

2. Reference Information

2-1 Tables of Abbreviations and Acronyms

Table 2-1 Abbreviations

A	Ampere	MV	Megavolt
Ah	Ampere-hour	MW	Megawatt
Å	Angstrom	MΩ	Megohm
dB	Decibel	m	Meter
dBm	Decibel Referenced to One Milliwatt	μA	Microampere
°C	Degree Celsius	μF	Microfarad
°F	Degree Fahrenheit	μH	Microhenry
°K	degree Kelvin	μm	Micrometer
F	Farad	μs	Microsecond
G	Gauss	μW	Microwatt
GHz	Gigahertz	mA	Milliampere
g	Gram	mg	Milligram
H	Henry	mH	Millihenry
Hz	Hertz	ml	Milliliter
h	Hour	mm	Millimeter
ips	Inches Per Second	ms	Millisecond
kWh	Kilowatt-hour	mV	Millivolt
kg	Kilogram	nF	Nanofarad
kHz	Kilohertz	Ω	Ohm
kΩ	Kilohm	pF	Picofarad
km	Kilometer	lb	Pound
km/h	Kilometer Per Hour	rpm	Revolutions Per Minute
kV	Kilovolt	rps	Revolutions Per Second
kVA	Kilovolt-ampere	s	Second (Time)
kW	Kilowatt	V	Volt
l	Liter	VA	Volt-ampere
MHz	Megahertz	W	Watt
		Wh	Watt-hour

Table 2-2 Table of Acronyms

ABL	Automatic Brightness Limiter	I/O	Input/output
AC	Alternating Current	L	Left
ACC	Automatic Chroma Control	L	Low
AF	Audio Frequency	LED	Light Emitting Diode
AFC	Automatic Frequency Control	LF	Low Frequency
AFT	Automatic Fine Tuning	MOSFET	Metal-Oxide-Semiconductor-Field-Effect-Tr
AGC	Automatic Gain Control	MTS	Multi-channel Television Sound
AM	Amplitude Modulation	NAB	National Association of Broadcasters
ANSI	American National Standards Institute	NEC	National Electric Code
APC	Automatic Phase Control	NTSC	National Television Systems Committee
APC	Automatic Picture Control	OSD	On Screen Display
A/V	Audio-Video	PCB	Printed Circuit Board
AVC	Automatic Volume Control	PLL	Phase-Locked Loop
BAL	Balance	PWM	Pulse Width Modulation
BPF	Bandpass Filter	QIF	Quadrature Intermediate Frequency
B-Y	Blue-Y	R	Right
CATV	Community Antenna Television (Cable TV)	RC	Resistor & Capacitor
CB	Citizens Band	RF	Radio Frequency
CCD	Charge Coupled Device	R-Y	Red-Y
CCTV	Closed Circuit Television	SAP	Second Audio Program
Ch	Channel	SAW	Surface Acoustic Wave(Filter)
CRT	Cathode Ray Tube	SIF	Sound Intermediate Frequency
CW	Continuous Wave	SMPS	Switching Mode Power Supply
DC	Direct Current	S/N	Signal/Noise
DVM	Digital Volt Meter	SW	Switch
EIA	Electronics Industries Association	TP	Test Point
ESD	Electrostatic Discharge	TTL	Transistor Transistor Logic
ESD	Electrostatically Sensitive Device	TV	Television
FBP	Feedback Pulse	UHF	Ultra High Frequency
FBT	Flyback Transformer	UL	Underwriters Laboratories
FF	Flip-Flop	UV	Ultraviolet
FM	Frequency Modulation	VCD	Variable-Capacitance Diode
FS	Fail Safe	VCO	Voltage Controlled Oscillator
GND	Ground	VCXO	Voltage Controlled Crystal Oscillator
G-Y	Green-Y	VHF	Very High Frequency
H	High	VIF	Video Intermediate Frequency
HF	High-Frequency	VR	Variable Resistor
HI-FI	High Fidelity	VTR	Video Tape Recorder
IC	Inductance-Capacitance	VTVM	Vacuum Tube Voltmeter
IC	Integrated Circuit	TR	Transistor
IF	Intermediate Frequency		

2-2 Description of Dynamic Focus

Most large-screen video display devices that are using CRT (including CDT) usually apply the Dynamic Focus (hereinafter D/F) circuit.

As CRT has non-spherical surface (perfect spherical surface = 1, non-spherical surface $R > 1$), the distance that the electron beam emitted from the electron gun reaches to the center of CRT is different from the one that the electron beam reaches to the corners. (See Figure 1.)

Only the beam, which has the equal distance as the beam from the electron gun to the center of CRT surface, can maintain the optimum focus.

By this reason, focus degradation at corners occurs inevitably.

To recover this, the speed of the electron beam injected into the corners of CRT should increase and the focus degradation by the difference of distances can be compensated.

Increasing the voltage is used as a method of increasing the speed of the electron beam at the corners of screen.

In this case, an ideal D/F voltage waveform is the form of parabola where the center of screen has low voltage and the corners has the highest voltages.

The horizontal D/F waveform compensates the focus degradation at left and right sides, but the vertical D/F waveform does at top and bottom sides.

The horizontal D/F and vertical D/F waveforms are separately created and mix two signals to compensate the focus of the whole screen.

