USBird

HAWK / FALCON / EAGLE8/A / MONO8 / FLEX8C

AUDIO / VIDEO RECORDERS

USERS MANUAL

WINDOWS VERSION

RELEASE 5.0

03/02/2007

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SECTION - 1

INTRODUCTION

The USBird support unit code was designed to be simple to use. To keep this manual down in size the obvious settings and displays will not be covered. The term "**RECORDER**" will be used when referring to the HAWK/4/8/8A, FALCON/4, EAGLE8 /A/B/C/D/E, FLEX8E, and all other ADS recorders with a built in **USB** port. Since the HAWK is the first of the new family to be released, the terminology in this manual will be "HAWK", however the **EAGLE8 / A and all new ADS recorders will use this PC program (USBIRD) for interface and data archive.**

For the hardware description of the HAWK, FALCON, EAGLE8/ A/B/C, MONO8, FLEX8C and other recorders refer to Sec- 6, Sec-7, and Sec-8.

Section- 9 describes the PLAYER program plays the "**audio"** and "**video**" data from the CD or DVD. The PLAYER program, which is automatically written to the "CD" or "DVD" can also be installed on any computer that contains a CD/DVD-ROM and a sound card. The installation steps are the same as given below. **For help, call ADS at 949 955-3103.**

1.1 SYSTEM REQUIREMENTS

The **CPU** should be at least Pentium III or higher with 600 MHz processing speed, 128 Megabyte RAM, and at least 20 Gigabytes of hard drive space. The supported operating systems are Windows 98, 2000, XP, VISTA, and ME.

1.2 INSTALLATION

The software is supplied on one CD. It can also be retrieved from our Web Site at (**www.adaptivedigitalsystems.com)** under Windows Support Code. Instructions are shipped with every update and are also on the website. A copy is included below. **The CD contains the following folders:**

1- **USBird – software installs in DRSU (desktop, laptop) and PDR2**
2- **PLAYER – used to playback audio/video recordings**
3- **Windows Media Player- used to playback .AVI and .WAV files**
4- **MJPG_CODEC – used to compress HAWK video files**

If the USBird version is 2.7x and higher the separate MJPG_CODEC installation will no longer be needed because we now hard code our own MJPEG Codec into the software.

5- USBird_Manual - a PDF copy of this manual
6- USBird_Install - a PDF instruction guide to load software.

For new software installation follow this order:

1. Install USBird software. Refer to Appendix A.
2. Optional - Windows Media Player 7.1. If your computer does not correctly display AVI files, install new Windows Media Player. Refer to Appendix C.

After the installation, if you do not have a shortcut icon for the USBird or the "PLAYER" programs you can go into Windows Explorer and open C:\PROGRAM FILES\ADS\USBird. From there you can drag the shortcuts "blue torch icons" {USBird.EXE and UBplayer.EXE} out by pointing to it and holding down the left mouse button as you drag it off the screen.

1.3 RUN PROGRAM

To run the PC program, click on the shortcut "**USBird**". From the Windows operating system access the USBird program select All Programs, ADS, USBIRD,USBIRD.

NOTE!!!

Conflicts between recorders and other devices such as USB printers, scanners may occur. It is recommended to remove any other USB devices until the recorder is configured and passed the FOUND NEW HARDWARE setup

The first time you connect the HAWK to the computer's USB port, the USB drivers must be installed. Once the USB drivers are installed the computer will be able to communicate with the recorder. The operating systems (WIN-98, WIN- 2000, XP, VISTA) detect a new USB device in the *FOUND NEW HARDSWARE WIZARD*.

These directions describe how to configure the FOUND NEW HARDWARE WIZARD for USB drivers.

Figure 1.3.1 Hardware Wizard

1. In the Welcome to the Found New Hardware Wizard, select “Yes, this time only.” **Refer to Figure 1.3.1 Hardware Wizard**

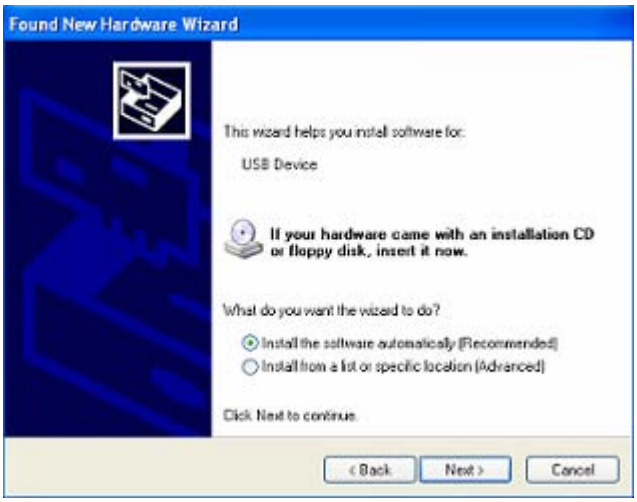


Figure 1.3.2 Install Automatically

2. Select “ Install the software automatically **(Recommended)” Refer to Figure 1.3.2 Install Automatically**

Figure 1.3.3 Complete Wizard

3. In the Completing the Found New Hardware Wizard select Finish. **Refer to Figure 1.3.3 Complete Wizard**

The computer recognizes the RECORDER if the **same** USB port is always used and the Found New Hardware Wizard will not appear. Attaching the recorder to a brand new USB port for the first time initiates the Found New Hardware setup.

1.4 RED LED

A solid red LED (light) must always appear when RECORDER is connected to the computer. The red LED appears only if the USB port supplies sufficient power to the Recorder. If the power from the USB port is marginal an external power supply such as USB hub should be used.

1.5 POWERED USB HUB

Most laptops and some desktops need the aid of an external power supply (USB HUB) in order for the HAWK to function properly. If the power is marginal the RECORDER will not connect or communicate with the computer. The USB hub provided by ADS can be used to power the RECORDER. The USB hub will be needed if the Red LED does not appear from the recorder. All other USB devices such as PDAs, scanners, printers, mouse, keyboard, etc, should be connected through the USB hub to reduce device conflicts and power issues.

4 Port Powered USB HUB

Note!

Exiting this program should be done in a normal fashion. Killing power on your computer in the middle of a program running under Windows may cause you problems. If you are stuck, use CTRL-ESC-DELETE and terminate the USBird program.

EAGLE8/A/B/C/D/E, MONO8, and FLEX8E use the USBird software. The video settings are disabled once the audio recorders are connected. **Refer to Figure 1-5 Video Settings**

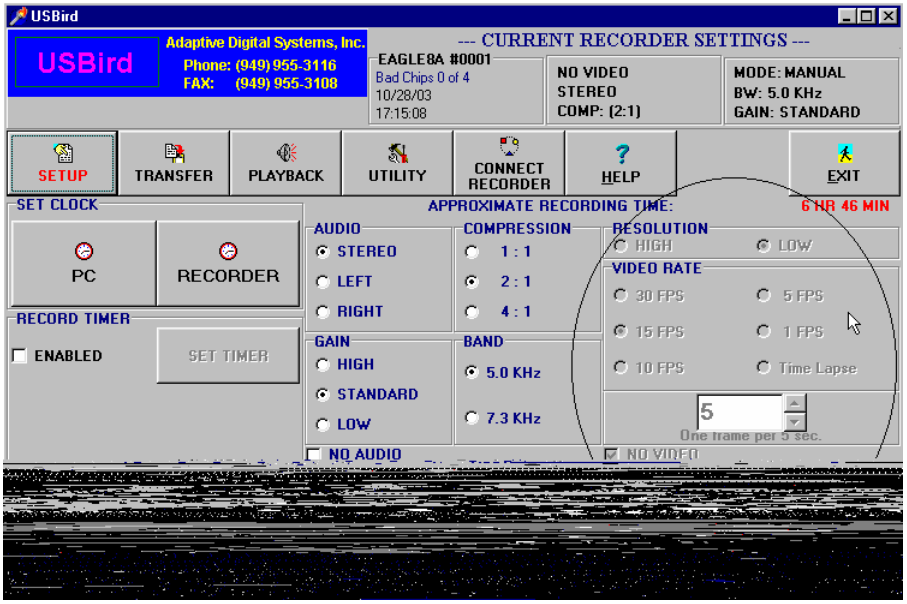


Figure 1-5 Video Settings

IMPORTANT REMINDER!!!

Always press the stop button or set the slide switch to OFF and remove batteries before you attach the RECORDER to the computer. If the RECORDER has not stopped recording properly, the recorder will begin recording again, once it is reconnected to the computer, and receives power. The USBird program notifies the user the RECORDER is recording.

SECTION 2

SETUP

The **SETUP** menu shown in Figure 2-1 appears on startup. Always select **CONNECT RECORDER** to read the settings of the attached RECORDER. The top right half of the screen displays the **Current Recorder Settings** of the RECORDER. Note the "Bad Chips" 0 of "X" for the HAWK, if you have any bad memory chips in the RECORDER please call ADS and make arrangements to have us repair the RECORDER at no cost to you. A RECORDER with some bad chips is still usable, however the record time is reduced proportionately.

2.1 SETUP Settings - Descriptions and Functions

The RECORDER **Clock** is set to the same date/time as the PC; hence ensure that the date/time on the PC is correct. The **PC button** configures the computer time. The **RECORDER button** syncs the computer and recorder times. **Refer to *Figure 2.1.1 Setup Menu***. The Date/Time on the bottom of the screen is the PC's, while the top of the screen displays the RECORDER Date/Time.

NOTE! The DATE format **MM/DD/YYYY** is set from the Windows CONTROL PANEL. Hence if you want European format you can select it from "**GLOBAL**" settings.

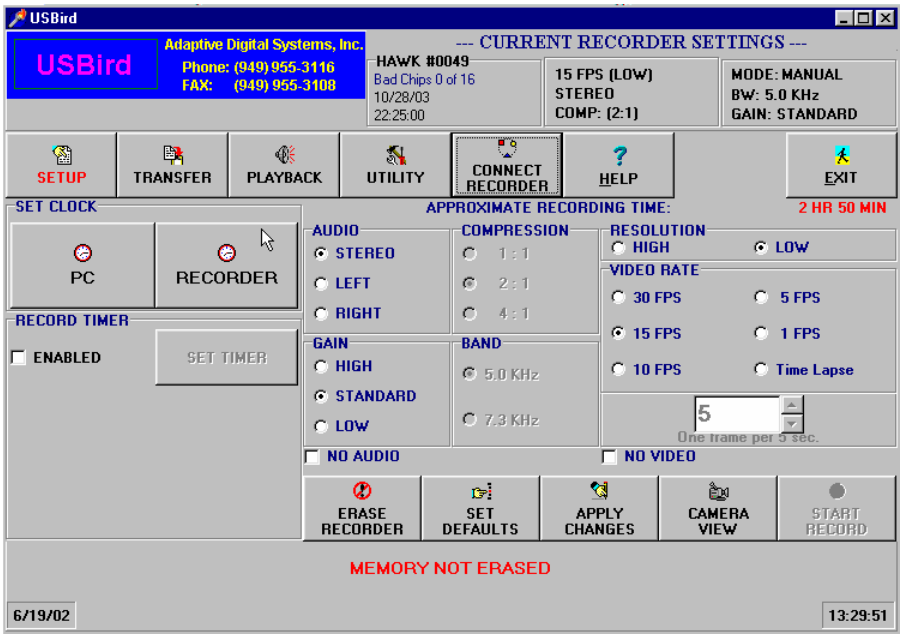


Figure 2.1.1 SETUP Menu

The **APPROXIMATE RECORDING TIME:** displays the amount of recording time whether you have audio, video, or both. The RESOLUTION of the camera and VIDEO RATE greatly effect the approximate recording time. The **HIGH** and **LOW** Resolution are determined by which camera is currently connected. The HAWK automatically recognizes the camera type that is connected hence selecting “HIGH or LOW” is only for record time information.

The **Video Rate** sets the frames per second. The maximum is 30 f/s and the minimum is1 f/s.

The **AUDIO** can set the recorder for stereo, left, right or no audio (video recorders only). .

The **COMPRESSION** is used to manage the size and quality of the data. The best audio is 1:1, the 2:1 (the default) is very good, while the 4:1 is good. The video RECORDERS are set to 2:1.

The **CAMERA VIEW** displays the output from the HAWK / FALCON camera in real time, it can be used to focus the camera and gives the operator an example of what the camera will capture .

The **DEFAULT,** settings would be the most commonly used values for record times. Typically this would be the ideal setting for most applications. The HAWK / FALCON default is 15 f/s of video, 2:1 stereo audio, and standard “GAIN”.

The **Record Time/ Quality, Setup, Bandwidth, and Gain** can all be changed at once. Select "APPLY CHANGES" once the desired settings are selected. Note the changes on top of the screen **after** you select "**APPLY CHANGES**". CURRENT RECORDER SETTINGS displays all the new settings of the recorder.

The **TIMER MODE** can be used to Start/Stop the RECORDER by its internal clock when the ***local*** or ***remote*** RCD/OFF or ON/OFF (new recorders) are not practical to use. Refer to Figure 2-2 for the Timer Entry Menu. **You can only setup the RECORDERS 1 week ahead of the current date/time.**

2.2 Set Timer:

1. In the SETUP Menu check the “**ENABLED” box** and select SET TIMER. **Refer to *Figure 2.2.1 ENABLED/ SET TIMERS***

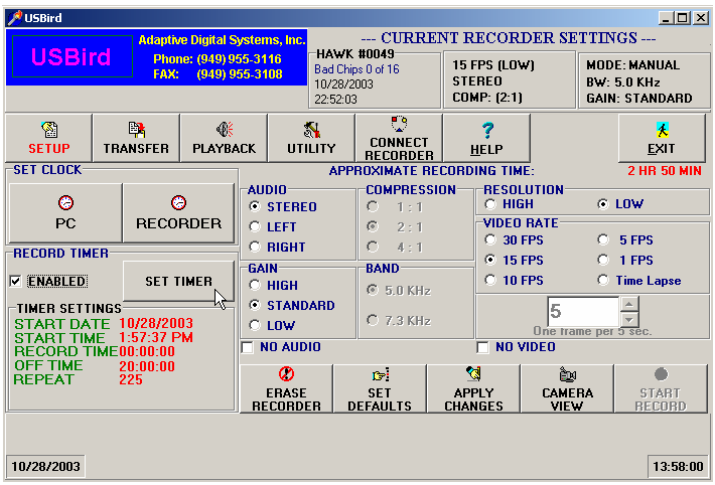


Figure 2.2.1 ENABLED / SET TIMERS

2. At the **TIMER RECORDING START DATE / TIME** the **TIME** is in military (24 Hour) format. Enter the date under **TIMER RECORDING START DATE**. A calendar appears. Enter the time in the TIME section. The **TIME** activates the recorder. **Refer to *Figure 2.2.2, Timer Mode Entry***

3. Next enter the "RECORD TIME," the RECORD TIME keeps track of the record length. Once **RECORD TIME** has completed the RECORDER turns off. **Refer to *Figure 2.2.2, Timer Mode Entry***

4. Set the **IDLE TIME**, it brings the RECORDER into hibernation mode. Once hibernation time has completed the RECORDER will be reactivated. If the RECORDER has no hibernation time, do not set **IDLE TIME**. **Refer to *Figure 2.2.2, Timer Mode Entry***

5. Select the **RUN** count, the number of times the RECORD TIME AND IDLE TIME occur. (1= One Time) Selecting CONTINUOUSLY sets the RECORDER to go through the RECORD TIME and IDLE TIME until memory is full. **Refer to *Figure 2.2.2, Timer Mode Entry***

6. Select "OK" to save settings and go back to the SETUP menu. **Refer to *Figure 2.2.2, Timer Mode Entry***

7. **When you return to the SETUP menu don't forget to "APPLY CHANGES" thus the new settings are saved.**

8. Note the " TIMER MODE" indication on top right of the screen in CURRENT RECORDER SETTINGS.

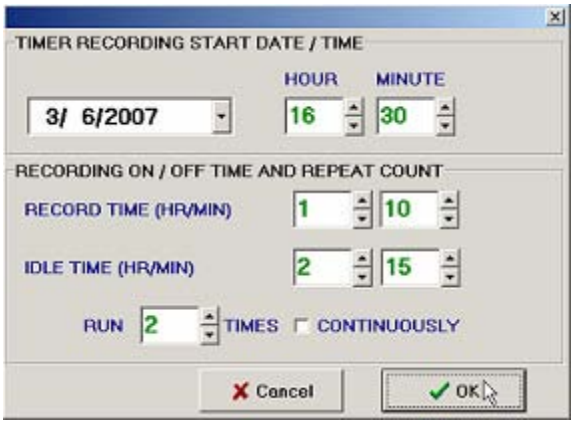


Figure 2.2.2 TIMER MODE Entry Menu

NOTE!! The unit automatically resets to MANUAL Mode after the data transfer. If you uncheck the "**ENABLE box"** and choose "APPLY CHANGES", the unit will revert to Manual.

