

MIS V6.40 Service Pack 2 FAQ 072302

Instructions for Adding and Changing External Clock Speeds

The following instructions are to assist you in adding a new external mastering speed for DVD and CD, or simply to rename an existing external clock speed. In order to assign or change an external mastering speed, you must first have an auxiliary clock board (AUX) board installed in your MIS V6 system. Internal clock speeds are speeds coming from the encoder board and cannot be changed. Refer to chapter 8 of the MIS V6.40 Service Pack 2 manual for additional information on auxiliary clock board and cabling diagrams.

To ensure that the EFM speed selection is an external speed from the auxiliary clock board, you can confirm the names by looking in DCAConfig under the tab - DCA EXTERNAL CLOCK. In this tab, you will see an External Clock Key Name field that contains a drop-down menu. Selecting an entry in the External Clock Key Name field will then indicate the Mastering Speed Name on this same tab. This entry for Mastering Speed Name should then appear on the MISV6 user interface as an optional EFM Speed that can be selected by the user for mastering.

For Your Information:

The DCA EXTERNAL CLOCK tab deals only with external clock mastering speeds and not internal clock mastering speeds from the encoder.

The external clock speed name that gets displayed in the MIS main user screen will have a frequency value associated with it and sometimes an R speed value. An internal clock speed name from the encoder never has an actual frequency value, unless this has been manually changed to reflect a frequency value.

For DVD, the following are examples of internal and external clock speed names.

- ◆ 1R (26.16) is an external speed from the AUXCLK board
- ◆ 34.5744M is an external speed from the AUXCLK board
- ◆ 1R is an internal speed from the encoder board
- ◆ 1-1/3R is an internal speed from the encoder board

For CD, the following are examples of internal and external clock speed names.

- ◆ 1X CD is an external speed from the AUXCLK board
- ◆ 1.00 is an internal speed from the encoder board

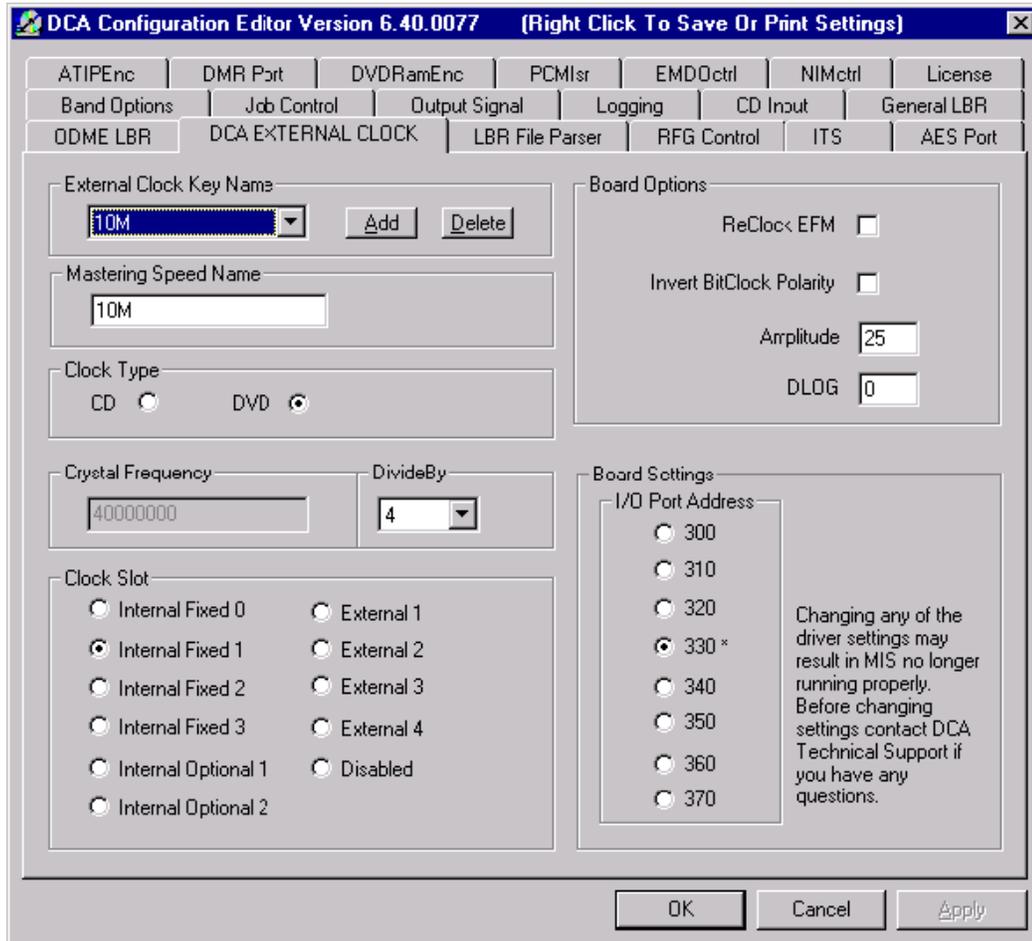
Again, it is best to confirm the external speed names as described above before you start mastering with the selected speed. *Refer to page 88 in the MIS V6.40 SP2 manual for additional information.*

Tip:

If you are cutting CD and/or DVD in a MIS V6.40 system with the clock board installed you should suppress all "internal clock speeds". However, if you are cutting CD-R, you must use an internal clock speed.

