

Avid MAC Xpress Power Up

Our Avid MAC Xpress system consists of the following items: 1) Power Mac 9600 Tower; 2) Avid Drives #1 and #2 (9 GB each); 3) a Medea Drive (120 GB); 4) Panasonic 19" NTSC Monitor; 5) Viewsonic 21" Monitors (Left & Right); 6) Mackie 1402 Mixer; 7) Roland Power Speakers (Left & Right); and 8) Sony UVW-1800 Beta Deck.

On the Table Top

1. Turn on the black **POWER STRIP** at right rear of NTSC Monitor. (*Orange, green, and red lights come on*). This will activate the two Avid Drives and the Medea Drive underneath the table. (*Green/Yellow Lights on Avid Drives and Blue Lights on Medea Drive come on*).
2. Wait for the yellow lights on the Avid Drives to go out, then turn on the **POWER MAC TOWER**. (*Green Light comes on*).

[It will now take approximately 4 minutes 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 following components]

On the Table Top

3. Power on the Panasonic **NTSC Monitor** and switch the Video Input to "**A**" for "**Avid**". (*"B" is for "Beta"*).
4. Power on both **Viewsonic Monitors** by pressing in each white button "**1**" to the far right of the monitor.
5. Power on **Audio Mixer** by flicking up the larger toggle switch at the right rear of the mixer. (*Red Power Light on*).

NORMALIZE NTSC MONITOR CONTROLS

VOLUME = 9 o'clock
PHASE = 12 o'clock
CHROMA = 3 o'clock
BRIGHT = 3 o'clock
CONTRAST = all the way right

NORMALIZE ROLAND SPEAKER CONTROLS

LOW BOOST = 3 o'clock
HIGH BOOST = 12 o'clock
INPUT VOL = 9 o'clock

NORMALIZE MACKIE 1402 AUDIO MIXER

1. Make sure the Red Power Light is on.
2. Starting at the top of the mixer, punch out all six **GRAY LOW CUT** buttons. (*Highest profile position*).
3. Turn all six **BLACK TRIM POTS** left to the "**U**" (Unity) position.
4. Turn all **RED AUX POTS** all the way left (Off).
5. Turn all **BLUE EQ POTS** straight up to the "**U**" (Flat) position. (*No EQ*).
6. Punch in the **GRAY MUTE** buttons for **Channel #1** and **Channel #2**. Punch out all other **GRAY MUTE** buttons.
7. Punch out all ten **GRAY SOLO** buttons. (*Solo Off*).
8. Turn the dark gray **PAN POTS** for **Channel #1** and **Channel #2** straight up for Mono Mix of playback.
9. Turn the **PAN POT** for **Channel #3** all the way **LEFT** for assignment to Audio Channel 1 on the Avid. (*Maintains stereo mix*).
10. Turn the **PAN POT** for **Channel #4** all the way **RIGHT** for assignment to Audio Channel 2 on the Avid. (*Maintains stereo mix*).
11. Bring up **Channel #1** and **Channel #2 WHITE FADERS** to "**10**" on the fader level.
12. Dead pot all other **WHITE FADERS** (Off).
13. Bring up **WHITE MONITOR FADER** to around "**20**" on the fader level. (*Adjustable Listening Level*).
14. Bring up both **MAIN MIX MASTER FADERS** to the "**U**" (Unity) position.
15. 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 has completed its 4-minute setup procedure, the **Avid Users/Composer Projects Window** will appear in the center of the left Viewsonic Monitor.
2. If you are a new user, the instructor will assign you a "User Name" (*usually your first or last name*). Click on **"NEW USER"** and type in your user name exactly as the instructor assigned it to you, and then click the **"OK"** button inside the window.
3. To name your new project, use the following code so that the instructor can easily locate your projects:

Suzie VID = (Suzie's Videographic project)
Suzie PSA = (Suzie's PSA project)

