

1. General

DDC Data Re-programming

In case the main EEPROM with Software DDC which store all factory settings were replaced because a defect, repaired monitor the serial numbers have to be re-programmed.

It is advised to re-soldered the main EEPROM with Software DDC from the old board onto the new board if circuit board have been replaced, in this case the DDC data does not need to be re-programmed.

Additional information

Additional information about DDC (Display Data Channel) may be obtained from Video Electronics Standards Association (VESA). Extended Display Identification Data(EDID) information may be also obtained from VESA.

DDC EDID structure

For the monitor : Standard Version 3.0
Structure Version 1.2

2. System and equipment requirements

1. An i486 (or above) personal computer or compatible.
2. Microsoft operation system Windows 95/98.
3. EDID301.EXE program (3138 106 10103) shown as Fig. 1
4. Software DDC Alignment kits (4822 310 11184) shown as Fig. 2.

The kit contents: a. Alignment box x1
b. Printer cable x1
c. D-Sub cable x1

Note: The EDID301.EXE (Release Version 1.54, 2000.04.25) is a windows-based program, which cannot be run in MS-DOS.

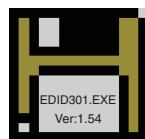


Figure 1 Diskette with EDID301.EXE

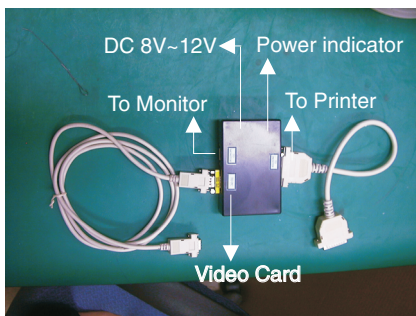
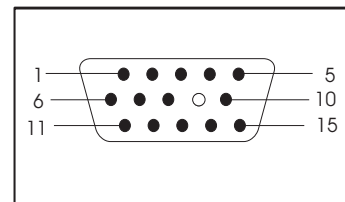


Fig. 2 Alignment Kits

3. Pin assignment

A. 15-pin D-Sub Connector

The 15-pin D-sub connector (male) of the signal cable on the 3rd row for DDC feature :



Pin No.	Assignment	Pin No.	Assignment
1	Red video input	9	No pin
2	Green video input	10	Logic ground
3	Blue video input	11	Identification output - Connected to pin 10
4	Identification output - Connected to pin 10	12	Serial data line(SDA)
5	Ground	13	H.Sync
6	Red video ground	14	V.Sync(VCLK for DDC)
7	Green video ground	15	Data clock line(SCL)
8	Blue video ground		

DDC Instructions

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4. Configuration and procedure

Following descriptions are the connection and procedure for Software DDC, the main EEPROM can be re-programmed along with Software DDC by enabling "factory memory data write"function on the DDC program (EDID301.EXE).

Initialize alignment box

In order to avoid that monitor entering power saving mode due to sync will cut off by alignment box, it is necessary to initialize alignment box before running programming software (EDID301.EXE). Following steps show you the procedures and connection.

- Step 1: Supply 8~12V DC power source to the Alignment box by plugging a DC power cord or using batteries.
- Step 2: Connecting printer cable and video cable of monitor as Fig. A
- Step 3: Run the EDID301.EXE program until the main menu appears. This is for initialize alignment box.

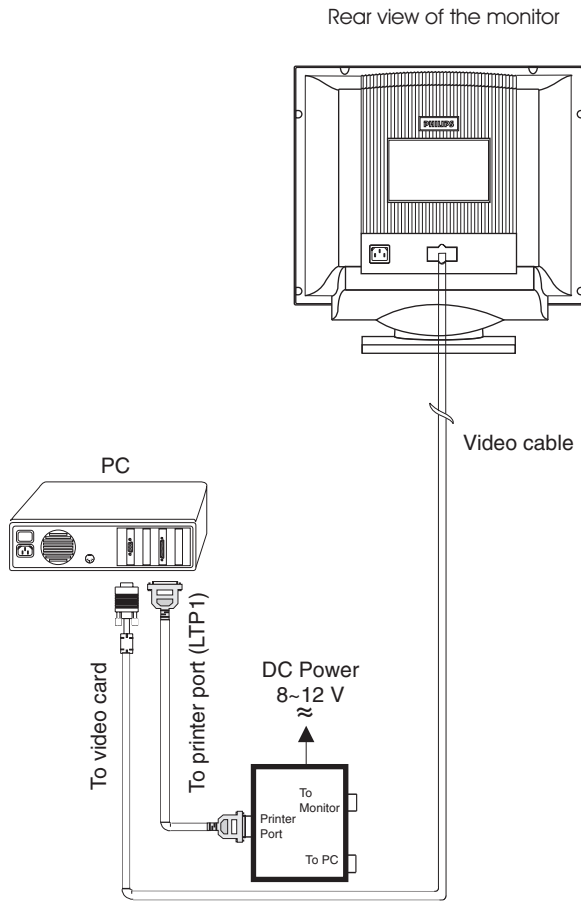


Fig. A

Re-programming Software DDC

- Step 1: After initialize alignment box, connecting all cables and box as Fig. 3
- Step 2: Follow the steps on DDC re-programming instructions to starting re-programming.

