

RetroScan Universal 4K Mark-II Software Index

Update 5-1-22 for Software V4.5.13

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Universal Mark-II Software Instructions

The software currently is limited to captures up to near 3K resolution when using the camera in the 2K mode (2048 x 1536). An upcoming version will unlock the entire 4K capability of the unit. My apologies for any inconvenience in the meantime.

NOTE Due to modern camera manufacturing methods, it is not uncommon for dead pixels to show up even on new cameras. While the manufacturing industry may consider a handful of dead pixels out of several million to be acceptable, we do not. As such, the Universal software now has a Pixel Mapping function which will automatically locate and repair virtually all dead pixels on your camera. This process can be repeated as the camera ages, thereby extending the useful life of the camera. And since the pixels are fixed during export, you would not need to recapture footage if you find bad pixels in your imagery. Just remap your camera and then re-export your files.

Overview of how the Universal software works:

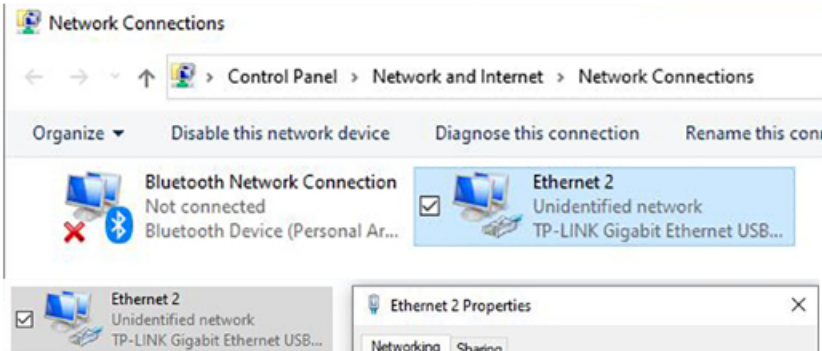
When capturing with the Universal, you are not scanning to a standard video file. Instead, you are scanning each frame of film to an individual Photoshop quality digital still frame numbered sequentially in a folder. This avoids the massive compression often associated with video files. Despite not being a video file, the Universal software will play back those numbered stills fast enough to see motion so that you can check your transfers. However, the original capture files are proprietary and can not be imported into any known edit system. As a result, you must use the Universal software to export your captures into a file appropriate for your needs. The export function of the software will allow you to output a variety of file types, including .MOV, .AVI and numbered image sequences, all in SD, HD or 2K resolution.

So, from a workflow standpoint, using the Universal is a two step process: First you capture all day long without regard to film playback speed or required resolution. Then you set up the Universal software at the end of the day to batch process (export) all your captures. The Universal software will then export HD, SD or 2K files which can then be imported into your desired edit program. This processing is generally done most efficiently overnight. Most people set up the Universal software to export to an external USB drive. The next morning, all the new files will be on that external drive which can then be unplugged and brought over to the desired PC or Mac edit suite. So while we don't support capturing on a Mac, the exported files are Mac compatible.

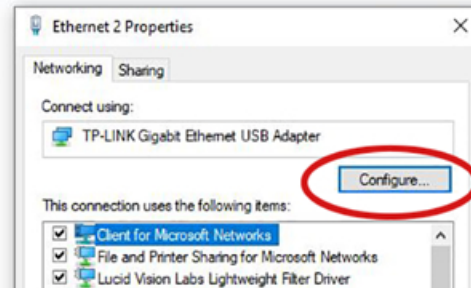
If you have any questions or problems, feel free to email us at retrofix@swtexas.net or call us at 830-966-4664. If emailing, please always include a phone number and, if you are international, please also include your country code.

Universal Mark-II Software Instructions

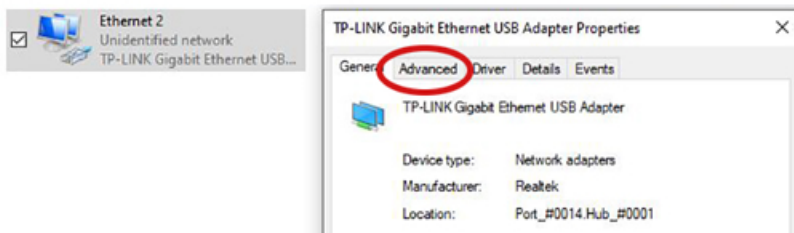
Ethernet PC Settings



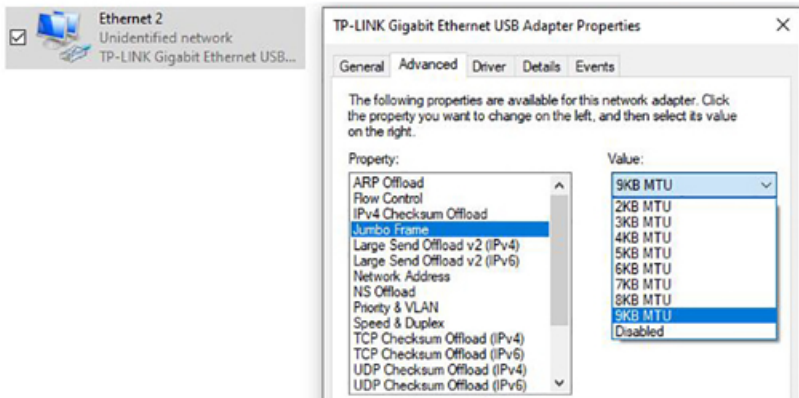
Even if you used the Ethernet to USB-3 adapter, you must make the following adjustments in your PC network card for your PC to “see” the 4K camera. In your control panel, find your network settings and double click on the network connection.



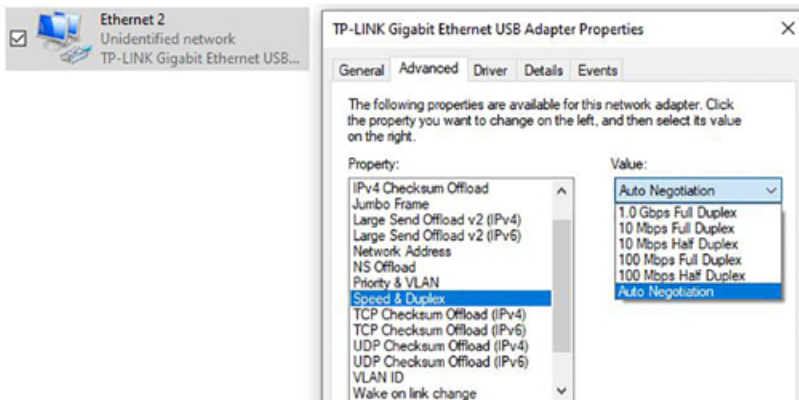
Click on the “Configure” button.



Click on the “Advanced” button.



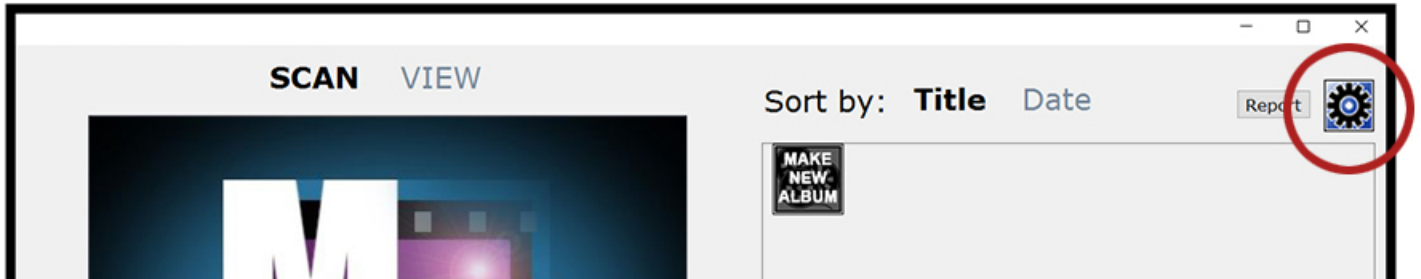
Under “Jumbo Frame”, change the value to “9KB MTU” or larger.



Under “Speed and Duplex”, change the setting to “Auto Negotiation”.

Then click “OK”.

RetroScan Universal Mark-II Settings



When you launch RetroScan, click the Settings icon in the upper right hand corner. The following settings box will appear.

A screenshot of the 'SettingsForm' dialog box. The dialog box is titled 'SettingsForm' and has a light gray background. It is divided into three main sections: 'DRIVES', 'CAPTURE', and 'EXPORT'.
DRIVES
Capture films to drive: C:\
Export albums and films to drive: C:\
NOTE: Export drives may also be changed on the albums.
CAPTURE
Grain reduction level: Light (selected), Heavy
Auto Exposure:
Capture Uncompressed:
Camera Model: 1.3 MP
EXPORT
Movie Output: AVI Compressed (fast)
Image sequence type: JPEG
At the bottom of the dialog box, there are 'OK' and 'Cancel' buttons.

The top section is about what drive you capture and export to.

The center section is about how you capture.

The bottom section is about how you export.

Please note that all choices are global and affect all captures and exports.

Drive Selection for Capture and Export

SettingsForm

DRIVES

Capture films to drive:
C:\

Export albums and films to drive:
C:\

NOTE: Export drives may also be changed on the albums.

Detailed description: This is a screenshot of a software settings window titled 'SettingsForm'. The 'DRIVES' section contains two dropdown menus. The first is labeled 'Capture films to drive:' and has 'C:\' selected. The second is labeled 'Export albums and films to drive:' and also has 'C:\' selected. A red oval highlights the 'Capture films to drive:' label and its dropdown menu. A note at the bottom states: 'NOTE: Export drives may also be changed on the albums.'

In this section, you select the drive that you wish to capture to. This ideally should be a fast, internal drive. If capturing 2K files, it is best to have an internal Raid-0 drive array with a separate internal system drive. Some people do capture to external drives but it is not something we recommend or support. If using this to capture uncompressed or 2K, please make sure that you have plenty of drive space as these types of files are quite large. In general, it is ideal to have at least 40% open headroom on your capture drive.

SettingsForm

DRIVES

Capture films to drive:
C:\

Export albums and films to drive:
C:\

NOTE: Export drives may also be changed on the albums.

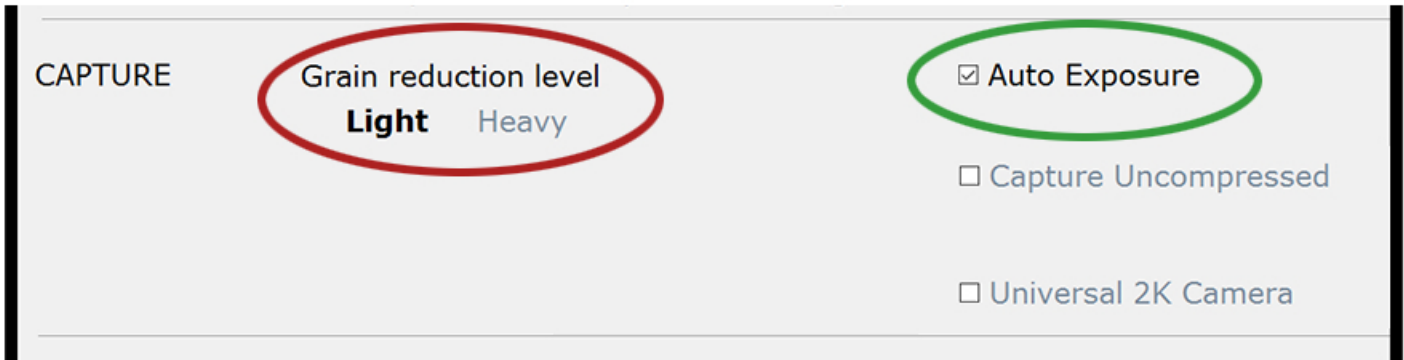
Detailed description: This is a screenshot of the same 'SettingsForm' window. In this view, a red oval highlights the 'Export albums and films to drive:' label and its dropdown menu, which is set to 'C:\'. The 'Capture films to drive:' dropdown is also visible and set to 'C:\'. The note at the bottom remains the same: 'NOTE: Export drives may also be changed on the albums.'

