# **External Device Control with Adobe Premiere PRO**

The MC-20PRO may be connected to one or several FutureVideo MC-100 Device controllers, allowing direct control of up to 16 external VTRs and ATRs (See FutureVideo Equipment Compatibility Chart). This direct hardware connection provides for more responsive and precise control of the external "decks" than usually can be provided by software only control of external devices, or where such control is not provided in the application software program. With the MC-100 Editlink option used, the MC-20PRO keys and jog/shuttle may be assigned to control the transport functions of these "decks". These include selecting the "deck" to be controlled, and various transport control commands such as Stop, Play, FF, RW, Jog, Shuttle, Record, etc. (see the pull-down list of commands when choosing MC-100 device control in the KeyAssigner software).

An ideal application for this is to be able to capture video and audio from multiple sources with appropriate capture hardware. In many applications, a transcoder (analog to firewire converter) may be used to bring analog video into your NLE's capture software program and the device control is done by the MC-20PRO Editlink to the MC-100's. In decks which have both firewire output and RS-422A, LANC, Control-M, or RS-232C control, a transcoder would not be necessary. We will show a typical application of a setup in section 7.2 using Adobe's Premiere's PRO 2 NLE capture mode.

Other uses for external device control may include synchronizing of multiple tapes for playback and recording by using the "Group" function in the MC-100 device controller command.

Included on the KeyAssigner CD are several NLE keymap files (.jst) and templates (.dot), in which the MC-100 device control commands have been pre-defined for the Log/Capture mode. Selecting the "Shifted" key set (a.k.a. VTR A/B select button) will enable this mode. The MC-20PRO Shift key is the round button directly above the Jog/shuttle dials. When the shifted key set is used, the red LED above the Jog/Shuttle dial will turn on. This means the transport command keys (the five large buttons and the left and right round buttons) now may control the external device – depending on how the mapping has been defined.

# Connecting the MC-20PRO to the MC-100 Device Controller

In order to operate and control the external devices, connect the **MC-20PRO** Editlink<sup>®</sup> port to the **MC-100's** RS-232C input using the FV0072 cable (supplied with the MC-100) as follows:



When using the MC-100 controller, ensure the "Slave" mode switch that is behind the panel of the MC-100 is set towards the right. MC-100 units that have a "Slave" label on the bottom (that were ordered as "slave" units) have this switch pre-set to this position by the factory.

*Note: Apply power to the MC-100 units before plugging the FV0072 cable into the MC-20PRO Editlink port.* 

### **Application with Adobe Premiere PRO 2**

With the purchase of the MC-100, a device control plug-in is provided to interface with Premiere PRO's Capture and Output to Tape (print-to-tape) modes. This allows for capture and control of the external devices via the MC-20PRO.

### **Installation Setup**

 Copy X-fvdrvx.prm found on the MC-100 Installation CD/Disk to the "program files\Adobe\Premiere Pro\plug-ins" directory.
 Ensure FutureVideo KeyAssigner software program is not running.
 Ensure the MC-20PRO is plugged into the computer's USB port & is powered.
 Ensure the MC-100 is plugged into the MC-20PRO Editlink port & is powered.
 Ensure the VTR is plugged into the MC-100 and is in remote mode & is powered.
 Start Adobe Premiere Pro 2 and bring up Capture Window (use F5 or press the Log/Capture button on the MC-20PRO) 8. Select the Settings tab in the Capture window:

😫 Adobe Premiere Pro - C:\Documents and Settings\Owner\My Bocuments\Adobe\Premiere Pro\7,0\test3pro2,prproj					
File Edit Project Clip Sequence Marker Title 1	Window Help				
Project: test3pro2.prproj × •	Source: (on close) * Effect Controls Audio Mixer: Sequence 01	Provram: Servience 01 ×			
	Manhun A				
20	Stopped.	Logging Settings	CONTRACTOR CONTRACTOR		
>		Capture Settings	655 m		
E test3pro2.proroi 8.ltems		Capture Format	So and a second se		
Name V Label		DV/IEEE 1394 Capture	and the second se		
Untitled Clip 01.avi					
Untitled Clip 01 4.avi					
Untitled Clip 01 3.avi					
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Is Untitled Cip 01 1 avi		Loc.			
U Sequence 01		Capture Locations			
Tel depieleDele Vault and		Video: Same as Project * Browse	Fit v 00;00;33;24 0		
		Path: C:\Documents and Settings\Owner\\7.0	38 00;06;24;12 00;08;32;16 00;10		
		17.5 GB Available	I ▶ I▶ → Ċ ⊕ ℜ.		
		Audio: Same as Project * Browse			
		Path: C:\Documents and Settings\Owner\\7.0			
Into A History Effects		17.5 G8 Available			
			00;00;40;00 00;00;48;00		
		Device Control			
		None	▲ II ==		
		DV/HDV Device Control	-12		
Cursor: 00;00;38;00		Serial Device Control			
		Prerol Time: Futurevideo Media Commander			
		Timecode Offset: 0 frames	V k (***		
		Abort capture on dropped frames	A 19 숙		
	▼ <u>00:00:00:00</u> { <u>00:00:00</u> <u>00:00:00</u> } <u>00:00:00</u> }				
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9. Under Device Control, click on Device list box and a choice

