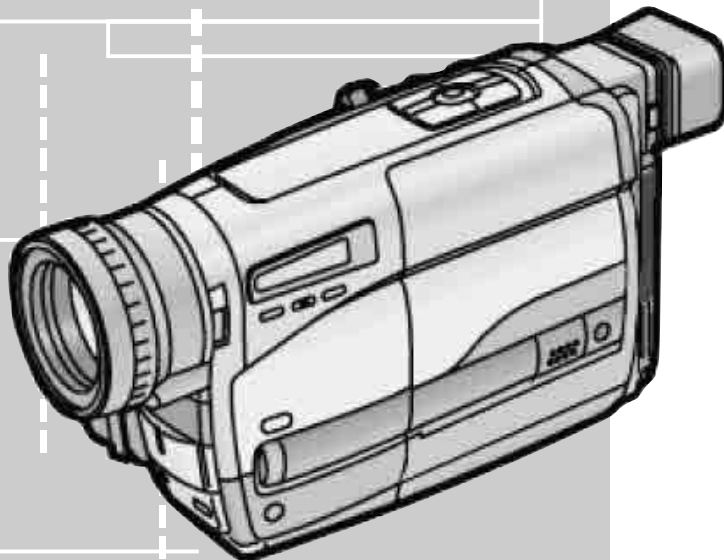


LIVE CAM _____ Service Manual

Livance LC 1150 GM18500



Zusätzlich erforderliche Unterlagen für den Komplettservice
Additionally required Service Documents for the Complete Service

Service Manual

Sicherheit
Safety

Materialnr./Part No.
720108000000

Grundig Service

Holpline Deutschland...
...Mo.-Fr. 8.00-18.00 Uhr

Technik:

TV	0180/52318-41
TV	0180/52318-49
SAT	0180/52318-48
VCR/LiveCam	0180/52318-42
HiFi/Audio	0180/52318-43
Car Audio	0180/52318-44
Telekommunikation	0180/52318-45
Fax:	0180/52318-51
Planatron (8.00-22.00 Uhr)	0180/52318-99

Ersatzteil-Verkauf:

Mo.-Fr. 8.00-19.00 Uhr

Telefon: 0180/52318-40
Fax: 0180/52318-50

Materialnummer/Part Number 7201005408100

Änderungen vorbehalten/Subject to alteration • Printed in Germany

E-BS-SA14 0601

<http://www.grundig.com>

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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SPECIFICATIONS

ITEM	SPECIFICATION	ITEM	SPECIFICATION
POWER	Source: Battery Pack; 7.2 V DC AC Adaptor; 7.9 V DC Consumption (Battery Operation) ; 5.2 W (When using Finder) ; 6.9 W (When using LCD Monitor)	VIDEO	Television System: EIA Standard (625 lines, 50 fields) PAL color signal OUTPUT: PHONO CONNECTOR; 1.0 Vp-p 75 Ω terminated
VIDEO RECORDING SYSTEM	VHS-C 4 Head System	AUDIO	HEADS: 1 Stationary head (Normal-Mono) OUTPUT: PHONO CONNECTOR; -6 dB (47kΩ loaded)/less than 1 kΩ
TAPE FORMAT	VHS-C Cassette Tape (Tape width 12.7 mm)	OPERATING TEMPERATURE	0-40 °C
TAPE SPEED	SP mode : 23.39 mm/s LP mode : 11.695 mm/s	OPERATING HUMIDITY	10-80 %
	Record/Playback Time: SP mode ; 45 min. with NV-EC45XG LP mode ; 90 min. with NV-EC45XG FF/REW Time: less than 2.5 min. with NV-EC45XG	WEIGHT	Approx. 850g (without Battery Pack)
CAMERA	PICK-UP ELEMENT: CCD (Charge Coupled Device)	DIMENSIONS	88 (W) X 118 (H) X 231 (D) mm
	STANDARD ILLUMINATION: 1,400 lx	STANDARD ACCESSORIES	1 pc. AC Adaptor 1 pc. Battery Pack 1 pc. Cassette Adaptor (Except NV-VZ9B, NV-VZ10B) 1 pc. Shoulder Strap 1 pc. DC Output Cable 1 pc. Battery for Cassette Adaptor (Except NV-VZ10B)
	LENS: 22 : 1 Power Zoom Lens F1.6 Focal Length; 2.9-63.8 mm Digital AI Auto Focus/Auto Iris Filter Diameter ; 43 mm		
IMAGE SENSOR: 1/5-inch CCD Image Sensor	1 pc. AC Cord 1 pc. Lithium Battery (Except NV-VZ9B) 1 pc. AV Cord (NV-VZ9B, NV-VZ10B only) 1 pc. Remote Controller (NV-VZ10 only) 1 pc. Battery for Remote Controller (NV-VZ10 only)		
FINDER	0.24-inch Black/ White Electronic Finder		
MONITOR	2.5-inch Color LCD Monitor		

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

1 INTRODUCTION

1.1. INTRODUCTION1

This service manual contains technical information which will be allowed service personnel's to understand and service this model. Please use part number on the parts list to make order for spare part and do not use reference number on the drawing. If the circuit is changed or modified, this information will be followed by supplement service manual.

Note 1:

The service manual for Mechanism-Chassis is separated as another one.

Please refer to the following manual for detail of adjustment procedure for Mechanism-Chassis.

Order number for service manual of Mechanism-Chassis : VMD9912044C8

1.2. INTRODUCTION2

Note 1:

Differences are mentioned as follows for VZ9 series.

Description	EG	EGM
Packing case	VPG0H14	VPG0H15
Operating manual	VQT9062	VQT9063

Note 2:

Differences are mentioned as follows for VZ10 series.

Description	EG	EGM
Packing case	VPG0H26	VPG0H27
Operating manual	VQT9062	VQT9063

Note 3:

Differences are mentioned as follows for VZ10 series.

Description	EN	ENH	ENC
Packing case	VPG0H29	VPG0H30	VPG0H31
AC cord	VJA0664	VJA0940	VJA0664

1.3. FEATURE COMPARISON CHART

		VZ9			VZ10			
		EG	B	EN/EU	EG	B	EN	A
CCD	CCD Image Sensor	1/5"	1/5"	1/5"	1/5"	1/5"	1/5"	1/5"
	CCD Capacity (Pixels)	450k	450k	450k	450k	450k	450k	450k
LCD MONITOR	Color LCD Monitor	2.5"	2.5"	2.5"	2.5"	2.5"	2.5"	2.5"
	LCD Capacity (Pixels)	112,320	112,320	112,320	112,320	112,320	112,320	112,320
B/W-EVF	B/W EVF LCD Monitor	0.24"	0.24"	0.24"	0.24"	0.24"	0.24"	0.24"
	EVF LCD Capacity (Pixels)	76,800	76,800	76,800	76,800	76,800	76,800	76,800
SPEED	Recording/Playback mode	SP	SP/LP	SP/LP	SP	SP/LP	SP/LP	SP/LP
LENS	Optical Zoom Ratio	x22	x22	x22	x22	x22	x22	x22
	Shortest Image Distance (From 1st Lens)	1.8m	1.8m	1.8m	1.8m	1.8m	1.8m	1.8m
DIG.ZOOM	Digital Zoom (x45/x100/x250)	O/O/O	O/O/O	O/O/O	O/O/O	O/O/O	O/O/O	O/O/O
	Voice zoom	O	O	O	O	O	O	O
ACCESSORY	Remote controller	X	X	X	O	O	O	O
	AV cord	X	O	X	X	O	X	X

2 SERVICE CAUTION

2.1. EEPROM DATA FOR SPARE PARTS OF THE MAIN C.B.A.

When the Main C.B.A. is replaced, the fixed and average data must be re-installed to EEPROM by Tatsujin kit according to the suffix for Movie camera.

Then, confirm and/or adjust the VTR and Camera adjustment one by one.

2.2. SERVICE EXTENSION CABLES.

This model is required the following extension cables for all connections.

As a convenient way, please prepare the Rear case U(K4ZZ15000013) as extra to repair easily.
(K4ZZ15000013 can be purchased through service route.)

Ref.	Parts No.	Pin	Part name	Connection	Q'ty	Remarks
(a)	VFK1582A2120	21	Flat Cable	FP701-Lens Unit	1	
(b)	VFK1582D1225	12	Flat Cable	PP301-Lens Unit	1	
(c)	VFK1582E0720	7	Flat Cable	FP2002-Cylinder	1	
(d)	VFK1582A1325	13	Flat Cable	FP6002-CAM. OP.	1	
(e)	VFK1582A1625	16	Flat Cable	FP6004-S/S ZOOM VTR OP.	1	
(f)	VFK1582A0920	9	Flat Cable	FP4001-A/C Head	1	
(g)	VFK1582A1025	10	Flat Cable	FP1001-EVF	1	
(h)	VFK1582A1925	19	Flat Cable	FP2001-Capstan	1	
(i)	VFK1582A2125	21	Flat Cable	FP6001-Mecha. FPC.	1	
(j)	VFK1582A1620	16	Flat Cable	FP4002-Front	1	

NOTE:

New Parts numbers consist 4 blocks. And they has meaning as follows.

For example: VFK1582 A 21 20
 1 2 3 4

1. It shows type of flexible cable, Zigzag, Straight or wire.

VFK1581	Straight Flexible cable without Connector
VFK1582	Straight Flexible cable with Connector
VFK1574	Zigzag Flexible cable without Connector
VFK1575	Zigzag Flexible cable with Connector
VFK1576	Wire cable

2. It shows pitch (mm) of connector.

A	0.5 mm
B	0.4 mm
C	0.3mm
D	0.8mm
E	1.0mm

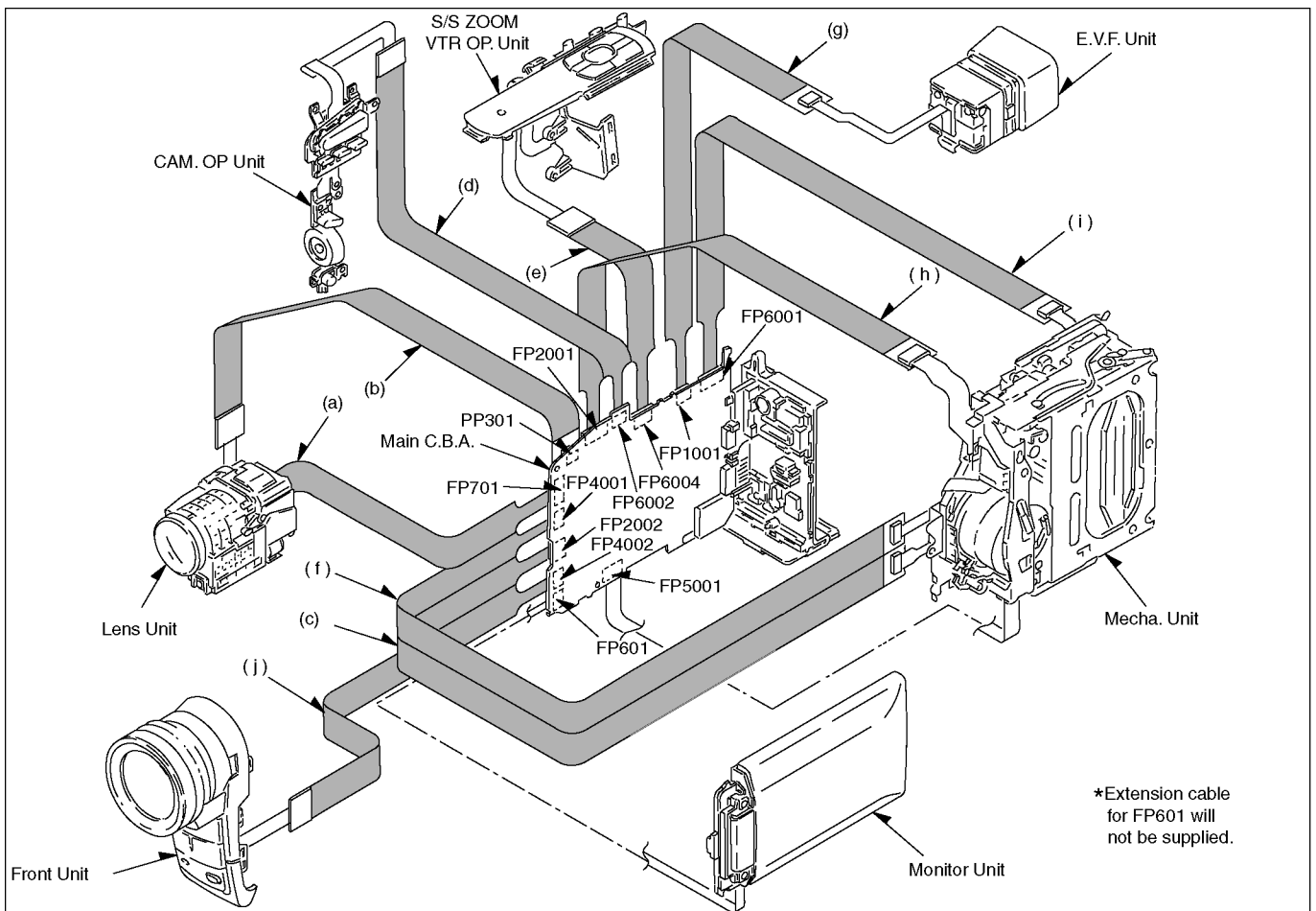
3. It shows number of pins of connector.

4. It shows length of cable with [cm].

Above parts number shows;

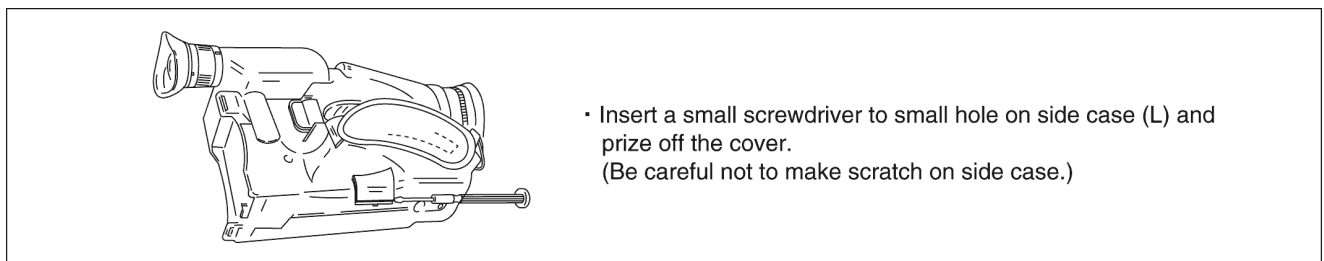
Straight Flexible cable with connector, connector pitch is 0.5 and length of cable is 20cm.

How to use extension cables.

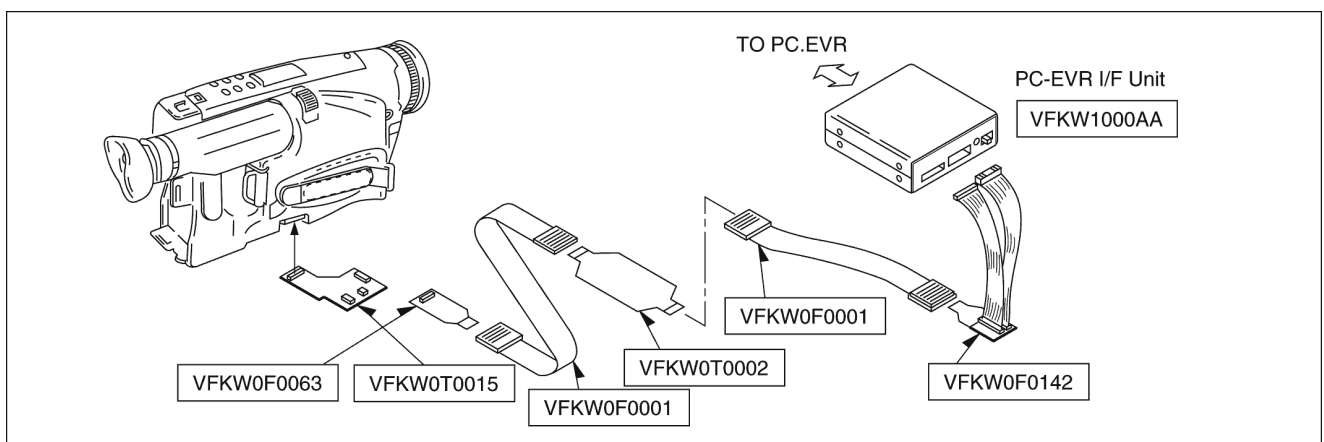


2.3. SET-UP FOR ADJUSTMENT OF TATSUJIN.

For adjustment of "TATSUJIN", please open the small cover which is located at bottom of side case(L) using small screwdriver as follows.



And then connect the JIG board and TATSUJIN cable as follows.



3 SERVICE INFORMATION

3.1. SERVICE INFORMATION DISPLAY (GENERAL DESCRIPTION)

- This Movie Camera has SERVICE INFORMATION DISPLAY function which enables quick trouble-shooting.
- The Service Information Display is available with the following procedures.
- The Service Information is displayed on the EVF and LCD monitor. (There are 4 kinds of SERVICE MODES as follow.)
In the OSD Line Output Mode, the service Information can be displayed even on TV.

MODE NAME	FUNCTION	How to use.		
OSD Line Output Mode	Checking the EVF information on the TV monitor	Push the following keys simultaneously more than 2 sec.		
		FOCUS/SET (SIDE CASE(R))	STOP (TOP PANEL)	DATE/TITLE (SIDE CASE (L) TOP)
SERVICE MODE 1	Remaining Battery A/D value. Safety Device Capstan/Cylinder injuctions.	Push the following keys simultaneously more than 2 sec.		
		COLOR (SIDE CASE(R))	STOP (TOP PANEL)	DATE/TITLE (SIDE CASE (L) TOP)
SERVICE MODE 2	Remaining Voltage A/D value. Mechanism position Serial key code	After chosing SERVICE MODE 1, push [DATE/TITLE] key.		
SERVICE MODE 3	ERROR CODE Display	After chosing SERVICE MODE 2, push [DATE/TITLE] key.		
SERVICE MODE 4	PG SHIFTER ADJUSTMENT	After chosing SERVICE MODE 3, push [DATE/TITLE] key.		

NOTE1:

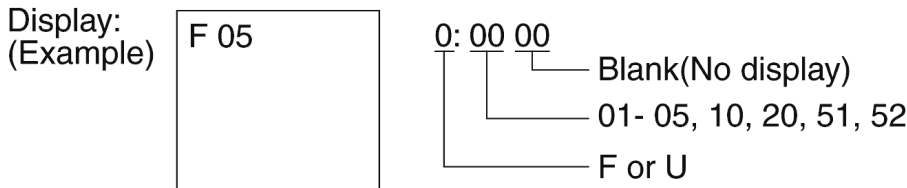
The content of all service modes (service Mode 1 to 4) are the same as previous models.
Please refer to the following Technical Information.
Order number for Technical Information : **VMD9512M138**

NOTE2:

When an undesirable condition occurs, the power will be turned off except zoom& focus motor lock condition. (Since this model, "ERROR CODE" is not automatically displayed on the EVF and LCD monitor, even the CAMERA LED is not flashed.)
By turning on Service Mode 3, it is possible to check what kind of undesirable condition has occurred, even after the ERROR CODE has disappeared. Because of The ERROR CODE is memorized to EEPROM-IC.

3.2. SERVICE MODE 3 (ERROR CODE DISPLAY)

- ERROR CODE appears on counter display position as follows. (See Fig.1).



Display	Condition	The Power off timing
F01	T-REEL LOCK	After 1 minute (flashing the LED)
F02	S-REEL LOCK	
F03	UNLOADING LOCK	
F04	LOADING LOCK	
F05	CYLINDER LOCK	
F51	FOCUS MOTOR LOCK	
F52	ZOOM MOTOR LOCK	
U10	DEW DETECTION	After 18 minutes (flashing the LED)
U20	HEAD CLOGGING	Not turning off

Fig.1

3.3. INSERTING THE BUTTON-TYPE BATTERY

Before setting the data and time, insert the button-type battery (supplied).

1 Open the [BACKUP BATTERY] Cover.

2 Insert the button-type battery so that its (+) side is visible.

3 Close the [BACKUP BATTERY] COVER.

- **Keep the button-type battery out of the reach of children.**
- Make sure you insert the battery with its poles correctly aligned.
- The internal clock works even when the Movie Camera is turned off, and it consumes power from the button-type battery.

- Before inserting or removing the button-type battery, be sure to set the [CAMERA/OFF/VCR] Switch to [OFF].
- When the button-type battery is exhausted, the [🔋] Indication flashes. In this case, replace it with a new CR2025 battery.
(The life of the battery is about 1 year.)
- To mark it easier to remove of the button-type battery, use a pointed object.
- When you remove the button-type battery, be careful not to drop it.

Note:

The lithium battery is a critical component (Type No.: CR2025 Manufactured by Panasonic.)

It must never be subjected to excessive heat or discharge.

It must therefore only be fitted in equipment designed specifically for its use.

Replacement batteries must be of the same type and manufacture.

They must be fitted in the same manner and location as the original battery, with the correct polarity contacts observed.

Do not attempt to re-charge the old battery or re-use it for any other purpose.

It should be disposed of in waste products destined for burial rather than incineration.

CAUTION

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the equipment manufacturer.

Discard used batteries according to manufacturer's instructions.

VARNING

Explosionsfara vid felaktigt batteribyte.

Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren.

Kassera använt batteri enligt fabrikantens instruktion.

ADVARSEL!

Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering.

Udskiftning må kun ske med batteri af samme fabrikat og type.

Levér det brugte batteri tilbage til leverandøren.

VAROITUS

Paristo voi räjähtää, jos se on virheellisesti asennettu.

Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

4 ADJUSTMENT PROCEDURES

4.1. DISASSEMBLY PROCEDURES

Flow-Chart for Disassembly Procedure

No.	Item/Part	Fig.	Removal (Screw)
1	Side Case (L) Unit	Fig.1	4-Screws (F)
		Fig.2	1-Screw (A) 1-Screw (B) 1-Screw (C) 3-Screws (D) 1-Screw (E)
		Fig.3	Locking Tab (a) Slightly open the Side Case (L) Unit. Disconnect FP6004.
2	Front Case Unit	Fig.4	4-Locking Tabs (b) Disconnect FP4002.
3	Main C.B.A.	Fig.5	2-Screw (G) Remove the Shield Case. Disconnect the following connectors. FP6002, FP2001, PP301, FP701, FP4001, FP2002, FP601, FP5001, FP6001, FP1001, FP4002, PS3510, PS1003
4	Cassette Cover Unit	Fig.6	1-Screw (H)
5	Rear Case Unit	Fig.7	1-Screw (K) 2-Locking Tabs (c)
6	EVF Unit	Fig.8	2-Screws (L)
7	Mechanism Unit	Fig.9	3-Screws (M) 1-Screw (M')
8	Lens Unit	Fig.10	1-Screw (N)
9	Main Frame Unit	Fig.6	1-Screw (I) 2-Screws (J)
		Fig.11	1-Screw (O) 7-Locking Tabs (d)
10	LCD Unit	Fig.12	Remove the Barrier. 1-Screw (P'), 4-Screws (P)
		Fig.13	1-Screw (Q) 2-Screws (R) 3-Locking Tabs (f) Remove the LCD Case (Upper) U. Disconnect FP901, FP902 and FP903. 2-Screws (S) Remove the LCD Hinge Holder U.
		Fig.14	1-Screw (T) Remove the Monitor C.B.A., Back Light U., LCD Shield Sheet, Diffusion Sheet, LCD Frame, LCD Module, LCD Case (Lower) U.
11	Back light Unit	Fig.15	Remove the Polarization Sheet. Remove the LCD Terminal Rubber and Fluorescent Lump.

