

# Linear Video Editing



snap on mark out mark out







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# Introduction to Linear Video Editing

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## Edit room and tape policies

- 1. Only certified members are permitted to operate equipment.
- 2. No food or beverages are allowed in the edit room.
- 3. Edit time is available by appointment only and reserved on a first come, first served basis.
- 4. Members are allowed 40 hours of edit time per month. If more than 40 hours of edit time are needed in one month, a written request must be made to NWCT's Executive Director. See a studio manager for more details.
- 5. Regularly reserved time slots (exp. every Monday from 6:00pm to 8:00pm) are possible and are given out on an availability basis at the discretion of the studio manager.
- 6. Please tell the studio manager at the time of the booking, if you will need extra help during your session (especially when you are first learning). This will help the studio manager plan their time so that they may help you better.

**Remember** . . . NWCT staff members are available to answer any questions or assist you throughout the edit process—just ask! We'd rather answer any question, no matter how petty it may seem to you, than have you waste valuable time struggling with a problem.

#### EDIT ROOM ABUSE POLICY

# Producing programs for hire, advertisements, commercials, obscene or indecent programming, lotteries, or personal and family programs will not be tolerated.

If you need to cancel your appointment, please notify the studio manager at least 24 hours in advance; unforeseen emergencies and illnesses will be taken into consideration. Please do **not** rely on leaving a voicemail message. Talk to a studio manager whenever possible.

If cancellations are not made 24 hours in advance of your scheduled time, become excessive, or if you are more than 30 minutes late for your appointment, you may be subject to disciplinary action as follows: first offense, verbal warning; second offense, written warning; third offense, suspension.

#### **RECORD TAPE POLICY**

All producers must provide their own videotapes. NWCT will have DV tapes available for purchase. If providing videotapes is a problem, please see a studio manager to make other arrangements.

#### TAPE DUB POLICY

- 1. Guests participating in a community television program are entitled to one free tape dub of their program. Each guest may provide a blank tape of their own or purchase one from NWCT. When a group with more than four members participates in a production, one free dub will be given to the group as a whole.
- 2. If guests wish to make more than one dub, there will be a \$10 dub fee per tape for owner provided tapes or a \$15 dub fee for NWCT provided tapes.
- 3. Tape dubs should be made prior to the program being submitted for scheduling.

## What is linear editing?

Linear editing is the process of transferring segments of video and/or audio from raw footage tapes onto a record tape. These segments can be taken from any location on your original tapes and edited onto the record tape in sequence. The finished program is called the "edit master" or "master".

#### TIME CODE/CONTROL TRACK

Time code/control track is recorded concurrently while video is recorded. **Time code** is time data recorded on a tape. The time is expressed in units of hours, minutes, seconds and frames, and if recorded continuously from the beginning of a tape, used to determine the absolute position of video and audio recorded on the tape. **Control track** is a series of electronic pulses recorded on a tape. Those pulses are called frames and there are about 30 frames for every second of videotape. Those pulses give your tape stability and synchronicity.

Time code/control track is to videotape like primer is to paint or railroad tracks are to trains, an essential but underlying element. If your tape doesn't have time code/control track, your video or audio signals won't record correctly on your tape.

How do you establish time code/control track on your tape? There are two ways. One, as mentioned above, is to record, but that is not very accurate when you are trying to edit. The second is through one of the two types of editing called assemble editing.

## The two types of linear editing: Assemble and Insert

#### ASSEMBLE EDITING

This type of editing allows you to assemble the basic pieces of your various video segments. During an assemble edit, all signals (video, audio, and control track) are recorded. This type of editing is done in chronological order, piecing together edits back to back on the edit master tape. Assemble edits establish the time code/control track on your tape.

When you perform assemble edits, the beginning of the edit is very precise and clean, but the end is very rough and uneven—the time code/control track breaks at the end of every assemble edit.



Assemble edits always break existing time code/control track at the end of an edit—never, ever, do an assemble edit in the middle of previously existing time code/control track. What if you want to do an edit in the middle? That is where insert editing is valuable.

#### **INSERT EDITING**

Insert editing allows you to select and insert video and/or audio signals into your program. Insert edits are used to add music, full page graphics and cut-away shots. They add depth and interest to programs.

Time code/control track must already be established on your tape because insert edits only record on the chosen video and/or audio tracks; it never touches (or records!) the control track. Unlike assemble edits, insert edits end as clean as they begin—no ugly glitches!



In this example of an insert edit, the video and channel 1 audio tracks are being recorded.

## How editing works

No matter which form of editing you choose, one-touch assemble or program insert, the tape always goes through the following process when performing an edit. When editing, the tape automatically backs up for the pre-roll (A)—you will not see the pre-roll on screen. The pre-roll gets the tape up to speed to more accurately perform the edit. After the edit is performed, the tape stops recording (B), but continues to play for a few seconds (C).

