

Avid DV Xpress Power Up

Our Avid DV Xpress system consists of the following items: 1) IBM PIII 733 MHZ Intellistation with 256 MB RAM; 2) Two Medea 4/120 GB Drives; 3) Sony Analog-DV Transcoder; 4) Sony 14" NTSC Monitor; 5) two IBM Trinitron 21" Monitors (*Left & Right*); 6) Mackie 1402 Audio Mixer; 7) two Roland Power Speakers (*Left & Right*); 8) Yamaha CD Writer; and 9) Sony UVW-1800 Beta Deck.

Underneath the Table

1. Turn on the white **Power Strip** underneath table. This will activate both **MEDEA DRIVES**. (*Green & Blue Lights come on drives*). Wait for the Medea Drive lights to stop blinking before turning on PC. **NEVER TOUCH THE MEDEA DRIVES !!!**
2. Turn on **INTELLISTATION TOWER** by pressing the **black plastic button** on the top right corner of tower. (*Green Light comes on.....It will now take about 2 minutes for the PC to boot up, so while you're waiting*).

On the Table Top

3. Power on both IBM 27" Monitors by pressing in each large black button at far right of each monitor.
4. Power on the silver Sony **Transcoder Box** to right of mixer and punch in "**DV IN**". (*Green light on*).
5. Power on the Sony 14" **NTSC Monitor** and switch the Video Input to "**A**" for "**Avid**". ("*B is for Beta*").
6. Power on **Audio Mixer** by flicking up the **black** larger toggle switch at right rear of mixer. (*Red Power Light on*).
7. Power on **Roland Speakers** by pushing in "**Power**" button on the right side speaker. (*Red light on*).
8. On the right speaker, put: MIC = turned off at 6 o'clock BASS = 12 o'clock TREBLE = 2 o'clock VOLUME = 10 o'clock

TO BOOT UP AVID SOFTWARE

1. Press **Ctrl + Alt + Del** on keyboard to boot up. (*Drag window over from center of screen to read*).
 2. Click "**OK**" on gray window. (*Drag window over from center of screen to read*).
 3. Click "**OK**" on LOGON Window. (No Password) (*Drag window over from center of screen to read*).
- [It will now take approximately 1 minute for the Avid Software to go through its setup procedure and checks, so while you're waiting, go ahead and use the time to normalize the Mackie Audio Mixer]

NORMALIZE MACKIE 1402 AUDIO MIXER

1. Make sure Red Power Light is on. Make sure Gray Button at the center rear of the mixer is punched out with white stripe showing.
2. Starting at the top of the mixer, punch out all six **GRAY LOW CUT** buttons. (*Highest profile position*).
3. Turn the first four **BLACK TRIM POTS** left to the "**U**" (Unity) position.
4. Turn the two **BLACK TRIM POTS** for **CH #5** and **CH #6** straight up to 12 o'clock.
5. Turn all **BLACK AUX** and **EFX POTS** all the way left (Off).
6. Turn all **BLUE EQ POTS** straight up to the "**U**" (Flat) position. (*No EQ*).
7. Punch out all **GRAY MUTE** buttons. (*Up position*)
8. Punch out all ten **GRAY SOLO** buttons (Solo Off). (*Up position*).
9. Turn all dark gray **PAN POTS** straight up for a Mono Mix of the Avid's audio playback, EXCEPT FOR:
10. Turn the **PAN POT** for **Channel #3** all the way **LEFT** for assignment to Audio Channel 1 on the Avid.
11. Turn the **PAN POT** for **Channel #4** all the way **RIGHT** for assignment to Audio Channel 2 on the Avid.
12. Bring up **Channel #1** and **Channel #2** **WHITE FADERS** to "**U**" on the fader level. (ANALOG FADERS)
13. Bring up **Channel #5** and **Channel #6** **WHITE FADERS** to "**U**" on the fader level. (DV FADERS)
14. Dead pot all other **WHITE FADERS** (Off).
15. Bring up **WHITE MONITOR FADER** to around "**20**" on the fader level. (*Adjustable Listening Level*).
16. Bring up both **MAIN MIX MASTER FADERS** to the "**U**" (Unity) position.
17. Under the Source Main Mix Section, punch in the gray **MAIN MIX** button and the gray **ALT 3-4** button. (*Make sure all other Gray Buttons in this section are punched out to the "OFF" position*).

Starting A New Project

1. Once the Avid DV has completed its 1-minute setup procedure, the **Avid Users/Projects Window** will appear in the center of the right IBM Monitor.
2. All students must first be assigned a "USER NAME" by the instructor. DO NOT TYPE IN A NAME UNTIL YOU HAVE BEEN ASSIGNED A NAME BY THE INSTRUCTOR!!! If you have been assigned a user name, click on "**NEW USER**" and type in your assigned name exactly the way you have been instructed on the menu and click the "**OK**" button inside the window.
3. To name your new project, click on "**NEW PROJECT**" and delete the existing words. ONLY USE YOUR ASSIGNED USER NAME and the following production codes: **VID** for "Videographic" and **PSA** for "Public Service Announcement". As such, Paul's PSA would be "**Paul_PSA**" and Joan's Videographic would be "**Joan_VID**". USE ONLY THESE LABELS FOR ALL AVID PROJECTS!!!!!!
4. With your User Name and Project Title both highlighted, click "**OK**" to start your project.
5. Place your **MAIN PROJECT BIN** in the top left corner of the Right IBM Monitor.