4. Click on **"NEW PROJECT"** and type in the name of your project using your assigned "User Name" and the appropriate project extension (VID or PSA), and then click the **"OK"** button.
5. With your User Name and Project Title both highlighted, click **"OK"** to start your project.
6. On the right Viewsonic Monitor, you will now see: 1) a black **COMPOSER SCREEN**; 2) a lavender **MAIN ROJECT BIN** with your name and project title at the top; and 3) a blank gray **TIMELINE** at the bottom half of the screen.
7. Move the lavender **MAIN ROJECT BIN** over to the left Viewsonic Monitor by holding the clicker down in the lavender section of the window and moving it over to the left top corner of the left Viewsonic Monitor directly over the Avid Xpress Icon. (*You can later reposition these windows to any location of the screen you desire*).
8. Now move the black **COMPOSER SCREEN** to the right side of the right Viewsonic Monitor by clicking down in the top Composer Section of the window and moving it to the right side of the screen.
9. Back over on the left Viewsonic Monitor, create a bin for your source footage (*audio and video clips*) by clicking on the lavender section of the **MAIN ROJECT BIN**, and then click the gray **"NEW BIN"** button. (*You will now see a new window appear on the screen with the name of your project followed by the word, "Bin". Name this bin, "Source Bin" for storing the audio and video clips that you will use in the editing of your project.. Using the same process, create a "Sequence Bin" for storing your edited master sequences, and also create a "Title Bin" for storing your titles for the project.*
10. You are now ready to start digitizing (importing) *audio and video clips* for storage in your **Source Bin**.

Continuing An Existing Project

1. 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 for additional new editing. (*If you are working on a new project, then proceed to the next page*).
2. Under **AVID USERS**, highlight your assigned "User Name".
3. Under **COMPOSER PROJECTS**, highlight your project 's name.
4. Click on **"OK"** to open your existing project. (*Your Project Bins and Timeline will come up on both Viewsonic Monitors exactly the way you last worked on the project*).
5. To Exit Your Project, click on the gray square at the top left corner of the **MAIN ROJECT BIN** on the Left Viewsonic Monitor. (*The Avid Users/Composer Projects Window will appear*).
6. To Re-enter or Go To Another Project, just select the "User Name" and Project Name" you want.

Importing / Digitizing Source Footage Clips

Normalize the Beta Deck by:

1. Switch to "**REMOTE**" (*Deck Controlled by Avid*).
2. Switch to "**LTC**" (*Longitudinal Time Code*).
3. Switch to "**Y-R-B**" (*Component Video - highest quality*).
4. Switch to "**INT**" (*Internal Time Code generator*).
5. Character "**OFF**" (*No Window Dub*).
6. Press **Power On**.
7. DO NOT insert the Source Tape into the Beta Deck at this time, *but make sure tape is "Rec Inhibited" to prevent erasure.*

On the Audio Mixer

1. Dead pot **Channel #1** and **Channel #2 WHITE FADERS**.
2. Bring up **Channel #3** and **Channel #4 WHITE FADERS** to around "22" with a split pan (*Channel #3 panned all the way left and Channel #4 panned all the way right*).
3. For a VU Meter, click on **TOOLS** on the Left Viewsonic 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*). 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 Left Viewsonic Monitor.

On Left Viewsonic Monitor

1. Click on **TOOLS** at the top left of screen and select "**DIGITIZE**". (*If you see the blue **Select Tape Window**, simply click the "OK" button and the window will disappear from the screen*).
2. You will now see the **Digitize Tool Window** on the screen. Click down in the lavender section and move the Digitize Tool Window lower on the monitor screen so that it does not cover up any of your **Source Bin** which will list your clips as they're imported.
3. At the top of the Digitize Tool Window, make your track selections (*what you want to digitize from your Source Tape*) by clicking any of the following gray buttons:
 - V1** = Video from your source tape (*turns red*).
 - A1** = Audio Channel 1 (Left) from your source tape (*turns purple*).
 - A2** = Audio Channel 2 (Right) from your source tape (*turns purple*).
 - TC** = Time Code from your source tape (*turns lavender*).
4. In the middle of the Digitize Tool Window, your Source Bin for storing your clips is listed in the white window along with the resolution rate of "**AVR 75**" which is the highest quality for our Avid MAC Xpress system, so leave these settings as listed. Make sure the **Disk Window** lists a **Medea Drive (0-13)** as the target disk for storing your clips. **DO NOT USE AVID STRIPES !!!** If Avid Stripe #1, #2, or #3 is listed, click on the drop down menu and click the small "X" out of its box. (*This will activate the Medea Drives*). Now, simply select a Medea Drive (#0-#13) for storing your clips. **Never use an Avid Stripe for any purpose !!!**
5. Insert your Source Tape into the Beta Deck. (*You will now see the blue **Tape Select Window**. If not, you may have to activate this function by clicking on the white window that lists "**Sony UVW-1800**" and select "**Check Decks**".*) Make sure "New Tape" is highlighted in pink. If not, highlight it, and click on "**OK**". (The blue Tape Select Window will disappear, but *every time you insert a new source tape, you will need to go through this procedure*).
6. You can now control the Beta Deck with the mouse by clicking on the **Gray Transport Controls** on the left side of the Digitize Tool Window. Hold down the clicker on the gray **Shuttle Square** to see if you can shuttle the tape. (*If you see the blue **Tape Select Window**, click on "OK" and it will disappear*).