You also select the drive that you wish to export files to after capture. They can be the same as the capture drive or they can be different or external drives. Please note that the export destination drives can also be changed on the albums, themselves. You can also export via a network but it is not recommended due to slow render speeds.

NOTE: All files must be exported.

You can not import the original capture files into any edit program.

Capture Settings



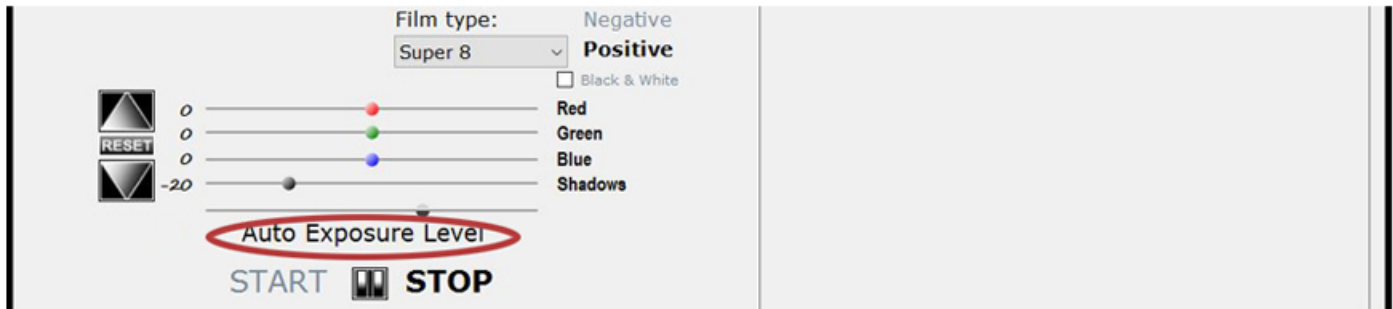
In this section, you choose the degree of grain reduction desired. This can be previewed in the set up mode of the capture control panel. Please note: The RetroScan grain reduction is passive. Rather than apply grain reduction processing to the image, RetroScan simply reduces the degree of sharpening applied to each frame. So the higher the grain reduction, the lower the sharpening. Some users will then apply sharpening in post.

Here you activate the RetroScan Auto Exposure function. (The software defaults to Auto Exposure when you first install it.)

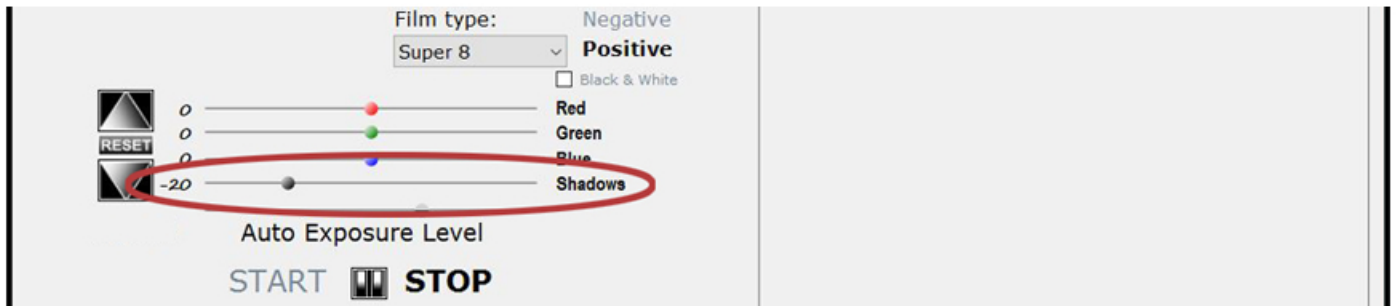


Turning the exposure knob to the right will make the image brighter on manual exposure. Typically, working with the lens between f2.8 and f4 seems to offer the best results. While this unit does have AutoExposure, we are not completely satisfied with the current algorithm being used by the camera. We are working on an improved method which should be in an upcoming release of the software. In the meantime, you will need to experiment with the unit to see what results work best when using AutoExposure.

Capture Settings



On the capture screen, the default starting point for the Auto Exposure level is somewhere near the “L” of "Level" but can be changed as needed.

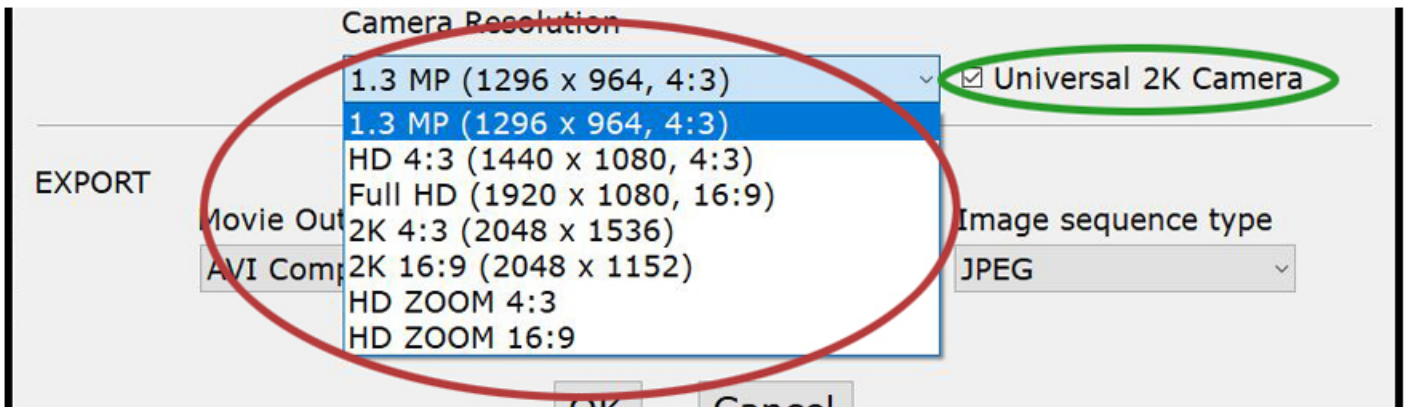


Shadow Detail is normally at -20 but can also be changed to suit the needs of the footage. In general, these settings are a good starting point that will work for Auto Exposure on most home movies with moderate over and under exposure. For radically under exposed or over exposed films, you may have better results using manual exposure.



RetroScan can capture in both compressed or uncompressed formats. The default setting is for compressed, where every frame is stored as a hi-resolution JPEG. Checking the box will allow you to capture uncompressed, where each frame is a BMP. Please note that capturing uncompressed requires an increased amount of drive space and speed.

Capture Settings



The software currently defaults to the standard 1.3 HD camera but you can not capture with anything other than the 4K camera with this version of the software. Currently, in the 2K mode, you can only capture up to near 3K resolution but that will change to 4K in an upcoming version. In the meantime, you will need to select the 2K camera option in the drop down menu. Within the middle **drop down menu**, you can then choose a variety of resolutions and aspect ratios to capture with from 1.3mp 4:3 all the way up to full 2k, either as 4:3 or 16:9. Captures above 1920 x 1080 may require an internal Raid-0 drive array.



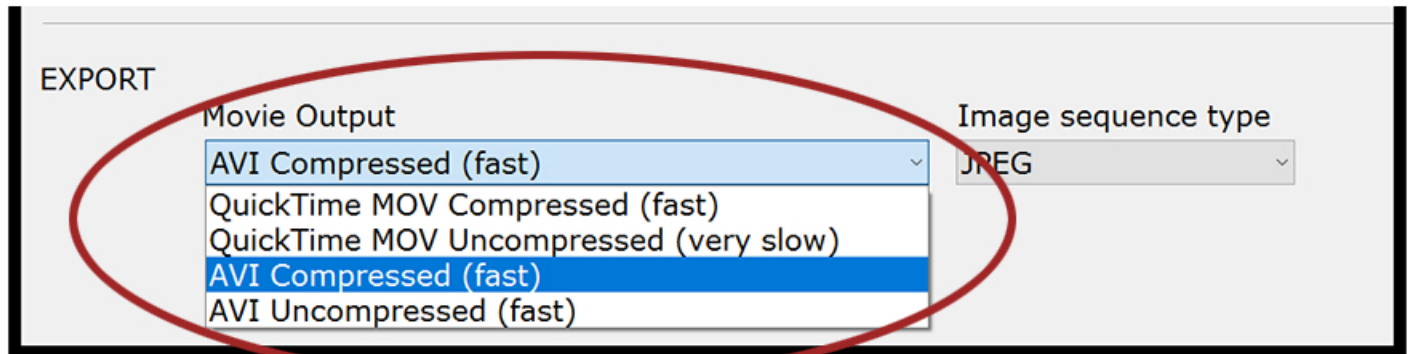
If working in 16mm, 9.5mm, S8/R8 formats, and you only require HD resolution, the HD zoom saves time by avoiding the change of lens tubes between formats. To use the HD ZOOM mode, first put the software in the 2K 4:3 mode (2048 x 1536) and then set up the Mark-II scanner with an extension tube so that the width of a 16mm frame of film fills the full 2K sensor. This should be done with the unit running so that you can achieve proper focus and framing. Next, stop the unit and put the software in the HD ZOOM mode of your choice, depending on the aspect ratio you require. The 4:3 ZOOM mode works in both 8mm and 16mm formats. The 16:9 ZOOM mode works only in smaller formats like 8mm and Super 8. Use the 4:3 ZOOM if you do not require captures outside the 4:3 film frame. Use the 16:9 ZOOM if you need to see the area outside the film frame (such as the areas between the R8 sprocket holes).

Use the “+” and “-” buttons to zoom in and out of the image. Use the various “<” buttons to move the image left right and up and down. Use the “X” button to toggle between the cropped view and wide sensor view. Once you set the desired cropping and image placement for a given format, the software will remember and go to that cropping position the next time you select that format. Please note that the zoom mode is not enlarging a low resolution image to HD. The zoom feature is instead letting you select what HD portion of the image sensor is being used. All captures are in HD resolution and are saved at 1080p. Exports can then be 1080, 720 or SD in both PAL or NTSC file formats.