You will now want to create the following bins by clicking on the "NEW" button inside the Main Project Bin:

6. Create a bin entitled "**SOURCE**" to store your audio and video source clips.
7. Create a bin entitled "**TITLES**" to store your CG titles and graphics.
8. Create a bin entitled "**SEQUENCE**" to store your edited master sequences for the project.

Position your Avid screens, bins, and tools in the following manner on the two 27" IBM Monitors:

9. Place your **COMPOSER SCREEN** on the left side of the Left IBM Monitor.
10. Place your **TIMELINE** below the COMPOSER SCREEN on the Left IBM Monitor.
11. Place your **SOURCE SCREEN** to the right of the COMPOSER SCREEN on the Left IBM Monitor.
12. On the Right IBM Monitor, place **Main Project Bin, Sequence, Titles and VU Meter** on left side and **Source Bin** on right side.
13. You are now ready to start importing your source footage (*audio and video clips*) into your Source Bin.

Continuing An Existing Project

If you are continuing with an existing project on the Avid, simply follow the procedure below to call your project back on the monitor screens. (*If you are working on a new project, follow the procedure listed above*).

1. Under **AVID USERS**, highlight your name in black.
2. Under **AVID PROJECTS**, highlight your project name in black.
3. Click on "**OK**" to open your existing project. (*Your Project Bins and Timeline will come up on both IBM Monitors exactly the way you last worked on the project*).
4. To Exit Your Project, click on the gray "**X**" square at the top right corner of the **MAIN PROJECT BIN** on the Right IBM Monitor. (*The Avid Users/Projects Window will appear*).
5. To Re-enter or Go To Another Project, just select the "User Name" and Project Name" you want on the Avid Users/Projects Window and click "OK".

Importing / Digitizing Source Footage Clips

Normalize the Beta Deck :

1. Switch to "REMOTE".
2. "LTC" (Longitudinal Time Code).
3. "S-VIDEO" (Y,R,B Component Video is not available on this Sony Transcoder).
4. "INT" (Internal Time Code generation).
5. Character "OFF" (No Window Dub).
6. Power On.
7. DO NOT insert the Source Tape into Beta Deck at this time, *but make sure that the Tape is "Rec Inhibited" to prevent erasure.*

On the Audio Mixer (make sure mixer is properly normalized)

8. Dead pot **CH #1** and **CH #2 WHITE FADERS** as well as **CH #5** and **CH #6 WHITE DV FADERS**.
9. Bring up **Channel #3** and **Channel #4 WHITE FADERS** to around "10" with a split pan (Channel #3 panned all the way left and Channel #4 panned all the way right).
10. For a VU Meter, click on **TOOLS** on the Left IBM Monitor, and select "**AUDIO TOOL**". (This gives you a VU Meter to set the proper audio level when importing the audio from Beta Tape into the Avid).
11. The Audio Tool will appear on the Composer Screen, so click down inside its top lavender section and move the entire tool over to the left bottom corner of the Right IBM Monitor.

Power On Sony Transcoder Box - hold down "ANALOG IN" button long enough for it to light up "red" for digital conversion.

On Left IBM Monitor

12. Click on **TOOLS** at the top left of screen and select/click "**RECORD**". (If you see the gray **Tape Select Window**, simply click the "**OK**" button and the window will disappear from the screen).
13. You will now see the **Record Tool Window** on the Left IBM Monitor screen. At the top of the Record Tool Window, make your track selections (*what you want to import from your Source Tape for this particular clip*) by clicking any of these gray buttons:

V1 = Video Clips from your source tape (*turns red when on*).

A1 = Audio Channel 1 for Left Channel of Stereo Music Track of your source tape (*turns blue when on*).

A2 = Audio Channel 2 for Right Channel of Stereo Music Track of your source tape (*turns blue when on*).

A3 = Audio Channel 3 (*leave off*).

A4 = Audio Channel 4 (*leave off*).

TC = Time Code from your source tapes (*turns lavender when on*).

15. Ignore "Video: 1394" and "Audio: 1394".
16. In the middle of the Record Tool Window, the **Bin** for storing your clips is listed in the white window along with the resolution rate of "**DV 25411**". Select the bin in which you wish to store this clip. (*If you see "Generic DV Device – NTSC" listed below the transport controls, click and select "**Sony UVW-1800**" to import footage from the Sony Beta Deck*).
17. Insert your "Rec Inhibited" Source Tape into the Beta Deck. (You will now see the **Select Tape Window**. If not, you may have to activate this function by clicking on the white window that lists "**Sony UVW-1800**" and select/click "**Check Decks**"). The Tape Select Window will appear. Make sure "New Tape" is highlighted in blue. If not, highlight it, and click on "**OK**". (The Select Tape Window will disappear, but every time you insert a new source tape, you will need to go through this procedure).
18. You can now control the Beta Deck with the mouse by clicking on the **Gray Transport Controls** on the left side of the Record Tool Window. Hold down the clicker on the gray **Shuttle Square** to see if you can shuttle the tape.