for

"FutureVideo Media Commander" should appear. (If it does not, please check that the "x-fvdrvx.prm" file was copied to the Premiere plug-ins directory). The device control will now be set to FutureVideo Media Commander as shown below when properly configured:

Capture ×	
Paused	Logging Settings
	Capture Settings
	Capture Format DV Capture
	Edit
	Capture Locations
	Video: Same as Project  Browse
	Path: C:\Documents and Settings\Owner\\7.0
	16.9 GB Available
	Audio: Same as Project   Browse
	Path: C:\Documents and Settings\Owner\\7.0
	16.9 GB Available
	Device Control
	Device: FutureVideo Media Command
	Current Device:
	Prerol Time: 5 seconds
	Timecode Offset: -4 frames
	Abort capture on dropped frames
V00.09.10.00 1 00.08:45:00 00.09:00.20 F 00:00:17:21 G	

10. Set the  $\ensuremath{\text{Preroll Time}}$  to 5 seconds and the  $\ensuremath{\text{Timecode Offset}}$  to -4 frames.

11. Click on **Options**... to bring up the following window (values may be different for your setup):

FutureVideo Controller Setup V1.6				
Controller Version MTC1.04LR02	Transport	evice Code 4		
Com 1 Com 3 Device Drive		evice Driver		
System Frame Rate	Capture Preroll 5			
⊙ 30 fps   ○ 25 fps	⊙ Off ○ On	Reset Counter		
29.97 fps 24 fps	O Auto	Calibrate		
OK Connect Disconnect Cancel				

- Choose the **COM port** that keyAssigner uses by checking under Windows's Device Manager "LPT & COM ports" to see which one has been assigned if you don't recall.
- Select System Frame rate appropriate to the system in use
- Select **Transport** 1. If using multiple MC-100's select desired one.
- Set **Device Code** and **Device Driver** according the FutureVideo Equipment Compatibility Chart provided with the MC-100. (If the VTR does not have an RS-232C control interface, then it does not matter which device driver is used. Otherwise enter in just the numeric value of the Driver leaving out the "R".)
- Choose **Time Code** On or AUTO if time coded SMPTE tape otherwise set to OFF
- Set Capture preroll to 5 seconds

Click **Connect** and ensure the Green light on the MC-100 lights and the Version # appears in the Version field as **MTC1.04LRxx**.

12. Click **OK**. If everything is working, you will see the following message and press the Continue button:

FutureVideo
Controller active.
Continue

Press the Mode button on the **MC-20PRO** labeled as **Log/Capture** and press the **VTR A/B Select** button to enable operation of the external deck (Shift LED is on).

In certain key maps (such as VCRControl.jst), a full set of deck controls have been defined including the Jog/Shuttle assignments in the "DECK" mode.

# Export to Tape with Device Control Setup

When you click on the File... Export...Export to Tape, the following window will appear:

Export to Tape				
C Device Control				
Activate Recording Device				
Assemble at timecode: 00;00;10;00				
Delay movie start by 0 frames				
Preroll 30	frames			
Options				
Abort after 1 dropped frames				
✓ <u>R</u> eport dropped frames				
Render audio before export				
Export Status				
Dropped frames:	0			
Status:	Ready			
Start Timecode:	00;00;43;02			
End Timecode:	00;00;52;07			
Current Timecode:	00;00;43;02			
C	Record Cancel			

Check the box "Activate Recording Device" and set the Preroll to 30 frames (you may have to experiment with this value depending on the equipment you are using).