Export Settings

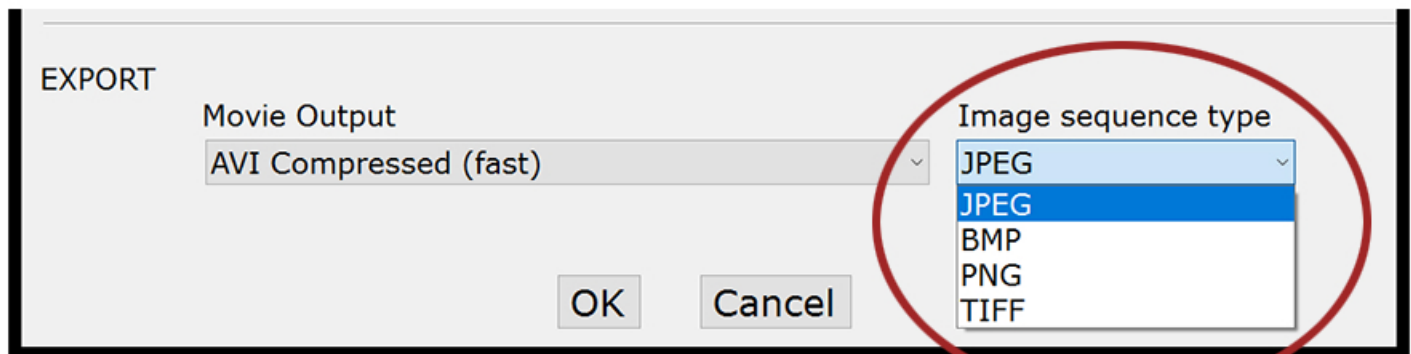
This section applies to EXPORT only. These settings do not affect your captures in any way and can be changed at any time before or after capture. After capture, you can export your files in two different ways. One way is a **MOVIE FILE** and the other is a **NUMBERED IMAGE SEQUENCE**. Please note that Movie Output choices do not affect Image Sequence choices and Image Sequence choices do not affect Movie Output choices. They are two separate files types. Your choices are explained as follows:

MOVIE FILE EXPORT:



You have two types of video files: .MOV or .AVI. The quality of the two is essentially the same. However, some edit programs work better with one or the other. For most projects, exporting as a compressed video file will look fine. For critical projects, you can also export uncompressed. Please note that exporting as a uncompressed .MOV file is very slow, for some reason. Exporting as uncompressed .AVI isn't. Also, unless you have a way to edit uncompressed, it is pointless to capture and export uncompressed.

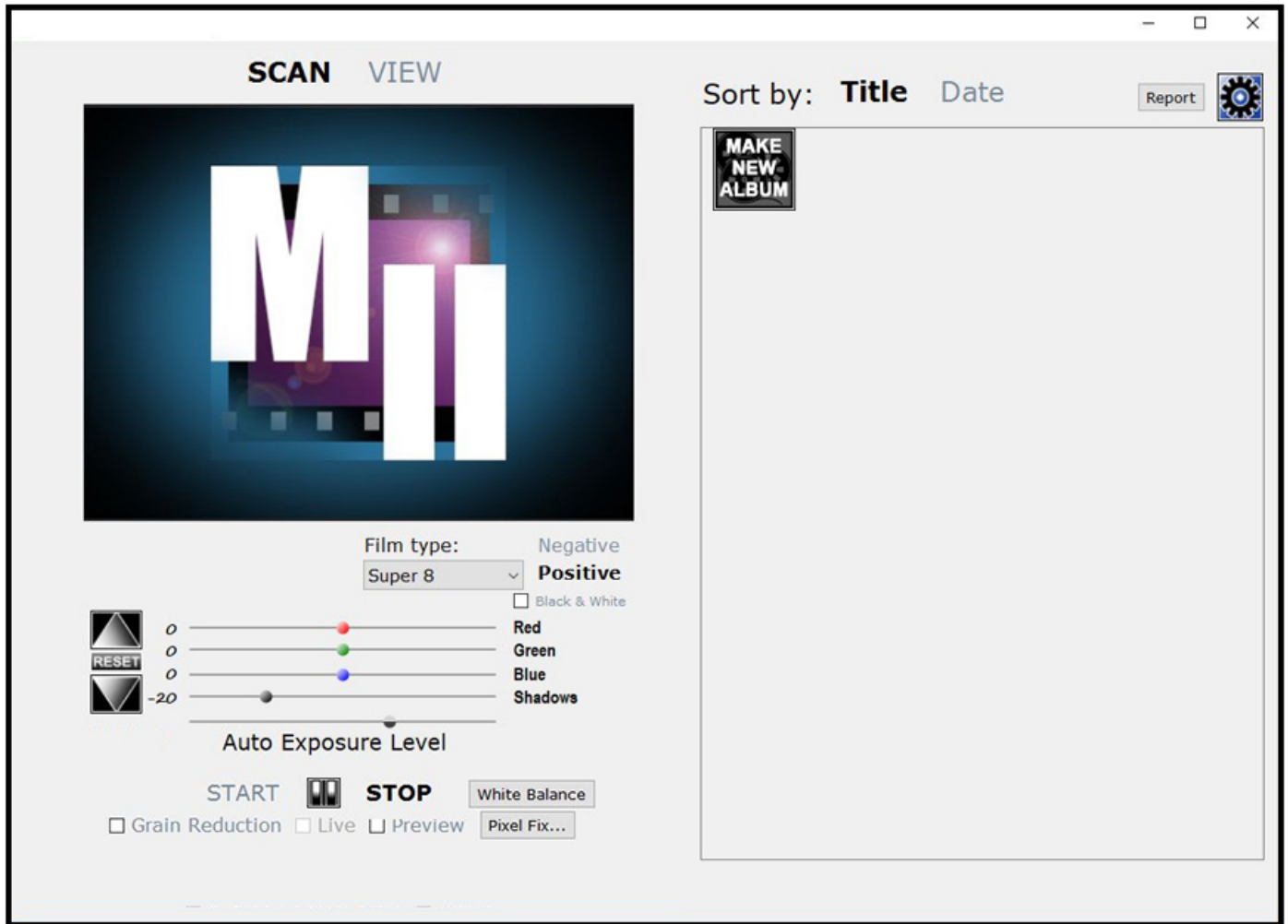
NUMBERED IMAGE SEQUENCE FILE EXPORT:



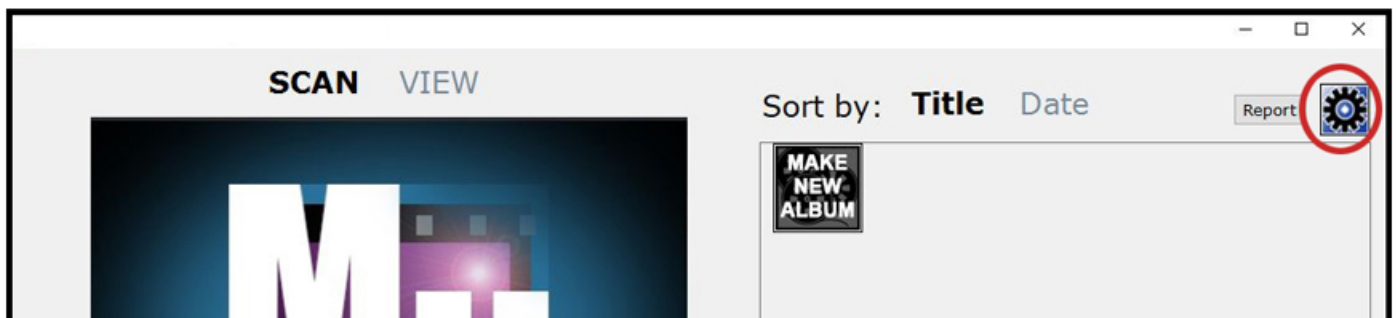
For highest quality, you can export as a numbered image sequence, which puts each frame of film on a separate digital still frame in a folder. A numbered image sequence can be imported into most any computer edit system which will automatically string the separate images together to create a video movie file. From smallest file size to largest, they are JPEG, PNG, BMP and TIF. Most people use JPEG. If capturing uncompressed and you wish to stay uncompressed, then you would need to export PNG, BMP or TIF.

Universal Scan Functions

Once you launch the software, the first screen you will see is this.

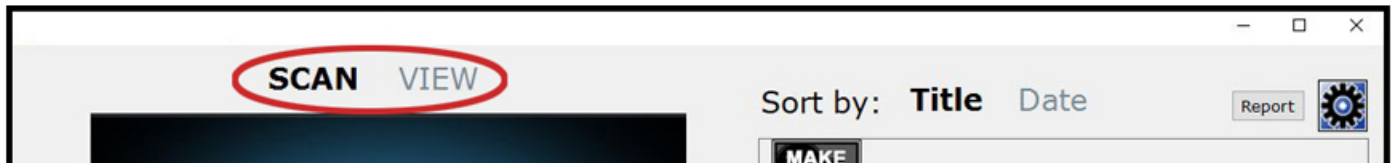


If this is the first launch during installation, it is advised to wait a few minutes for drivers and background processes to complete before attempting to perform your first scan. The default mode of the software is Auto Exposure. This can be changed to Manual Exposure easily via the settings panel of the software.

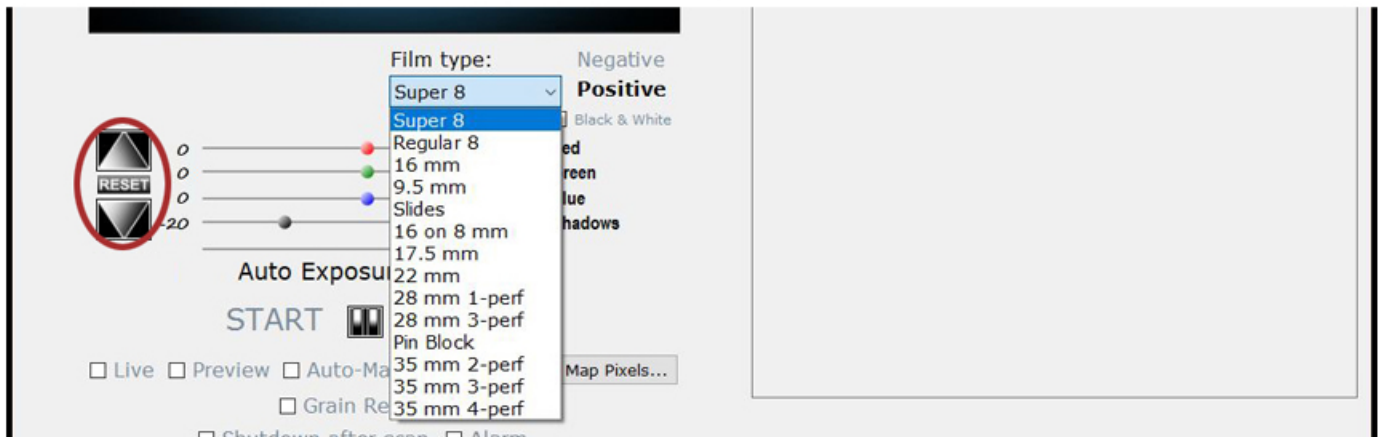


To access settings, just click on the settings icon in the upper right hand corner. It is suggested that you continue reading the following scan functions to familiarize yourself with the various functions before making changes to the software settings.

Universal Scan Functions



Here you toggle between the scanning function and the viewing function. "Scan" is selected to transfer your film and contains various image controls and functions. "View" is selected after scanning to watch or export your films into desired formats.



Use this drop down menu to select the format of the film you are transferring (Super 8, Regular 8, 16mm, etc) NOTE: the format "16 on 8mm" is offered as a solution to the occasional problem of encountering 16mm imagery shot on regular 8mm film. Adjust the camera for overall framing of the film like normal but use the up and down arrows on the left to adjust which perf is being used to register the image when dealing with multi-perf film such as 16 on 8mm, 22mm, 28mm, and 35mm film.