Digitizing Source Footage Clips

1. Play or shuttle the source tape backward or forward up to the point you want to digitize by using the gray transport controls on the window, or **type the time code number you want** in the white **"In Point Box"** and click on the **"GO TO"** button to the right. *(The Beta Deck will search and pause at that point on the tape and will enter that number as the "In Point" for importing). (If you don't see video playing in the Composer Screen while you're importing, click on "Settings" in the Main Project Bin and scroll down to click on "Video Display". Make sure "External" and "Composite" are selected, and then click "OK").*
2. Play the tape and adjust the audio import level to around **"10"** on the mixer by using **Fader #3** and **Fader #4** to keep the audio level averaging **"0dB"** on the "Analog" right side of the **VU Meter** which is the same as **-14dB** on the "Digital" left side of the same **VU Meter**. In other words, "0dB Analog" = "-14dB Digital".
3. If you don't know the time code number of the shot you want, just play the tape and pause it at the point you wish to start importing by clicking on the gray square of the shuttle control. Check the time code number of the clip which is displayed in green numerals above the transport controls to make sure that it corresponds to the time code number on your Import List or EDL notes and script. *(Remember to import enough lead in footage and tail footage to allow for 1-second dissolves [Handles] in and out of the clip).*

For example, to import a 4-second clip with the IN Point **01;02;03;25** and the OUT Point **01;02;07;25** you should mark the "Import IN Point" at **01;02;02;25** and the OUT Point **01;02;08;25**

4. Mark an **IN POINT** by pressing the **"I"** key on the keyboard or by clicking on the **"In Point Icon"** with the mouse on the tape transport panel. *(Notice that the time code number has now been entered in the white "In Point Box" to the right).*
5. Mark an **OUT POINT** in the same manner by playing the tape and pressing the **"O"** key or clicking on the **"Out Point Icon"** at the point you wish to stop importing the clip, remembering to leave enough tail footage for 1-second dissolves out of the clip. *(Notice that the time code number has now been entered in the white "Out Point Box" and that the duration of the clip has been calculated in the box below).*
6. ~~To Digitize the Clip~~, click on the **RED SQUARE** [that has the center white dot]. *(The Beta Deck will cue up to the In Point with a preroll, and then the red square will flash as the Avid imports the clip).*
7. After the clip is finished being imported, notice in your selected **Bin** that the clip *(highlighted in black & yellow)* has now been registered with all of its relevant data.
8. To label your clip, simply highlight the text already there, and type in your own label for the clip which best describes the shot. When completed, simply press the **RETURN key** (Enter) on the keyboard. *(The clip name is now listed with its new label in the Source Bin along with its In Point, Out Point, Duration, Medea Drive, etc.).*
9. If you prefer to display your clips in the Bins in **"Picture Frame Mode"**, simply click on the **"F"** button at the bottom left. Click on **"T"** to return to **"Text Mode"**.
10. ~~To Import an "Audio Only" Clip~~, such as stereo music, activate **"A1"** or **"A2"** on the TRACK SELECTION along with **"TC"** for the Time Code, but make sure you deactivate **"V1"** *(the video track)* in order to save on media storage space. There is no reason to import the video information from an "Audio Only" clip.
11. ~~To Continue Digitizing Clips~~, simply repeat the following procedure:
 - A) Make your TRACK SELECTIONS *(what tracks you want to import from each clip)*.
 - B) Play tape and mark IN and OUT POINTS. *(Adjust audio import level using Faders #3 and #4).*
 - C) Click on the RED SQUARE to digitize.
 - D) Change label of clip in Source Bin.
12. ~~When Importing Is Completed~~, simply click on the gray "X" at the top right corner of the Record Tool Window to remove the tool.
13. Eject your Source Tape from the Beta Deck.
14. You are now ready to proceed to the editing stage.

Basics of Avid Editing

On the Left IBM Monitor, you will be working primarily with the following three screens:

- A) **COMPOSER Screen** - (the larger Record Deck screen on the left side that plays "**sequences**").
- B) **SOURCE POP-UP Screen** - (the smaller Source Deck screen on the right side that plays "**segments**").
- C) **TIMELINE** - (the graphic representation of your "edited sequence" on the bottom half of the screen).

On the Right IBM Monitor, you will be working with the following five Bin Windows and Tools:

- D) **Main Project Bin** - contains the macroscopic view of all the different bins of your project. (*Place in top left corner of Right Monitor*).
- E) **Source Bin** - contains all of your imported audio and video clips that you will use in editing. (*Place in right corner of Right Monitor*).
- F) **Sequence Bin** - contains all the edited sequences (master tapes) of your project. (*Place under Main Project Bin on Right Monitor*).
- G) **Title Bin** - contains all of the CG titles you have created for keying over the video. (*Place under Sequence Bin on Right Monitor*).
- H) **VU Meter** - for setting the gain level when importing audio clips into the project. (*Place under Title Bin on Right Monitor*).

Playing/Shuttling of Clips and Sequences on the Avid

- 1) Only "**clips**" can be played on the smaller Source Screen to the right, and only "**sequences**" (*edited masters*) can be played on the larger Composer Screen on the left.
- 2) You play clips on the Source Screen or Composer Screen by using the **transport control panel** just below the screens or by using the **keyboard commands** (*see Icons*).
- 3) You can also shuttle clips and sequences backward and forward by grabbing the **Blue Line** above the transport control panel with the mouse to shuttle the clip or sequence backward/forward at any speed. Sequences can also be shuffled to any point by simply clicking directly on that section of the Timeline.
- 4) When a clip or sequence is playing, you can pause it by clicking the **PLAY** button again, or by hitting the **SPACE BAR** on the keyboard.
- 5) Both screens can also be advanced backward or forward **one frame at a time** by using the transport control panel or keyboard.
- 6) Although the Composer Screen can be cued to the start of its sequence with one click of the mouse, the smaller Source Screen requires that you drag the blue line on the screen all the way back to the start (left) in order to cue up the clip to the start.

