Intro to Studio Production at Denver Open Media

DOM Studio Hours
Tuesday-Friday 1pm-8:30pm
Saturday 11am-6pm

CREW LIST - CREW@DENVEROPENMEDIA.ORG

WWW.DENVEROPENMEDIA.ORG
720-222-0160

Version 2.2

THE EQUIPMENT YOU WILL LEARN ABOUT IN THIS CLASS:

- Fresnell, broad (or pan), halogen, and fluorescent lights
- Handheld, shotgun, and lavalier/lapel microphones
- XLR cables and The Jack bay
- Intercom System
- Studio Cameras and Tripods, Pan and Tilt Resistance
- Crew Positions and Stage directions
- The Control Room: Broadcast Pix
- Directing, Switching, Lighting, Audio and Recording

Studio A - HD	Studio B - HD
• Large space, audience seating	• Smaller, more intimate space
• Staging large enough for a band	• 2 Curtains, Black and Gray
• Screenings	• Chroma Key with green-screen cyc wall
• PA system	• 3 Robotic Cameras
• 3 Manual Studio Cameras, 2 Robotic Cameras	• Scan converter to incorporate A/V computer output
• Go "LIVE" on Comcast Channel 56	• Go "LIVE" on Comcast Channel 56
• Telephone system for call-ins	• Telephone system for call-ins
• Scan converter to incorporate A/V computer output	• 4 Microphone Inputs
• HD and SD recording DVD, DV and Compact Flash	• HD and SD recording DVD, DV and Compact Flash

QUICK GLANCE AT A FEW IMPORTANT DOM POLICIES:

1. Classes offered at Denver Open Media certifies members to use DOM equipment and facilities covered in the Field, Studio or Editing classes.

2. Once certified, you can rent DOM equipment at commercial rates or you can purchase a DOM membership and check-out basic DOM equipment free of charge.

   DOM Equipment Access Membership ($250 per year) - Gives individuals access to basic field packages or studio equipment, pending certification. Other equipment can be rented at discounted rates. See denveropenmedia.org for a complete list of equipment.

   DOM Organizational Membership ($500 per year for qualifying organizations) - Qualifying nonprofit organizations can grant four of their staff, members or volunteers with the equivalency of four Equipment Access Memberships (see above). The membership also comes with four classes.

3. If you are accessing our equipment through your DOM membership, all material you create using DOM equipment must be non-commercial in nature and be submitted to air on our channels WITH A CREATIVE COMMONS NON-COMMERCIAL SHARE-A-LIKE DERIVATIVES LICENSE. If your material is commercial in nature and/or cannot air on our station, you must rent our equipment at the commercial rates.

4. If you are accessing our equipment through your DOM membership, NEITHER YOU NOR YOUR CREW MAY BE PAID TO PRODUCE YOUR VIDEO PROJECT. If you are getting paid you must rent the equipment at the COMMERCIAL rates. Certain exceptions are made for nonprofit organizations based on project proposals. Please see our Station Director for more information.

5. Uncertified people cannot touch DOM equipment except where the shadow policies apply, see 2, Studio Membership.

6. Please do not bring food or drink into the studios or editing stations. Talent may have bottled water.

7. Damage to equipment due to inappropriate use is the responsibility of the user. Damage to equipment due to normal wear and tear is Denver Open Media's responsibility.

LIGHTING YOUR STUDIO SHOOT

THE 3 PRIMARY KINDS OF LIGHTS AVAILABLE IN THE STUDIOS ARE:

Fluorescent Lights ("Kino")
• The largest lights in the studio, fluorescent lights can only be dimmed bulb by bulb - there are four in each light fixture.
• The most energy-efficient and cost-efficient of all the lights in the studio. Running a fluorescent light all day is cheaper than running any of the other lights for just one hour.

Broad/Flood Lights (a.k.a. Pan lights)
• Smaller, open-faced rectangular lights with long thin bulbs.
• Shaped to provide a wide, thin light that you can pan across.
• Usually used for fill, backlight, and set lighting.

Fresnell Lights
• The most common type of lights you see: smaller, square or round, open-faced lights with flat bulbs designed to throw a bright light.
• These light have large, rotatable barndoors that are meant to shape light to any size needed.
• By controlling the width of the beam, they can be used as a key, fill, or back ligl

Ellipsoidal Lights
• Commonly known as a spotlight or theater light.
• Can be spotted with colored gels for use with musical performance or drama.
• Ellipsoidals are used for their strong, well-defined light and their versatility.
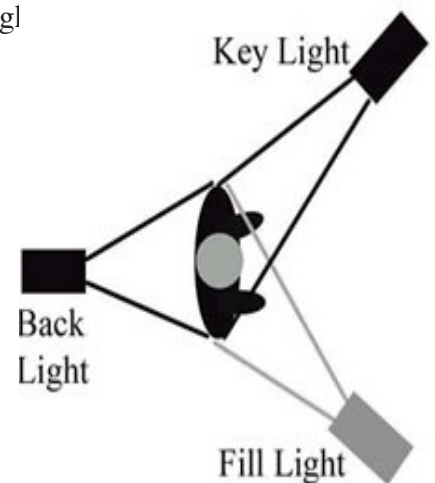
THE MOST SIMPLE AND COMMON LIGHTING SETUP IS 3-POINT LIGHTING:

This setup consists of:

o **The Key Light:** A bright light in front of the subject. The key is usually eye-level or above and off to one side (say 15-45 degrees) so there is some depth and shadows to what you're filming. This is the main light that illuminates the subject.

o **The Fill Light:** A diffused light, dimmer than the Key, the Fill light is placed on the opposite side of the subject, filling the shadows left by the Key light and ensuring the entire subject is exposed properly.

o **The Back Light:** A small light, above and behind the subject, shining on the back of their head and shoulders, the Back light casts a glow in the subject's hair and atop their shoulders, which helps to separate them from the background.

Setting up Audio for a Studio Shoot

Use XLR cables to patch microphones into cameras, snakes or audio mixers.

The jackbays are the square black boxes where you plug in your microphones and through which the sound is patched to the audio components in the control room.

Types of Microphones

Handheld:
Can be Uni-directional or Omni-directional. They only pick up sounds from things that are close to the microphone, which makes them well-suited for use in noisy situations.

Lavalier (a.k.a. "lav" or lapel mic):
An Omni-directional microphone that requires power, either from a battery or from phantom power (power that comes through the audio cable from the source, usually a mixing board). It is a small clip-on microphone most commonly used in sit-down interviews and non-narrative video. They are very sensitive and can pick up a lot of ambient sound, so they are not always recommended for noisy situations. When using a lav mic, be aware of things around the mic that may rub against it and interfere with the audio you are trying to record. For example, long hair and necklaces can rub against the mic, and cause noise.

Shotgun:
Hypercardioid microphones are best used for capturing sound at a distance. They are most commonly used in narrative filmmaking, where you do not want to see any microphone in your shot, and are often attached to boom poles. They do pick up a lot of ambient sounds as well, and are not optimal for noisy situations. Best multi-purpose mic.

Dynamic-type mics:
No External Power
Pick up range - weak, 4-6 inches
The most common type of dynamic mic is the moving coil microphone. Its construction is similar to that of a speaker. A thin diaphragm of plastic, mylar or aluminum picks up vibrations in the air and moves a coil of wire up and down across a magnet creating an electric current.

Condenser-type mics:
*Needs External Power**
Pick up range - Strong, 6 inches and greater
 They are constructed from two very thin metal plates, one movable and one fixed. These plates form a capacitor (a capacitor is an electrical device capable of storing an electrical charge). When air vibrations make the plates move, small voltage changes are created which are picked up by the circuitry within the microphone.
*These microphones often require a power supply to operate either through a battery or through the 48-volt phantom power supply on a mixing board or camera.