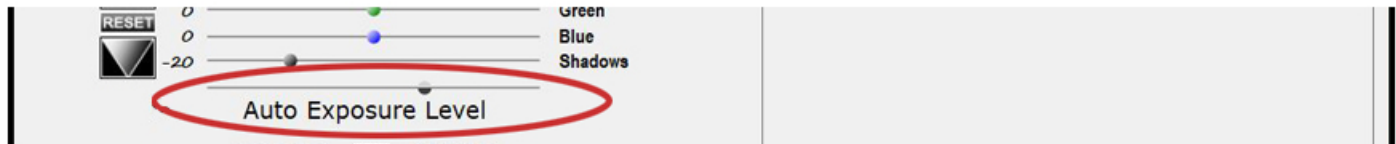


You will find that old home movies are always "Positive", which is the default state for the software. "Negative" should be selected when transferring modern negative. If working with black and white film (positive or negative) you can get true black and white by checking the box for Black and White.



The Red-Green-Blue sliders control the color of your image and can be changed before or during capture. Shadow Detail is preset to -20 for powerful blacks and good contrast but can be adjusted at any time to bring out more information in shadow areas if required. The "RESET" button will move all sliders back to the default position.

Universal Scan Functions



As noted on page 3, the default position of the Auto Exposure slider is near the L on "Level". Combined with the default -20 default position of the Shadow Detail slider, this should provide bright, snappy transfers of most home movies that vary in exposure from slightly under to slightly over exposed. The Auto Exposure Level can be adjusted as needed to accommodate a wide variety of color or black and white film.



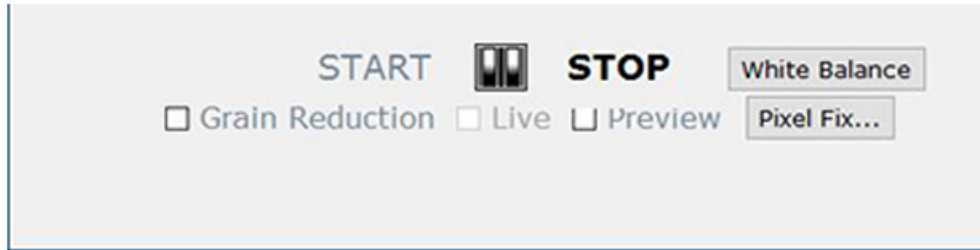
For manual mode, uncheck the "Auto Exposure" box in settings. When in manual exposure mode, all exposure adjustments will be made via the exposure control knob on the Universal. You can adjust the sensitivity of the camera by using the Gain drop down menu. You have a choice of 0, 5, 10 and 15 db. The default for manual exposure is 5. The higher the gain, the more "noise" may appear in the image, so this function should be used carefully for best picture quality. This gain level will adjust automatically when Auto Exposure is activated.

As an alternative to either manual or auto exposure, you can create what some call a "Flat Scan". Load decent looking film into the unit, move the camera to a position where you can see the sprocket hole along with some of the frame imagery. With the software in the manual mode, adjust the Shadow detail and the Exposure knob of the unit so that the sprocket hole isn't pure white and there are useful details in the shadow areas. The resulting image will be dull and low contrast with muted color. But the frame will contain pretty much all the detail and information so you can let the unit run, knowing that the highlights will not be lost and the shadow detail will be protected. Then, in post, you can either adjust each scene manually to restore contrast or apply your NLE's auto level filter to bring back the proper color and contrast levels.



The "Start" button will begin your actual capture and the "Stop" button will end your capture. In between "Start" and "Stop" is a Pause symbol "II", which will let you pause the recording. Press the Pause symbol to pause the recording. Press the Pause symbol again to resume recording. **NOTE: You can not go directly from Pause to "Start" or "Stop". Also, Start, Pause and Stop buttons do not control any motor functions.**

Universal Scan Functions



PREVIEW can be used to see how your film will look without actually capturing it to your harddrive. This can be used whether the film is stationary or running. Just be aware that, if the film is not running, then the film isn't under tension and the image may not reflect accurate focus. Typically, it is best to adjust focus while the film is running.

LIVE is a function no longer required in this software and is disabled.

"GRAIN REDUCTION" will make the grain of the film less noticeable by reducing the degree of sharpening applied to each frame. This avoids over-processing of the final image if the user desires to apply sharpening later in post.

It should be noted that we do not employ active grain reduction methods or filtrations in this software to prevent over-processing of the image. Instead, checking the box for grain reduction merely reduces the amount of sharpening being applied to the image. We find this to be less objectionable since you can always apply sharpening later, if needed, but you can't remove unwanted sharpening or unwanted grain manipulation easily.

Universal Scan Functions



WHITE BALANCE

Press the White Balance button to balance the color of the image.

PIXEL FIX

If your transfers show dead pixels, this is easily remedied by using the pixel fixing functions within the RetroScan software. Please plug the camera into your PC so the camera can warm up for at least 30 minutes as a warm camera sensor is more likely to show problem pixels.

You will need to create some full sensor 2K footage if you don't already have some with dead pixels in it. Bring that original 2K capture footage into the VIEW window and use the SnapShot button to create a still frame that you know will show dead pixels. Press the Manual Map Pixels button on the capture panel and browse to your chosen still frame. That still frame will launch in the Pixel Fix Utility and you will see a bunch of yellow circles around pixels that have already been mapped by the software. Don't be alarmed by the large number. Remember, there are 3.2 million pixels in this sensor so even having a hundred problem pixels is considered normal by today's manufacturing standards. (Sorry. But true.)

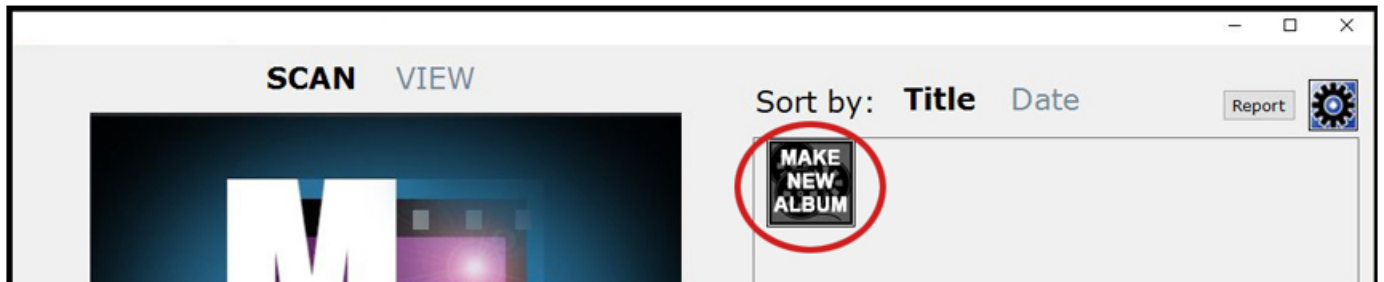
You can now use the scroll/slide bars to navigate the picture to look for additional dead pixels. You can also bring in a series of frames and the software will cycle through them repeatedly, making the dead pixel stand out from the image.

When you spot on a dead pixel, use the cross hair cursor to click on the pixel to mark it. There is a window upper right that will show a magnified view to make it easier to see. Each pixel you fix will be marked with a tiny red square circled in yellow. If you make a mistake and need to remove a choice, just right click on that pixel.

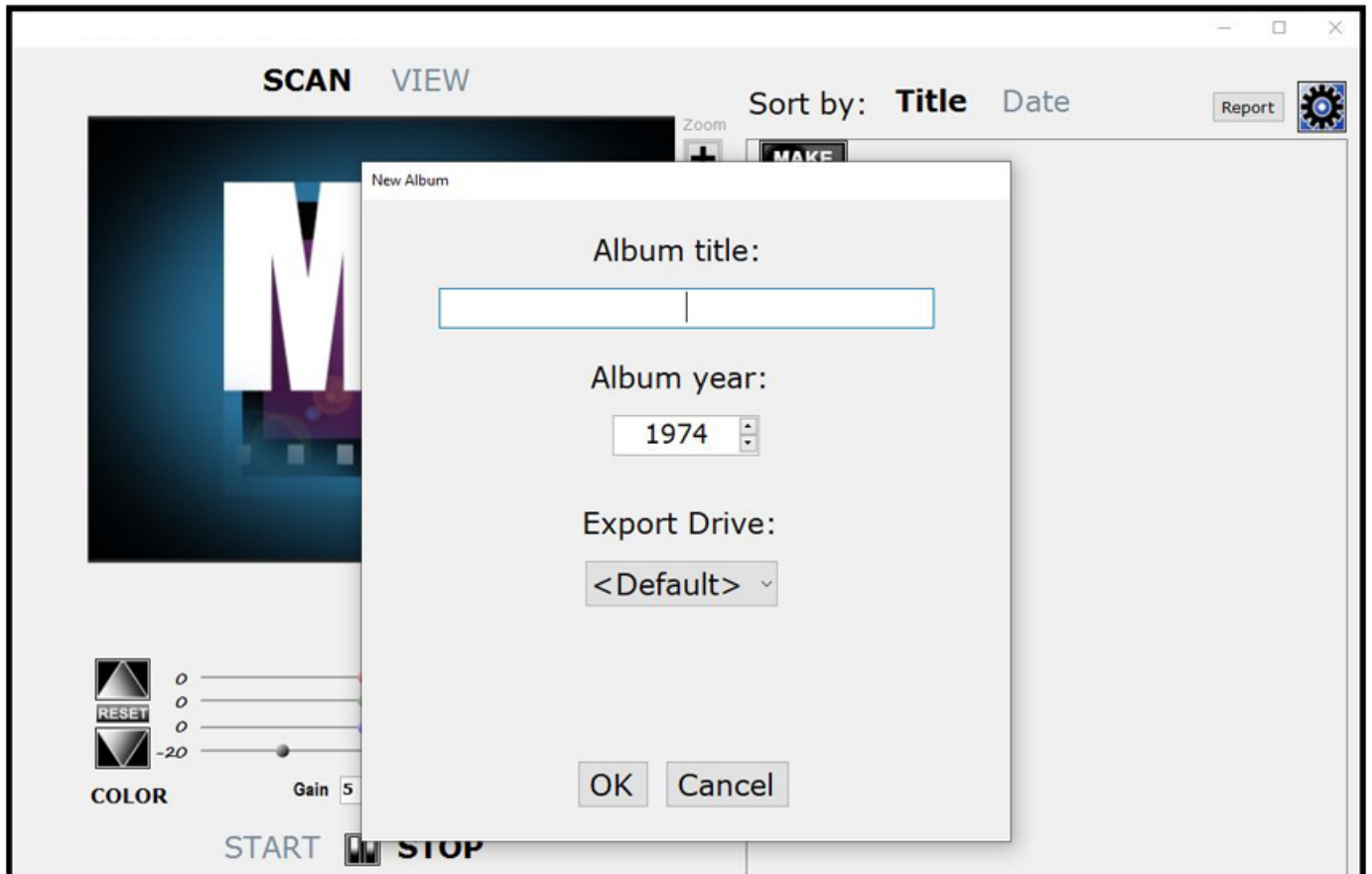
There is a button bottom left that will let you turn the yellow circles on and off, if desired. This allows you to make sure there are actually no dead pixels hiding behind the yellow line work of the circles, themselves. **After you finish, click the "Save" button bottom left and close out the window.**

When you export your footage, all marked pixels will be repaired. All previously marked pixels will stay in the map so you can add indefinitely as more pixels show up over time, if needed.

