Introduction

Modern monitors internally store data on their performance characteristics and capabilities in an abbreviated format. The information is called the monitor Extended Display Identification Data or EDID and is read by operating systems and video graphics cards to determine the optimum display properties for the system. This monitor is a very advanced and flexible monitor and it exceeds the capability of the EDID system to describe it fully. Special OSD menu allows alternate EDIDs to be selected which are more suitable for certain graphics cards.

Unless you change the video graphics card that drives your monitor, there is usually no need to change the EDID settings.

The EDID update procedure must be done carefully. If an incorrect EDID is selected, it is possible that the monitor may not display any images afterwards.

Applicable model: All models with the following firmware level

The procedure given in this document applies to monitors with firmware at the following levels:

DDC CPU	Version 3.2 or higher
OSD CPU	Version 5.0 or higher
USB CPU	Version 4.0 or higher
FPGA LOGIC	Version 34 or higher

 To check the versions, see page 2. If you need to change the settings on a monitor that has firmware at a lower level, refer to http://www.idtech.co.jp.

1. Setting

a. Connect the monitor to the desired graphics card and/or computer system.

b. Turn on the monitor and the computer. Wait until the system has completed its boot process and a stable screen image is displayed. Confirm that the power indicator on the monitor shows green.

If there is no image displayed and the power indicator shows steady amber, press the Debug switch to turn on the monitor (see the following figure), the power indicator will show blinking amber. The video image from the computer will not appear but the screen will display a sequence of test patterns.


Debug switch
(Inside of the bottom cover)

Bottom view
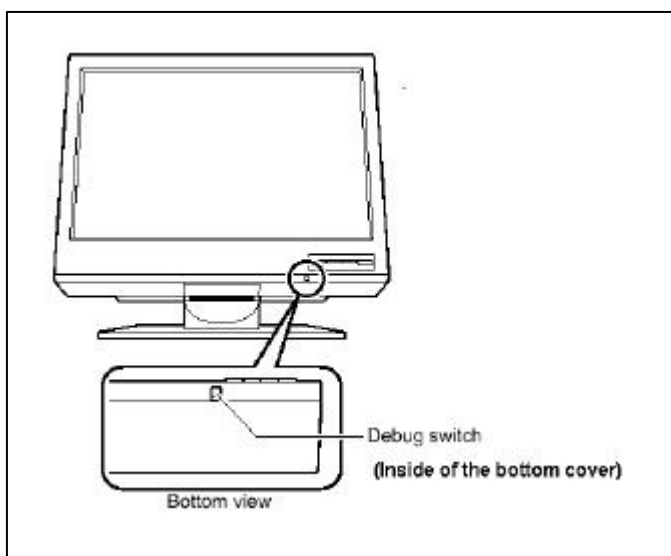
CAUTION:

Do not use conductive material to press this switch. It may damage the electric circuit inside of the monitor.

2. Enabling the special OSD (on-screen display) menu

a. Press the leftmost OSD button (select/enter) and navigate to the (i) (information) icon by using the '<-' (navigate left) or '->' (navigate right) buttons. Press the 'select/enter' button to access the information screen. The refresh rate and screen resolution will be displayed, as in this example:

```
ⓘ    60Hz
1600x1200
```
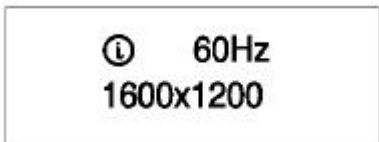
b. Press the 'navigate left' button three times, and then press the 'navigate right' button three times. The first panel of the special OSD menu will be displayed, as in this example:

```
-1- 3.2  5.0
 2  005 034
```
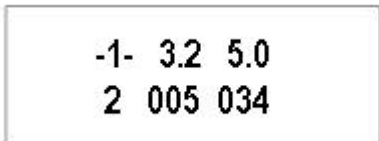
In this panel, the firmware versions are shown in the following format:

```
--------------------------
  -1-     aaa bbb
   c      ddd eee
--------------------------
where    aaa: DDC-CPU version
         bbb: OSD-CPU version
         c:reserved
         ddd: USB-CPU version
         eee: FPGA-LOGIC version
```

Note: if the special OSD menu does not appear, press the 'select/enter' button to exit from the OSD menu and return to step 2a to try again.

