

Kramer Electronics, Ltd.



**EDID Designer
User Guide**

Software Version 1.0.0.32

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1 About the EDID Designer

The EDID Designer is a PC-based program that lets you create, modify and save EDIDs on a computer. You can then download the EDID to USER memory in various Kramer devices. It gives the AV technician a strong and flexible troubleshooting tool for diagnosing display problems.

The EDID Designer connects to a Kramer device either via an RS-232/Ethernet port or via a USB port. If connecting through a USB port, a USB driver must be installed prior to installing the EDID Designer.

Presently, the EDID Designer can only be used with the **VP-81KSi** and it connects via the RS-232 or Ethernet port.

2 Downloading and Installing the EDID Designer

This section describes how to download all necessary software from the Kramer Web site and install it on your PC to use EDID Designer.

To download and install the EDID Designer:

1. Navigate to the Kramer Web site (<http://www.kramerelectronics.com>).
2. Search for the desired Kramer product in the Kramer Matrix.
3. When the product appears, click on the **Downloads** tab.
4. In “*Product Software*”, click on **EDID Designer**. The EDID Designer window opens. Note the related products for which the EDID Designer is available.
5. Click the **Download now** button.
6. **Save** the software in a designated folder.
7. Navigate to the designated folder to which you downloaded the EDID Designer in the previous section. Double-click the file **setup.exe** from this folder or from the distribution media included with the Kramer device.
8. After the installation completes, navigate to *Start > Programs > Kramer > EDID Designer* and run the EDID Designer. The following window opens:



Figure 1: Device Selection Window

- 9. Choose *Other* and click **OK**.
- 10. The main window ([Figure 2](#)) appears:

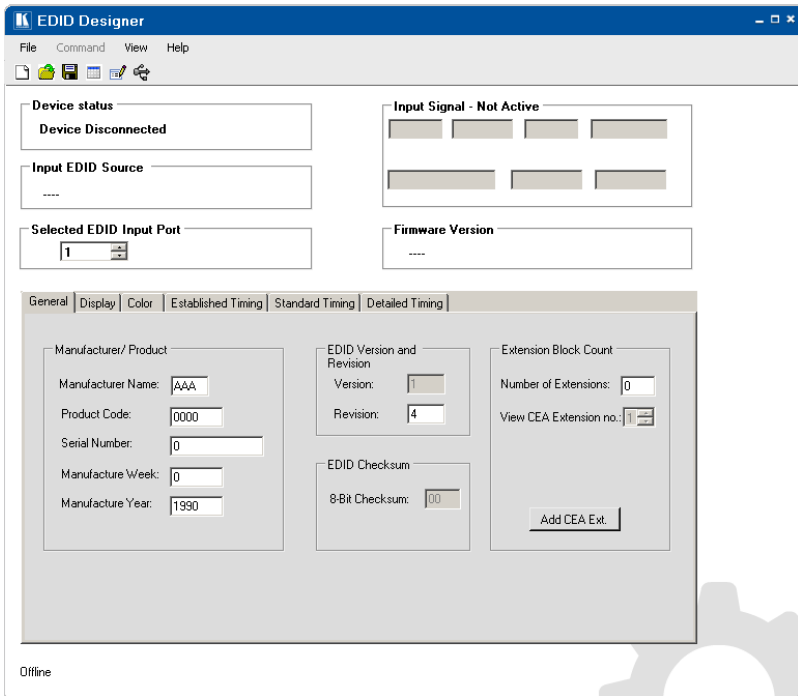



Figure 2: EDID Designer Main Window

- 11. Connect an RS-232 or Ethernet cable from your PC to the device depending on the available interface.