2.3 ERASE RECORDER

The RECORDER data memory MUST always be erased after each use. The unit will not operate unless you have erased previous recordings, after complete and proper data transfer off all recordings.

Depending on the unit, i.e., how much memory it has, the erasure may take from 1 to 16 minutes to finish.

SECTION 3

UTILITY

The UTILITY selection is covered next because the operator may need to define the computer disk drives for the USBird program and run maintenance programs for the RECORDER. If you received your computer from ADS the disk drives have been configured. **Refer to *Figure 3-1 for the UTILITY Menu*.**

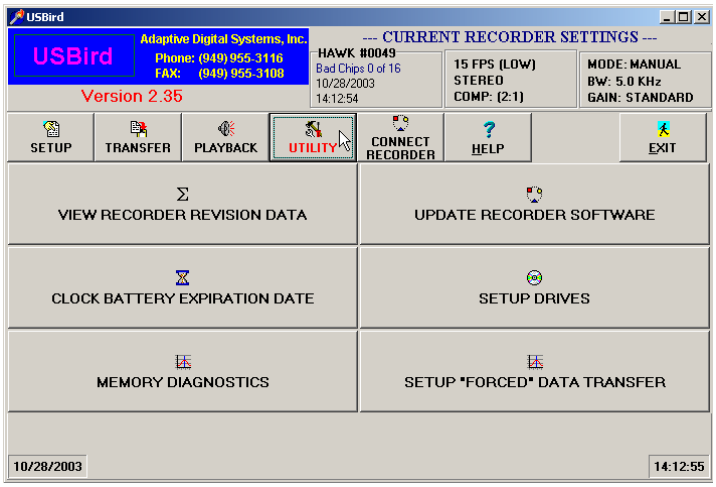


Figure 3-1 UTILITY Menu

3.1 SETUP DRIVES

The **SETUP DRIVES** defines the different types of disk drives of the computer. The USBird does not automatically recognize the disk drive. The user has to define the disk drives manually. **Refer *to Figure 3-3.2 The Drive Menu***. The "C" drive is assumed to be a hard disk. This program will not allow Formatting of any hard disk. During new software installations the user has to enter the hard drives, CD/DVD Writer, (CD\DVD Read only), and any MO drives . If you partitioned your hard disk into multiple drives you can define those partitions as well. If the disk drives are unknown, the disk drives and drive letters can be found in the Windows Menu under "MY COMPUTER". Four drives is the maximum that can be added. Refer to **APPENDIX – F SETUP DRIVES** for full drive installation procedure.

3.2 Change Format Utility

The CD/DVD-WR (burner) uses the Roxio's Drag to Disc software for the FORMAT and EJECT functions. If ADS provided the computer system, the drives are already installed. You can skip this part. If you are upgrading Roxio you will need to define the path to the FORMAT UTILITY. The computers that ADS provides, the path to DragToDisc is automatically set. If you provide your own computer enter the path from the **Change Format Utility** button. The path to the

DragtoDisc software is **C:\Program Files\Roxio\Easy CD Creator 7\DragtoDisc\DragtoDisc.exe. Refer *to Appendix E-4 CHANGE FORMAT UTILITY*** If the drive is a re-writable MO (Magneto Optical) then the program will automatically use the Windows utility, therefore you do not need to define one.

3.3 TEMP Button Sets Drive for AVI & WAV

The **TEMP** button selects the drive (hard disk, CD/DVD writer, thumb drive) where AVI and WAV files are stored after conversion. A folder is created and named HAWK_TEMP. **Refer to *Figure 3-3.1 Select Temp Drive***

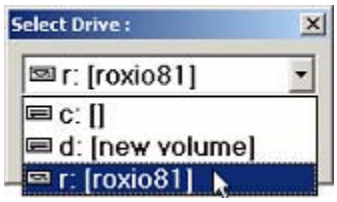


Figure 3.3.1 Select Temp Drive

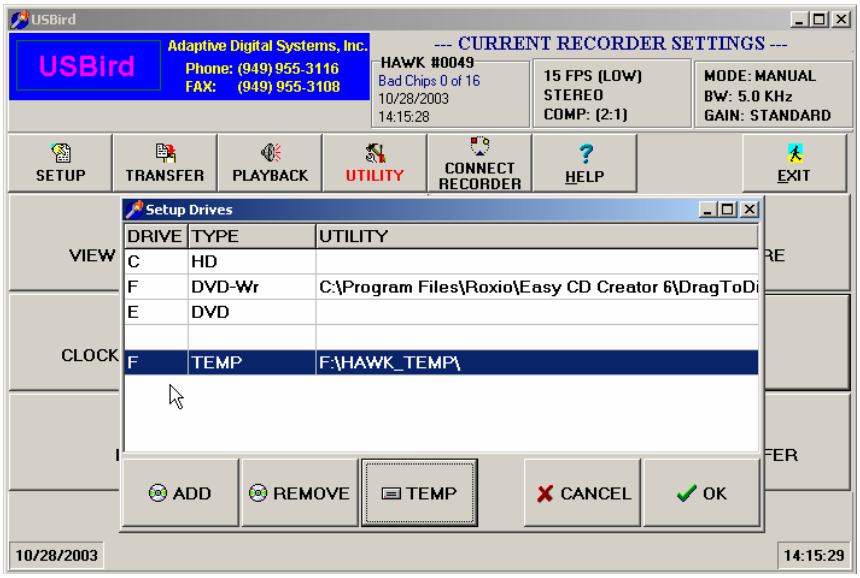


Figure 3.3.2 Drive Menu

3.4 VIEW RECORDER REVISION

The data displays the hardware and software revision numbers and dates of the RECORDER. Make sure all RECORDERS have the current firmware and hardware.

3.5 CLOCK BATTERY EXPIRATION

The user may examine the internal Clock Battery expiration date from this menu. Every two years ADS will change the battery and re-test the recorder at no charge.

3.6 UPDATE RECORDER SOFTWARE

This button will load the firmware that is on the hard disk into the RECORDER. This should be done as soon as possible when a new release is sent.

Reloading the firmware does not erase the recorded data and parameters. Hence if you are having trouble with your unit, it is safe to reload your firmware. Refer to Appendix-D.

3.7 MEMORY DIAGNOSTIC

The memory test should be run periodically, (about once every 90 days) to identify failed chips. The recorder is still usable with a couple of bad chips however, since ADS will repair any unit at no cost, it is recommended that the recorder be sent back to ADS at your earliest convenience.

SECTION 4

TRANSFER

To transfer the evidence to the archive media (CD/DVD) follow the steps outlined below:

* Set the RECORDER to **OFF** and remove batteries. Use the USB cable provided by ADS to attach the RECORDER to the computer,

1. Select **CONNECT RECORDER** to read RECORDER settings and content.
2. Select TRANSFER and SELECT ALL, note the session information.

*Refer to **Figure 4-1 Transfer*** "SELECT ALL" highlights all the sessions.

Information supplied by the RECORDER will be displayed in the white box, indicating good communication between RECORDER and computer. Current Recorder Settings at the top of the screen displays the recorder type, serial number and settings.

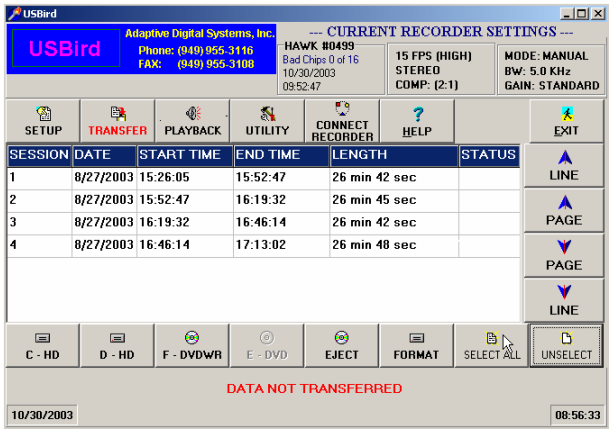


Figure 4-1 Transfer

3. If the sessions are transferred to the CD or DVD media you must first FORMAT the blank media. Refer to the Section 4.2 Format CD / DVDs. After the CD/DVD media has been formatted select the drive the data will be archived on. *Refer to Figure 4-2 Select Storage Device*

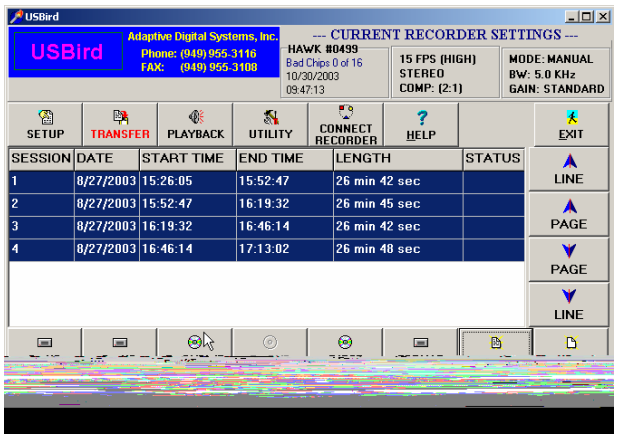


Figure 4-2 Select Storage Device

After the user chooses DVD WR (DVD burner) or CD WR (CD burner) the CD/DVD Select displays the type of media and which sessions will be transferred.

Selecting DVD 1 transfers all the sessions that will fit on the first DVD. The size of one DVD-R is 4.7 Giga bytes. DVD media has to be formatted. *Refer to Figure 4-3 DVD 1*

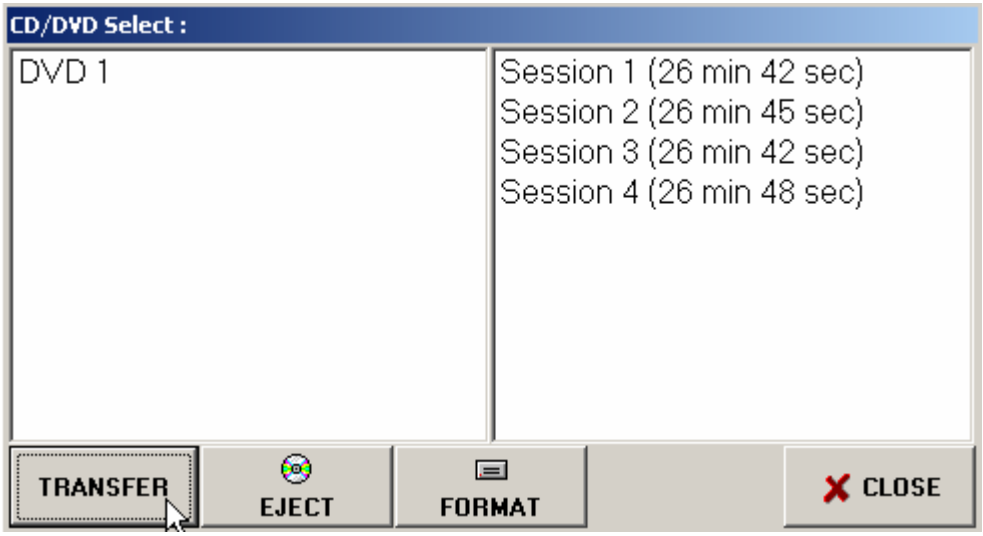


Figure 4-3 "DVD 1"

A full HAWK/8 has 2 GBs of recording, transfers on multiple CD-Rs, typically 4. A full HAWK4/8A, FALCON2/4 has 4 GBs of recording, transfers on multiple CD-Rs, typically 8.The data size of the HAWK recording determineS the number of CD-Rs created. Figure 4-4 displays 4 CD-Rs are needed to transfer all the HAWK data. The example shows selecting CD3 will transfer all the sessions that

will fit on the third CD. CD-R media has to be formatted first. *Refer to Figure 4-4 CD3*

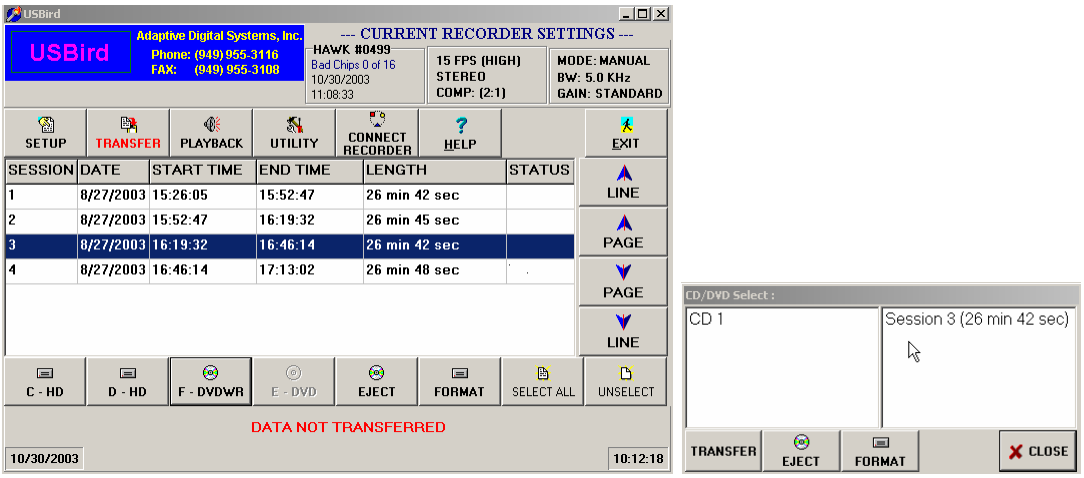


FIGURE 4-4 "CD 3"

4. After the user views their selection in the CD/DVD Select, highlight DVD1 and select **TRANSFER**.
Refer to Figure 4-6 TRANSFER BUTTON

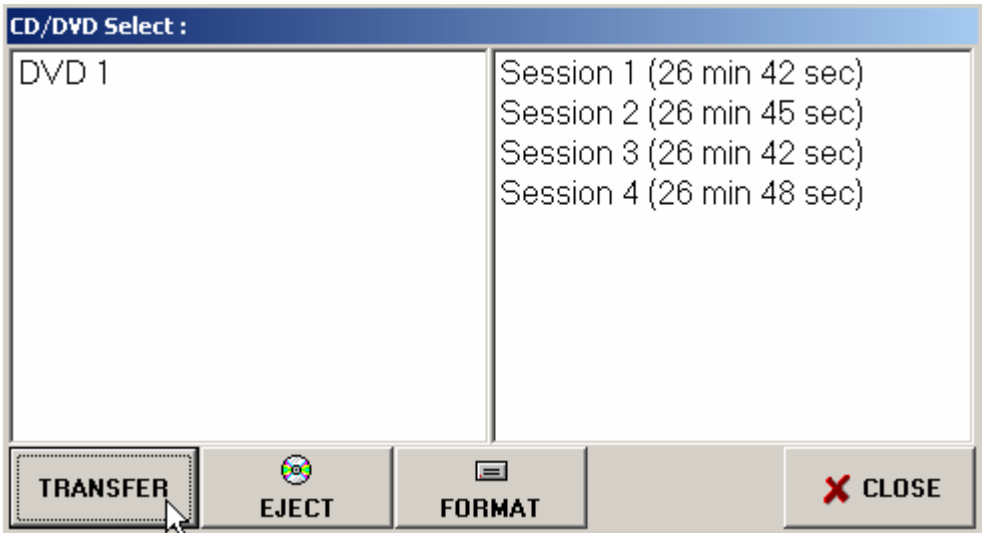


FIGURE 4-6 TRANSFER BUTTON

The keyboard screen allows the user to input information regarding the data**.**

NOTE!

YOU SHOULD NOT USE SPECIAL CHARACTERS AND SPACES IN THE FILE NAME.

