

# **APPLE-IIPLUS RGB INTERFACE CARD**

# RGB-IIB PATENT P

KAGA ELECTRONICS CO., LTD.

# **INSTRUCTION MANUAL**

## -RGB-IIB INTERFACE CARD-

RGB-IIB is an exclusive-use interface card for connecting the RGBvision monitor to an APPLE-IIPLUS computer.

Through the use of the RGB-IIB, it is possible to display the 16 full colors of the APPLE - IIPLUS computer, on the RGBvision monitor (RGB separated signal input monitor).

The RGB-IIB provides a unique function which is to specify the color of characters in the "TEXT" mode in 8 different ways and display them in the desired color arrangement by simply turning a ROTARY-SW provided.

### [A] INSTALLATION

RGB-IIB comes with a set of interface card and connecting cables (Fig. 1).

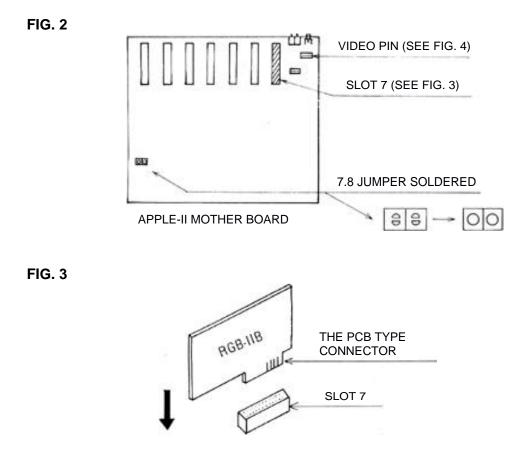
### FIG. 1 VIDEO CORD 4P PLUG 6P PLUG 6P PLUG 6P PLUG

1 Turn OFF the power supply SW of APPLE-IIPLUS computer and remove the top cover of the computer cabinet.

2 Using a low wattage soldering iron and resin core solder, connect together the jumper marked "7" as shown in Fig. 2, and repeat this process for the jumper marked "8". Be careful not to overheat the jumper or the surrounding PCB, nor to drop excess solder into the cabinet.

(NOTE): THIS PROCEDURE IS NOT REQUIRED TO THE APPLE-II-EURO PLUS.

3 Inspect the POE type connector on the RGB-IIB module to make sure that it is clean and the contacts are bright. Then insert module into mother-board slot 7 which is located at the right end of the mother POE, making certain that it is fully bottomed in the P.C. card connector as shown in Fig. 3.



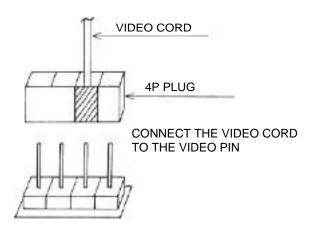
Locate the video output connector on the rear of the computer cabinet. Directly in front of this connector is a short row of electrical components, and then a row of four vertical pins which are located nearest to the video jack. Connect the video cord from the RGB-IIB module to the second pin from the right end of this row, as shown in Fig. 4. Connect the end of video cord with the four pin plug of RGB-IIB to the video pin of the APPLE-IIPLUS computer.

#### WARNING

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It is very important that step 4 be followed exactly. Connecting the RGB-IIB video cord to any other pin in this row may damage the computer, the RGB-IIB or both.

FIG. 4



- 5 Plug the end of the connecting cable with the six pin plug into the mating six pin socket on the RGB-IIB module.
- 6 Route the connecting through a convenient opening in the rear of the computer cabinet close to the module, and plug the eight pin end of the cable into the mating connector on the RGB-vision monitor.
- 7 Set the monitor mode selector-switch to the "II" position.
- 8 Recheck each installation operation (step 2 through 7) before processing further.
- 9 Replace the computer cover and turn ON the A.C. power to both the computer and the monitor.
- 10 Adjust the RGBvision monitor to obtain a satisfactory picture (refer to OWNER'S GUIDE).
- 11 If there appears any abnormality in the quality of the video display, recheck steps 2, 3, 4 & 9, particularly watching for cold solder Joints and dirty contacts. If the display is still not satisfactory, return the RGB-IIB module and the monitor to the dealer from whom they were purchased.

#### [B] USING METHOD OF ROTARY-SWITCH

Through the change over operation of the ROTARY-SW, you can specify colors you want for the screen and characters in the "TEXT" mode which appear first when you turn on the power supply switch of APPLE-IIPLUS computer. Colors can be set by changing over the position of the ROTARY-SW, and the color correspondence table is given below. At normal time, the ROTARY-SW is set to CODE (NO. 0).

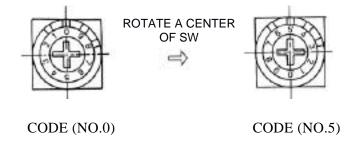
CODE NO	D. SCREEN	CHARACTERS	SWITCH POSITION
0	Black	White	0, 8
1	Black	Green	1,9
2	Black	Orange	2
3	Black	Yellow	3
4	Black	Blue	4
5	Dark red	Yellow	5
6	Aqua	Black	6
7	Dark blue	Aqua	7

#### COLOR CORRESPONDENCE TABLE

#### (EXAMPLE)

If you want to specify CODE (NO. 5), change over the switches as shown in Fig. 5.

**FIG. 5** 



#### [C] OPTIONAL FUNCTION

RGB-IIB provides a terminal for the installation of screen mode changeable switch. When the APPLE-IIPLUS computer is connected to RGBvision monitor by using RGB-IIB interface card, sometimes a phenomenon. may occur in which characters are difficult to read in "HGR" mode. This phenomenon occurs due to a limitation of a dot matrix in "HGR" mode as shown at page 19 20 of APPLE-IIPLUS reference manual. This optional function has been developed to solve this problem. If you connect "ON-OFF" push-switch being on the market to this terminal which is the three pin socket by using attached 3P plug and change over this switch, the color graphic and characters displayed on the screen change into two-color display, thereby vividly displaying the characters. If you further change over "ROTARY-SW" in this state, 8 color combinations for the screen and characters can be obtained, so that you can use the RGBvision as a monochrome monitor with colors you desire.

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PRINTED IN JAPAN