12. To begin communication, click the button  or menu item *File > Connect*. [Figure 3](#) appears.

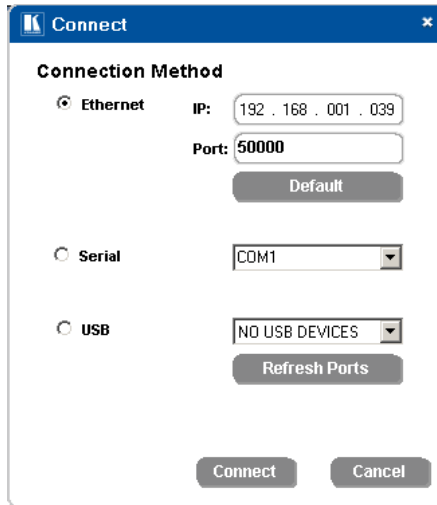


Figure 3: Connection Method Display

13. Choose the connection method and enter the correct parameters as needed.
14. The Device Status on the main window changes to *Device was found* and at the lower left corner of the Main Window changes to *Online*.

You can now use the EDID Designer (see section [3](#)).

3 Using the EDID Designer

This section explains how to use the EDID Designer.

The main window of the EDID Designer and its elements are defined in [Figure 4](#):

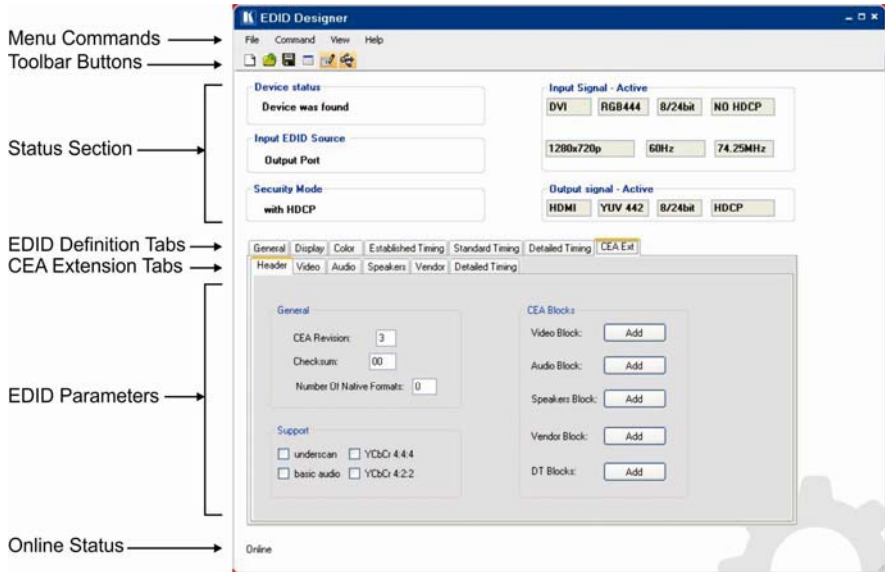


Figure 4: EDID Designer Main Window Elements

For explanations of the main window elements:

- Menu commands, see section [3.1](#)
- Toolbar buttons, see section [3.2](#)
- Status section, see section [3.2](#)
- EDID definition tabs and parameters, see section [3.4](#)
- CEA extension tabs and parameters, see section [3.5](#)
- Online status, see section [3.6](#)

3.1 Menu Commands

[Table 1](#) describes the menu items of the EDID Designer.







Table 1: EDID Designer Menu Items

Menu	Item	Description
File	Connect	Connects or disconnects the device
	New EDID	Creates a new EDID
	Open EDID	Opens an existing EDID
	Save EDID	Saves the current EDID
	Save EDID as...	Saves the current EDID with a different name or to a new location on disk
	Exit	Closes the EDID Designer
Command	Load EDID from port	Loads the EDID from the Selected EDID Input Port
	Download EDID to port	Loads EDID to the Input EDID Source
View	Edit EDID	Select read only/modify
	Byte Viewer	Displays the Byte Viewer window (see Figure 5)
	Select Device	Selects the Other device or VA-2H
Help	About	Describes the SW version of the EDID Designer

3.2 Toolbar Buttons

[Table 2](#) describes the toolbar buttons of the EDID Designer.