RULES TO LIVE BY:
1. When connecting mics to cables, make sure they click in.
2. Anytime you're filming something that uses a PA system, it's best to get your sound from the PA instead of a mic.
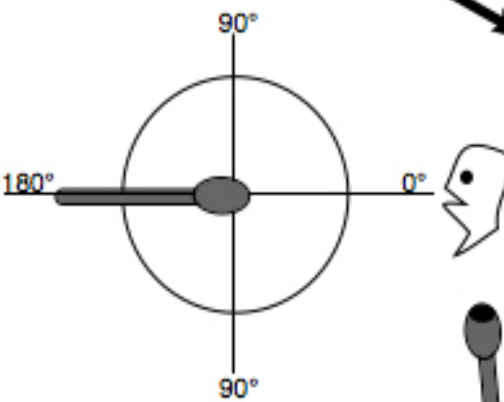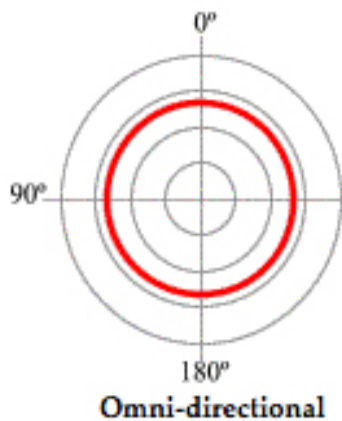*3. When your shoot is over, coil the XLR cables properly or the cables will be damaged.*

PICK-UP AND POLAR PATTERNS

Every type of mic has a different sensitivity to the direction the sound is coming from. Some mics only pick up the sound in front of it, others pick up all sounds whichever direction they come from. This sensitivity, when plotted on a graph, is called its polar pattern. Polar patterns help us choose the right mic for the job.
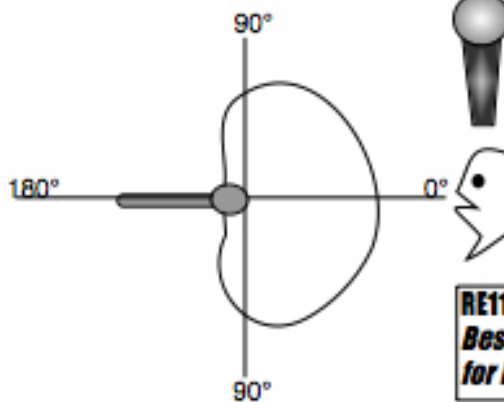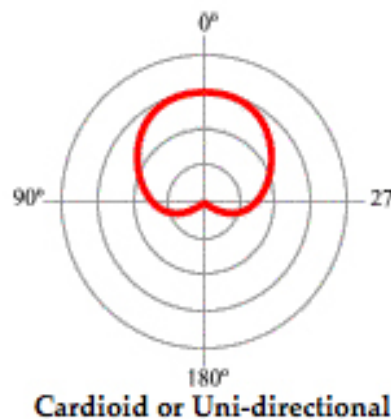
Omni-directional
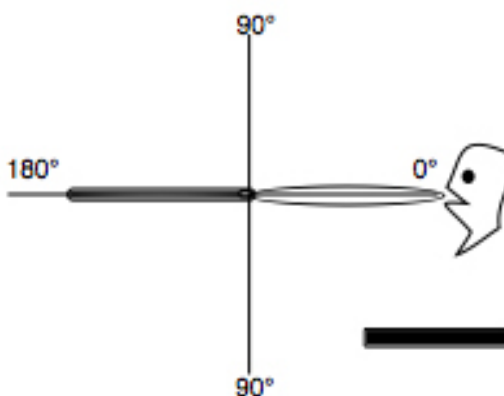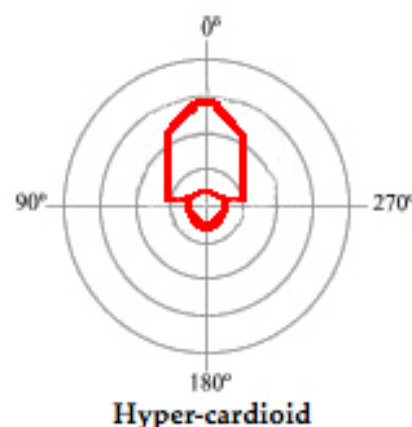
This type of mic will pick up sound from all directions.

Some Common Microphones

Omni-directional

Lavalier (Condenser Mic) - Used for Interviews

635A Handheld (Dynamic Mic) - Used for Street Interviews or Music

BeyerDynamic (Dynamic Mic) - Used for Street Interviews or Musical Instruments

Cardioid

Picks up sound only from in front of the microphone.

Cardioid or Uni-directional

Shure SM58 (Dynamic Mic) - Used for Singing and Music

RE11 (Dynamic Mic) - Best for use in a Mic Stand for interview/ singing/music
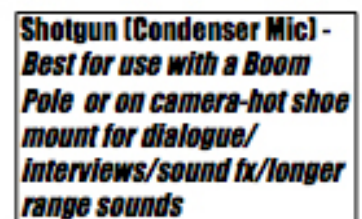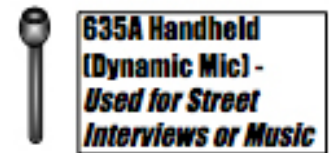
Hypercardioid

Variations on the cardioid patterns that pick up in a very focused area in front of the microphone.

Hyper-cardioid

Shotgun (Condenser Mic) - Best for use with a Boom Pole or on camera-hot shoe mount for dialogue/ interviews/sound fx/longer range sounds

THE STUDIO CAMERAS
They are tapeless as they record to decks in the Control Room. You can view the frame you're shooting by using the viewers mounted on top of the camera.

ADJUSTING THE POSITION OF THE STUDIO CAMERAS

How to brake and unbrake the Dolly:
• To brake the dolly, step on the silver tabs located near the wheels until they lock in place.
• To unbrake the dolly, use the toe of your foot to unlock the same silver tabs

How to adjust the Studio Tripods:
• The tripods that are attached to dollies:
1. Find an intern and staff! These cameras are heavy, and adjusting the tripod is a three-person job.
2. Unscrew the silver knobs on the tripod legs. Once you have unscrewed all three, you must tap the screw hard with your palm to move it into the adjustable position. Adjust the camera's height. To make sure it is level, check that the bubble on the head of the tripod is in the center of the circle. Once you have the tripod at the height you want it, re-screw the silver knobs.
• Other tripods can be adjusted either by turning the adjustment wheel or, in the case of the most basic tripods, by opening the flap on the legs of the tripod that will allow you to adjust the height.

How to Adjust Pan and Tilt Resistance:
Tilting is the term used for moving the camera up and down.
Panning is the term used for moving the camera from left to right

The Pan and Tilt Drag knobs on the sides of the camera allow you to adjust the amount of resistance that exists when you pan or tilt.

Tilt drag controls the amount of resistance there is when tilting
• Tightest at 9, most loose at 1
Pan drag controls the amount of resistance there is when panning
• Tightest at 9, most loose at 1

Tilt and Pan Locks lock the tilt and pan movement and make it impossible to tilt or pan. Always unlock the Tilt and Pan Locks when you want to move the camera, and lock the Tilt and Pan Locks when you are leaving the camera.

How to Balance the Camera's Weight (a.k.a. "Adjusting Counterbalance"):
If the camera is leaning too far one way or the other, turn the counter-balance knob on the right side of the camera to make the camera lean farther back or farther to the front until you get the right balance.

How to Use Zoom and Focus handles:
• The zoom handle is the right-hand handle on the camera. To zoom in, press the T on the handle, which stands for TIGHT, as in TIGHT SHOT. To zoom out, press the W on the handle, which stands for WIDE, as in WIDE SHOT.
• The focus handle is the left-hand handle on the camera. Rotate the handle left or right to focus or un-focus.

STEPS TO CAMERA SET-UP

REMINDER: DO NOT TOUCH CONTROL ARMS UNTIL YOU UNLOCK PAN AND TILT LOCK ON TRIPOD HEAD.