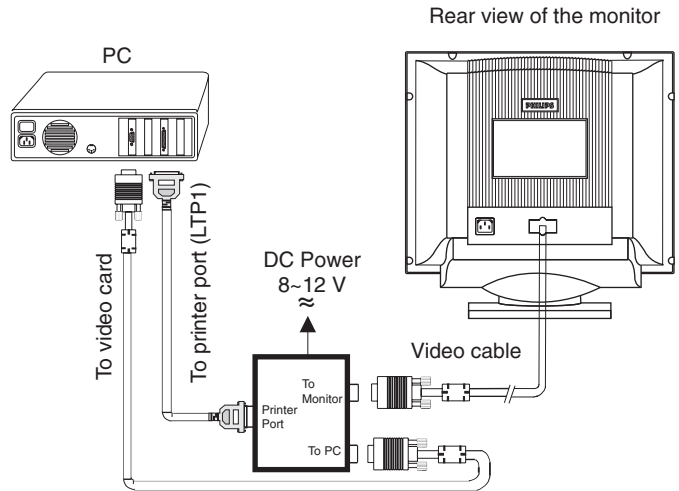


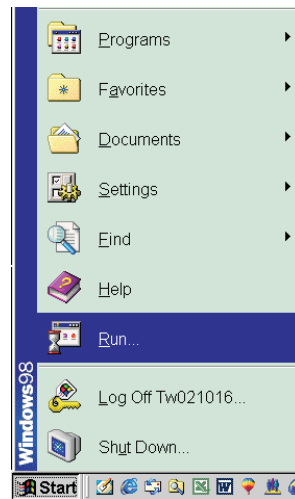
Fig. 3

5. DDC re-programming instructions

Start on DDC program

Start Microsoft Windows.

1. Insert the disk containing EDID301.EXE program into floppy disk drive.
2. Click **Start**, choose Run at start menu of Windows 95/98.



4. At the submenu, type the letter of your computer's floppy disk drive followed by :EDID301 (for example, A:\EDID301, as shown in Fig. 5).

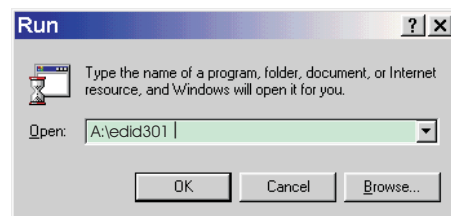


Fig. 5

5. Click button. The main menu appears (as shown on Fig. 6).

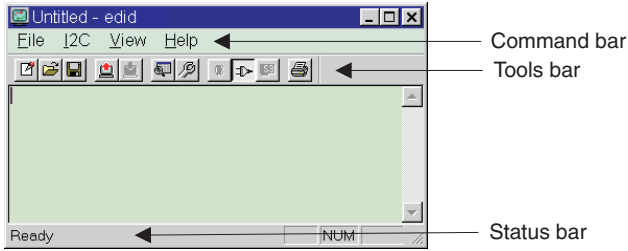




Fig. 6

Note: If the connection is improper, you will see the following error message before entering the main menu. Meanwhile, the  (read EDID) function will be disabled. At this time, please make sure all cables are connected correctly and fixedly, and the procedure has been performed properly.



Loading DDC data from monitor

1. Click  icon on the tools bar to bring up the Configuration Setup windows as Fig.7
2. Select the DDC2B as the communication channel.
3. Enable Factory memory data write function and fill in page address "FA" to the block.
4. Click button to confirm your selection.

Note: The Factory memory data write function will allow EDID301 to rewrite the serial numbers of Software DDC data in main EEPROM.