5. Enter descriptive information and select Enter. *Refer to Figure 4-7 Keyboard*
6. Data transfer begins. When the blue bars stop, transfer is completed. *Refer to Figure 4-8 Transfer complete*

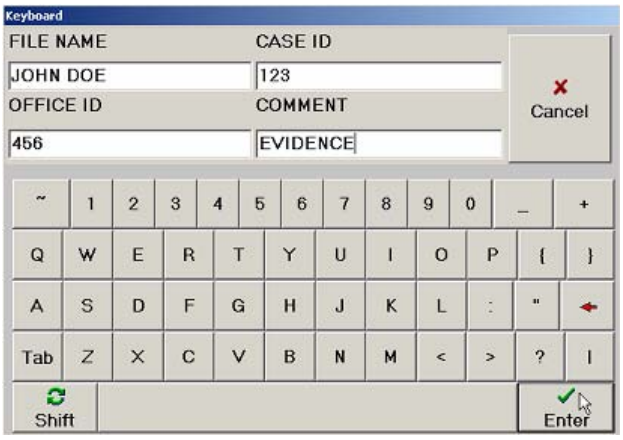


Figure 4-7 Keyboard

The TRANSFERRING DONE displays when data transfer has completed. Select the **CLOSE** from CD/DVD Select button to go back to the USBird. *Refer to Figure 4-8 Transfer Done*

7. Playback the sessions through the PLAYBACK screen. Eject the CD/DVD. Refer to Section 4.3 EJECT CD/DVD.

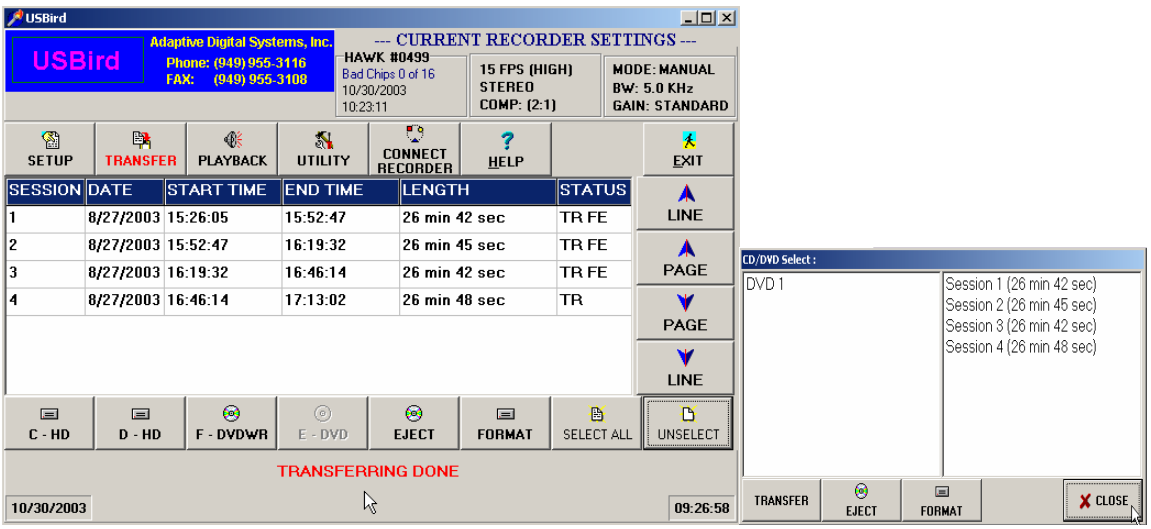


Figure 4-8 Transfer Done

4.1 Definitions of the Status Abbreviations

On the Transfer and Playback screens the **STATUS** of each session are displayed.
Each abbreviation **TR, FE, LB,** and **PF** have their own definition. *Refer to Figure 4-9*
STATUS

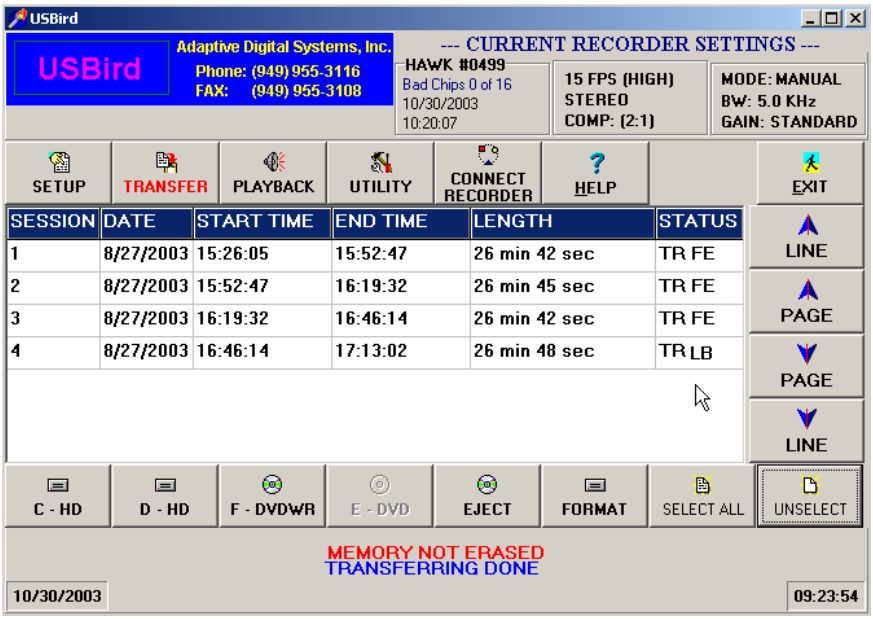


Figure 4-9 STATUS

TR = **Transferred session complete**
The chosen session has transferred properly.

FE = **Forced Ending**
The session closed in order to fit on one CD MEDIA. One Forced Ending fills one CD-R. You can select all of the sessions between 2 FE tagged files to transfer to 1 CD. One DVD-R will hold 8 Forced Endings, or 2 HAWK memory cards.

LB = **Low Battery**
The session stopped because battery power was low.

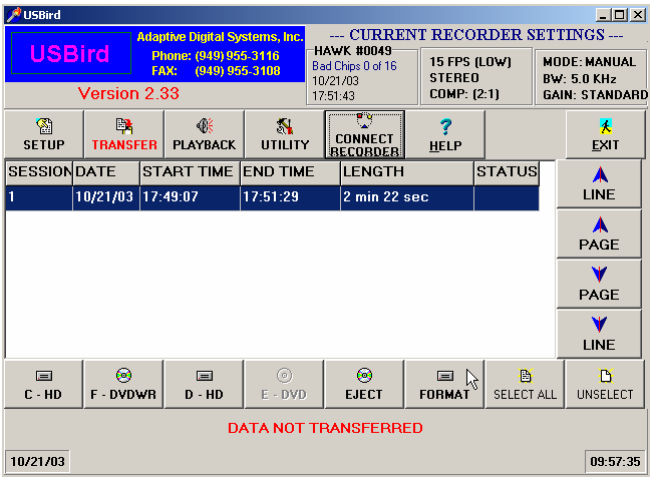
PF = Power Failure
Power to the recorder was interrupted. For example, removal of batteries without pressing the stop button will cause a **PF** in the **STATUS** window.

4.2 FORMAT CD / DVD

WARNING!!!

For EVIDENCE you should use a “GOLD” CD/ DVD because cheap media may loose data over time. We recommend “**MITSUI GOLD**”.

1. Select FORMAT button from the Transfer screen. *Refer to Figure 4.2.1 SELECT FORMAT*
2. Select the drive letter for burner and select FORMAT. *Refer to Figure 4.2.2 DRIVE LETTER*



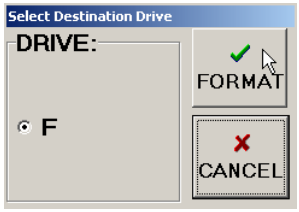


Figure 4.2.1 SELECT FORMAT **Figure 4.2.2 DRIVE LETTER**

3. The Roxio’s Drag to Disc interface appears. **Refer to *Figure* 4.2.3 *DRAG TO DISC INTERFACE***

4. Right mouse click on the interface, and select Format Disc. **Refer to *Figure* 4.2.4 *FORMAT DISC***

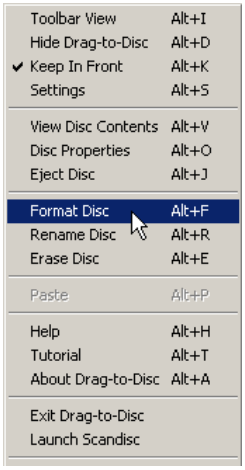


Figure 4.2.3 DRAG TO DISC INTERFACE **Figure 4.2.4 FORMATDISC**

5. Enter Volume Label, which will be the name given to the CD and select OK. **Refer to *Figure 4.2.5 VOLUME LABEL***

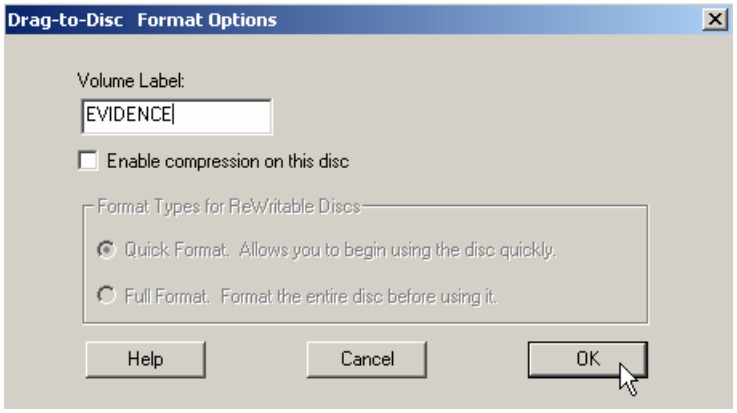


Figure 4.2.5 VOLUME LABEL

6. After Format is complete, the Drag to Disc icon will appear with the disk name. **Refer to *Figure 4.2.6 ICON***

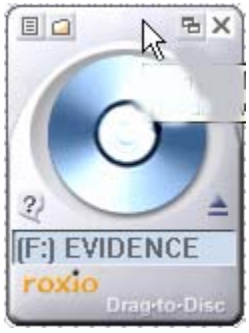


Figure 4.2.6 ICON

4.3 EJECT THE CD / DVD

1. Select EJECT button. **Refer to *Figure 4.3.1 SELECT BUTTON***

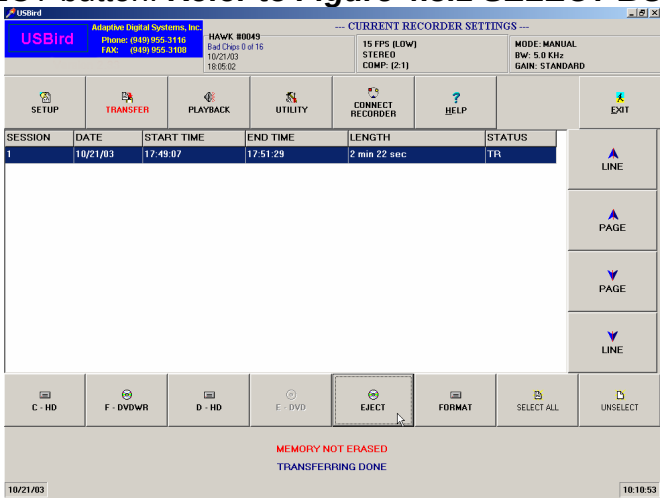


Figure 4.3.1 SELECT BUTTON

2. Select the DRIVE letter and select EJECT. **Refer to *Figure 4.3.2 DRIVE LETTER***

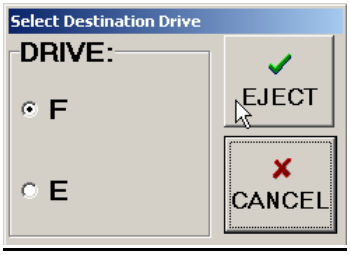


Figure 4.3.2 DRIVE LETTER

3. Check the boxes of all the three options. **Refer to *Figure 4.3.3 EJECT OPTIONS***
4. Select the EJECT button. **Refer to *Figure* 4.3.3 *EJECT OPTIONS***

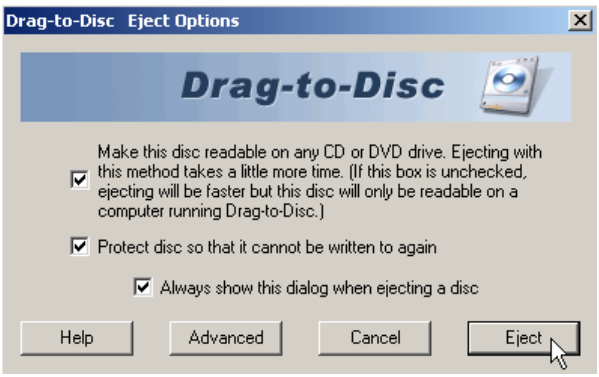


FIGURE 4.3.3 EJECT OPTIONS

4.4 COPY Recording from Hard Drive to CD/DVD

The numbers in the diagram correspond to the direction number.

1. Format blank Media. (CD or DVD) **Refer to *Section 4.2 FORMAT CD / DVD***

2. Go to **PLAYBACK Refer to *Figure 4.4.1 PLAYBACK SCREEN***

3. At **Play From** select the storage device the recordings are archived.
   Refer to *Figure 4.4.1 PLAYBACK SCREEN*

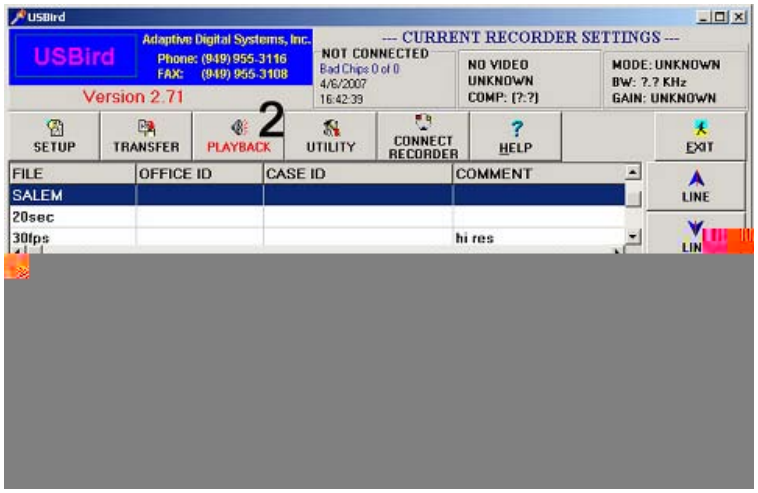


Figure 4.4.1 PLAYBACK SCREEN

In most cases the letter “C” designates the hard drive. In cases with multiple hard drives make sure the correct drive letter is selected where the recording is stored.

4. Select and highlight the File and sessions. **Refer *Figure 4.4.2 Select Session and Copy***

Multiple recordings can be transferred together, for example sessions numbered 4,5,and 6 can be copied together since they are in sequential order. IF you wanted to copy sessions 1 and 6 you have to transfer them one at a time.