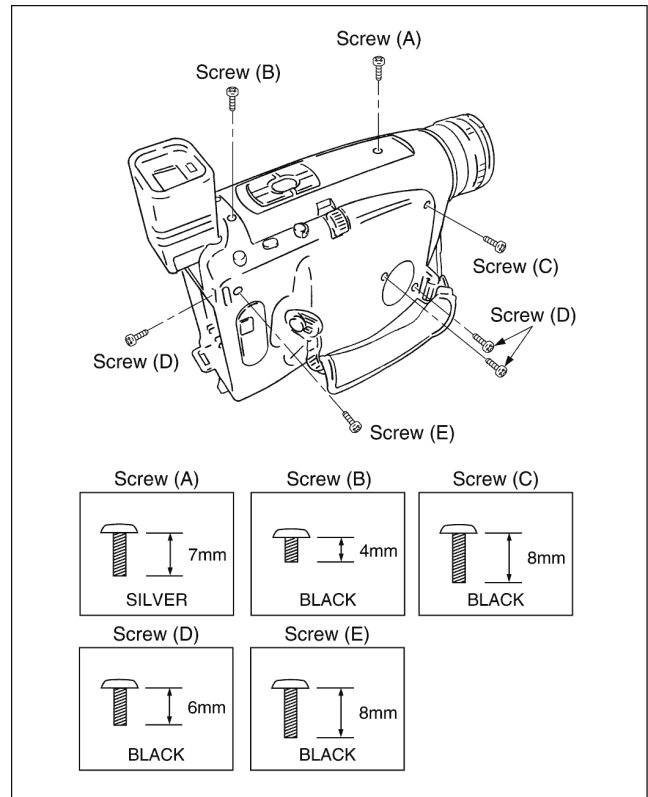


Fig.2

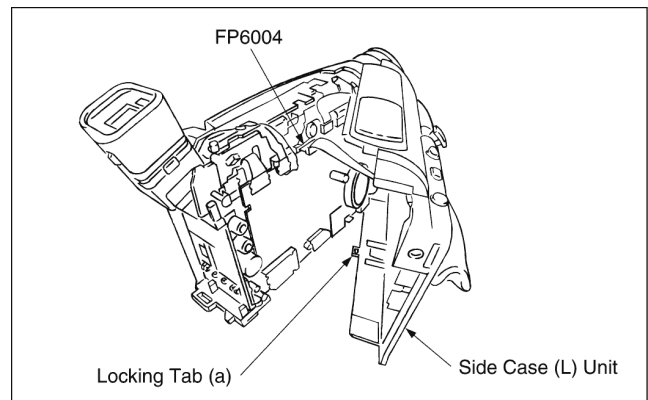


Fig.3

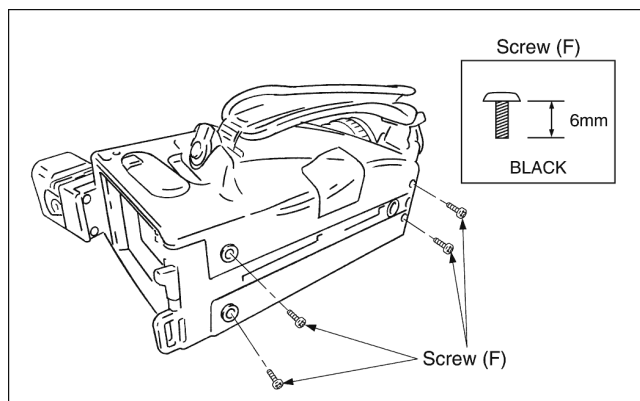


Fig.1

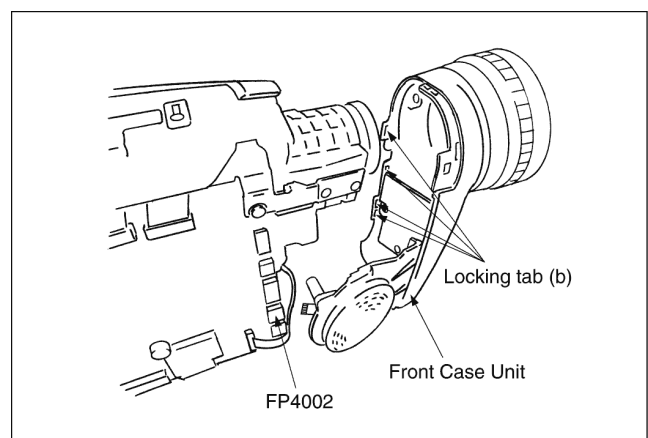


Fig.4

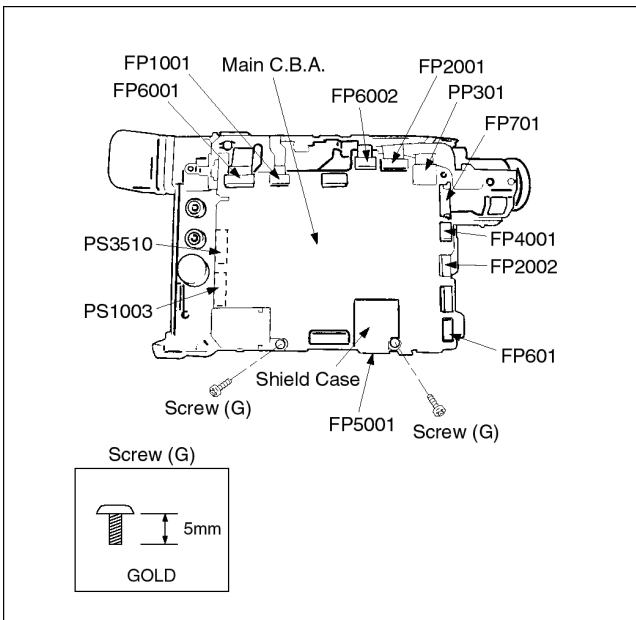


Fig.5

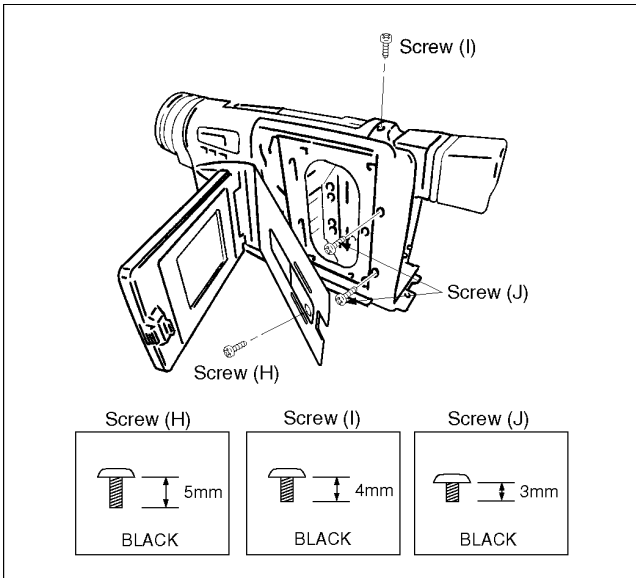


Fig.6

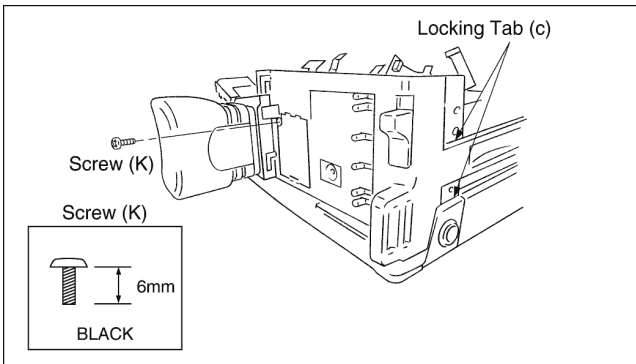


Fig.7

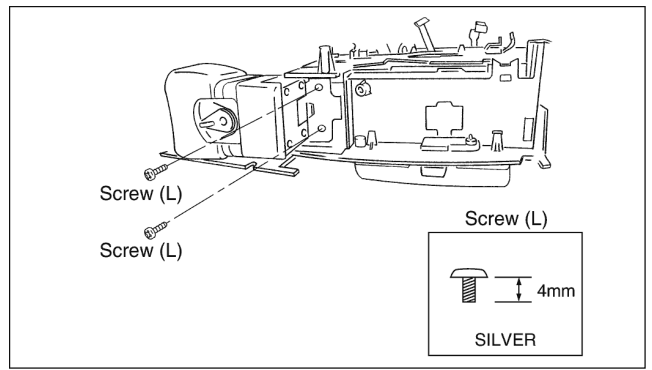


Fig.8

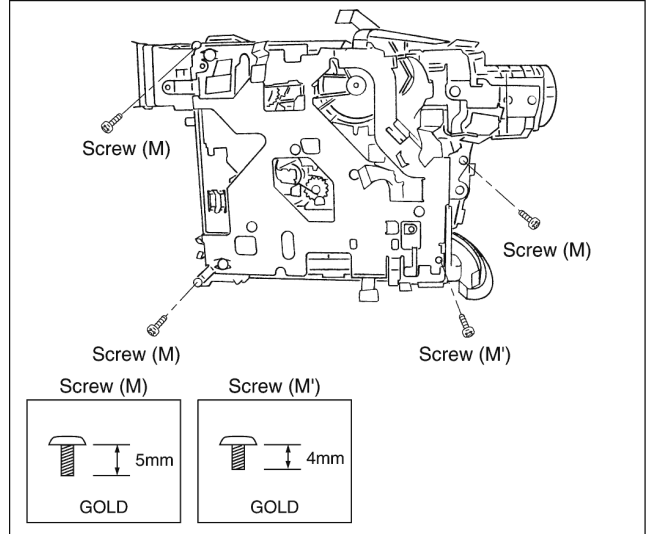


Fig.9

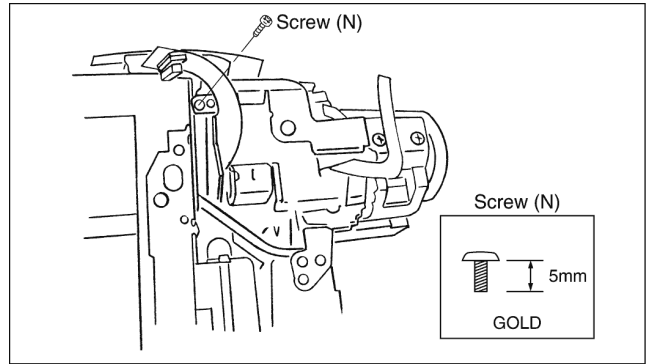


Fig.10

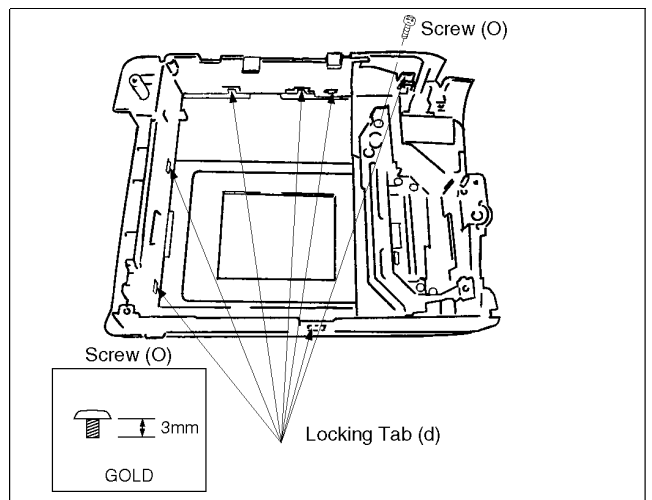


Fig.11

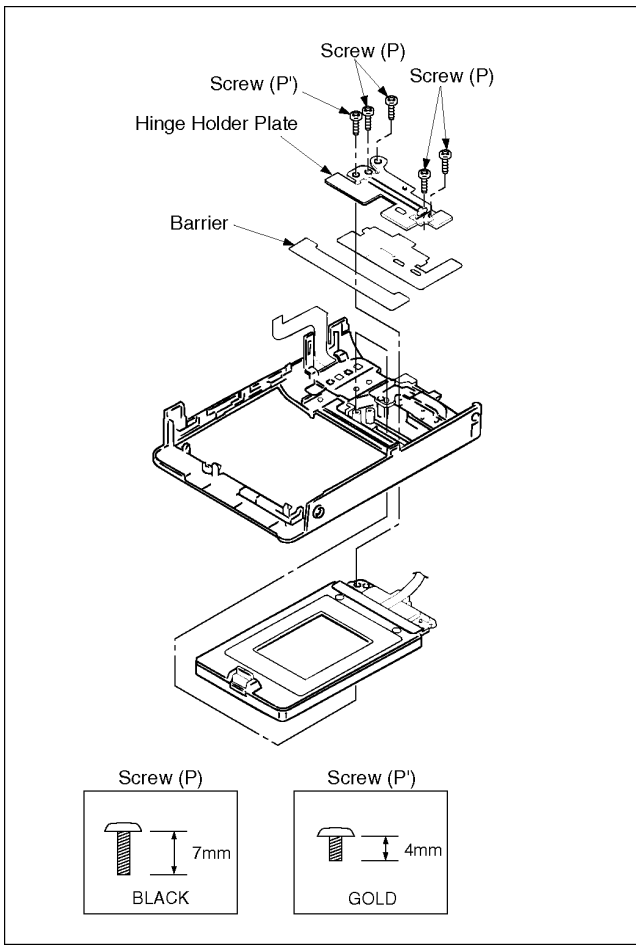


Fig.12

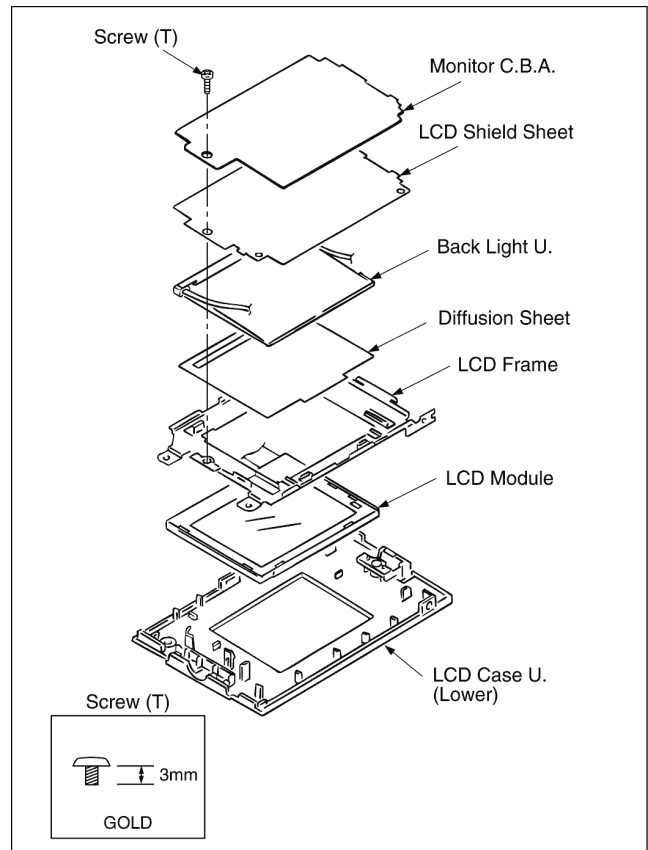


Fig.14

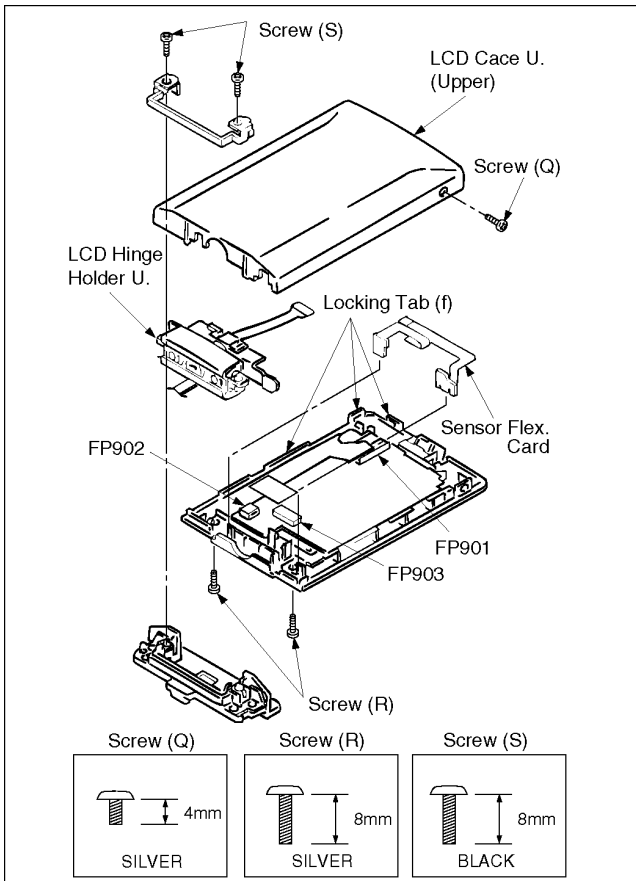


Fig.13

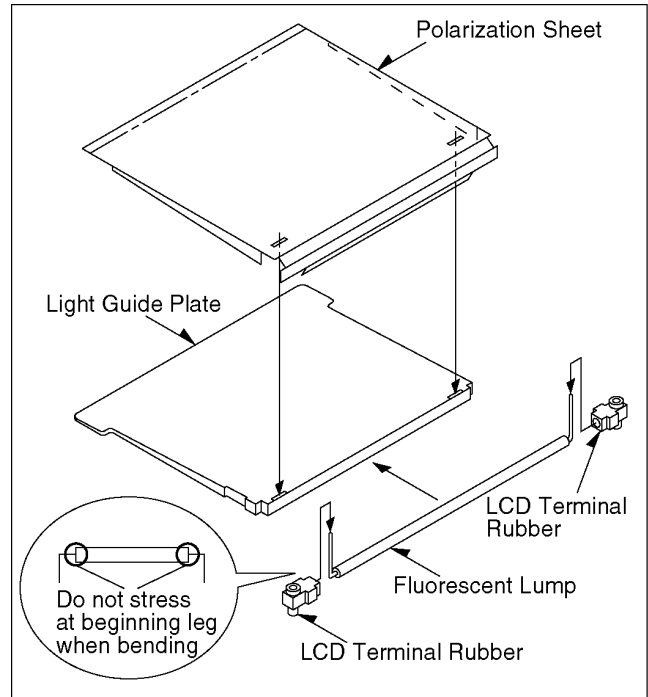


Fig.15

4.2. DISASSEMBLY PROCEDURES OF LENS UNIT

- The following flowchart describes order or steps for removing the lens units and certain printed circuit boards in order to make access to the item needing service.
- To reassemble the unit follow the steps in reverse order.

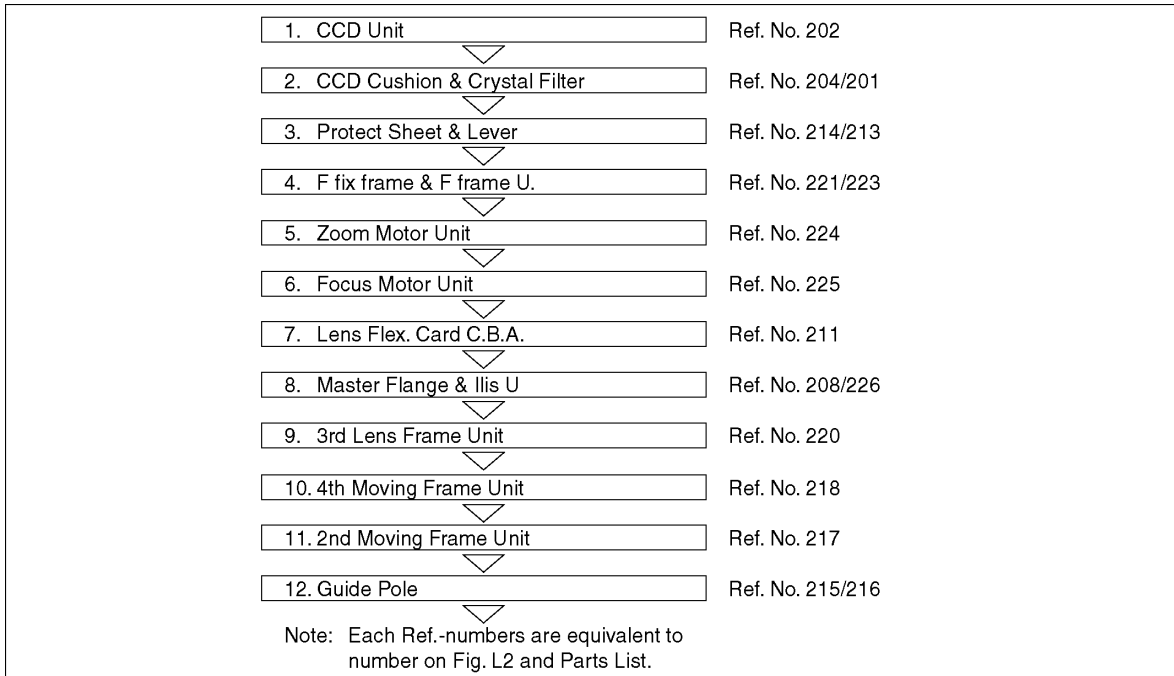


Fig. L1

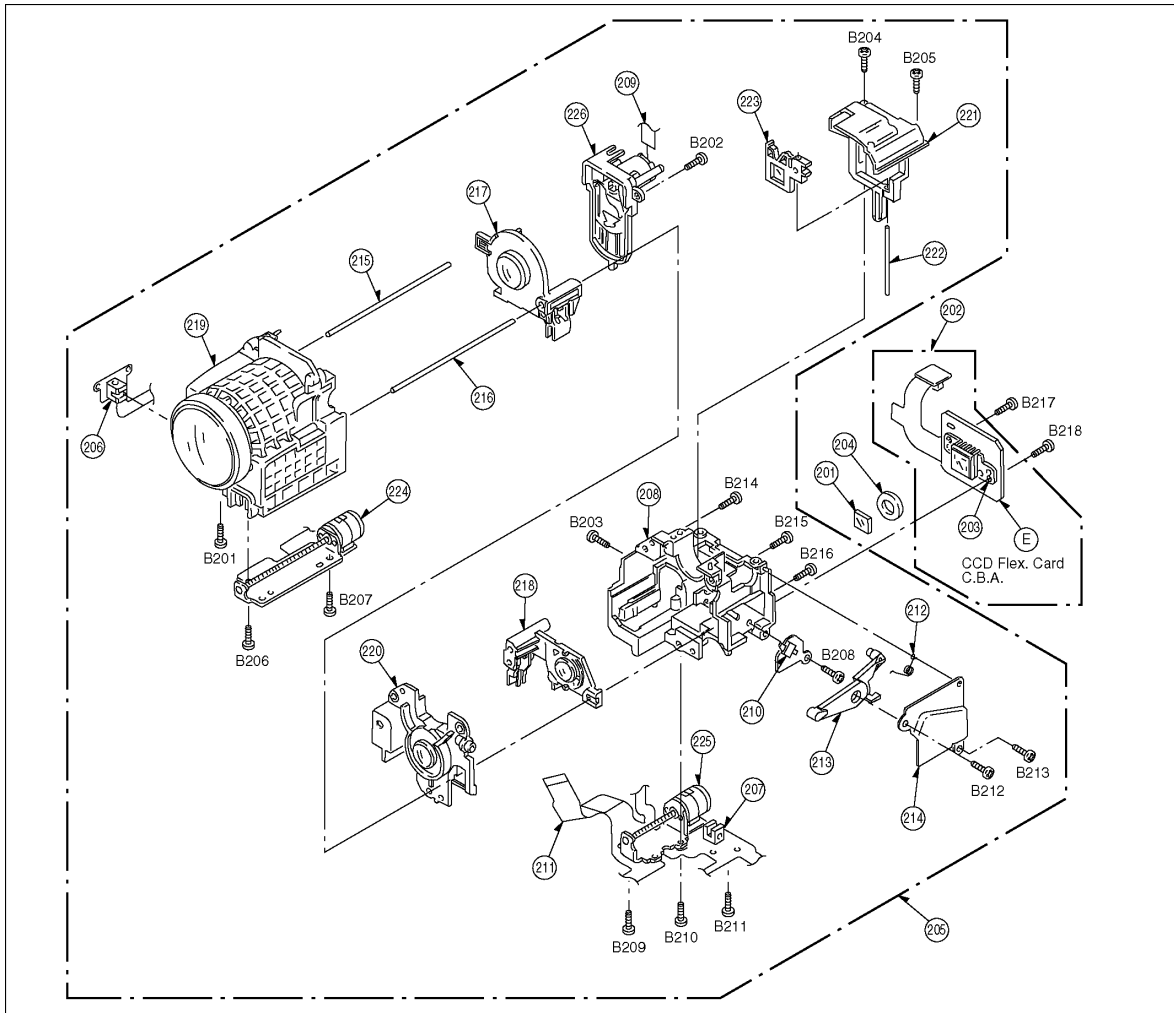





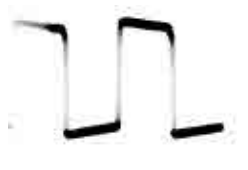
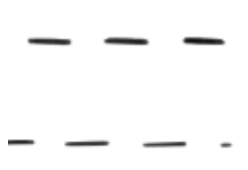
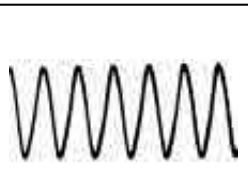
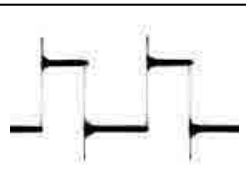
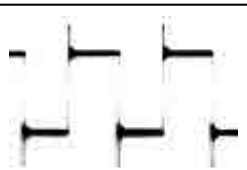
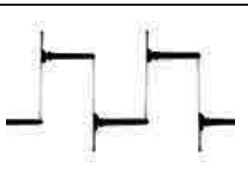
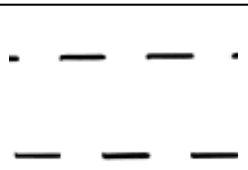
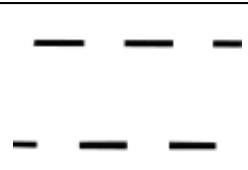
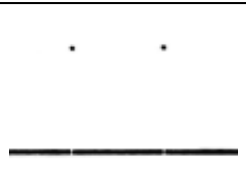
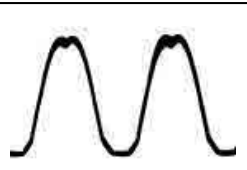
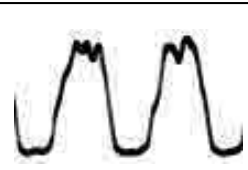
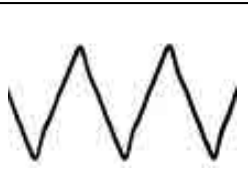

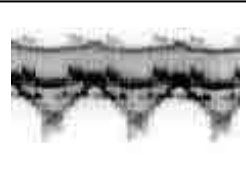
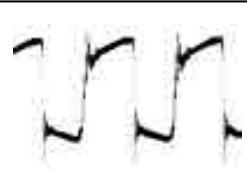

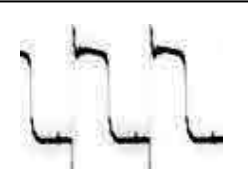
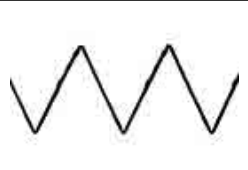
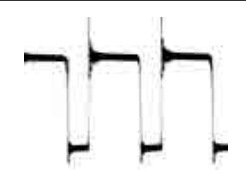
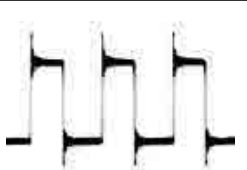
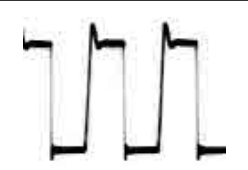
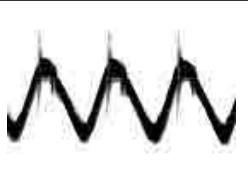
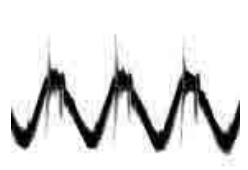


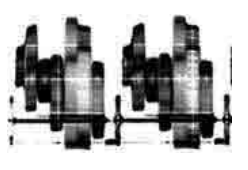
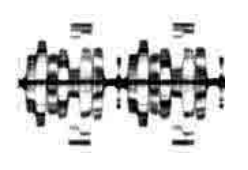

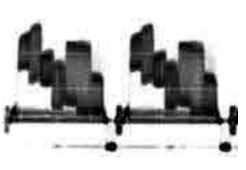
Fig. L2

5 ABBREVIATIONS

	INITIAL/LOGO	ABBREVIATIONS		INITIAL/LOGO	ABBREVIATIONS	
A	A.TR	Auto Tracking	D	DISCS	Dis Chip Select	
	ABSF	Focus Encoder Input		DISP	Display	
	ACI	Analog Channel Cording IC		DL	Delay Line	
	ADCLK	Analogue Digital Clock		DL	Delay Line	
	ADCNT	Analogue Digital Control		DOBLK	Bit Clock (to D/A Converter)	
	ADCS	Analogue Digital Chip Select		DOCTL	Data Output Control	
	AE	Auto Expose		DODAT	Serial Data (to D/A Converter)	
	AECNT	Auto Expose Control		DRK	Dark	
	AEIRQ	Auto Expose Interrupt Request		DS	Double Sampling Pulse	
	AF	Auto Focus		DS1, 2	Double Sampling Pulse	
	AFADE	Audio Fade		DSP	Digital Signal Processor	
	AFCS	Auto Focus Chip Select		DSP	Digital Signal Processor	
	AGC	Automatic Gain Control		DVDD	Digital VDD	
	AGCCNT	Automatic Gain Control Control		DVSS	Digital Ground	
ALCCNT	Auto Level Control Control	DZ	Digital Zoom			
ALCMAIN	Auto Level Control Drive	E	E Snap	Electric Snap Shot		
AMUT	Audio Mute		E2P	EEPROM		
AORP	Audio Overlap Pulse		EC	Error Control		
APCNT	Aperture Control		EC	Torque Control		
ARTV	Artificial Vertical Sync		ECM	Electric Condenser Mic		
ATF	Automatic Track Finding		EE CS	EEPROM Chip Select		
ATR	Auto Tracking		EEPROM	Electric Erasable Programable Read Only Memory		
AUX	Auxiliary		EIS	Electric Image Stabilizer		
AVDD	Analogue VDD		ENV	Envelope		
AVSS	Analogue Ground		EQ	Equalizer		
AWTB	Auto White Balance B-Y		EVF	Electric View Finder		
AWTR	Auto White Balance R-Y		EXT DC	External DC (AC Adaptor)		
B	B-Y KB		B-Y Carrier Balance	EZOOM	Electric Zoom	
	BACK		Back-up	F	F	Far (Focus)
	BATT	Battery	FB		Feed Back	
	BCBM(B-Y)	B-Y Carrier Balance	FCK		Clock	
	BCBM(R-Y)	R-Y Carrier Balance	FENC		Focus Encoder	
	BF	Burst Flag	FM		Field Memory	
	BFND	Burst Flag Pulse	FM0-7		Field Memory 0 - 7	
	BFA	Burst Plug for Encoder	FMDIR		Focus Motor Direction	
	BFO/BFI	Burst Plug Input/Output	FMOEM		Field Memory Enable	
	BL	Back Light	FMOEO		Field Memory Enable	
	BLC 0, 1	Back Light Y Control Out, In	FMT		Focus Motor	
	BLD/O	Back Light Drive Input / Output	FMT1-4		Focus Motor Terminal 1-4	
	BLK	Blanking Pulse	FNO		F Value	
	BLKA	Blanking for Encoder	FR		Capstan Reverse High	
BLKI/O	Blanking Pulse In/Out	G	GCNT		Gain Control	
BM	Balance Modulator		GSW	Ground for Switching Power		
BUF	Buffer	H	H1,2	H. CCD Drive Pulse		
C	C CNT		Colour Control	HASW	HEAD AMP SW	
	C/N		Carrier/Noise	HBRST	High Bright Set	
	CAM		Camera	HCLR	High Clear	
	CAM T		Camera Test	HCP	Shift Clock for Horizontal Drive	
	CAM TL		Capstan Trque Limit	HD	Horizontal Drive Pulse	
	CAMCLK		Camera Clock	HDTV	High Definition TV	
	CAP R/F/S		Capstan Revers(H)/Stop(M)/Forward(L)	HEX	Hexadecimal	
	CAPSTP H		Capstan Stop Flag (Stop High)	HLT	High Bright Signal	
	CAPVM		Capstan Motor Current	HSS	Horizontal Sinc Signal	
	CASDWN		Cassette Down	HSS	High Speed Shutter	
	CBLK		Composite Blanking Pulse	I	INTER	Interval Recording
	CCD		Charge Coupled Devise		INV	Inverter
	CCW		Counter-Clockwise		IOU	R-Y Analogue Signal Output
	CDS	Correlate Double Sampling Signal	IOU		Analogue R Signal Output Terminal	
CDS OUT	CDS Output Signal	IOV	B-Y Analogue Signal Output			
CH	Charge	IOV	Analogue B Signal Output Terminal			
CH1	Channel 1 (Odd Field)	IOY	Analogue Y Signal Output Terminal			
CHR	Character	IRDET	Infrared Rays Detection			
CHR MIX	Character Mix	IRIS/SH	Iris / Shutter Control			
CI, CO	Buffer In/Out	IRQ	Interrupt Request			
CK	Clock	K	KANDO		Digital Gain Up	
CL / CLK	Clock		KB		Carrier Balance	
CMODE	Camera Mode		KND		Digital Gain Up	
CNR	Chrominance Noise Reduction		KNEE		Knee Corection (γ Control)	
CO	Control Out	L	LCD	Liquid Crystal Display		
CO0-7	Chrominance Output 0 to 7 (Digital)		LD	Load Pulse		
COM	Common		LDD	Liquid Direct Drive		
CP	Clamp Pulse		LEDCNT	LED Control		
CPOB	Clamp Pulse for Optical Blanking		LI-BATT	Lithium Battery		
CPS	Composite Signal		LOAD	Loading		
CRST	Camera Reset		LSB	Least Significant Bit		
CS	Chip Select	LVL	LPF Switch for Auto Focus			
CS 0-7	Chrominance Signal Out 0-7	M	MD	Modulation		
CSEL	Clock Phase Select		MENB	Focus Motor Enable		
CSI 0-7	Chrominance Signal In 0-7		MFF	Manual Focus Far		
CTSW	Crosstalk Switch		MFN	Manual Focus Near		
CW	Clockwise		MIX N.R.D.	Non Rec Data Mix		
CYLVM	Cylinder Motor Current or Power		MRST	Focus Motor Reset		
D	D MODE		Digital Mode Switch Signal	MSB	Most Signal Bit	
	DAC		Digital Analog Convertor	MVSYNC	Monitor Vertical Sync Signal	
	DAC		Digital Analogue Converter			
	DB0-7		Data 0-7			
	DCLR		Digital Clear			
	DCP		Digital Clamp Pulse			
	DICLK		Digital Clock			
	DIS		Digital Image Stabilizer			