#### EDIT PROCESS DIAGRAM



## How to start editing a program

- 1. Log or plan your program content (use videotape log sheet on page 5).
- 2. Set up the VCRs and equipment for your session (see VCR set-up guide on page 6 or consult a studio manager).
- 3. You must have time code/control track on your tape to perform an edit.

If you are editing directly onto your original footage, time code/control track should already be established and **you should only edit in the insert (program edit) mode**!

If you are transferring raw footage to another tape using the assemble (one-touch) mode, you must first establish some time code/control track on the blank record tape. NWCT suggests recording one minute of color bars and one minute of black at the beginning of your program. Here is how to do that . . .

- a. Put blank tape in record VCR.
- b. Press BACK COL. button on flashing row of video switcher.
- c. Select color bars on Compix graphics computer . . .
  - Double left click on GenCG icon on computer desktop
  - Left click Tools on Windows tool bar
  - Left click on GenlockVGA Control of pulldown menu
  - Left click on down arrow beside Test Pattern
  - Left click on 75% Bars
- d. Press record on record VCR's edit controller.
- e. Left click on Clear Screen button after one minute of color bars has been recorded.
- f. Let tape run an additional minute and ten seconds and stop tape.
- g. Back up tape to two minute mark and set point(s) for first edit.

## Videotape log sheet

Tape number: \_\_\_\_\_ Date(s) recorded: \_\_\_\_\_

Production:

START	END	TIME	DESCRIPTION

## Setting up edit room VCRs

Before editing, verify that all raw footage tapes are record-protected!

#### EDITING DV TO DV

For one-touch assemble edits and program insert edits

#### Play VCR

- 1. Set edit mode to Passive.
- 2. Set edit control to Edit.

#### Record VCR

- 1. Set edit mode to Recorder.
- 2. Set edit control to Edit.



#### EDITING ANYTHING OTHER THAN DV TO DV

For edits not requiring an edit cable (graphics, SVHS, music, voice-overs)

#### Play VCR

Settings can remain the same, just power down the VCR

#### Record VCR

Settings can remain the same, but unplug the edit cable



## One-touch assemble edit

- 1. Press JOG/SHUTTLE button on record VCR edit controller and check that button is lit.
- 2. Search for the edit start point on the record tape using the jog dial/shuttle ring.
- 3. Press REC. The picture from the play VCR appears on the screen.
- 4. Search for the edit start point on the play tape using the jog dial/shuttle ring on the record VCR edit controller.
- 5. Press JOG/SHUTTLE button on record VCR edit controller—editing begins.
- 6. Press STOP on controller to stop editing.



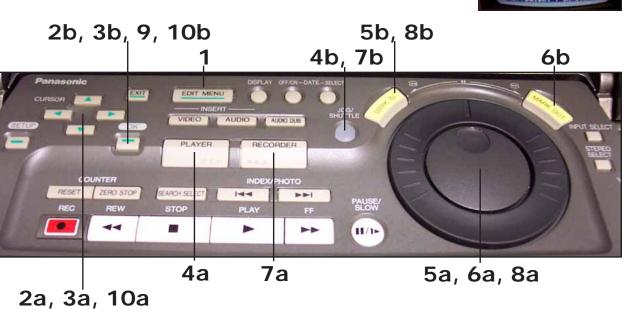
### Program insert edit

- 1. Press EDIT MENU button on record VCR edit controller.
- 2. Select Program Editing on screen using cursor arrow keys on controller, then press OK button on controller.
- 3. Select the desired editing operation on screen, and then press OK.
  - To insert picture: Video Insert
  - To insert sound: Audio Insert
  - To insert picture and sound: AV Insert
  - To add new sound on channel 2: Audio Dubbing
- 4. Press PLAYER and JOG/SHUTTLE buttons on record VCR edit controller—the picture from the play VCR appears on the screen.





- 5. Search for the edit start point on the play tape and press MARK IN button.
- 6. Search for the edit end point on the play tape and press MARK OUT.
- 7. Press RECORDER and JOG/SHUTTLE—the picture from the record VCR appears on the screen.
- 8. Search for the edit start point on the record tape and press MARK IN.
- 9. Press OK.
- 10. Select Start Insert on screen to start editing, then press OK. Editing begins after the play and record VCRs both rewind their tapes to the edit start points.











## **Erasing edit points**

- 1. Press EDIT MENU button on record VCR edit controller twice.
- 2. Select Erase all programs on screen using cursor arrow keys on controller, then press OK button on controller.
- 3. Select Yes, then press OK.

4. Repeat program insert edit steps 2-10 after All programs have been erased displays on screen.

## Editing without the edit cable

- 1. Press JOG/SHUTTLE button on record VCR edit controller and check that button is lit.
- 2. Search for the edit start point on the record tape using the jog dial/shuttle ring.
- Press button for editing mode on record VCR edit controller—REC to assemble edit, VIDEO INSERT to insert picture, AUDIO INSERT to insert sound, VIDEO INSERT and AUDIO INSERT to insert picture and sound, and AUDIO DUB to add new sound.
- 4. Press PAUSE/SLOW button on record VCR edit controller-editing begins.
- 5. Press STOP on controller to stop editing.