5. Select the **COPY** button **Refer *Figure 4.4.2 Select Session and Copy***

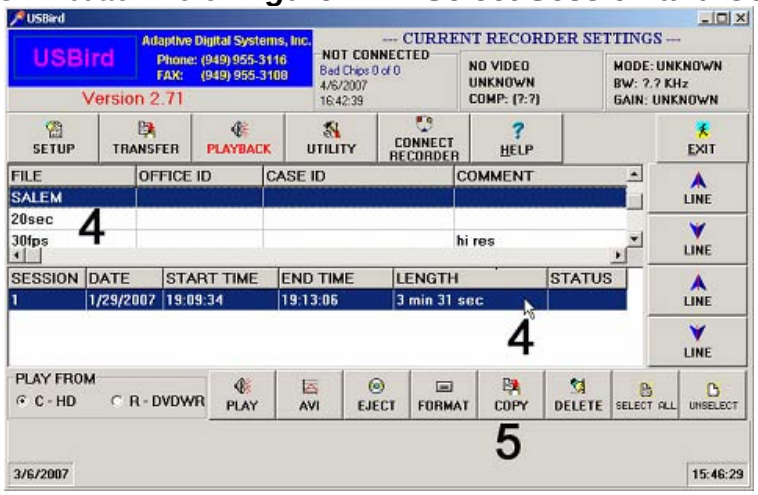


Figure 4.4.2 Select Session and Copy

6.In the Select Destination Drive Screen choose the CD/DVD burner. **Refer *Figure 4.4.3 Select Destination Drive***

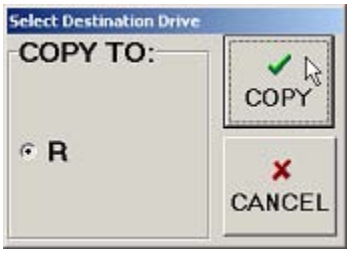


Figure 4.4.3 Select Destination Drive

7. **Copy in Progress** will be displayed at the bottom of the screen. **Refer to *Figure 4.4.4 Copy in Progress***

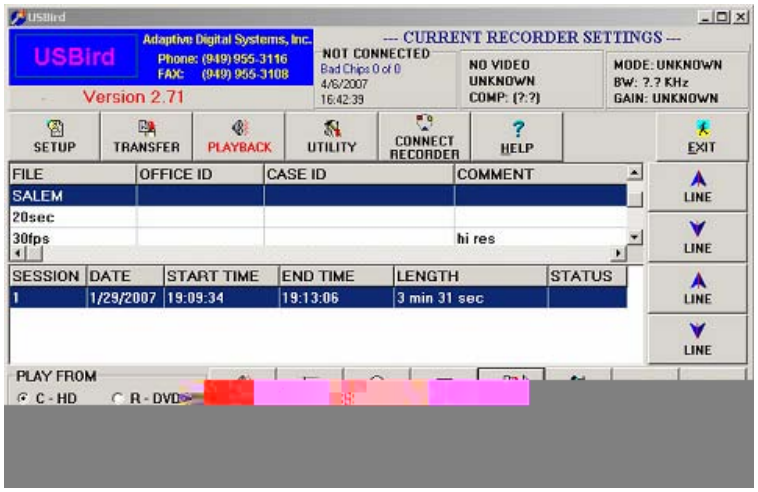


Figure 4.4.4 Copy in Progress

8. Once the **Copy Complete** is displayed, check to make sure the recording plays back in the **PLAYBACK** Menu. **Refer to *Figure 4.4.5 Copy Complete***

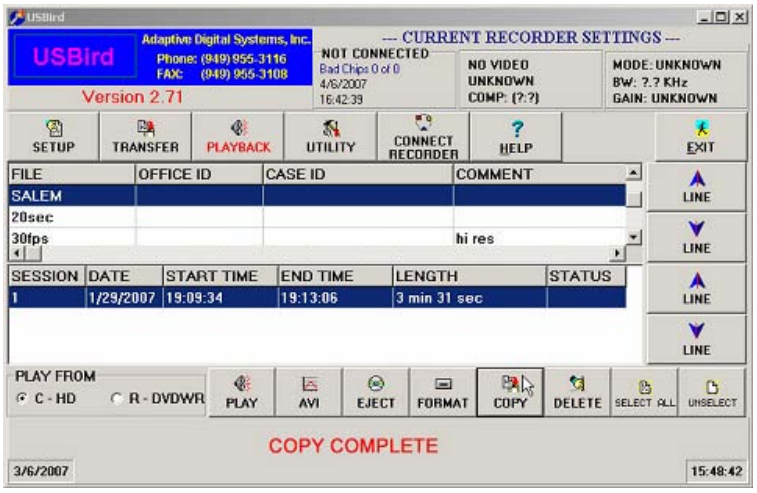


Figure 4.4.5 Copy Complete

9. Eject and Finalize the CD/DVD through the DragtoDisc program. **Refer to Section 4.3 EJECT CD/DVD**

SECTION 5

PLAYBACK

In order to initiate playing video / audio perform the steps outlined below:

1. Select the **PLAYBACK** button located on the top row.
2. Select the “Source” drive, C, D, E etc in **PLAY FROM**
3. Select File and Session(s) you desire to listen and watch
4. Select Play button. **Refer to Figure 5-1, Press PLAY**

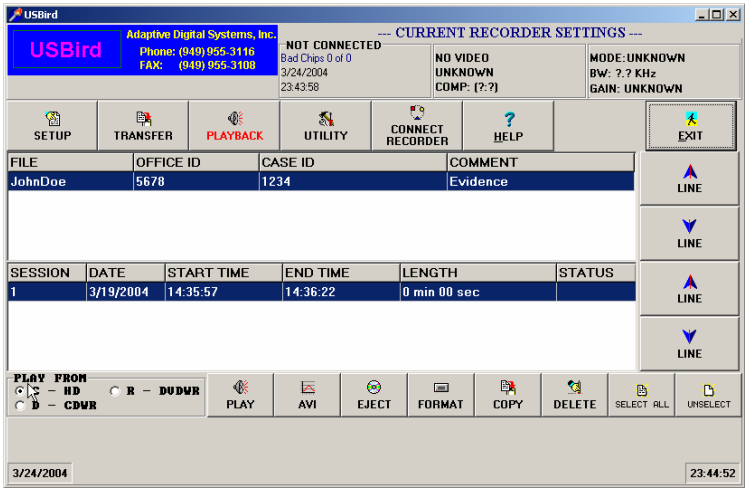


Figure 5-1 Press PLAY

Once you choose the file, it will be converted to MJPEG and played through the USBirdPlayer. The recording will not be copied to the Hard disk, unless you make an AVI file. Windows media Player will play the AVI file. Refer to **Figure 5-2 “USBirdPlayer” Menu**

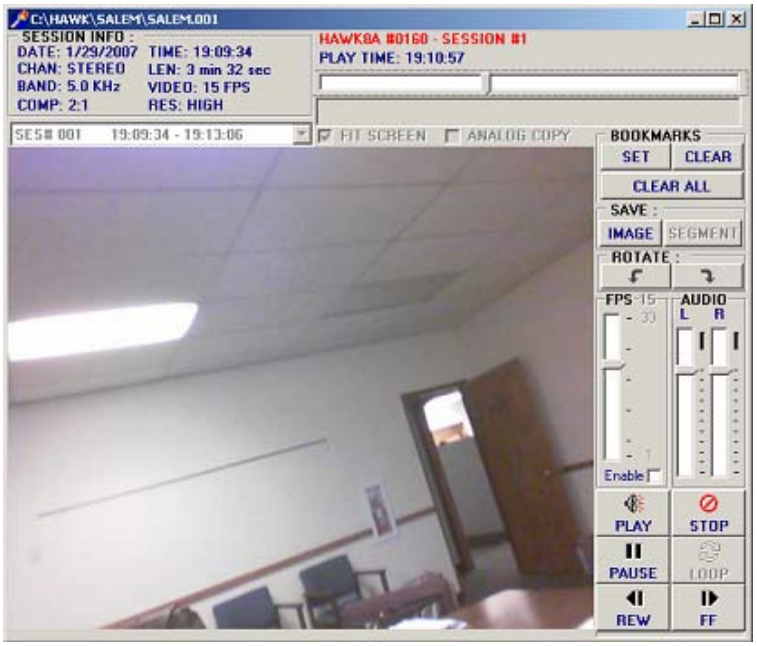


Figure 5-2 "USBird Player" Menu

.

Most of the controls are obvious, **Windows Media Player Menu**. To play from any time, just place the mouse on the "white box" on the time bar and hold the left mouse button down. Drag the arrow to when you want to play and release the mouse button start playing.

5.1 Definitions of PLAYBACK Controls

1. The **SETUP** button configures the disk drives of the computer.

2. The **PLAY FROM** selects the storage device sessions are stored in.

3. The **PLAY** button, once sessions are chose the PLAY button to go into the PLAY screen.

4. The **AVI** button converts audio/video recordings into AVI files. Our proprietary video/audio format is stripped away.

5. The **WAV** button converts audio recordings into wav files. Our proprietary audio format is stripped **away.**

6. The **EJECT** button calls the DragToDisc program which finalizes and ejects the CD/DVD

7. The **FORMAT** button calls the DragToDisc program, which prepares a blank CD/DVD for data transfer.

8. The **COPY** button transfer files from different storage devices such as hard disk to CD/DVD or CD/DVD to hard disk.

9. The **DELETE** button removes files from the hard drive, select the file name of the recording. The removed files do not go to the recycle bin. Delete cannot delete files from a closed CD/DVD.

10. The **ROTATE** arrows will rotate the session video 90 degrees. The **ROTATE** buttons are useful when the camera is upside down or sideways.

    1. Select the session.
    2. Select the Rotate arrow until the session is right side up.

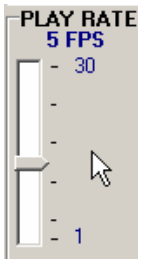


Figure 5-4 PLAY RATE

PLAY RATE can be adjusted, for example if a recording was captured at 1 frame per second you can playback the recording at 30 frames per second for a faster playback. Go to the **PLAY RATE** meter and move the bar. **Refer to Figure 5-4 PLAY RATE**

The PLAYBACK window can fit the entire screen by removing the PLAYER graphical interface. This is used when the recording is made into an analog copy such as VHS tape. Right click on the PLAYBACK screen and select **FULL SCREEN**. **Refer to Figure 5-5 FULL SCREEN**

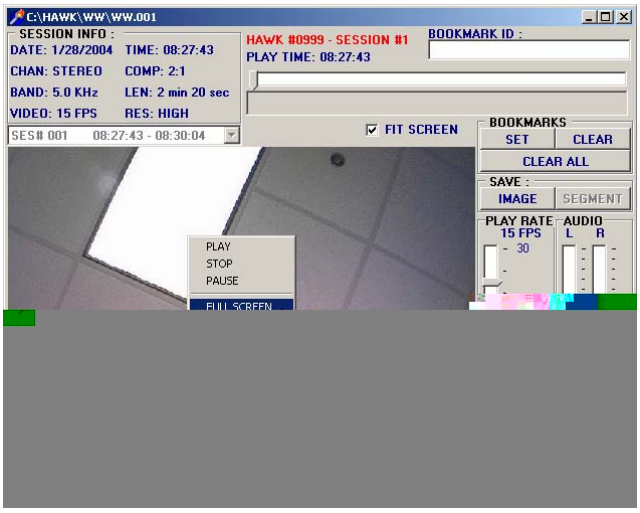


Figure 5-5 FULL SCREEN

Analog audio can be made from the USBird recording. First attach an audio tape recording device to the sound card. Use the audio output of the sound card, usually the green connector. At the **PLAYBACK** screen check the box labeled **ANALOG COPY**. The **Select** screen appears. The select screen allows the user to choose an audiotape length. After you choose the **TAPE LENGTH** the audio will play. You should hit the record button on the audiotape device. **Refer to Figure 5-6 ANALOG COPY**

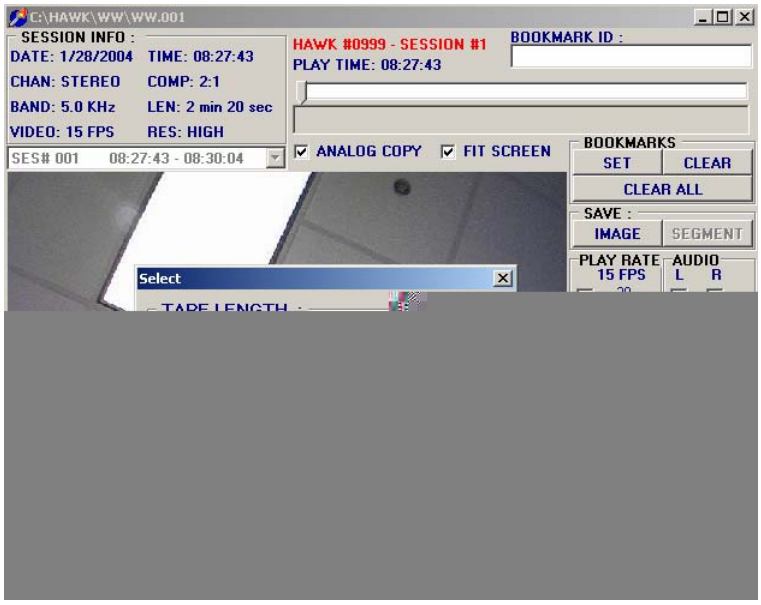


Figure 5-6 ANALOG COPY

The **AVI / WAV** button converts the HAWK file to a standard AVI or WAV format that can be played by any media player. The **AVI** button does not display the video file once it has been converted. The AVI/WAV files are stored where the HAWK_Temp folder is initialized in the **UTILITY** screen under **SETUP DRIVES** and **TEMP** button. **Refer to Figure 5-7 AVI/WAV Menu**

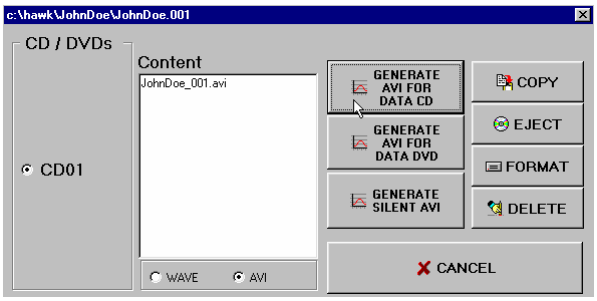


Figure 5-7 AVI/WAV Menu

DATE AND TIME from Windows Media Player

The running time and the date of the AVI recording can be displayed through Windows Media Player by selecting **View**, **Now Playing, Tools**, **Caption**. The date and time of the recording will be displayed at the bottom left of the playback screen. **Refer to Figure 5-8 Display Captions through Media Player**

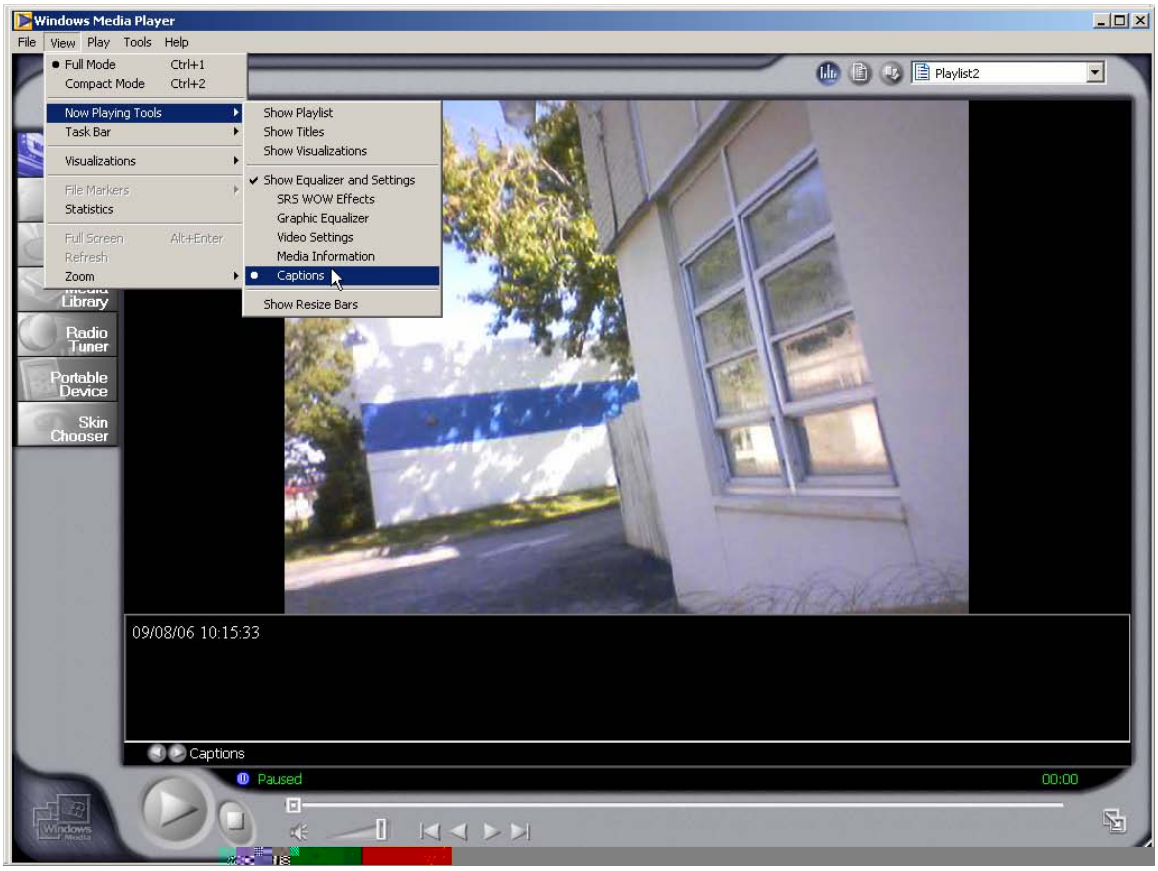


Figure 5-8 Display Captions through Media Player

SECTION - 6

HAWK4/8/A / FALCON/4 EAGLE8/A RECORDERS

HAWK

The HAWK line of recorders can perform both video and or audio recording. The record time is 30 f/s=1.7 HR; 15F/S=3 HR; 5 f/s-8 HR; 1 F/S=17 HR. The HAWK memory expansion cards (up to a total of 8) can be added to the HAWK for longer-term recordings. Each HAWK memory card adds 3 hours of low-resolution recording at 15 f/s.