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 in 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).*
2. Play the tape and adjust the audio import level by using **Fader #3** and **Fader #4** to keep the audio level at around **"0dB"** on the **Audio Tool's VU Meter**.
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 EDL notes or script. *(Remember to include enough leader and tail footage at the beginning and end of each clip [Handles] to allow for 1-second dissolves 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 typing in the **"Import IN Point"** from your Import List, or you can do it 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** by typing in the **"Import OUT Point"** from your Import List, or you can do it 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 Import 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 pre-roll, and then the red square will flash as the Avid imports and digitizes the clip).*
7. After the clip is finished being imported, notice in your **Source Bin** that the clip *(highlighted in black)* has now been registered with all of its relevant data.
8. To label your clip, simply 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, Media Drive, etc).*
9. If you prefer to display your clips in the Source Footage Bin 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"** and **"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 Importing Clips, simply repeat the following procedure:
 - A) Make your TRACK SELECTIONS *(what tracks you want to copy from each clip)*.
 - B) Type in the Import IN and OUT POINTS. *(Adjust audio import level using Fader #3 and #4).*
 - C) Click on the RED SQUARE to import and digitize.
 - D) Type in label of clip in SOURCE BIN.
12. When Importing Is Completed, simply click on the gray top left corner of the Digitize Tool Window to remove the tool from the screen.
13. Eject your Source Tape from the Beta Deck. You are now ready to proceed to the editing stage.

Basics of Avid Editing

On the Right Viewsonic Monitor, you will be working primarily with the following three screens:

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

On the Left Viewsonic Monitor, you will be working with the following Bin Windows:

- D. **Main Project Bin** - contains the macroscopic view of all the different bins of your project.
- E. **Source Bin** - contains all of your imported audio and video clips that you will use in editing.
- F. **Sequence Bin** - contains the edited sequence or various versions of edited sequences for your project.
- G. **Title Bin** - contains all of the CG titles you have created for keying over the video.
- H. **VU Meter** - for setting the gain level when importing audio clips into the project.

Playing/Shuttling of Clips and Sequences on the Avid

1. Only "**clips**" can be played on the smaller Source Screen on the left, and only "**sequences**" (*edited masters*) can be played on the larger Composer Screen on the right.
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 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. You can also get to a specific section of the Timeline very quickly by **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 the keyboard (*see Transport Control Icons on the Source and Composer Screens as well as on the keyboard*).
6. Although the Composer Screen can be cued to the start of its "sequence" with one click of the mouse, the 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 a 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, a 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**" for **Out Point** on the **keyboard**, *OR*:
- 2) Clicking on the In Point and Out Point **ICONS** on the Source Screen and Composer Screen's **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 as using the "B" (overwrite) command.

Understanding the Timeline

The Timeline is a pictorial representation of your edited sequence that you see played back on the Composer Screen. Both the Timeline and the 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 larger **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 **Fader #3** and **Fader #4**.
- B) Bring up **Fader #1** and **Fader #2** above "Unity" to around "4".
- C) Spilt both Pan Pots with **Channel 1 Pan Pot all the way left** and **Channel 2 Pan Pot all the way right**.

2. To Cue Up a Clip for your First Edit

In your **Source Bin** on the left Viewsonic 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 it**. *[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 Right Viewsonic Monitor*).

3. 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*).

4. 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*).

5. 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 the channels you wish to see and hear during playback are activated in the **Right Column boxes**. (*Lavender = "On" (Gray = "Off")*).

6. To Drop the Clip onto 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 easy as using the "B" overwrite command on the keyboard. (*You will now see the clip on the Timeline with its label/name printed inside*).

7. To Do Your Next Edit

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

8. 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*). If you are not sure about the Out Point, then simply leave it unmarked because the next edit will automatically cut off any excess footage left from the previous edit.

9. Mark an IN POINT on the Composer Screen

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

10. 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")*).

11. 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*).

12. 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, or just mark an IN POINT only.
- C) Play the Composer Screen and mark an IN POINT.
- D) Make your Track Selections of what you want the edit to affect.
- E) Hit "**B**" (overwrite) *which performs the actual edit and places the clip on the Timeline*).