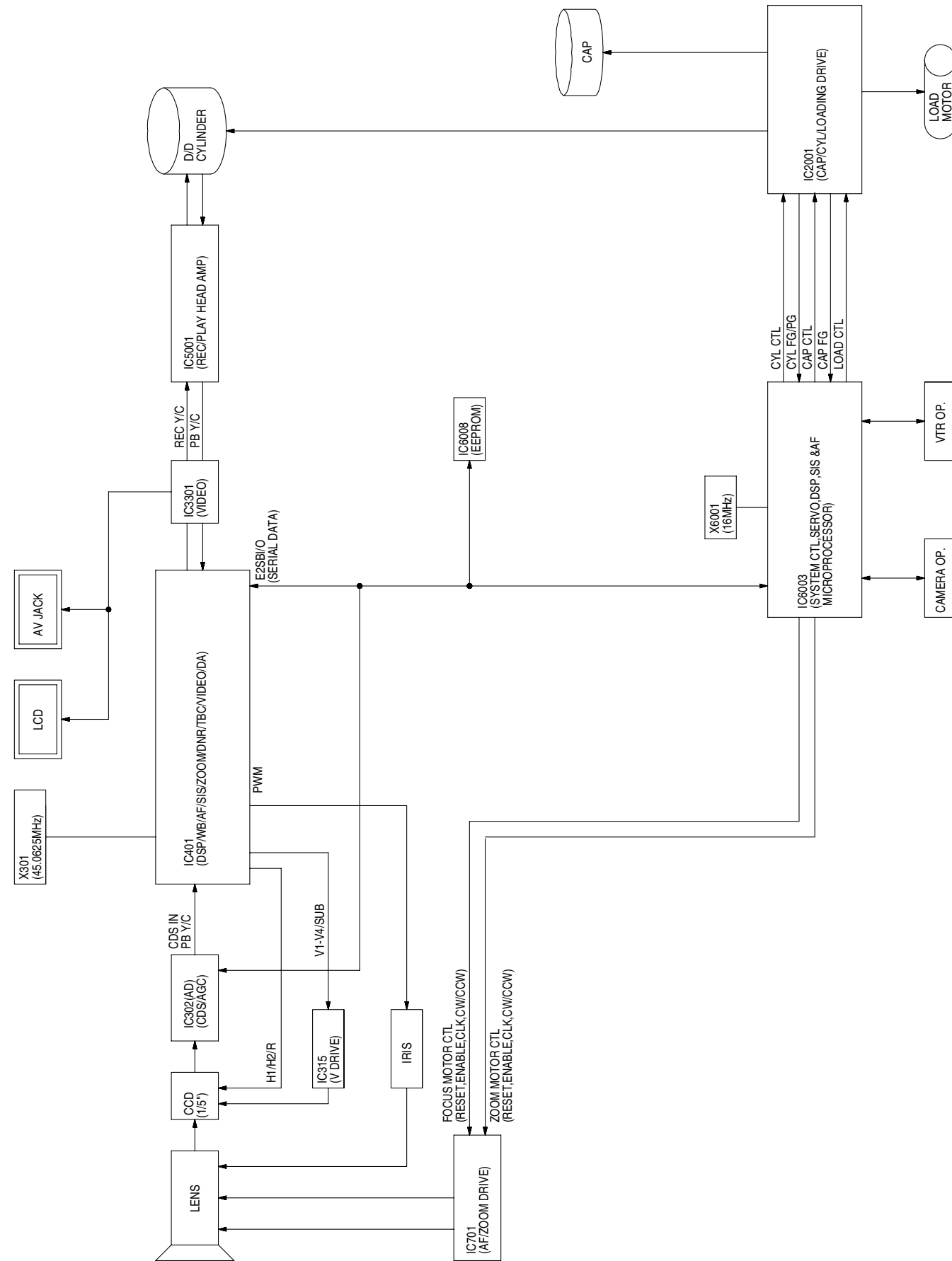
	INITIAL/LOGO	ABBREVIATIONS		INITIAL/LOGO	ABBREVIATIONS
N	N N/F N/P NC NDE NLE NR NRD NRD BLK NRD CLK NRDCLK NRE NWE	Near (Focus) Near/Far Focus NTSC/PAL No Connection Non Liner De-Emphasis Non Liner Emphasis Noise Reduction Non Rec Data No Rec Data Blanking No Rec Data Clock Non Rec Data Blanking Read Enable Input (Low Active) Write Enable (Low Active)	S	SPA SPEN SPST SRT SSA STAB STB STB	ATF Sampling Pulse 8 Bit Data Enable 8 Bit Data Strobe Start Start Sync block Area Safety Tab Switch Stand by Signal Strobe
O	OB OBCNT OE OFS OP OSD OVL OZ	Optical Black Optical Black Control Output Enable Offset Operation AMP Output ON Screen Display Overlap Pulse Optical Zoom	T	T T PHOT TBC TFT TH TI TL TM TMD TRE TREETL TRFIX TRIWAVE TRP TRP TSR TST	Tele (Zoom) Take-up Photo Transistor Time Base Control Thim Film Transistor Thermostat for Battery Test Mode Select Torque Limit Sub Code Sub Code Data Tracking Error Signal Take-up Reel Tracking Fix Tracking Wave Tracking Position Trap Head Switching Reference Time Scale Transfer
P	PAJ PB1-3 PBCTL PBCTL PBH PBLK PC1-3 PCBM PCH PCI PCO PCS PCV PE PED PEDECNT PFP PGC POR POSCOM PREAMP PREBLK PT PWM PWMB	Picture Control PNP Base 1-3 Play Back Control Pre-Blanking Control Head Amp Switch Pre-Blanking (Pulse) PNP Corrector 1-3 Carrier Balance Phase Compensator (Hole AMP) Phase Compensator (Current) Phase Compensator Out Switching Power Control Phase Compensator (Voltage) PNP Emitter Pedestal Pedestal Control Pilot Frame Position Pulse Generator Comparator Power On Reset Position Common Pre-AMP Pre-Blanking Protect for V Voltage Pulse Width Modulation Pulse Width Modulation Pulse	U	U/V SEL UNLOAD UNRE UNWE UV UV SEL	R-Y/B-Y Select Signal Un-Loading Microprocessor Read Enable Microprocessor Write Enable R-Y/B-Y R-Y/B-Y Select Signal
Q	Q2H	Source Output Select	V	V1-V4 VB VCE VCO VCP VCTRL VD VDDX VDDXY VDDY VDREC Vgg Vgl VID VIN VITC VL VLC VLOCKP VLP VM VMD VMD1-3 VMODE VMVH VORP VRB VRBS VREF1R3V VREF3R3V VREFH VREFL VRI VRO VRT VRTS VSS	V.CCD Drive Pulse VH Filter Switching Power Terminal Voltage Control Oscillator Shift Clock Output for Vertical Drive Voltage Charge Control Vertical Drive Pulse X Drive Power for Colour LCD XY Drive Power for Colour LCD Y Drive Power for Colour LCD Video Delayed Rec Voltage for Gate IC Gate off Voltage Video Signal Out Video In Vertical Interval Time Code Low Voltage Variable Length Cording Artificial Sync Pulse Artificial Sync Pulse Motor Voltage Velocity Mode Data Electric Shutter Mode NTSC/PAL Select Switch VH Filter Switching Video Overlap Voltage Reference Bottom Voltage Reference Bottom Output Reference Voltage 1.3V Reference Voltage 3.3V Reference Voltage High Side Reference Voltage Low Side Reference Voltage Input Reference Voltage Output Voltage Reference Top Voltage Reference Top Output Vertical Sync Signal
R	R/B R/L RA RA1 RAC AC RAD RAE RB RB RCB RE REC CC REC CCNT RECCTRL RECI RENCF RENCR REBASE RGBIV1-2 RST RSTB RSTPWD RSTR RSTW RVCO RW RWAE	Read/Busy Direction Select for Data Transmition Recording AMP Rec AMP 1 Rec Audio Current Read Address Data Read Address Enable Read Busy Read Busy R Carrier Balance Read Enable Rec Current Control Rec Current Control Recording Control Pulse Rec Amp Switch Lens Control (Forward) Lens Control (Reverse) Rotary Erase Head 1V Inverted Signal 1-2 Reset R Strobe Reset Power Down Input Reset Read Reset Write Resister for Oscillation Read Write Read Write Enable	W	W WAD/WAE WB WE WEM WHD	Wide (Zoom) Write Address Enable White Balance Write Enable Memory Write Enable Wide Horizontal Drive Pulse
S	S PHOT S/S SBD SBI SBO SCAN0-5 SCK SCR "SCR, S.C.R" SEG. SH/IRIS SIOC SNS LED SO	Supply Photo Transistor Start/Stop Serial Data Serial Data Input Serial Data Output Key Scan 0-5 Serial Clock Search Still Cue Review Segment Shutter/Iris Control Serial In/Out Control Sensor LED Serial Data Output	X	XP	FG Logic Reset
			Y	YCE YNCST YNR	Cylinder Error Code Noise Canceller Noise Reduction
			Z	Z.ENC Z.MIC ZENC ZMT(+)/(-) ZMTER ZMW	Zoom Encoder Zoom Mic Zoom Encoder Output Zoom Motor (+)/(-) Zoom Motor Tele Side Zoom Motor Wide Side

6 WAVEFORM TABLE

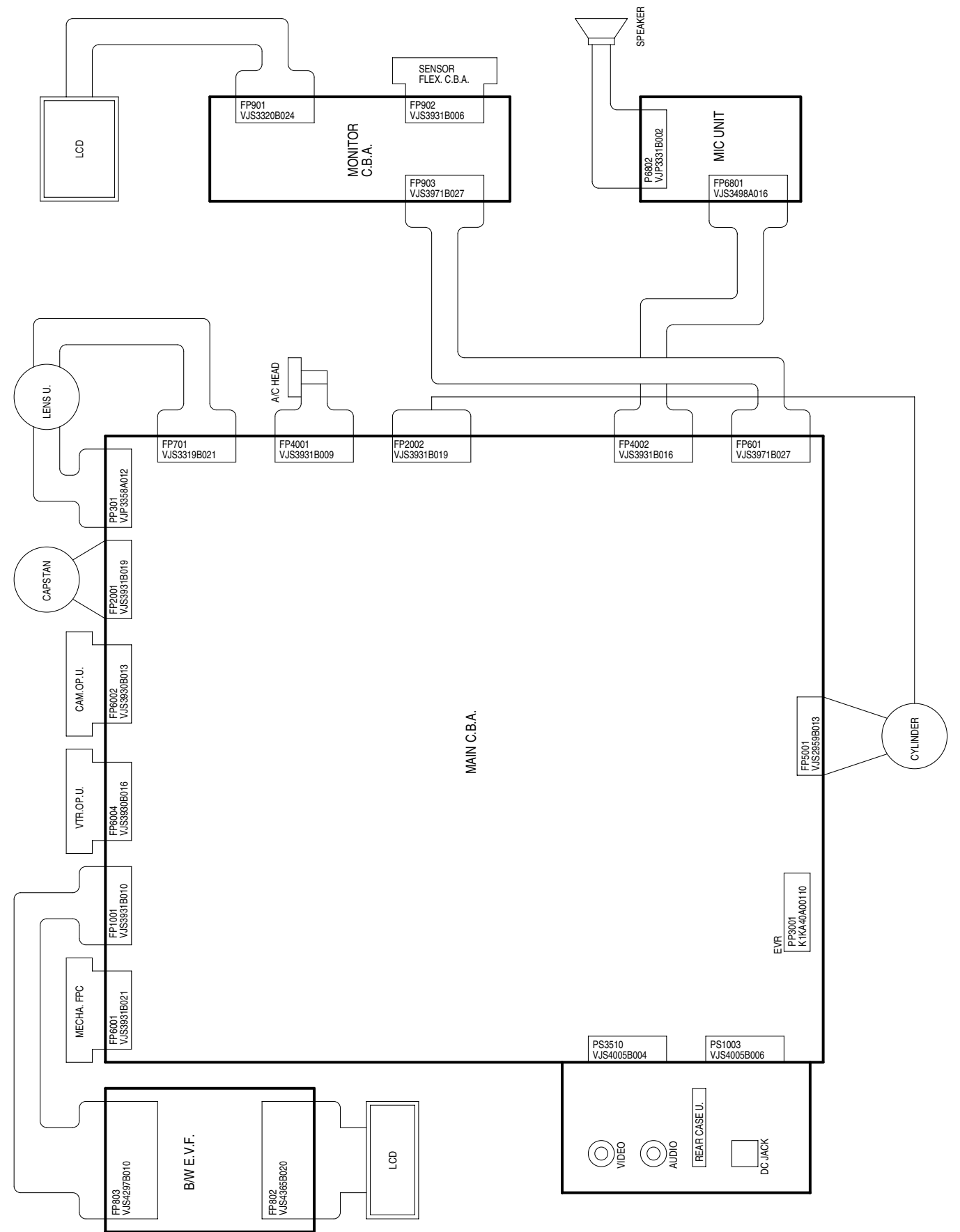
 <p>IC701-12, 14 POWER ON 6.0 Vp-p (5msec./div.) ZOOM MOTOR DRIVING</p>	 <p>IC5001-47 PLAY 0.2 Vp-p (2msec./div.) COLOR BAR</p>	 <p>IC5001-8 3.0 Vp-p (20msec./div.) COLOR BAR</p>	 <p>IC6003-35 FF/REW 2.2 Vp-p (50msec./div.)</p>	 <p>IC6003-36 FF/REW 3.0 Vp-p (20msec./div.)</p>
 <p>IC6003-66 STOP 2.6 Vp-p (50nsec./div.)</p>	 <p>IC6003-144, IC2001-40 REC/PLAY 5.2 Vp-p (1µsec./div.)</p>	 <p>IC6003-145 REC/PLAY 5.4 Vp-p (1µsec./div.)</p>	 <p>IC6003-155, IC2001-26 REC/PLAY 3.0 Vp-p (10msec./div.)</p>	 <p>IC6003-157, IC2001-25 REC/PLAY 3.0 Vp-p (0.2msec./div.)</p>
 <p>IC6003-159, IC2001-27 REC/PLAY 3.0 Vp-p (1msec./div.)</p>	 <p>IC6003-174 STOP 5.4 Vp-p (0.5µsec./div.)</p>	 <p>IC2001-59, 61, 63 REC/PLAY 2.8 Vp-p (1msec./div.)</p>	 <p>IC2001-52, 53, 54 REC/PLAY 2.8 Vp-p (20msec./div.)</p>	 <p>IC2001-21 REC/PLAY 0.6 Vp-p (0.5µsec./div.)</p>
 <p>IC302-10 STOP 1.2 Vp-p (20µsec./div.) GRAY SCALE</p>	 <p>IC302-26 STOP 0.6 Vp-p (20µsec./div.) GRAY SCALE</p>	 <p>IC1001-9 STOP 1.0 Vp-p (1µsec./div.)</p>	 <p>IC1001-11 STOP 1.4 Vp-p (1µsec./div.)</p>	 <p>IC1001-15 STOP 1.3 Vp-p (1µsec./div.)</p>
 <p>IC1001-27 STOP 0.6 Vp-p (1µsec./div.)</p>	 <p>Q1001-2 STOP 11.8 Vp-p (1µsec./div.)</p>	 <p>Q1003-4 STOP 12.0 Vp-p (1µsec./div.)</p>	 <p>Q1004-2 STOP 18.0 Vp-p (1µsec./div.)</p>	 <p>Q1061-4 STOP 0.2 Vp-p (1µsec./div.)</p>
 <p>Q1062-4 STOP 0.2 Vp-p (1µsec./div.)</p>	 <p>IC801-5 STOP (B/W EVF) 1.0 Vp-p (20µsec./div.) COLOR BAR</p>	 <p>IC3301-25 REC/PLAY 3.5Vp-p (20µsec./div.) COLOR BAR</p>	 <p>IC3301-20 REC 1.8Vp-p (20µsec./div.) COLOR BAR</p>	 <p>IC401-80 REC 0.6Vp-p (20µsec./div.) COLOR BAR</p>
 <p>IC401-85 REC 1.0Vp-p (20µsec./div.) COLOR BAR</p>	 <p>FP801-6 STOP 0.6Vp-p (20µsec./div.) COLOR BAR</p>			

7 BLOCK DIAGRAMS

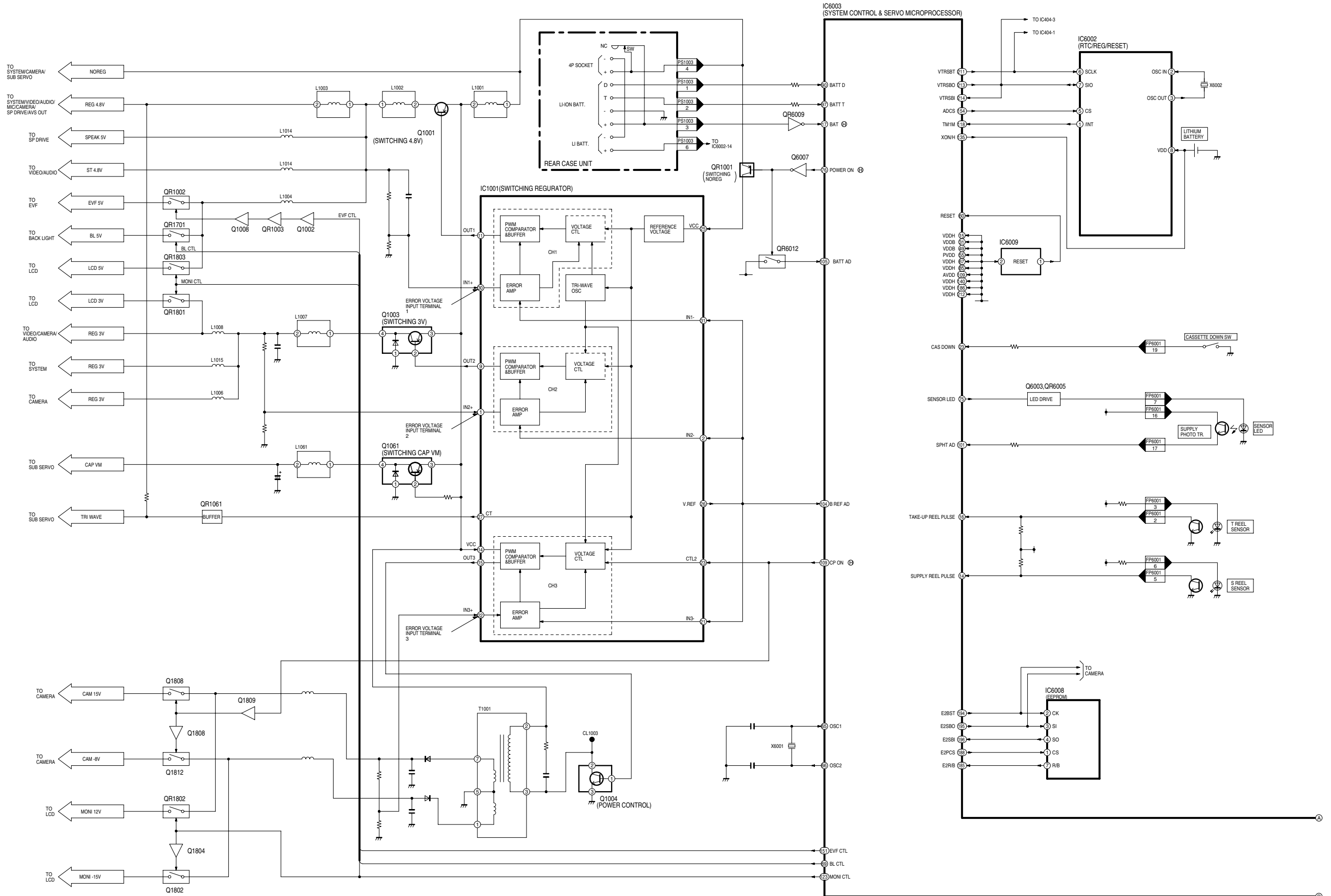
7.1. OVERALL BLOCK DIAGRAM



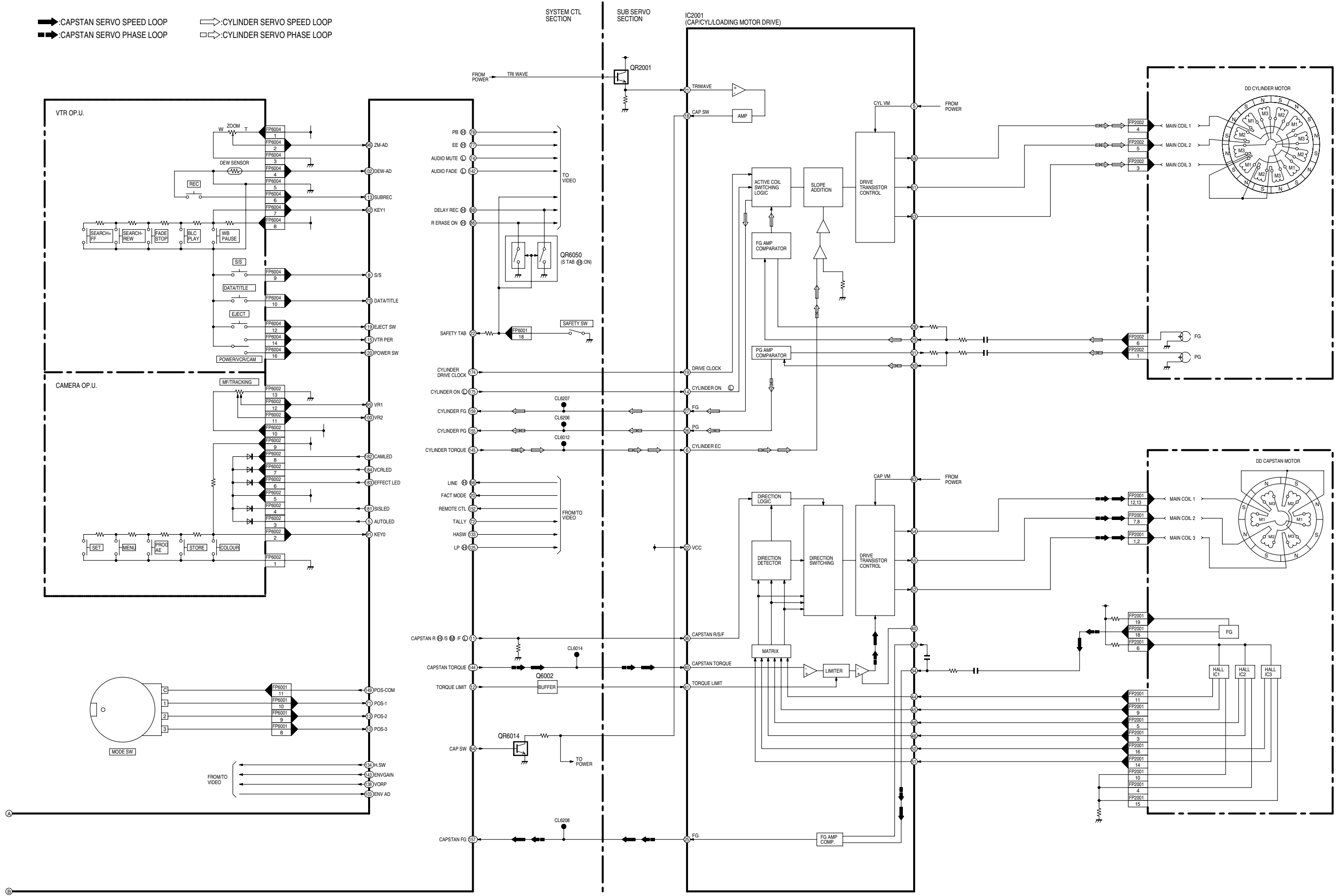
7.2. BLOCK DIAGRAM OF CONNECTION



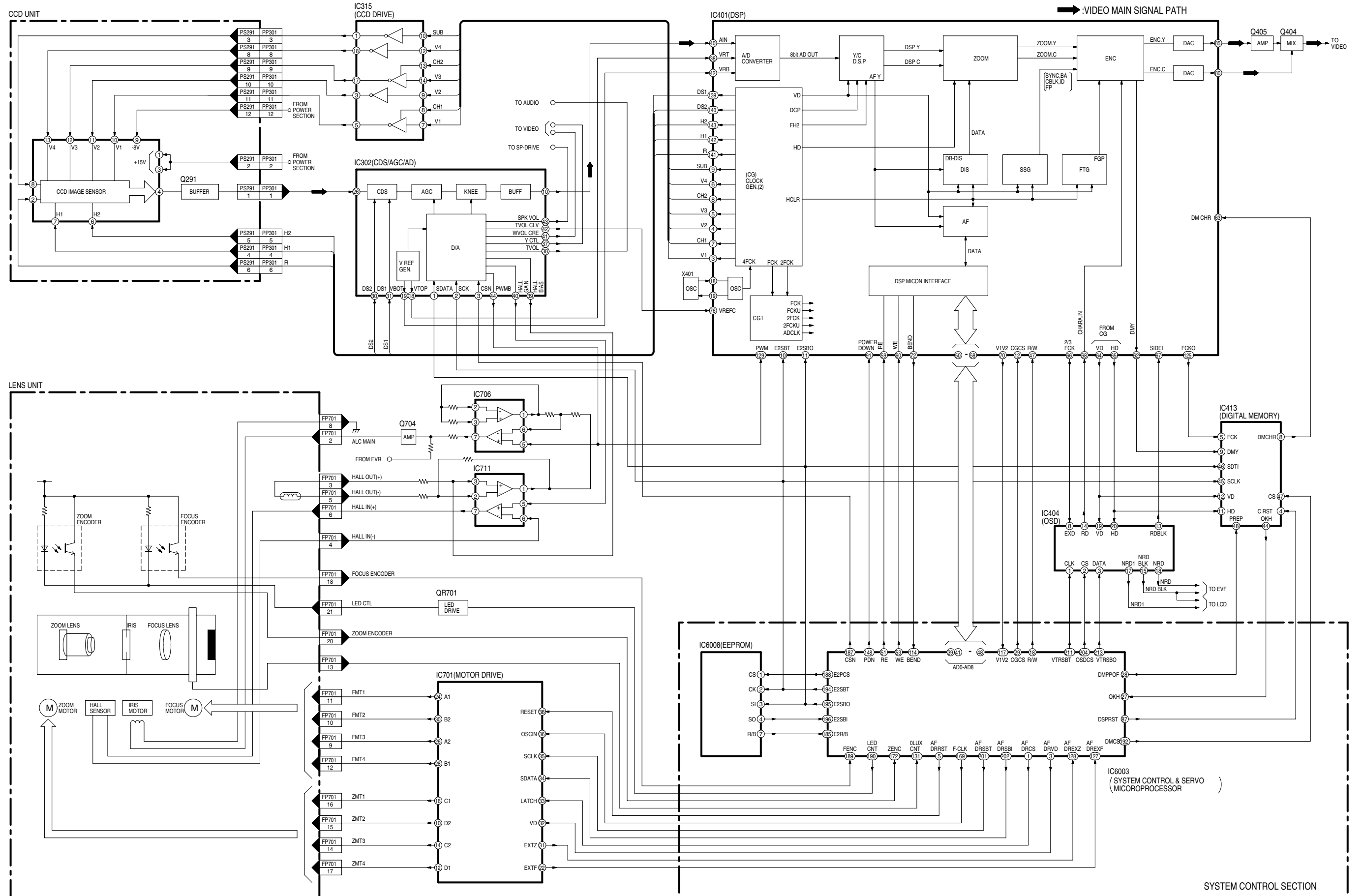
7.3. SYSTEM CONTROL & SERVO/ POWER BLOCK DIAGRAM