Marking In Points and Out Points

The Avid editing process consists primarily of marking In Points and Out Points on the Source Screen and the Composer Screen and then dropping the marked clip onto the timeline. The process is "nonlinear" because unlike tape editing, there is no fast forwarding or rewinding of a tape to search for a clip. The clip is instantly available with a click of the mouse. Once the edit (cut) is performed, you then have the option of adding a dissolve, fade, a keyed title over the video, or a variety of other transition effects. Marking of In Points and Out Points can be performed in two different ways:

- 1) Using "**I**" for **In Point** and "**O**" and **Out Point** on the **keyboard**, OR:
- 2) Clicking on the In Point and Out Point **ICONS** on the Source Deck and Composer screen **Transport Control Panels**.

Inserting Clips into the Timeline

- 1) You can insert clips into the timeline by using the letter "**B**" (**overwrite**) on the **keyboard**, OR:
- 2) **Drag and Drop using the mouse**; however, this technique is not as foolproof or as easy as using the "B" (overwrite) command.

Understanding the Timeline

The Timeline is a graphical representation of your edited sequence that you see played back on the Composer Screen. Both the Timeline and Composer Screen have a **Blue Line** indicator to let you know where you are in your sequence. Following is an explanation of the Timeline matrix:

Explanation of Rows on the Timeline

<i>Lock</i>	<i>EDIT</i>	<i>Play</i>	
	V2		= Video Channel #2 used for keying CG Titles over various video clips.
	V1		= Video Channel #1 for Video Clips.
	A1		= Audio Channel #1 for Left Channel of Stereo Music Track.
	A2		= Audio Channel #2 for Right Channel of Stereo Music Track.
	A3		= Audio Channel #3 for VO, sound effects, ADR, or foley.
	A4		= Audio Channel #4 for VO, sound effects, ADR, or foley.
	TCI		= Time Code of Master Sequence on the Composer Screen.

Explanation of Columns on the Timeline

1. The large **Middle Column** with V2, V1, A1, etc. allows you to **AFFECT or CHANGE** the listed channel during an edit. For instance, if you only want the video to change on an edit, while keeping the audio that is already on the Timeline, you activate V1 by clicking it ("**ON**" = **lavender**), but turn off A1 and A2 by clicking on them ("**OFF**" = **gray**). If you want the video and both audio channels to be affected during the next edit, then you then must activate A1 and A2 by clicking them on (*turns lavender*).
2. The smaller **Right Column** is used to **DISPLAY (show during playback)** the channels you want to be seen and heard during playback. By clicking in the Right Column, the listed channels can be (**DISPLAYED = lavender**) or (**NOT DISPLAYED = gray**).
3. The small **Left Column** is used to "**LOCK**" various channels from being changed or affected during the editing process. By clicking in the Left Column, channels can be (**LOCKED = lavender**) or (**UNLOCKED = gray**).

To Start Editing

1. On the Mixer

- A) Dead pot the first four **White CH #1, Ch #2, CH #3, and CH #4 Faders**.
- B) Bring up **CH #5** and **CH #6** to "Unity" with both pan pots "straight up".

2. Switch **Sony Transcoder** to "**DV IN**". (*right green light on*).

3. Switch **Sony NTSC Monitor** to "**Line A**" to monitor Avid. ("**A**" = Avid) ("**B**" = Beta).

4. On the Right IBM Monitor - click on the gray **SETTINGS** button in the **Main Project Bin**, scroll down and double click on "**Video Display**".

5. On the Left IBM Monitor - you will see the **Video Display Window**. At the top, select "**External Video**" and in the middle select "**Composite**", then click "**OK**". (*This enables playback on both the Composer Screen and Sony NTSC Monitor simultaneously*).

6. To Cue Up a Clip for your First Edit

In your **Source Bin** on the Right IBM Monitor, get your first edit ready by **placing the cursor on the little film icon next to the clip** you want (*cursor turns into a hand*) and **double click**. *[If you are in "Frame Mode", you can double click inside the clip, but for "Text Mode" you must double click on the film icon]. (*You will now see your clip displayed on the smaller **SOURCE POP-UP SCREEN** next to the **COMPOSER SCREEN** on the Left IBM Monitor*).

7. To Mark an IN POINT on the Source Pop-Up Screen

Play the clip (*using the Transport Control Panel just below the screen*) and mark an **IN POINT** by pressing "**I**" on the keyboard or by clicking the "**In Point Icon**" on the transport controls. (*You will now see a sawtooth over the video frame in the Source Screen which indicates the In Point of the edit*).

8. To Mark an OUT POINT on the Source Screen

Press "**O**" on the keyboard or click on the "**Out Point Icon**" on the transport control panel. (*If you are marking an "Audio Only" clip, you will want to mark the Out Point fairly tight; however, if you are marking a video clip, you may want to leave a longer tail (over record) in order to allow more flexibility on the subsequent edit*).

9. To Make Your Track Selections on the Timeline

Activate the channels on the Timeline you want to affect with this edit (**V1, A1, A2, etc.**) by clicking in the appropriate **Middle Column boxes**. (*Lavender = "On" (Gray = "Off")*).

Also, make sure that all channels in the **Right Column boxes** are activated for display during playback. (*Lavender = "On" (Gray = "Off")*).