The HAWK2 has 4 Gigabytes of memory while the HAWK4 has 8 Gigabytes. The record time lengths double and quadruple depending on which recorder you have. **Refer to Figure 6-1 The HAWK**.

The HAWK has remote and built in stereo microphone input, Manual or Timer programmable “ON/OFF.” The HAWK has local audio playback controls.

Figure 6-1 The HAWK

HAWK8/A

The HAWK8/A is the next generation audio / video recording device. The HAWK8/A is a slimmer version of the HAWK/4 with more memory. The advantages of the HAWK8 are you can move the recorder into objects where size makes a difference. The HAWK memory is 4 Gigabytes, which gives you a 2 hour recording at 30 fps at high resolution The HAWK uses two or four triple A alkaline or lithium batteries. The lithium battery will give you approximately 4 hours of battery life.

Another difference between the HAWK/4 and HAWK8/A is the removal of several components from the HAWK/4 such as the audio connector and the red record

and stop buttons. The HAWK8/A does not have the local audio playback controls. The HAWK8/A uses the black slide switch to activate the recorder into record mode. The mini USB port on the HAWK8/A is different from the HAWK/4. The new generation HAWK4 uses the slide switch and new mini USB port. Refer to Figure **6-2 The HAWK8/A**

Figure 6- 2 The HAWK8/A

EAGLE8/A

The EAGLE 8/A is an audio only recording device. It has the same button functions as the HAWK recorder except the EAGLE does not have video capturing ability. New versions of the EAGLE 8/A recorder include the B,C,D,E. The only difference is the memory size. For example, the stereo record times at 2:1 compression are:

EAGLE8B = 6.7 hours EAGLE8D = 26.8 hours
EAGLE8C = 13.4 hours EAGLE8E = 53.6 hours

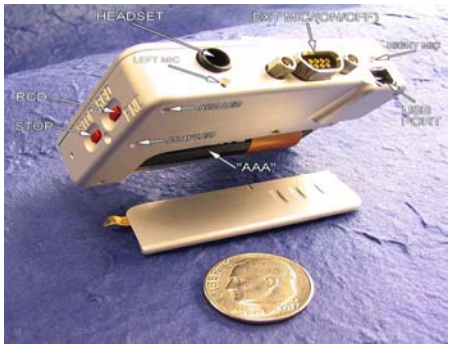


Figure 6-2 The EAGLE 8/A

FALCON/2

The FALCON is the next generation audio / video recording device. The FALCON is a slimmer version of the HAWK with more memory. The advantages of the FALCON are you can remove the recorder from the aluminum shell in order to place the recorder in objects where size makes a difference. The FALCON2/4 memory is 4 Gigabytes, which gives you a 4 hour recording at 30 fps at high resolution The FALCON uses a rechargeable lithium battery. The lithium battery will give you approximately 4 hours of battery life.

Another difference between the HAWK and FALCON is the removal of several components from the HAWK such as the audio connector and the record and stop buttons. The FALCON uses the black slide switch to initiate the recording. The mini USB port on the FALCON is different from the HAWK. **Refer to Figure 6-3 for a picture of the FALCON**

Figure 6-3 The FALCON

FALCON/4

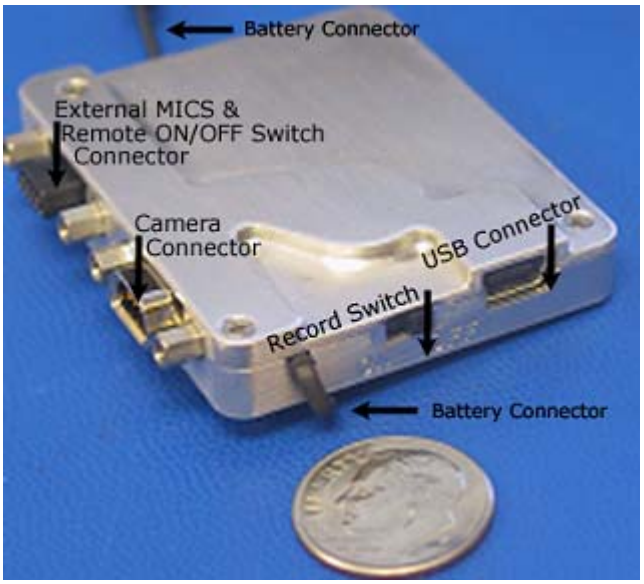


Figure 6- The FALCON4

BATTERY Installation

The HAWK uses two 1.5 v, "AA" batteries for operation. The batteries are installed series providing 3 volts. The HAWK8/A uses 2 and 4 “AAA” batteries.

Please note the label in the bottom of the unit for proper battery installation.

Two "AA" Alkaline batteries will last for 3.5 – 4 hours, while two “AA” Photo Lithium cells will last for 7.5 - 8 hours. ***You should not mix battery technology***. The HAWK uses about 315 mA at 3 volts while it is recording, and about 1 ma of power while it is waiting, hence do not install the batteries a long time ahead of its use. If the situation calls for it, you can insert the batteries a couple of days ahead and still get the full recording.

NOTE!!

You should always use fresh batteries for each new operation. Used batteries may leak, hence do not leave batteries in the RECORDERS.

LED

The RECORDERS have dual LEDs which turn red or green. The LED indicates an operation. The RECORD "LED" in the front, near the RCD switch, is used the same as the older FBIRD recorders. When the unit is turned "ON" the RECORD LED will turn solid “red” indicating that it recognized the switch. When the camera is connected, in 2 seconds the LED will turn solid “green” indicating that the camera is ready and the record process has started.

Note!!

If the GREEN and RED LEDs do not show proper operation turn the HAWK “OFF” for 5 seconds then press the “RCD” again.

Only during audio and no video recording the red LED will follow and trace the loudest audio from the left microphone.

The LED will flash repeatedly 3 times when the recorder memory is full. If the battery is low then the LED will flash ON and OFF **slowly.**

LED Codes

The red LEDs will flash 3 times repeatedly when the recorder’s memory is full. Another reason for the red blinking LEDs is the data has been transferred and the recorder memory needs to be erased. The recorder will not record. Go to the nearest computer and erase the data.

If the battery is low then the LED will flash ON and OFF **slowly.**

No red or green LED present the record is not recording.

NOTE!
If the low battery indicator is flashing, turn the unit "OFF" replace the cells and turn the unit ON or "RCD" again.

The computer will display the fact that the **"last recording"** was stopped short because of a low battery condition.

The green "LED", further back, will be ON when the unit is in playback. In later software releases the LED will follow the playback audio levels.

CAMERA

The HAWK has a variety of camera options. You can have a black and white or color camera. The image sizes are (LOW resolution) 352 X 288 and (HIGH resolution) 640 X 480 pixels. The VGA camera can operate both HIGH (640 X 480) and LOW (352 X 288) RESOLUTION MODE. The selection can be made from "SETUP."

The MICROCAM operates at 640 X 480. (High Resolution)

The HI-RES CAM operates at 1280 X 960 1.3 MEGAPIXEL

Dual Cameras have the advantage of two cameras, for applications that need more than one camera angle.

Once the camera is connected and the unit is turned ON, the HAWK will automatically detect and recognize which camera is used and adjusts the parameters accordingly. Refer to Figure 6-2 HAWK with HAWKEYE (shirt button), HCAM (pinhole) and the adjustable lens cameras.

NOTE!

If no camera is found the LED will <u>not</u> turn "GREEN", hence you should turn the unit "off" wait 5 seconds and try again. The HAWK will record "audio" if the camera does not operate.

CAMERA DEFINITIONS

At the end of each camera connector there is a stripe that distinguishes the color and type of the camera.

CAMERA	CAMERA RESOLUTION	COLOR	STRIPES
CIF	LOW RESOLUTION	B/W	NONE
CIF	LOW RESOLUTION	COLOR	RED
VGA	HIGH RESOLUTION	B/W	YELLOW
VGA	HIGH RESOLUTION	COLOR	YELLOW/RED

MICROPHONE

The HAWK/EAGLE8 and FALCON can use its stereo internal or external microphones. If the external microphone is plugged in it is automatically selected for use. The Left and Right microphone position is engraved on the chassis. The internal microphone is factory set for 6 dB more sensitivity, over the external microphone.

USB PORT

The HAWK USB port uses a special USB cable that connects the HAWK to the computer's USB port. The HAWK communicates with the computer via USB.

HEADSET

The 1/8-inch stereo headset plug is used for playback. This output is intended for use with headsets or powered speakers. The output is disabled during recording. If at all possible this output should be used to playback the preamble.

CONTROL SWITCHES

The HAWK/EAGLE8 has the RCD/FWD and STOP/OFF momentary switches on the side and the PLAY/PAUSE {P/P} as well as the REW, {R} on the bottom. **Refer to Figure 6-4 Hawk with button Descriptions or Figure 6-5 EAGLE8/A.**

RECORDING

First Generation:

Our first generation recorders such as the HAWK/4 use the red push buttons that are designated "RCD" and "STOP." **Refer *to Figure 6-4 Hawk with button Descriptions or Figure 6-5 EAGLE8/A.***

NOTE "PAUSE" is not active during recording

Next Generation:

Our next generation recorders such as the HAWK/4, HAWK8, FALCON/4 use a black switch that slides into designated modes "ON" and "OFF

If the remote record switch is attached to the RECORDER it must be used for ON/OFF control. When the red slide switch is slid to the “ON” position a black dot appears and the recorder begins recording. For special applications, ADS also makes a set of external microphones without the external ON/OFF switch.

NOTE!
To ensure proper operation,
depress all switches for about 2 seconds.

RCD/ON

The "RCD red button “or “ON black slide switch " activates the HAWK to go into the record mode. The LED turns red, then green within 2 seconds to indicate that the camera is attached. The LED will flash “red” following incoming audio while the unit is recording.

NOTE!

The user should make a short “preamble” recording to check that everything is attached and working properly. Make sure the red and green LEDS are present, if they are not, go to the nearest computer and make sure the memory has been erased and the batteries are new.

NOTE!

If you are in PLAY mode, you must turn the unit "OFF" before you can enter the RECORD mode. During PLAY the RCD switch acts as the "FWD".

STOP/OFF

The "STOP red button " or “the OFF black switch” halts recording, and puts the unit in a low power state. The RECORDER logs the states of ”ON / OFF” and the date/time as “Session” information.

PLAYBACK

The playback function uses all 4 switches. NOTE that you must be in the OFF state to re-enter the record mode. The REW and FWD switches have different meaning when in PLAY or PAUSE. Note that “playback” does not erase any data. Once you are finished with local “playback”, you may continue recording from where you left off by first turning the RECORDER “off” then pressing RCD. The HAWK8/A and FALCON4 do not have PLAYBACK capability.

PLAY / PAUSE

NOTE!

The Play / PAUSE (P/P) as well as the REW(R) controls on the HAWK unit is on the bottom. Use a paper clip to operate and hold down button until recording plays (3-5 seconds).

The "PLAY" button causes the unit to power up, turn the green LED 'ON" and start playing from the beginning Session 1. Depressing this switch while the unit is playing will cause it to PAUSE and flash the green LED. To continue playing you must depress this switch again.

REW

Depressing this switch while the audio is playing causes a 3-minute jump back. Depressing it while you are in PAUSE causes the RECORDER to begin playing from the beginning of the current Session. To jump back **into** the previous session you should hit REW from the PAUSE state, and then hit REW again to take you back into the previous session.

FWD

Depressing the "FWD" switch causes the audio to jump ahead 3 minutes. If you are in the PAUSE state, depressing this switch will jump you into the beginning of the next Session.

OFF

Depressing this button will cause the recorded to be powered OFF. This must be done to re-enter the RECORD mode.

RECORDING LENGTH

Type of camera and frames per second determines the recording length. The chart below displays HAWK recording duration. The settings are stereo with 2:1 compression. Times are given for each session and full recorder length.

	One Forced Session CIF (LOW)	One Forced Session VGA (HIGH)	Full Recording Length CIF (LOW)	Full Recording Length VGA (HIGH)
30 f/s	22 minutes	14 minutes	88 minutes	56 minutes
15 f/s	42 minutes	27 minutes	168 minutes	108 minutes
10 f/s	60 minutes	40 minutes	240 minutes	160 minutes
5 f/s	105 minutes	73 minutes	420 minutes	292 minutes
1 f/s	258 minutes	212 minutes	1032 minutes	848 minutes

RECORDING TIME AND BATTERY LIFE WITH VGA CAMERA AND AUDIO ON

Battery	1 f/s 851 min	5 f/s 293 min	10 f/s 161 min	15 f/s 111 min	30 f/s 58 min
Duracell	151 min LB	138 min LB	124 min LB	Memory Full	Memory Full
Energizer	458 min LB	Memory Full	Memory Full	Memory Full	Memory Full

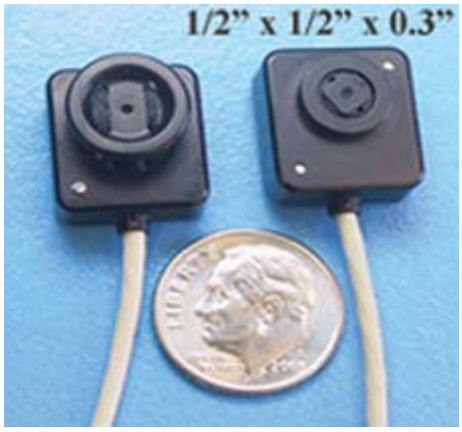
The EAGLE8/A has 420 minutes of recording time on 1 “AAA” battery and 18 hours on 2 “AAA” batteries.

TRANSMITTERS

Do not slide the XMT switch if antenna is not presently connected to the EAGLE/8 or HAWK recorder. *Refer to Figure 6-6 Eagle8/Transmitter*

In order to begin transmitting, press record button, then turn on the XMT switch. To remove antenna, XMT switch should be in the off position first. XMT switch should always be in the off position when not transmitting or in use.

Figure 6-4 HAWK with button descriptions



The Micro Cams records at 640X 480 pixels.
(High Resolution)

MICRO CAMS

The SXGA camera records at 1290 x 960 resolution at 1.3 megapixel. The SXGA is mainly used in stationary applications for example, a pole camera.

SXGA Camera

The Low Light Cameras work well in environment where light is a limited resource.

Low Light Cameras Long Lens, Button, Pinhole

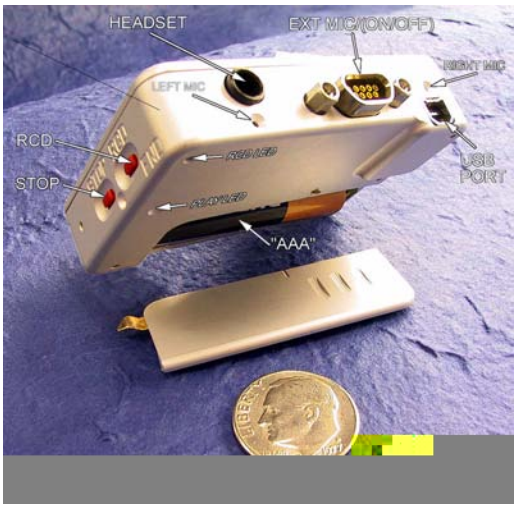


Figure 6-5 EAGLE8/ A with descriptions

Figure 6-6 EAGLE8/Transmitter

SECTION 7

"MONO8" RECORDER

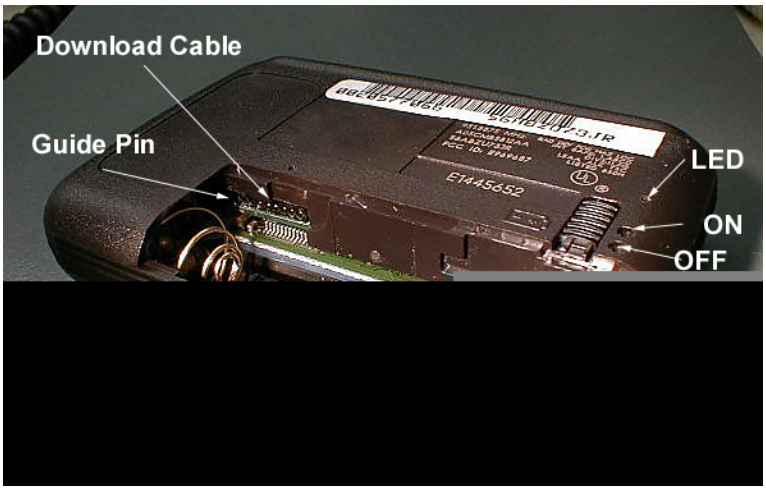


Figure 7-1 MONO8

The MONO8 audio recorder captures stereo for 10 hours or mono for 20 hours. Note that the pager is fully functional with the exception of the vibrator function. The MONO8 has an Officer Safety Transmitter (OSRFT) option which transmits the audio continuously for up to 6 + hours while recording with the “L91” Lithium battery. When the MONO8 is not transmitting, an ordinary Alkaline “AA” will last for 10+ hours. The MONO8 uses the USB port of the PC for data archive making it a very transportable unit. Refer to **Figure 7-1 MONO8**

The MONO8A is the latest model it has more memory and records 13 stereo hours.

