



SOUTHWESTERN OAKLAND CABLE COMMISSION

## Studio B Training Class

Two week workshop for Studio B Certification

PUBLIC ACCESS

MISSION

STATEMENT

“To provide a venue,  
resources and  
opportunities for residents  
to utilize the medium of  
television to  
independently produce  
their own non-  
commercial, non-profit  
message in the most cost-  
effective manner.”

**SWOCC Studios**

33300 Nine Mile Rd  
Farmington, MI 48836  
main 248.473.2800  
fax 248.473.8610

SWOCC Studios  
Studio B Training Class

**Syllabus**

WEEK 1

SWOCC Procedures  
Intro to the Camera  
Camera Exercises  
Control Room Equipment  
Role of Crew Positions  
Question & Answer

WEEK 2

Review of the Camera and Control Room  
Audio  
Character Generator  
Question & Answer

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**SWOCC Studios**  
**Studio B Training Class**

**Facility Operations**

**SWOCC STUDIO PROCEDURES**

1. Office hours are 8:30 a.m. – 4:30pm. Monday thru Friday. Evenings and weekends are by appointment.
2. All questions, troubleshooting, scheduling, and checkout of equipment must go through Community Relations, or staff person assigned to production.
3. First-time shows require character generation to be prepared at least one day in advance by a crew person. On going productions (those with CG already formatted) may take changes at the time of the show.
4. Access on those areas necessary for production. Staff offices (including front office) are off limits.
5. Staff will supervise all shoots and complete all technical adjustments. Staff will NOT crew any positions for any show at any time. Staff reserves the right to stop, or cancel any production for any reason at anytime.
6. Residents may not touch (use) equipment without staff approval.
7. Microphones will be checked out to the producer at the time of studio check in. They should be returned to staff at time of studio check out.
8. Do not step on or roll over any cables.
9. The facility is to be left exactly as it was found.
10. Crew is responsible for returning/putting away the equipment they used/manned.
11. The producer is responsible for tape stock, actions & behaviors of guests, talent & crew. Also producer is responsible for cleaning up after their production.
12. In the event any procedures are violated, staff will complete necessary documentation to alert the Executive Director who will determine action, up to and including suspension of facility privileges.
13. Policies for use of studio, equipment and access channels are set forth in the SWOCC Public Access Television Policies.
14. All procedures are noted in the Producers workshop.

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**Facility Operations**

**Procedures For Production**

3. Producer must contact the SWOCC to set up a pre-production meeting with a SWOCC staff member, at least two weeks prior to the studio production.
4. During the Pre-Production meeting, perimeters of the production will be set. Anything **not** discussed previously in the pre-production meeting will **not** be allowed or implemented during the actual production.
5. A pre-production meeting must take place prior to each production/show until staff deems unnecessary. Staff reserves the right to require pre-production meetings as necessary.
6. Producers must arrive within 15 (fifteen) minutes of the scheduled appointment time. A user arriving more than fifteen minutes late will have their reservation forfeited.
7. Producers are responsible for set-up and strike of the set. Appointment times should be made to reflect the necessary needed time for each production.
8. Producers are expected to contact SWOCC staff if he/she is unable to make an appointment, or if they will be delayed. Leaving a voice message does not constitute a reservation cancellation or tardiness. Confirmation must be received from a staff member.
9. Producers may only use certified crew for a production. The producer is required to provide a complete list of crew and assignments to their assigned staff member prior to a production.
10. Producers are responsible for understanding and following all polices in the Public Access Polices book. Producers are responsible for their crew, talent and other persons on set, and that they must abide by the same polices.

# SWOCC Studios

## Studio B Training Class

Week 1

*Intro to the Camera*

*Control Room*

*Crew Positions*

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33300 Nine Mile Rd

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fax 248.473.8610

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WEEK 1

**Physical Attributes of the Camera**

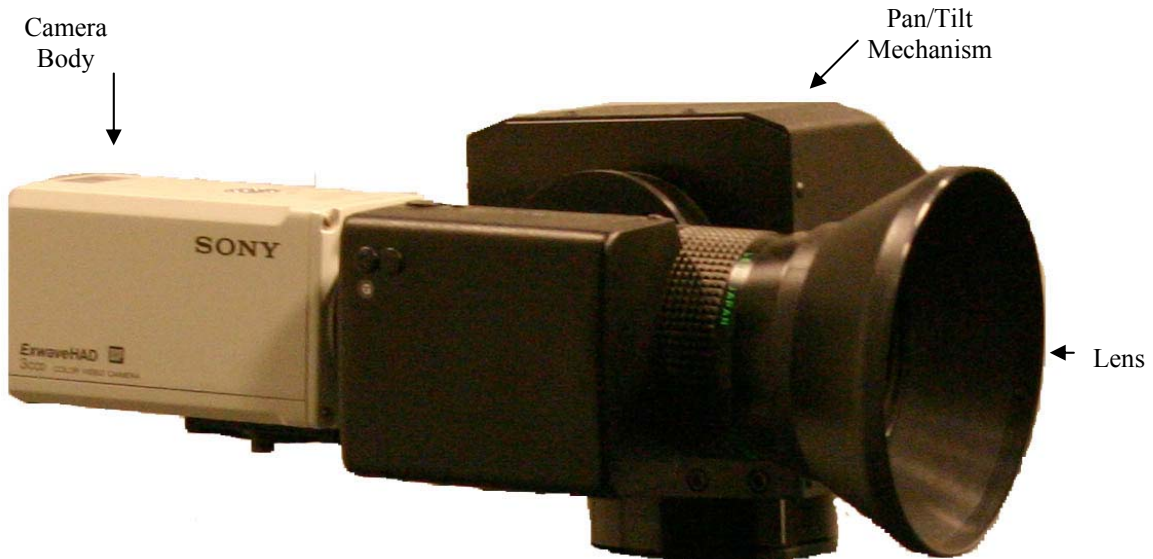
**Lens-**What the Camera Sees

Zoom-Change what the camera sees from wide angle to narrow angle.

Focus- Used to make the picture appear sharp and clear

Iris- Controls the amount of light that enters the lens.

**CCD (Charge-Coupled Device)-** a small solid-state silicon chip that contains horizontal and vertical rows of thousands of light sensing picture elements called pixels.



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WEEK 1

## **Under the Camera**

### **Tripod** (sticks)

- Pedestal Control/Lock
- Leg Height Control/Lock
- Camera Head-Mount

### **Dolly**

- Wheels
- Tripod Feet Lock

## **Movement Definitions**

**Tilt up/down-** Up and down movement of the camera on the tripod.

**Pan right/left-** Side to side movement of the camera on the tripod.

**Pedestal up/down-** Physically raising or lowering the camera with the tripod.

**Zoom in/out-** Either using the Zoom Controls or Manually adjusting the zoom in or out until the subject is in frame.

**Dolly in/out-** Movement of the camera and tripod across the floor toward the subject (dolly in) or away from the subject (dolly out).

