

Nevada County Digital Media Center

User's Guidebook

This document is intended to provide guidelines for the utilization of resources from the Nevada County Digital Media Center (NCTV). Please read the Policy & Procedure Manual for further details regarding use. Any individual or organization who is a resident of Nevada County may submit programming for transmission. Membership is not required for (non-series) content submissions. Membership is required for equipment and facility use and (series) content submissions.

Equipment & Studio Use

- Only certified members of NCDMC are entitled to use the studio and equipment as part of their membership agreement. Please become familiar with the use of the facilities & equipment.
- Training programs will be offered for free to members on the basic hardware operations. Advanced workshops may have a fee.
- Meeting room use for members is for production meetings only. Setup and cleanup are the responsibility of the member.
- Members must be at least 18 years of age or if a minor, they must have a signature by their parent or guardian before he or she may use the facility and equipment.
- Equipment & studio use must be reserved/scheduled fourteen (14) days in advance for either production or rehearsal of the production. The Creative Lab use must be reserved/scheduled five (5) days in advance. Certification must be complete at the time of the reservation.
- All equipment checked out over the weekend is due back by noon on Monday
- The reserving party needs to arrive at the pre-scheduled time for the equipment check-out process (allow at least 1 hour)
- If you experience difficulties with equipment, immediate notification needs to be made via email to stationmanager@nevadacountytv.org. Also documentation should be provided at the time of check-in as to the problem
- Only those people who certified can operate checked-out hardware
- Productions in progress will take precedence of studio and equipment use. Members may be required to relinquish their practice time to facilitate a production's completion. Notification will be given in advance.
- NCDMC staff will make duplicates (dubs) for a fee. Members may not make dubs using NCDMC equipment unless previously arranged.
- When using the Creative Lab, users must bring their own portable drive containing their content. Members content WILL NOT be stored on the Creative Lab computers.
- NCDMC is not responsible for providing crew or setting up the studio. A list of certified members who may assist you with your production is available. Contact the Coordinator in advance.
- It is recommended that producers do live-to-capture vs live-to-air for more flexibility for fixes and creativity. Those wishing to produce a live-to-air program that will be going to one of the three cable channels must hire a certified NCDMC "Live-Assist" operator at \$80/hr. Scheduling of a proposed live-to-air program is subject to availability of the facility, equipment, and staff. A "no-show" for a live-to-air program is immediate grounds for series cancellation. NCDMC may pre-empt or reschedule a live-to-air program if all necessary conditions have not been met, or for unforeseen reasons.
- At least a 24hr notification should be given when cancelling any reservation for use of the facility or equipment. A message left on the answering machine or email to stationmanager@nevadacountytv.org will be sufficient when the facility is closed.
- Repeated cancellations will trigger a review of privileges resulting in possible suspension of equipment/facility use.

- There is no smoking or alcohol allowed during productions and or Studio & Creative Lab use.
- The facility is a drug free zone. No food or drink is allowed in the Creative Lab or near equipment.
- Users are expected to clean up after they have finished their sessions and replace items to their original locations.

Training, Certification & Workshops

- Training sessions are held monthly, members can take them as many times as they need.
- The schedule of these sessions will be posted in advance on the website and vary in days and times.
- Additional workshops may or may not have a fee. Interested parties should contact the office or sign up online for inclusion. Membership may or may not be required for workshops.