BATTERY

NOTE, a battery should be left in the unit while on the shelf to keep the pager function settings. This should not be confused with the recorder settings, which are kept even without a battery. A fresh battery must be installed on every new recording.

DOWNLOAD CABLE / GUIDE PIN
The Download / Control cable plugs in just to the inside of the coil spring. The "key" Guide Pin is towards the outside (short) end. Please be gentle, and insert and pull the cable straight out.

RCD

The "ON" and "OFF" switches are momentary, and should be held for about 1/2 second. Note the red LED will follow the audio. **NOTE, please do not exert excessive force when depressing the switch.**

SECTION 8

FLEX8F

The **FLEX8F** is our most covert recorder. The solid-state electronics built on an untra-thin form factor assures inconspicuous evidence recording in highly transportable packages. Data is transferred to any PC via a Universal Serial Bus (USB). Standard audio hardware commonly found on most PCs may be used for data playback. User software running under Windows 98/2000/XP/VISTA® will cut CD media for archive, and can also create audio CDs which can be played on any CD player. Due to more dense memory boards we are able to create recorders with longer record times such as the FLEX8C2/ D / E. Refer to **Figure 8-1 FLEX8F**

System features:

- Local Record START/STOP
- Playback via Standard Audio Cards
- Programmable Timer ON/OFF
- 13.4 Hrs Stereo / 26.8 Hrs Mono Record
- Local Microphone Inputs
- Interface to USB Port
- 1:1, 2:1, 4:1 record compression
- Optional "Officer Safety" Transmitter
- Measures 1.75" x 0.9" x 0.18"
- Uses flat rechargeable Lithium cells

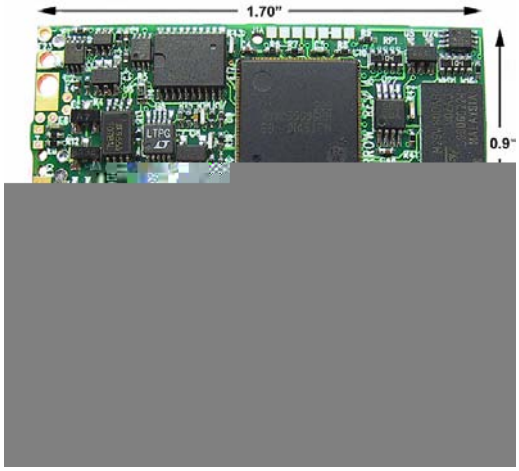


Figure H-1 FLEX8F

SECTION 9

PLAYER Program

The “PLAYER” is similar to our FBPLAYER used on the earlier EAGLE 2 and 4 line. The PLAYER plays audio and video files from the recorders however the PLAYER cannot change the settings of the RECORDER. The PLAYER code resides on all evidence CDs inside the HAWK directory. The PLAYER can execute on any PC and uses the PC’s Sound Blaster for audio output. To run PLAYER simply double click on the ICON located on the CD/DVD under HAWK/Player.exe . If you are using USBIrd software 2.6x and lower versions be sure to install the MJPEG codec. The MJPEG codec is located in the **CODEC** folder in the evidence CD. The main menu is shown in Figure 9.1.

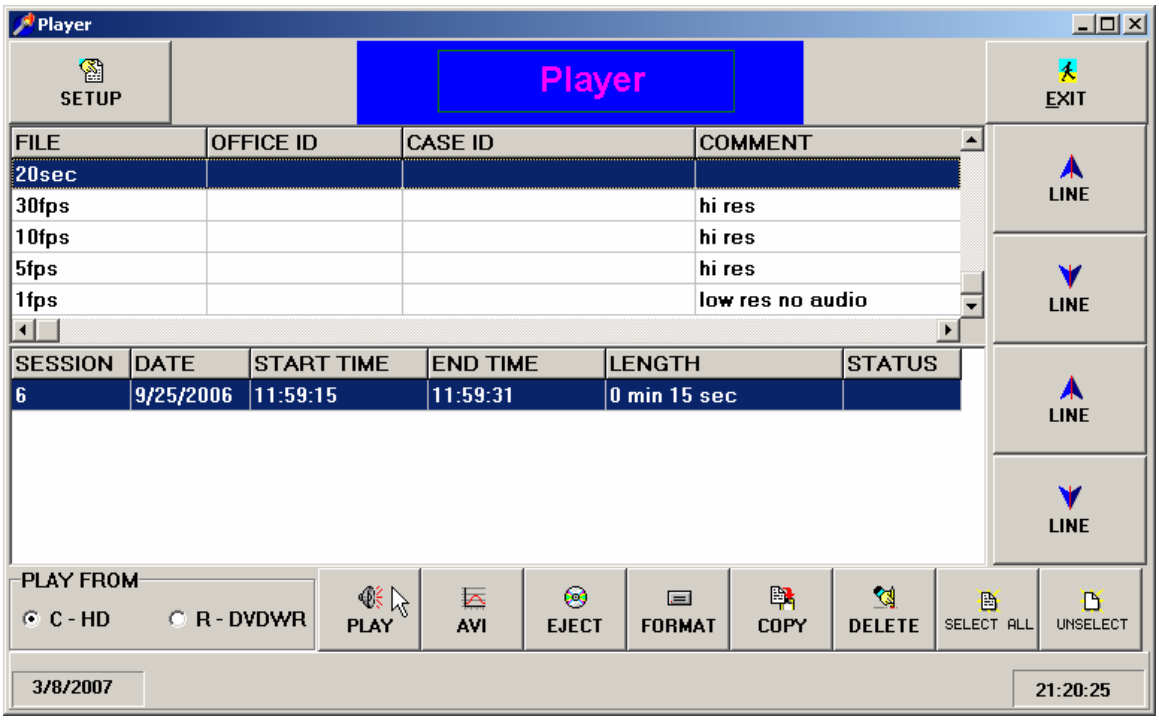


Figure 9. 1 PLAYER Main Menu

The user can select which drive to play back from. Once the drive is selected the file names appear on the screen, as shown above. After you select a file the Sessions information appears on the screen.

PLAYER BUTTON DESCRIPTIONS

1. The **SETUP** button configures the disk drives of the computer.

2. The **PLAY FROM** selects the storage device sessions are stored in.

2. The **PLAY** button, once sessions are chose the PLAY button to go into the PLAY screen.

3. The **AVI** button converts audio/video recordings into AVI files.

4. The **WAV** button converts audio recordings into wav files

5. The **EJECT** button calls the DragToDisc program which finalizes and ejects the CD\DVD.

6. The **FORMAT** button calls the DragToDisc program which prepares a blank CD/DVD for data transfer

.

7. The **COPY** button transfer files from different storage devices such as hard disk to CD/DVD or CD/DVD to hard disk.

8. The **DELETE** button removes files from the hard drive, select the file name of the recording. The removed files do not go to the recycle bin. Delete cannot delete files from a closed CD/DVD

9. The **EXIT** button terminates the PLAYER program.

Select the sessions for playback and choose either PLAY or COPY. Once the file is selected the screen shown on appears. Refer to **Figure Player Playback Screen 9.1.1** From here the user can automatically make .WAV or .AVI files. ***Note that one CD will typically hold about 1 hour of recording from a HAWK.***

9.1 PLAYER PLAYBACK MENU BUTTONS

1. The **SET** button creates a bookmark in the time bar.

2. The **CLEAR button** removes previous bookmark.

3. The **CLEAR ALL** button removes all bookmarks.

4. The **SEGMENT** button extracts a portion of the recording created by the BOOKMARKS.

5. The IMAGE button extracts a picture frame from the recording
6. The session volume can be adjusted through the AUDIO L and R channel scroll bars.

7. The **PLAY RATE** adjusts the frames per second of playback.

8. The **PLAY** button begins audio and video playback**.**

9. The **PAUSE** button stops the playback, selecting the PLAY button resumes the playback.

10. The **REW** button advances the video recording back 1 frame.

11. The **FF** button advances the video recording forward 1 frame**.**

Figure Player Playback Screen 9.1.1

9.2 CREATE A JPEG

The USBird and Player program have the capability of creating JPEG.
A JPEG is a compressed image (individual picture) extracted from the video recording.

a. Select the image by using the scroll bar or REW and FF buttons.
   Refer to *Figure 9.2.1 Select IMAGE*

Figure 9.2.1 Select IMAGE

b. Next select the **PAUSE** button. **Refer to *Figure 9.2.1 Select IMAGE***

c. Select the **IMAGE** button. **Refer to *Figure 9.2.2 IMAGE Button***

Figure 9.2.2 IMAGE Button

d. In the **SAVE AS** screen select the location where to save the JPEG (use the down arrow to navigate through the folders) and input a name for the JPEG in the File name. **Refer to *Figure 9.2. 3 Save As Screen***

e. Select Save. **Refer to *Figure 9.2. 3 Save As Screen***

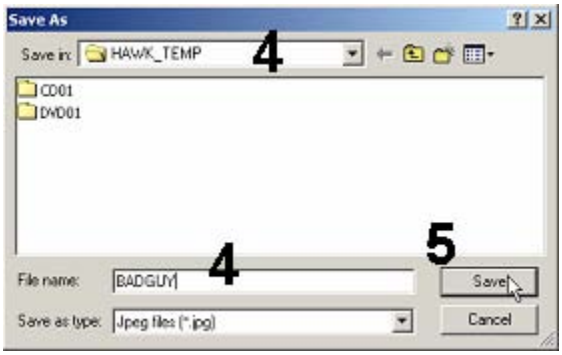


Figure 9.2. 3 Save As Screen

f. Retrieve the JPEG for viewing. **Refer to *Figure 9.2.4 JPEG***

Figure 9.2.4 JPEG

9.3 CREATE A SEGMENT

The USBird and Player program have the capability of creating **SEGMENTS**. The user can select a portion from the recording. For example, you may have four hours of recording, in that recording you may only need 2 minutes. The extracted portion of the recording is a segment. The segment is separated

into its own individual session. The SEGMENT is created in the PLAYBACK screen.

1. Create the segment by using the scroll bar. Find the beginning of the SEGMENT and select SET. **Refer to *Figure 9.3.1 Start of SEGMENT***

Figure 9.3.1 Start of SEGMENT

2. Find the end of the SEGMENT select SET. **Refer to *Figure 9.3.2 End of SEGMENT***

Figure 9.3.2 End of SEGMENT

3. Select the SEGMENT button. **Refer to *Figure 9.3.3 SEGMENT Button***

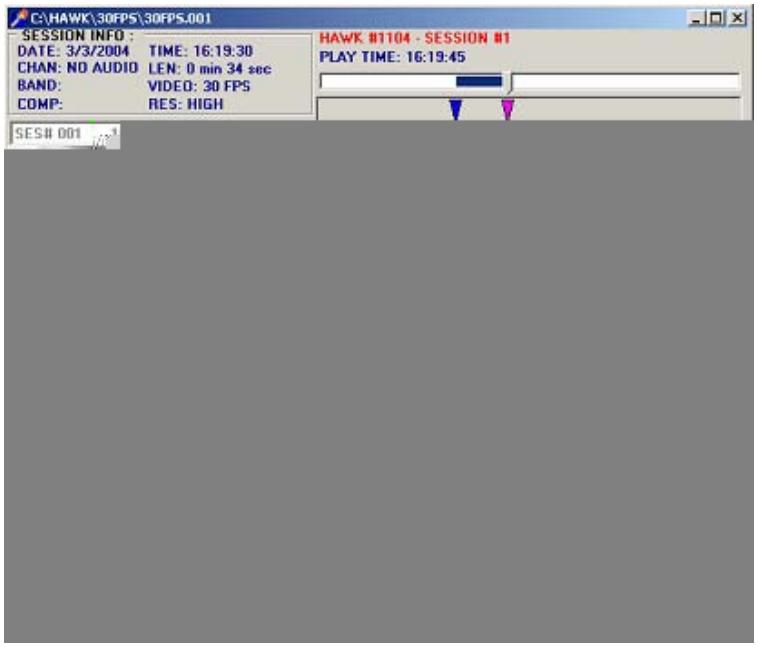


Figure 9.3.3 SEGMENT Button

10. In the CaseIDForm screen the **SEGMENT** is designated by the **SG** followed by the original file name and session number. The FILE NAME can be renamed. **Refer to *Figure 9.3.4 CaseIDForm***

11. Select OK. **Refer to *Figure 9.3.4 CaseIDForm***

Figure 9.3.4 CaseIDForm

The **CLEAR** button removes the previous bookmark from the scroll bar.
The **CLEAR** ALL button removes **all** the bookmarks from the scroll bar

9.4 AVI

An AVI file created for other programs that recognize AVI file format such as WINDOWS MEDIA PLAYER. We covert our proprietary audio/video format to a

common user friendly format. An AVI file can be converted to the MJPEG2 format which can be played back on a standard DVD player. AVIs can also be generated from the USBird Program in the Playback screen. In this demonstration the AVI will be made from the PLAYER program.

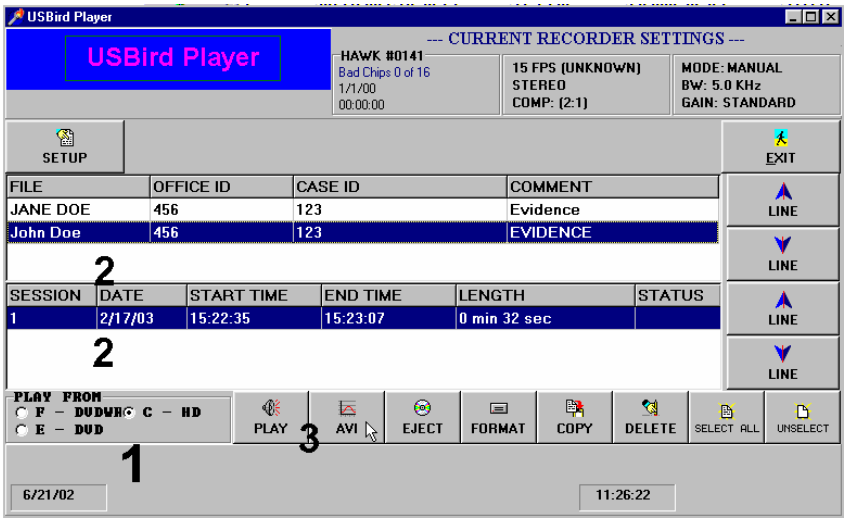


Figure 9.4.1 AVI File Menu

Make " .AVI" Files

The numbers corresponds to the direction number.