Adding an External Clock Speed

1. Open the **DCA Configuration Editor** and select the **DCA External Clock** tab as shown below.



2. Next, click the **Add** button in the **External Clock Key Name** field and the following dialog box will open. In the **New Clock Entry** dialog box, enter a unique name for the new external clock speed and click **OK**.



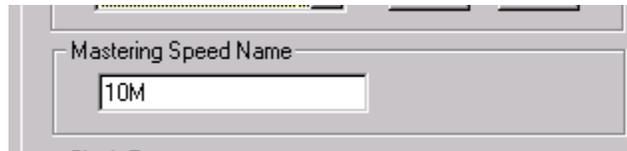
3. In the **External Clock Key Name** dialog box, click the drop-down menu button and select the new entry from the list that you just added.



For You Information:

External Clock Key Name is used internally by MIS and does not appear anywhere on the MIS main user screen. Click the down arrow to the right of the text box to see all the defined speeds

4. In the **Mastering Speed Name** box, enter the name of the external clock speed, as you want it to show up in the MIS main user screen.



For Your Information

As indicated above, you need to add the name of the external clock speed that you want to see in the MIS main menu. Note: The space for the Mastering Speed Name is limited to a maximum of 9 characters. Also you should rename the external clocks speeds to include the characters "EXT" in their mastering speed name to clearly identify external and internal mastering speeds.

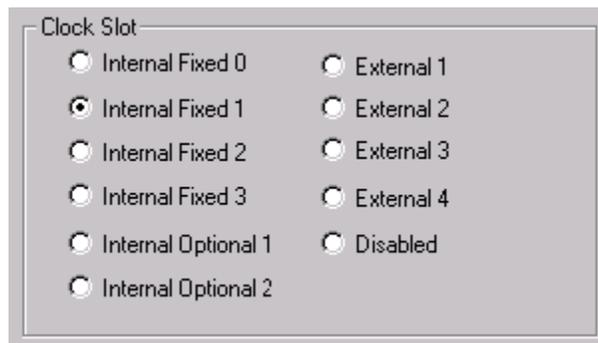
- In the **Clock Type** section of DCAConfig, select CD or DVD depending on the type of cut this new mastering speed will be used for.



Clock Type

CD DVD

- In the **Clock Slot** section of DCAConfig choose one of the 'internal fixed' clock slots to obtain the base frequency.



Clock Slot

Internal Fixed 0 External 1

Internal Fixed 1 External 2

Internal Fixed 2 External 3

Internal Fixed 3 External 4

Internal Optional 1 Disabled

Internal Optional 2

For Your Information:

When selecting one of the internal fixed clock slots, you must use a slot that is designated by MIS. Refer to the table on page 6 that defines the DVD and CD mastering speeds and associated clock slot.

- In the **DivideBy** section DCAConfig select the appropriate divisor to obtain the final desired frequency.



DivideBy

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For Your Information:

When selecting one of the internal fixed clock slots, you must use a slot that is designated by MIS. Refer to the table on page 6 that defines the DVD and CD mastering speeds and associated DivideBy option.

- Click **Apply** to save changes.



The Innovation Continues!

9. Exit out of DCAConfig.

For Your Information:

You cannot rename or edit the internal mastering clock speed names in any way, as the encoder board generates these speeds. If you have any questions with adding a new or changing an existing External Clock Speed, please contact DCA Technical Support.

DVD and CD Default External Mastering Speeds

The following are default external mastering speed that are displayed in the EFM Speed text box on the MIS user interface screen for both DVD and CD. If you wish to use one of the following speeds, you must have an auxiliary clock board installed in your system. Refer to page 88 in the MIS V6.40 SP2 manual if you have any additional questions regarding external clock speeds.