→:CAPSTAN SERVO SPEED LOOP
 →:CAPSTAN SERVO PHASE LOOP
 →:CYLINDER SERVO SPEED LOOP
 →:CYLINDER SERVO PHASE LOOP

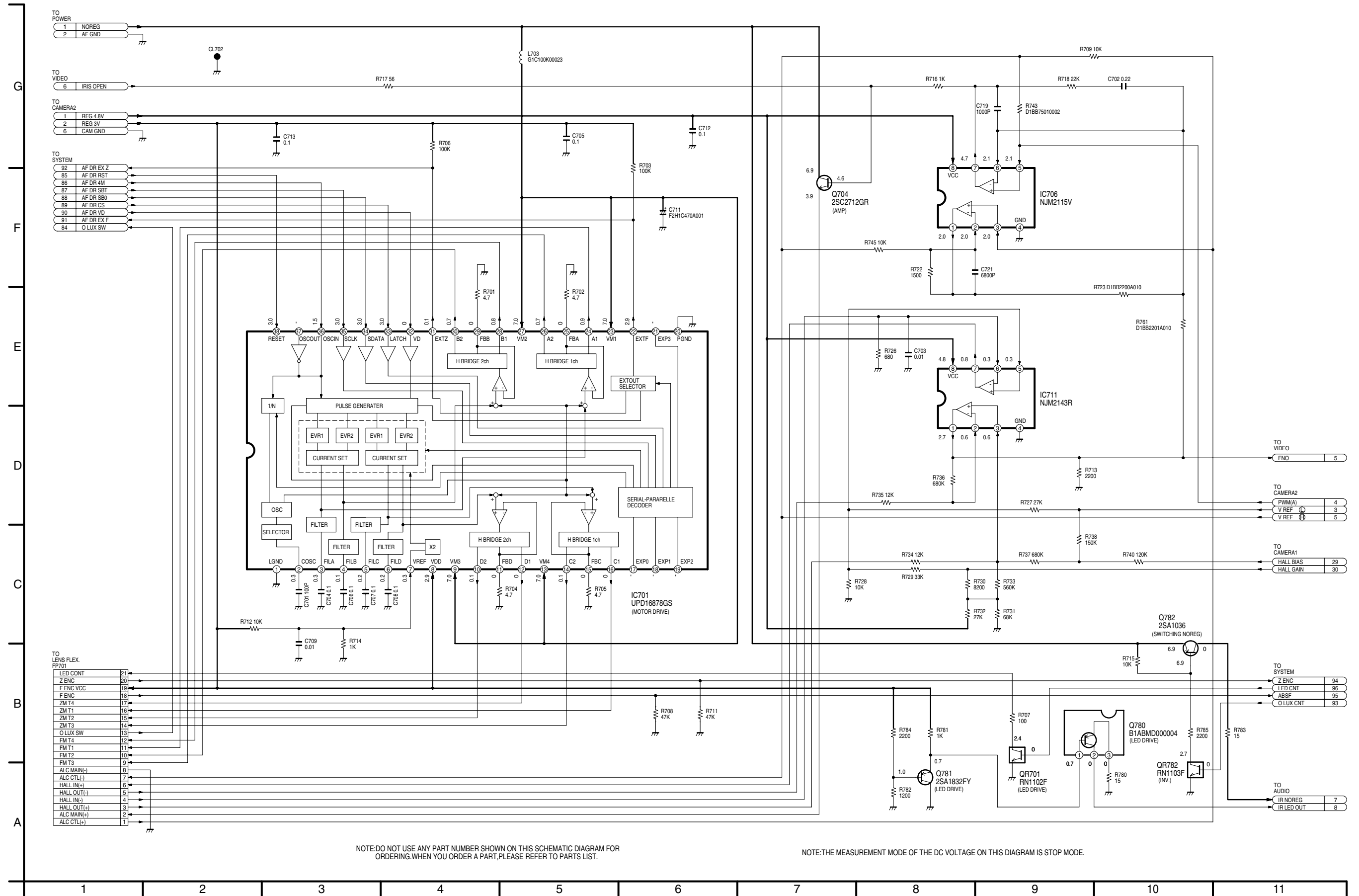


7.6. CAMERA BLOCK DIAGRAM

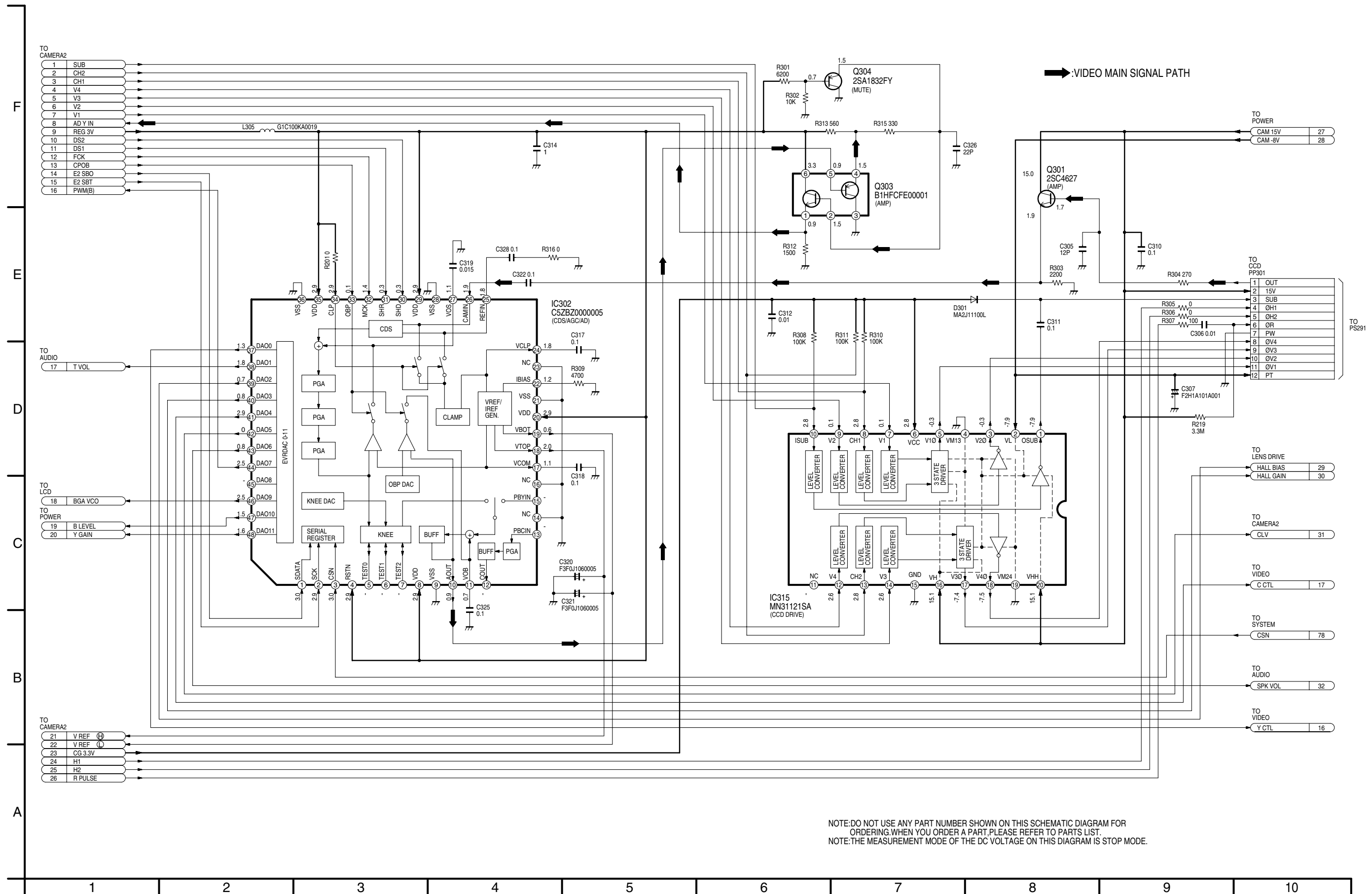


8 SCHEMATIC DIAGRAMS

8.1. LENS DRIVE SCHEMATIC DIAGRAM

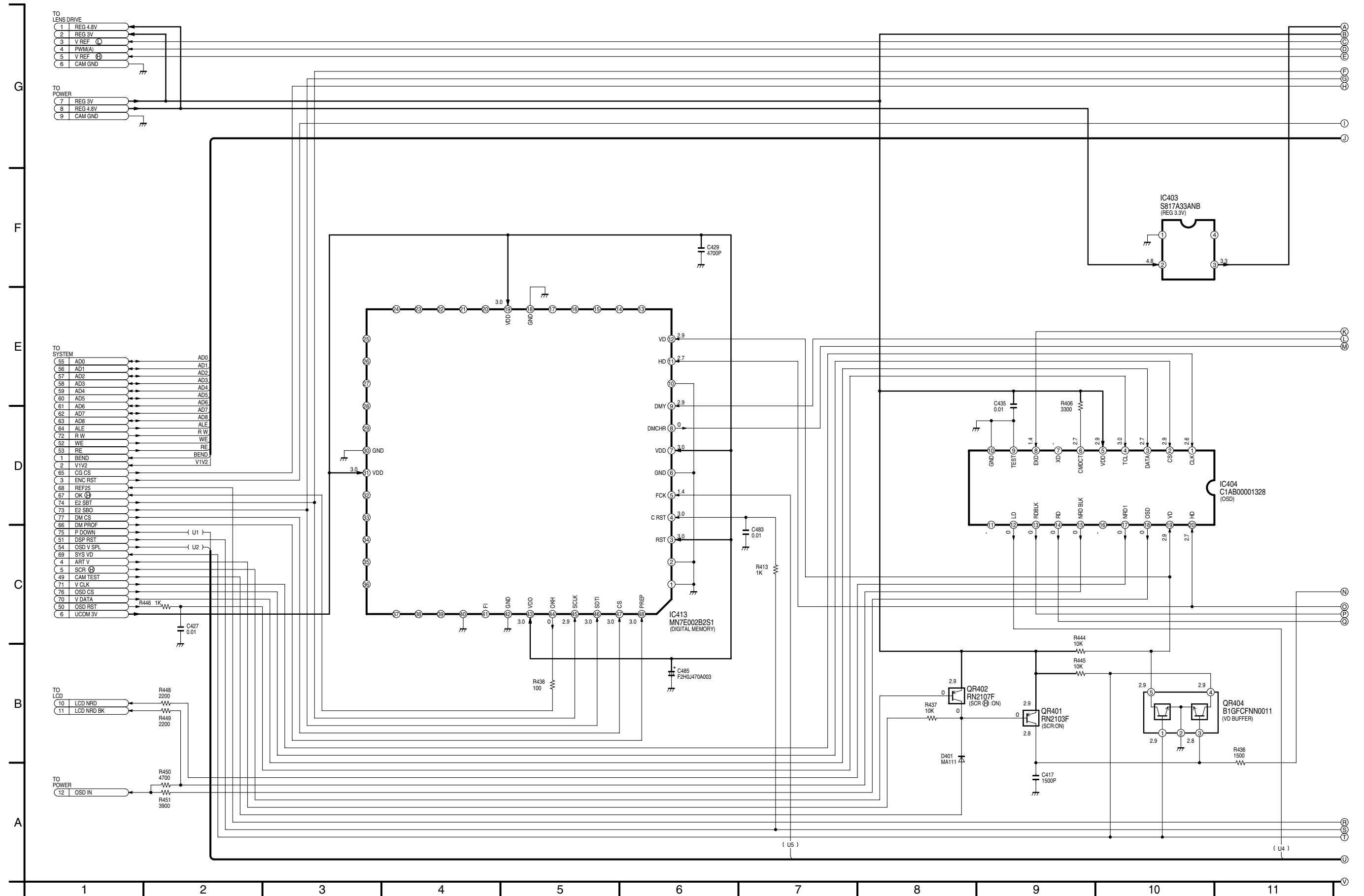


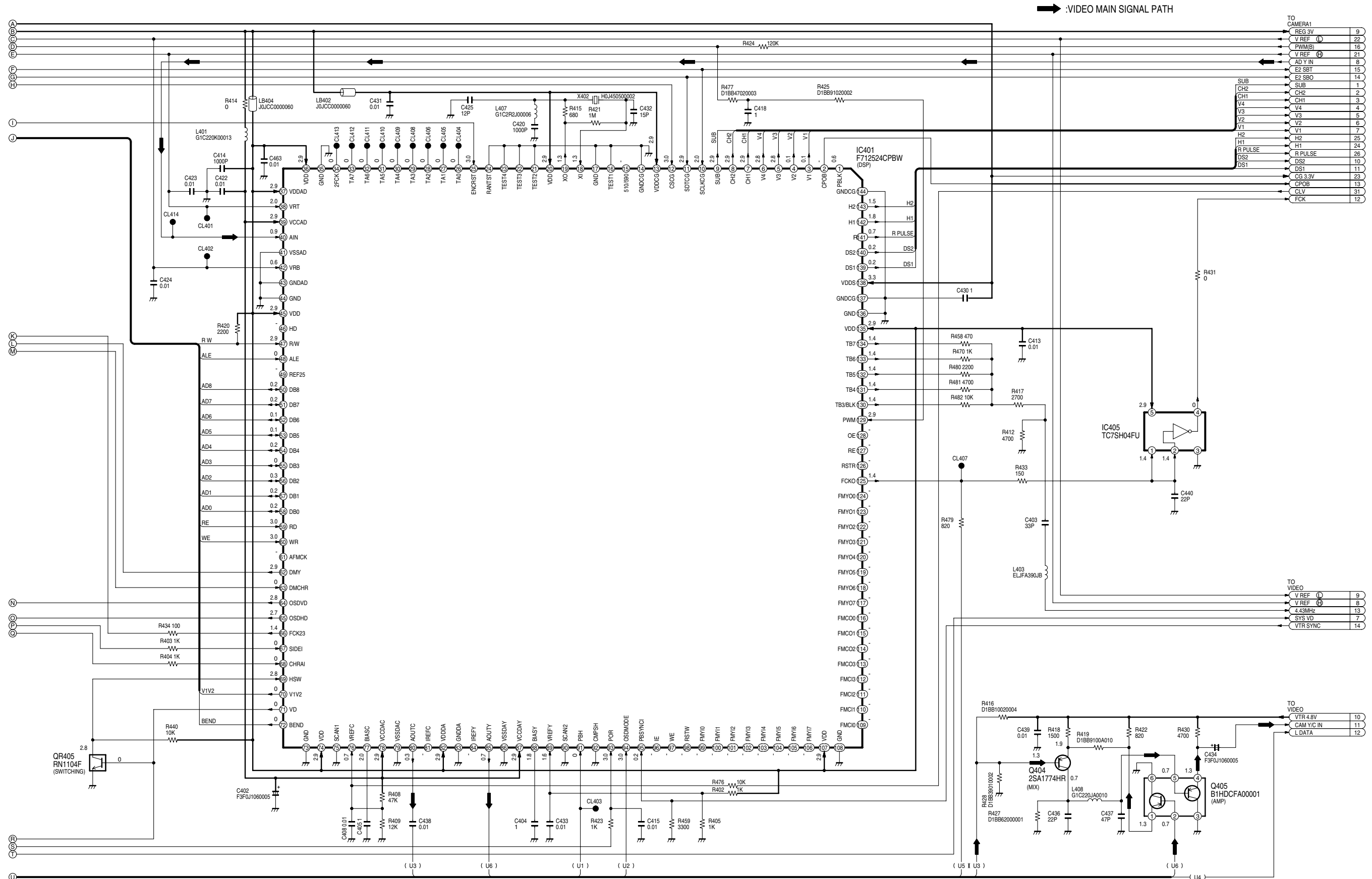
8.2. CAMERA 1 SCHEMATIC DIAGRAM



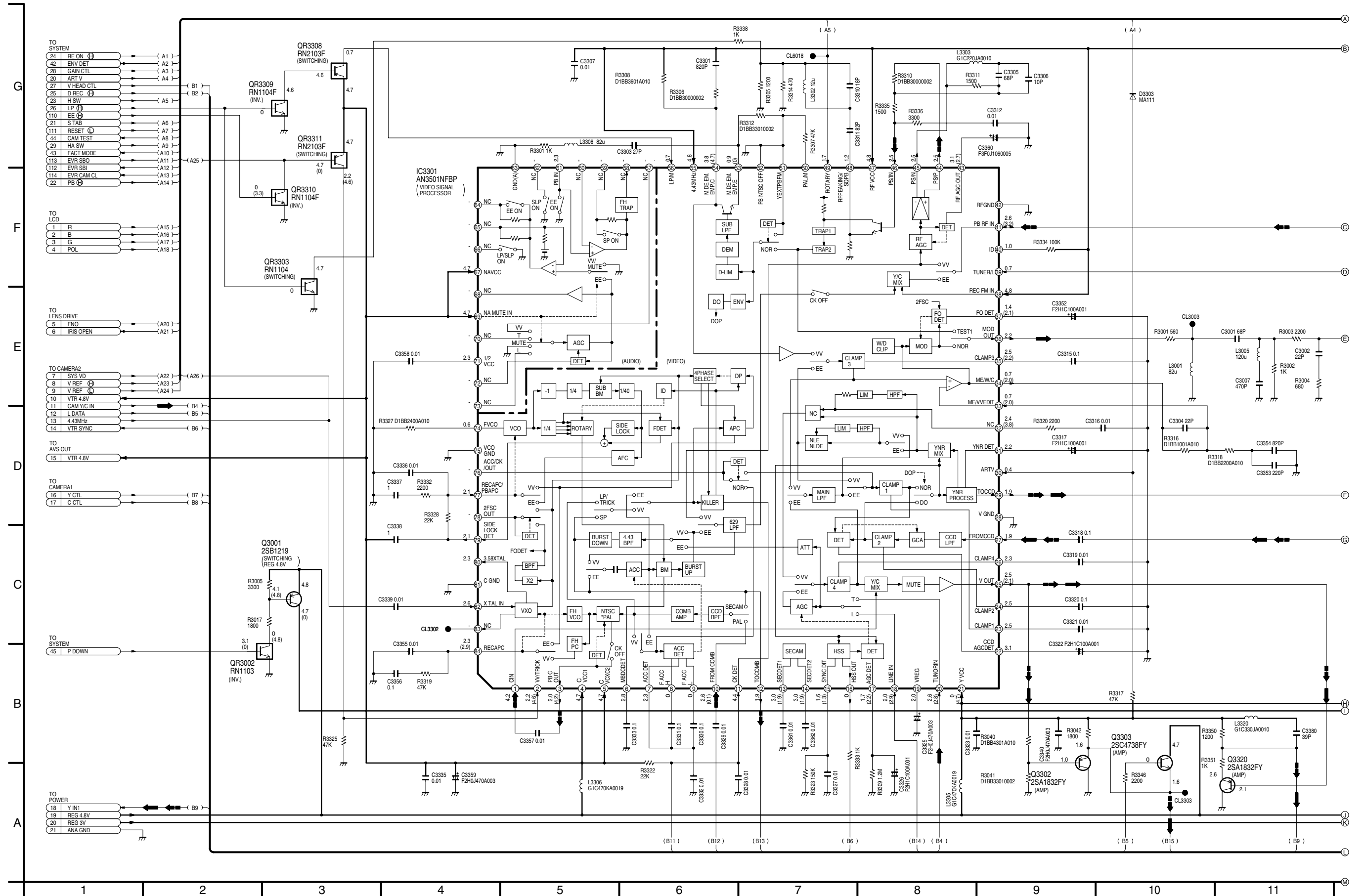
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.
 NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

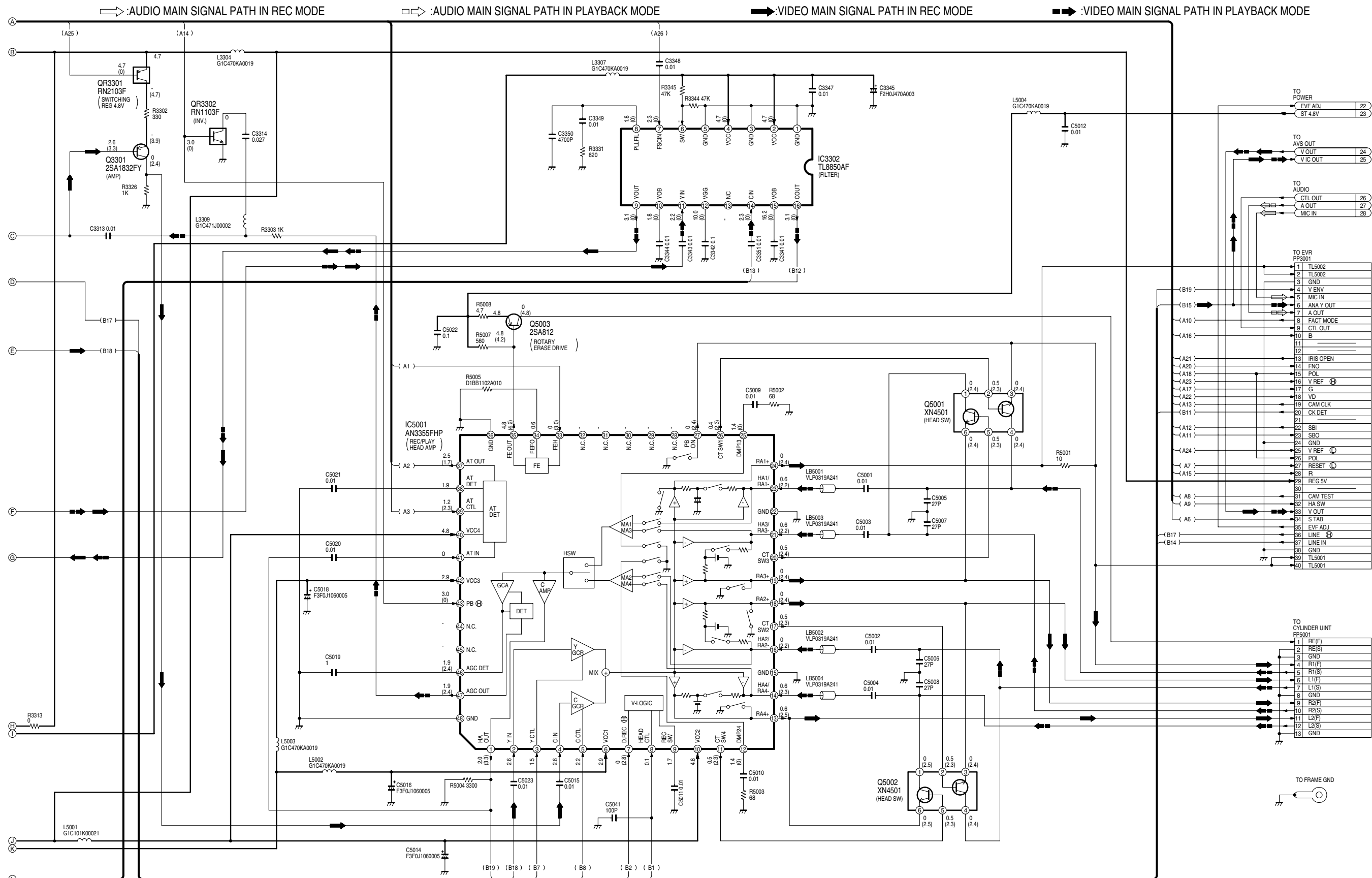
8.3. CAMERA 2 SCHEMATIC DIAGRAM





8.4. VIDEO SCHEMATIC DIAGRAM





NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKET() ON THIS DIAGRAM IS RECORD MODE.(SP MODE)

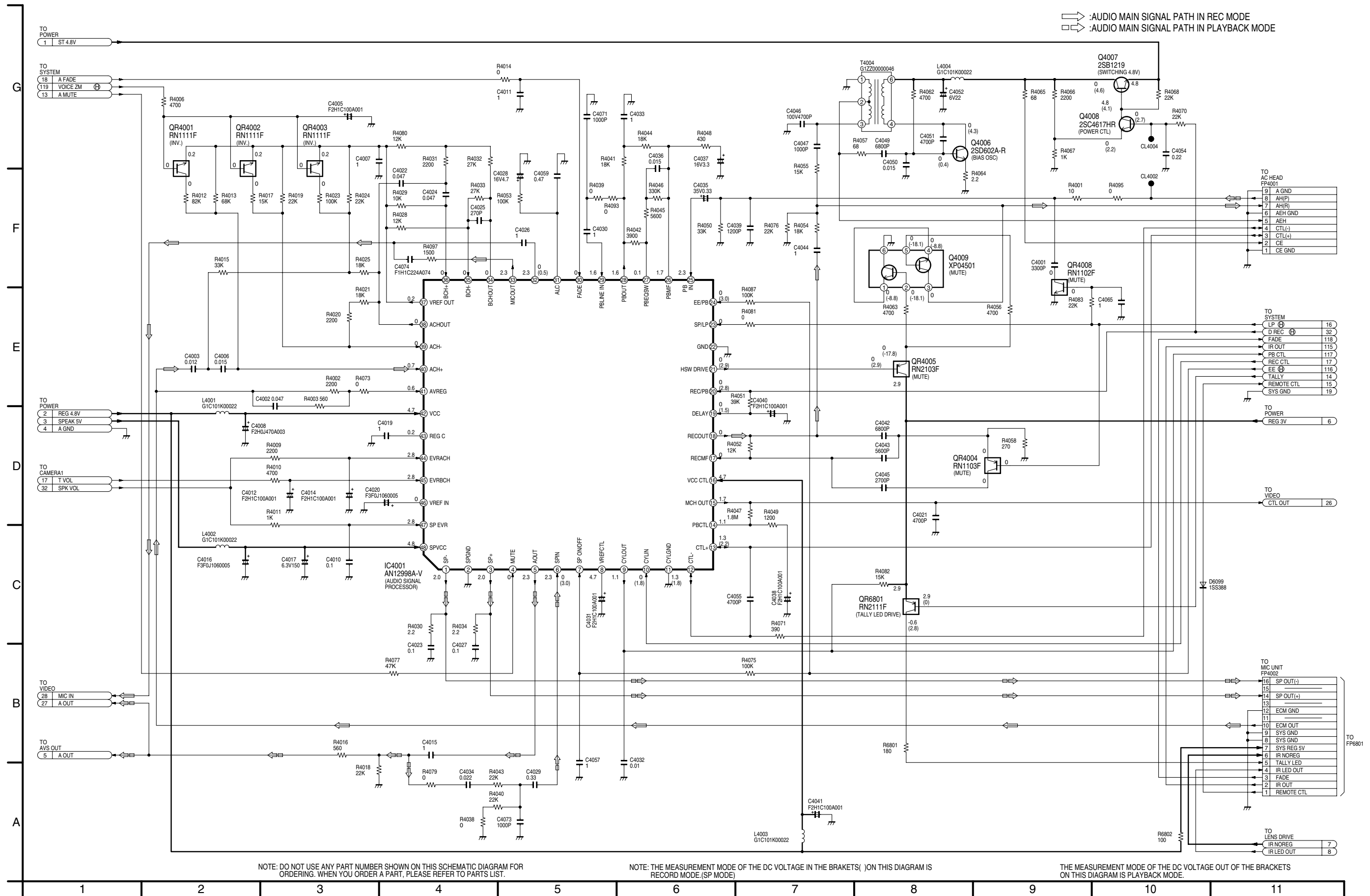
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKET() ON THIS DIAGRAM IS PLAYBACK MODE.