1. From the PLAYER PROGRAM, Select the drive where sessions are stored in PLAY FROM. **Refer to *Figure 9.4.1 AVI FILE Menu***

2. Select the File name, and one session. AVIs can only be created one at a time. **Refer to *Figure 9.4.1 AVI FILE Menu***

3. Select AVI button. **Refer to *Figure 9.4.1 AVI FILE Menu***

4. Choose the GENERATE AVI FOR DATA DVD. This selection will slice the recording in order to fit on DVDs. The number of DVD's needed depends on the length of the recording and displayed in the CD/DVDs column. **Refer to *Figure 9.4.2 AVI Conversion SCREEN***

The AVI files are converted and written to a Hawk_Temp Folder. The user chooses where the Hawk_Temp Folder is stored. **Refer to *Figure 9.4.2 AVI Conversion SCREEN***

5. Insert a blank CD\DVD in the CD\DVD-WRITER and select FORMAT. Format the CD using the DragToDisc software. Refer to Section 4.1 Format CD/DVD

6. Select the AVI under CONTENT

7. Select COPY, the AVI file is copied from Hawk_Temp to the CD/DVD.

8. **Select EJECT and close out the CD**

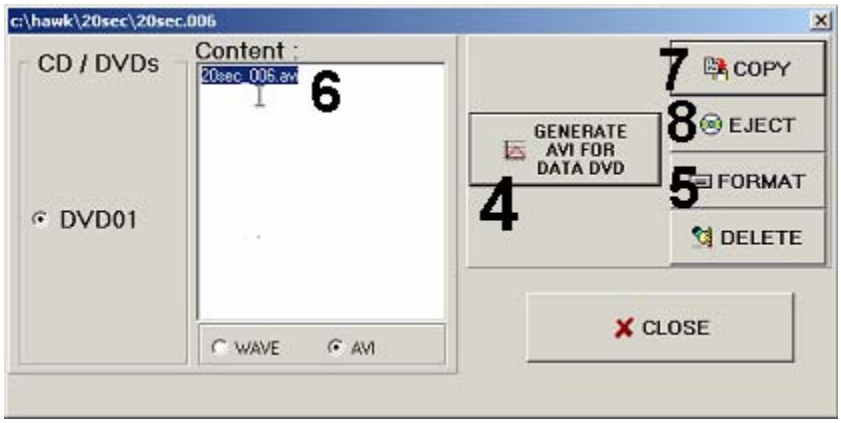


Figure 9.4.2 AVI Conversion SCREEN

GENERATE AVI FOR DATA DVD creates AVIs stored on DVD media.

GENERATE SILENT AVI will create a file with video and no audio.

A **WAV** file can be created from an audio/video recording. From the AVI Conversion Screen select **WAVE.** Follow the WAV instructions. The video will be stripped from the recording leaving only the audio.

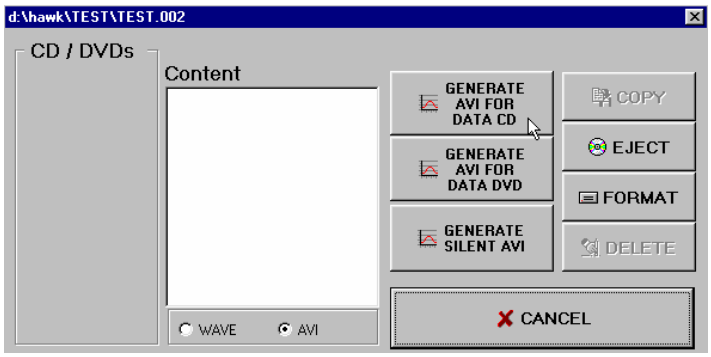


Figure 9.4.2 AVI Conversion SCREEN

9.5 WAV

A WAV file is created for other programs that recognize the WAV file format such as WINDOWS MEDIA PLAYER. We covert our proprietary audio format to a user-friendly format. WAV files can also be generated from the USBird Program in the Playback screen. In this demonstration the AVI will be made from the PLAYER program.

The numbers corresponds to the direction number.

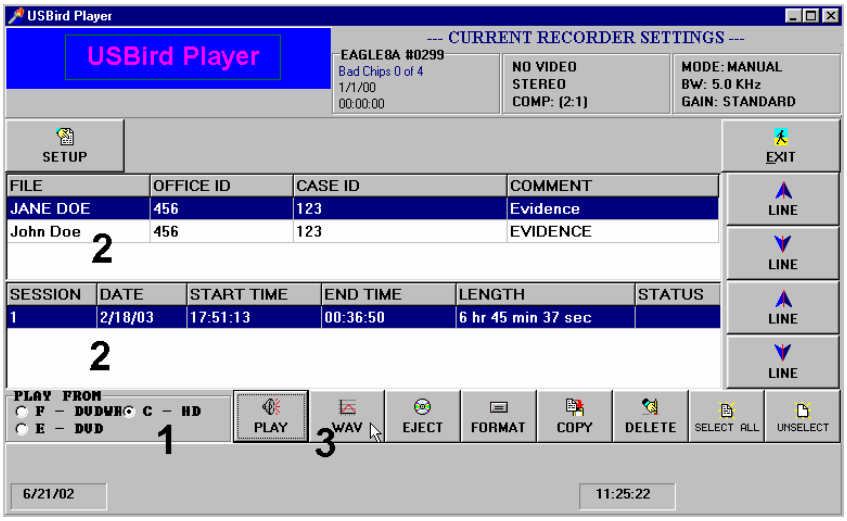


Figure 9.5.1 WAV File Menu

Make " .WAV" Files

1. From the PLAYER PROGRAM, Select the drive where sessions are stored in PLAY FROM.

2. Select the File name, and one session. WAVs can only be created one at a time.

3. Select the WAV button. If the session contains video select AVI and in the conversion screen select WAV.

4. Choose GENERATE WAV FOR Audio CD, this will slice the recording to fit on CD media. The length of the recording determines the number of CDs needed and is displayed under the CD/ DVDs column. **Refer to Figure 9.5.2 WAV CONVERSION SCREEN**

A music CD can hold about 70 minutes of audio recording. If you have a two hour recording two CDs are needed.

The WAV files are converted and written to the Hawk_Temp Folder. The user chooses where the Hawk_Temp Folder is stored. **Refer to *Figure 7-5 WAV CONVERSION SCREEN***

5. Insert a blank CD\DVD in the CD\DVD-WRITER and select FORMAT. Format the CD using the DragToDisc software. Refer to Section 4.1 Format CD/DVD **Refer to *Figure 9.5.2 WAV CONVERSION SCREEN***
6. Select the WAV under CONTENT, **Refer to *Figure 9.5.2 WAV CONVERSION SCREEN***
7. Select COPY, the WAV file is copied from Hawk_Temp to the CD/DVD. **Refer to *Figure 9.5.2 WAV CONVERSION SCREEN***

8. Select EJECT, finalize and close CD/DVD with DragToDisc. **Refer to *Figure 9.5.2 WAV CONVERSION SCREEN***

GENERATE WAVE FOR DATA CD creates a WAV file to fit on a data CD.
.
GENERATE WAVE FOR DATA DVD creates a WAV file to fit on a data DVD.

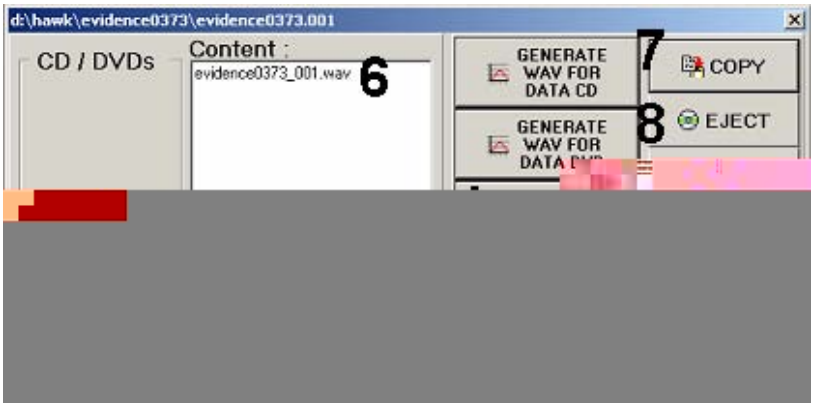


Figure 9.5.2 WAV CONVERSION SCREEN

APPENDIX - A

USBird SOFTWARE INSTALLATION

To install/update the resident code from CD.

1. Remove existing software from the CONTROL PANEL/ ADD REMOVE PROGRAMS
.2. Go to USBird folder and select ‘Setup.exe’.
10. In the Welcome screen, select next.
11. In the Choose destination location, select next.
12. In the Select Program Folder, select next. Start Copying files begins.
13. Drag out USBird short cut to Desktop.
14. **Check the box, “Yes, Launch the program first” and select next in the Setup Complete screen. Refer to Figure A-1 Setup Complete**
15. Close Hawk folder.

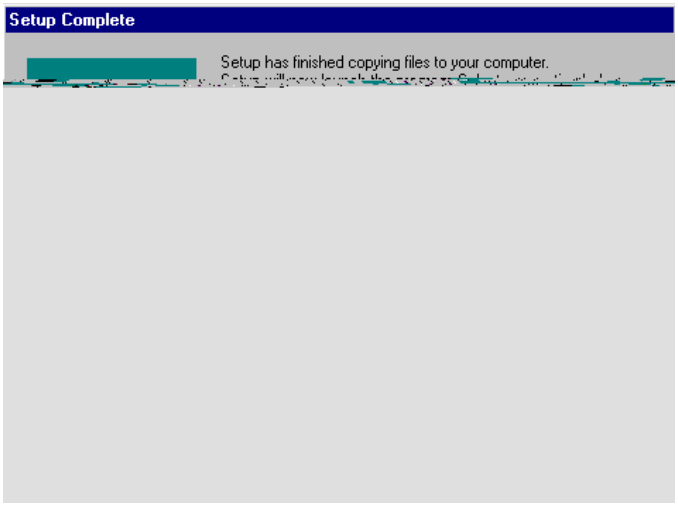


Figure A-1 Setup Complete

After the installation, if you do not have a shortcut icon for the USBird, you can go into Windows Explorer and open C:\PROGRAM FILES\ADS\USBird. From there you can drag the shortcuts “blue torch icons” {USBird.EXE} out by pointing to it and holding down the left mouse button as you drag it off the screen.

APPENDIX – B

MJPEG CODEC

Installing MJPEG

If the video can not playback install the MJPEG codec. MJPEG Codec compresses the Hawk File so it can be played back through Windows Media Player.

1. Go to the MJPG_CODEC Folder.
2. Select LEAD MCMP_MJPEGCodec.exe.

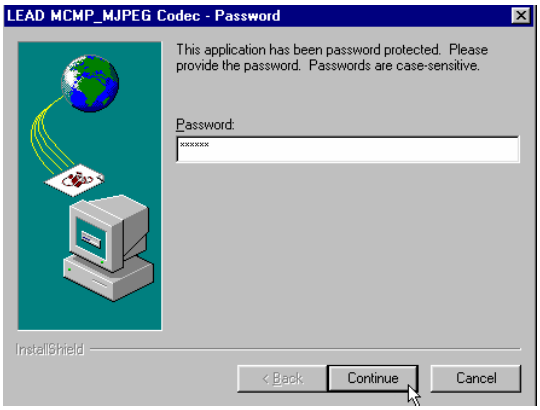


Figure B - Password

3. In the Lead MCMP_MJPEG Codec – Password type “showme” and select continue. Refer to **Figure B - Password**
4. File extraction begins.
5. In the Lead MCMP_MJPEG Codec with Free Converter screen select next.
6. In the License Agreement select Yes.
7. In the Choose Destination Location select next.
8. At the Select Program folder select next.
9. At the Install shield Wizard complete select Finish.

APPENDIX - C

WINDOWS MEDIA PLAYER

Installing Windows Media Player 7.1

If your computer does not correctly display AVI files install new Windows Media Player 7.1.

1. Go to My Computer and go to USBIRD CD.
2. Select mp71.exe
3. In the Windows Media Player 7.1 Setup select Yes.
4. In the License agreement, select Yes and file extraction begins.
5. In the Windows Media Component Setup select next.
6. Check the box, 'I have read the Privacy Statement' select next.
7. In the Components screen make sure all boxes are checked select next.
8. In the Customize your Windows Media Player all boxes are checked select next.
9. In Windows Media Setup is ready to install select next.
10. In Setup has completed select Finish.

APPENDIX - D

UPDATE BINARY CODE

How to update HAWK Binary Code

1. Select **Utility** button.
2. Select **UPDATE RECORDER SOFTWARE**.

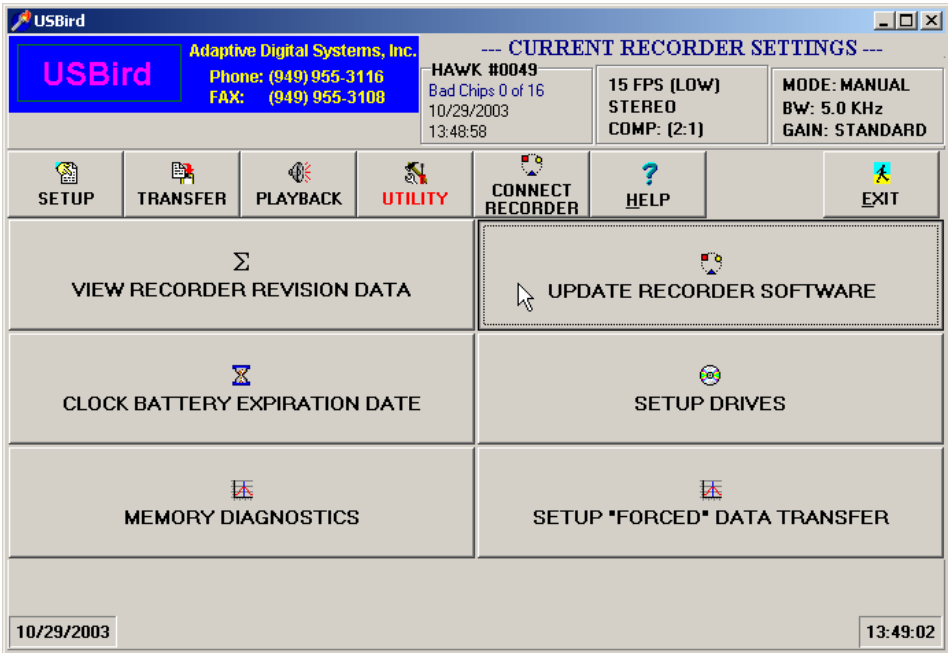


Figure D-1 UPDATE RECORDER SOFTWARE

3. In the Confirm box select **Yes**.

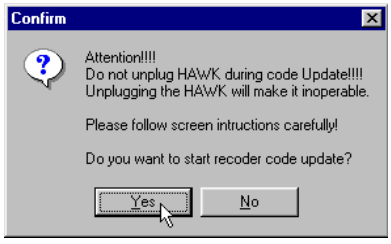


Figure D-2 Confirm box

Important!

Do not unplug the recorder while it is updating the binary code, this can cause malfunction in the Hawk. Code update takes approximately 40 seconds.

4. After binary code update is complete, select OK at the CODE UPDATED box.
   Refer to figure **D-3 CODE UPDATED BOX.**

5. Binary code update is successful when “HEX CODE LOAD DONE” is displayed.
   Refer to figure **D-4 HEX CODE LOAD DONE SCREEN**

Figure D-3 CODE UPDATED BOX

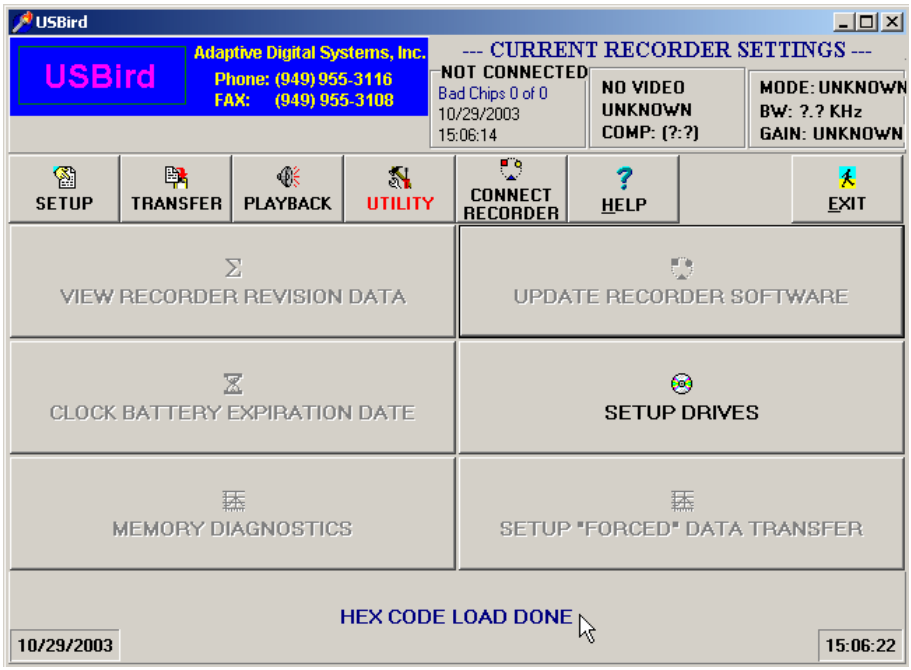


Figure D-4 HEX CODE LOAD DONE SCREEN

6. Disconnect RECORDER from USB cable for 10 seconds.
7. Reconnect RECORDER and select **CONNECT RECORDER**
8. Go to Setup and select the **APPLY CHANGES** button.

