

30 June 2022

IR-01-22-15600

John Smith fyi-request-19518-2303500a@requests.fyi.org.nz

Dear John

#### Request for information

Thank you for your Official Information Act 1982 (OIA) request of 30 May 2022, requesting:

Could you please supply me a copy of the following documents, 1) Instruction manual for using video / digital recording machine in interviewing a suspect that shows how it works. 2) All general instructions and policy in relation to the use of it.

In response to your request please find attached the 'Advanced User Manual' relating to New Zealand Police Interviewing Equipment which encompasses both aspects of your request.

You will note that there have been three areas redacted in the document, the information is withheld pursuant to section 9(2)(a) of the OIA to protect the privacy of natural persons, including that of deceased natural persons.

You have the right, under section 28(3) of the OIA, to ask the Ombudsman to review my decision if you are not satisfied with the way I have responded to your request. Information about how to make a complaint is available at:

Your sincerely

Craig Scott Detective Inspector National Criminal Investigation Group

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Investigative Interviewing Planning & Preparation, Engage & Explain, Account, Closure, Evaluation

Advanced User Manual

# Melview Series S106 - DVD Interview System

<mark>s.9(2)(a) OIA</mark>, Black Diamond Technologies Ltd, & The Investigative Interviewing Unit

August 2009

#### 1. Read Instructions

The safety and operating instructions should be read before the product is operated.

#### 2. Retain Instructions

The safety and operating instructions should be retained for future reference.

#### 3. Heed Warnings

All warnings on the product and in the operating instructions should be adhered to.

#### 4. Follow Instructions

All operating and user instructions should be followed.

#### 5. Cleaning

Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners <u>especially on the microphone</u>. Use a damp cloth for cleaning.

#### 6. Attachments

Do not use attachments that have not been recommended by the product manufacturer as they may cause hazards.

#### 7. Water and Moisture

Do not use this product near water – for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and like.

#### 8. Accessories

Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult and serious damage to the product. Use only a cart, stand, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacture's instructions, and should use a mounting accessory recommended by the manufacturer.

#### 9. Moving the Product

The protection covers provided should be fitted to the product before it is moved. A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



#### 10.Ventilation

Slots and openinings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

#### **11.Power Sources**

This product should be operated only from the type of power source indicated on the power label. If you are not sure of the type of power supply in your office, consult your product dealer or local Power Company. For products intended to operate from battery power or other sources, refer to the operating instructions. **This product is intended for indoor use and must be earthed**. For field operation you must observe and comply with local power supply regulations such as the use of Residual Current Device (RCD) or isolation transformer. The unit must be protected from moisture.

#### 12. Power-Cord Protection

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

#### 13.Overloading

Do not overload wall outlet sockets, extension cords, and integral convenience receptacles as this can result in a risk of fire or electric shock. Never spill liquid of any kind on the product.

#### 14.Object Entry

Never push objects of any kind into this product through openings as they may touch

dangerous voltage points or short-out parts that could result in a fire or electric shock.

#### 15.Servicing

Do not attempt to service this product yourself as opening or removing the covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel. The air filter must be cleaned every 12 months or sooner if placed in a dusty environment. It is recommended that this unit is serviced every 12 months by a qualified service technician.

#### 16.Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- (a) When the power-supply cord or plug is damaged.
- (b) If liquid has spilled, or objects have fallen into the product.
- (c) If the product has been exposed to rain or water.
- (d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- (e) If the product has been dropped or damaged in any way.
- (f) When the product exhibits a distinct change in performance - this indicates a need for service.

#### **17.Replacement Parts**

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacture or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

#### 18.Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform a safety check to determine that the product is in the proper operating condition.

#### 19.Heat

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

#### 20. Access to Isolated Mains Input

The mains plug or appliance coupler must be accessible when the equipment is installed.

#### 21. Operation Temperature

This equipment is designed to operate between  $5^{\circ}$ C to  $40^{\circ}$ C.

#### **Considerations**

Should the unit be exposed to an extreme or sudden temperature change, leave the unit on, without any discs for 2 hours. Leaving the unit on will disperse the moisture that may have formed on the class lens and mirrors inside the unit.

#### Protect the Power Cord

Do not damage the power cord. Damage to the power cord may cause a fire or shock hazard. When unplugging the power cord, please hold it by the plug and remove it carefully.

#### **Recording Media**

Use only the approved Police DVD kits available via the procurement system. Avoid directly touching or scratching the recording surface, do not place in a location where there is moisture or direct sunlight.