Capturing Film



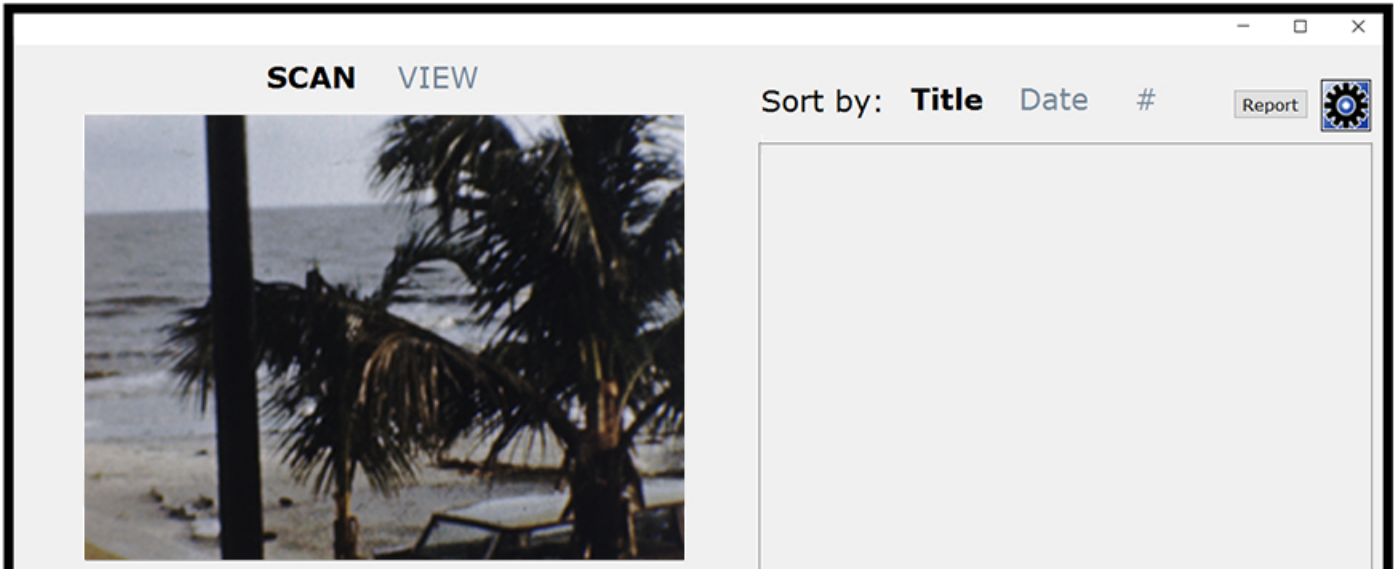
Before you can scan any movie, you must first create an album to put it in. Click on “Make a New Album” icon which will pop open a dialog box.



Fill out the necessary fields. The album title will be the prefix for all files created in that album and will number consecutively automatically, starting with "001" but you can also give unique names to each file. The default year is 1974 but can be changed as desired. Album information can be changed later by right clicking on the album. The Export Drive for this album can be selected here. Default is usually "C" but you can designate a different export drive in Settings. Also, you can plug in as many other Export destination drives as you have USB ports and each folder could export to its own drive, if desired. Just make your choice for export drives here or on the export page. Please note that Export Drive choice does not affect your choice for Capture drive, which should ideally be internal.

Capturing Film

Once you create an album, double click to open it. With film loaded on the Universal, check the Preview box and start your film running. Depending on the camera/resolution choices made in Settings, you will see either a full frame 4:3 window or a window that is 16:9 with a “safe area” designated by yellow dashed lines.



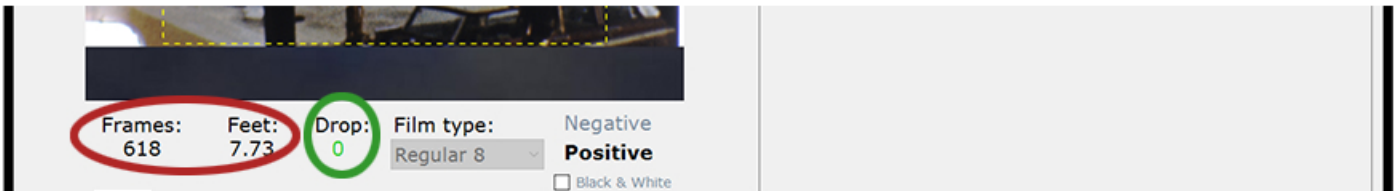
If capturing 4:3 (in HD or 2K) you will see the image extending out to the edge of the capture window. Anything that you do not see in the capture window will not be included in the captured file. When exporting, you can either output as a 4:3 image or you can export as a 16:9 image with black pillar bars added to each side of the captured frame.



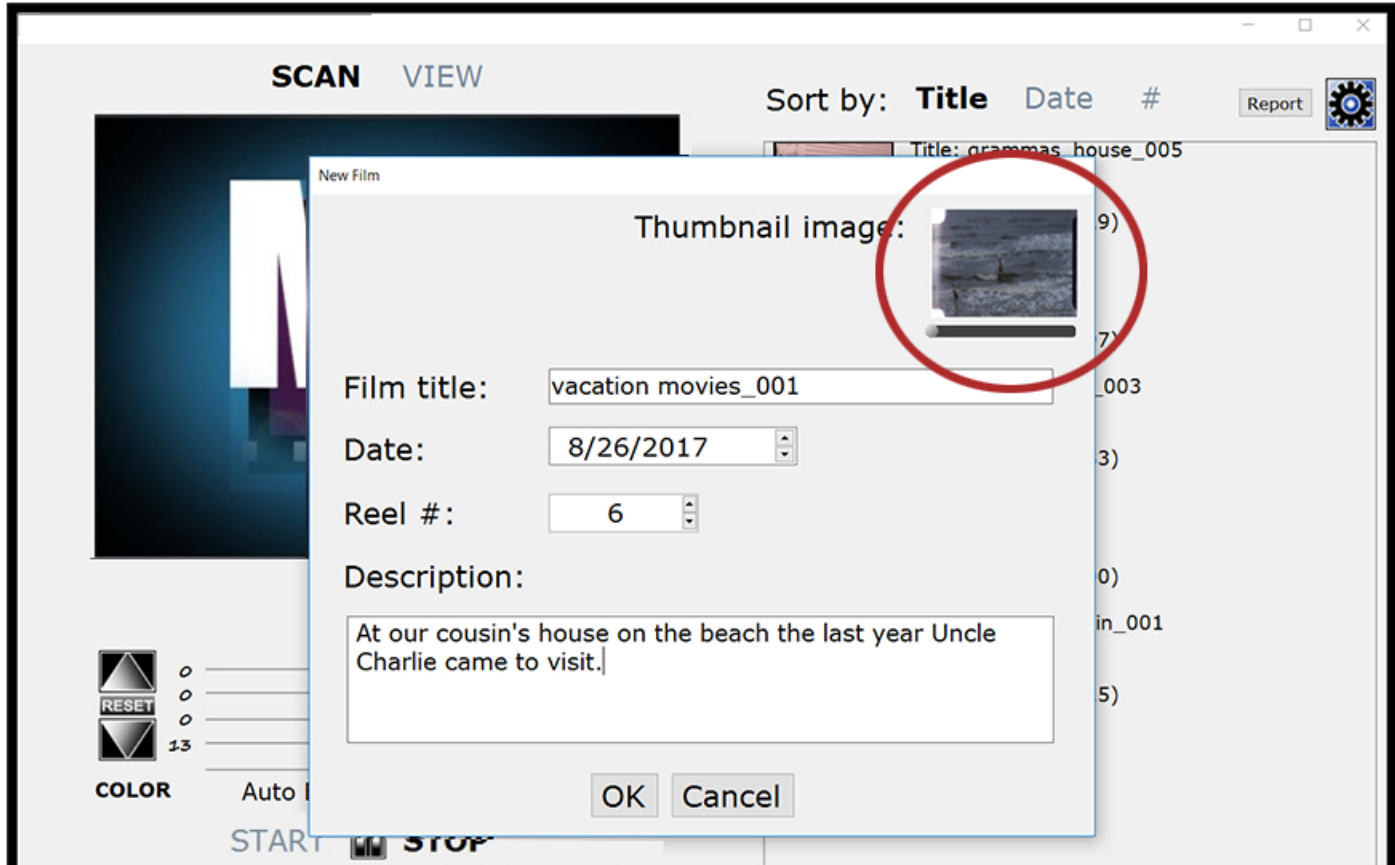
If capturing in the 16:9 mode, areas left and right of the yellow box will also be captured along with the center. During HD or 2K export, you can cover those areas with black pillar bars or leave them visible. During SD export, the software will use only the area within the yellow box, which is standard TV format. Please note that some home movies have imagery which goes well outside that aspect ratio so a loss of picture information from the film edges is not unusual when converting home movies to SD.

Capturing Film

Once you are satisfied with your Preview, uncheck the Preview box, start your film from the beginning and press the “START” button to begin capture.



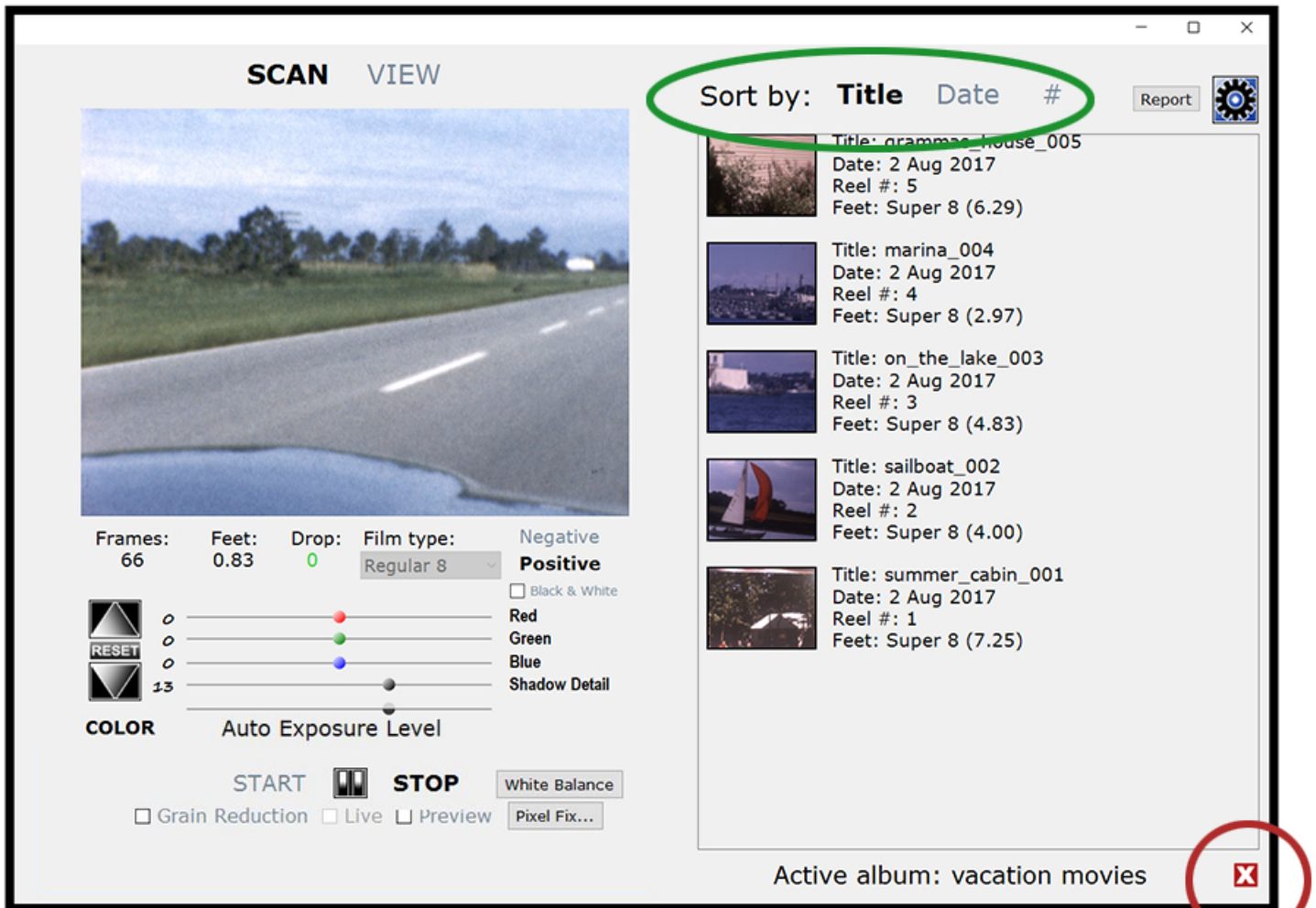
During capture, you will see **Frames and Feet** displayed. The software will keep track of this data and it can be used later to print out a report showing total footage transferred. Also, while capturing, the **Drop Frame** display will let you know if your PC has dropped any frames. It should be noted that “dropped frames” only refers to your hard drive not being able to keep up with the capture data rate, such as when capturing uncompressed or 2K (or both!). “Dropped frames” does not refer to frames that were missed during capture due to bad splices or the sprocket hole sensor not reading the film correctly.



