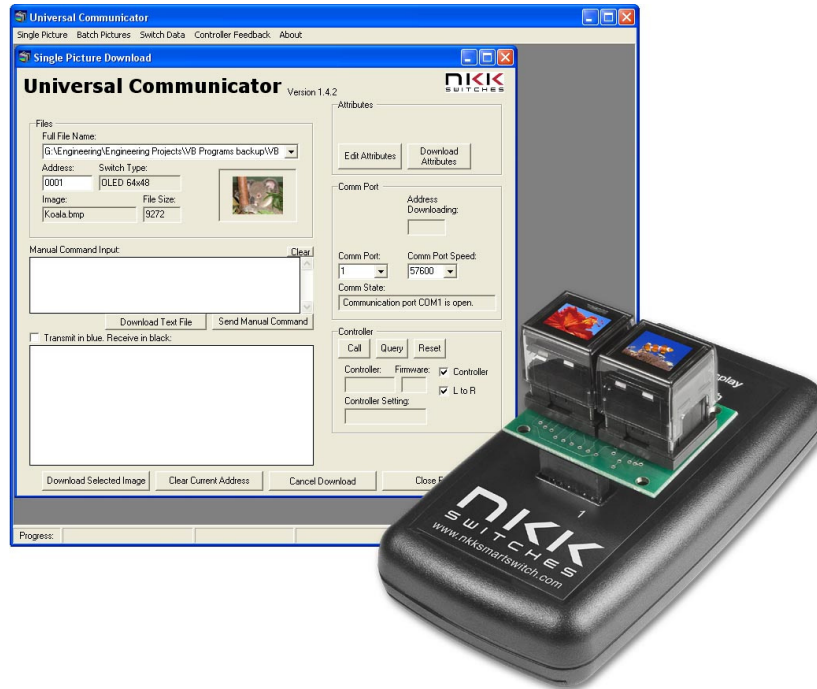# Preparing a Video for the Universal Communicator
Revision B

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Toll Free 1.877.2BUYNKK (877.228.9655) • **Phone** 480.991.0942 • **Fax** 480.998.1435
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1. **Purpose**
   This document describes one way to prepare a video for the Universal Communicator for the OLED Smart Switch. It should be understood that there are other techniques available and that this may not be the best approach. QuickTime is used in this example as it was available but this tutorial does not represent a recommendation or endorsement. Other video editing programs can be used.
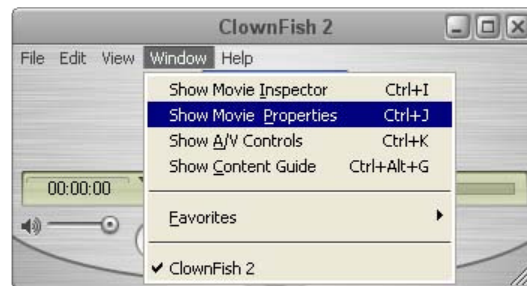
2. **Using QuickTime to create bmp files for the Universal Communicator.**
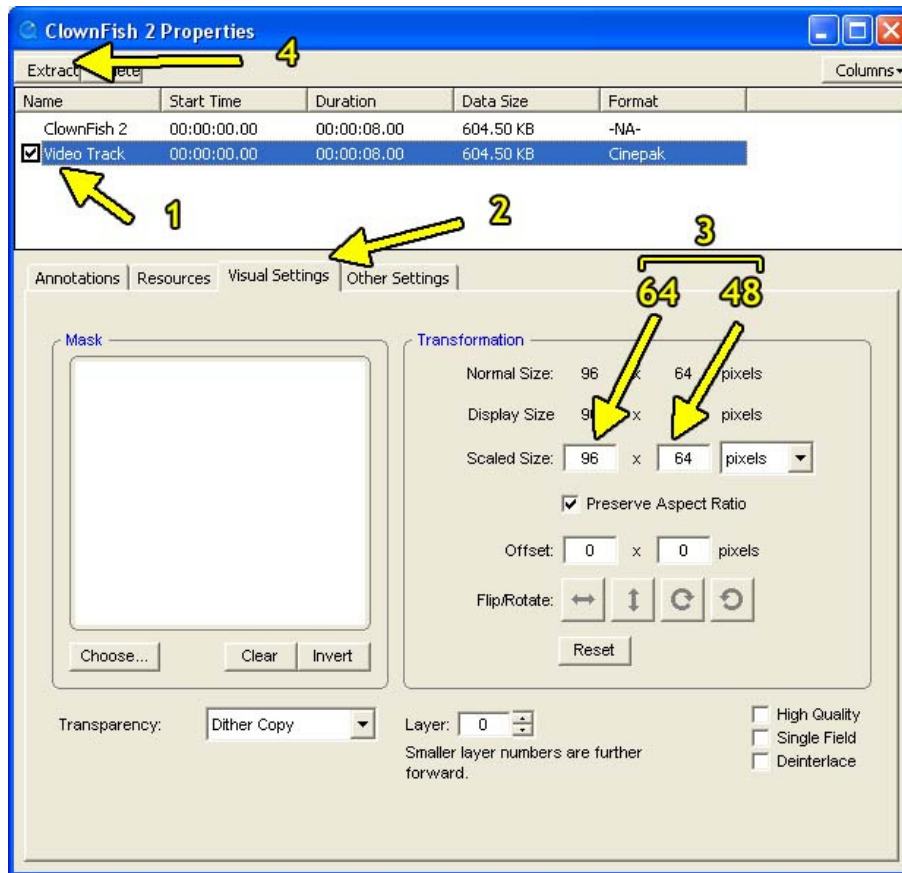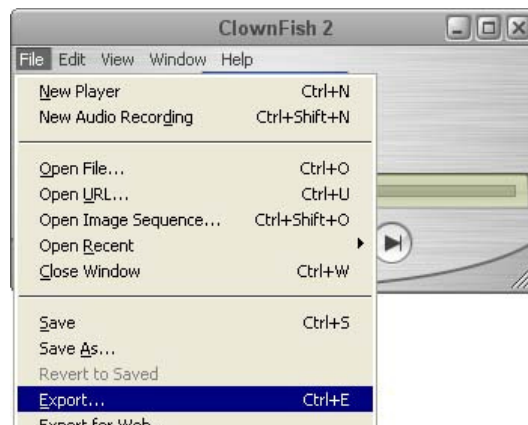   2.1. Open a video file using QuickTime.