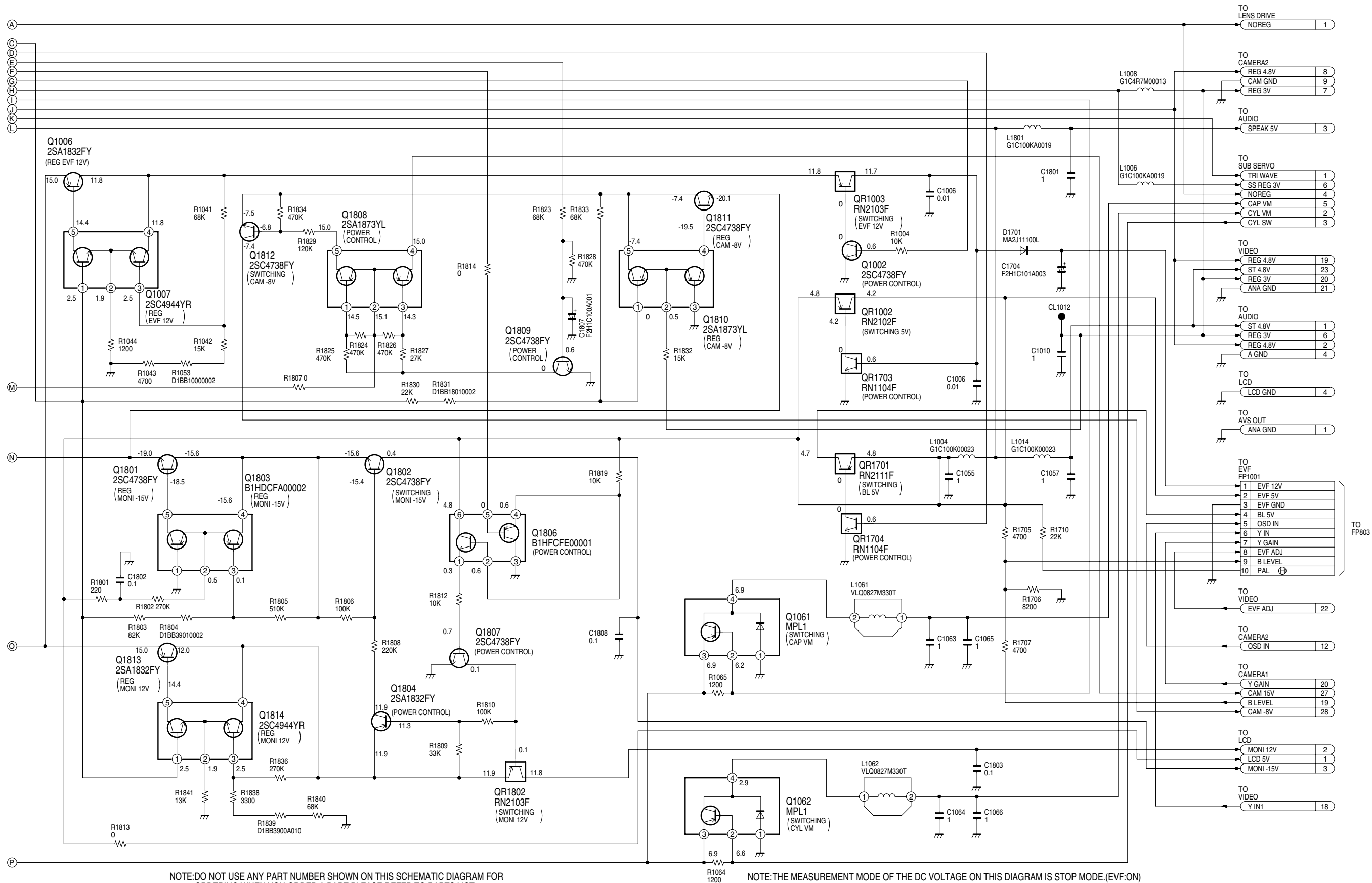
8.5.1. SYSTEM CONTROL& SERVO DC VOLTAGE CHART (SP MODE)

Ref No.	IC6002																			
MODE	1	2	3	4	5	6	7	8												
STOP	3.0	0.4	0.5	0.0	0.2	2.6	2.6	-												
PLAY	3.0	0.4	0.5	0.0	0.2	2.6	2.6	-												
REC.	3.0	0.4	0.5	0.0	0.2	2.6	2.6	-												
F.F.	3.0	0.4	0.5	0.0	0.2	2.6	2.6	-												
REW	3.0	0.4	0.5	0.0	0.2	2.6	2.6	-												
Ref No.	IC6003																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	3.0	0.0	0.0	3.0	3.0	0.0	3.0	2.9	0.0	3.0	0.0	0.0	3.0	0.1	3.0	2.6	3.0	2.9	0.0	3.0
PLAY	3.0	0.0	0.0	3.0	3.0	0.0	3.0	2.9	0.0	3.0	0.0	3.0	3.0	0.1	3.0	1.4	3.0	2.9	0.0	3.0
REC.	3.0	0.0	0.0	3.0	3.0	0.0	3.0	2.9	0.0	3.0	0.0	3.0	3.0	2.7	3.0	1.4	3.0	2.9	0.0	3.0
F.F.	3.0	0.0	0.0	3.0	3.0	0.0	3.0	2.9	0.0	3.0	0.0	3.0	3.0	1.4	3.0	1.4	3.0	2.9	0.0	3.0
REW	3.0	0.0	0.0	3.0	3.0	0.0	3.0	2.9	0.0	3.0	0.0	3.0	3.0	1.4	3.0	1.4	3.0	2.9	0.0	3.0
Ref No.	IC6003																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0.0	0.0	0.0	0.5	0.0	0.0	0.0	3.0	3.0	3.0	3.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
PLAY	0.0	0.0	0.0	0.5	0.0	0.0	0.0	3.0	3.0	3.0	3.0	0.5	0.2	0.3	0.3	0.2	0.3	0.2	0.4	0.0
REC.	0.0	0.0	0.0	0.5	0.0	0.0	0.0	3.0	3.0	3.0	3.0	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
F.F.	0.0	0.0	0.0	0.5	0.0	0.0	0.0	3.0	3.0	3.0	3.0	0.6	0.2	0.6	0.3	0.2	0.6	0.5	0.4	0.0
REW	0.0	0.0	0.0	0.5	0.0	0.0	0.0	3.0	3.0	3.0	3.0	0.6	0.5	0.6	0.3	0.5	0.6	0.5	0.6	0.0
Ref No.	IC6003																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	3.0	3.0	3.0	3.0	2.9	0.0	3.0	0.0	0.0	0.0	2.9	3.0
PLAY	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.4	3.0	0.0	3.0	3.0	2.9	0.0	3.0	0.0	0.0	0.0	2.9	3.0
REC.	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3	3.0	3.0	3.0	3.0	2.9	0.0	3.0	0.0	0.0	0.0	2.9	3.0
F.F.	0.6	0.3	0.4	0.6	0.4	0.6	0.5	0.6	3.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	2.9	3.0
REW	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.7	3.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	2.9	3.0
Ref No.	IC6003																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0.0	0.0	3.0	0.0	1.4	1.5	3.0	1.4	0.0	2.9	0.0	3.0	2.6	0.0	3.0	3.0	3.0	0.0	0.0	3.0
PLAY	0.0	0.0	3.0	0.0	1.4	1.5	3.0	1.4	0.0	2.9	0.0	3.0	2.6	0.0	3.0	3.0	3.0	0.0	0.0	3.0
REC.	0.0	0.0	3.0	0.0	1.4	1.5	3.0	1.4	0.0	2.9	0.0	3.0	2.6	0.0	3.0	3.0	3.0	0.0	0.0	3.0
F.F.	0.0	0.0	3.0	0.0	1.4	1.4	3.0	1.4	0.0	2.9	0.0	3.0	2.6	3.0	2.9	3.0	3.0	0.0	0.0	3.0
REW	0.0	0.0	3.0	0.0	1.4	1.4	3.0	1.4	0.0	2.9	0.0	3.0	2.6	3.0	2.9	3.0	3.0	0.0	0.0	3.0
Ref No.	IC6003																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	2.9	2.9	2.9	0.0	0.0	1.5	3.0	0.0	0.0	1.9
PLAY	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	2.9	2.9	2.9	0.0	0.0	1.5	3.0	0.0	0.0	1.9
REC.	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	2.9	2.9	2.9	0.0	0.0	1.5	3.0	0.0	0.0	1.9
F.F.	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	2.9	2.9	2.9	0.0	0.0	1.5	3.0	0.0	0.0	1.9
REW	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	3.0	2.9	2.9	2.9	0.0	0.0	1.5	3.0	0.0	0.0	1.9
Ref No.	IC6003																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
STOP	0.0	0.0	1.6	1.7	1.9	3.0	0.0	3.0	3.0	0.0	3.0	0.0	2.9	0.1	0.0	0.1	0.0	3.0	0.0	2.9
PLAY	0.0	0.0	2.5	1.7	2.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	2.9	0.1	2.9	0.1	0.0	3.0	0.0	0.0
REC.	0.0	0.0	1.7	1.7	2.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	2.9	0.1	0.0	0.1	0.0	3.0	0.0	2.9
F.F.	0.0	0.0	1.6	1.7	2.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	2.9	0.1	2.9	0.1	0.0	3.0	0.0	0.0
REW	0.0	0.0	1.6	1.7	2.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	2.9	0.1	2.9	0.1	0.0	3.0	0.0	0.0
Ref No.	IC6003																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
STOP	2.6	3.0	3.0	3.0	0.0	0.0	2.9	0.1	2.8	0.0	0.0	0.0	1.5	1.5	0.0	0.0	0.0	0.0	0.1	3.0
PLAY	2.6	3.0	3.0	3.0	0.0	0.0	2.9	0.1	2.9	0.0	0.0	0.0	1.5	1.5	0.0	0.0	0.0	0.0	0.1	3.0
REC.	2.6	3.0	3.0	3.0	0.0	0.0	2.9	0.1	2.9	0.0	0.0	0.0	1.5	1.5	0.0	0.0	1.8	0.0	0.1	3.0
F.F.	2.6	3.0	3.0	3.0	0.0	0.0	2.9	0.1	2.9	0.0	0.0	0.0	1.5	1.5	0.0	0.0	0.0	0.0	0.1	3.0
REW	2.6	3.0	3.0	3.0	0.0	0.0	2.9	0.1	2.9	0.0	0.0	0.0	1.5	1.5	0.0	0.0	0.0	0.0	0.1	3.0
Ref No.	IC6003																			
MODE	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
STOP	0.0	0.0	2.3	0.2	1.6	0.0	0.0	0.0	0.0	0.0	3.0	2.9	0.0	0.2	0.1	2.6	0.5	0.5	1.5	0.0
PLAY	0.0	0.5	1.2	1.2	1.6	0.0	0.0	1.3	0.0	0.0	3.0	2.9	0.0	0.2	0.1	2.5	1.5	0.5	1.5	0.0
REC.	0.0	0.0	2.3	1.2	1.6	0.0	0.0	0.0	0.0	0.0	3.0	2.9	0.0	0.2	0.1	2.6	1.5	0.5	1.5	0.6
F.F.	0.0	0.0	0.0	1.1	1.6	0.0	0.0	0.0	0.0	0.0	3.0	2.9	0.0	0.2	0.1	2.6	1.5	0.5	1.5	1.6
REW	0.0	0.0	1.1	1.1	1.6	0.0	0.0	0.0	0.0	0.0	3.0	2.9	0.0	0.2	0.1	2.6	1.5	0.5	1.5	1.6
Ref No.	IC6003																			
MODE	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
STOP	0.0	0.0	2.8	0.0	0.1	2.9	0.0	2.6	1.5	3.0	3.0	0.0	2.6	1.5	0.0	3.0	3.0	2.8	0.0	1.6
PLAY	0.0	0.0	2.8	0.0	0.1	2.9	0.0	0.0	1.5	0.0	0.0	0.0	2.6	1.5	0.0	3.0	3.0	2.8	0.0	1.6
REC.	0.0	0.0	2.8	0.0	0.1	2.9	0.0	1.7	1.8	3.0	3.0	0.0	2.6	1.5	0.0	3.0	3.0	2.8	0.0	1.6
F.F.	0.0	0.0	2.9	0.0	0.1	2.9	0.0	1.6	1.5	3.0	3.0	0.0	2.5	1.5	0.0	1.3	3.0	2.8	0.0	1.6
REW	0.0	0.0	2.9	0.0	0.1	2.9	0.0	1.6	1.5	3.0	3.0	0.0	2.6	1.5	0.0	0.0	3.0	2.8	0.0	1.6
Ref No.	IC6003																			
MODE	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200
STOP	0.0	3.0	0.0	0.0	2.9	3.0	3.0	3.0	0.0	0.0	2.9	3.0	0.0	2.9	3.0	2.9	1.0	3.0	2.6	2.9
PLAY	0.0	0.0	0.0	3.0	2.9	3.0	3.0	0.0	0.0	0.0	2.9	3.0	0.0	2.9	3.0	2.9	0.9	3.0	2.6	2.9
REC.	0.0	3.0	0.0	0.0	2.9	3.0	3.0	3.0	0.0	0.0	2.9	3.0	0.0	2.9	3.0	2.9	3.0	3.0	2.6	3.1
F.F.	0.0	0.0	0.0	3.0	2.9	3.0	3.0	3.0	0.0	0.0	2.9	3.0	0.0	2.9	3.0	2.9	3.0	3.0	2.6	3.1
REW	0.0	0.0	0.0	3.0	2.9	3.0	3.0	3.0	0.0	0.0	2.9	3.0	0.0	2.9	3.0	2.9	3.0	3.0	2.6	3.1
Ref No.	IC6003																			
MODE	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216				
STOP	3.0	3.0	3.0	2.9	0.0	0.0	3.0	3.0	3.0	3.0	2.8	3.0	2.9	2.7	0.0	0.0				
PLAY	3.0	3.0	3.0	2.9	0.0	0.0	3.0	3.0	3.0	3.0	2.8	3.0	2.9	2.7	0.0	0.0				
REC.	3.0	3.0	3.0	2.9	0.0	0.0	3.0	3.0	3.0	3.0	2.9	3.0	2.9	2.7	0.0	0.0				
F.F.	3.0	3.0	3.0	2.9	0.0	0.0	3.0	3.0	3.0	3.0	2.8	3.0	2.9	2.7	0.0	0.0				
REW	3.0	3.0	3.0	2.9	0.0	0.0	3.0	3.0	3.0	3.0	2.8	3.0	2.9	2.7	0.0	0.0				

Ref No.	IC6008																			
MODE																				

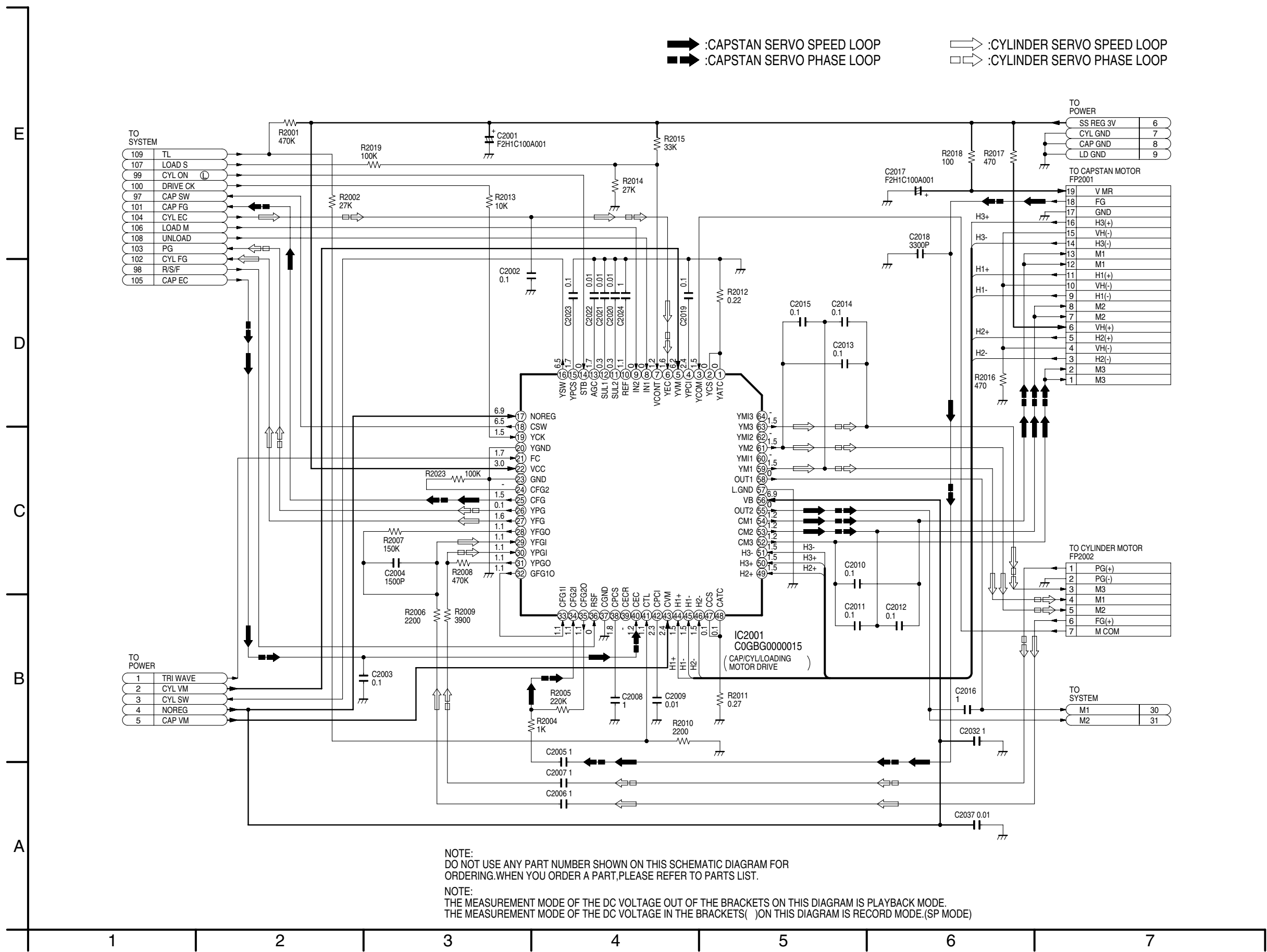
8.6. AUDIO SCHEMATIC DIAGRAM





- TO LENS DRIVE NOREG 1
- TO CAMERA2 REG 4.8V 8
- CAM GND 9
- REG 3V 7
- TO AUDIO SPEAK 5V 3
- TO SUB SERVO TRI WAVE 1
- SS REG 3V 6
- NOREG 4
- CAP VM 5
- CYL VM 2
- CYL SW 3
- TO VIDEO REG 4.8V 19
- ST 4.8V 23
- REG 3V 20
- ANA GND 21
- TO AUDIO ST 4.8V 1
- REG 3V 6
- REG 4.8V 2
- A GND 4
- TO LCD LCD GND 4
- TO AVS OUT ANA GND 1
- TO EVF FP1001 EVF 12V 1
- EVF 5V 2
- EVF GND 3
- BL 5V 4
- OSD IN 5
- Y IN 6
- Y GAIN 7
- EVF ADJ 8
- B LEVEL 9
- PAL 10
- TO VIDEO EVF ADJ 22
- TO CAMERA2 OSD IN 12
- TO CAMERA1 Y GAIN 20
- CAM 15V 27
- B LEVEL 19
- CAM -8V 28
- TO LCD MONI 12V 2
- LCD 5V 1
- MONI -15V 3
- TO VIDEO Y IN1 18

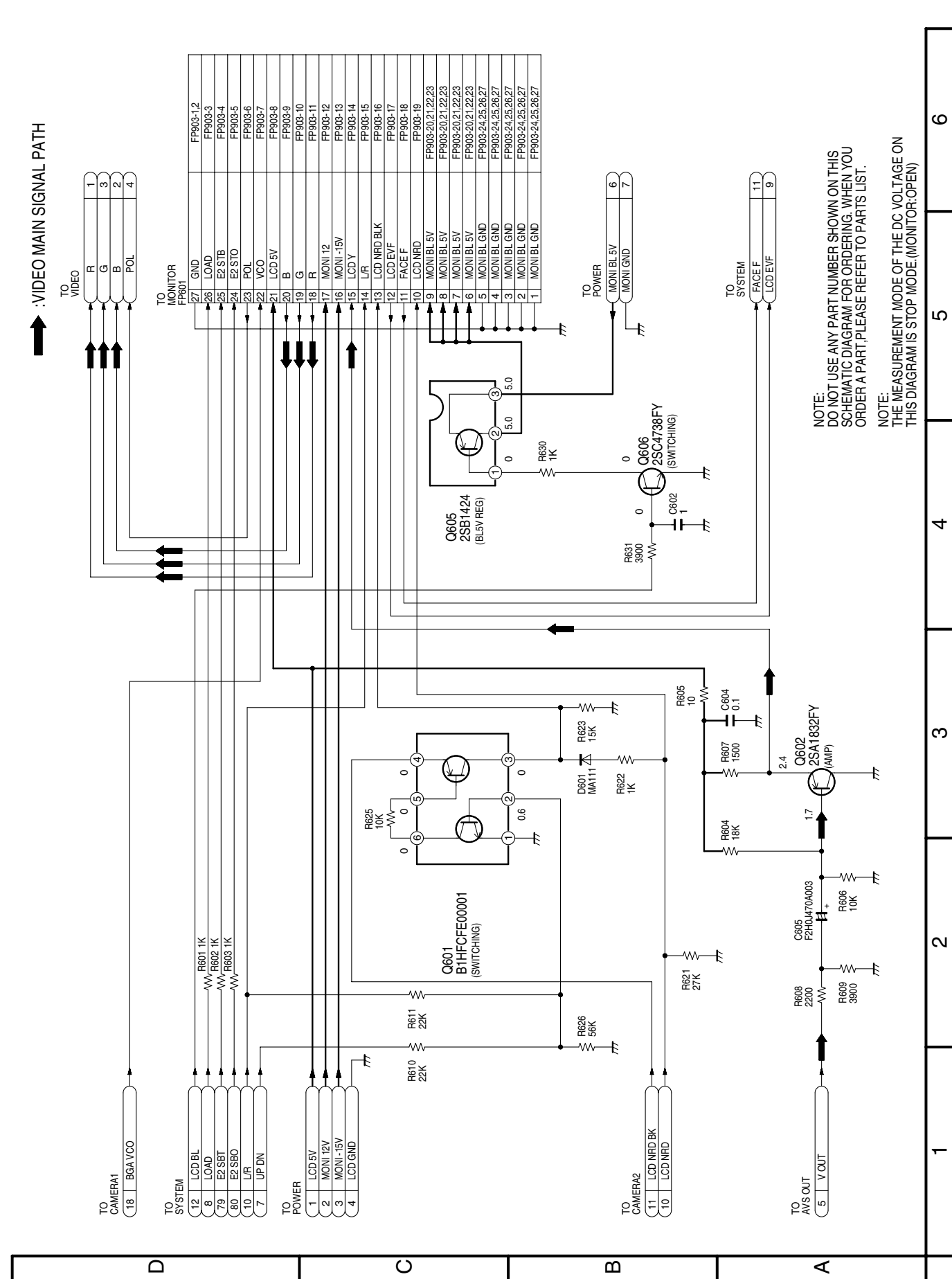
8.8. SUB SERVO SCHEMATIC DIAGRAM



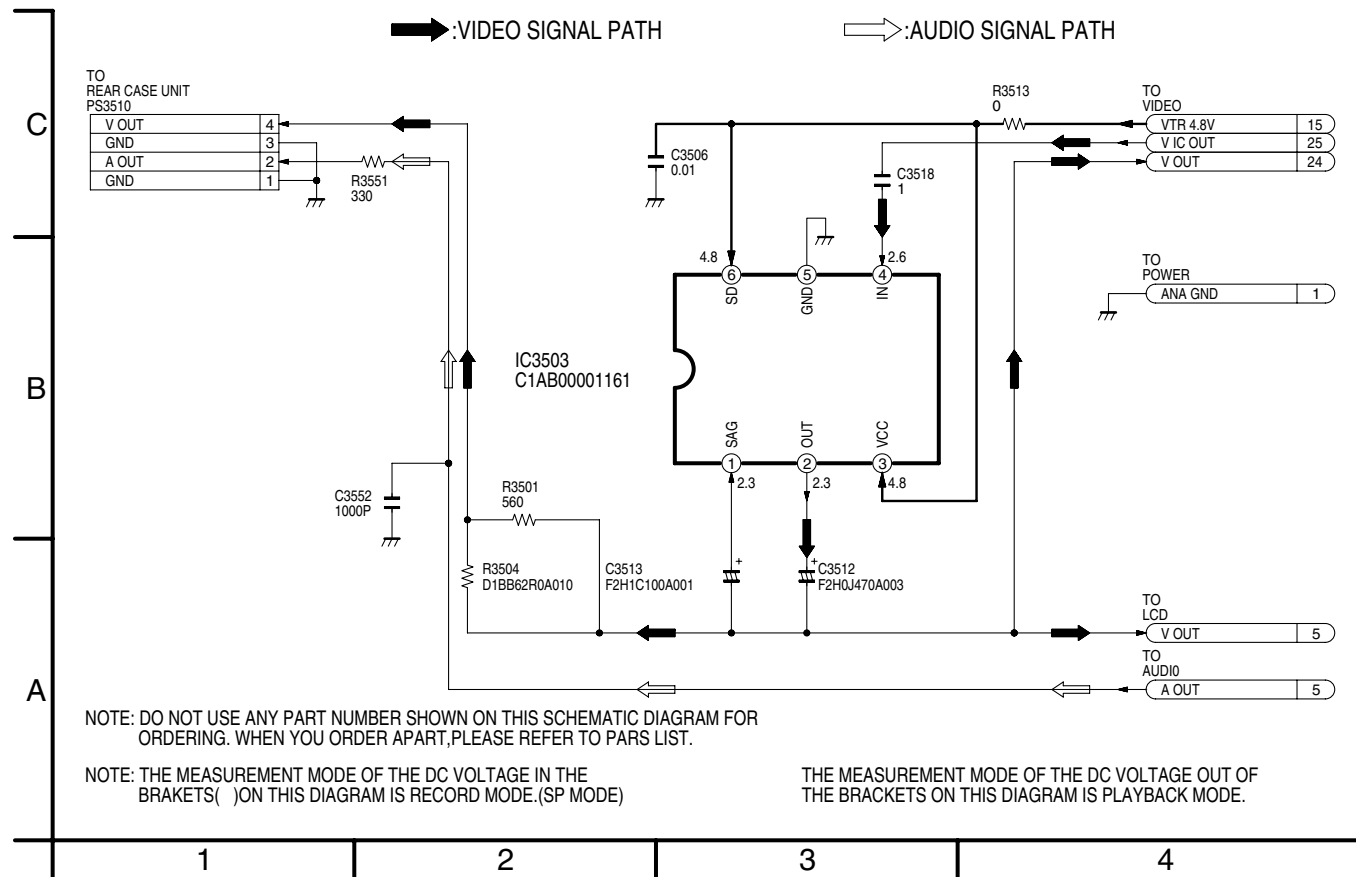
:CAPSTAN SERVO SPEED LOOP
 :CAPSTAN SERVO PHASE LOOP
 :CYLINDER SERVO SPEED LOOP
 :CYLINDER SERVO PHASE LOOP