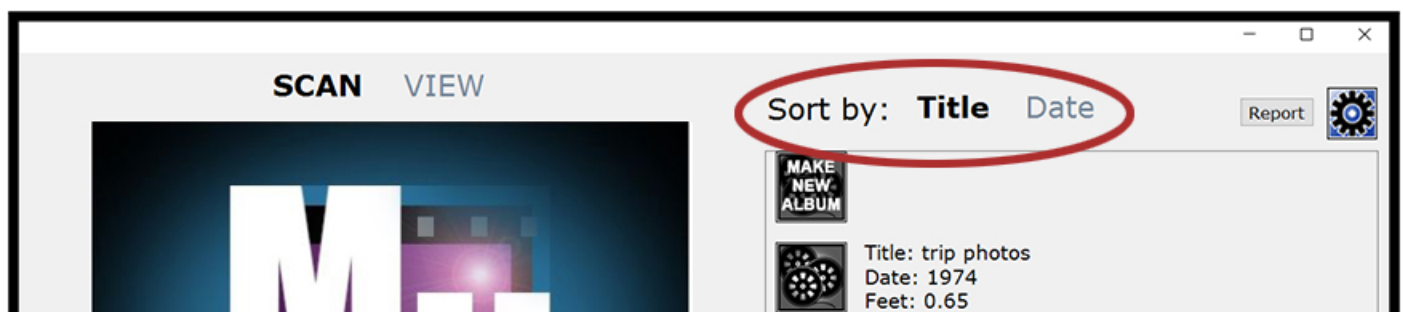
When you click "Stop", a box will pop up that lets you change the name of the file, or add a date and a description, as well. In the upper right hand corner there is a tiny window with a scroll bar. This image will appear as the thumbnail for your file in the album. You can use the tiny scroll bar to find another frame to use for your thumbnail.

Capturing Film

Once you close the pop up box, the file will take its place in the album . Note that all files in the album can be sorted by clicking on **Title, Date or Reel #**.



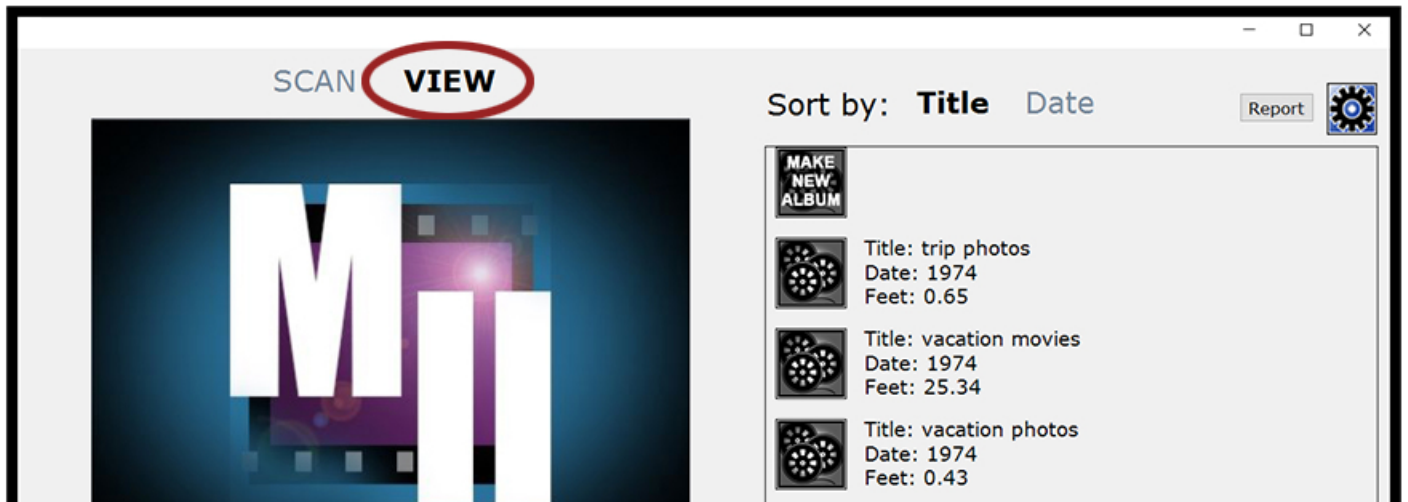
To close that album, **click on the X** in the lower right hand corner. If you can not see the X because it is off the screen, then you have your Font Size in your PC set at something greater than 100%. This is not resolution size but a setting referred to by Windows as "Font Size". You can make this adjustment in your PC's control panel.



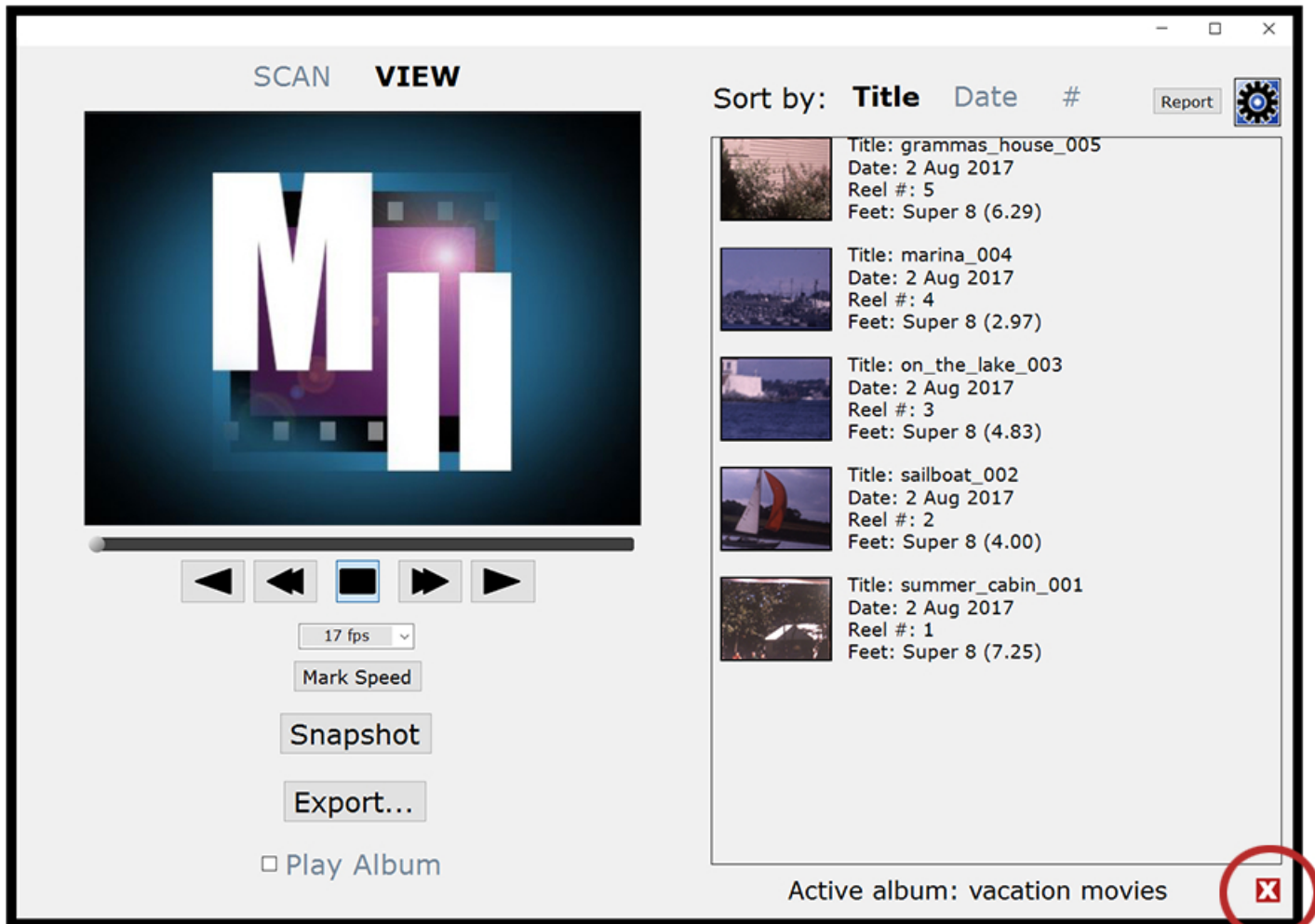
After closing that album, it will show up along with all the other albums, one above the other. Albums can be sorted by clicking on **Title and Date**.

Viewing Capture Files

Click on “VIEW” above the capture window and the screen will change to this:



If you then click on any given album, it will open up and change to this:

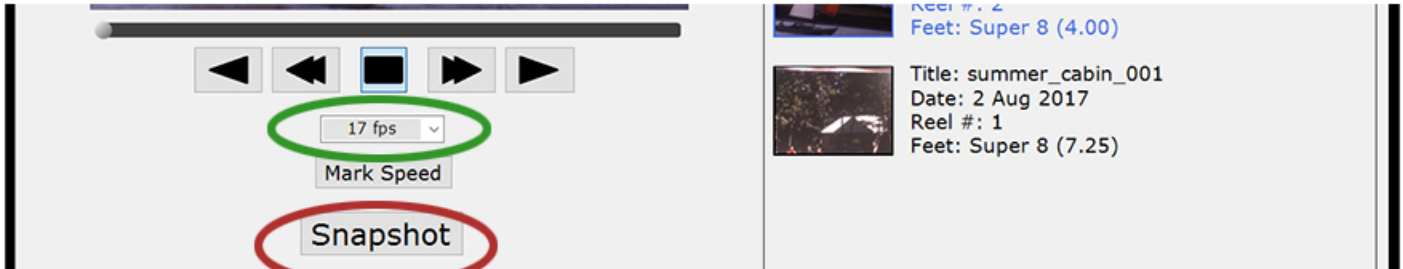


(Remember, close the selected album by clicking on the X in the bottom corner.)