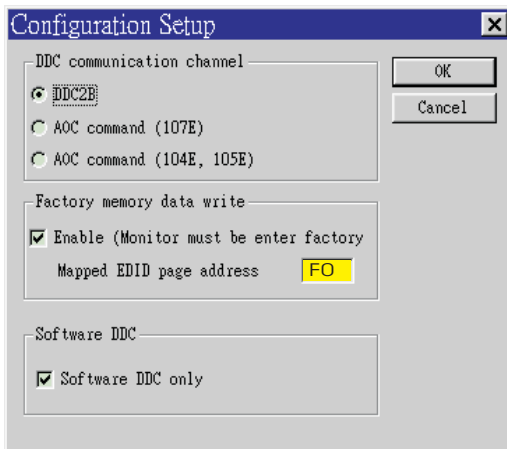

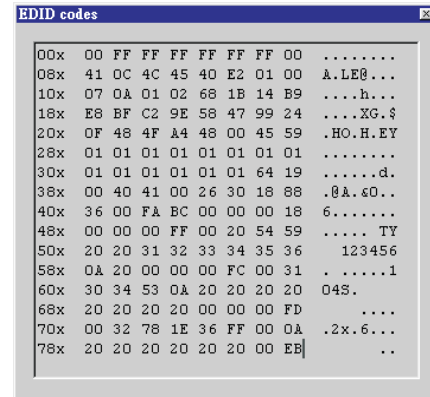


Fig. 7

4. Click  icon to read DDC EDID data from monitor. The EDID codes will display on screen as following. (The EDID codes are dependent on the model.)




Note: During the loading, EDID301 will verify the EDID data which just loaded from monitor before proceed any further function, once the data structure of EDID can not be recognized, the following error message will appear on the screen (Fig. 8). Please confirm following steps to avoid this message.

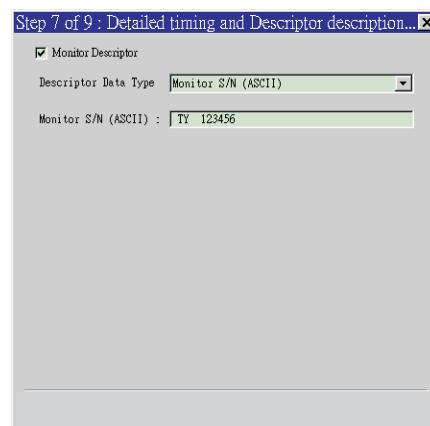
1. The data structure of EDID was incorrect.
2. Software DDC Data that you are trying to load data is empty.
3. Wrong communication channel has set at configuration setup windows.
4. Cables loosed or poor contact of connection.
5. Software DDC only is disable.



Fig. 8



Modify DDC data (Serial No.)

1. Click  icon on the tool bar.
2. Click till the Step 7 of 9 window appears.
3. Type the new Serial No. (for example, TY 123456).
4. Click till the last step window appears, then click to exit the Step window.





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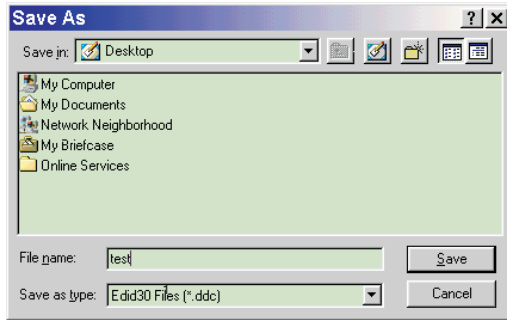
Write DDC data to monitor

1. Click  icon from the tools bar to starting rewrite DDC data.
2. Click  for confirmation.



Save DDC data as a file

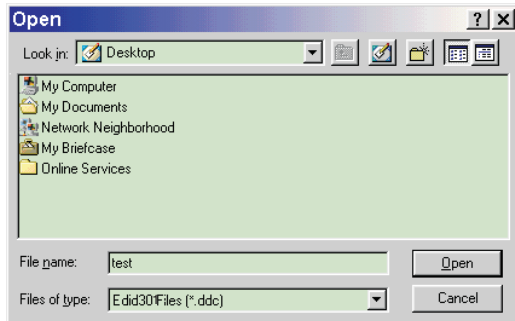
Sometimes, you maybe need to save DDC data as a text file for using on other DDC chip. To save DDC data, follow the steps below:

1. Click  icon on the tools bar and type a file name you like. The file format is ddc type which can be open by Microsoft WordPad.
2. Click  button.



Load DDC data from file

1. Click  from the tools bar.
2. Select the file you want to open.
3. Click  Button.



4. Now you can re-programming DDC data which you just loaded from a file, please be confirmed that model and serial number are correct and match with the monitor you are trying to re-write.

Exit DDC program

1. Click file command on the command bar then select Exit.



Definition of Serial Number

T Y 0 0 0 2 8 0 0 0 0 1