   2.2. Select **Window.**
   2.3. Select **Show Movie Properties.**

2.4. Select **Video Track.**
2.5. Select **Visual Settings.**
2.6. Set Scaled Size to 64x48 pixels.
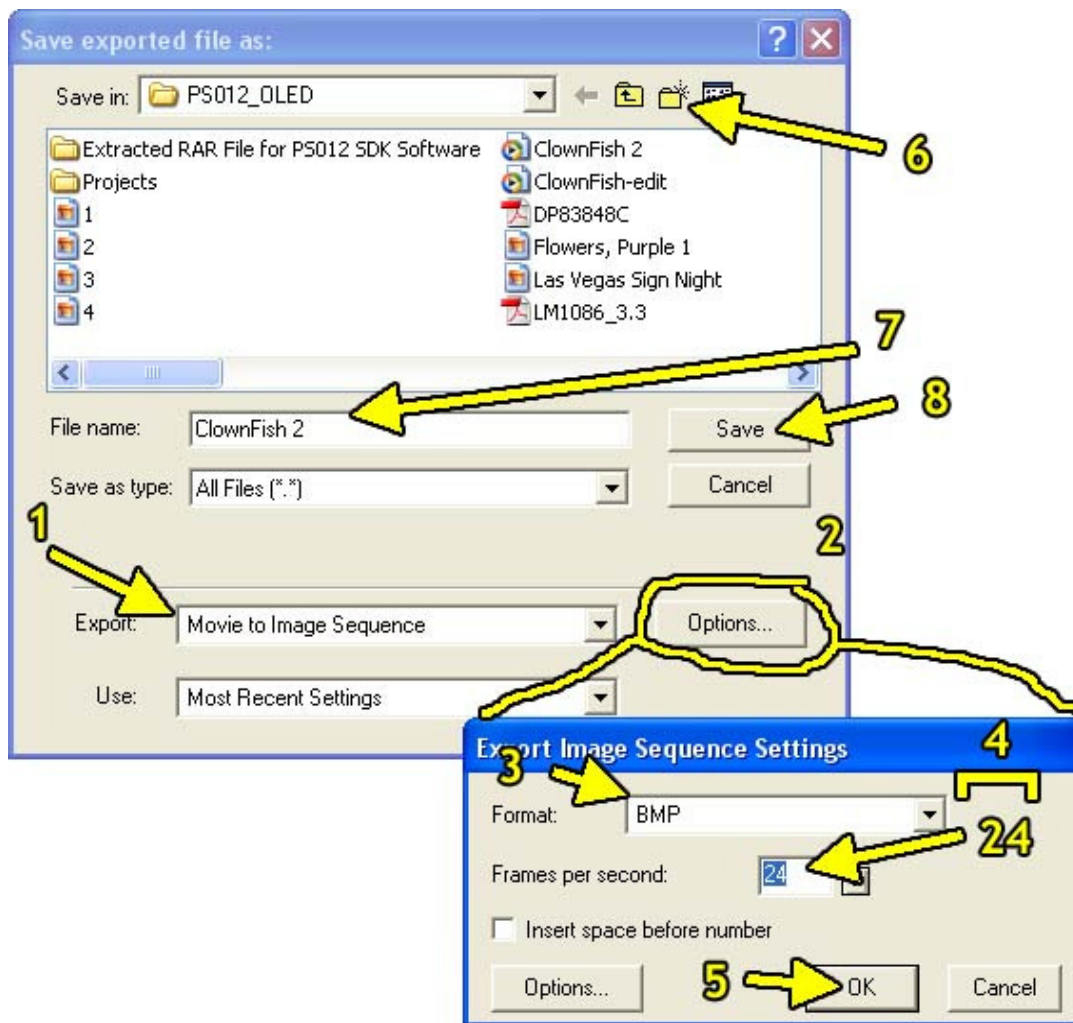   2.6.1. Uncheck **Preserve Aspect Ratio** if necessary.
2.7. Select **Extract.**