1. Unlock floor wheels on tripod.

2. Move camera into position by holding the base of the tripod or pedestal with one hand and the video cable with the other.

3. Lock one wheel (closest to your foot) on tripod/pedestal.

4. Check to make sure that your tripod/pedestal is at the proper height for your shoot. It is standard practice to set up the camera so the lens is eye-level with talent. If you need to do this please get assistance from your facilitator.

5. Make sure the level bubble on the tripod/pedestal head is in the center of the black circle. If camera head is not level please get your facilitator for assistance.

6. Set drags- make the tension setting appropriate for use. Make sure drag is set "9," the tensest setting.

7. Unlock pan and tilt locks. Turn knobs away from you –towards front of camera. Now you can use the control arms! Whenever you are using the camera these should remain unlocked- but make sure the **drag is set to at least 6 or higher!** As soon as you move away from the camera re-lock the pan and tilt.
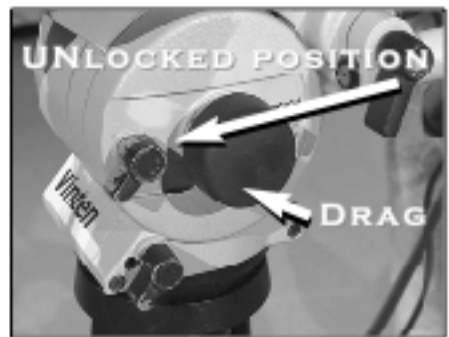
8. Adjust your viewfinder for your height by unlocking the knob and tilting the viewfinder up or down.
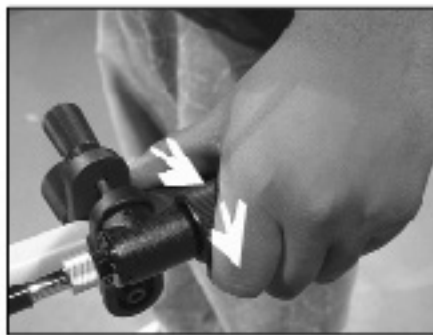
Camera Terms and Directions

ZOOM IN
(TELEPHOTO) -MOVES IN CLOSER TO SUBJECT

ZOOM OUT
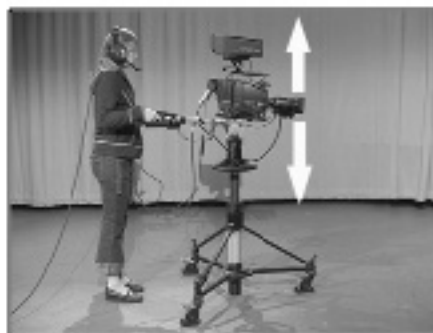**(WIDE ANGLE) -PULLS FURTHER AWAY FROM SUBJECT**

FOCUS CONTROL-
TO FOCUS PROPERLY ZOOM IN AS FAR AS THE ZOOM WILL GO

THEN USE THE FOCUS CONTROL TO MAKE THE IMAGE SHARP

THEN ZOOM BACK OUT TO YOUR SHOT

PAN -MOVE THE CAMERA HEAD LEFT OR RIGHT FROM A PIVOTING POINT

TILT -MOVE THE CAMERA HEAD UP OR DOWN FROM A PIVOTING POINT

ARC -MOVE THE ENTIRE CAMERA IN AN ARC SHAPE AROUND THE SUBJECT

TRUCK -MOVE THE ENTIRE CAMERA LEFT OR RIGHT

DOLLY -MOVE THE ENTIRE CAMERA IN TOWARD OR AWAY FROM THE SUBJECT

BASIC CAMERA WORK:

Once you understand how to use camera setting, lighting, and audio to capture good video, the next step to-wards producing high-quality footage is the composition of your shots (also known as your cinematography). As a filmmaker, you always want to understand where your audience will be looking, and you want to be able to subtly control where they focus within each shot.

It's important where you place people and objects in the frame across all three dimensions: up and down, left to right, and near to far. In general, things that are bigger in your screen take up the most space and that's what people will pay the most attention to.

Rule of Thirds
When filming people, regardless of the shot (whether a Close-up or Wide Shot) you want the subject's eyes in the top third of the frame. If you only learn one thing about cinematography, this should be it.

Focus
The strongest tool in the cinematographer's bag of tricks is focus. A full-face Close Up (CU) in sharp focus in the foreground will dominate the audience's attention, diverting their attention from a softer, unfocused figure in the background. Conversely, a figure in soft focus in the foreground can occupy more than half the frame and yet attract less attention than a smaller figure in the background, proving that focus is more important than the location or size of the object.

Framing refers to the placement and movement of the frame itself. Like any painter, the cinematographer gets to decide what items are inside and outside of the frame of his picture, as well as how the items are arranged within that frame. Of course film and video differ from most other forms of art, in that the frame itself can move. Dolly shots, pans, zooms, tilts, etc are unique tools of the cinematographer.

Framing for Beginners: Our basic tip for beginners is to conduct ALL your camera movement while the camera is off, and only record stationary shots. Watching good TV and Film, you'll notice that the vast majority of shots are stationary and contain no frame movement. Beginners tend to want to move the camera to keep things in-teresting, but the end result is often chaotic. More experienced cinematographers often learn to keep most shots interesting using placement alone, resorting to movement of objects within the frame or of the frame itself, only on special occasions.

Zooming is often considered an amateur technique and is rarely seen in professional film and TV. Whenever possible, physically moving the camera in or out is almost always preferred. When you see zooming it is usually with dollies, jibs or cranes and since we don't have them you should keep the camera still.

RULES TO LIVE BY:
1. You should always keep pan and tilt resistance on a higher number like 7, 8 or 9. This will make it harder to move the camera, but will make your movements much smoother.
2. AGAIN, always remember to unlock the Tilt and Pan Locks when you want to move the camera, and lock the Tilt and Pan Locks when you are leaving the camera. (These cameras' knobs have been much-abused on the studio cameras. They do not work well, but it's a good practice to lock and unlock them as noted above.)

Composing Your Shot

RULE OF THIRDS

You can use the rule of thirds as a guide in the off-center placement of your subjects.

Imagine your picture area divided into thirds both horizontally and vertically.

The intersections of these imaginary lines suggest four options for placing the center of interest for good composition and balance with in the picture.

HEAD ROOM

Poor head room (left) gives viewers the impression of relative weakness, compared with the strength of less head room (right).

Head room refers to the space between the top of the subject's head and the top of the frame.
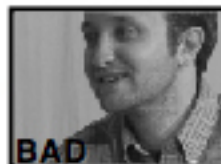
*Not all televisions have the same size screens and in order to make sure that most TVs will be able to see a well framed shot the viewfinders on the cameras have frameguides so you can frame your shot for the smallest TV screens.

NOSE ROOM AKA LEAD ROOM

The subject on the left "feels" cramped because he is too close to the right side of the frame--there is no room for his gaze. The subject on the right has plenty of "nose" room for his gaze or gesture.

If the subject is looking towards the right frame, leave more room at the right. If the subject is gesturing towards the left frame, leave more room at the left. If the subject is moving towards the right frame, leave them more room at the right.
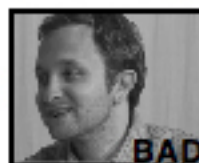
CONTINUITY- DIRECTOR'S LINE

Be sure to keep the talent on the same side of the frame throughout all the shots...for example if the host is on the left looking right towards the guest in a wide shot, then when cut to a close-up of the host he/she should also be on the left looking right.

Types of Camera Shots

EXTREME CLOSE-UP (XCU)-FACE

CLOSE-UP (CU) -HEAD & SHOULDERS

MEDIUM CLOSE-UP (MCU) -HEAD & CHEST

MEDIUM SHOT (MS)-HEAD & WAIST

OVER-THE-SHOULDER (O.S.)