13. 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. This action will clear the In Point or Out Point from the screens so that you can assign a new point.

14. To Undo an Edit or Any Other Transition

If you make a mistake, 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 = Apple Z
REDO = Apple R

SAVE = Apple S

Add New Audio Track = Apple U
Add New Video Track = Apple Y

Overwrite = "B" (Red Arrow on Timeline) (*Records over the previous information on the Timeline*).
Splice In = "V" (Yellow Arrow on Timeline) (*Squeezes in between and adds to the previous information*).

Adding Transition Effects

DISSOLVES (a cross fade with one clip fading 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. (You will see an "L" mark visible over the video on the Composer Screen if you're on the cut).
- 2) Click on the gray **Hamburger Icon** (which is the first icon at lower left corner of Composer Screen) to call up the **Tools Menu**.
- 3) On the Tear Off Tools Menu, select the first gray box at the left labeled **"ADD DISSOLVE"**. (The 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 the "X" out of **"Don't Render Real-Time Effects"** Box. Make sure that the effect is going to be rendered on a **Media Drive (#0-#13)** and NOT the **Effect Target Disk**. **Do Not Use the Effect Target Disk !!!** Now click on the **"ADD and RENDER"** Button. If you get the warning message, **"Incoming Media Too Short"**, you will need to move your In Point on that clip back as many frames as necessary to accomplish the dissolve, and then re-edit (drop on the Timeline again) the new clip with its new In Point using the **"B" (overwrite)** function. If you get the warning message, **"Outgoing Media Too Short"**, you will need to move your Out Point on that clip forward as many frames as necessary to accomplish the dissolve, and then re-edit (drop on the Timeline again) the new clip with its new Out Point using the **"B" (overwrite)** function. Click the **"ADD and RENDER"** button, and if you have adequate Incoming Media and Outgoing Media to accomplish the dissolve, you will then see the "Creating Video Effect" Window as the Avid renders the dissolve effect.

Now you can play the sequence on the Composer Screen to see the dissolve transition between the two clips in real time.

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 use in slow motion. In order to save storage space, **tightly mark only the bare minimum of footage you need**. For example, if you have a 3-second clip you wish to slo-mo at half speed (50%), you will end up with a 6-second clip after it is slo-mo'd. If you slo-mo the same 3-second clip at quarter speed (25%), you will end up with a 12-second clip which takes up a lot more storage. As such, you would want to mark the IN and OUT points within the clip tighter to possibly a 1.5-second clip which at 25% slo-mo would render the same 6-second clip after it is slo-mo'd.
- 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 black, and typing in the number you desire. Remember that slower speeds will eat up a lot more storage space. (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. However, your 4-second clip at 200% will now become only a 2-second clip after it is processed with fast motion).
- 4) Select the **"Interpolated Field"** box for smoother motion effects.
- 5) Click on **"Create and Render"**. (When completed, notice in your Source Bin that the new motion effect clip has a "motion icon" at the left of its label with its speed in frames per second).
- 6) Re-Label the clip to differentiate it from the original clip by typing a new label.
- 7) Double click the new 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 - 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 "**ADD DISSOLVE**".
- 3) Inside the 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 "**Starting at Cut**".
- 5) In the **Duration Box**, type in "**60**" frames (2-second fade in) or whatever length you want for the fade.
- 6) Click out the "**X**" from the "**Don't Render Real-Time Effects**" small box.
- 7) Click on **ADD and RENDER**. (On the Timeline, you will now see a yellow square icon box which indicates a fade).
- 8) On the Composer Screen, pull the **Blue Line** back before the fade and play the sequence to watch the fade in real time.

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

- 1) On the Composer Screen, place the **Blue Line** at 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. First, trim off any excess footage from that clip that may be lasting longer than the end of your program. You may have to do an "**Extract**" or "**Lift**" (*see next page*) to trim off the excess footage.
- 2) Click on the **Hamburger Icon** and select "**ADD DISSOLVE**".
- 3) Inside the 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 (2-second fade out) or whatever length you want for the fade out at the end of the clip.
- 6) Click out the "**X**" from the "**Don't Render Real-Time Effects**" small box.
- 7) Click on **ADD and RENDER**. (On the Timeline, you will now see a yellow square icon box which indicates a fade).
- 8) On the Composer Screen, pull the **Blue Line** back before the fade and play the sequence to watch the fade out 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. A digital cut allows you to make a backup copy of your project via a "component dub" onto high-quality Beta SP or Mini-DV video tape for subsequent tape dubbing, distribution, and/or archiving).