NOTE:
 DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.
 NOTE:
 THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE.
 THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS () ON THIS DIAGRAM IS RECORD MODE. (SP MODE)

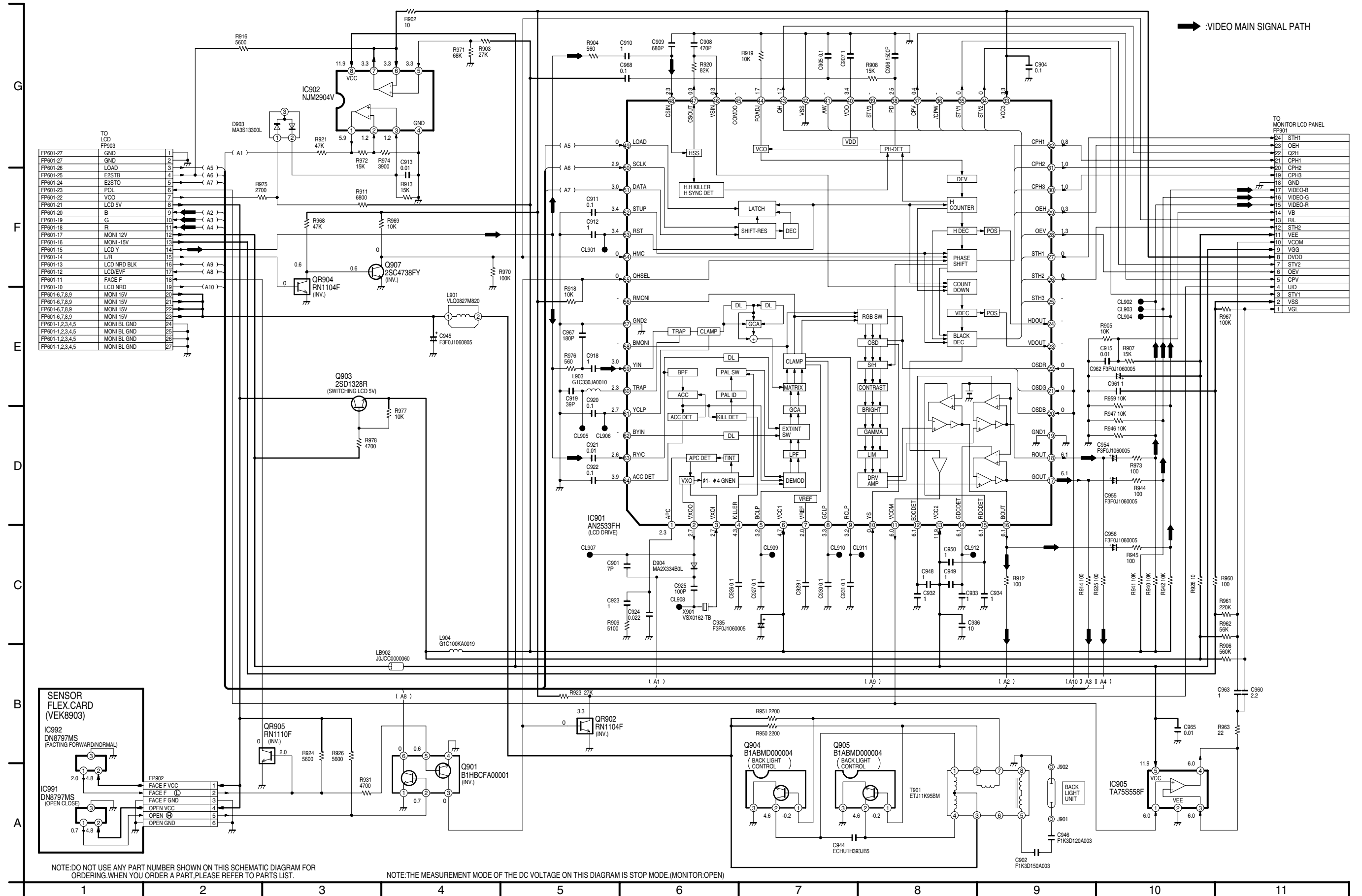
8.9. LCD SCHEMATIC DIAGRAM



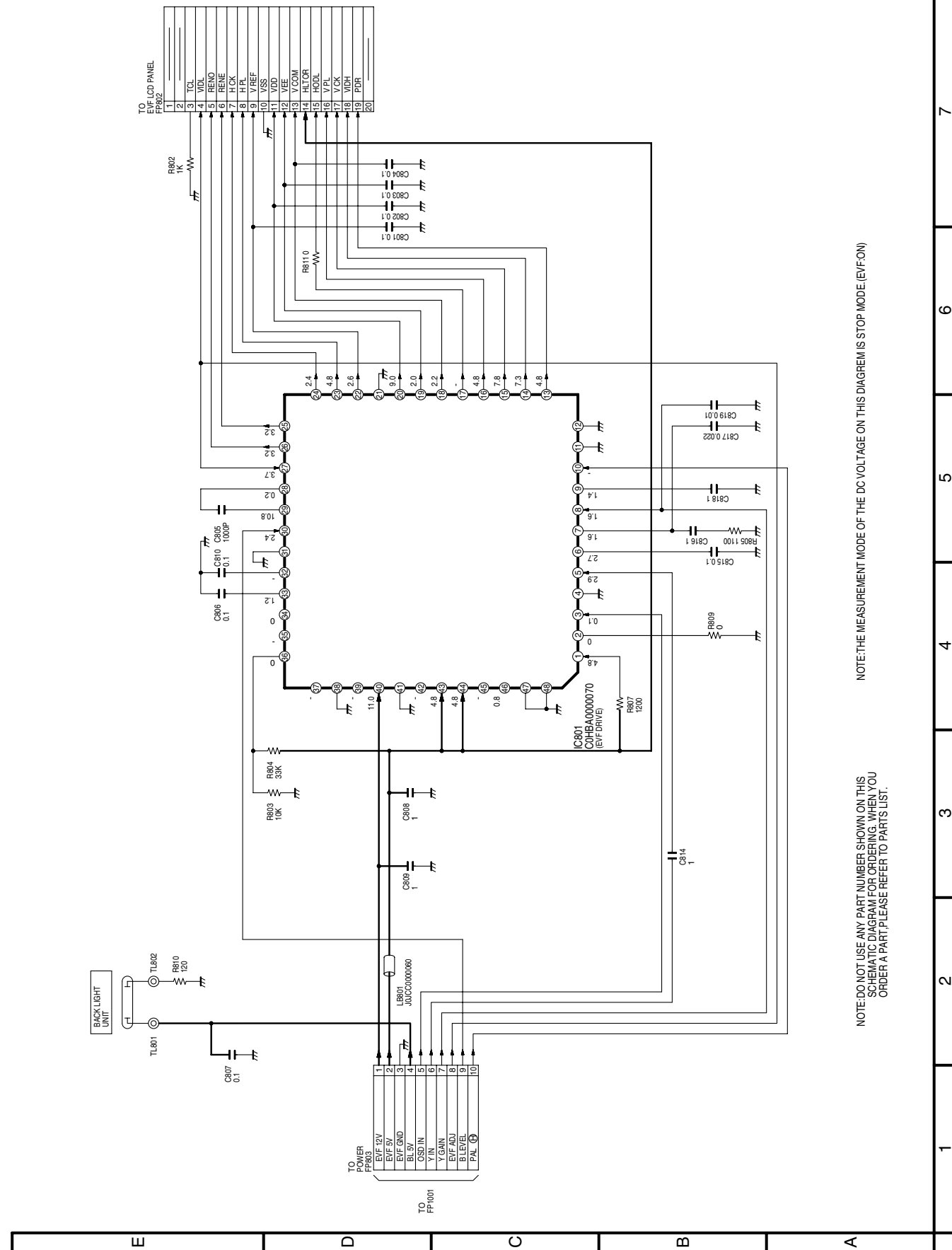
8.10. AVS OUT SCHEMATIC DIAGRAM



8.11. MONITOR & SENSOR FLEX. CARD SCHEMATIC DIAGRAM



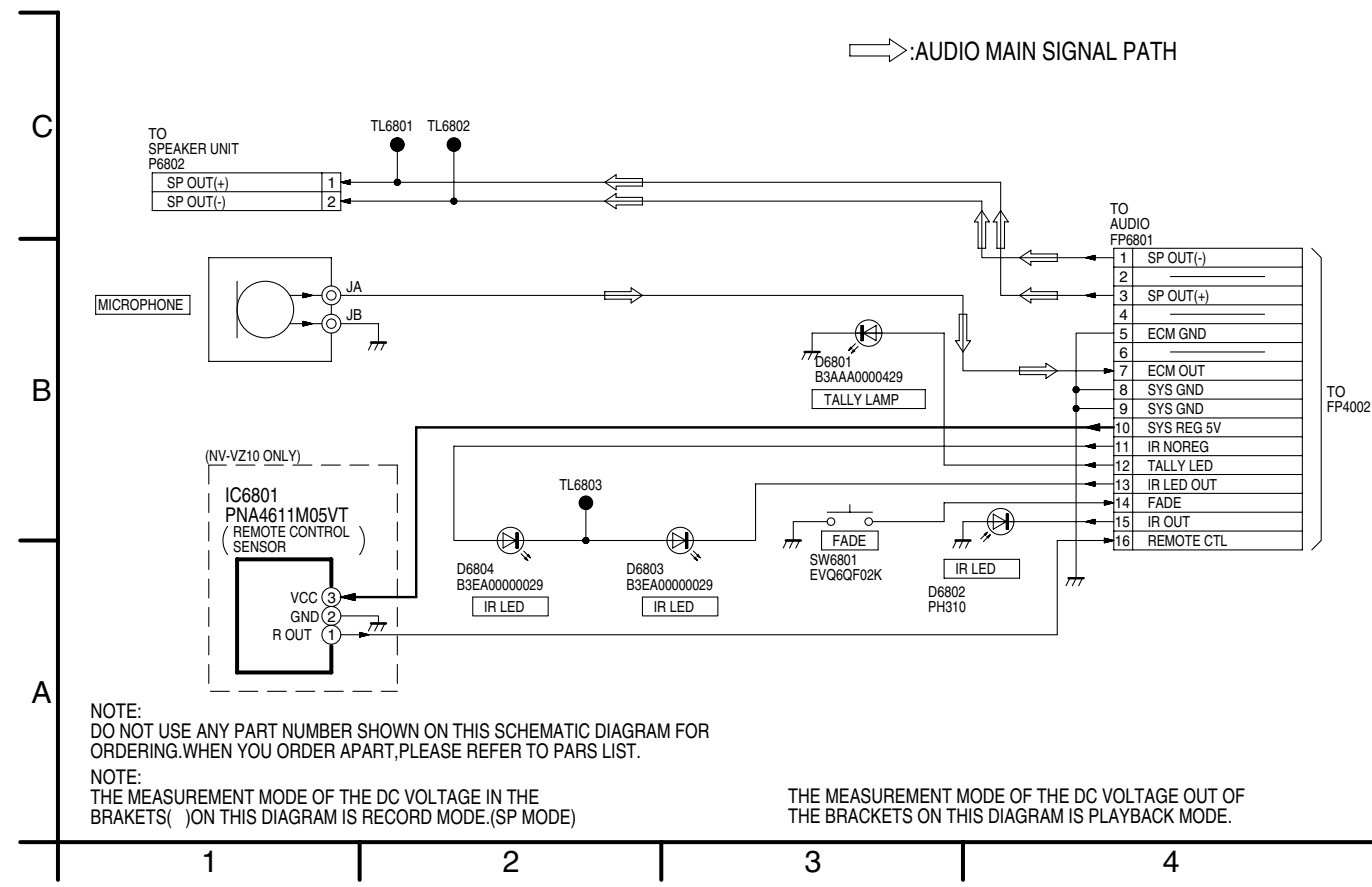
8.12. B/W-E.V.F. SCHEMATIC DIAGRAM



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE. (EV/FON)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

8.13. MIC UNIT SCHEMATIC DIAGRAM

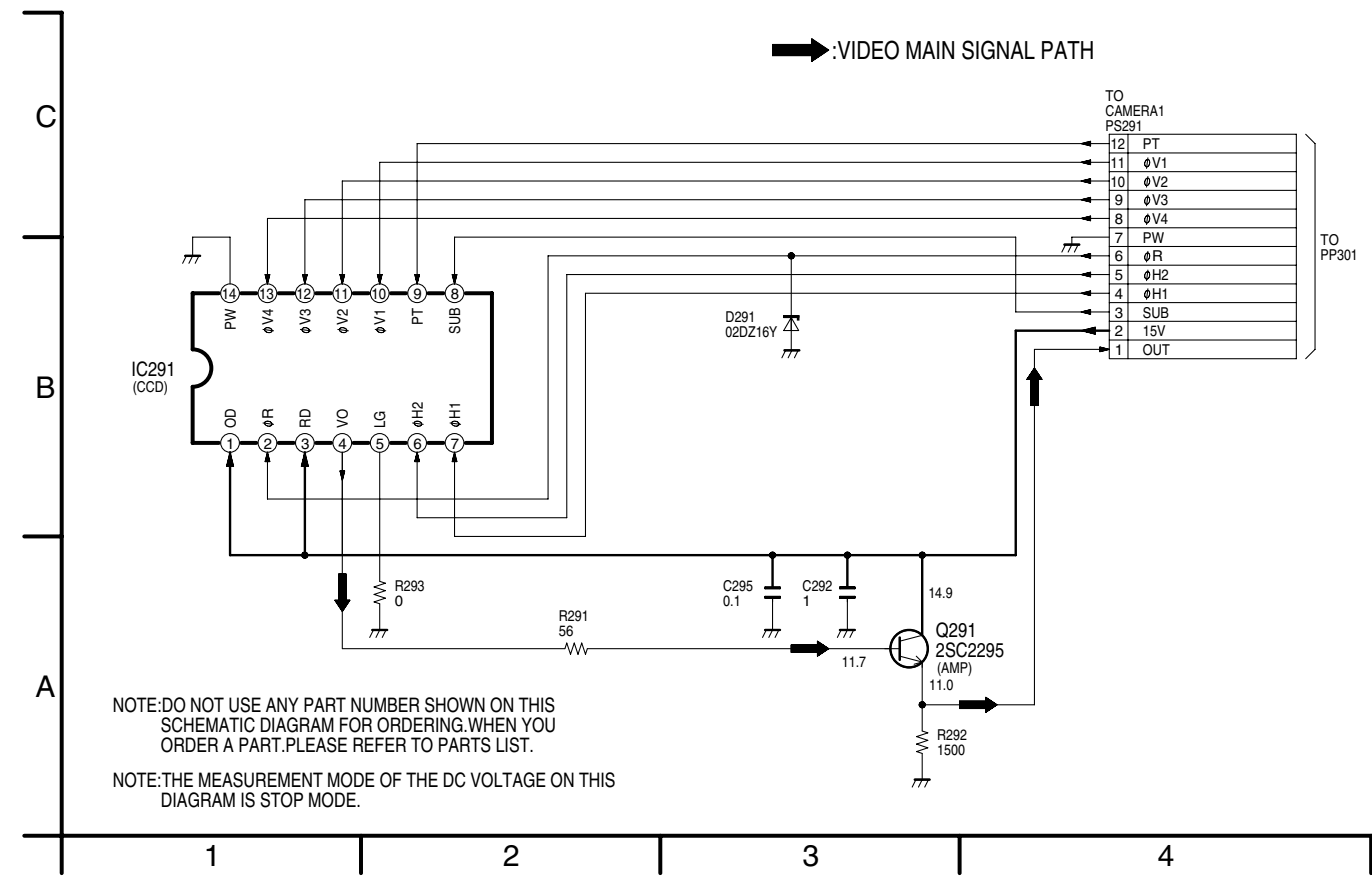


NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKET () ON THIS DIAGRAM IS RECORD MODE. (SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE.

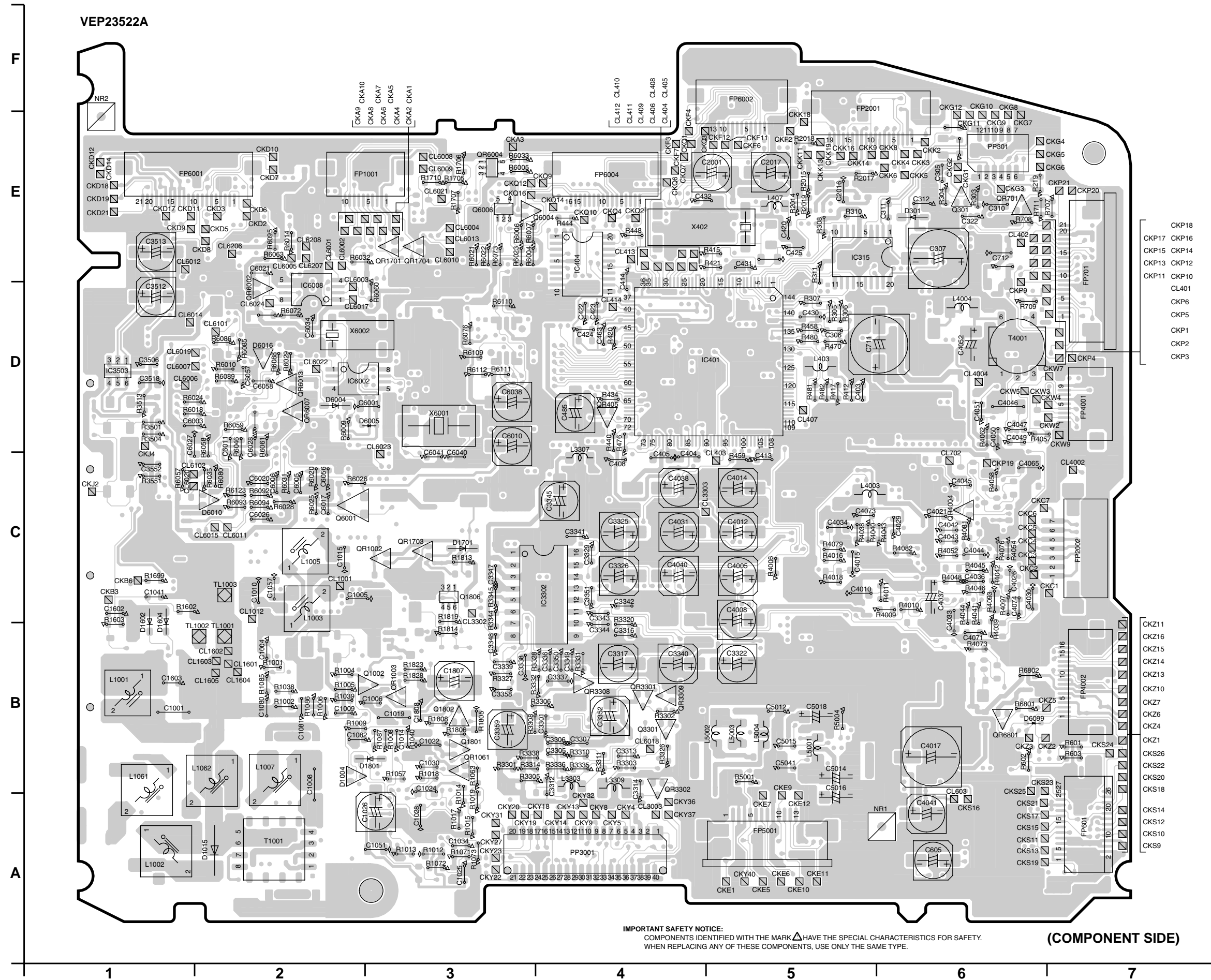
8.14. CCD FLEX. CARD SCHEMATIC DIAGRAM



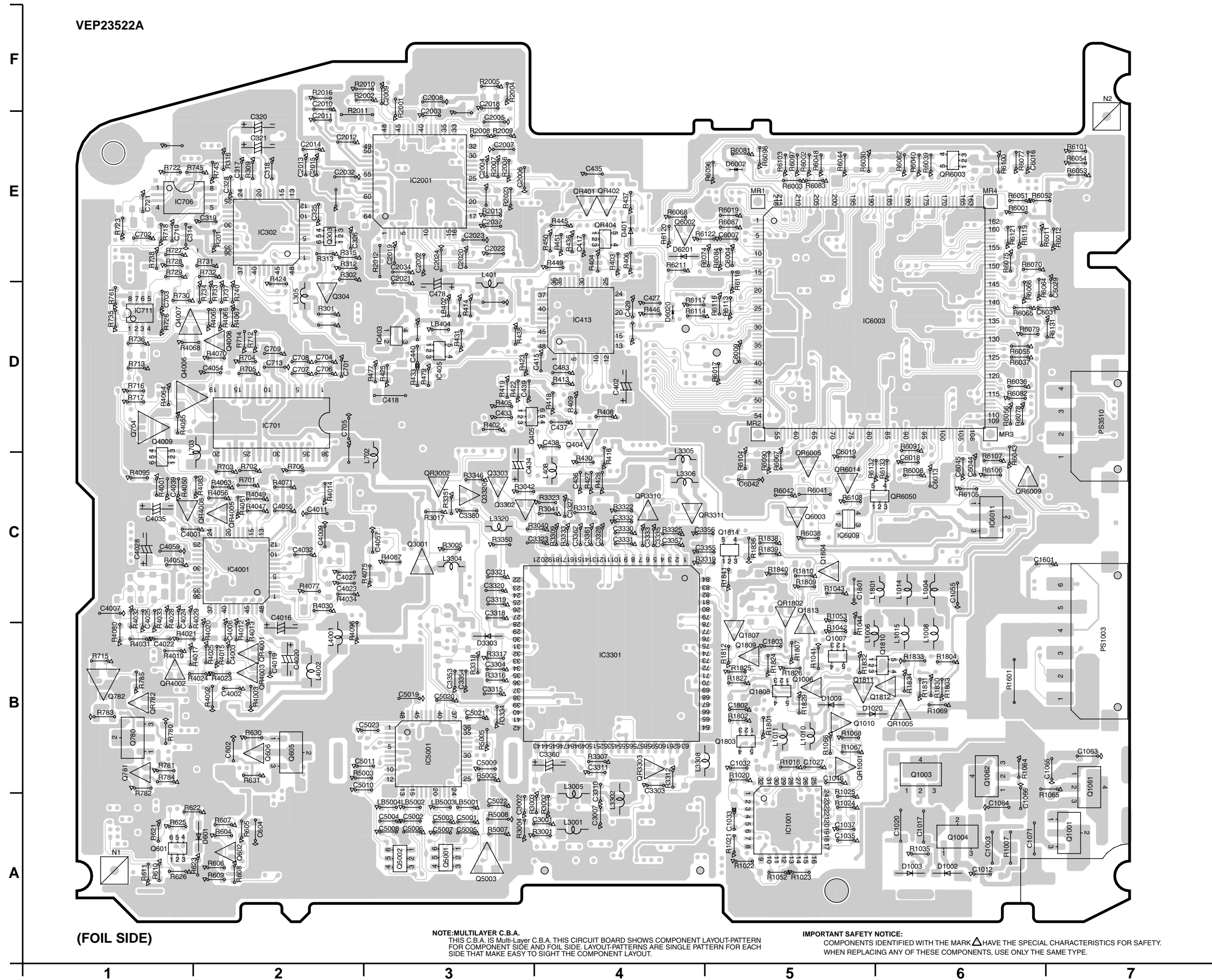
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

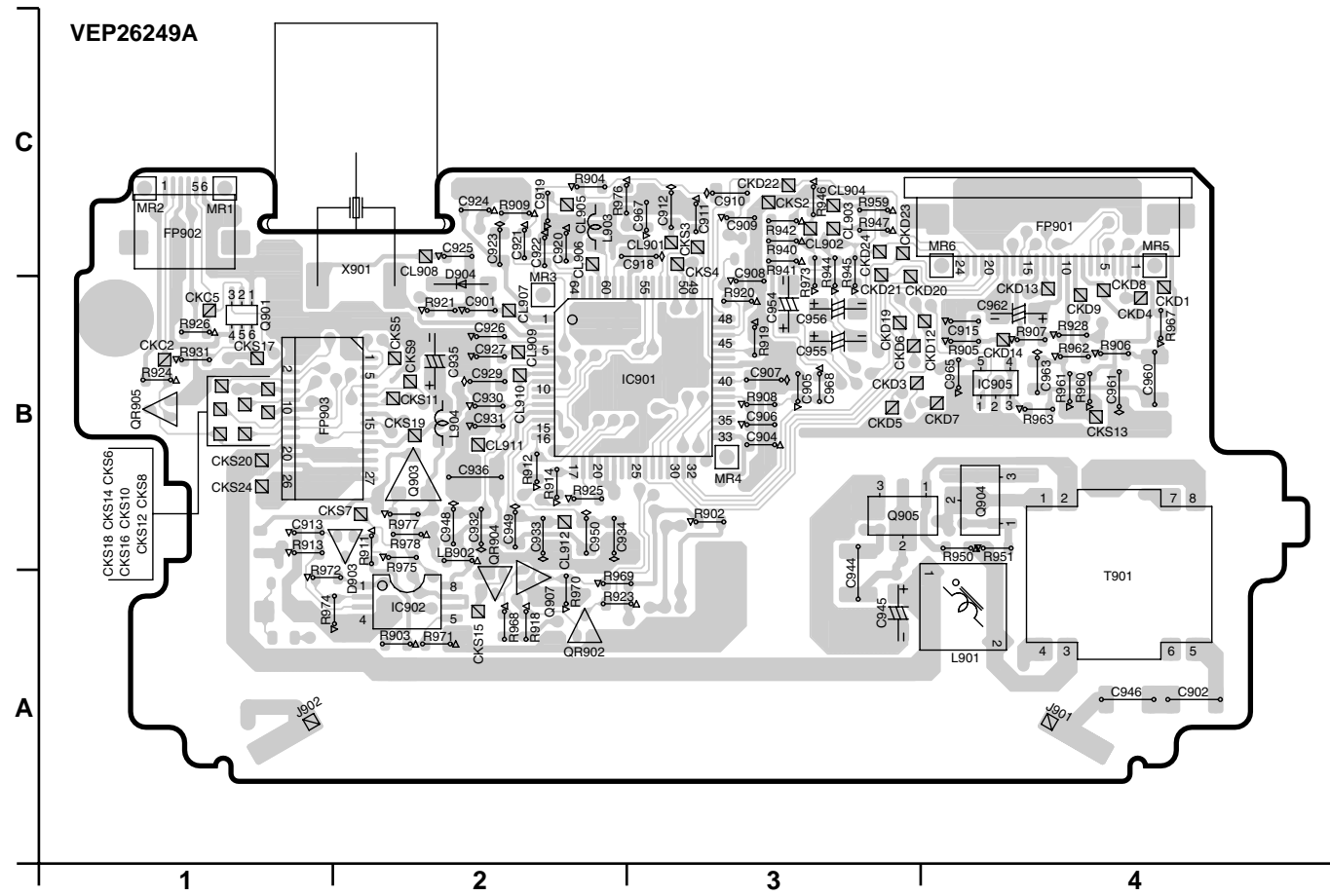
9.2. MAIN C.B.A. (COMPONENT SIDE)