Program Submissions & Scheduling

- Programs should be submitted at least two (2) weeks in advance of the requested play date.
- Live-to-air programming must be scheduled four (4) weeks before the scheduled airdate.
- Uploading content is the responsibility of the creator. Access to the upload site is below.
- For those wishing to deliver their content in person, a free use of a computer at NCDMC is provided to facilitate the upload.
- The program creator accepts full responsibility for the content of this program/ series.
- The program creator is responsible for obtaining all necessary waivers from individuals appearing in the program/series. Without these waivers, a program may not be aired.
- All series submitters must be members and sign a Program Submission Agreement agreeing to submit a specific number of programs on specific dates. Failure to provide two (2) programs on time or if technical or content problems exist, the result may be the loss of the regularly scheduled time slot. Staff will make notification if a show is in jeopardy.
- Submitters are responsible for indicating on the Program Submission Agreement form the appropriate category of the TV Parental Guidelines.
- Programs must begin with a message advising viewer discretion if they fall in these categories: (a) TV14 includes one or more of the following: intense violence, intense sexual situations, strong coarse language, or intensely suggestive dialogue. b) TVMA includes graphic violence, explicit sexual activity, or crude indecent language.
- Programs CAN NOT contain any material that is libelous, slanderous or defamatory, that is an unlawful invasion of privacy, violates state, federal or copyright laws.
- Programs created for Public Access CAN NOT contain commercial advertising or “call to actions” (see below).
- NCDMC is not responsible for dropped off content or maintaining a copy of your programs.
- Air times for individual programs are scheduled in at the discretion of NCDMC staff.
- Every effort will be made to air your program on the date(s) and time (s) you request but no guarantee will be made.
- Priority is given to government programs and programs produced by members within Nevada County.
- NCDMC may re-broadcast any program at any time, use for noncommercial use, upload to NCVTs Internet offerings and use excerpts for promotional purposes.
- NCDMC reserves the right to pre-empt any program for the presentation of a “Special” production or other non-scheduled programming
- The program creator MUST NOT represent themselves as NCDMC/NCTV or that they are affiliated with NCDMC /NCTV.

Underwriting

Underwriting is a means of acknowledging a local business or agency for their support. Listed below are some policies for underwriting to assure proper use of the “public access” channel and its non-commercial status.

The purpose of an underwriting announcement is to 1) identify a business, individual or organization supporting the program, and 2) acknowledge, recognize and/or thank them for supporting the program.

- Acknowledgments will be limited to a maximum of ten (10) seconds per underwriter
- A standard opening could be: “This program has been made possible by...”
- Each underwriting will have a Program Underwriting Disclosure form completed and filed with the project
- Underwriting acknowledgment should not be commercial by nature
- A standard format should be followed for each underwriting acknowledgment
- Appropriate information can be:
 - Name of the business or agency
 - Location
 - Phone Number
 - A short statement of service
 - Business logos
 - Slogans
 - Value neutral descriptions of product line or services
 - Brand names, trade names, product service listings
- NOT APPROPRIATE information would be:
 - Prices, Indication of savings or value
 - Calls to action to visit a business or purchase products
 - Inducements to buy, sell, rent or lease
 - Superlative or comparative descriptions.
 - Advertising which endorses or opposes candidates for public office, which is also intended to be presented as a paid political advertisement on other media
 - Programming which constitutes or promotes any lottery or gambling enterprise
 - Material that is obscene as defined by applicable law
 - Material that constitutes libel, slander, invasion of privacy or publicity rights, unfair competition, violation of trademark or copyright, or which might violate any local, state or federal law
 - Material that represents itself as being produced by Nevada County Television (NCTV) or the Media Center when it is not
 - Material which has a reasonable probability of creating an immediate danger of damage to property or injury to persons
 - NCDMC requires that producers who seek underwriting to complete, and update semi annually, the Program Underwriting Disclosure Form. The producer is required to submit one original, signed copy to NCDMC prior to submission of programming. The purpose of this mandatory disclosure is to ensure that each program funder has been notified of the following information; (a) Program underwriters are not providing support to NCDMC, they are providing support to the program producer. (b) Program underwriters may also be approached for underwriting by NCDMC, which reserves the right to solicit underwriting from all businesses and organizations whether or not they also underwrite specific programs. (c) Programs and on-air underwriting announcements cablecast on NCDMC may not be commercial in nature, nor use commercial language to promote the sale or exchange of goods or services. Underwriting announcements are intended to identify and thank the source of underwriting donations. They should not be construed as advertisements. By submitting a program, the producer agrees that he or she has not represented underwriting announcements as a form of advertising.