OVER-THE-SHOULDER MEDIUM (O.S.M.S.)

TWO-SHOT (2S)-TWO PEOPLE

MEDIUM WIDE(MW) -HEAD TO KNEE

GROUP SHOT(GRSH) OR WIDE SHOT (WS)

ESTABLISHING SHOT (ES) OR EXTREME WIDE SHOT (XWS)

Crew Positions

PRODUCER

The producer assumes full responsibility for all aspects of the program and is responsible for the safety of all the people and equipment as well as for the content and quality of the show.
Specific responsibilities include:

*Plan and script the show.

*Reserve the studio: be sure to reserve in advance, the studios book up quickly

*Prepare any materials you'll need in advance (roll-in tapes, cue cards, teleprompter scripts, materials for keying, etc.).

*Prepare material for character generator (titles, lower thirds, credits).

*Assemble crew (All need to be Members/Certified by DOM)
*Assemble talent
*Arrange for the setup of the stage or set.
*Make sure everyone knows the production schedule and what is expected of them

DIRECTOR

The director's main responsibility is to make sure that all aspects of the taping go smoothly.
The direction happens from the control room.
Specific responsibilities include:

*Countdown at the start and end of the show.
*Keep time and cue those responsible for the roll-in tapes or other sections of the program.
*Communicate and cue floor manager and talent when necessary.
*Communicate with the camera operators to get the shots you want.
*Decide which shots and transitions you want on the program and communicate this to the technical director.

TECHNICAL DIRECTOR/SWITCHER

The main responsibility of the technical director (TD) is to make sure that the cameras are set up properly and to control the switcher and the keys to get the camera shots and transitions that the director wants to appear on the program. It's common for the TD to also take on some jobs of the director or floor manager.
Specific responsibilities include:
*Make sure cameras look color balanced.
*Operate the switcher and the keys.

AUDIO TECHNICIAN

This position responsibilities are to get the best possible sound.
Specific responsibilities include:

*Determine which microphones are best for the show (the producer may have done this already).
*Hook up microphones
*Set master audio control levels.
*Set levels for all sources of audio.
*For live call-in shows: set up the speaker so that the talent will be able to hear the callers and the callers can hear the talent, and to adjust the levels so feedback does not occur.
*Monitor and adjust levels as necessary during taping

CAMERA OPERATOR

Follow directions of the director to get the shots requested. The operator is responsible for the safety of the camera equipment (DON'T FORGET TO UNLOCK THE PAN AND TILT LOCKS).
Specific responsibilities include:
*Hook up your intercom.
*Make sure the viewfinder on the camera has frameguides -so your shots won't be out of the safe-frame area.
*Compose and focus your shots.
*Make sure that you are quiet during the taping.
*Follow the director's instructions.

CHARACTER GENERATOR

This person is responsible for setting up the titles, lower thirds (identification of talent), and credits. Remember that it takes time to format all the pages, transitions, and to check spelling. During the taping of the show the titles and credits will have to be keyed over at the appropriate times.

FLOOR MANAGER

The floor manager's main responsibility is to bridge communications between the people in the control room and the people in the studio. On set the floor manager will need to use pre-arranged non-verbal signals to communicate with the talent. They may also need to keep time, hold cue cards or place or remove props from the set. Specific responsibilities include:
*Hook up your intercom headset.
*Hold cue cards and/or countdown cards.
*Cue talents (and audience) when told to do so by the director.

Communicating in the Studio

How to Use the Headsets and Comms:

Headsets and Comms allow the cameraperson to communicate with the control room. Both the cameraperson and the director inside the control room wear headsets, and use the comm, the box attached to the headset, to control communication.

o **MIC OFF** allows the cameraperson to hear, but does not allow the director to hear the cameraperson

o **MIC ON** allows two-way communication so the director and cameraperson can also hear you. Camera-people usually never speak during the shoot!

Some common signals are:

30 SECONDS	1 MINUTE	5 MINUTES
CUE TALENT	LOOK AT CAMERA	STRETCH IT OUT
SPEED IT UP	BREAK/ROLL-IN	WRAP IT UP
CUT	PHONE CALL	

THE CONTROL ROOM

The Lighting Control Panel is the smaller, gray board available in the control room, can be used to control the lights in the studio.

THE LIGHTBOARD

1. Press the button that looks like a circle with a vertical dash at the top. You should see the board light up.
2. Slide up the MASTER Faders.
3. Choose your lights by consulting the light grid chart above the light board. Find the corresponding numbers on the lightboard fader and slide them slowly up, the further up you go the brighter the light will get.
4. KINOs, there are 2 sliders, instead of just one, that control each kino (fluorescent light). The fader on the top row only provides power to the kino, the corresponding fader on the bottom rows controls the dimming function. As fluorescents can not properly dim, each one of the four bulbs light up or turn off in turn to increase or decrease brightness.
5. To turn the lightboard OFF, bring all faders down, bring down the MASTERS, press the "MODE" button and then the "√" button to confirm. The board should completely darken.

Icons to Know:

Broadcast PIx Desktop Icon

Harris TitleMotion Desktop Icon

Broadcast Pix Button

Used for:

    * Launching the Broadcast Pix program
    * Should launch Title Motion as well, if not click on the icon to the right

        Used for:

    * Creating and Saving graphics and titles
    * Creating animations

        Used for:

    * Shows- New, Load, Edit
    * Floating new monitors and loading/saving layouts
    * Arranging inputs
    * Arranging graphics/ animations/clips

CLOCK

The clock's time is synced with the computer. If producing content that will go directly to air, please use this time for your production.

TIMER

Time your show's length or use the timer as a countdown clock.
- Click on the ARROW button to change direction.
- When counting down, an ellipsis appears below the arrow.
- When counting down, click the ELLIPSIS to set the timer time.
- Click the PLAY button to start. When counting, the PLAY button turns into a PAUSE button.
- Click the PAUSE button to stop.
- Click the STOP button to start over.

SOURCES

All the video, CG and graphics available for your show such as Cameras, Decks, Clips, CG, Computers, Stills, and Logos.

LAYOUT

The arrangement of the windows and virtual tools and programs needed for your show.

To Load or Save a Layout
- Click on the Broadcast Pix Icon > Muti-view > Muti-view layouts> select a layout
- Be sure to either use your own layout or the DOM Layout - and never save changes unless it is your own show!

SWITCHER CONTROLS

Switching Sources Using the Mouse- Most of the functionality for switcher can be accessed using the clicking the mouse within Broadcast Pix's interface.

Source Controls: To select sources
Preview - Sources are selected but ARE NOT on-air. Indicated by the color orange.
Program - Sources ARE on-air Indicated by the color red.
Sources - All the potential video inputs available the program
   Studio A: Three w HD camera, T
   Studio B: Three (3) robotic cameras, Computer (VGA) and DVD/DV/VHS players
Keys - Additional elements to overlay on the program output

Video Switching - Preview and Program:
To set up a shot in the Preview window,
1. Click on the source window that corresponds to the camera or other video source you want to Preview.
2. Once the camera/video you want is displayed in the Preview monitor, you can make sure the shot you want will go to air or on tape. Communicate with your crew to perfect the shot. Use director vocab - "Give me a Wide shot on Camera 2"; "Camera 3, Tilt up a little".
3. Once your shot is ready in Preview, you can take it to Program Out.
     a. Click the Preview window and the Preview monitor video switches to Program
4. Once the shot is taken to Program Out, you can choose a different camera and set up a new shot in Preview.

Note: clicking the Program windows does nothing.

Switcher Window
Use in conjunction with Mouse switching. This is the primary switching tool in Studio B.
- Select Transition types, Cut, Wipe, Mix
- Assign Keys
- Execute transition or use mouse for transition

To assign a source to a keyer:
Click on one of the **Key Assignment** buttons, then click on the thumbnail of the **source** you wish to assign, and its key thumbnail will change to show the new key source.