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

1. On the NTSC Monitor, switch to **Input B** for the Beta Deck.
2. Normalize the Beta Deck, except in this procedure, switch to "**LOCAL**" mode. Insert your "Rec Enabled" tape and cue it to the location where you'd like to start recording. Once you've found your location, press STOP and then press only the red "**REC**" button for E-to-E monitoring of the Avid source.
3. To Adjust the Audio Levels, make sure the mixer is normalized and then punch in the **GRAY MUTE** buttons for **Fader #1** and **Fader #2** on the mixer to output the Avid audio to the Beta Deck. **Split the Ch 1 and Ch 2 Pan Pots left and right for a stereo mix** or put both Pan Pots straight up for a monaural mix. Play the sequence on the Composer Screen and adjust the audio level with the faders on the mixer to "**0dB**" while watching only **the VU Meters on the Beta Deck**.
4. On the Composer Screen, cue the sequence to the beginning (*To the "L" mark*), but then press the frame advance 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 on the Composer Screen or on your recorded tape.
5. On the Beta Deck, preset the Time Code to the number you desire. When you're ready to record, simply press "**REC**" and "**PLAY**", and let the tape record for at least 30 seconds of leader before you start playing the sequence on the Composer Screen.
6. 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 on the NTSC Monitor. You will now see the video and hear the audio on the NTSC Monitor only. (*This is the quick and dirty way of doing a digital cut*).

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

1. On the NTSC Monitor, switch to **Input B** for the Beta Deck.
2. Normalize the Beta Deck, except in this procedure, switch to "**LOCAL**" mode. Insert your "Rec Enabled" tape that has already been "**blackstriped**" and then press only the red "**REC**" button for E-to-E monitoring of the Avid source.
3. To Adjust the Audio Levels, make sure the mixer is normalized and then punch in the **GRAY MUTE** buttons for **Fader #1** and **Fader #2** on the mixer to output the Avid audio to the Beta Deck. **Split the Ch 1 and Ch 2 Pan Pots left and right for a stereo mix** or put both Pan Pots straight up for a monaural mix. Play the sequence on the Composer Screen and adjust the audio level with the faders on the mixer to "**0dB**" while watching only **the VU Meters on the Beta Deck**.
4. At the top left corner of the Left Viewsonic Monitor, click on "**CLIP**" and select "**Digital Cut**". (*You will now see the Digital Cut Window appear on the screen*).
5. Inside the Digital Cut Window:
 - A) For the **SOURCE** menu (*coming from the Avid*), select **V2, V1, A1, and A2** or whatever combination of channels you have been using in your edited sequence on the Avid.
 - B) For the **RECORD** menu (*going to the Beta Deck*), select **V1, A1, and A2**.
 - C) Select: "**Entire Sequence**", then "**Record To Tape**", and then "**Record Deck Time**".

6. 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 **Apple "I"** command. 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.
7. Now switch the Beta Deck to "**REMOTE**" and shuttle your "blackstriped" 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 for you in the window display).*
8. To Start Recording to Tape, click on the large square PLAY BOX 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 while the Avid plays back the edited sequence).*
9. When the sequence is done, the "**Digital Cut Complete**" window will appear. Click on "**OK**".
10. Play the Beta Tape back to check the audio and video quality of the recording on the NTSC Monitor. You will now see the video and hear the audio on the NTSC Monitor only.

Avid MAC Shutdown Procedure

To Exit Your Current Project

1. Click on the top left corner box of your **Main Project Bin**. *(This allows you to leave your project and the Avid Users/Composer Projects Window will appear).*

(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 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/Composer Projects Window displayed, click on "**QUIT**".
3. With the next window displayed, click on "**LEAVE**".
4. On the top left corner of the left Viewsonic Monitor, click on "**SPECIAL**", and then select "**SHUTDOWN**". *(The Avid system and computer shut down).*

At the right rear of the NTSC Monitor On the Table Counter

5. Turn off the **black Power Strip**. *(Green lights and Blue lights out). Never touch the Medea or Avid Drives underneath the table !!!*

On the Table Counter

6. Turn off all three **Monitors**. *(All lights out).*
7. Turn off the **Mackie Mixer** at the right rear. *(Red Power Light out).*
8. Turn off the **Beta Deck**. *(All lights out).*
9. Turn out the **lights in the room** to make sure that everything is off and quiet. *(Good night).*