Table 2: EDID Designer Toolbar Buttons

Button	Description
	Creates a new EDID for editing
	Opens an existing EDID from the disk
	Saves the current EDID to the disk
	Displays the Byte Viewer window to edit the hex codes (see Figure 5)
	Toggles Read-only/Modify, to disallow or allow editing of the EDID
	Connects or disconnects the communication link to the computer. When connecting to a device you are prompted for the connection parameters (see Figure 6)

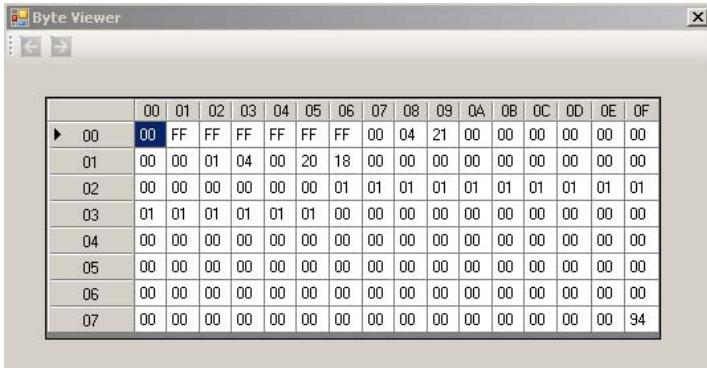


Figure 5: Byte Viewer Display

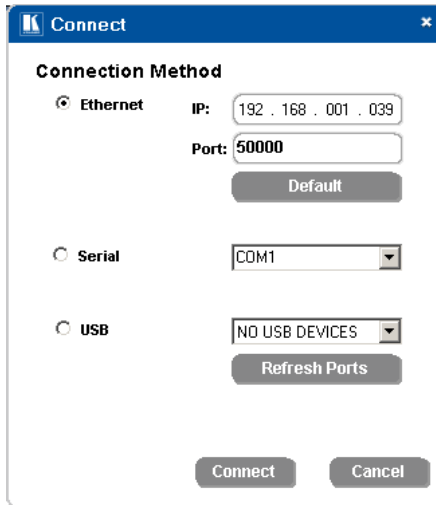


Figure 6: Connection Method Display

3.3 Status Section

[Table 3](#) describes the status section of the EDID Designer.

Table 3: EDID Designer Status Section

Field	Description
Device Status	Indicates if the connection has been detected or not found
Input EDID Source	Indicates the EDID source
Input Signal	Indicates if active or inactive
Selected EDID Input Port	Chooses the active EDID input port
Firmware Version	Indicates the version of the EDID firmware

3.4 EDID Definition Tabs and Parameters

[Table 4](#) describes the EDID definition tabs. The EDID parameters shown for each tab are only illustrated in [Figure 7](#) to [Figure 12](#).

For full information about the EDID definitions found in the EDID parameter sections, refer to the VESA Enhanced Extended Display Identification Data Standard¹.

Table 4: EDID Definition Tabs

Tab	Description	See
General	Contains general definitions about the display and its EDID	Figure 7
Display	Contains detailed definitions of the video input and the image size	Figure 8
Color	Contains detailed definitions of color support	Figure 9
Established Timing	Contains detailed definitions of resolution and timing	Figure 10
Standard Timing	Allows the user to define 8 preset timing schemes	Figure 11
Detailed Timing	Allows the user to define detailed timing schemes	Figure 12

¹ Available from www.vesa.org

General | Display | Color | Established Timing | Standard Timing | Detailed Timing

Manufacturer/ Product

Manufacturer Name:

Product Code:

Serial Number:

Manufacture Week:

Manufacture Year:

EDID Version and Revision

Version:

Revision:

EDID Checksum

8-Bit Checksum:

Extension Block Count

Number of Extensions:

View CEA Extension no.:

Figure 7: EDID Designer – General Tab

General | Display | Color | Established Timing | Standard Timing | Detailed Timing

Video Input Definition

Analog

Signal Level Standard

0.700,0.300

0.714,0.286

1.000,0.400

0.700,0.000

Setup expected

Synchronization Types

Seperate Syncs

Composite Sync

Sync on green video

Serration of Vsync Required for Composite or Sync on Green

Digital

Color Bits:

Interface:

Image Size

Max. Horiz. Size (cm):

Max. Vert. Size (cm):