Technical Details for Program Submissions

- Programs may be fifteen (15), thirty (30), sixty (60), ninety (90) or one hundred twenty (120) minutes.
- Editing and Master format files such as ProRes, DV, or uncompressed formats can be extremely large and may take a very long time to upload. So when exporting out of your nonlinear editor, consider using a broadcast-quality but compressed distribution format such as H.264 8 Mbps for HD, or MPEG-2 18 Mbps for HD. SEE BELOW FOR WHAT IS ACCEPTABLE FORMATS
- Video levels not to exceed 100 I.R.E and blacks at 7.5
- Audio must reflect reference tone level and must be consistent throughout the program.
- Audio must be produced so that no noise, static, dropouts or extraneous distortion is recorded in the audio
- Audio dynamic range of program material must be suitable for television broadcast. Instantaneous audio peaks must not exceed +14db, average peaks should not exceed +2db, and average dialog should not be less than -8db
- Stereo audio must be fully mono compatible. The audio channels must be in the proper phase. NOTE: Full Mono Compatibility means that when the left and right stereo channels are actively combined to mono there is no discernible change in audio level or fidelity.
- All programs should have titles and credits
- The minimum title is the name of the program within the first two minutes and the name of the program's producer(s) and local sponsor if any.
- The minimum credit at the end of the program would be the sponsor.
- All programs must have a minimum of thirty (30) seconds of black burst recorded at the end of the video.
- There must be no broken tracks or tracking errors, and there should not be low audio/video levels or video breakup within your program.
- **File naming Should be consistent. It should be show and episode only. Examples**
 - Word Education - Affect and Effect
 - Nory & Friends - Part 1
 - The Curious Giraffe Show - Episode 11
- Want to create better video? SEE ADDITIONAL TIPS BELOW
- How to upload content - SEE BELOW

Uploading Content

We use TelVue Connect (<https://connect.telvue.com/>) for uploading our content for broadcasting. Below are the technical specifications that will help guide you.

System Requirements - Browsers

- Chrome
- Firefox – Incompatible features: Folder Uploads
- Safari 5.1+ on OS X 10.7+ – Resumable Uploads compatible with 6.0+. Incompatible features: Folder Uploads.
- Internet Explorer 8+ – Incompatible features:
 - IE 8 & 9 – Resumable, drag-and-drop uploads. You will only see a single-file uploader.
 - IE 8 – Lightbox video previews. Use the Edit page instead.
 - All IE Versions – Folder Uploads

LAN / Internet Connectivity - Minimum requirements:

Small Files – Under 100 MB

- Wireless N or 100 Mb wired Ethernet LAN
- 5 Mb/s Upstream Internet Bandwidth
- 10 Mb/s Downstream Internet Bandwidth

Large Files – 100 MB+

- 100 Mb wired Ethernet LAN – With very-large files, you'll have better success if you get Wireless out of the equation. Wi-fi, being radio frequencies, is subject to too many interference factors.
- 10 Mb/s Upstream Internet Bandwidth
- 20 Mb/s Downstream Internet Bandwidth
- Find out your Internet bandwidth at Speakeasy Speedtest. Ultimately, if you truly want the fastest workflow, purchase as much Internet bandwidth as you can.
- Also, be sure your computer does not go into "Standby" or "Sleep" while large uploads are in progress.