To add keys or background video to the next transition:
Click on the **Key** or **BGR** buttons, and each will illuminate as you click on it and the keyed image will be added to the preview monitor if it is not already on air. The button illuminates red when the key is on air, and orange when it is on preview.

To change the style of transition that occurs when you click on the Preview monitor:
Click on **Cut, Mix** or **Wipe**.

To take Preview to air/Program
Click on the **Cut** or **Auto** above
(Auto executes whichever transition style and rate is selected).

SoftPanel -The control panel for sources, transitions and keys related to your production.

The softpanel is an onscreen version of the Switcher. Studio B does not have a physical switcher. The studio is designed to use the mouse to control your program switching. If you prefer to use an interface more like a physical switcher, enable the onscreen softpanel or request to use the iPad.

To enable the Softpanel:
Navigate to Broadcast Pix > Panel > 1ME Soft Panels > Soft Panel

Note: Physical Switcher in Studio A only - Softpanel in Studio B

TRANSITIONS
To change what is on program, with a cut, mix or effect (toggles program and preview)
Transition Style: Type of transition

Cut - Jumpcut from one source (program) to another (preview)

Mix - Dissolve from one source (program) to another (preview)

Wipe - Wipes from one source (program) to another (preview)

+ When wipe is selected, a wipe style can be selected on the PixPad

KEYS (OVERLAYS)

Adding Keys to Program

Key can be added to the Program with a simple click. To add a key to Program,

- Click on the window of the key to be used.

Note: The key will remain on program until it is clicked again.

Keys can be loaded in Preview and prepared for a transition. This technique is good for setting up a shot of a subject with the approriate lowerthirds in place. To add a key to Preview,

- Click the gray box on the window of the key to be used.
- The gray box and the name of the document in the key will turn orange
- The key's content will display in Preview.

Note: When in Preview, the key will move to Program in the next transition

Key Controls

Key Assignment - Enable Switcher Window. Panel > Switcher Window

  1. Click the key you want to assign in Key Assignment Area

  2. Select the source you want to assign to the Key, it can be any source but in general CGs, Stills, Logos, Animations and Clips will be the most common assignment

Keys Layering

Program - background

Key 1 - first layer of keys (lays over Program)

Key 2 - second layer of keys (lays over Program and Key 1)

Key 3 - third layer (lays over Program, Key 1 and Key 2)

Next Transition:

BGR - THIS BUTTON SHOULD REMAIN ENABLED (orange light)

- If disabled, Preview functionality will be disabled
- Can select keys 1, 2, 3 to Preview keys 1, 2, 3 with next source and then both to Program

CLIPS

The Broadcast Pix contains clip store for digital video files. Producers are only permitted to store an intro and outro for their show. Any other clips used during your show must be deleted for other clips after show.

To save digital video file in your show's clip store:
Moving the video file to the clip storage:
1. Navigate to My Computer > D Drive.
2. Open your show's clip folder.

If you don't have a folder for your show's clips, create a folder.
1. Insert your flash drive into the Broadcast Pix.
2. Copy the content from your drive to D Drive.

Adding the video file to Broadcast Pix:
1. Confirm your show is loaded.
2. Navigate to the Broadcast Pix Icon > File > Edit Show
3. Click on Clips 1.
4. Find the video you added to the clip storage.
5. Add the video file by clicking the Arrow button.
6. Click Save to close.

Selecting the video file in Clips 1:
1. Navigate to Clips 1 on the PixPad
2. Click on a file to be used
3. You may need to use the left and right arrows to navigate to the file.

Playing a clip:
1. Click the Clip 1 source window.
2. Click the Preview window and the Clip will become Program and start playing.

Acceptable Formats
For SD Quicktime formats in Studio B:

* Video Compression Setting: DV/DVC Pro 25 Mbps, H.264 (don't use for chroma key) or ProRes
* Quality: Best
* Audio: stero PCM Data 16 bit, 48kHz (or any samply rate)
* Quality: Best Quality
* Scan Mode: Interlaced
* Aspect Ratio: 16x9

For HD Quicktime formats in Studio A:
* File Size: 1920 x 1080i (16x9)
* Frame Rate: 60 or 29.97/25
* Quality: Best Quality
* Scan Mode: Interlaced
* Aspect Ratio: 16x9

ALL IN A ROW

Notice that the majority of the board is taken up by vertical slices or channels, that work for all intents and purposes, identically. These are all the individual sound sources, which are called inputs. All the
sound sources- all have their own individual input, or channel. The controls for each channel run vertically up the soundboard, and are numbered 1-24 from left to right. All these channels allow us to treat each sound source individually, and finally mix them together to make a complete soundtrack to a program.

At the very bottom of each channel is a sliding control, called a fader, which regulates the amount of each sound source that will end up in the program, or main mix. In between the top and bottom are controls that can, if desired, modify and 'shape' each individual channel, and controls that will assign or send each channel to its desired destination: the main mix, the studio monitor speakers, the telephone interface, or any combination of these. The extreme right side of the soundboard controls the destinations of the mixed sound sources, called outputs and level of the main mix outputs. The program mix, or main mix is what becomes the sound portion of your television program. This is what gets recorded to your master tape, or gets broadcast live. The two 'main mix' fader- one for the left channel, one for the right, (extreme right side of the soundboard) - determine the overall output volume of your program. In other words, if both these fader are fully down, your program will be a silent one.

The PFL/SOLO switch (at he bottom of the channel strip, above the fader) and depress this switch. PFL stands for Pre-Fader Listen, and allows you to monitor, or listen to the sound source without raising the fader- or letting the source into the main mix. (This switch will also enable you to cue up a tape or CD, or listen to the talent when the program is happening- but it does not put it into the main mix. It will also override the monitors in the control room, muting the main mix and sending the sound source directly to the monitor speakers, so beware that you don't leave this switch down during your mix session.)

Steps to setting your levels:
1. Mute audio channels.
2. "RESET" board - Make sure none of the PFL lights are lit up, make sure the channels you are using are not being EQ'd.
3. Be sure that 48v (PHANTOM POWER) button is depressed or you will not get a mic signal through the board.
4. Check the Master Levels "OUT" -set it at the thick line -U- line about 3/4 the way up.
5. Begin testing each input - Set the first channel to unity - the thick line -U- line about 3/4 the way up.
6. Unmute the channel and watch the levels - and adjust the GAIN master level is bouncing around -10 to -5 db.
7. Remute the channel.
8. Unmute next channel and repeat previous steps. Repeat steps 6 and 7 for each channel.

"THERE'S NO SOUND!" SOME COMMON PROBLEMS AND TROUBLESHOOTING SCHEMES:
* Determine if source is generating sound right now: is the person speaking? Is the DVD actually playing?
* Are you sure you're on the right channel? They all look the same.
* Make sure all PFL/Solo switches are up, no green lights.
* Make sure all MUTE switches are up, no red lights.
* Control room monitor must be on and turned up to hear mix.
* Is the master level up?
* If all else fails: check the mic and the cable by switching with a mic and cable known to work

Controlling Robotic Cameras

To Create and and Preset Shots with the Robotic Camera:

1. Select Camera (select 1, 2, or 3)

2. Use the Joystick to set your shot

o To pan left: rotate the joystick to the left.

o To pan right: rotate the joystick to the right.

o To tilt up: push the joystick away from you.

o To tilt down: pull the joystick back towards you.

o To zoom in/out: twist the top of the joystick controller clockwise or counter-clockwise.

3. To save a shot - select and hold the PRESET button and select a number preset button (1-8)

Graphics

The Broadcast Pix system also has a broadcast quality character generator called Inscriber TitleMotion Pro. TitleMotion Pro should be loaded on the smaller Asus monitor. There are two types of files you will considered with in the process of making graphics for your production.