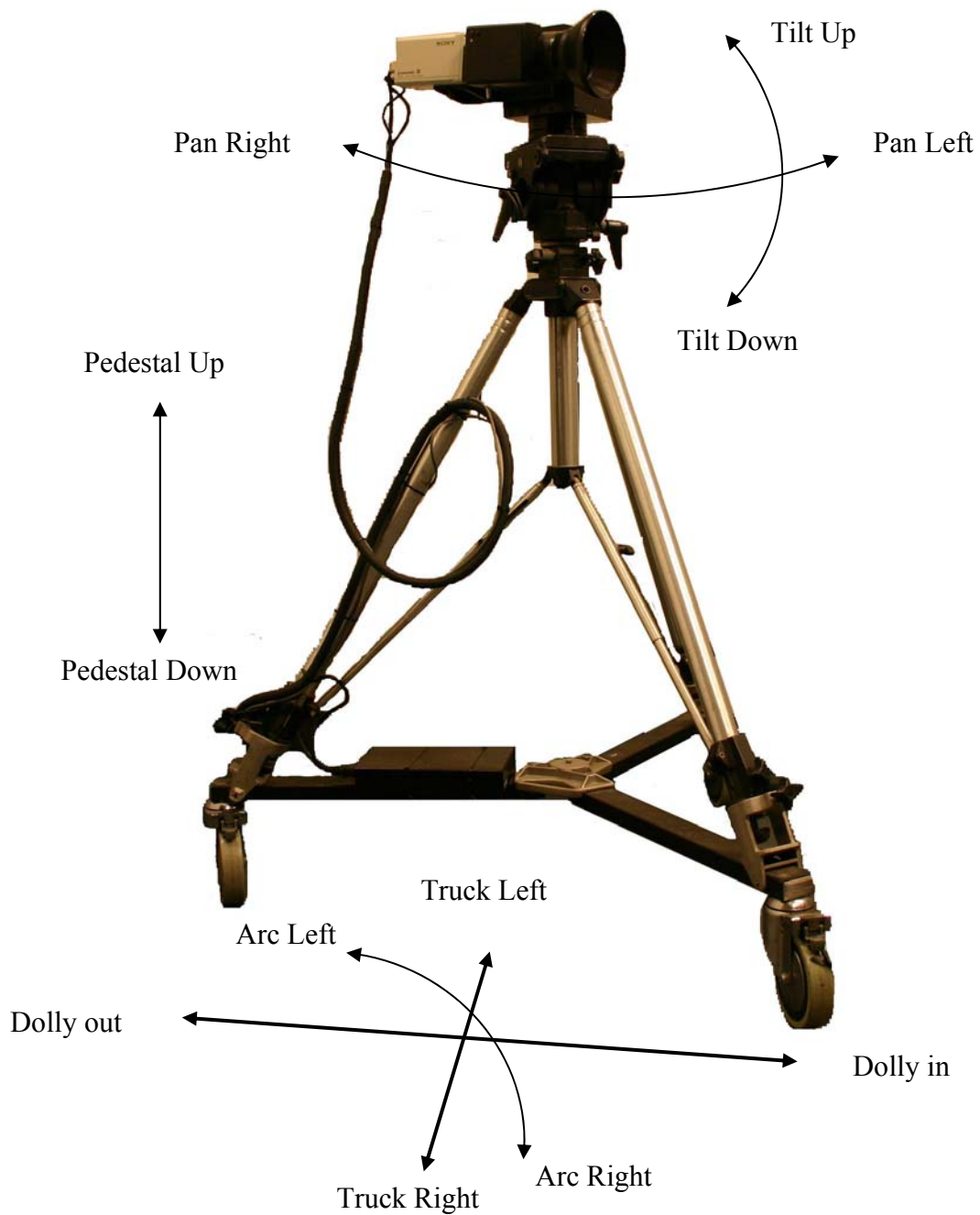
**Truck left/right-** Side to side movement of the camera and tripod across the floor.

**Arching-** Camera trucks and dolly's at the same time, moving in a semi circle around the subject.

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WEEK 1

Camera Movement Examples





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WEEK 1

**Through the View Finder**

**Aspect Ratio-** The ratio of the width of the television screen to its height. The standard ration is 4 x 3 ( four units wide by three units high); HDTV (high-definition television) is 16 x 9 ( sixteen units wide by nine units high).

**White Balancing-** To see a white object as white, the camera must be told whether the light in which it is operating in is white. This is a camera adjustment to compensate for a bluish or reddish light. White balancing the camera should be done anytime the light changes on an object. This is an automatic feature on most consumer camcorders.

**Safe Title-** Refers to the picture area that will be seen by most television receivers in the home.

**Camera Bars-** Serves as a reference for the color monitors or for the playback of the recording.

## **Framing Definitions**

**XCU (Extreme Close-Up)** – A view of just the subjects face.

**CU (Close-Up)**- A head and shoulders shot of subject.

**MS (Medium Shot)**- A view of the subject from the waist up.

**LS (Long Shot)**- A view of the subject from head to toe.

**WS (Wide Shot) or XLS (Extreme Long Shot) or Cover Shot**- A view of the subject and their surroundings.

**One Shot** - One person in the frame.

**Two Shot**- Two people in the frame.

**Three Shot**- Three people in the frame.

**Over the Shoulder**- A camera view looking over the shoulder of one subject at another subject face front.

**Headroom**- Space above the head of the subject

**Talk (Lead) Room**- Space in front of a profiled subject, or ahead of someone moving on camera.

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WEEK 1

**Picture Composition Examples**



Extreme Long Shot (XLS)  
or Cover Shot



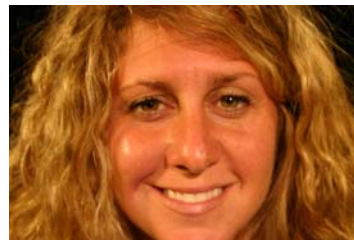
Long Shot (LS) or  
Full Shot



Medium Shot (MS) or  
Waist Shot



Close-up (CU)



Extreme Close-up (XCU)



Two Shot



Over the Shoulder Shot  
(O/S)

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WEEK 1

**Picture Composition Examples**



Too Much Headroom



Too Little Headroom



Too Little Noseroom



Too Much Noseroom



Perfect Noseroom

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WEEK 1

**Picture Composition Examples**



Too Little Leadroom



Perfect Leadroom



Problematic Composition:  
Plant



Problematic Composition:  
Flag



Pointing to Nose Room

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WEEK 1

**Crew Definitions**

<b>Producer</b>	In Charge of one or several program series. Manages budget and coordinates with talent, clients, studio management, writers, etc. Incurs sole responsibility for all aspects of a production, including all personnel working on a production, coordinating technical, and non-technical production elements. Often serves as director and writer.
<b>Asst. Producer</b>	Assists producer in all production matters. Often do those actual coordinating jobs, such as telephoning to schedule and confirm crew, talent, studio reservations, etc.
<b>Director</b>	In charge of directing talent and technical operations. Is ultimately responsible for transforming a script into an effective video and audio message.
<b>Technical Director</b>	Does the switching and acts as technical crew chief. Often serves as director.
<b>Production Asst.</b>	Assists producer and director during actual production.
<b>Camera Operator</b>	Operates camera, takes direction from Director, one operator often serves as floor manager.
<b>Audio Technician</b>	In charge of all audio operations. Works audio console (mixer) during the show. Takes cues from director.
<b>C.G. Operator</b>	Types and/or recalls from the computer the names and other graphic material to be integrated with the video image. Takes cues from the director.
<b>Floor Manager</b>	In charge of all activities on the studio floor. Directs talent, relays director's cues to talent, and supervises floor personnel.
<b>Talent</b>	Refers to all performers and actors who regularly appear on television.
<b>Editor</b>	Non-linear or linear edits the production according to the producer's notes, or direction. Often is done by the producer or director.

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## Studio B Training Class

WEEK 1

### **The Control Room**

**The Switcher-** A panel with rows of buttons that allows the selection and assembly of various video sources through a variety of transition devices, and the creation of electronic special effects.

**VTR (Video Tape Recorder)-** Records the Video and Audio signal onto videotape.

**The Character Generator-** A computer dedicated to the creation of letters and numbers in various fonts. Its output can be directly integrated into video images.

**CCU ( Camera Control Unit)-** Equipment, separate from the actual camera, that allows the video operator to adjust the color and brightness balance before and during the production.

**The Audio Console (Board or Mixer)-** Controls the volume of all inputs, mix some or all of the inputs signals in various ways, and manipulate the sound signals of each channel for the final mix.