Input Formats - Media Containers

- 3GPP, 3G2
- HDV
- MXF (including D-10/IMX)
- MPEG-2 PS, MPEG-2 TS
- MP4, MOV (QuickTime)
- GXF, LXF
- Smooth Streaming – H.264, VC-1
- VOB – DVD Import
- WMA, WAV, Broadcast WAV
- WMV, ASF, AVI

Video Codecs

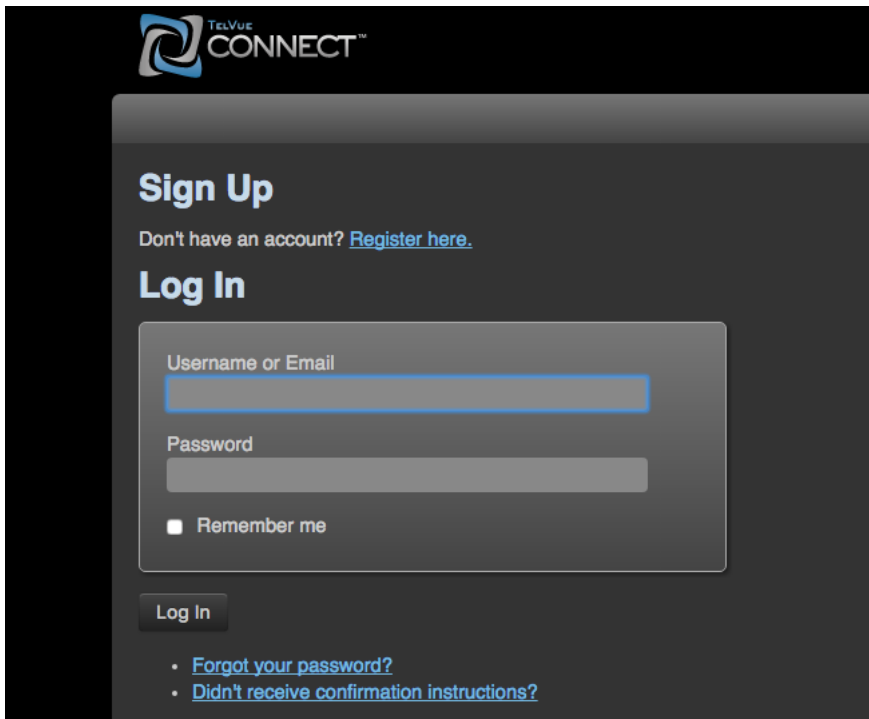
- MPEG-4, MPEG-2, MPEG-1
- H.264, H.263
- DVCPPro, DV50, DV25
- DPS, DivX
- DNxHD, AVCIntra
- Flash – VC-1
- RealVideo
- Windows Media Video

Audio Codecs

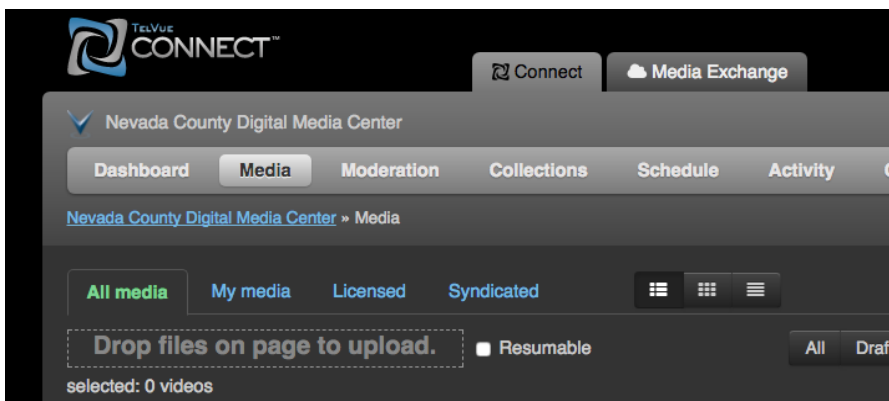
- PCM, MPEG-1 Layer II, MP3
- AAC, AMR-NB
- AC-3, Dolby Digital
- Dolby E
- Dolby Digital Plus
- RealAudio
- Windows Media Audio

Upon first accessing <https://connect.telvue.com/> , you will need to log-in. For general public access, use:

- User: **nctvupload**
- Password: **upload104**



When you're logged in, you'll be on the dashboard. Navigate to the **Media** tab on the top bar.