Diagonal 15.75 inch

Figure 8: EDID Designer – Display Tab

Using the EDID Designer

General | Display | **Color** | Established Timing | Standard Timing | Detailed Timing

Feature Support

- Standby Mode
- Suspend Mode
- Active Off = Very Low Power

Display Type

- Monochrome or Grayscale
- RGB Color
- Non-RGB Color
- Undefined

- sRGB Standard
- Preferred timing mode
- Display is Continuous Frequency

Chromaticity and Default White Point

Red x:

Red y:

Green x:

Green y:

Blue x:

Blue y:

White x:

White y:

Display Transfer Characteristics

Gamma Value:

Figure 9: EDID Designer – Color Tab

General | Display | Color | **Established Timing** | Standard Timing | Detailed Timing

Established Timing

- 720 x 400 @ 70 Hz [IBM, VGA]
- 720 x 400 @ 88 Hz [IBM, XGA2]
- 640 x 480 @ 60 Hz [IBP, VGA]
- 640 x 480 @ 67 Hz [Apple, MacII]
- 640 x 480 @ 72 Hz [VESA]
- 640 x 480 @ 75 Hz [VESA]
- 800 x 600 @ 56 Hz [VESA]
- 800 x 600 @ 60 Hz [VESA]
- 800 x 600 @ 72 Hz [VESA]
- 800 x 600 @ 75 Hz [VESA]
- 832 x 624 @ 75 Hz [Apple, MacII]
- 1024 x 768 @ 87 Hz [I] [IBM]
- 1024 x 768 @ 60 Hz [VESA]
- 1024 x 768 @ 70 Hz [VESA]
- 1024 x 768 @ 75 Hz [VESA]
- 1280 x 1024 @ 75 Hz [VESA]
- 1152 x 870 @ 75 Hz [Apple, MacII]

Figure 10: EDID Designer – Established Timing Tab

Using the EDID Designer

General | Display | Color | Established Timing | Standard Timing | Detailed Timing

Timing ID# 1

Used

H. Active Pixels:

Refresh:

Aspect Ratio

16:10

4:3

5:4

16:9

Timing ID# 3

Used

H. Active Pixels:

Refresh:

Aspect Ratio

16:10

4:3

5:4

16:9

Timing ID# 2

Used

H. Active Pixels:

Refresh:

Aspect Ratio

16:10

4:3

5:4

16:9

Timing ID# 4

Used

H. Active Pixels:

Refresh:

Aspect Ratio

16:10

4:3

5:4

16:9

View Standard Timing IDs: 1-4 5-8

Figure 11: EDID Designer – Standard Timing Tab

General | Display | Color | Established Timing | Standard Timing | Detailed Timing

Descriptor Block

Block 1 Block 3

Block 2 Block 4

Descriptor Block Type

Timing

Display

Block #1

Preferred Timing at 0Hz

Pixel Clk: Interlace

H Active pxl: V Active Lines:

Total H Blank: Total V Blank:

H Front Porch: V Front Porch:

H Sync Width: V Sync Width:

H Image Size: V Image Size:

H Border: V Border:

Stereo Display

None (Normal) 2 Ways, R on Even

FS, R on Sync 2 Ways, L on Even

FS, L on Sync Side by Side

4 Ways

Sync Scheme

Analog Sync on RGB

Analog Bipolar Serrations

Digital Composite V Polarity(+)

Digital Separate H Polarity(+)

Figure 12: EDID Designer – Detailed Timing Tab

3.5 CEA Extension Tabs and Parameters

[Table 5](#) describes the CEA extension tabs. The parameters shown for each tab are illustrated in [Figure 14](#) to [Figure 19](#).

Table 5: CEA Extension Tabs

Tab	Description	See
Header	Contains general definitions about the display and its EDID	Figure 14
Video	Contains detailed definitions of the resolution and aspect ratio	Figure 15
Audio	Contains detailed definitions of audio parameters	Figure 16
Speakers	Contains detailed definitions of installed speakers	Figure 17
Vendor	Contains vendor specific settings	Figure 18
Detailed Timing	Contains detailed definitions of timing, stereo display and the sync scheme	Figure 19

To view the CEA Extensions:

1. On the *General* tab, enter a value in the *Number of Extensions* field and click **Add CEA Ext.**:

Extension Block Count

Number of Extensions:

View CEA Extension no.:

Add CEA Ext.