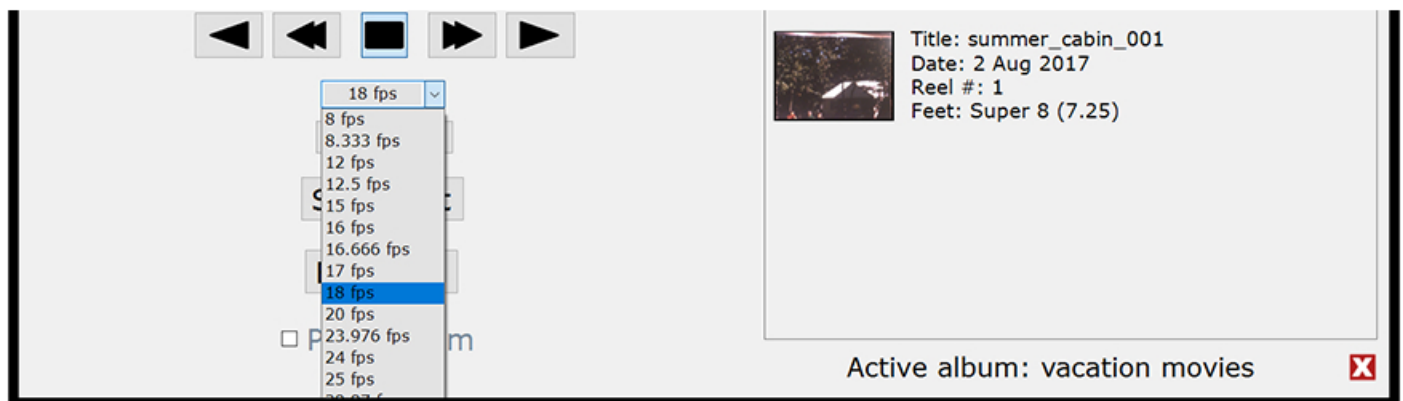
Viewing Captured Files



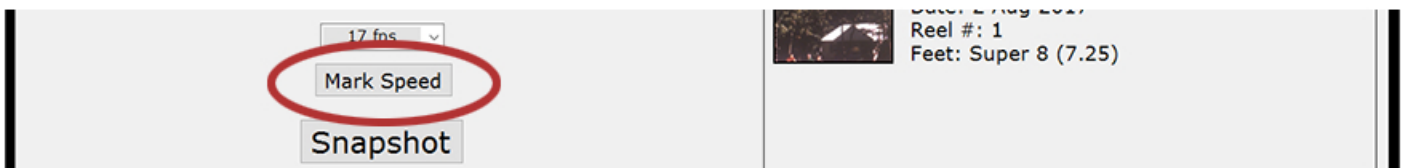
To view a captured file, double click on it and the file will appear in the player window. You can then use the standard play keys for forward, reverse or step frame by frame.



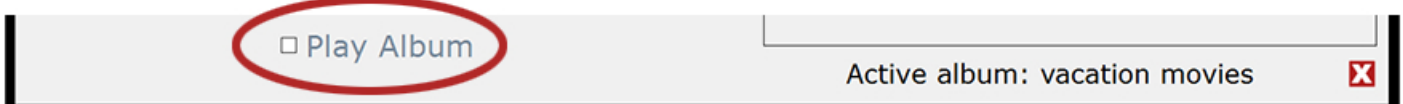
If you see a particular frame that you would like to use for an enlargement or perhaps a DVD or BluRay cover, you can click on the **“Snapshot”** button and the software will output a high resolution still frame which can be found in the Export folder. To see the movie played at a variety of speeds, simply use the **speed drop down menu**.



Most R8 was shot at 16fps but some was shot at 18fps. Most S8 film was shot at 18fps but sometimes 24fps. Commercial S8 films are always at 24fps. Silent 16mm film was shot at both 16fps and 18fps. Sound 16mm was shot at 24fps. The default for speed is set to 17fps, which is a convenient “in between” speed for both R8, S8 and 16mm silent films, which represents the majority of what most users will be transferring.

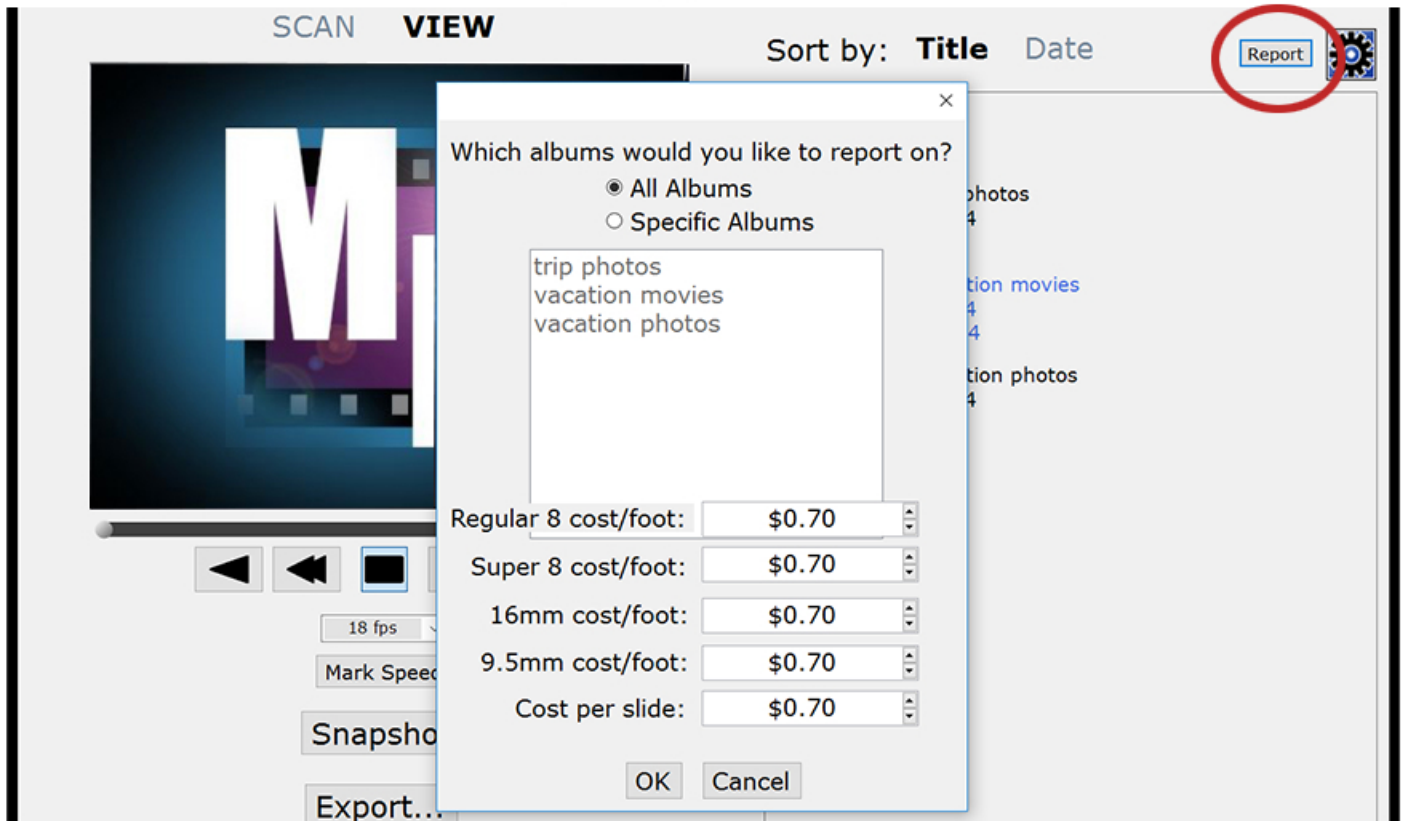


You can assign the speed later on the Export page or you can use the **“Mark Speed”** button to assign the speed to the file here. It can be changed later, if desired.



If you wish to preview the entire album, just check the **“Play Album”** box.

Viewing Captured Files



Clicking on “**Report**” will pop up a box that lets you assign charge amounts to your transfers. You can then print out a history report that reflects total footage and charges.

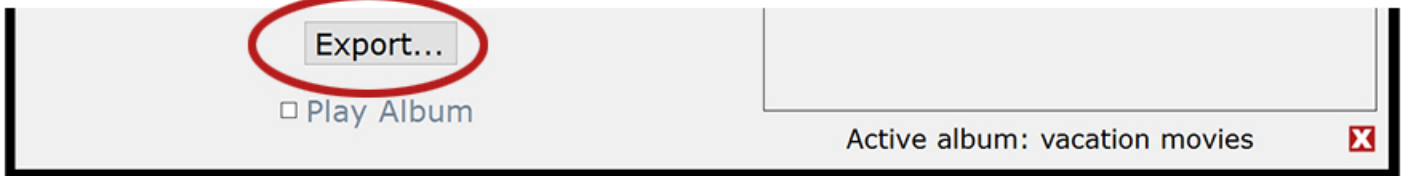
RETROSCAN CAPTURE HISTORY REPORT | Saturday, August 26, 2017 4:34:34 PM