10. To Drop the Clip into the Timeline

Simply press "**B**" (*overwrite*) on the keyboard or you can "**Drag and Drop**" the clip into the timeline by using the mouse; however, this technique is not as foolproof or as using the "B" overwrite command. (*You will now see the clip on the Timeline*).

11. To Do Your Next Edit

Remove the old clip from the Source Screen by clicking on its top right "X" box. (*The Source Pop-Up Screen will disappear*). For your next edit, double click the clip over to the Source Screen.

12. Mark an IN POINT and OUT POINT on the Source Screen

Play the clip and press "**I**" for "**In Point**" and "**O**" for "**Out Point**". (Remember to leave a longer tail on the clip (over record) for more flexibility in editing).

13. Mark an IN POINT on the Composer Screen

Play the edited sequence (master tape) from the start by clicking on the "**Left Arrow**" button of the transport control panel which cues the edited sequence to its start. (When the sequence is properly cued to its starting point, you will see a white "**L**" supered over the video in the bottom left corner of the Composer Screen). Play the sequence and mark an **IN POINT** (where you want the new clip to appear) by pressing "**I**" on the keyboard.

14. To Make Your Track Selections on the Timeline

Activate the channels on the Timeline you want to affect with this edit (**V1, A1, A2, etc.**) by clicking in the appropriate **Middle Column boxes**. (Lavender = "On") (Gray = "Off").

15. To Drop the Clip into the Timeline

Simply press "**B**" (overwrite). (Notice how the Timeline displays the two clips with a line between them which indicates that a "cut" or "edit" has been made between the two clips. You can later change this "cut" to a dissolve or fade transition which is explained later in the "Adding a Dissolve" section).

16. To Continue Editing, just follow the procedure:

- A) Double click the next clip over to the Source Screen.
- B) Play the Source Screen and mark an IN POINT and OUT POINT.
- C) Play the Composer Screen and mark an IN POINT.
- D) Make your Track Selections of what you want the edit to affect.
- E) Drop the clip into the Timeline (which performs the actual edit).

17. To Erase or Clear In Points and Out Points

Click on the In Point or Out Point "**clear-colored icons**" on the transport control panel or use the same "clear-colored" icon keys on the keyboard.

18. To Undo an Edit or Any Other Transition

If you make a mistake you want to correct, the Avid Xpress has 32 levels of **UNDO**. This means that you can undo any edit or transition effect that you have dropped into the timeline up to 32 times. You can also **REDO** anything you have removed with the UNDO function up to 32 times.

The key commands are:

UNDO = Ctrl + Z
REDO = Ctrl + R

SAVE = CTRL + S

Add New Audio Track = CTRL + U
Add New Video Track = Ctrl + Y

Overwrite = "B" (Red Arrow on Timeline)
Splice In = "V" (Yellow Arrow on Timeline)

Adding Transition Effects

DISSOLVES (one clip fades into another clip via superimposition).

- 1) Drag the **blue line** on the Composer Screen to the edit point (cut) where you wish to add a dissolve effect, or actually click on the "cut line" of the edit down on the Timeline itself. (You should see an "**L**" mark visible over the video on the Composer Screen if you're exactly on the cut).
- 2) Click on the gray **Hamburger Icon** (which is the first icon located at lower left corner of Composer Screen) to call up the **Tear Off Tools Menu**.
- 3) On the Tear Off Tools Menu, select/click the first gray box at the left labeled "**ADD DISSOLVE**". (The Quick Dissolve Window will appear on the screen). For a typical one-second dissolve, use the default settings already listed of "**Dissolve**" at "**30**" frames and "**centered on the cut**". (Of course, these settings can be changed if you desire to do longer or faster dissolves).
- 4) Inside the Dissolve Window, click on the gray "**ADD and RENDER**" Button. (You will then see the "Creating Video Effect" Window as the Avid renders the dissolve effect).
- 5) Now you can play the sequence on the Composer Screen to see the dissolve transition between the two clips in real time. (You will also see a pink box icon at the cut point on the Timeline which signifies a "rendered dissolve").

SLOW MOTION (variable motion effects backward or forward at any speed).

- 1) Double click the clip you wish to slo-mo over to the Source Screen and mark an **IN POINT** and an **OUT POINT** for the segment you want to slo-mo.
- 2) Click on the "**MOTION ICON**" on the bottom right corner of the Source Screen's **Transport Control Panel**. (The "Motion Effect Window" appears).
- 3) Inside the Motion Effect Window, select "**50.00%**" speed which is "half speed" or select any speed you want by deleting the number highlighted in blue, and typing in the number you desire. (You can do backward slow motion at half speed by typing in "**-50.00%**" or fast speed by typing in a number that is higher than "**101.00%**" such as "200.00%" which is double speed (2X) or twice as fast).
- 4) Select the "**Interpolated Field**" box for smoother motion effects.
- 5) Click on "**Create and Render**". Select "**Video**" for your Bin, and click "**OK**". (When completed, notice in your Video Bin that the new slo-mo clip has a "motion icon" with its speed in frames per second).
- 6) Re-Label the clip to differentiate it from the original clip by highlighting it and typing a new label.
- 7) Double click the new slo-mo clip over to the Source Screen. Play the slo-mo clip on the Source Screen, mark an In Point and an Out Point, and then drop it into the timeline.

FADE IN/OUT (variable Fade In or Fade Out to BLACK at any dissolve rate).