**CD Player-** Compact disk player used to add music to studio productions.

**Clear Com-** Intercom system used to facilitate voice communication between control room and studio.

**Program Monitor-** Program output of the video switcher.

**Preview Monitor-** Preview output of the video switcher.

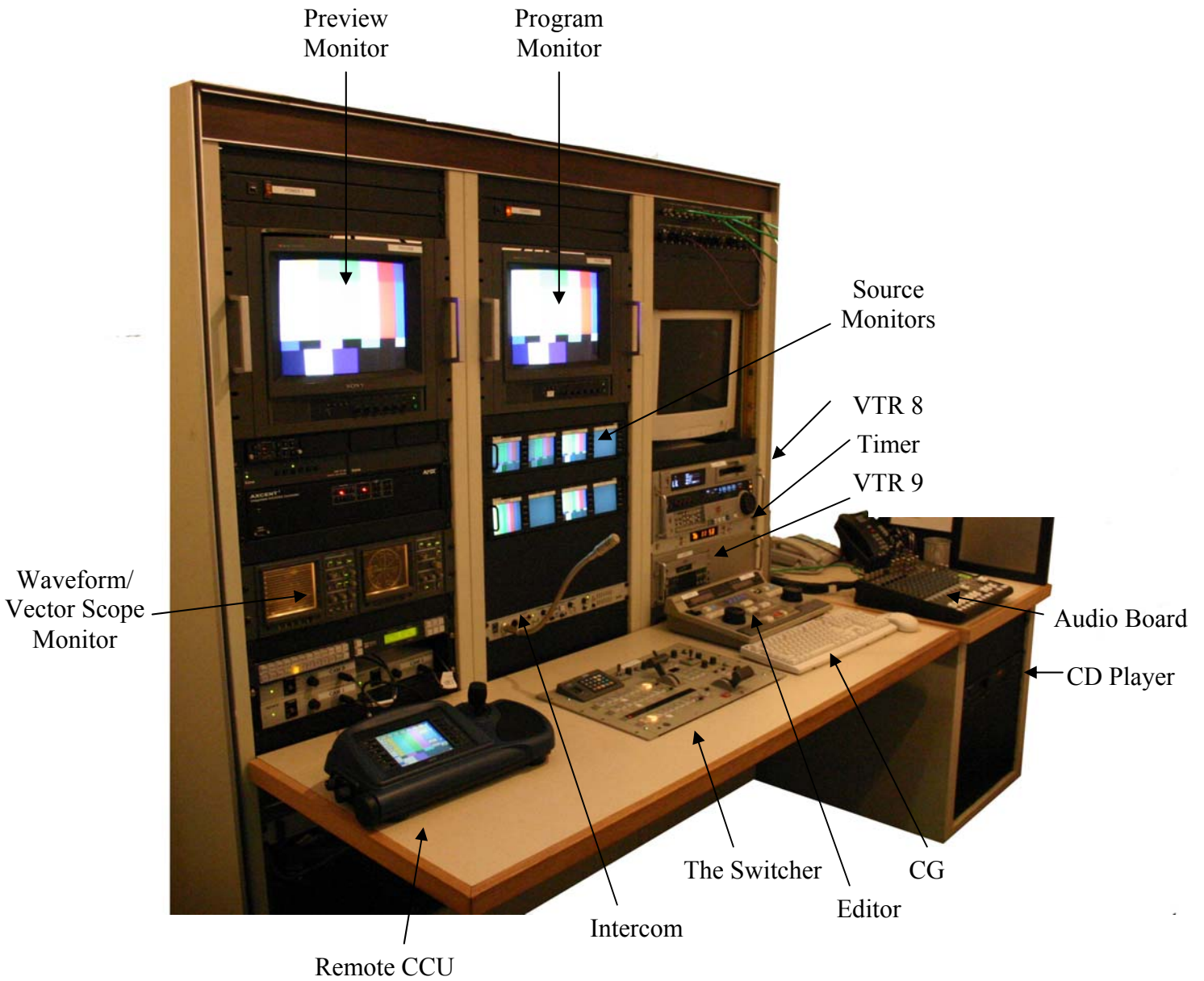
**Waveform/Vector scope Monitor-** Measures the brightness and color of the program video signal.

**On-Air Light-** Light that is turned on to alert others a production is in progress.

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WEEK 1

**The Control Room**





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WEEK 1

The Switcher



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## Studio B Training Class

WEEK 1

### **The Switcher**

**Preset (Preview) Bus-** Lit button is being sent to the Preview Monitor.

**Program Bus-** Lit button is being sent to the Program Monitor.

**Cut-** The instantaneous change from one shot (image) to another.

**Effects Mode-** Dissolves or Wipes are used to transition from one video signal to another.

**Mix Mode-** Dissolves are used to transition from one video signal to another.

**Wipe Mode-** Wipes are used to transition from one video signal to another.

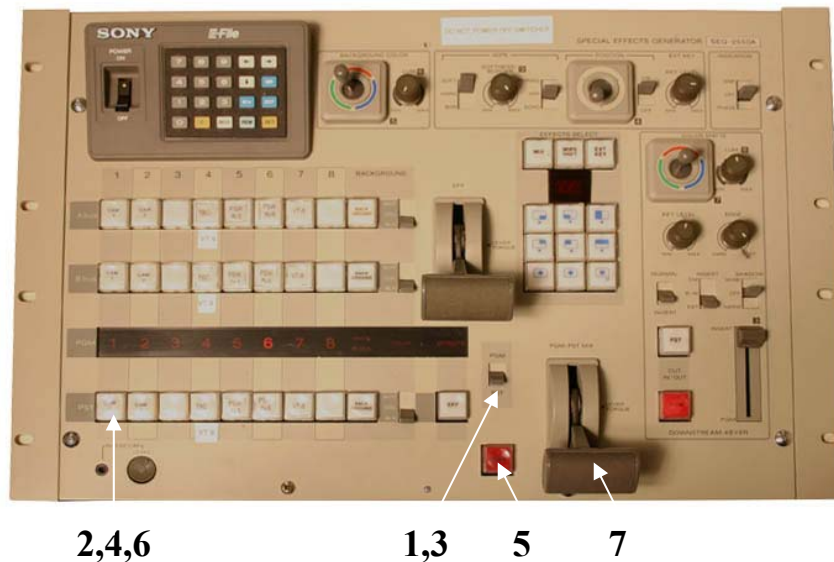
**Manual-** Use T-Bar for manual transitions.

**DSK (Down Stream Keyer)-** A control that allows the title to be keyed (cut-in) over the picture (Program out signal) as it leaves the switcher.

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WEEK 1

**Directing using the Switcher**



**Directing in Program Mode**

- 1-Select PGM
- 2-Select the video source on the Preset Bus you want to switch to.

**Directing in Preset Mode**

- 3-Select PST

**To Cut in Preset Mode**

- 4- Select the video source on the Preset Bus you want to switch to.
- 5-Press the Take Button

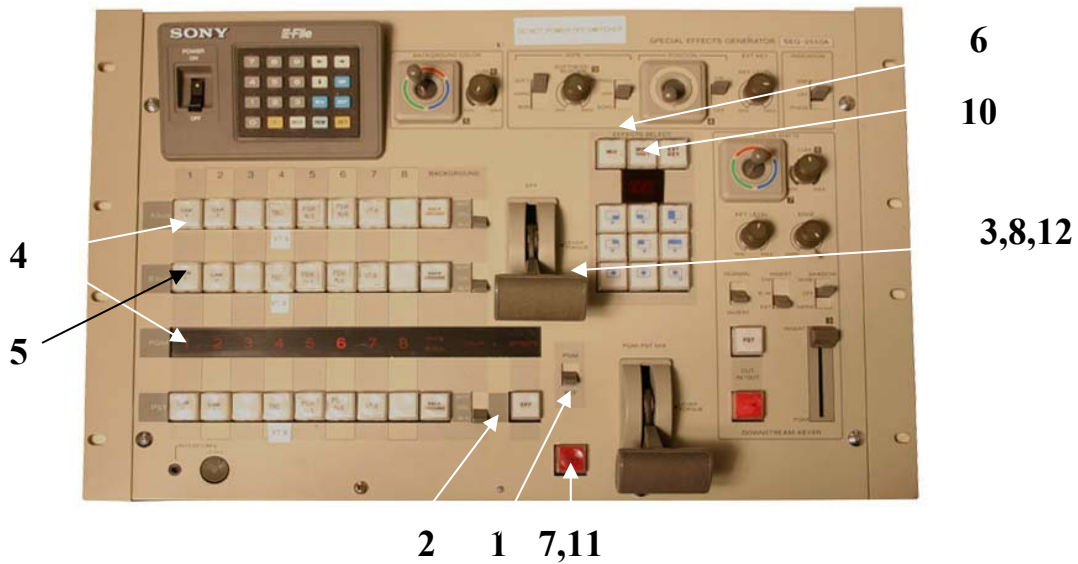
**To Dissolve in Preset Mode**

- 6- Select the video source on the Preset Bus you want to switch to.
- 7-Push or Pull the T-Bar toward or away form you.