ALBUMS ARE ARRANGED ALPHABETICALLY, FILMS BY REEL NUMBER

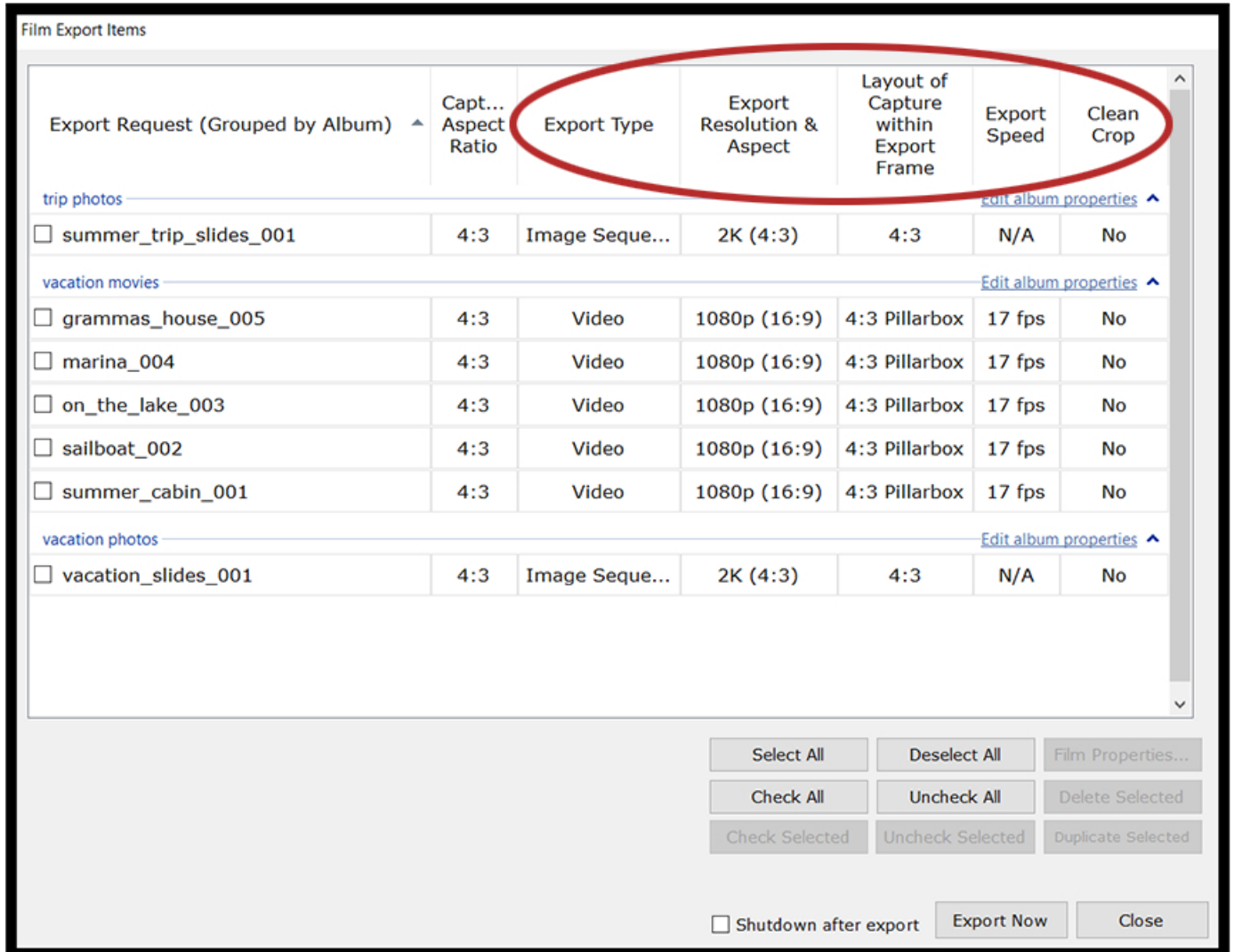
Film Title	Date	Reel #	Type	Cost/Unit	Units	Cost
Album: trip photos						
summer_trip_slides_001	2017-8-24	1	Slides	\$0.70	0.65 slides	\$0.46
(No Description Provided)						
Totals					0.65	\$0.46
Album: vacation movies						
summer_cabin_001	2017-8-2	1	Super 8	\$0.70	7.25 feet	\$5.08
(No Description Provided)						
sailboat_002	2017-8-2	2	Super 8	\$0.70	4.00 feet	\$2.80
(No Description Provided)						
on_the_lake_003	2017-8-2	3	Super 8	\$0.70	4.83 feet	\$3.38
(No Description Provided)						
marina_004	2017-8-2	4	Super 8	\$0.70	2.97 feet	\$2.08
(No Description Provided)						
grammas_house_005	2017-8-2	5	Super 8	\$0.70	6.29 feet	\$4.40
(No Description Provided)						

Close Print

Exporting Captured Files



Click on the Export button and the software will go to this screen.



Depending on the camera used, exports can be SD, HD or 2K. Full screen 4:3 and 16:9. Here are the definitions of headings displayed above their respective columns.

Export Type: Numbered Image Sequence or Video File (.MOV or .AVI)

Resolution/Aspect Ratio: 720p 4:3, 720p 16:9, 1080p 4:3, 1080p 16:9, 2K 4:3, 2K 16:9, Standard Definition PAL, Standard Definition NTSC

Layout: Letter Boxed, Pillar Bars, 16:9 full frame, 4:3 full frame

Export Speed (fps): 8, 8.333, 12, 12.5, 15, 16, 16.666, 17, 17.982, 18, 20, 23.976, 24, 25, 29.97, 30

Clean Crop: Crops into the image 10% and then gently rescales to desired resolution. This is handy if you have captured film and find that there is undesirable lint or hair at the picture edge and you don't want to rescan.

Exporting Captured Files

NOTE: All files must be set up before you can check any boxes for export.

The screenshot shows the 'Film Export Items' window with a table of export settings. A red circle highlights the 'Export Resolution & Aspect' column for the 'vacation movies' group, where a dropdown menu is open showing options: 1080p (16:9), 720p (4:3), 720p (16:9), 1080p (4:3), 1080p (16:9), NTSC, and PAL. A green circle highlights the 'Before' and 'After' preview thumbnails at the bottom left, showing a landscape scene with a resolution change from 1296 x 964 (4:3) to 1920 x 1080 (16:9). The table below shows the following data:

Export Request (Grouped by Album)	Capt... Aspect Ratio	Export Type	Export Resolution & Aspect	Layout of Capture within Export Frame	Export Speed	Clean Crop
trip photos						
<input type="checkbox"/> summer_trip_slides_001	4:3	Image Seque...	2K (4:3)	4:3	N/A	No
vacation movies						
<input type="checkbox"/> grammas_house_005	4:3	Video	1080p (16:9)	4:3 Pillarbox	17 fps	No
<input type="checkbox"/> marina_004	4:3	Video	720p (4:3)	4:3 Pillarbox	17 fps	No
<input type="checkbox"/> marina_004	4:3	Video	720p (16:9)	4:3 Pillarbox	17 fps	No
<input type="checkbox"/> on_the_lake_003	4:3	Video	1080p (4:3)	4:3 Pillarbox	17 fps	No
<input type="checkbox"/> sailboat_002	4:3	Video	1080p (16:9)	4:3 Pillarbox	17 fps	No
<input type="checkbox"/> summer_cabin_001	4:3	Video	1080p (16:9)	4:3 Pillarbox	17 fps	No
vacation photos						
<input type="checkbox"/> vacation_slides_001	4:3	Image Seque...	2K (4:3)	4:3	N/A	No

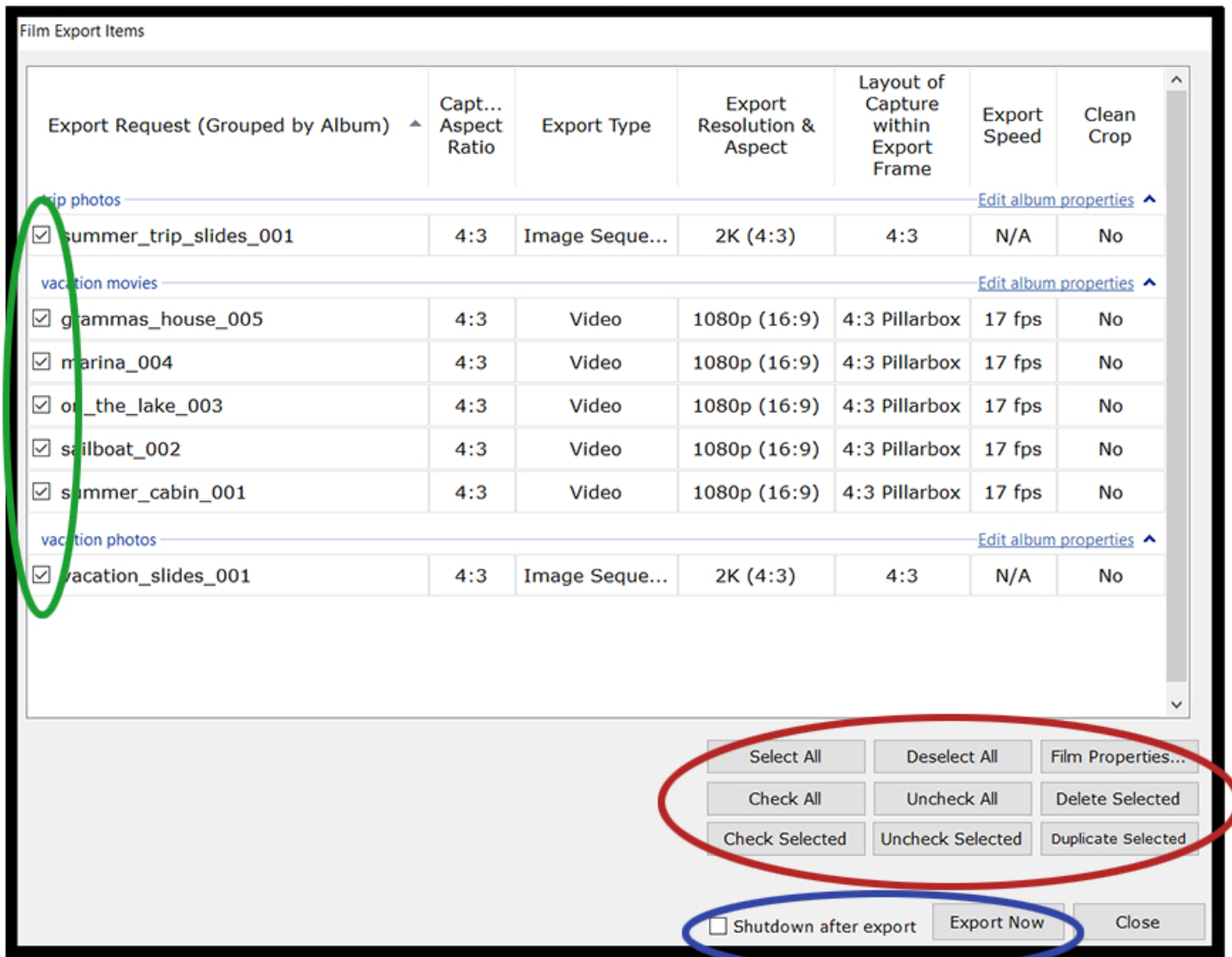
Buttons at the bottom right include: Select All, Deselect All, Film Properties..., Check All, Uncheck All, Delete Selected, Check Selected, Uncheck Selected, Duplicate Selected, Shutdown after export, Export Now, and Close.

To set up a single file for export, left click once on the desired file and then access the **drop down menu** related to the column heading. Make your selections for Export Type, Resolution/Aspect Ratio, Layout, Export Speed and Clean Crop. Note that each change will be reflected in the **“Before”** and **“After”** thumbnails in the bottom left hand corner. This gives you a preview of what the final export will look like, in terms of layout and aspect ratio.

To set up multiple selected files at one time, single left click the first file of the desired group, hold down the shift key and single-left-click the last file of the desired group. All files in between will be highlighted. Or, if you wish to select all files, hold down the shift key and then single-left-click the top file. All files below will be highlighted.

After highlighting desired files, single-right-click on the drop down menu and make your choice, which will automatically be applied to all highlighted files in the group.

Exporting Captured Files



In the **bottom right hand** corner are controls that allow for a variety of single as well as group file functions. The buttons are fairly self explanatory but the button marked as “Duplicate Selected” is useful if you want to export two different types of formats from one file. As an example, if you wanted to export a file as 1080P as well as Standard Definition NTSC, you could duplicate that file and then set up each file as desired. This saves on having to export your files twice.

After setting up your files, **check the boxes on the left for the files you wish to export** at this time. If you wish to export all of them, just press the button “Check All”. If you wish to only export a selection, highlight the desired files as described earlier and then press the button “Check Selected”.

Once all desired boxes are checked, press “Export Now” to begin your export.

If you wish to save on PC wear, check the box “Shutdown after Export”.

After export has completed, new files will be in the Export Folder on your hard drive.