Watch Folders

Watch folders allow you receive new graphics automatically in your show under CG1, CG2, Stills, Logo, etc.

   o Click on the Broadcast Pix Icon > File > Edit Show
   o Click on either CG1, CG2, Stills, Logo, etc.
   o Select "Enable Watch folder"
   o Click on Watch Folder Options

   o Type in a Folder name like CG or Logo
   o Select- Overwrite existing files, Update Live files and Add content to both channels
   o Click OK, OK again and finally Click SAVE

SCRIBE Files: Editable version of your graphic, this saves layers so you should always save at least one as a template.
   * After you have designed a graphic, save it: Navigating to File > Save > Save files to c/graphics/show folder
ICG Files: Production version of your graphic.

   * To make graphics available in Broadcast Pix, export it: Navigating to > File > Export > Export ICG > Save file to *watch folder location

Updating Graphics on the Fly

If you need to make changes to graphics that is already being used by broadcast pix, simply edit the SCRIBE file in Inscriber and save the PNG using the steps above. You must use the same name as the previsously exported PNG and save it in the same location.

Animations

Graphics can also be animated. To animate a graphic and make it available in Broadcast Pix;

   1. Build your graphic as you normally would.
   2. Navigate to the Animation Button - to the right of the text tool
   3. Set a motion action for each element (use Templates to start) and click APPLY.
   4. Export Animation *watch folder location
   5. Add new animation to a Key.

Media/Graphics Management

To remove a file from the Broadcast Pix*:
Navigate to Broadcast Pix > File Edit Show > Edit Appropriate Bin (CG, Clip, Anim) > right click on the file in ENTIRE LIBRARY to delete

*Always delete media from the Broadcast Pix interface. You must be in the show which you want to delete media.

DOM Studio Class Show Script

Run Down Sheet

The Control Room

TURN ON/OFF:
- Cameras (robotic controllers)
- DV Decks (analog recording)
- DVD Decks (analog recording)
- Control Room Speakers (Crown Amp)
- Broadcast Pix
  - To turn on - Use power button in rack
    - If needed, turn the latch to open the cover
    - Once all the machines are running, click the Broadcast Pix Desktop Icon
  - Quit Programs - Inscriber and Broadcast Pix (file< quit)
  - Shutdown like a PC - start tab, then shutdown or restart
- All monitors
- Light Board
- Audio Board

DON'T TOUCH:
- Juice Goose (Studio A)
- Yamaha (Studio A)
- Marshall monitors (Studio A)
- Digital Hybrid (Studio A)
- Studio Speakers (Crown Amp)
- Scan Converter
- Communication system

Monitors
- SHARP - Primary Broadcast Pix Control Room monitor (BP on input 5)
- Asus - Secondary Broadcast Pix Control Room monitor (graphics)
- JVC - Confidence and Scopes monitor, including DVD recording and finalizing (Video), Preview (SDI-1), Program with Audio levels (SDI-2)
- Westinghouse - Live Comcast Return monitor
- Marshalls - Source monitor for most inputs

Studio Monitor
- Sony - Program

Cameras
- Focus Assist
- Headsets
- Pan/Tilt Locks- Very Important!
- Robotic Cameras are still analog

Matrox Scan Converter
- Need to use DVI-D

NanoFlash HD Recorder
- Producer must use their own CompactFlash

Audio Board

Audio metering
- Watch VU meter keep around -7/-10 on Audio Board in A and -6/-10
- Check Program with Audio levels (SDI-2) on JVC monitor - keep at first line (Studio A)

Ways to Join a Crew and Find a Crew:

Under Member Tools you can find a crew three ways - Login to your DOM account at denveropenmedia.org

1. Create a Crew Request (http://www.denveropenmedia.org/node/add/om-crew-request)
    ● A crew request form will appear, fill out the appropriate information.
    ● This can also be done when "Making a Reservation" at the end of an equipment reservation page.

2. Find a Crew (http://www.denveropenmedia.org/crew_connect/find)
    ● Here you can look at potential crew members by choosing the skill level you require.

3. Find a Gig (http://www.denveropenmedia.org/merci/volunteer_requests)
    ● This will bring up a calendar of all upcoming projects that need crew members.

Also you can e-mail crew@denveropenmedia.org

Questions? email ann@openmediafoundation.org

The Lightboard :

The Lighting Control Panel is the smaller, gray board available in the control room and can be used to control the lights in the studio.

1. Press the button that looks like a circle with a vertical dash at the top. You should see the board light up.
2. Slide up the MASTER Faders.
3. Choose your lights by consulting the light grid chart above the light board. Find the corresponding numbers on the faders and slide them slowly up, the further up you go the brighter the light will get.
    ● Only use KINOs and LEDs for work lights.
    ● KINOs - as fluorescents can not properly dim, each one of the four bulbs light up or turn off in turn to increase or decrease brightness.
1. To turn the lightboard OFF, bring all faders down, bring down the MASTERS, press the "MODE" button and then the "√" button to confirm. The board should completely darken

Icons to Know:

Broadcast PIx Desktop Icon	Harris TitleMotion Desktop Icon	Broadcast Pix Button
Used for: ● Launching the Broadcast Pix program ● Should launch Title Motion as well, if not click on the icon to the right	Used for: ● Creating and Saving graphics and titles ● Creating animations	Used for: ● Shows- New, Load, Edit ● Floating new monitors and loading/saving layouts ● Arranging inputs ● Arranging graphics/ animations/clips

Clock-

The clock's time is synced with the computer. If producing content that will go directly to air, please use this time for your production.

Timer-

Time your show's length or use the timer as a countdown clock.
- Click on the ARROW button to change direction. When counting down, an ellipsis appears below the arrow.
- When counting down, click the ELLIPSIS to set the timer time.
- Click the PLAY button to start. When counting, the PLAY button turns into a PAUSE button.
- Click the PAUSE button to stop.
- Click the STOP button to start over.

Sources

All the video, CG and graphics available for your show such as Cameras, Decks, Clips, CG, Computers, Stills, and Logos.

Layout-

The arrangement of the windows and virtual tools and programs needed for your show.

To Load or Save a Layout
- Click on the Broadcast Pix Icon > Muti-view > Muti-view layouts> select a layout
- *Be sure to either use your own layout or the DOM Layout - and never save changes unless it is your own show!*

Show

Broadcast Pix has a concepts of shows, which contain custom settings and specific content for your productions.
- Show saves the input assignments of sources

- Show files saved to c:\BroadcastPix\Shows
- Save Graphics/Clips/Stills/Animation specific to your show
- Graphics/Clips/Stills/Animation Watch folder created for each show

Create a New Show

If you are using the studio regularly or working on a recurring show in the studio, you will need to create Show. Create a New Show by:
1. Clicking on the Broadcast Pix Icon > File > New Show
2. Give your show a name
3. Select **DOM Default** as the starting point for the show you are creating.
4. Click SAVE

Load an Existing Show

If you have previously created a show, you can load a saved show. Load a Show by;
- Clicking on the Broadcast Pix Icon > File > Load Show
- Select the show you want to load.
- Click the Open button. *The name of the loaded show will appear above the status bar.*

Use a USB Flash Drive to bring in graphics your show's folder.

Edit a Show

There are many things you may need to do in the edit show mode.
- Manually add graphics/titles/clips/logos to you pixpad
  - Clicking on the Broadcast Pix Icon > File > Edit Show
  - Click on CG1 or 2, Stills1 or 2, Clips, Logo
  - Click on View entire Library and double click on the items in the left column to bring them into the right column which is for your show.
  - Click OK
  - Click SAVE
- Set Watch Folders **-** Watch folders allow you receive new graphics automatically in your show's PixPad under CG1, CG2, Stills, Logo, etc.
  - Clicking on the Broadcast Pix Icon > File > Edit Show
  - Click on either CG1, CG2, Stills, Logo, etc.
  - Select "Enable Watch folder"
  - Click on Watch Folder Options
  - Type in a Folder name like CG or Logo
  - Select- Overwrite existing files, Update Live files and Add content to both channels
  - Click OK and then Click OK
  - Click SAVE
- Pixpad - The pixpad allows you access to all your graphics and video files you load on to the computer and into your show.
  - Clicking on the Broadcast Pix Icon > File > Edit Show
  - Click on Order PixPad
  - Move the them in the order you want to access them in the Pixpad
  - Click OK
  - Click SAVE

1. Clicking on the Broadcast Pix Icon > File > Quit
2. A warning MAY pop up: *Changes to the layout have been made. Do you want to save?* Click **Yes if it is your own layout and you do want to save. DO NOT save if it is not your own layout.**
3. Another warning will pop up: *A show is running are you sure you want to quit Broadcast Pix?* Click **Yes**

Switcher Controls

Switching Sources Using the Mouse

Most of the functionality for switcher can be accessed using the clicking the mouse within Broadcast Pix's interface.

