms (42 lines)	0.571ms (50 lines)	0.533ms (50 lines)
	C-Sync width	0.038ms (3 lines)	0.034ms (3 lines)	0.032ms (3 lines)
	D-Back porch	0.475ms (38 lines)	0.526ms (46 lines)	0.491ms (46 lines)
	E-Active	12.804ms (1024 lines)	13.714ms (1200 lines)	12.800ms (1200 lines)
	F-Front porch	0.013ms (1 line)	0.011ms (1 line)	0.011ms (1 line)
Sync polarity (H/V)		Positive / Positive	Positive / Positive	Positive / Positive