

Product System (PS)

Subject: **Circuit Operation Theory**

Part No.:

Rev.: 0

Doc. No.

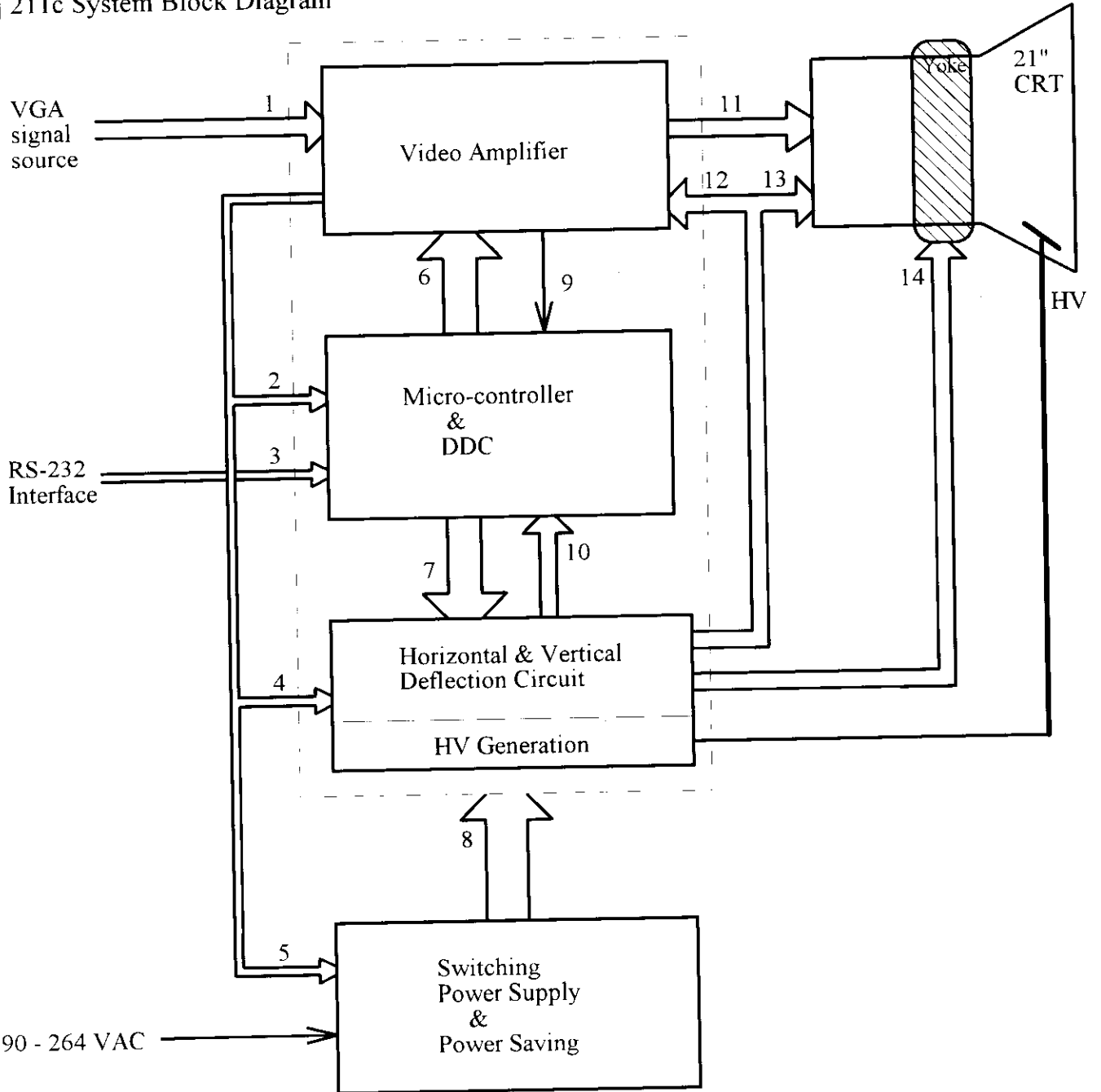
318-C01

Project Code: 91.74502.001

Page 1 of 38

Model Name: 72211c

[A] 211c System Block Diagram



Ecc 2D: TVPD >> 21C

Product System (PS)

Subject: **Circuit Operation Theory**

Part No.:

Rev.: 0

Doc. No. 318-C01

Project Code: 91.74502.001

Page 2 of 38

Model Name: 72211c

FIGURE.1 211c System Block Diagram

[B] Deflection and HV generation circuit introduction

B.1. Deflection and HV generation circuit block diagram

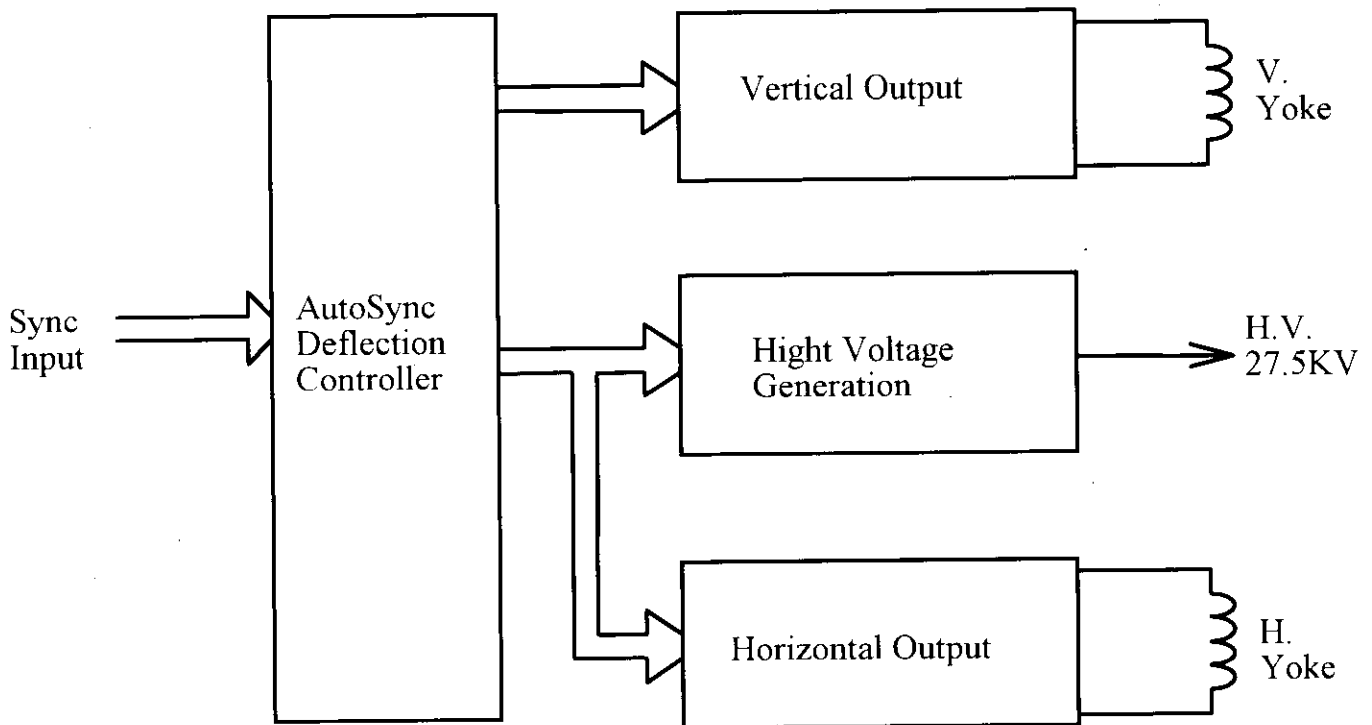


FIGURE.2 Deflection and HV generation circuit block diagram

As FIGURE.2, the 211c monitor is different with another monitor; the 211c monitor uses a separated horizontal output circuit. One is horizontal size processing circuit, another is high voltage processing circuit. Separated horizontal output circuit has a big advantage: excellent high voltage regulation, so this monitor adopts the advantage to get a perfect picture.

B.2. 211c Function Block of Deflection & HV generation

Product System (PS)

Subject: Circuit Operation Theory	Part No.:	Rev.: 0
	Doc. No. 318-C01	
Project Code: 91.74502.001		Page 20 of 38
Model Name: 72211c		