And the vertical Dynamic Focus waveform is composed of the horizontal Dynamic Focus waveforms as much as the number of scanning lines. (See Figure 2.)

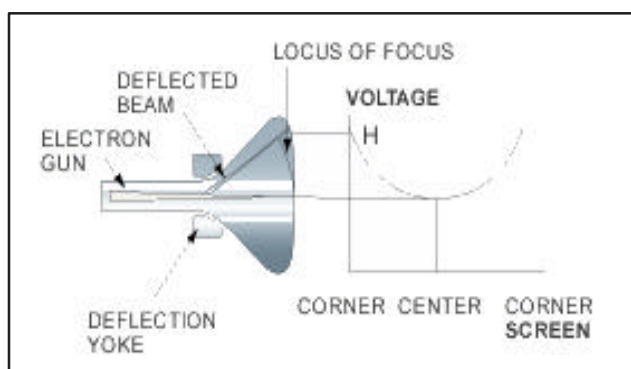


Fig. 1 Dynamic Focus Diagram (Horizontal)

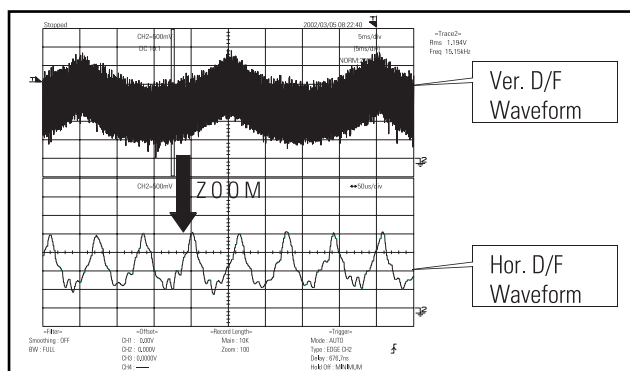


Fig. 2 H/V Dynamic Focus Waveform

2-3 IC Line Up

2-3-1 Progressive

Table 2 - 3 IC Line - Up				
No	Block Name	IC Location	IC Name	CODE-NO
1	MAIN	IC601	TDA7265	AA96-00623E (ASSY)
		IC602	MSP3420G (QFP)	1204-002002
		IC603	TL062CDT (SOP)	1201-000541
		IC604	TL062CDT (SOP)	1201-000541
		IC605	TEA6422D (SOP)	1001-001178
		IC701	TEA6425D (SOP)	1001-001177
		IC702	TEA6425D (SOP)	1001-001177
		IC704	PCF8591T	1002-001048
		IC801	KA278RA05 X 3EA +78R09+7808	AA96-00475B (ASSY)
		IC802	7905 (DIP)	1203-000119
		IC807	78R12 (DIP)	1203-000165
		IC808	SI-3050C	BP96-00020G (ASSY)
2	Micom	IC901	SDA5550M (QGP)	204-001912
		IC902	24C16 (SOP)	1103-000180
		IC903	78RM33D	1203-002302
		IC905	M27W201-80F6 (DIP)	1102-001130
3	PRO-SCAN	IC01	VSP9407 (QFP)	1204-001938
		IC02	CXA2151Q (QFP)	1204-001814
		IC03	BA7657F (SOP)	1001-001082
		IC04	CXA2165Q (QFP)	1204-001989
		IC05	LF18	1203-002186
		IC06	7027	1203-001211
		IC11	78RM33D	1203-002302
		IC13	74HC123 (SOP)	0801-000662
4	CG-MDL	IC01	SDC12 (QFP)	BP13-00003A
		IC02	78RM33D	1203-002302

Table 2 - 3 IC Line - Up (Continued)						
No	Block Name	IC Location	IC Name	CODE-NO		
4	CG-MDL	IC03	7042	1203-001824		
		IC04	7S04	0801-002345		
		IC05	24C64 (SOP)	1103-001195		
		IC06	TSC871251G2D (PLCC)	AA09-00032A		
		IC07	EL2250CS (SOP)	1201-001520		
		IC08	74HC4052 (SOP)	1001-000164		
		IC09	072 (SOP)	1201-001504		
		IC10	072 (SOP)	1201-001504		
		IC11	072 (SOP)	1201-001504		
		IC12	LM324AM (SOP)	1201-001135		
		IC13	NC7SB3157 (SOT)	1001-001155		
		IC14	072 (SOP)	1201-001504		
		IC15	7S04 (SOP)	0801-002345		
		IC16	7S04 (SOP)	0801-002345		
		IC17	TLC2932IPWLE (SOP)	1209-001163		
		5	SUB	ICS801	VIPER12A	1203-002177
				ICS802	KA7805	1203-000568
IC301	LA7845			1204-000517		
IC421	78R12			1203-000165		
IC430	317 (TO-220)			1203-000161		
IC431	MC4558C			1201-000191		
IC471	TL494CN			1203-000610		
IC831S	STR-X6456			AA13-00105A		
IC851	SE110N			1203-001400		
ICR01S	431 (TO-92)			1203-001217		
PC801S	PS2561			0604-001032		
PC811S	PS2561			0604-001032		
6	CRT	IC501, 531, 561	TDA6111Q	1201-001131		
7	CG-AMP	ICZ103, 104	STK392-010	1201-001512		

2-4 MICOM IIC BUS LINE -UP