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WEEK 1

**Directing using the Switcher**



**Directing in Preset Mode**

1-Select PST

**To Dissolve using the Effects Bus**

2- Select EFF

3-Push the Effects T-Bar toward A Effects Bus

4-Select the same video source on the A Effects Bus as on the Program Bus

5- Select the video source on the B Effects Bus you want to switch to

6-Select Mix

7-Press Take button

8-Pull the Effects T-Bar Toward you

**To Wipe using the Effects Bus**

9-Follow steps 1-5

10-Select Wipe

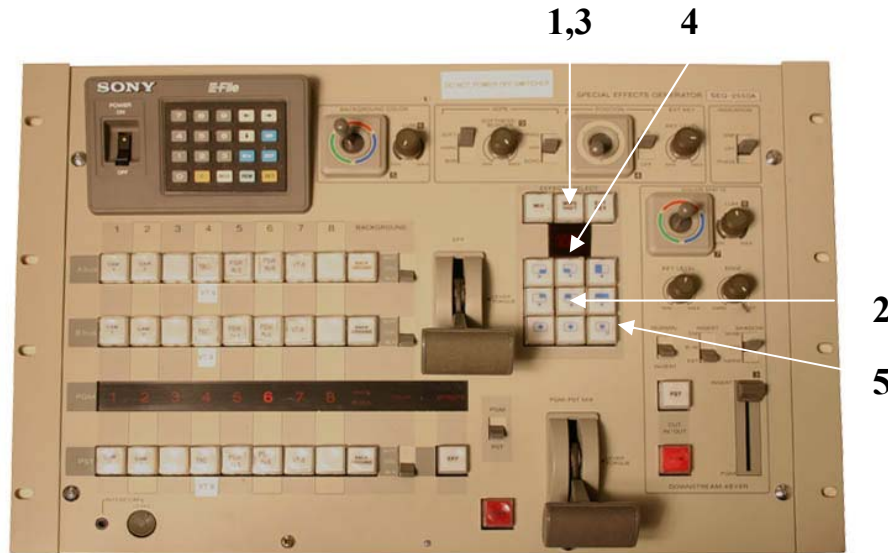
11- Press Take button

12- Pull the Effects T-Bar Toward you

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WEEK 1

**Selecting Effects**



**To Select an Effect**

**1-**Press the Wipe Button

**2-**Press Button that corresponds with the desired wipe

**Or, if you have found an Wipe you wish to use off the Effects Palette:**

**3-**Press the Wipe button Twice (Three Red 000's will light)

**4-**Punch in number of wipe by pressing one of three top wipe buttons.

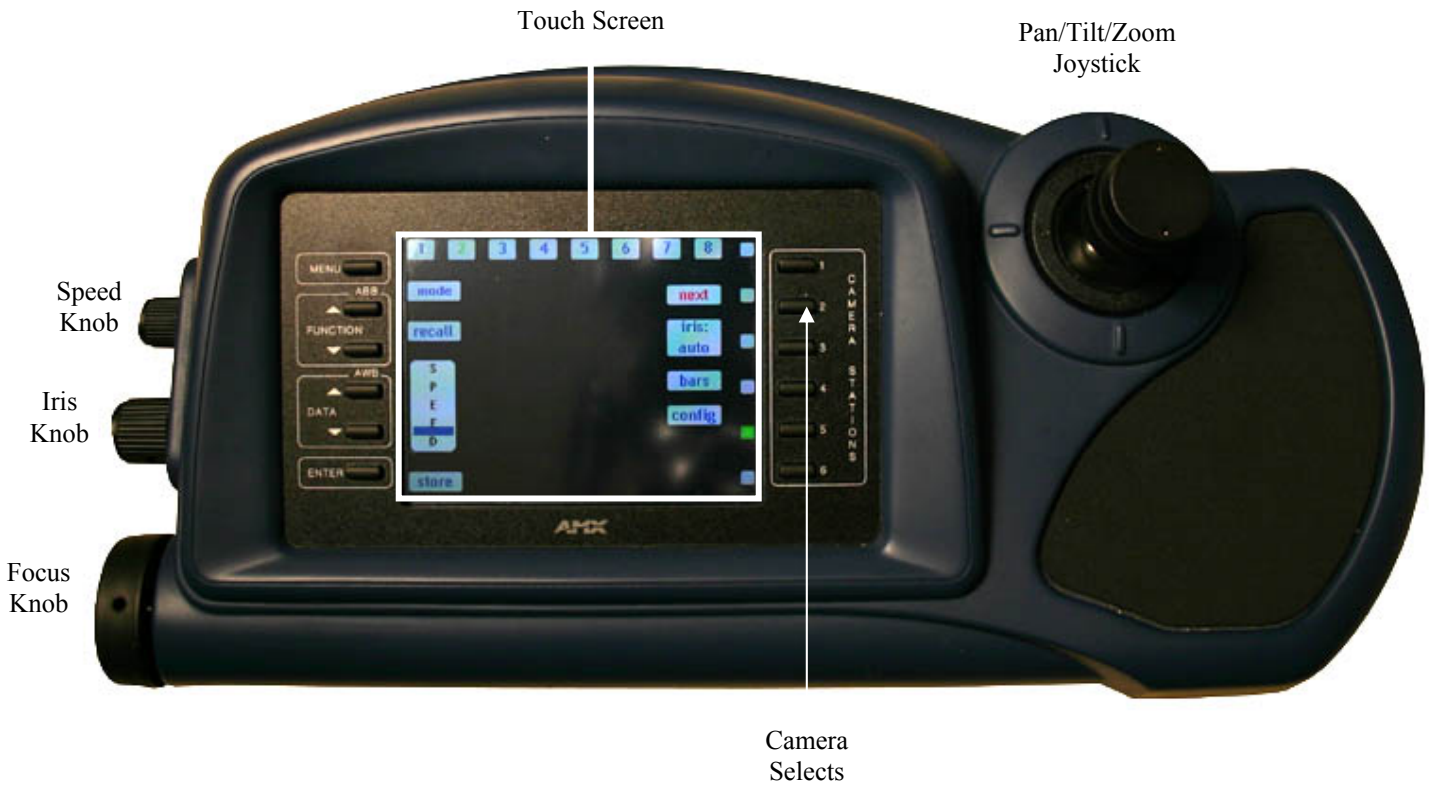
(First button corresponds to first 0, Second Button with second 0, etc.)