From there, simply drag and drop your video into the dotted line box to begin the upload process. It may take some time to upload depending on video quality, video duration, and local internet upload speed.

After that, we (NCDMC) will take care of the rest and begin scheduling it to air.

EULA on Connect

When uploading content onto Connect you are agreeing to the following

NCTV is a free speech venue and encourages a diverse range of programming. Producers are free to produce programming on any topic of their choosing. NCTV does not editorialize or select programming based on content. It is not the policy of NCTV to censor submitted programs. Producers assume liability and indemnify NCTV and the Nevada County Digital Media Center from all legal action caused by violations to local, state or federal law when they upload content for airing. The program creator is responsible for obtaining all necessary waivers from individuals appearing in the program/series. Without these waivers, a program may not be aired.

In the course of ingesting programs for playback, NCTV staff may discover policy violations prior to the program being cablecast. NCTV may take action on discovered violations before a program has been cablecast and may refuse to cablecast or may delay scheduling of a program with discovered violations

To assure compliance with the agreement between NCTV and applicable PEG agreements; ordinances, regulations, laws, statutes; and nationally accepted standard practice in community cable access television, presentation of the following material on a community use or public access channel managed by NCTV is prohibited:

- (a) Commercial Programming containing commercial language (see below).
- (b) Advertising which endorses or opposes candidates for public office, which is also intended to be presented as a paid political advertisement on other media. Candidates and advocates for ballot issues are welcome to utilize NCTV services on the same terms as any other access users. NCTV will not schedule any programming endorsing particular issues or candidates within 72 hours of any election.
- (c) Programming which constitutes or promotes any lottery or gambling enterprise in a manner that violates any applicable local, state, or federal law.
- (d) Material that is obscene as defined by applicable law.
- (e) Material that constitutes libel, slander, invasion of privacy or publicity rights, unfair competition, violation of trademark or copyright, or which might violate any local, state or federal law.
- (f) Material that represents itself as being produced by Nevada County Television (NCTV) or the Media Center when it is not so produced.
- (g) Material which has a reasonable probability of creating an immediate danger of damage to property or injury to persons.

Programs must begin with a message advising viewer discretion if they fall in these categories: (a) TV14 includes one or more of the following: intense violence, intense sexual situations, strong coarse language, or intensely suggestive dialogue. b) TVMA includes graphic violence, explicit sexual activity, or crude indecent language.

Air times for individual programs are scheduled in at the discretion of NCDMC staff. Every effort will be made to air series programs on the date(s) and time (s) requested but no guarantee will be made. All series submitters must be members and sign a Program Submission Agreement. Priority is given to government programs and programs produced by members within Nevada County. NCDMC may re-broadcast any program at any time, use for non-commercial use, upload to NCVTs Internet offerings, webcast on nevadacountytv.org, to "bicycle" the program to other cable systems for non-commercial use and use excerpts for promotional purposes.

NCDMC reserves the right to pre-empt any program for the presentation of a "Special" production or other non-scheduled programming.

Tips for Digital Video for Broadcast Television

Unfortunately professional broadcast video production is not as easy as uploading a video from your iPhone to your YouTube account. Creating a quality program for broadcast television is extremely detailed and technical. Below are five easy ways to help making better video.

Keep it Native

Quality loss can come in many forms. "Keep it Native." This means maintaining the same format and specifications from shooting, through post, and to the final deliverable. Taking time to make sure you keep the highest level of quality through each step of the production and post processes will ensure there is minimal degradation on the finished program.

Mixed Media on the Same Timeline/Sequence

Field Dominance issues are one of the most common problems. It is very common to see both SD and HD originated content in the same program. Fielding issues arise because SD footage can commonly be lower field dominant whereas HD footage is only upperfield or progressive. This field priority discrepancy can cause a playback issue because the SD footage may need to be played in the opposite field order as HD content. NLE exports are based on the sequence settings, not the individual clip settings. Two clips with opposite field orders on the same sequence will almost guarantee one of them will look poor on export. It is the editor's job to correctly convert each clip to the same field order of the sequence or there will be motion and resolution issues with the incorrectly exported video. Ghosting, flicker, and motion judder are all signs of incorrect or incompatible field order. This issue is often overlooked as LCD monitors use a progressive scan technology that will not accurately display your interlaced footage like a CRT will.

