



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.*



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Adding an External Clock Speed

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

🏖 DCA Configuration Editor	Version 6.40.0077 (F	Right Click To Save Or P	rint Settings) 🛛 🗙
ATIPEnc DMR Port Band Options Job C ODME LBR DCA EXT	DVDRamEnc F ontrol Output Signal ERNAL CLOCK LBR Fil	PCMIsr EMDOctrl Logging CD Ir e Parser RFG Control	NIMctrl License) nout General LBR 1 ITS AES Port
External Clock Key Name	Add <u>D</u> elete	Board Options ReCloce Invert BitClock	c< EFM
Clock Type CD C DVD	•	Ar	rplitude 25 DLOG 0
Crystal Frequency 40000000	DivideBy	Board Sottings I/O Port Address C 300	
Clock Slot C Internal Fixed 0 C Internal Fixed 1 C Internal Fixed 2	C External 1 C External 2 C External 3	© 320 © 330 * © 340	Changing any of the driver settings may result in MIS no longer running property.
C Internal Fixed 3 C Internal Optional 1 C Internal Optional 2	C External 4 C Disabled	C 350 C 360 C 370	Before changing settings contact DCA Technical Support if you have any questions.
		ОК	Cancel Apply

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**.

	New Clock Entry	
	Key Name	
	<u>OK</u>	
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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.

External Clock Key Name	
10M	<u>A</u> dd <u>D</u> elete

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.

Marketing Council Marca		
– Mastering Speed Name		
104	1	

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.

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5. 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.



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



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.

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



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.

8. Click Apply to save changes.

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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.

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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

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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.

👌 DCA Configuration Editor	Version 6.40.0077	(Right Cl	ick To Save Or I	Print Settings]	×
ATIPEnc DMR Port Band Options Job C ODME LBR DCA EXT	DVDRamEnc iontrol Output Signal ERNAL CLOCK LBR F	PCMIsr L File Parser	EMDOctrl ogging CD RFG Control	NIMetri Input Ge ITS	License eneral LBR AES Port
External Clock Key Name 10M Mastering Speed Name 10M	Add <u>D</u> elete	B	oard Options ReCk Invert BitClock A	oc< EFM 🗖 Polarity 🗖	_
CD O DVD	•			DLOG O	
Crystal Frequency 40000000	DivideBy	B	oard Sottings 1/0 Port Address 0 300		
Clock Slot C Internal Fixed 0 C Internal Fixed 1	C External 1 C External 2		○ 310 ○ 320 ○ 330 ×	Changing an driver setting result in MIS	y of the Is may
C Internal Fixed 2 C Internal Fixed 3	C External 3 C External 4		 340 350 360 	running prop Before chan settings cont Technical St	erly. ging act DCA upport if
C Internal Optional 1			C 370	you have an questions.	y
			ОК	Cancel	Apply

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.



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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.

- Mastering Speed Name		
	1	
IUM		

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.

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