**5-**Press the “enter” key

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WEEK 1

**Camera Controller**



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WEEK 1

**Camera Controller**



**To preset Camera Positions**

1-Adjust Camera to desired position

**The following steps will be done on the Touch Screen**

2-Press preset number on which to store camera position

3-Press Store

**To recall a preset position**

4-Press preset number you wish to recall

5-Press Recall

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WEEK 1

**The Time Clock**



**To Set the Timer:**

(Example Time: 00:10:30)

- 1-Hold the Timer Button
- 2-Press the Select/Reset two times until the second set of 0's blinks
- 3-Press Set/Stop 10 times to advance the timer 10 minutes
- 4-Press Select/Reset one time until the third set of 0's blinks
- 5-Press Set/Stop 30 times to advance the timer 30 seconds
- 6-Press Select/Reset once until no numbers blink

**To Reset the Timer:**

- 7-Press Select/Reset

**To Start the Timer:**

- 8-Press the rocker switch Up to start counting up or Down to start counting down



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## Studio B Training Class

Week 2

*Audio*

*Character Generator*

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33300 Nine Mile Rd  
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WEEK 2

**Microphones**

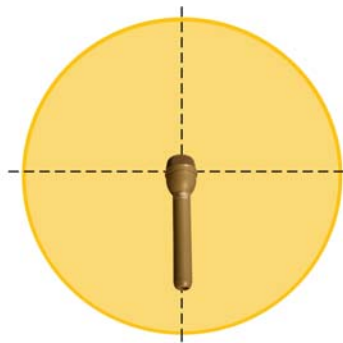
**Pick up Pattern-** The zone within which a microphone can hear well. (Omni- and Uni-directional)

**Omnidirectional-** hears equally well from all directions.

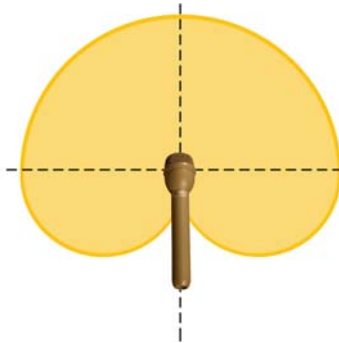
**Unidirectional-** hears especially well in one direction.

**Cardioid-** Unidirectional mic which has a heart-shaped pickup pattern.

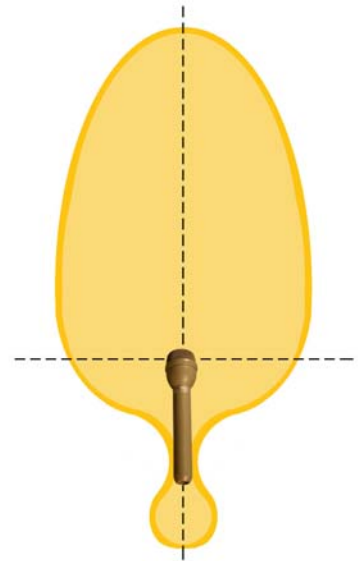
**Hypercardioid-** Unidirectional mics which has a “long reach,” meaning it can pick up sounds that are farther away. Because these mics are fairly long and are aimed at the sound source, they are commonly called **Shotgun mics**.



Omnidirectional



Uni-directional  
Cardioid



Uni-directional  
HyperCardioid

## Microphones

**Lavaliere (Lav) Microphone-** a very small, rugged, omnidirectional microphone that is used primarily for voice pickup. Usually clipped to clothing.



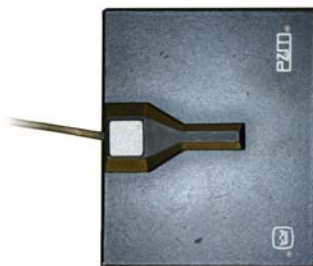
**Hand Held Microphones-** a microphone that is handled by the talent, used in situations in which you need to exercise some control over the sound pickup.



**Shotgun (Boom) Microphone-** a long, unidirectional microphone that is used to pick up sound sources farther from the microphone; used whenever the mic is to be kept out of the picture.



**Pressure Zone Microphone (PZM)-** a small omnidirectional boundary microphone that can be placed on a table, wall, floor, lectern, or any flat surface. A small microphone is mounted face-down a short distance from the reflective boundary plate. This creates a pressure zone between the plate and the mic. The microphone detects changes in this pressure zone, rather than the conventional method of detecting changes in the surrounding air pressure (i.e. sound waves).



# Connector



Female  
XLR

Male  
XLR



Male  
RCA

Female  
RCA



Male  
Phone  
(Quarter Inch)



Male  
Mini

# Studio Panel

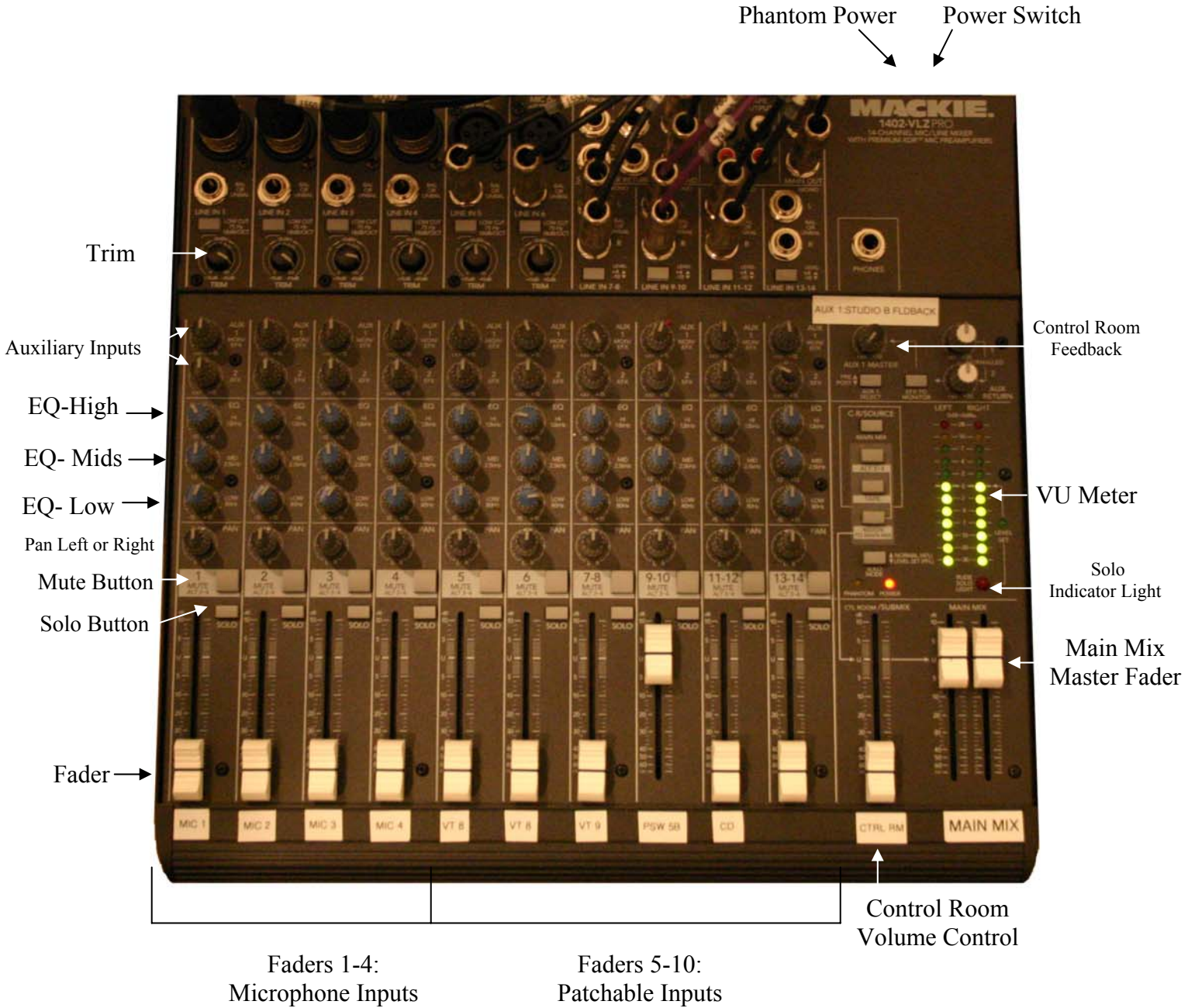




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WEEK 2

Audio Board



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WEEK 2

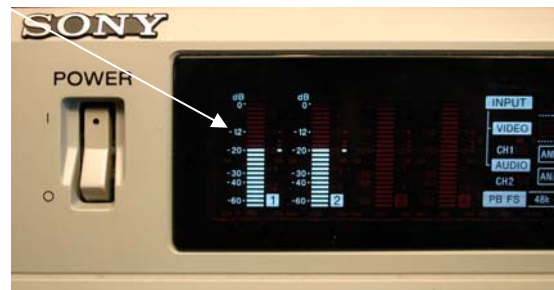
## Setting up the Audio Board



- 1-Slide Main Mix Fader to 0db or Unity
- 2-Slide faders 9 and 10 (PSW 5) until VU Levels are at 0db
- 3-Adjust Control room volume to desired level
- 4-Adjust Levels on VTR 8 to -20db

You have now calibrated the output from the mixer with the input of the deck.