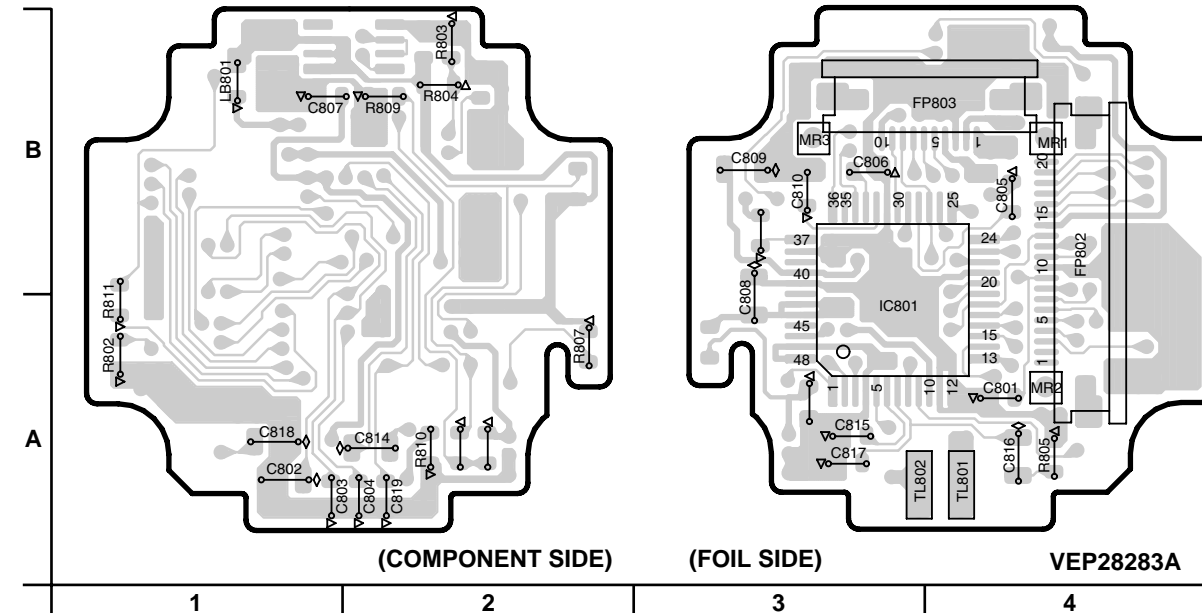
9.3. MAIN C.B.A. (FOIL SIDE)



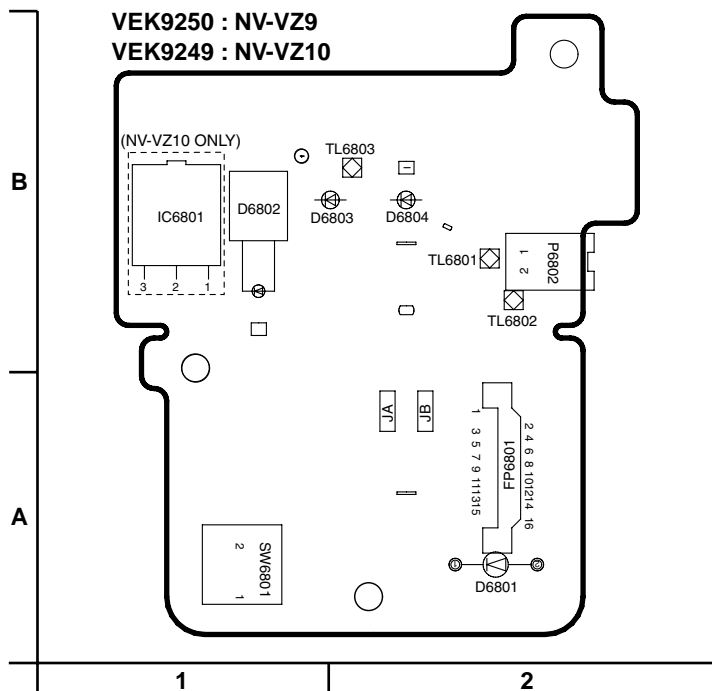
9.4. MONITOR C.B.A.



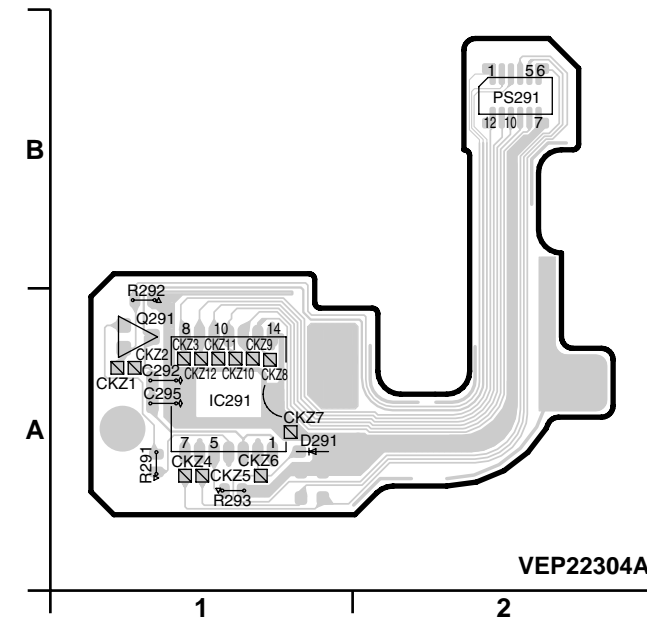
9.6. B/W-E.V.F. C.B.A.



9.5. MIC UNIT



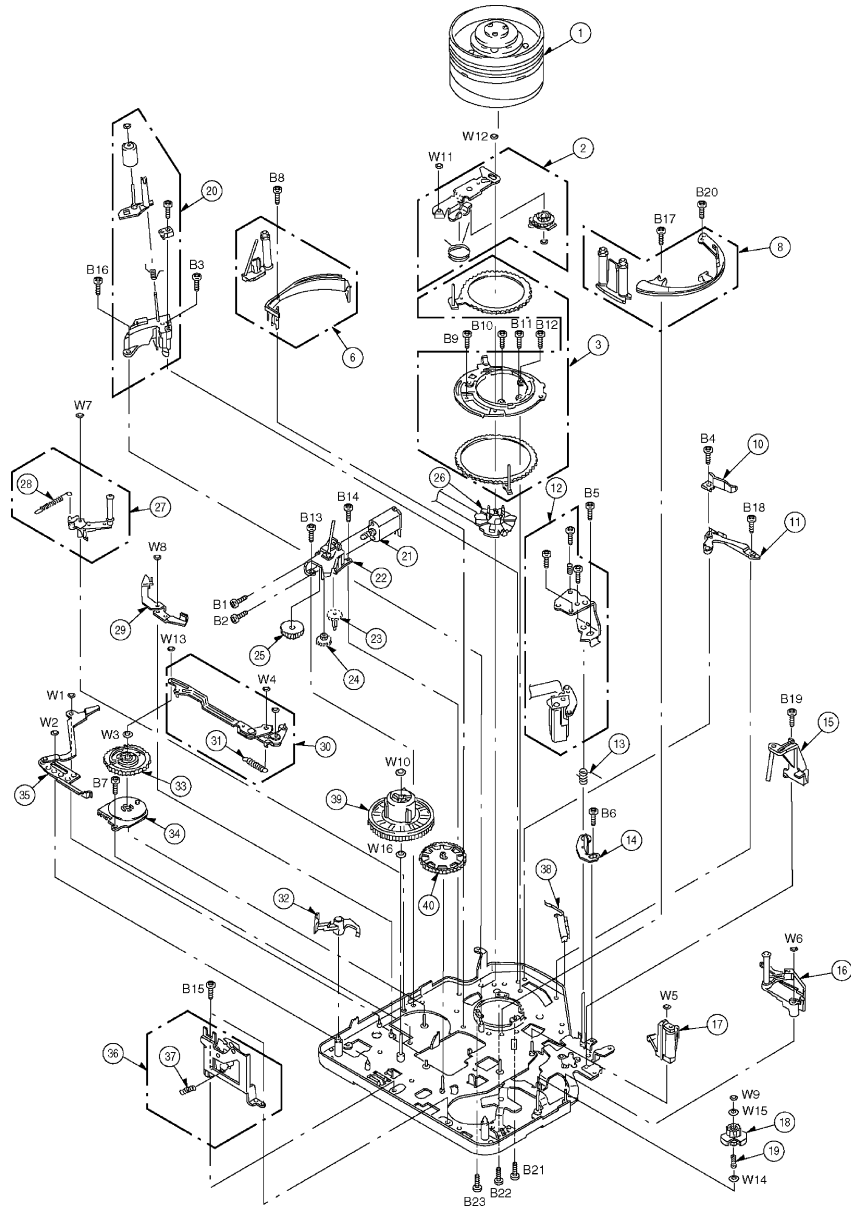
9.7. CCD FLEX. CARD C.B.A.



Explosionszeichnungen / Exploded Views

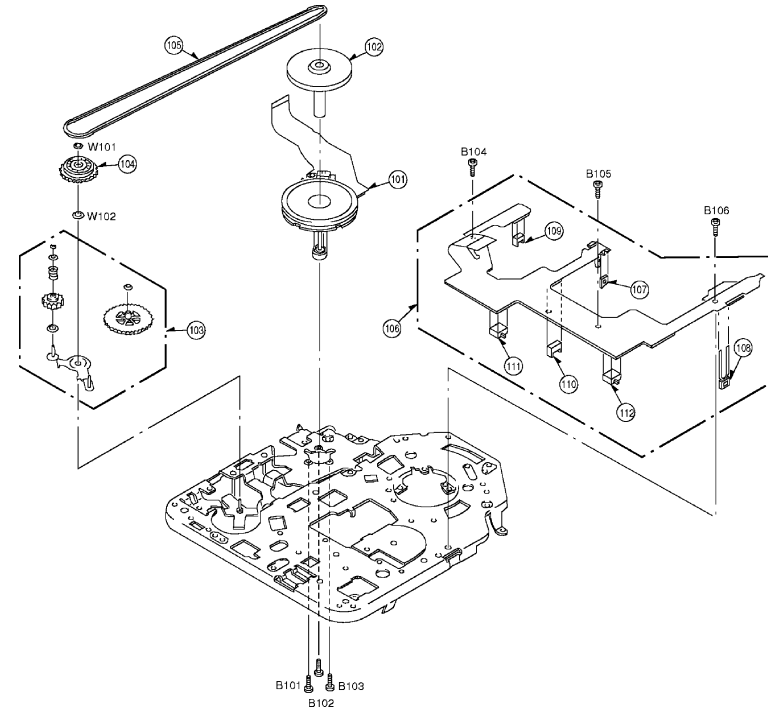
Laufwerk (1) / VTR Mechanism Section (1)

1

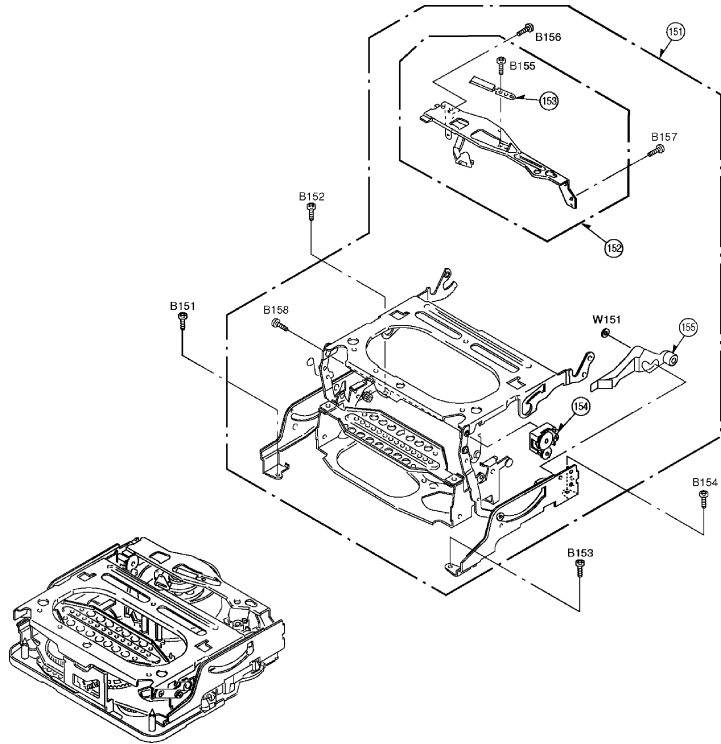


Laufwerk (2) / VTR Mechanism Section (2)

2



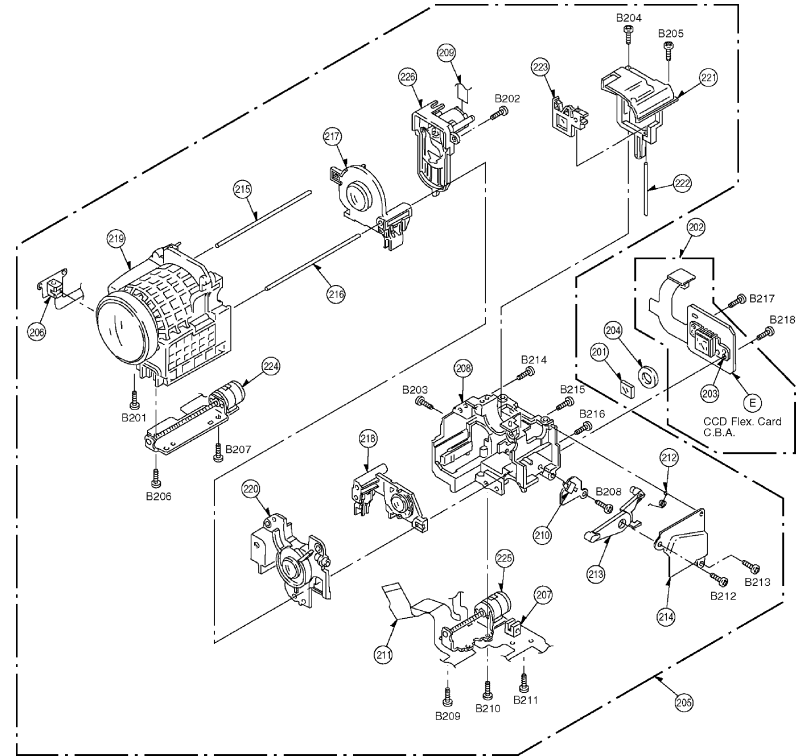
Laufwerk (3) / VTR Mechanism Section (3)



3

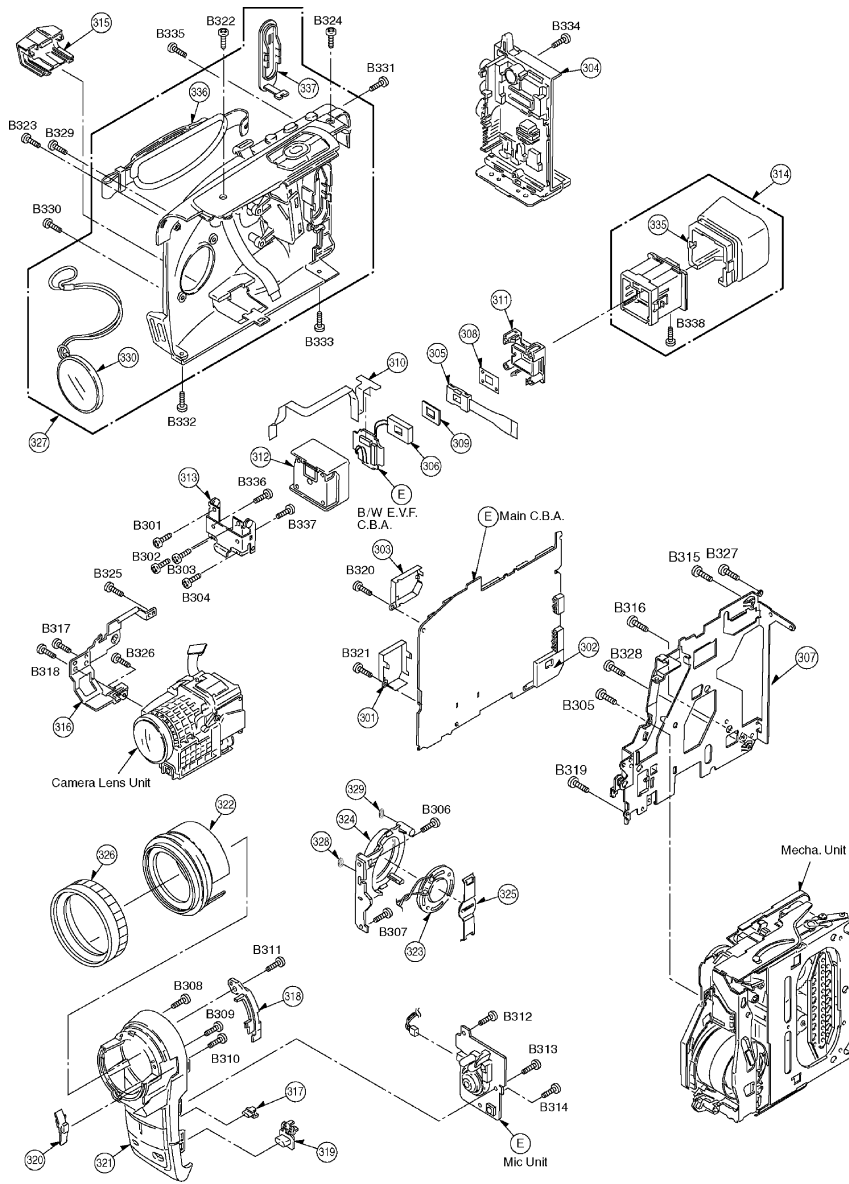
Optik / Camera Lens Section

4



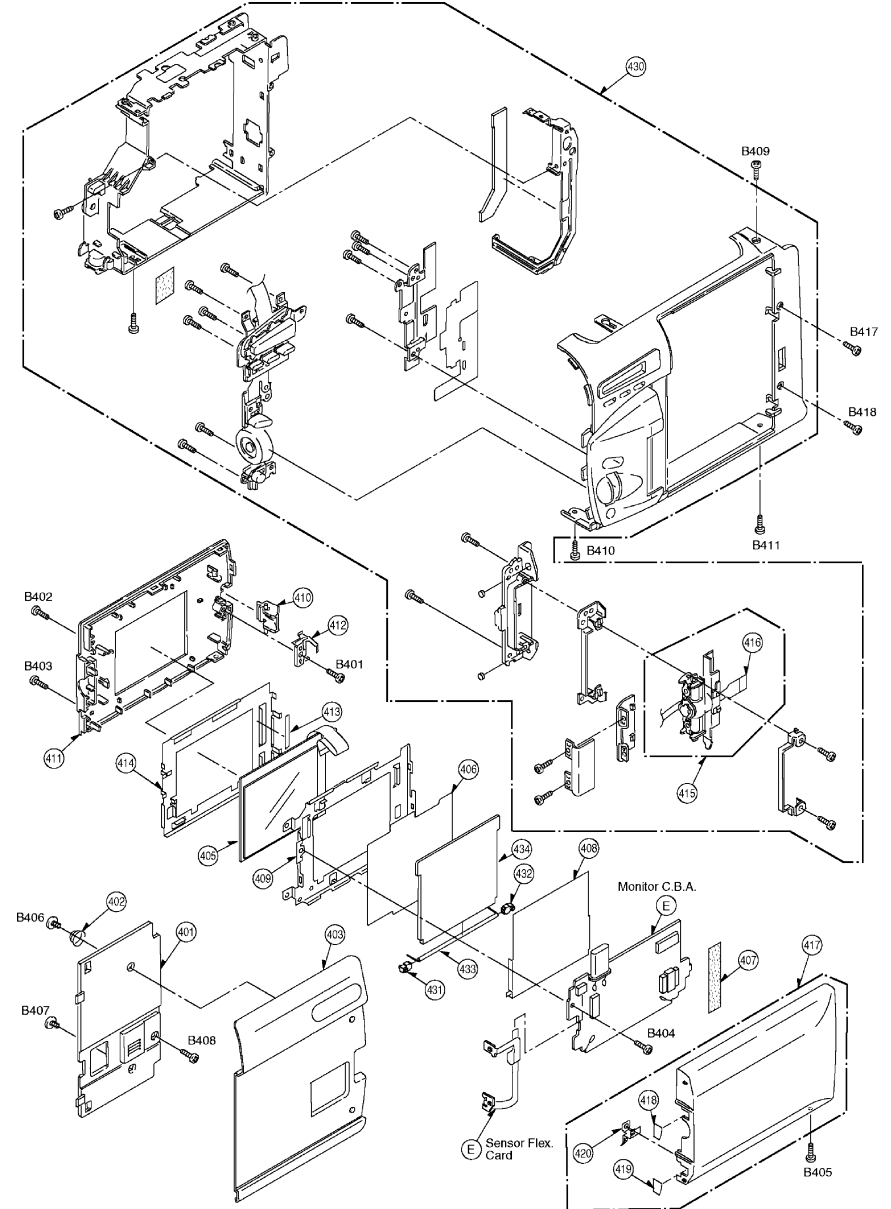
Gehäuse (1) / Frame & Casing Section (1)

5



Gehäuse (2) / Frame & Casing Section (2)

6



Ersatzteilliste Spare Parts List

4 / 2001

GRUNDIG

LIVE CAM

LIVANCE LC 1150 VC

MATERIAL-NR. / PART NO.: 758699100000
BESTELL-NR. / ORDER NO.: GM18500

POS. NR. POS. NO.	ABB. FIG.	MATERIAL-NR. PART NUMBER	ANZ. QTY.	BEZEICHNUNG (D)	DESCRIPTION (GB)
		758699100000		LIVANCE LC 1150VC KEIN E-TEIL	LIVANCE LC 1150VC NO SPARE PART
0001.000	1	759813761400		KOPFRAD KPL	HEAD WHEEL ASSY
0002.000	1	759813769000		DREHHEBEL	SWING LEVER
0003.000	1	759813769100		LADERING	LOADING RING
0006.000	1	759813769200		BANDFUEHRUNG LINKS	LEVER, TAPE TENSION
0008.000	1	759813769300		FUEHRUNGSSEGMENT RECHTS	GUIDE RAIL
0010.000	1	759813769400		STOPPER PIN RECHTS	STOPPER PIN RIGHT
0011.000	1	759813769500		T-FUEHRUNG STOPPER	T-GUIDE STOPPER
0012.000	1	759813769600		AUDIOKOPF KPL	AC HEAD UNIT
0013.000	1	759813769700		FEDER AUDIOKOPF	SPRING AC HEAD
0014.000	1	759813769800		JUSTAGEPLATTE AC	ADJ. PLATE AC
0015.000	1	759813769900		EINHEIT T4 U	UNIT T4 U
0016.000	1	759813780000		SCHWENKARM	LEVER
0017.000	1	759813780100		HEBEL ANDRUCKROLLE KPL	ARM PRESSURE ROLLER
0018.000	1	759813912300		ZAHNRAD T	DRIVE GEAR T
0019.000	1	759813780300		DREHFEDER REW	REW TORQUE SPRING
0020.000	1	759813780400		STOPPER FUEHRUNG LINKS KP	STOPPER GUIDE LEFT CPL.
0021.000	1	759813762100		LADEMOTOR KPL	LOADING MOTOR CPL
0022.000	1	759813780500		HALTER MOTOR	HOLDER MOTOR
0023.000	1	759813780600		ZAHNRAD A	BRAKE GEAR A
0024.000	1	759813780700		ZAHNRAD B	BRAKE GEAR B
0025.000	1	759813780800		ZAHNRAD C	BRAKE GEAR C
0026.000	1	759813400000		VERBINDER	LINK
0027.000	1	759813781000		BANDZUGHEBEL M. ZUGFEDER	BANDZUGHEBEL
0028.000	1	759813780900		ZUGFEDER	ZUGFEDER
0029.000	1	759813781100		BANDZUGHEBEL	BANDZUGHEBEL
0030.000	1	759813781200		STEUERSCHIEBER	LEVER UNIT
0031.000	1	759875873500		ZUGFEDER	ZUGFEDER
0032.000	1	759813782000		SCHALTER AUFNAHMESPERRE	SWITCH RECORD SAFETY
0033.000	1	759813781400		ZAHNRAD	CAM GEAR
0034.000	1	759813762600		FUNKTIONSWAHLSCHALTER	MODE SWITCH
0035.000	1	759813781500		AUSWURFHABEL	EJECT LEVER
0036.000	1	759813781600		VERRIEGELUNGSEINHEIT	LOCK BASE UNIT
0037.000	1	759875874300		FEDER	FEDER
0038.000	1	759813781900		FUEHRUNGFEDER	GUIDE SPRING
0039.000	1	759813781700		WICKELTELLER S	REEL BASE S
0040.000	1	759813781800		ZAHNRAD	ZAHNRAD
B 00001	1	759813789500		SCHRAUBE XQN14+A14	SCREW XQN14+A14
B 00002	1	759813789500		SCHRAUBE XQN14+A14	SCREW XQN14+A14
B 00003	1	759813789400		SCHRAUBE VHD1319	SCREW VHD1319
B 00004	1	759813789000		SCHRAUBE VHD1320	SCREW VHD1320
B 00005	1	759813789300		SCHRAUBE VHD1337	SCREW VHD1337
B 00006	1	759813789200		SCHRAUBE VHD1338	SCREW VHD1338
B 00007	1	759813789500		SCHRAUBE XQN14+A14	SCREW XQN14+A14
B 00008	1	759813788800		SCHRAUBE XQN14+B25FY	SCREW XQN14+B25FY
B 00009	1	759813788800		SCHRAUBE XQN14+B25FY	SCREW XQN14+B25FY
B 00010	1	759813788800		SCHRAUBE XQN14+B25FY	SCREW XQN14+B25FY
B 00011	1	759813788800		SCHRAUBE XQN14+B25FY	SCREW XQN14+B25FY
B 00012	1	759813788800		SCHRAUBE XQN14+B25FY	SCREW XQN14+B25FY
B 00013	1	759813788800		SCHRAUBE XQN14+B25FY	SCREW XQN14+B25FY
B 00014	1	759813788800		SCHRAUBE XQN14+B25FY	SCREW XQN14+B25FY
B 00015	1	759813788800		SCHRAUBE XQN14+B25FY	SCREW XQN14+B25FY
B 00016	1	759813788800		SCHRAUBE XQN14+B25FY	SCREW XQN14+B25FY
B 00017	1	759813788800		SCHRAUBE XQN14+B25FY	SCREW XQN14+B25FY