APPENDIX – E

SETUP DRIVES

1. Select **UTILITY**, and select **SETUP DRIVES**. Refer to **Figure E-1 Setup Drives**

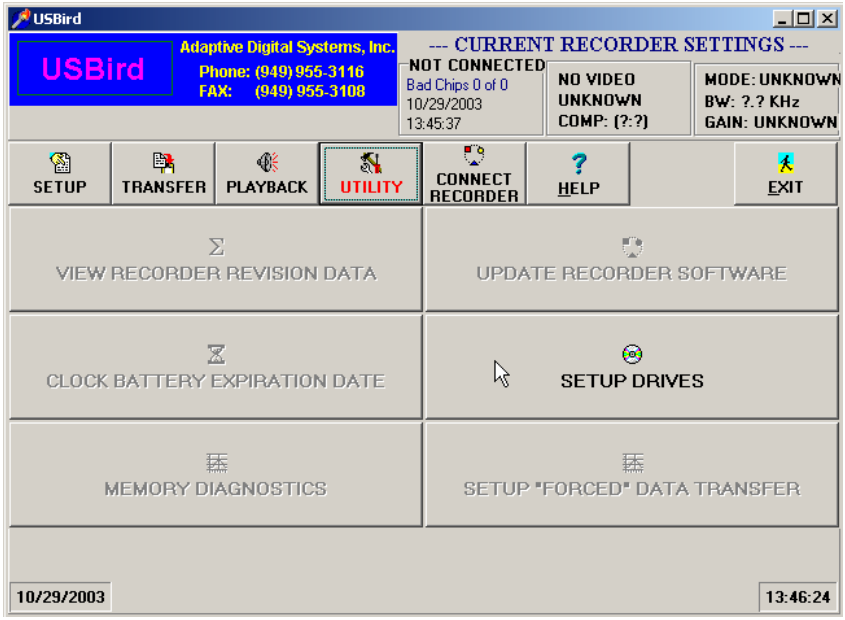


Figure E-1 Setup Drives

2. In Setup Drives select **ADD** Refer to **Figure E-2 Setup Drives**

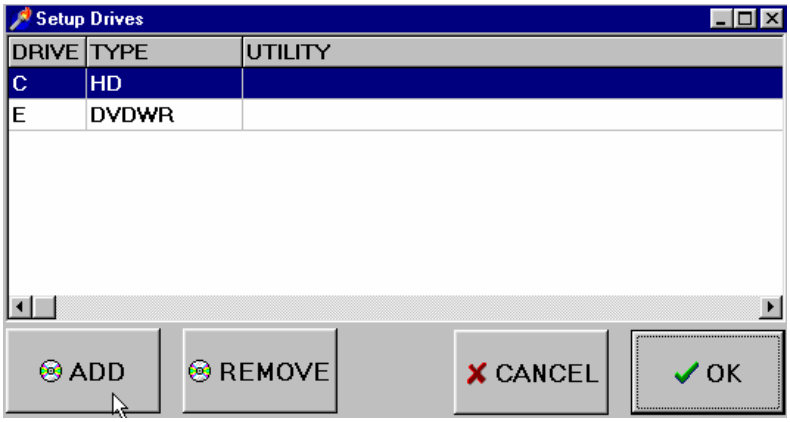


Figure E-2 Setup Drives

3. Select drive with corresponding letter, choose **TYPE** and select OK. Refer to **Figure E-3 Add Drives**

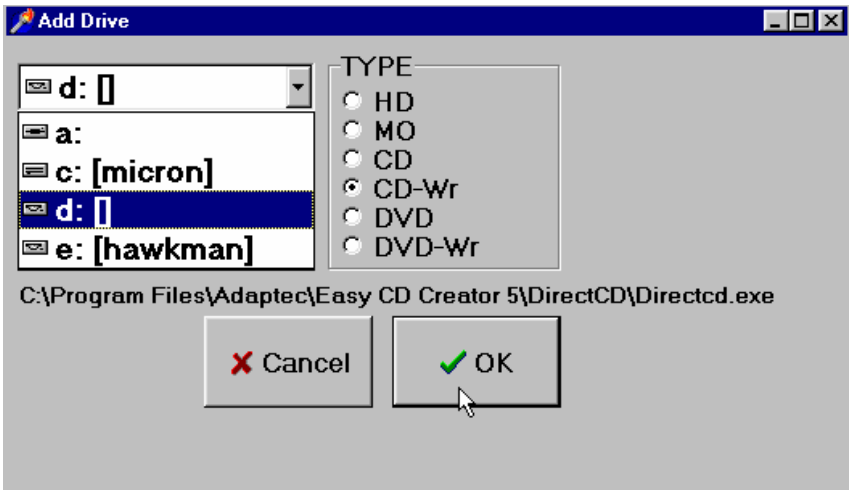


Figure E-3 Add Drives

4. If the space is blank, press Change Format Utility button, to select the format program. The path for ROXIO 5 is C:\Program Files\Adaptec\Easy CD Creator\DirectCD\directcd.exe. The path for ROXIO 6 is C:\Program Files\Roxio\Easy CD Creator 6\DragtoDisc\DragtoDisc.exe. Refer to **Figure E-4 CHANGE FORMAT UTILITY**

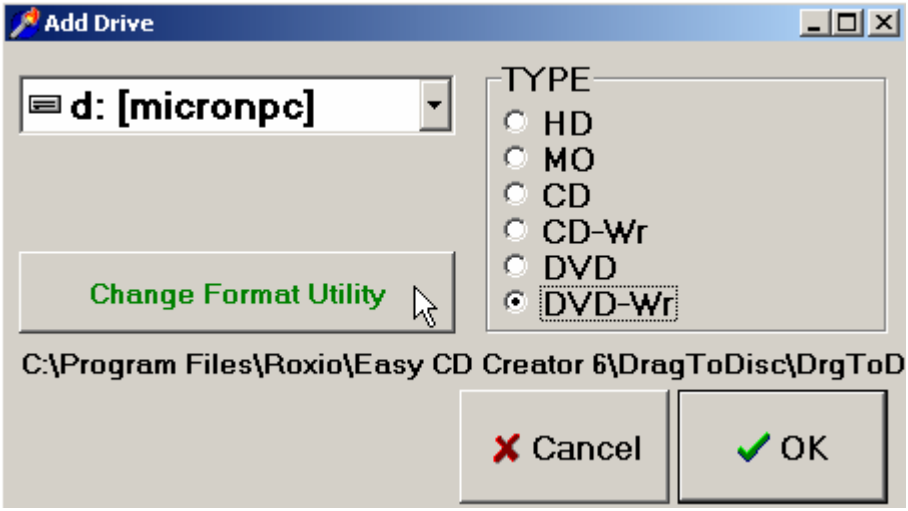


Figure E-4 CHANGE FORMAT UTILITY

5. The new drive will be added, select **OK**. Refer to **Figure E-5 New Drive Added**

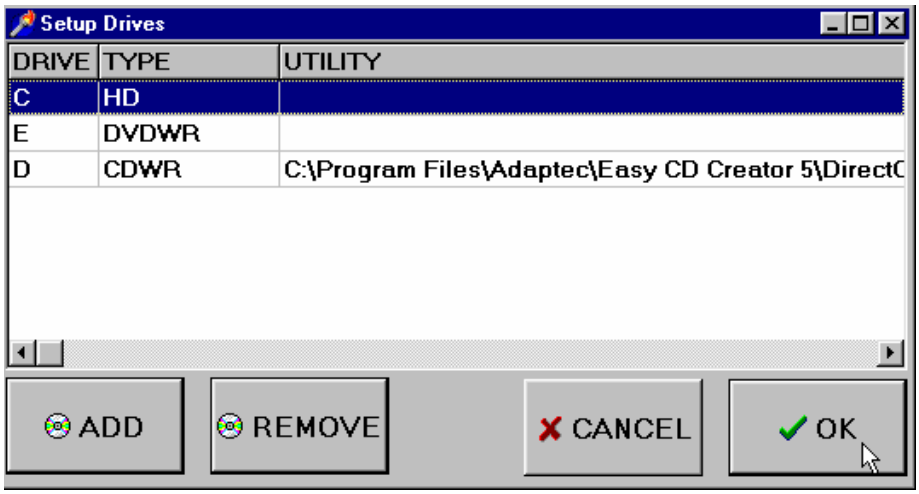


Figure E-5 New Drive Added

6. Now you can view the drives that were added. Refer to **Figure E-6 View Drives**

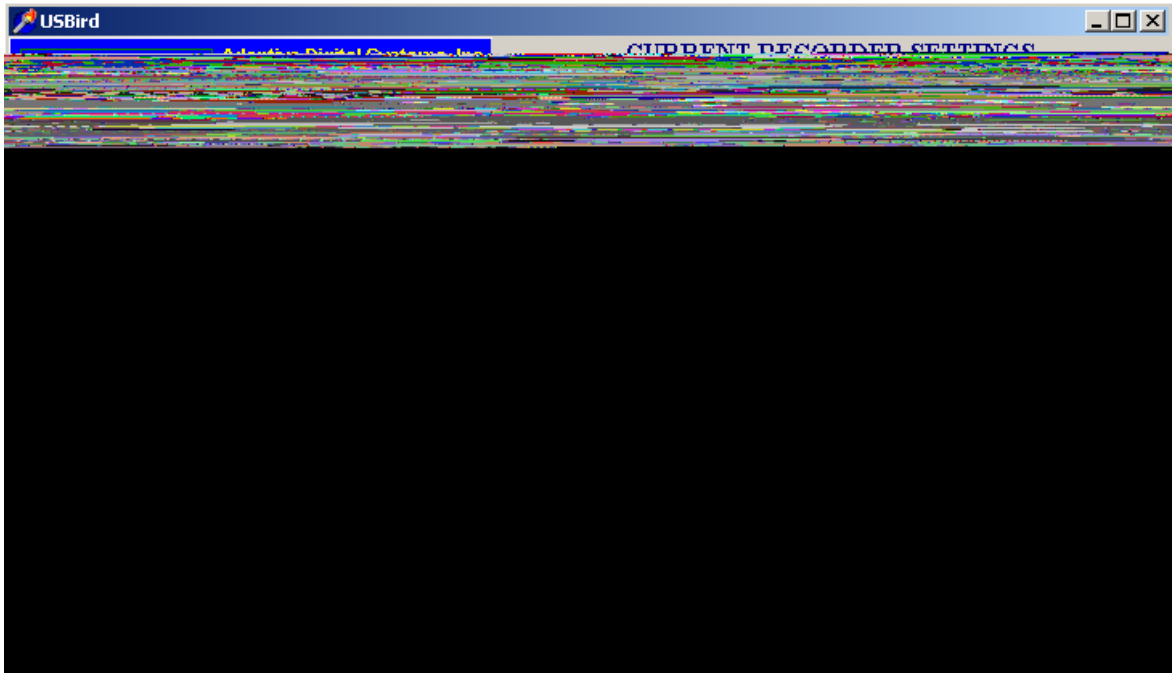


Figure E-6 View Drives

APPENDIX - F

BATTERY ORIENTATION

Proper battery placement is necessary in order for the recorder to function correctly. Use the battery diagram as a guide. **NEVER** remove batteries when device is recording.

Figure G-1 Battery Diagram

Figure G-2 Battery Installation

Always use a fresh battery when using the recorder and follow correct battery installation. Refer to **Figure G-2 Battery Installation**

APPENDIX - G

ADS SOFTWARE CONFIGURATIONS

This message was written to clear up some confusion that may exists on the various software and hardware releases that are out in the field.

FBIRDWIN 3.5 (and 3.X) is used with desktops and PDR (not PDR2) stations. This software will not run on Windows 2000, and Windows XP.

USBI 1.91 (and 1.0x) is used with the black USB boxes as well as the PCI card version. When the little black box is used

Both the FBIRDWIN and USBI software handles the following recorders:
EAGLE2/A,
EAGLE4/A/C
FBIRD8/A/B
MONO2/A
MONO4
FLEX8B

"**USBird**" 3.05 (3.XY) is used on all new recorders that have a built in USB port and attached wris transceiver. In fact, everything to be released from now on will use this software. The recorders already using the USBird 3.05 software are:

HAWK/4 /8 /8A
FALCON/4
EAGLE8/A /A2 /A3 / B / B2 /C /C1 /D /E
MONO8/ A
FLEX8C /C2 /D /E /F

NOTE!! Much like the "FBPLAYER" is burned onto the evidence "CD", a program called "USBirdPLAYER" will be burned onto the CD / DVD using the USBird 2.00 and later releases. The "USBirdPLAYER" can be called up from the evidence CD / DVD and the video/ audio be player without any additional software from ADS. The USBirdPLAYER software can also be used to make ".AVI" copies which can be burned onto CD / DVD.

APPENDIX - H

TROUBLE SHOOTING

Most problems can be solved by referring to the USBIRD MANUAL.

Before you use the recorder, make sure memory has been erased. If you press the record button and see three blinking lights you must erase the recorder memory. The memory cannot not be overwritten, after you completely erase the memory the recorder will begin recording.

Always test the recorder before you deploy it. Make sure audio and video are working properly. Always use fresh batteries, and give rechargeable batteries enough time to recharge.

All external cables and connectors are fastened securely and all cameras are in focus.

All external microphones are in a good audio position to capture audio.

The external on / off switch should be on the off position when you are attaching the switch to the recorder.

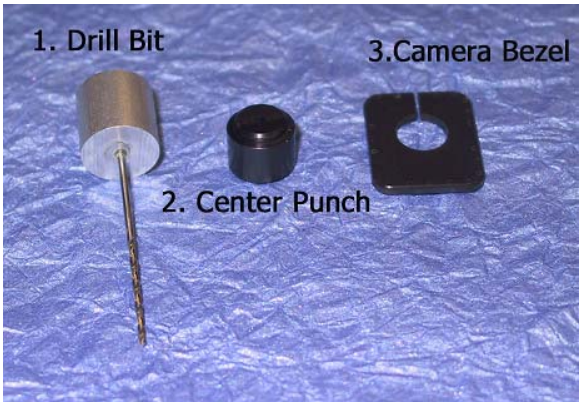
No other USB devices can be attached to the computer while you are using a recorder. If you need to attach another USB device such as a USB printer, scanner, mouse, use a USB HUB. The USB HUB should be the only device attached to the computer and all devices should be plugged into the USB HUB.

VIDEO DOES NOT PLAYBACK for USBird installations 2.6x and older. Install MJPEG codec.

APPENDIX – I

Micro Cam Installation

Mounting a MICROCAM into the concealment is made easy by the items below. The three items are shipped with the MICROCAMS. The items include, a drill bit, a center punch, and camera bezel or frame.



MICROCAM Concealment Kit

1. Choose an item
2. Make sure the surface lays flat and does not distort while moving.
3. Place the center punch and camera bezel flat on the item.
4. Mark the edges of the camera bezel for easy alignment.

Center Punch and Camera Bezel

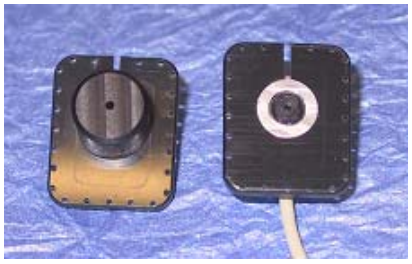
Drill Bit

5. Place the drill bit inside the center punch. The center punch and camera bezel align the camera hole.

6. Once the camera hole is made remove the drill bit and center punch.

7. Replace the center punch with the MICROCAM.

8. Glue down and around the camera bezel; make sure the camera lens is not obstructed.



MICROCAM in BEZEL