4



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## Studio B Training Class

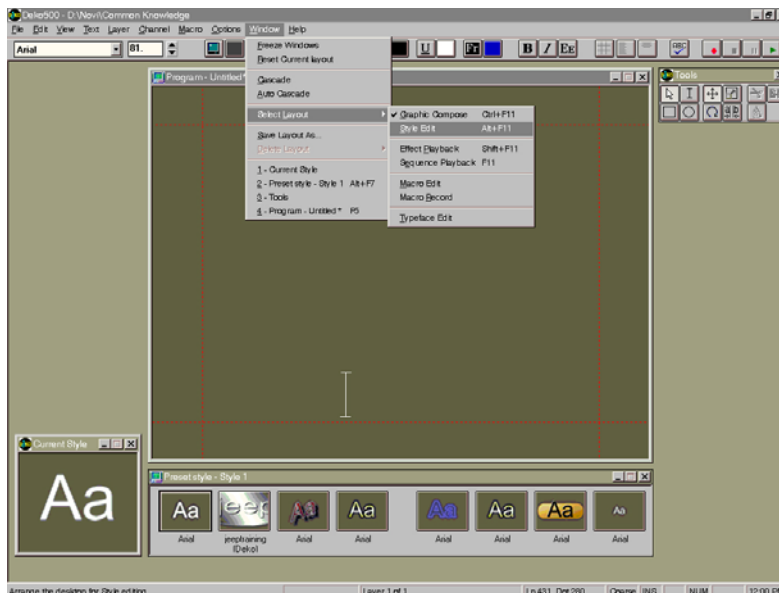
WEEK 2

## The Character Generator

1. Open Deko500 Program



2. Click: **Window>Select Layout>Style Edit** or **ALT + F11** on the keyboard



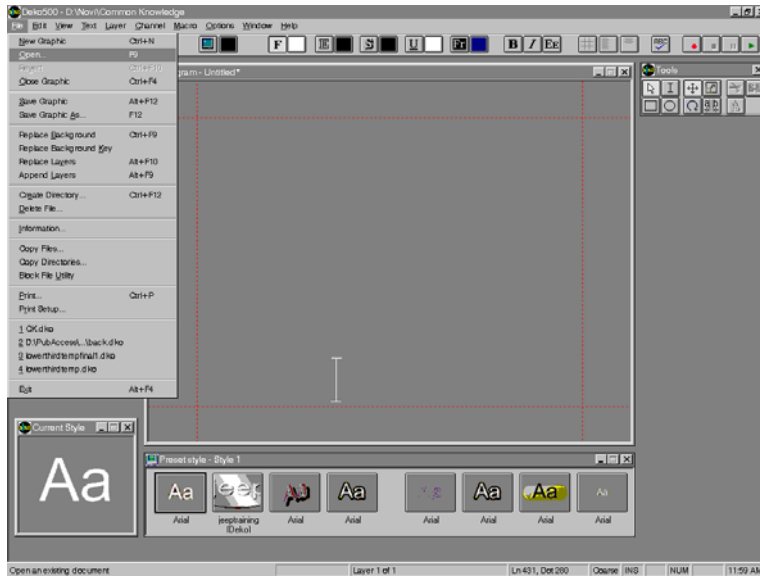


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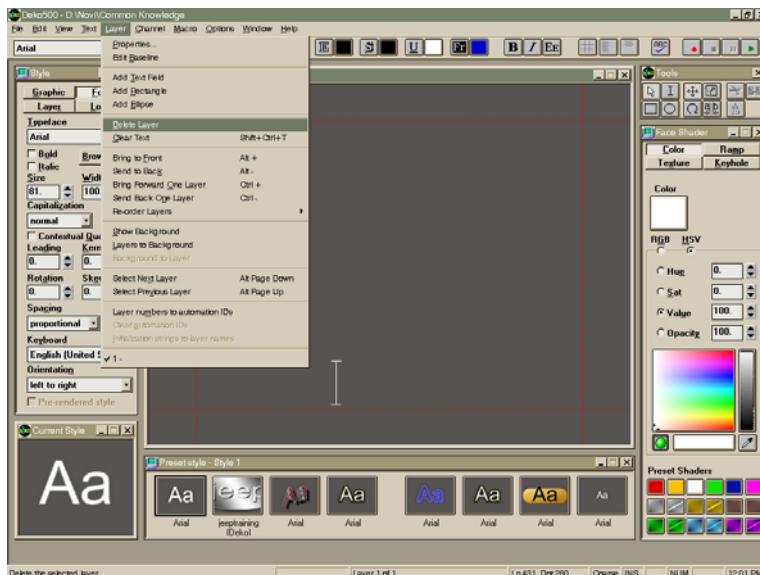
WEEK 2

## The Character Generator

3. To open a Graphic: **File>Open**



4. Creating a New Graphic : **Layer>Delete Layer**

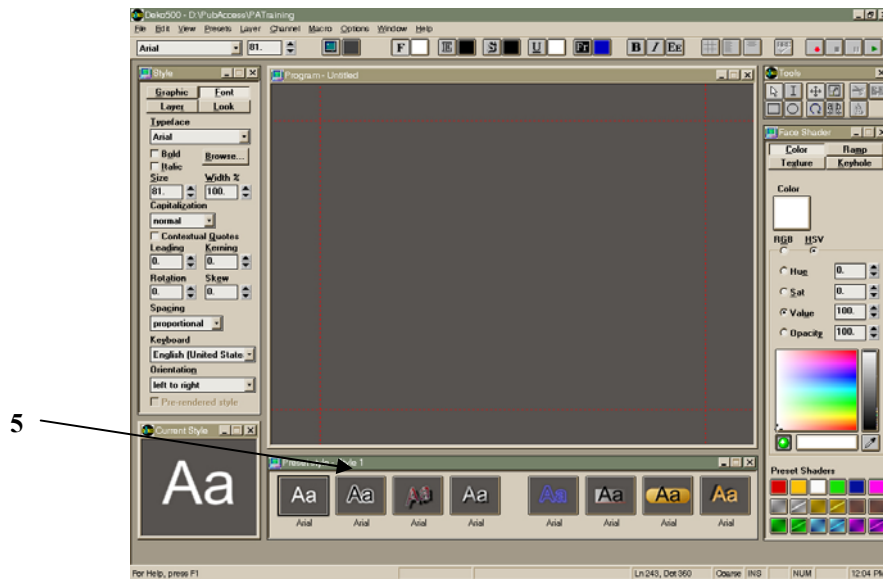


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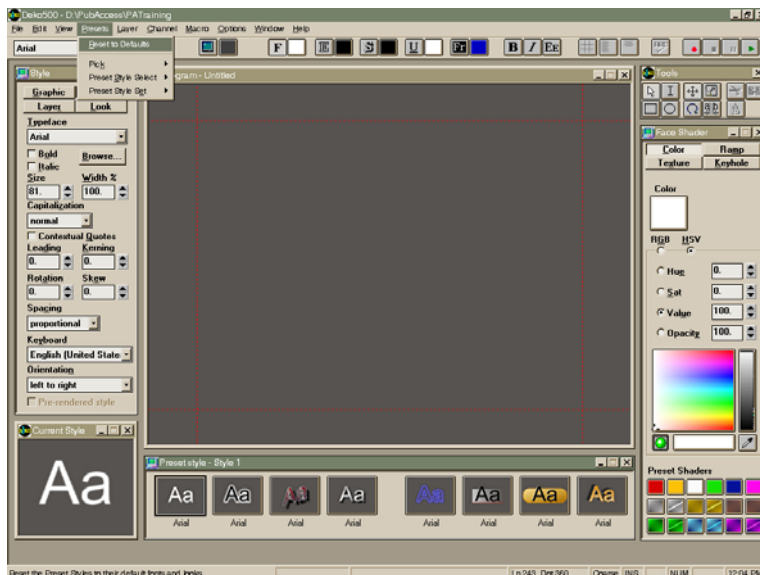
WEEK 2