Fades involving Black can be accomplished using two different techniques:

- 1) The first technique involves digitizing some blackstriped black footage from a Beta Tape as a clip, editing the black clip into the Timeline, and then "**Adding a Dissolve**" to the cut between the black clip and the video clip that is next to it.
- 2) The second technique involves using the Avid to generate black by having it "**Fade To Color**" or "**Fade From Color**" "starting at" or "ending at" the nearest cut.

FADE IN - using "Fade FROM Color" on the Avid

- 1) On the Composer Screen, place the **Blue Line** at the beginning of your edited sequence which should be the left side of the first clip at the beginning of the Timeline. (*Make sure you see the "L" mark on the bottom left corner of the Composer Screen*).
- 2) Click on the **Hamburger Icon** and select the first gray box on the left "**ADD DISSOLVE**".
- 3) Inside the Quick Dissolve Window, click on the **Add Box** at the top of the window and instead of "Dissolve", select "**Fade FROM Color**".
- 4) In the **Position Box**, instead of "Centered on the Cut", select "**Ending at Cut**".
- 5) In the **Duration Box**, type in "**60**" frames (two-second fade in) or whatever length you want for the fade.
- 6) Click on **ADD and RENDER**. (On the Timeline, you will now see a yellow square icon box which signifies a "rendered" fade from black).
- 7) On the Timeline, click the blue line over to a point just before the yellow fade in square and then click the play button on the Composer Screen to watch the fade in play in real time.

FADE OUT - using "Fade TO Color" on the Avid

- 1) On the Timeline, click the **Blue Line** to the end of the last cut you made on your edited sequence which should be the right side of the clip you want to fade to black.
- 2) Click on the **Hamburger Icon** and select the first gray box to the left "**ADD DISSOLVE**".
- 3) Inside the Quick Dissolve Window, click on the **Add Box** at the top of the window and instead of "Dissolve", select "**Fade TO Color**".
- 4) In the **Position Box**, instead of "Centered on the Cut", select "**Ending at Cut**".
- 5) In the **Duration Box**, type in "**60**" frames (two-second fade out) or whatever length you want for the fade out at the end of the clip.
- 6) Click on **ADD and RENDER**. (On the Timeline, you will now see a yellow square icon box which signifies a "rendered" fade to black).
- 7) On the Timeline, click the blue line over to a point just before the yellow fade out square and then click the play button on the Composer Screen to watch the fade out play in real time.

FADE IN/OUT - using "Digitized Black Footage Clip" from Beta Tape

- 1) Digitize 10 seconds of black footage from a blackstriped Beta Tape.
- 2) Mark an IN and an OUT on the Source Screen for the amount of black you need from the black clip.
- 3) Mark an IN on the Composer Screen and drop the black clip into the Timeline using "**B**".
- 4) Position the **Blue Line** on the cut and "**Add and Render**" a typical dissolve.

“DELETE” a clip from the Timeline

- 1) Activate (turn on) the **Red Arrow** at the bottom of the Timeline.
 - 2) **Highlight the shot (clip)** on the Timeline that you want to delete by clicking on it (*Clip turns lavender*).
 - 3) On the keyboard, hit the large **“DELETE”** key as many times as it takes to completely remove the clip from the Timeline.
 - 4) Turn off the **Red Arrow** at the bottom of the Timeline to return to normal.
-

“EXTRACT” or “LIFT” a segment from the Timeline

- 1) On the Composer Screen, mark an **IN** and an **OUT** point for the segment you wish to entirely remove from the project sequence (timeline).
 - 2) Activate (turn on) ALL CHANNELS **V2, V1, A1, A2, A3, A4, TCI**. (*All turn lavender*).
 - 3) Hit the **“X”** key to entirely remove the segment.
-

“PROC AMP” a clip on the Timeline

- 1) First, the particular clip you want to affect with the **Proc Amp** needs to be dropped onto the Timeline.
- 2) Activate (turn on) the **Yellow Arrow** at the bottom of the Timeline.
- 3) **Highlight the clip** on the Timeline that you want to affect by clicking on it (*Clip turns lavender*).
- 4) Go to the **TOOLS** menu.
- 5) Select **Effect Palette**.
- 6) Select **Image**.
- 7) Select **Color Effect** and double click it onto the selected clip on the Timeline.
- 8) (*Notice that an icon with a **blue or green dot is now showing** on the selected clip on the Timeline*).
- 9) On the Composer Screen, go to the **Hamburger**.
- 10) Select the first box on the bottom row which is the **Effect Mode**.
- 11) Once the Effect Mode window pops up, **slide the faders** in the window to get your desired effect.

(You will see the resulting effect of sliding the faders on the Composer Screen. Once you have the desired effect all set, make sure that you write down the setting numbers so that you can replicate the same effect on other clips if needed).

- 12) On the Composer Screen, go to the Hamburger and select the second box, top row “**Render Effect**”.
(*Make sure that the effect is going to be rendered on a **Medea Drive and NOT on the Effect Source Disk***).
- 13) Click “**OK**” to render the effect.
- 14) Click “**OFF**” the **Yellow Arrow** at the bottom of the Timeline to return to normal use.

Split Edit

(A "Split Edit" is the term we use to refer to an edit in which the audio and video from a talking head interview come in at different points on the timeline. In other words, we hear the audio of the talking head first, then see the accompanying video of the talking head later. On typical edits of talking head interviews, the audio and video appear at the exact same time which is referred to as a "guillotine cut" because it is very abrupt and "choppy". Edits can be made smoother and softer by having the new audio and video come in at different times on the timeline by using the "split edit" technique.