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

POS. NR. POS. NO.	ABB. FIG.	MATERIAL-NR. PART NUMBER	ANZ. QTY.	BEZEICHNUNG (D)	DESCRIPTION (GB)
B 00018	1	759813788800		SCHRAUBE XQN14+B25FY	SCREW XQN14+B25FY
B 00019	1	759813788800		SCHRAUBE XQN14+B25FY	SCREW XQN14+B25FY
B 00020	1	759813611700		SCHRAUBE XQN14+B4	SCREW XQN14+B4
B 00021	1	759813789100		SCHRAUBE XQN14+C35R	SCREW XQN14+C35R
B 00022	1	759813789100		SCHRAUBE XQN14+C35R	SCREW XQN14+C35R
B 00023	1	759813789100		SCHRAUBE XQN14+C35R	SCREW XQN14+C35R
W 00001	1	759813789800		SCHEIBE VMX2026	WASHER VMX2026
W 00002	1	759813789800		SCHEIBE VMX2026	WASHER VMX2026
W 00003	1	759813789800		SCHEIBE VMX2026	WASHER VMX2026
W 00004	1	759813789800		SCHEIBE VMX2026	WASHER VMX2026
W 00005	1	759813789800		SCHEIBE VMX2026	WASHER VMX2026
W 00006	1	759813789800		SCHEIBE VMX2026	WASHER VMX2026
W 00007	1	759813617000		SCHEIBE VMX2027	WASHER VMX2027
W 00008	1	759813617000		SCHEIBE VMX2027	WASHER VMX2027
W 00009	1	759813617000		SCHEIBE VMX2027	WASHER VMX2027
W 00010	1	759813820000		SCHEIBE VMX2955	WASHER VMX2955
W 00011	1	759813789700		SCHEIBE VMX2974	WASHER VMX2974
W 00012	1	759813789700		SCHEIBE VMX2974	WASHER VMX2974
W 00013	1	759813789700		SCHEIBE VMX2974	WASHER VMX2974
W 00014	1	759813820200		SCHEIBE VMX2979	WASHER VMX2974
W 00015	1	759813789900		SCHEIBE VMX3000	WASHER VMX3000
W 00016	1	759813820100		SCHEIBE XWGV2D4G	WASHER XWGV2D4G
0102.000	2	759813782100		ROTOR KPL	ROTOR UNIT
0103.000	2	759813782200		HEBEL ZWISCHENRAD	PIVOTING LEVER
0104.000	2	759813782300		KUPPLUNGSEINHEIT	CLUTCH UNIT
0105.000	2	759813782400		RIEMEN CAPSTAN	CAPSTAN BELT
0106.000	2	759813782500		FLEXIBLE PLATTE	FLEXIBLE PLATE
0107.000	2	759813782900		LED	LED
0108.000	2	759813782700		FOTOTRANSISTOR	PHOTOTRANSISTOR
0109.000	2	759813782800		SENSOR	SENSOR
0110.000	2	759813782800		SENSOR	SENSOR
0111.000	2	759813782600		SCHALTER	SWITCH
0112.000	2	759813782600		SCHALTER	SWITCH
B 00101	2	759813820300		SCHRAUBE XQN14+A3	SCREW XQN14+A3
B 00102	2	759813820300		SCHRAUBE XQN14+A3	SCREW XQN14+A3
B 00103	2	759813820300		SCHRAUBE XQN14+A3	SCREW XQN14+A3
B 00104	2	759813788800		SCHRAUBE XQN14+B25FY	SCREW XQN14+B25FY
B 00105	2	759813788800		SCHRAUBE XQN14+B25FY	SCREW XQN14+B25FY
B 00106	2	759813788800		SCHRAUBE XQN14+B25FY	SCREW XQN14+B25FY
W 00101	2	759813912400		SCHEIBE	WASHER
W 00102	2	759813820400		SCHEIBE VMX2939	WASHER VMX2939
0151.000	3	759813783000		KASSETTENSCHACHT KPL.	CASSETTE COMPARTMENT CPL.
0152.000	3	759813783200		BANDFUEHRUNG	TAPE GUIDE
0153.000	3	759813783300		MASSEKONTAKT	EARTH BRUSH
0154.000	3	759813783100		DAEMPfung	DAMPING
0155.000	3	759875876600		HEBEL	LEVER
B 00151	3	759813820500		SCHRAUBE VHD0838	SCREW VHD0838
B 00152	3	759813820500		SCHRAUBE VHD0838	SCREW VHD0838
B 00153	3	759813820500		SCHRAUBE VHD0838	SCREW VHD0838
B 00154	3	759813820800		SCHRAUBE VHD0711	SCREW VHD0711
B 00155	3	759813820700		SCHRAUBE XQN14+BF2	SCREW XQN14+BF2
B 00156	3	759813820700		SCHRAUBE XQN14+BF2	SCREW XQN14+BF2
B 00157	3	759813820600		SCHRAUBE XQN16+AJ8	SCREW XQN16+AJ8
W 00151	3	759813820800		SCHRAUBE VHD0711	SCREW VHD0711
0201.000	4	759813785100		TRAEGER SENSOR	SENSOR BARRIER
0202.000	4	759813761600		CCD EINHEIT	CCD UNIT
0203.000	4	759813785400		FIXIERPLATTE CCD	CCD FIXING PLATE
0204.000	4	759813786600		DAEMPfung CCD	CCD CUSHION
0205.000	4	759813762700		LINSEINHEIT	LENS UNIT
0206.000	4	759813912500		FOTOWIDERSTAND	PHOTOINTERRUPTER
0207.000	4	759813912500		FOTOWIDERSTAND	PHOTOINTERRUPTER
0208.000	4	759813785500		HAUPTFLANSCH	MASTER FLANGE
0210.000	4	759813788700		SCHALTER 0-LUX	SWITCH 0-LUX
0211.000	4	759813785600		LEITUNG FLACHBAND	FLAT CARD CABLE
0212.000	4	759813785700		FEDER F	F SPRING
0213.000	4	759813785800		HEBEL	LEVER
0214.000	4	759813823100		SCHUTZEINLAGE	PROTECT SHEET

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

POS. NR. POS. NO.	ABB. FIG.	MATERIAL-NR. PART NUMBER	ANZ. QTY.	BEZEICHNUNG (D)	DESCRIPTION (GB)
0215.000	4	759813785900		POLFUEHRUNG	GUIDE POLE
0216.000	4	759813785900		POLFUEHRUNG	GUIDE POLE
0217.000	4	759813786100		2. BEWEGL. LINSENRAHMEN	2ND. MOVING FRAME
0218.000	4	759813786200		4. BEWEGL. LINSENRAHMEN	4. TH. MOVING FRAME
0220.000	4	759813786400		3. BEWEGL. LINSENRAHMEN	3. RD. MOVING FRAME
0221.000	4	759813823200		FIXIERRAHMEN	FIX FRAME
0222.000	4	759813786500		POLFUEHRUNG F	F GUIDE POLE
0223.000	4	759813823300		F RAHMEN	F FRAME
0224.000	4	759813762200		ZOOMMOTOR	ZOOMMOTOR
0225.000	4	759813762300		FOKUSMOTOR	FOCUSMOTOR
0226.000	4	759813786000		BLLENDE KPL	IRIS UNIT
B 00201	4	759813823500		SCHRAUBE VHD0852	SCREW VHD0852
B 00202	4	759813823500		SCHRAUBE VHD0852	SCREW VHD0852
B 00203	4	759813823500		SCHRAUBE VHD0852	SCREW VHD0852
B 00204	4	759813606100		SCHRAUBE XQN16+CJ5	SCREW XQN16+CJ5
B 00205	4	759813606100		SCHRAUBE XQN16+CJ5	SCREW XQN16+CJ5
B 00206	4	759813606100		SCHRAUBE XQN16+CJ5	SCREW XQN16+CJ5
B 00207	4	759813606100		SCHRAUBE XQN16+CJ5	SCREW XQN16+CJ5
B 00208	4	759813606100		SCHRAUBE XQN16+CJ5	SCREW XQN16+CJ5
B 00209	4	759813606100		SCHRAUBE XQN16+CJ5	SCREW XQN16+CJ5
B 00210	4	759813606100		SCHRAUBE XQN16+CJ5	SCREW XQN16+CJ5
B 00211	4	759813606100		SCHRAUBE XQN16+CJ5	SCREW XQN16+CJ5
B 00212	4	759813606100		SCHRAUBE XQN16+CJ5	SCREW XQN16+CJ5
B 00213	4	759813606100		SCHRAUBE XQN16+CJ5	SCREW XQN16+CJ5
B 00214	4	759813823600		SCHRAUBE XQN16+CJ8	SCREW XQN16+CJ8
B 00215	4	759813823600		SCHRAUBE XQN16+CJ8	SCREW XQN16+CJ8
B 00216	4	759813823600		SCHRAUBE XQN16+CJ8	SCREW XQN16+CJ8
B 00217	4	759813823600		SCHRAUBE XQN16+CJ8	SCREW XQN16+CJ8
B 00218	4	759813823600		SCHRAUBE XQN16+CJ8	SCREW XQN16+CJ8
0301.000	5	759813820900		SCHUTZPLATTE H.A.	SHIELD CASE H.A.
0302.000	5	759813821000		SCHUTZPLATTE OBEN, NETZTEIL	SHIELD CASE UPPER, POWER
0303.000	5	759813821100		SCHUTZPLATTE UNTEN, NETZTEIL	SHIELD CASE LOWER, POWER
0305.000	5	759813912600		GEH.-RUECKTEIL	REAR CASE
0306.000	5	759813912700		HINTERGRUNDBELEUCHTUNG	BACK LIGHT
0307.000	5	759813912800		MECH. GRUNDPLATTE	MECHA. EARTH PLATE
0309.000	5	759813783800		SUCHEREINLAGE	EVF SHEET
0310.000	5	759813783900		FLEXIBLE LEITUNG SUCHER	FLEXIBLE CABLE EVF
0311.000	5	759813784000		MONTAGESTUECK SUCHER	EVF MOUNT PIECE
0312.000	5	759813784100		GEHAUESE SUCHER	EVF CASE
0313.000	5	759813912900		EVF ANGEL	EVF HINGE
0314.000	5	759813912000		AUGENMUSCHEL	EYE CUP
0315.000	5	759813821600		ABDECKUNG SUCHER	EVF COVER
0316.000	5	759813784400		LINSENRAHMEN	LENS FRAME
0317.000	5	759813784500		GEGENSTUECK	TALLY PANEL
0318.000	5	759813784600		FUEHRUNG FUNKTIONSWAHLSCH	GUIDE SELECT KNOB
0319.000	5	759813784700		KNOPF ABGLEICH	KNOB FADE
0320.000	5	759813784800		FUNKTIONSWAHLSCHALTER	SELECT KNOB
0321.000	5	759813911900		GEH.-VORDERTEIL KPL.	FRONT CASE UNIT
0322.000	5	759813912100		LINSENRAHMEN	LENS FRAME
0323.000	5	759813913300		LAUTSPRECHER	SPEAKER
0324.000	5	759813913400		LAUTSPRECHERBEFESTIGUNG	SPEAKER PIECE
0325.000	5	759813870300		FEDER LAUTSPRECHER	SPEAKER SPRING
0327.000	5	759813910700		GEH.-SEITENTEIL LINKS KPL	SIDE CASE LEFT UNIT
0328.000	5	759813913500		SCHEIBE LAUTSPRECHER	SPEAKER SPACER
0329.000	5	759813913500		SCHEIBE LAUTSPRECHER	SPEAKER SPACER
0330.000	5	759813790900		ABDECKUNG OBJEKTIV	HOOD CAP
0335.000	5	759813784300		AUGENMUSCHEL	EYE CUP
0336.000	5	759813790800		HALTERIEMEN	GRIP BELT
0337.000	5	759813790700		ABDECKUNG AV-BUCHSE	AV JACK COVER
B 00301	5	759813719400		SCHRAUBE XQN2+BJ5FZ	SCREW XQN2+BJ5FZ
B 00302	5	759813719400		SCHRAUBE XQN2+BJ5FZ	SCREW XQN2+BJ5FZ
B 00303	5	759813719400		SCHRAUBE XQN2+BJ5FZ	SCREW XQN2+BJ5FZ
B 00304	5	759813719400		SCHRAUBE XQN2+BJ5FZ	SCREW XQN2+BJ5FZ
B 00306	5	759813821800		SCHRAUBE XQN2+BJ5	SCREW XQN2+BJ5
B 00307	5	759813821800		SCHRAUBE XQN2+BJ5	SCREW XQN2+BJ5
B 00308	5	759813821800		SCHRAUBE XQN2+BJ5	SCREW XQN2+BJ5
B 00309	5	759813821800		SCHRAUBE XQN2+BJ5	SCREW XQN2+BJ5
B 00310	5	759813821800		SCHRAUBE XQN2+BJ5	SCREW XQN2+BJ5
B 00311	5	759813821800		SCHRAUBE XQN2+BJ5	SCREW XQN2+BJ5

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

POS. NR. POS. NO.	ABB. FIG.	MATERIAL-NR. PART NUMBER	ANZ. QTY.	BEZEICHNUNG (D)	DESCRIPTION (GB)
B 00312	5	759813821800		SCHRAUBE XQN2+BJ5	SCREW XQN2+BJ5
B 00313	5	759813821800		SCHRAUBE XQN2+BJ5	SCREW XQN2+BJ5
B 00314	5	759813821800		SCHRAUBE XQN2+BJ5	SCREW XQN2+BJ5
B 00315	5	759813822000		SCHRAUBE XQN14+C2	SCREW XQN14+C2
B 00316	5	759813822000		SCHRAUBE XQN14+C2	SCREW XQN14+C2
B 00317	5	759813821800		SCHRAUBE XQN2+BJ5	SCREW XQN2+BJ5
B 00318	5	759813821800		SCHRAUBE XQN2+BJ5	SCREW XQN2+BJ5
B 00319	5	759813822200		SCHRAUBE XQN2+CF4	SCREW XQN2+CF4
B 00320	5	759813822300		SCHRAUBE XQN2+CF5	SCREW XQN2+CF5
B 00321	5	759813822300		SCHRAUBE XQN2+CF5	SCREW XQN2+CF5
B 00322	5	759813822400		SCHRAUBE XQN2+CF8FN	SCREW XQN2+CF8FN
B 00324	5	759813822600		SCHRAUBE XQN2+CJ4FZ	SCREW XQN2+CJ4FZ
B 00325	5	759813822700		SCHRAUBE XQN2+CJ5	SCREW XQN2+CJ5
B 00326	5	759813822700		SCHRAUBE XQN2+CJ5	SCREW XQN2+CJ5
B 00327	5	759813822700		SCHRAUBE XQN2+CJ5	SCREW XQN2+CJ5
B 00328	5	759813822700		SCHRAUBE XQN2+CJ5	SCREW XQN2+CJ5
B 00329	5	759813719500		SCHRAUBE XQN2+CJ6FZ	SCREW XQN2+CJ6FZ
B 00330	5	759813719500		SCHRAUBE XQN2+CJ6FZ	SCREW XQN2+CJ6FZ
B 00331	5	759813719500		SCHRAUBE XQN2+CJ6FZ	SCREW XQN2+CJ6FZ
B 00332	5	759813719500		SCHRAUBE XQN2+CJ6FZ	SCREW XQN2+CJ6FZ
B 00333	5	759813719500		SCHRAUBE XQN2+CJ6FZ	SCREW XQN2+CJ6FZ
B 00334	5	759813719500		SCHRAUBE XQN2+CJ6FZ	SCREW XQN2+CJ6FZ
B 00335	5	759813822800		SCHRAUBE XQN2+CJ8FZ	SCREW XQN2+CJ8FZ
B 00336	5	759813913200		SCHRAUBE	SCREW
B 00337	5	759813913200		SCHRAUBE	SCREW
B 00338	5	759813725400		SCHRAUBE XQN16+BJ5FZ	SCREW XQN16+BJ5FZ
0401.000	6	759813913600		KNOPF VERRIEGELUNG KASS.	CASSETTE LOCK BUTTON
0402.000	6	759813702200		FEDER CASSETTENFACHKLAPPE	CASSETTE COIL SPRING
0403.000	6	759813911800		ABDECKUNG KASSETTENFACH	CASSETTE COVER
0405.000	6	759813913700		MONITOR LCD PANEL	MONITOR LCD PANEL
0406.000	6	759813913800		DIFFUSOR EINLAGE	DIFFUSION SHEET
0407.000	6	759813695800		EINLAGE SUCHER	EVF SHEET
0408.000	6	759813913900		POLARISATIONSEINLAGE	POLARIZATION SHEET
0409.000	6	759813914000		RAHMEN LCD	LCD FRAME
0410.000	6	759813914100		VERRIEGELUNGSHEBEL LCD	LCD LOCK LEVER
0411.000	6	759813911500		LCD-GEHAUESE UNTERTEIL	LCD CASE LOWER
0412.000	6	759813914200		FEDER LCD	SPRING LCD
0413.000	6	759813914300		LICHT EINLAGE	LIGHT SHEET
0414.000	6	759813914400		LCD SCHUTZGEHAUESE	LCD SHIELD CASE
0415.000	6	759813914500		ANGEL LCD	LCD HINGE
0416.000	6	759813914600		FLEXIBLE LEITUNG MONITOR	FLEXIBLE CABLE MONITOR
0417.000	6	759813911700		LCD-GEHAUESE OBERTEIL	LCD CASE UPPER
0430.000	6	759813910800		GEH.-SEITENTEIL RECHTS KP	SIDE CASE RIGHT UNIT
0433.000	6	759813914700		FLUORESCENZLAMPE	FLUORESCENT LAMP
0434.000	6	759813914800		LICHTLEITER	LIGHT GUIDE
B 00401	6	759813821800		SCHRAUBE XQN2+BJ5	SCREW XQN2+BJ5
B 00404	6	759813604300		SCHRAUBE XQN16+B3FZ	SCREW XQN16+B3FZ
B 00405	6	759813604300		SCHRAUBE XQN16+B3FZ	SCREW XQN16+B3FZ
B 00406	6	759813604300		SCHRAUBE XQN16+B3FZ	SCREW XQN16+B3FZ
B 00407	6	759813604300		SCHRAUBE XQN16+B3FZ	SCREW XQN16+B3FZ
B 00409	6	759813822600		SCHRAUBE XQN2+CJ4FZ	SCREW XQN2+CJ4FZ
B 00410	6	759813719500		SCHRAUBE XQN2+CJ6FZ	SCREW XQN2+CJ6FZ
B 00411	6	759813719500		SCHRAUBE XQN2+CJ6FZ	SCREW XQN2+CJ6FZ
B 00417	6	759813822900		SCHRAUBE XQN2+CJ35FZ	SCREW XQN2+CJ35FZ
B 00418	6	759813822900		SCHRAUBE XQN2+CJ35FZ	SCREW XQN2+CJ35FZ
				ZUBEHOER	ACCESSORIES
		720116001500		BEDIENUNGSANLEITUNG D/F/NL/I	OPERATING INSTRUCTION D/F/NL/I
		720116001600		BEDIENUNGSANLEITUNG GB/E/S/DK	OPERATING INSTRUCTION GB/E/S/DK
		720105408100		SERVICE MANUAL D/GB	SERVICE MANUAL D/GB
		759813910600		FERNBEDIENUNG TP73C	REMOTE CONTROL TP73C
		759813267700		NETZKABEL	POWER CABLE
		759813877400		DC-KABEL	DC-CABLE
		759813915000		NETZTEIL NA1100	POWER SUPPLY
		759813710900		BATTERIE PACK BPL99	BATTERY PACK BPL99
		759813042400		DC-KABEL	DC CABLE
		759874628800		AV-KABEL	AV CABLE
		759813402800		SCHULTERRIEMEN	SHOULDER BELT

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POS. NR. POS. NO.	ABB. FIG.	MATERIAL-NR. PART NUMBER	ANZ. QTY.	BEZEICHNUNG (D)	DESCRIPTION (GB)
SERVICEMITTEL					
		759813823800		FLEXIBLE LEITUNG 21 P. VF	FLEXIBLE CABLE 21 P. VFK1
		759813824800		FLEXIBLE LEITUNG 12 P. VF	FLEXIBLE CABLE 12 P. VFK1
		759813823900		FLEXIBLE LEITUNG 7 P. VFK	FLEXIBLE CABLE 7 P. VFK15
		759813824000		FLEXIBLE LEITUNG 13 P. VF	FLEXIBLE CABLE 13 P. VFK1
		759813824100		FLEXIBLE LEITUNG 16 P. VF	FLEXIBLE CABLE 16 P. VFK1
		759813824200		FLEXIBLE LEITUNG 9 P. VFK	FLEXIBLE CABLE 9 P. VFK15
		759813824300		FLEXIBLE LEITUNG 10 P. VF	FLEXIBLE CABLE 10 P. VFK1
		759813824400		FLEXIBLE LEITUNG 19 P. VF	FLEXIBLE CABLE 19 P. VFK1
		759813824500		FLEXIBLE LEITUNG 21 P. VF	FLEXIBLE CABLE 21 P. VFK1
		759813824600		FLEXIBLE LEITUNG 16 P. VF	FLEXIBLE CABLE 16 P. VFK1

POS. NR. POS. NO.	MATERIAL-NR. PART NUMBER	BEZEICHNUNG DESCRIPTION	POS. NR. POS. NO.	MATERIAL-NR. PART NUMBER	BEZEICHNUNG DESCRIPTION
759813911100 LP-HAUPTMODUL KPL. MAINBOARD C.B.A			L 01061	759813705100	SPULE VLQ0827M330
			L 01062	759813705100	SPULE VLQ0827M330
			L 01801	759813763900	SPULE 10UH
			L 03001	759813706200	SPULE ELJFA820JB
			L 03303	759813764100	SPULE 22UH
			L 03304	759813764400	SPULE 47UH
			L 03305	759813764400	SPULE 47UH
			L 03306	759813764400	SPULE 47UH
			L 03307	759813764400	SPULE 47UH
			L 03308	759813706200	SPULE ELJFA820JB
			L 03320	759813474300	DR. 470UH 5% VLQ0163J471
			L 04001	759874837800	SMD DR 1210 100UH 10% LEM
			L 04002	759874837800	SMD DR 1210 100UH 10% LEM
			L 04003	759874837800	SMD DR 1210 100UH 10% LEM
			L 04004	759874837800	SMD DR 1210 100UH 10% LEM
			LB 00402	759813315900	SPULE VLP0175
			LB 00404	759813315900	SPULE VLP0175
			Q 00191	759813778900	TRANS 2SC4178-F1314-T1
			Q 00301	759813764800	TRANS 2SC4627
			Q 00303	759813764900	TRANS HN1B04 FUGRR
			Q 00304	759813765300	TRANS 2SA1832FY
			Q 00404	759813766500	TRANS RN2103F
			Q 00405	759813765100	TRANS HN1A01FUFR
			Q 00601	759813764900	TRANS HN1B04 FUGRR
			Q 00602	759813765300	TRANS 2SA1832FY
			Q 00606	759813765400	TRANS 2SC4738FY
			Q 00704	759813765200	TRANS 2SC2712GR
			Q 00781	759813765300	TRANS 2SA1832FY
			Q 01002	759813765400	TRANS 2SC4738FY
			Q 01003	759813544600	TRANSISTOR MPL1
			Q 01004	759875518000	SMD TRANS. 2 SD 2210 R
			Q 01006	759813765300	TRANS 2SA1832FY
			Q 01007	759813765500	TRANS 2SC4944YR
			Q 01010	759813765300	TRANS 2SA1832FY
			Q 01061	759813544600	TRANSISTOR MPL1
			Q 01062	759813544600	TRANSISTOR MPL1
			Q 01801	759813765400	TRANS 2SC4738FY
			Q 01802	759813765400	TRANS 2SC4738FY
			Q 01804	759813765300	TRANS 2SA1832FY
			Q 01806	759813764900	TRANS HN1B04 FUGRR
			Q 01807	759813765400	TRANS 2SC4738FY
			Q 01809	759813765400	TRANS 2SC4738FY
			Q 01811	759813765400	TRANS 2SC4738FY
			Q 01813	759813765300	TRANS 2SA1832FY
			Q 01814	759813765500	TRANS 2SC4944YR
			Q 03001	759813765600	TRANS 2SB1219
			Q 03301	759813766500	TRANS. RN2103F
			Q 03302	759813766500	TRANS. RN2103F
			Q 03303	759813766500	TRANS 2SC4738FY

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POS. NR. POS. NO.	MATERIAL-NR. PART NUMBER	BEZEICHNUNG DESCRIPTION	POS. NR. POS. NO.	MATERIAL-NR. PART NUMBER	BEZEICHNUNG DESCRIPTION
Q 03320	759813766500	TRANS. RN2103F		759813911300	LP-SUCHERMODUL KPL. EVF-BOARD C.B.A
Q 04007	759813765800	TRANS 2SB1219			
Q 04008	759813766000	TRANS 2SC4617HR			
Q 04009	759813765900	TRANS-TRANS XP4501	FP 00802	759813788300	VERBINDER 20POL (FEMALE)
Q 05001	759813765900	TRANS-TRANS XP4501	FP 00803	759813788400	VERBINDER 10POL (FEMALE)
Q 05002	759813765900	TRANS-TRANS XP4501			
Q 05003	759813766200	TRANS 2SA812	LB 00801	759813315900	SPULE VLP0175
Q 06001	759813768300	QUARZ 45.062M			
Q 06002	759813765300	TRANS 2SA1832FY		759813911200	LP-MONITORMODUL KPL. MONITOR BOARD C.B.A
Q 06003	759813765400	TRANS 2SC4738FY			
Q 06004	759813765400	TRANS 2SC4738FY			
Q 06006	759813765500	TRANS 2SC4944YR		759813469300	HALTER, SENSOR
QR 00401	759813766500	TRANS. RN2103F	H 00001	759813469400	HALLELEMENT HW-105C
QR 00401	759813766500	TRANS. RN2103F	H 00002	759813469400	HALLELEMENT HW-105C
QR 00402	759813766600	TRANS. RN2107F			
QR 00402	759813766600	TRANS. RN2107F			
QR 00404	759813766700	TRANS. RN1704R	Q 00002	759875362700	FOTOTRANS.PT 4850 F
QR 00404	759813766700	TRANS. RN1704R			
QR 00405	759813766800	TRANS. RN1104F	S 00001	759813469500	SCHALTER 3P.
QR 00405	759813766800	TRANS. RN1104F	S 00002	759813458200	SCHALTER
QR 00701	759813766900	TRANS. RN1102F	D 00903	759875506100	DIODE MA 133
QR 00701	759813766900	TRANS. RN1102F			
QR 00782	759813767100	TRANS. RN1103F		759813911000	LP-MICROFONMODUL KPL.
QR 01001	759813767200	TRANS. RN2102F			
QR 01002	759813767200	TRANS. RN2102F		759813915100	FLEXIBLE CCD PLATTE FLEXIBLE CCD CARD
QR 01003	759813766500	TRANS. RN2103F			
QR 01005	759813767300	TRANS. RN1112F			
QR 01061	759813767400	TRANS. RN2111F	D 291	759813763400	DIODE 02DZ16Y
QR 01701	759813767400	TRANS. RN2111F			
QR 01703	759813766800	TRANS. RN1104F	Q 291	759812796400	TRANS 2SC2295
QR 01704	759813766800	TRANS. RN1104F			
QR 01802	759813766500	TRANS. RN2103F		759813790200	FLEXIBLE LINSENPLATTE FLEXIBLE LENS CARD
QR 03002	759813767100	TRANS. RN1103F			
QR 03301	759813766500	TRANS. RN2103F		759813823400	HALL SENSOR
QR 03302	759813767100	TRANS. RN1103F			
QR 03303	759813766800	TRANS. RN1104F		759813788700	SCHALTER
QR 03308	759813766500	TRANS. RN2103F			
QR 03309	759813766800	TRANS. RN1104F		759813914900	FLEXIBLE SENSOR PLATTE FLEXIBLE SENSOR BOARD
QR 03310	759813766800	TRANS. RN1104F			
QR 03311	759813766800	TRANS. RN1104F			
QR 04001	759813767500	TRANS. RN1111F			
QR 04002	759813767500	TRANS. RN1111F			
QR 04003	759813767500	TRANS. RN1111F			
QR 04004	759813767100	TRANS. RN1103F			
QR 04005	759813766500	TRANS. RN2103F			
QR 04008	759813766900	TRANS. RN1102F			
QR 06002	759813767000	TRANS. UN2130X			
QR 06003	759813767200	TRANS. RN2102F			
QR 06004	759813767200	TRANS. RN2102F			
QR 06005	759813766500	TRANS. RN2103F			
QR 06007	759813766900	TRANS. RN1102F			
QR 06009	759813767900	TRANS. RN1113F			
QR 06013	759813767400	TRANS. RN2111F			
QR 06014	759813767500	TRANS. RN1111F			
QR 06050	759813766700	TRANS. RN1704R			
QR 06801	759813767400	TRANS. RN2111F			
R 01601	759875863400	SI.-WIDERSTAND			
T 04001	759813768200	OSZ. SPULE VLQ0905			
X 00402	759813768300	QUARZ 45.062M			
X 06001	759813634700	QUARZ 16000KHZ			
X 06002	759813768400	QUARZ 32.768K			

Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Mat.-Nummer 720108000000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!



The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000000, as well as the respective national deviations.

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