## The Character Generator

5. Click on Preset Style Window



6. Click : Presets>Reset to Defaults

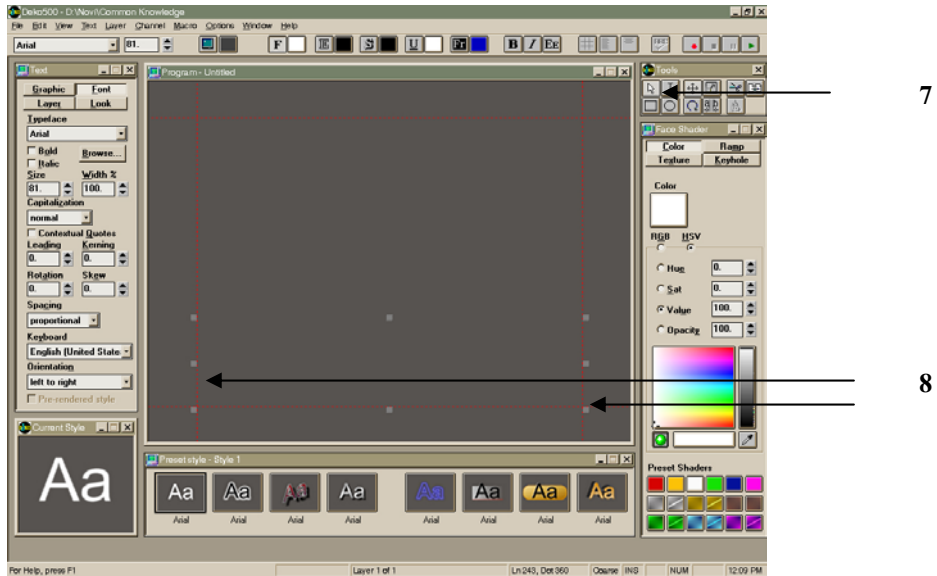


# SWOCC Studios Studio B Training Class

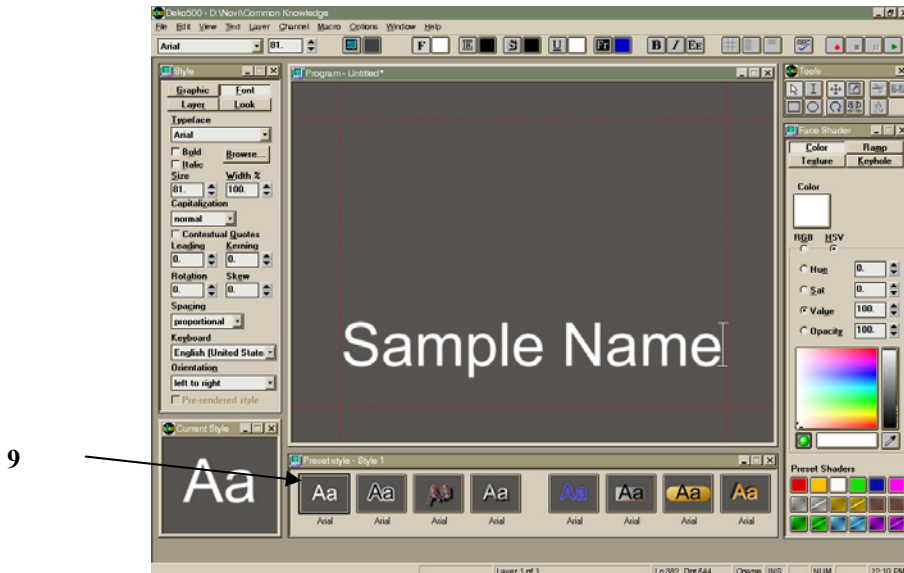
WEEK 2

## The Character Generator

7. Select I-Beam tool
8. Draw text box from safe title area to safe title area



9. Click on a font and type desired text

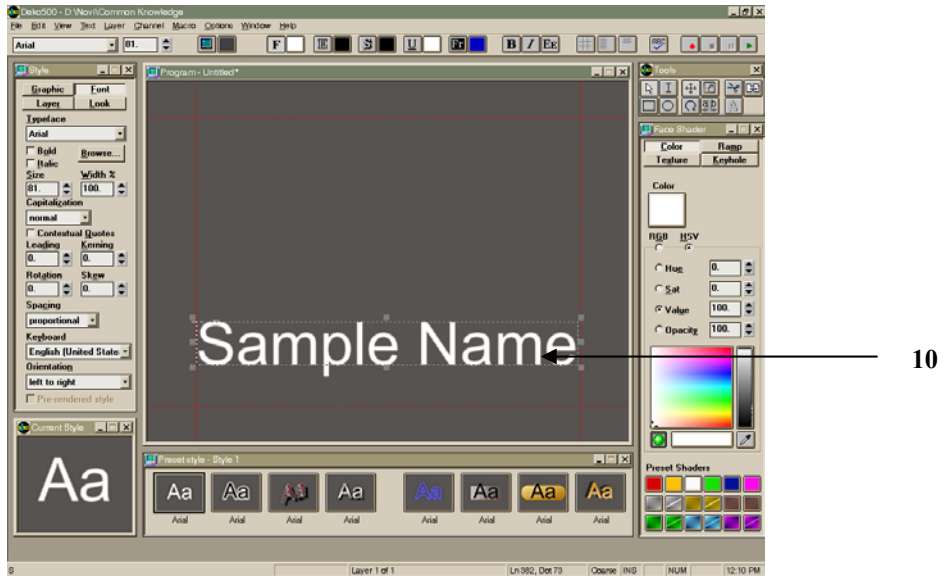


# SWOCC Studios Studio B Training Class

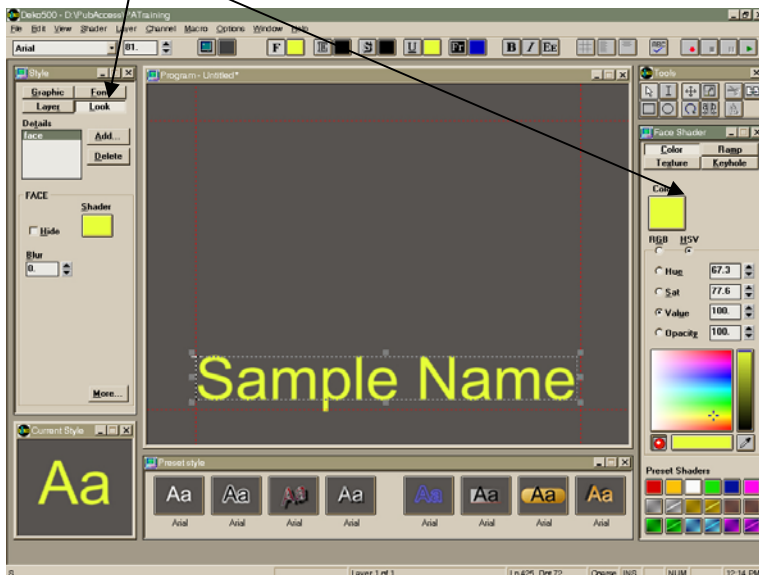
WEEK 2

## The Character Generator

10. Click one letter to the end of the row or page you wish to select, Right Arrow over, then Shift + Left Arrow till all text is selected.