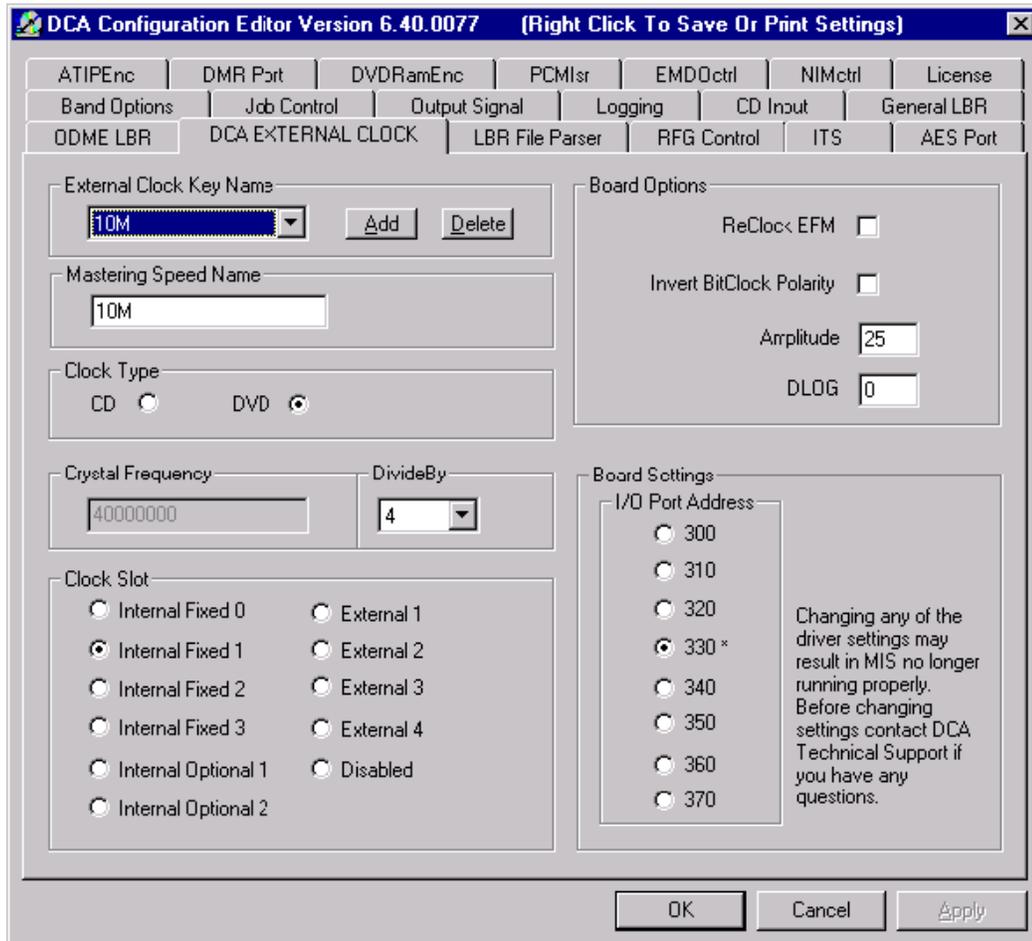
DVD Mastering Speed	Clock Slot	Divide By	Clock Speed
10M	Internal Fixed 1	4	40,000,000
17.2872M	Internal Fixed 0	2	34,574,400
1R 26.16M	Internal Fixed 3	2	52,320,000
20M	Internal Fixed 1	2	40,000,000
2R 52.32M	Internal Fixed 3	1	52,320,000
34.5744M	Internal Fixed 0	1	34,574,400
40M	Internal Fixed 1	1	40,000,000
50M	Internal Fixed 2	1	50,000,000

M = MHz

CD Mastering Speed	Clock Slot	Divide By	Clock Speed
1x (4.3218MHz)	Internal Fixed 0	8	34,574,400
2x (8.6436 MHz)	Internal Fixed 0	4	34,574,400
3x (13.0800 MHz)	Internal Fixed 3	4	52,320,000
4x (17.2872 MHz)	Internal Fixed 0	2	34,574,000
6x (26.1600 MHz)	Internal Fixed 3	2	52,320,000
8x (34.5740 MHz)	Internal Fixed 0	1	34,574,000

Changing the Mastering Speed Name for an External Clock Speed

1. Open the **DCA Configuration Editor** and select the **DCA External Clock** tab as shown below.



2. Next, in the **External Clock Key Name** field, click the drop-down menu button and highlight the current mastering speed that you want to rename.



3. In the **Mastering Speed Name** box, rename the current external mastering speed to name of the external clock speed, as you want it to show up in the MIS main user screen.



For Your Information

As indicated above, you need to add the name of the external clock speed that you want to see in the MIS main menu. Note: The space for the Mastering Speed Name is limited to a maximum of 9 characters. Also you should rename the external clocks speeds to include the characters "EXT" in their mastering speed name to clearly identify

4. Click **Apply** button to save changes.
5. Exit out of DCAConfig.

For Your Information:

You cannot rename or edit the internal mastering clock speed names in any way, as the encoder board generates these speeds. If you have any questions with adding a new or changing an existing External Clock Speed, please contact DCA Technical Support.