3. Checking the current EDID settings

a. In the special OSD menu, press the 'navigate left' or 'navigate right' buttons to show panel 2 of the special OSD menu.

b. In about five seconds, the current EDID settings will be displayed, as in this example:

```
-2- 020
```

.
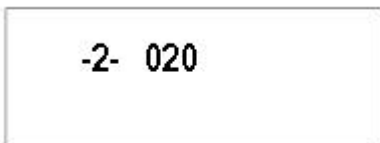
If the EDID setting is given as 000, or any number greater than 63, or a value ending
in 'x', an error has occurred; repeat step 3 to try again. For details, see
"Valid settings" on the last page.

4. Changing the EDID setting

    a. From the table in the 'Valid settings' section, choose the number of the EDID setting you want to use.

    b. Set the brightness level to the number for the EDIDsetting you have chosen (see user's guide), you can choose values from 0 to 20. For higher numbers, firstly enable the special OSD menu and then exit it by using the 'select/enter' button. The brightness range will now extend from 0 to 63, as in this example:

    c. Navigate back to the first panel of the special OSD menu.

    d. Press the 'navigate left' or 'navigate right' buttons to show panel 2. Then press both 'navigate' buttons together, and hold them down until three dots appear on the display. The three dots show that the EDID setting is in the process of being updated.

    e. Within about five seconds, the number of the new EDID setting stored in the monitor will be displayed. If it is not the setting number you want, try again.

Note: An attempt to enter any unsupported setting number will fail.

If the setting number ends in 'x', the update procedure has failed. Try again.

    f. Turn off the monitor to disable the special OSD menu and return to normal operation.

<u>Important notices</u>

> If the monitor is connected to a powered-off computer system, or if the screen resolution is changed, it will not be possible to program a new EDID setting.
> The EDID setting cannot be reset to the original number as for the factory default values by the procedure given in this manual. To reset the EDID to an equivalent value to the factory default, check your model and choose the appropriate number as below, then update the setting.
>
> MD22292-B1: Setting number 20
> MD22292-C0/C2: Setting number 30
> MD22292-B0/B2: Setting number 29

Valid settings

The DDC-CPU firmware that performs the EDID setting process within the monitor can only detect and update certain types of EDID setting. If it encounters a setting it does not recognize, it reads it as 000 (unknown).

From the following table, choose the EDID setting that is appropriate for the operating system and video graphics card you are using.

If you need to use an EDID setting not listed in the table, you will need to upgrade to a later version of DDC-CPU.

EDID settings may be updated without notice. For the latest information, refer to http://www.idtech.co.jp.

Even though a video graphics card is listed here, not all of its functions may not be supported.

Table1: Supported setting number by DDC-CPU version 3.2 and 3.3

Setting number	Applicable model	Description
07	-	Reserved. Do not use.
08	-	Reserved. Do not use.
09	-	Reserved. Do not use.
10	-	Reserved. Do not use.
12	-	Reserved. Do not use.
13	-	Reserved. Do not use.
20	B0	For Matrox-G200MMS^{TM} Special version for this monitor (Windows®)
27	-	Reserved. Do not use.
29	B0/B1/B2	For ATI-FireGL4 ^{TM}, nVIDIA-Quadro4-900XGL ^{TM} (Windows®) (For the users who want 3840x2400 at 20Hz refresh rate. Recommended)
30	C0/C2	For ATI-Radeon ^{TM} 8500 (Macintosh®)
31	-	Reserved. Do not use.

Table2: Supported setting number by DDC-CPU version 3.4 and 3.5

Setting number	Applicable model	Description
07	-	Reserved. Do not use.
08	-	Reserved. Do not use.
09	-	Reserved. Do not use.
10	-	Reserved. Do not use.
12	-	Reserved. Do not use.
13	-	Reserved. Do not use.
20	B0	For Matrox-G200MMS^{TM} Special version for this monitor (Windows®)
27	-	Reserved. Do not use.
29	B0/B1/B2	For ATI-FireGL4 ^{TM}, nVIDIA-Quadro4-900XGL ^{TM} (Windows®) (For the users who want 3840x2400 at 20Hz refresh rate. Recommended)
30	C0/C2	For ATI-Radeon ^{TM} 8500 (Macintosh®)
31	-	Reserved. Do not use.
34	B0/B1/B2	For nVIDIA-Quadro4-900XGL ^{TM} (Windows®) (Only for the users who want 3840x2400 at 24Hz refresh rate)
35	B0/B1/B2	For nVIDIA-Quadro4-900XGL ^{TM} (Windows®) (Only for the users who want 3840x2400 at 25Hz refresh rate)