11. Manipulate Font Look and Style.

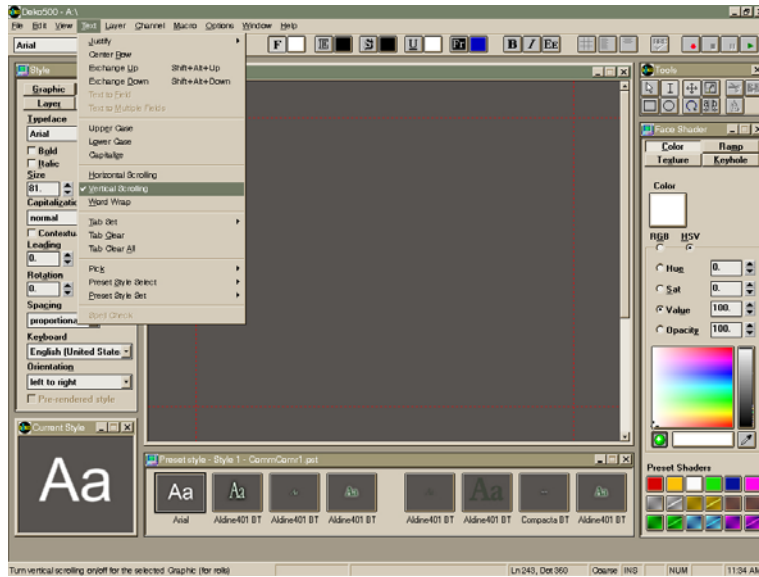


# SWOCC Studios Studio B Training Class

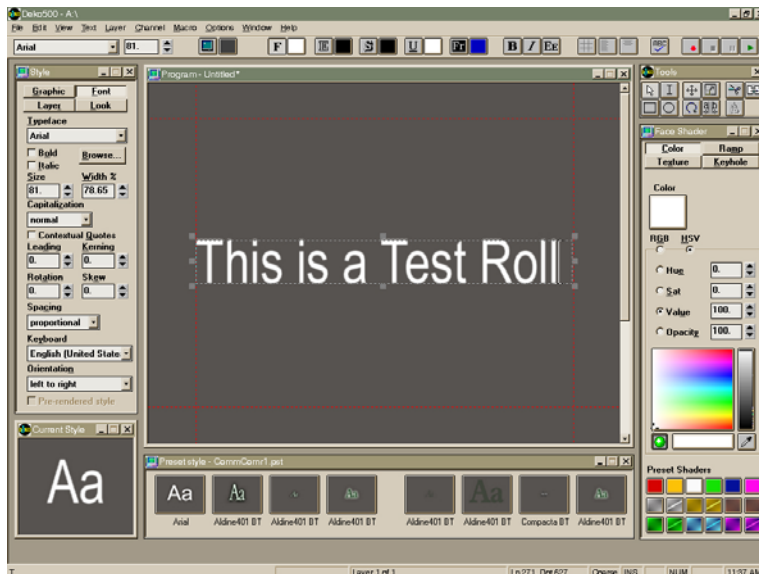
WEEK 2

## The Character Generator

### 12. To Create Text Roll: Text>Vertical Scrolling



13. Select I-Beam and Drag Text Box from safe title to safe title, Click on a font and type desired text.

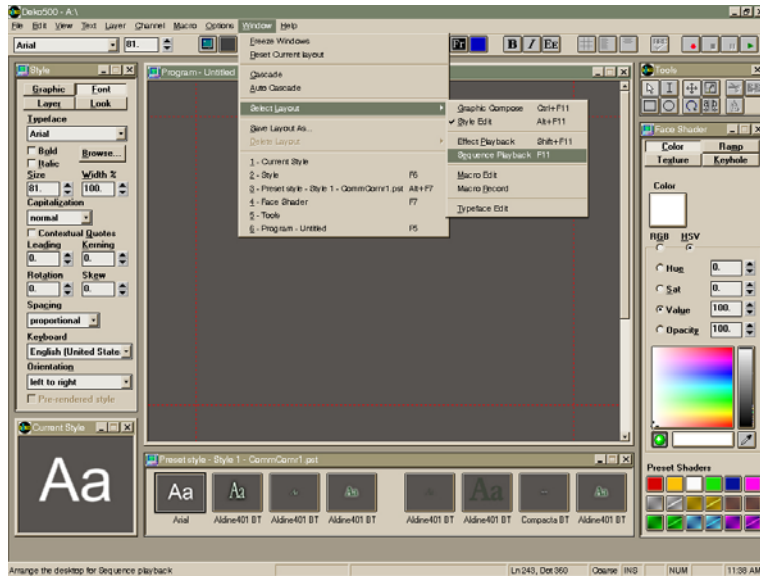


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WEEK 2

## The Character Generator

14. To Create a Sequence: **Window>Select Layout>Sequence Playback** or **F11 on keyboard**



# SWOCC Studios

## Studio B Training Class

WEEK 2

### The Character Generator

Creating a Sequence

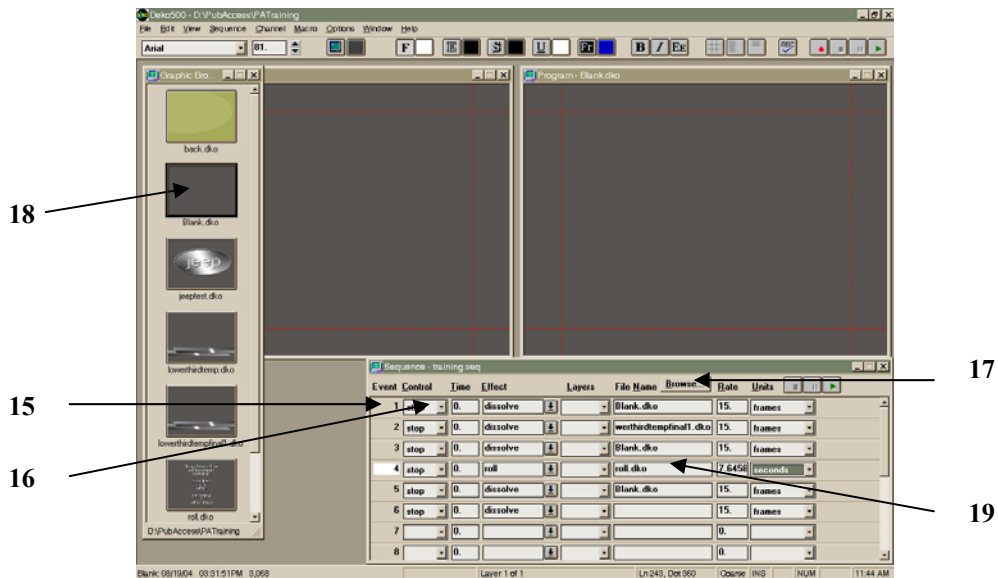
15. Select Event 1

16. Change Options to **Control: Stop**, **Time: 0**, **Effect: Dissolve**, **Layers: Blank**, **File Name: Blank**, **Rate: 15**, **Units: Frames**.

17. Select Browse

18. To import a file: Double Click (always start with a blank page)

19. Remember to change credit roll **Effect** to **Roll** and **Unit** to **Seconds**.



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WEEK 2

**The Character Generator**

Short Cuts to Remember

Alt + Arrow: Move Object

CTRL + Space Bar: Fine Movement vs. Course

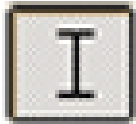
Alt + F11: Style Edit

F11: Sequence Playback

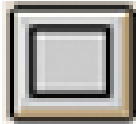
F5: New Graphic



Pointer



Add  
Text  
I-Beam



Add  
Rectangle



Add  
Ellipse



Move  
Tool



Rotate/Skew  
Tool