## Playing your program on NWCT

Scheduling your program for playback is an important aspect of production. Here are some suggestions to make the process easier.

#### PROGRAM LENGTH

When planning a program, one of your first considerations should be program length. NWCT has no absolutes for length but we do have a suggestion. Programs that are **30 minutes** or **one hour** in length are easier to schedule which could result in more frequent play times.

#### SCHEDULING

Our channels are scheduled two weeks in advance. You may check to see when your program is scheduled three ways:

- 1. Check the daily schedule on Channel 18.
- 2. Check our programming schedule at <u>www.nwct.org</u>.
- 3. Contact a studio manager for scheduling information.

You may also pre-schedule special or timely programs in advance. When doing so, you must adhere to a definite program length.

#### **REQUIREMENTS FOR PLAYBACK**

- 1. Tapes should begin with one minute of color bars then one minute of black.
- 2. There should be no glitches or loss of control track in any portion of the program.
- 3. Video levels and audio levels must be consistent throughout your show.
- 4. Programs should be followed with one minute of black.
- 5. Copies of your program should be made prior to the tape being submitted for playback.
- 6. Permission must be secured for any copywritten music or video used in your program.
- 7. A tape release form (see page 10) must accompany each tape. Finished programs and paperwork must be turned into a studio manager.

#### **REGULAR TIME SLOTS**

If you produce a program on a regular basis you can reserve a regular time slot on our channels. Here are time slot guidelines:

- 1. To set up a regular time slot you must have three programs complete and ready for scheduling.
- 2. You must fill out a regular time slot application and submit it to the master control operator/scheduler. The scheduler is available 9:30-5:00pm Monday through Friday.
- 3. Regular time slots are assigned in the channel lineup on an availability basis and at the discretion of the scheduler.
- 4. Once you have secured a regular time slot, you must consistently turn in new programming or your time slot will be revoked. Fill out tape forms with dates each program should air.
- 5. Programs should be turned in for playback two days prior to its playback time.
- 6. Programs should never be longer than your time slot. Your show will be cut off early.
- 7. If you should decide to discontinue your timeslot, please notify the scheduler.

#### AFTER YOUR TAPE IS DONE PLAYING

Tapes are pulled from playback on a monthly basis. All producers are responsible for picking up their tapes after they have been pulled—after 90 days, they are disposed of!

NORTHWEST COMMUNITY TELEVISION TAPE RELEASE FORM									
STAFF USE ONLY									
Tape number	Received by	Date	No	tes/special instructions					
PRODUCERS — FILL OUT ALL THE INFORMATION BELOW									
Program title									
Topic, guest, and content information									
This program was recorded with equipment from D NWCT D Other									
Date recorded				Date submitted to NWCT					
Timely dates mentioned				Regular time slot holders—list playback date(s)					
Program length HOURS : MINUTES : SECONDS : :				Program locate HOURS : MINUTES : SECONDS : :					
ADULT CONTENT Check all that apply—   Language/profanity Nudity   Other									
			hildr	en? 🛛 Yes 🗆 No					
TECHNICAL DIFFICULTIES? Describe—									
In consideration for permission, use and access to the replay of my program on the cable system from Northwest Community Television (NWCT) and Comcast or its successors, I hereby make the following representations, agreements and releases: I certify that no advertising material or other commercial programming: lottery or lottery information; obscene material, sexually explicit conduct, or material soliciting or promoting unlawful conduct (as those terms are defined or interpreted under applicable FCC regulations); or indecent, slanderous or libelous material, is contained in this program. I request that this program be shown on a NWCT channel. I authorize the subsequent replay of this program at the discretion of NWCT. I certify that I have obtained any and all clearances for the cablecast of this program from broadcast stations, networks, sponsors, music licensing organizations, performers; representatives, authors, composers and others, as required. I accept full responsibility for the content of the program and the consequences of its presentation. I acknowledge and agree that I am liable for any costs arising from the use of copyrighted or licensed materials. I am familiar with the NWCT Public Access Rules, I have read the Rules, I understand the requirements contained within the Rules, I will comply with them. I understand and agree to the rules and procedures surrounding the treatment of programming that violates the Public Access Rules, and hereby authorize NWCT to remove any of my programming that violates the Public Access Rules. I hereby and hereby agents and representatives from any and all liability, amage, injury, and judgements arising from the cablecast, playback or production of any programming or any other claim as set forth in the Public Access Rules. I further attest that I have truthfully filled out this Release Form.									
Producer's signature									
Name (print)				Email address					
Address (include city, state, and zip code)									
Home phone				Cell phone					