Figure 13: EDID Designer – General Tab - Extension Block Count

2. Click the **CEA Ext** tab to display all the extensions and the *CEA Ext Header* tab:

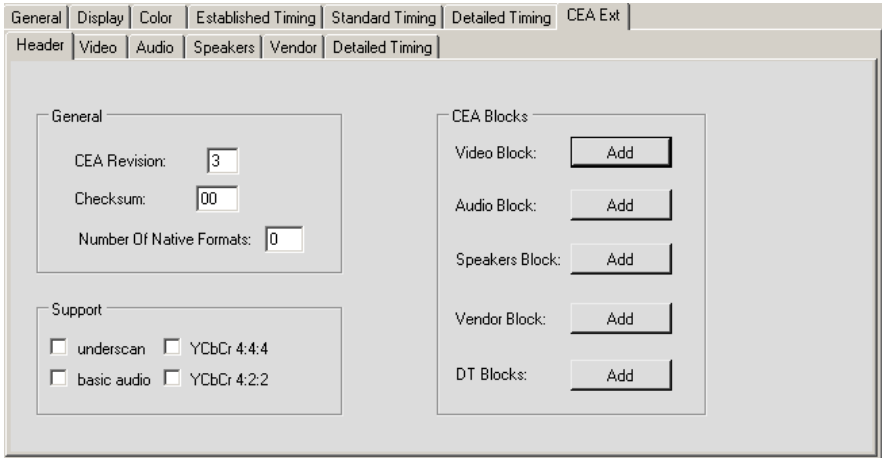


Figure 14: EDID Designer – CEA Ext Header Tab

3. Click **Add** in any of the CEA blocks to activate the contents of each tab.

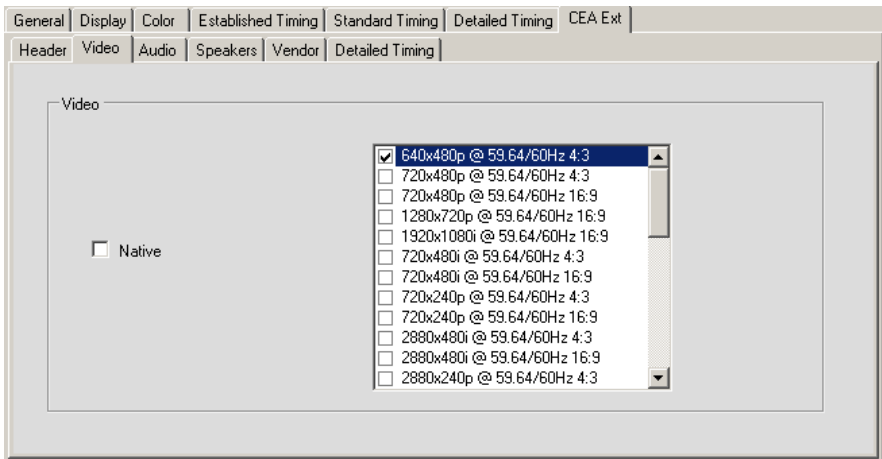


Figure 15: EDID Designer – CEA Ext Video Header Tab

Using the EDID Designer

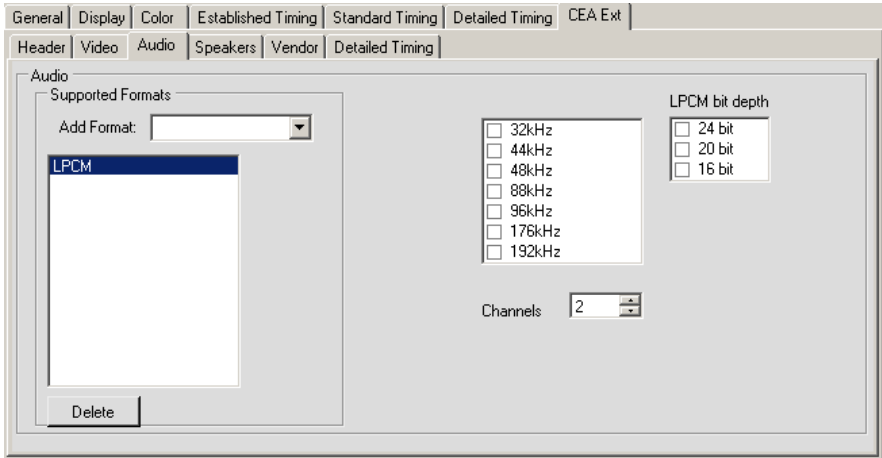


Figure 16: EDID Designer – CEA Ext Audio Tab

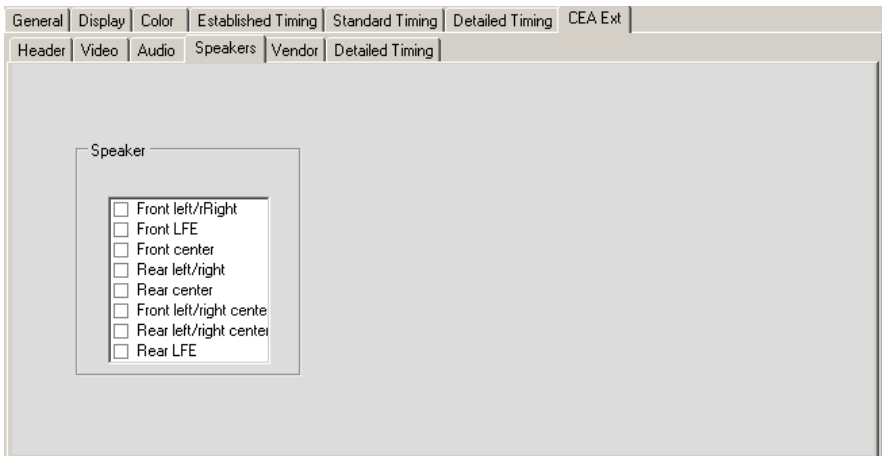


Figure 17: EDID Designer – CEA Ext Speakers Tab

Using the EDID Designer

General | Display | Color | Established Timing | Standard Timing | Detailed Timing | CEA Ext

Header | Video | Audio | Speakers | Vendor | Detailed Timing

Vendor

IEEE registration number:

CEC physical address:

Max TDMS clock: MHz

HDMI Present

3D Present

3D Multi Present

- dual-link DVI
- YCbCr 4:4:4
- 30bpp
- 36bpp
- 48bpp
- AI (ACP/ISRC)
- Frame Packing
- Field Alternative
- Line Alternative
- Side-by-Side (full)
- L+Depth
- L+Depth+Graphics
- Top-and-Bottom
- Side-by-Side(Half) with horizontal sub-sampling
- Side-by-Side(Half) with all quincunx sub-sampling

Figure 18: EDID Designer – CEA Ext Vendor Tab

General | Display | Color | Established Timing | Standard Timing | Detailed Timing | CEA Ext

Header | Video | Audio | Speakers | Vendor | Detailed Timing

Descriptor Block

Add DT Block

Timing

at 0Hz: Pixl Clk: Interface

H Active pxl: V Active Lines:

Total H Blank: Total V Blank:

H Front Porch: V Front Porch:

H Sync Width: V Sync Width:

H Image Size: V Image Size:

H Border: V Border:

Stereo Display

None (Normal) 2 Ways, R on Even

FS, R on Sync 2 Ways, L on Even

FS, L on Sync Side by Side

4 Ways

Sync Scheme

Analog Sync on RGB

Analog Bipolar Serrations

Digital Composite V Polarity(+)

Digital Separate H Polarity(+)

Figure 19: EDID Designer – CEA Ext Detailed Timing Tab

3.6 Online Status

The online status indicates whether the device is *Online* and available for downloading, uploading or operation or is *Offline*.