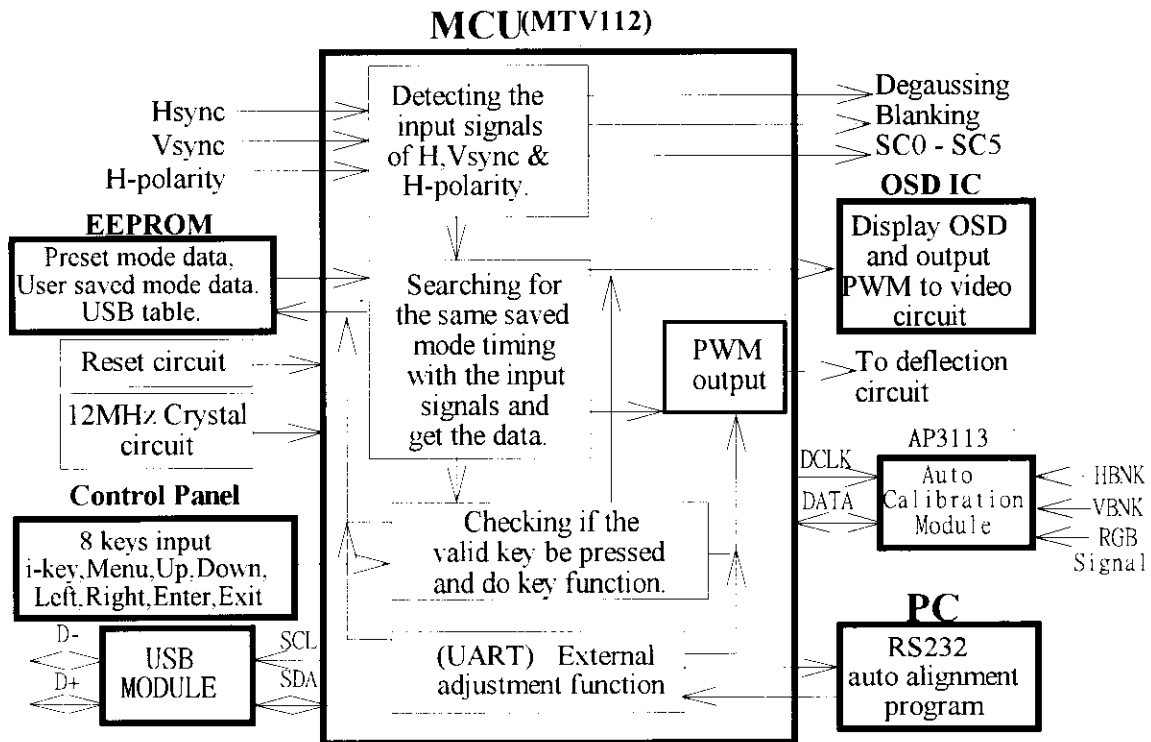
ACERVIEW 72211c MICROCONTROLLER CIRCUIT OPERATION THEORY

1. Introduction :

This model, 72211c, will support powerful OSD function to help end user fine adjustment. The Microcontroller circuit of the 72211c can determine what mode it is by detecting the frequency of horizontal and vertical synchronous and the polarity of horizontal synchronous, and provide DC voltages to control the picture and save the adjusted value into the EEPROM by using the OSD, "On Screen Display control", that means the user can get any information of the picture display or adjust it and save the status values into the EEPROM by choosing and pressing the proper key according to the indication of the OSD. In addition, user can press i-key to do auto-calibration.

2. Block diagram :

The major parts of 72211c Microcontroller circuit are MCU, EEPROM, OSD IC, and Auto Calibration Module. The circuit block diagram is shown as below.



☐ Product System (PS)

Subject:	Circuit Operation Theory	Part No.:		Rev.:	0
		Doc. No.	318-C01		
Project Code:	91.74502.001			Page 27 of 38	
Model Name:	72211c				

Switching Power Supply Operation Theory

1. General Specification

Input Voltage : 90~132,180~264VAC (AUTO RANGE)

Input Frequency : 47~63Hz

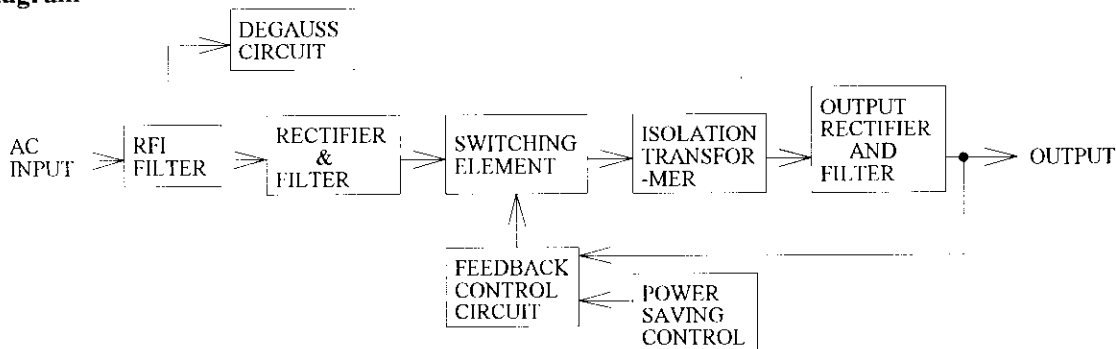
Output Requirement:

Output

MAX. Load Current

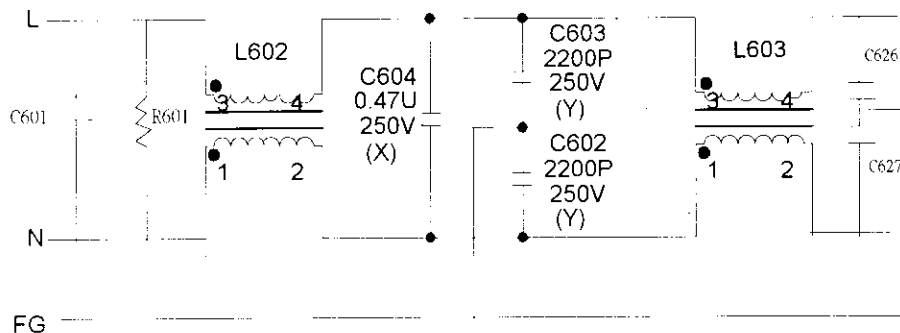
+6.5V	0.7A
+16V	0.8A
+24V	0.2A
+80V	0.2A
+200V	0.42A

2. Block Diagram



3. Circuit Operation Theorem

3.1 RFI FILTER



This circuit designed to inhibit electric and magnetic interference for meet FCC, VDE, VCCI standard requirements.

☐ Product System (PS)

Subject: Circuit Operation Theory	Part No.:	Rev.: 0
Project Code: 91.74502.001	Doc. No. 318-C01	Page 32 of 38
Model Name: 72211c		

Video Circuit :

1. Design Specifications :

- 1.1 input :
 - D-sub and BNC
- 1.2 sync type :
 - separate sync
 - composite sync
 - SOG
- 1.3 pixel rate = 230 MHz
- 1.4 light output (3" block pattern) = 40F.L. [max brightness and max contrast]
- light output (full white pattern)= 25F.L. [max brightness and max contrast]

2. CRT Specifications :

- 2.1 heater voltage = 6.3V
 - heater current = 0.32A (typical)
- 2.2 cathode spot cutoff voltage = 110V [G2=600V]
- 2.3 max-to- min cutoff ratio = 1.17

3. Block Diagram :

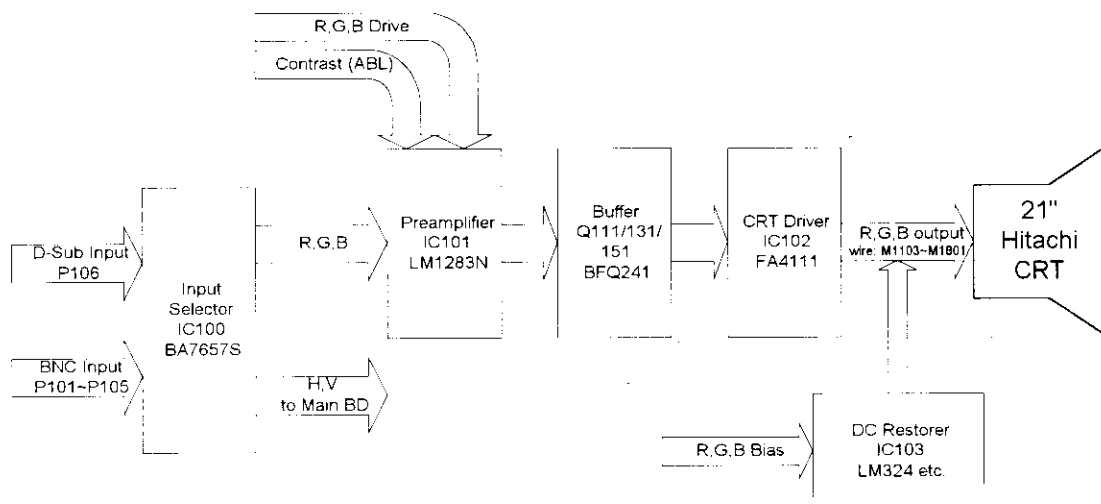


Fig. 1 Block Diagram of 72211C video