2.8. With new movie file select **File.**
2.9. Select **Export.**

Select **Movie to Image Sequence** in dropdown menu of **Export.**

    2.10. Select **Options…**
    2.11. Select BMP Format.
    2.12. Select 24 frames per second.
    2.13. Select OK.
    2.14. Create a new folder to put the saved files in.
    2.15. Open new folder.
    2.16. Select a file name.
    2.17. Select save.

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2.18. Wait for the export progress to end.

2.19. The bmp files are all in one folder.

2.20. Download files to OLED controller using the Universal Communicator using the download batch method.

3. Attributes and Loops for Displaying Videos.

3.1. Attributes and loops are explained in detail in the CL01 Intelligent Controller User Manual. An example of a loop is shown below. To enter the loop from any address the Actions Addresses, SW1 or SW2 should be set to the starting address of the loop. In this case 007AH.

3.2. First address:

3.2.1. At the first address of the loop the End Address, EP1, has to have the address of the end of the loop.

3.2.2. The timers have to be set to the desired speed.

3.2.3. While in the loop, to have an action when a switch is pressed the Actions Addresses, SW1 or SW2, has to be set to the desired address. SW1 and SW2 could be either the right or left switch. An address of 0000 means no action to take.

3.3. Last address:

3.3.1. At the last address of the loop if the Actions Addresses, SW1 and SW2, are set to zero the controller will go back to the first address of the loop.

3.3.2. If they have an address then the controller will go to that address.

3.4. The rest of the addresses within the loop do not need any attributes set for the loop to run or for the switches to respond to being pressed.

In the example below Loop 1 starts at 007AH and ends at 0112H and has a speed of 01x24. 24 is the frame rate of the example movie. If switch, SW1, is pressed the controller will go to 0114H and if the switch, SW2, is pressed the controller will have no additional actions but simply continue its current task.

File Name	DEC Address	HEX Address	Actions Addresses		End Address	Timers	
			SW1	SW2	EP1	T1V	T2V
ClownFish001	0122	007A	0114	0000	0112	01	24
ClownFish002	0123	007B					
ClownFish003	0124	007C					
ClownFish004	0125	007D					
…	…	…	…	…	…	…	…
ClownFish151	0272	0110					
ClownFish152	0273	0111					
ClownFish153	0274	0112	0000	0000	0000	00	00