To Do A Split Edit

Go ahead and edit two talking head interviews together....in other words, place Talking Head Interview #1 on the timeline with its video and soundbite audio on A2 (V1 and A2 activated purple), then edit Talking Head Interview #2 on the timeline (where you want it to come in after Talking Head Interview #1) with its video and soundbite audio on A2 (V1 and A2 activated purple).

(Notice how the edit cut line between the two interviews is lined up on both the V1 (Video Track) and the A2 (Audio Track). The goal now is to split the two edit cut lines apart so that the audio and video from Talking Head Interview #2 come in at different times. Here's how you do it).

1. Mark an **IN POINT** on the Video Track of the Composer Screen where you want the audio from Talking Head #2 to come in on the timeline.
2. Activate A2 Audio Track (purple) and de-activate V1 Video Track (gray).
3. Activate (turn on) the **Red Arrow (Overwrite)** function.
4. On the timeline, **drag the A2 Audio Track to the left up to the Blue Line** which is parked on the In Point you already marked. (Notice that the Audio Track and Video Track edit cut lines have now been split apart and now small white numerals are superimposed on those tracks on the timeline. If you play back the split edit now, you will notice that the audio and video of Talking Head #2 are now horribly **OUT OF SYNC!**).

To get the audio and video back in sync:

1. De-activate (**turn off**) the **Red Arrow** (Overwrite) function.
2. Now mark a new **IN POINT on the Video Track** of the Composer Screen where you want the video of Talking Head #2 to appear (obviously at a later point on the timeline than the audio from Talking Head #2).
3. Mark an **OUT POINT at the end of the A2 Audio Track** on the Composer Screen which should be designated by the white **backward "] "**, and not the forward " ["!
4. Now **Park the Blue Line back on the IN POINT** of the A2 Audio Track (where purple meets gray) and make sure that you see the white **SAWTOOTH** designation on the Composer Screen.
5. Hit the **Hamburger Icon** on the Composer Screen and select **MATCH FRAME** (third box from top left).
6. De-activate (**turn off**) **A2 Audio Track** (turns gray).
7. Activate (**turn on**) **V1 Video Track** (turns purple).
8. Now **Hit "B"** to match up the video and audio of the Talking Head again. (You should now be able to playback your split edit with proper lip-sync).

Exporting to Tape / Digital Cut

(A "Digital Cut" is the term Avid uses to refer to the process of exporting or outputting an edited master sequence from the Avid onto a Video Tape Recorder, which in our case is a Beta SP Deck. A digital cut allows you to make a backup copy of your project via an "S-Video dub" onto high-quality Beta SP format video tape for subsequent tape dubbing, distribution, and/or archiving).

There are two methods of doing a digital cut to tape: 1) A "**Crude Digital Cut On-the-Fly**" which involves using a blank tape when there is no time to blackstripe; and 2) An "**Automated Digital Cut**" which involves using a "blackstriped" tape for more professional results. Regardless of the procedure you choose, you need to normalize the following components as follows:

Normalize the following:

- 1) Switch **Sony Transcoder** to "**DV IN**". (Converts Avid's digital output to analog for Beta tape recording).
- 2) Make sure **Mixer** is properly normalized and bring up **CH #5** and **CH #6** to "**U**". (Controls Avid's digital audio output level).
- 3) Switch **Sony NTSC Monitor** to "**Line B**". (Lets you monitor the Beta Deck's input and output signal). You can also monitor the Beta Deck's audio input and output on the Sony Monitor by pushing **MENU**, **ENTER**, and then use the **Up Arrow** to bring the Volume up to "**57**" on the screen.
- 4) Make sure the **Beta Deck** is switched to "**S-Video**". (Y,R,B Component video is not available on this Avid system).
- 5) In the **Main Project Bin** on the Right IBM Monitor, click on the gray "**SETTINGS**" button and scroll down to "**Video Display**" and double click.
- 6) In the **Video Display Window** on the Left IBM Monitor, click on "**External Video**" and then "**Composite**" so that you will be able to see video playback on both the Composer Screen and the NTSC Monitor simultaneously.

To Do A Crude Digital Cut On-The-Fly Using a Blank Tape

- 1) To Adjust the Audio Levels, make sure **Mixer** is properly normalized. Split the CH #5 and CH #6 **PAN POTS** all the way left and all the way right to maintain a stereo mix, or put them straight up for a monoaural mix. Play the sequence on the Composer Screen and adjust the audio level with the **CH #5** and **CH #6** faders on the mixer to "**0dB**" using only **the VU Meter on the Beta Deck**.
- 2) Normalize the Beta Deck, except in this procedure switch to "**LOCAL**" mode.
- 3) On the Composer Screen, cue the sequence to the beginning (To the "**L**" mark), but then press the button just once on the Composer Screen's Tape Transport to get rid of the "**L**" by just one frame so that it doesn't show up on the Composer Screen or on your recorded tape .
- 4) On the Beta Deck, cue the tape to where you want to start recording, preset the Time Code, and then press "**REC**" and "**PLAY**", and let the tape record for at least 30 seconds.
- 5) On the Composer Screen, simply play the sequence when you want to start recording to tape. (You are now exporting the Avid sequence to tape). At the conclusion of the sequence, let the Beta Deck record for an additional 30 seconds, then press "**STOP**". Play the Beta Tape back to check the audio and video quality of the recording.