Center-cut Safe HD

If the originating source video is SD then an HD feed will up-convert the SD source (usually adding pillar bars to the sides of the 4×3 video). For HD sourced material the station's SD feed will get an automatic down-convert. Here's where the issue comes up. Stations want their SD viewers to see a 4×3 full screen program, not letterbox content. To that end, all HD source programs may automatically be down-converted by center-cutting the HD source for the SD feed. This means that any graphics or visual content outside of the 4×3 raster will be cut off. This process should be considered when creating and positioning HD graphics.

Broadcast Legal Chroma/Luma/Gamut

Television stations mandate strict values for Chroma, Luma and RGB Gamut. Today's cameras are not restricted to the color and brightness values that are required by these television broadcasters. It is essential to utilize the NTCS/Broadcast Safe filters available on every NLE system. Generally using the most conservative preset with no values over 100 will correctly adjust the hot signals that modern cameras capture.

Audio Peaks and Loudness

Recording and mixing digital audio to the 0dB level is far too strong. Here's why: Once an audio signal passes the 0dB threshold the signal can no longer be captured. This is referred to as "clipping." There is no regaining the lost audio information resulting from clipping. To prevent this issue it is best practice to not drive the audio to the 0dB limit. Digital headroom is the term used to signify that the audio peak level has been lowered below the 0dB point. It is recommend at least 6dB of headroom to prevent clipping. This means that program peaks should not meter/register above -6dB.

Definitions

Cablecast: Transmission of programming from NCTV's control room into the public cable television system(s).

Commercial Program/Announcement: A program or announcement whose content is designed to promote the sale or exchange of goods or services.

Educational Access: Category of programming submitted by area educational institutions, which takes responsibility for its content, on designated public or educational access channels.

Facility / Facilities: When referring to NCTV, includes all studio, control and cable casting equipment as well as NCTV's designated bandwidth (e.g., channel(s) on the cable television systems.

Government Access: Category of programming submitted by area government agencies, which take responsibility for its content, on designated public or government access channels.

Member: A person or organization who has applied for and been admitted to membership in NCTV and has paid the required dues.

Non-commercial Program/Announcement: A program or announcement whose content does not contain commercial language as defined in the NCTV Policy Manual.

PEG Access: Acronym for "Public, Education and Government Access." See each term, defined separately.

Producer: The person or organization that is responsible for creating programming. The producer may or may not be a submitter.

Program: Audio/video content provided to NCTV for cablecast by a community producer.

Program Underwriting: Monetary or other consideration provided to a producer or to NCTV in order to support the creation and/or distribution of the program in return for on-air credit.

Public Access: Category of programming submitted by any submitter for cablecast on designated public access channels.

Series: A regularly-scheduled string of programs provided by the same submitter and under a common series title. Station

Underwriting: Monetary or other consideration provided to NCTV, whether through a member, a producer, a submitter, any other third party, or directly to NCTV, in order to support the operation of the public access station; in return for on-air credit.

Submitter: The individual or organizational member that submits a program to NCTV. That person or organization takes full responsibility for the content of the program as well as for abiding by these Policies.

Underwriting: see "Individual Program Underwriting" Section 10.2 and "NCTV Station Underwriting" Section 10.1. **User:** A person or organization that uses NCTV's public access to the cable system and Internet by submitting programming; and/or a person or organization that becomes a Member of NCTV and receives access to membership benefits.

Acknowledgement

I hereby acknowledge the receipt of the User's Guide document from NCTV.

Name _____

Address _____

City, State, Zip _____

Phone _____

Email _____

Date _____