To select a source to Preview,
> Click on the window of the source to be used.
> *The selected sources will display in Preview.*

To take Preview to air,
> Click the Preview window.
> *Note: clicking the Program windows does nothing.*

Using the Switcher Window

Use in conjunction with Mouse switching. This is the primary switching tool in Studio B.

- Select Transition types, Cut, Wipe, Mix
- Assign Keys
- Execute transition or use mouse for transition

To assign a source to a keyer:
Click on one of the **Key Assignment** buttons, then click on the thumbnail of the **source** you wish to assign, and its key thumbnail will change to show the new key source.

To add keys or background video to the next transition:
Click on the **Key** or **BGR** buttons, and each will illuminate as you click on it and the keyed image will be added to the preview monitor if it is not already on air. The button illuminates red when the key is on air, and orange when it is on preview.

To change the style of transition that occurs when you click on the Preview monitor:
Click on **Cut, Mix** or **Wipe**.

To take Preview to air/Program
Click on the **Cut** or **Auto** above (Auto executes whichever transition style and rate is selected).

Switcher (Physical Switcher in Studio A only - Softpanel in Studio B):
The physical control panel for sources, transitions and keys related to your production

To control Broadcast Pix using the physical switcher;
    Press the PixButton that is lit orange and says Join the Show.

Source Controls: To select sources
    Preview - Sources are selected but ARE NOT on-air. Indicated by the color orange.
    Program - Sources ARE on-air Indicated by the color red.
    Sources - All the potential video inputs available the program
        Studio A: Three w HD camera, T
        Studio B: Three (3) robotic cameras, Computer (VGA) and DVD/DV/VHS players
    Keys - Additional elements to overlay on the program output

    To access a source in the 10-18 range on the Switcher:
● Press the Shift button
● Select a button from the Program, Preview or Source Rows, as desired.
● To indicate that this button is in a shifted state, on the Control Panel the button will blink. Once a direct or unshifted sources is selected the blinking will stop.

SoftPanel
The softpanel is an onscreen version of the Switcher. Studio B does not have a physical switcher. The studio is designed to use the mouse to control your program switching. If you prefer to use an interface more like a physical switcher, enable the onscreen softpanel or request to use the iPad.

    To enable the Softpanel: Navigate to Broadcast Pix > Panel > 1ME Soft Panels > Soft Panel

Tally Status on Switcher

Color		Status
Red		On-Air
Orange		Selected but Off-Air
Green		Not Selected and Off-Air

Transition Controls: To change what is on program, with a cut, mix or effect (toggles program and preview)

      Cut - Jumpcut from one source (program) to another (preview)
      Mix - Dissolve from one source (program) to another (preview)
      Wipe - Wipes from one source (program) to another (preview)
          ○ Wipe button next to mix, select wipe type on PixPad to right of the T-bar
      T-bar - Transitions from one source (program) to another (preview)

Key Controls

Key Select Buttons - For use with Source Row buttons to assign sources to key
Source Row - For use with Key Select buttons to assign sources to key
Key Transition Buttons - For including keys in transition or to preview a key.
Direct Buttons - Display key content directly on-air.

To assign a source to a Keyer using the switcher:
1. Press the desired Key Select button, either Key 1, Key 2 or Key 3
2. Press the desired Source Row button
3. Note the changes in the direct keys

To assign a source to a Keyer using the Switcher Window:
1. Enable Switcher Window. Panel > Switcher Window
2. Click the key you want to assign in Key Assignment Area - Key 1, Key 2 or Key 3
3. Click on the desired Source Thumbnail
4. Note the changes in the direct keys

Direct Key Controls: Use to add graphics or titles as overlays directly on-air.

Adding Keys (overlays) to the Program Output
Up to 5 Keys can be added to the Program with a simple click. To add a key to Program,
● Press the Direct Key you wish to use, press it again to turn it remove it from program.

Keys Layering
Program - background
Key 1 - first layer of keys (lays over Program)
Key 2 - second layer of keys (lays over Program and Key 1)
Key 3 - third layer (lays over Program, Key 1 and Key 2)

Next Transition:
Keys can be loaded in Preview and prepared for a transition. This technique is good for setting up a shot of a subject with the appropriate lowerthirds in place.
 To add a key to Preview,
- Click the Key 1, 2, or 3 button on the switcher.
- The key button, the corresponding direct key and the source thumbnail on the multitviewer will turn turn orange.
- The key's content will display in Preview.
- When you cut or transition to Program, the key will now follow the source.

BGR - THIS BUTTON SHOULD REMAIN ENABLED (orange light)
   ○ If disabled, Preview functionality will be disabled
   ○ If not using BGR, can select keys 1, 2, 3 to preview keys 1, 2, 3

Clips
The Broadcast Pix contains clip store for digital video files. Producers are only permitted to store an intro and outro for their show. *Any other clips used during your show must be deleted for other clips after show.*

To save digital video file in your show's clip store:

Moving the video file to the clip storage:
1. Navigate to My Computer > D Drive.
2. Open your show's clip folder.
   If you don't have a folder for your show's clips, create a folder.
1. Insert your flash drive into the Broadcast Pix.
2. Copy the content from your drive to D Drive.

Adding the video file to Broadcast Pix:
1. Confirm your show is loaded.
2. Navigate to the Broadcast Pix Icon > File > Edit Show
3. Click on Clips 1.
4. Find the video you added to the clip storage.
5. Add the video file by clicking the Arrow button.
6. Click Save to close.

Selecting the video file in Clips 1:
1. Navigate to Clips 1 on the PixPad
2. Click on a file to be used
3. *You may need to use the left and right arrows to navigate to the file.*

Acceptable formats for playback in studios through Broadcast Pix

For HD Quicktime formats in Studio A and B:
- File Size: 1920 x 1080i (16x9)
- Frame Rate: 60 or 29.97
- Quality: Best Quality
- Scan Mode: Interlaced
- Aspect Ratio: 16x9

For additional help on preparing your files for playback, go to denveropenmedia.org and click on the Help link on the top right of the screen.

Graphics

The Broadcast Pix system also has a broadcast quality character generator called Inscriber TitleMotion Pro. TitleMotion Pro should be loaded on the smaller Asus monitor. There are two types of files you will considered with in the process of making graphics for your production.

SCRIBE Files: Editable version of your graphic.
After you have designed a graphic, save it;
> **Navigating to File > Save > Save files to c/graphics/show folder**

PNG Files: Production version of your graphic
To make graphics available in Broadcast Pix, export it;
> **Navigating to > File > Export > Export PNG > Save file to c:/watch/*you show name*/cg**

Updating Graphics on the Fly
If you need to make changes to graphics that is already being used by broadcast pix, simply edit the SCRIBE file in Inscriber and save the PNG using the steps above. ***You must use the same name as the previsously exported PNG and save it in the same location.***

Be sure to save graphics in **System C > Watch < "Your Show Folder" < folder type "CG or Logo"** and they will be available in the PixPad for your show.