(This is the quick and dirty way of doing a digital cut when you have only a blank tape and no time to "blackstripe" it. To learn how to do a more "professional" automated digital cut, go on to the next page).

Automated Digital Cut

(An "Automated Digital Cut" is the more professional method of exporting your Avid project to video tape; however, it requires that you first "blackstripe" the tape you are planning to record on which, depending on the length of the tape, could take anywhere from 30 minutes to one hour. As such, you should arrive at your digital cut session with your tape already blackstriped to avoid delays).

To Do A Fully-Automated Digital Cut to a "Blackstriped" Tape

- 1) At the top left corner of the Left IBM Monitor, click on "**CLIP**" and select "**Digital Cut**". (You will now see the Digital Cut Window appear on the Right IBM Monitor screen).
- 2) Inside the Digital Cut Window:
 - A. On the left side column (coming from the Avid), select **V2, V1, A1, and A2** (turns lavender) or whatever combination of channels you have been using in your edited sequence on the Avid.
 - B. On the right side column (going onto the Beta Deck), select **V, A1, and A2**. (turns lavender).
 - C. Leave Audio Target and Video Target at "1394".
 - D. Select: "**Entire Sequence**".
 - E. Deck Control is "**Remote**".
 - F. Click on white "Sequence Time" and select "**Record Deck Time**".
 - G. Ignore the rest of the windows.
- 3) Change the Avid from "Non Drop Frame" (NDF) to "**Drop Frame**" (DF) mode by holding down the clicker inside of the Composer Screen and then using the keystroke **Ctrl "I"**. Put the cursor on one of the colons (:) in the time code number and **type a semicolon (;)** instead. This converts the Avid from its "Non Drop Frame" default setting to the preferred "Drop Frame" time code. Click "**OK**".
- 4) To Adjust the Audio Levels, make sure the **Mixer** is properly normalized. Split the CH #5 and CH #6 **PAN POTS** all the way left and all the way right to maintain a stereo mix, or put them straight up for a monoaural mix. Play the sequence on the Composer Screen and adjust the playback level with the **CH #5** and **CH #6** faders on the mixer while watching the **VU Meter on the Beta Deck**.
- 5) Make sure the Beta Deck is switched to "**REMOTE**" and "**S-Video**".
- 6) Insert your "**blackstriped**" Beta Tape with the red "**Rec Enabled**" plastic all the way down. (Allows recording on the tape).
- 7) The **Select Tape Window** will appear on the Left IBM Monitor with "**New Tape**" highlighted in blue. Click "**OK**". (You can now shuttle the Beta Tape to the point you wish to start recording by using the gray **Tape Transport Controls** on the screen).
- 8) Shuttle your Beta Tape to the position you want to record and mark an **IN POINT** using the "**I**" key or by clicking on the "**In Point Icon**" on the **Tape Transport Control Panel**. (The Out Point and duration values will be automatically calculated).
- 9) To Start Recording to Tape, click on the large **Red Square** inside the window. (The Beta Deck will cue to its pre-roll position, pause, and start rolling. When it reaches its In Point, it will start to record [red box flashes] while the Avid plays back the edited sequence).
- 10) When the sequence is done, the "**Digital Cut Complete**" window will appear. Click on "**OK**".
- 11) To remove the Digital Cut Tool from the screen, simply click on the gray "X" in the top right corner.

Avid DV Shutdown Procedure

To Exit Your Current Project

1. Click on the top right corner "X" box of your Main Project Bin. *(This allows you to leave your project and the Avid Users/Projects Window will appear in the center of the Right IBM Monitor).*

(If you want to enter another project, simply highlight the name of the project in the window and click on "OK". The project will appear on the IBM Monitor screens within a few seconds exactly the way it was when you last worked on the project).

To Shutdown the Avid System

2. With the Avid Users/Projects Window displayed, click on **"QUIT"**.
3. With the next window displayed, click on **"LEAVE"**.
4. On the bottom left corner of the Left IBM Monitor, click on **"START"**, and then select **"SHUTDOWN"** and **"OK"**. *(While the Avid system and pc take 1 minute to shut down, proceed to the following steps below).*

On the Table Counter *(It is very important that you power down the components in this order!).*

5. Before turning off the **Mackie Mixer**, make sure you dead pot the **White Monitor Fader** all the way down to prevent loud pops from blowing out the Roland Speakers during future power ups. Turn off the mixer at the right rear. *(Red Power Light out).*
6. Eject any tapes from the **Beta Deck**, the power off the deck. *(All lights out).*
7. Before turning off the **Sony NTSC Monitor**, punch in **"Line A"**, then **"Menu"**, **"Enter"**, and then use the **Down Arrow** to bring the Volume all the way down to **"MIN"**. Now power down monitor. *(Green light out).*
8. Turn off **Roland Speakers** by pushing in Power Button on Right Speaker. *(Red light off).*
9. Turn off the **Sony Transcoder Box**. *(Green light out).*
10. Leave both 27" **IBM Monitors "ON"**. *(It will take about 30 seconds for the Orange lights to go out on their own).*

Underneath the Table

11. Turn off white **Power Strip** underneath the table. **NEVER TOUCH THE MEDEA DRIVES !!!!** *(Green and Blue lights on the Medea Drives now go out).*
12. Turn out the lights in the room to make sure that everything is off and quiet. *(Good night).*