Media/Graphics Management

To remove a file from the Broadcast Pix*:
> Navigate to Broadcast Pix > File Edit Show > Edit Appropriate Bin (CG, Clip, Anim) > right click on the file in ENTIRE LIBRARY to delete

Always delete media from the Broadcast Pix interface. You must be in the show which you want to delete media.

Producers are limited to one minute of HD clips on the Broadcast Pix system. Content longer this

may be deleted without notice.

Controlling Robotic Cameras

To Create and and Preset Shots with the Robotic Camera:

1. Select Camera (select 1, 2, or 3)
2. Use the Joystick to set your shot
       o To pan left: rotate the joystick to the left.
       o To pan right: rotate the joystick to the right.
       o To tilt up: push the joystick away from you.
       o To tilt down: pull the joystick back towards you.
       o To zoom in/out: twist the top of the joystick controller clockwise or counter-clockwise.
3. To save a shot - select and hold the PRESET button and select a number preset buttong (1-8)
4 Click Set and repeat for each shot you will want to recall during the shoot.

The Audio Mixer

Steps to setting your levels:

1. Mute audio channels.
2. "RESET" board - Make sure none of the PFL lights are lit up, make sure the channels you are using are not being EQ'd.
3. Be sure that 48v (PHANTOM POWER) button is depressed or you will not get a mic signal through the board.
4. Check the Master Levels "OUT" -set it at the thick line -U- line about 3/4 the way up.
5. Begin testing each input - Set the first channel to unity - the thick line -U- line about 3/4 the way up.
6. Unmute the channel and watch the levels on the board or in the HD Program Monitor - and adjust the GAIN master level is bouncing around -10 to -5 db.
7. Remute the channel.
8. Unmute next channel and repeat previous steps. Repeat steps 6 and 7 for each channel.

HD Recording NanoFlash
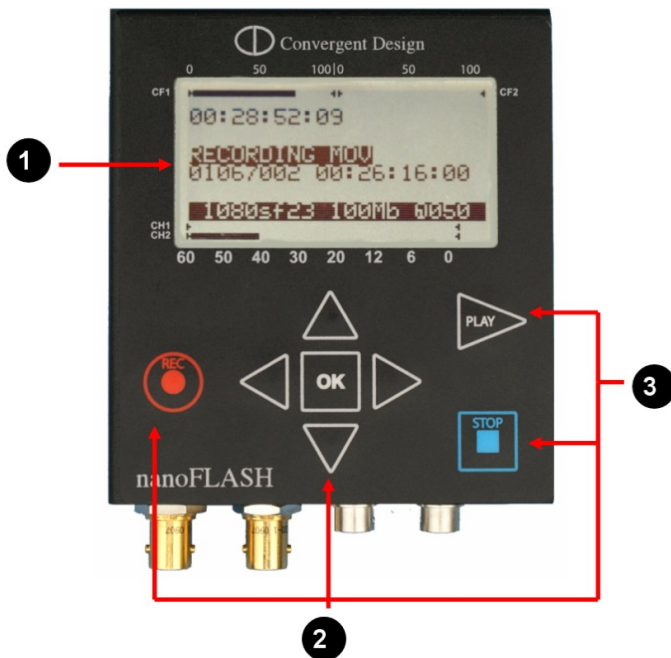
Front Panel Details

1.   LCD Display: Shows the status of the nanoFlash in the various operating modes. Also displays warning and errors in correspondence with flashing LED error lights. (see p. 10)

2.   Navigation Buttons: Allows the user to navigate the menu. (see p. 11) 3.   Record, Stop, Play Buttons: <REC>, <STOP>, and <PLAY> buttons for control of respective modes. The nanoFlash, when powered on, is in a ready mode. Record or Playback can be activated by pressing the appropriate buttons, as described below:

REC: Press <REC> to start recording a clip to the card. (This assumes that System- >Record Trigger is set to "Record Button" - other Trigger modes will disable the Front Panel buttons. See Record Trigger menu description for more details.) Unless stopped, the unit records to current CF slot til full and continues recording to next card slot til full. Cards may also be hot-swapped for indefinite record length. During Record, the led next to the actively recording CF card slot will flash red, and a rotating hourglass will appear on the lcd screen.

"Skip to next file": Pressing the Record button during a record session will cause the current file to be closed and a new clip started. "Skip to next card": Similarly, pressing the Record button twice in rapid succession during a record session causes the recording to continue on the next card.
(See "Recording Notes" Addendum.) (ver1.6.226)

STOP: Press <Stop> button to terminate record or playback mode. Also used to cancel a card format. Note: the STOP button is immediately responsive upon being pressed. To prevent accidentally stopping a record, see alternative record trigger options (timecode trigger, remote trigger)(page 11), which

de-activate the REC and STOP buttons.

PLAY: Press once to enter Playback mode. By default, Play will start with the last recorded clip. Other features:

1. Use the left and right arrow keys to advance/ back up to the next/ previous file. You can hold down these keys to move very quickly from file to file.
2. During Play, press Play button to pause, press again to resume play.
3. During Play, hold Play button 1 second for fast forward 2x, hold 2 seconds for fast forward 4x, 3 seconds for 6x (see progress bar on menu for fast forward level). Fast forward performance will depend on card speed and bit rate – see Play setup for more details. Press Play again to return to Play/Pause.
4. Set the Loop option in the main menu off or on to loop play.

FORMAT: Format (erase) ALL inserted CF cards.
Use with caution! Note: CF card Volume names may be defined on a computer.
1. Navigate to SYSTEM, press right arrow
2. Down or up arrow to FORMAT, press right arrow
3. When you see Press OK<Format, press OK

DOM Studio Class Show Script Run Down Sheet

Lapse Time or Actual Time	Duration	Video	Audio	Location
00:00:00	00:30:00	Black/Start Recording	---	Switcher/ Record Deck
00:00:30	00:00:30	Intro	Opening Music	CG/CD
00:01:00	00:01:00	Host/Guest	Host/Guest mic	Camera 1,2,3/Studio Mics
00:02:00	00:01:00	PSA	PSA	VTR
00:03:00	00:01:30	Host/Guest	Host/Guest Mics	Camera 1,2,3/Studio Mics
00:04:30	00:00:30	Host Wrap Up	Host Mic	Camera 2, Studio Mic
00:05:00	00:30:00	Black	---	Switcher
00:05:30	00:00:00	Stop Recording	---	Record Deck

Outline Script

Lapse Time or Actual Time	Duration	Video	Audio
00:00:00	00:00:30	Black	----
00:00:30	00:00:30	FADE IN INTRO CROSS FADE OUT INTRO WITH CAMERA 2 - ESTABLISHING SHOT	FADE IN MUSIC CROSS FADE MUSIC and BRING UP MICS
00:01:00	00:01:00	CUT TO M.C.U. OF HOST-CAMERA 1 CUT TO M.C.U. OF GUEST AND BACK TO HOUSE SWITCH CAMERAS AT WILL WITH APPROPRIATE SHOTS ESTABLISHING SHOT - CROSS FADE WITH PSA	HOST: *Hello, I'm _____. Welcome to the DOM Studio Class. Today we'll be talking about _____. Joining us in the studio today is _____.* *ASK QUESTIONS AND AD LIB DISCUSSION* *HOST: We will take a break for this PSA* FADE MICS/ BRING UP PSA AUDIO
00:02:00	00:01:00	PSA VIDEO FROM DVD	AUDIO FROM DVD-BRING UP AUDIO
00:03:00	00:01:30	FADE IN- ESTABLISHING SHOT SWITCH CAMERAS AT WILL WITH APPROPRIATE SHOTS	FADE PSA AUDIO/ BRING UP MICS HOST: *We're back with _____, what did you think of that PSA?* *Ad lib discussion*
00:04:30	00:00:30	M.S. OF HOST	HOST: *That's all the time we have for today. Many thanks to my guest _____. Thanks for watching the DOM Studio Class Show. See you next time .*
00:05:00	00:00:30	Black	FADE MUSIC OUT
00:05:30	00:00:00	Stop Recording	