#### **Electrical Warning - User Information**

This equipment has been tested and found to comply with the AS/NZS CISPR22 class A and the European CISPR22 Class A EMC standard. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

#### Disclaimer

Information and specifications in this manual may be changed without notice.

### CONTACTS

Service Spare Parts & Technical Service Support Black Diamond Technologies New Zealand Ltd Phone (0064 4) 560-9100 Fax (0064 4) 560-9130 Free phone: 0800 1 Melco (Inside New Zealand) E-mail: For all sales and technical enquiries: S.9(2)(a) OIA Home Page: http://www.melview.com

Police Enquiries

Investigative Interviewing Unit National Criminal Investigation Group s.9(2)(a) OIA

Investigative Interviewing Manuals and Guidance

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# Basic Suspect Room Set-Up Guide Diagram



## Room Layout Basic Guideline

- 1. The interview unit should be placed in front of any windows allowing the natural light entering the room to be behind the camera.
- 2. The door should always be in view of the camera.
- 3. The interviewing officer should be closest to the door taking full control of the interview room and making it more difficult for the suspect to escape.
- Avoid placing bright white objects in the room, as reflections from these objects will decrease the definition of the picture.
- 5. Lights should be placed each side of the table to increase the picture definition.
- 6. The camera is preset for a two-meter focus distance.
- The recommended interview unit cabinet is 800mm high with interview related document forms in a cupboard in one half and a secure locked storage post box in the other half for placement of the completed interview recording.

## Connecting the Equipment



Warning:<br/>Ween first connected to the<br/>power supply the unit must be connected<br/>for at least 20 minutes before inserting<br/>any recording media. If it has been transported by<br/>Air, been stored disconnected from a power<br/>supply at less than 10°C, or been stored in a damp<br/>environment the unit should be connected for at<br/>least one hour prior to use. Failure to do so can<br/>shorten the life if the laser assemblies. Never<br/>disconnect from the power supply unless the<br/>product is faulty. Disconnecting the power will

# mean that the laser heater and filtered clean air will stop operating.

- 1. Remove the interview unit and the accessories from the carton.
- 2. Place the interview unit on a table.
- Connect the camera cable between the camera input on the rear of the interview unit and the keyboard. The Keyboard must have the supplied EMC suppressor fitted with 1 Turn.
- 4. For a S106 system connect to the 2 power supply plugs and leave in stand-by (DO NOT INSERT ANY RECORDING MEDIA) Warning: For out door operation, an RCD or an isolation transformer must be used. The power lead is an IEC type that connects to the rear of the interview unit. For a B106 system with 2 DVD burners, connect the 12V power plug from the mains power adaptor to the 12V input on the rear of the interview unit. Then turn on the power socket at the wall.
- The Interview unit after about 80 seconds power up should now display the camera picture and "Melview Video Interview System Insert All Blank Media - Press the RECORD Button".
- 6. The camera can now be tilted up/down with the knob adjuster on the top of the cabinet. Please adjust the position of the interview unit so that all parties are in view. <u>Note</u>: For Adult Witness and Child Evidential Interviewing camera installations please refer to the Witness/Child installation guide.
- 7. The equipment is now ready to use.

#### Front Panel Features

- <u>Stand-by Power Switch</u> When in stand-by the camera, monitor, microphones and the recorders are powered off. Power is kept to the fan and power supplies so that moisture and dust is kept away from the mechanisms. The shutdown process takes around 20 seconds when the controller is put into STBY mode. Once power off is selected the unit cannot be started again for 30 seconds. The core controller CPU, LAN option and clean air fan are kept working.
- <u>Volume</u> Volume Control. Up/down buttons are provided. More complex audio adjustments such as tone and balance are provided in the service menu's
- <u>Phones</u> Headphone socket. Automatically switches off the audio to the speakers for private monitoring of the sound.

• <u>Control Buttons</u> - All control buttons will beep once when selected then, double beep and the LED below the button will illuminate when the correct operation has been achieved. (Note the Volume Up/Down buttons do not have LEDs).

#### Front Panel LCD Display

The Melview Series 106 controller has a 2 line 20 character display that displays system status, VU meters, Service setup adjustments and alarm messages. With the exception of the VU meter, most times the same data is displayed on the video monitor as well.

### **Recorder Names and Functions**

#### Working Deck 1

The Working copy is intended for internal police work. Where "play" buttons are fitted, the Working Copy can be played back to the client during the interview. **The Working recorder is the <u>only</u> recorder that, can rewind/reverse over a recording**. The Working recorder is also used as the play back recorder when Dubbing and is connected to the monitor and audio power amplifier.

#### Master Deck 2

The Master recorder will only be used for recording. The master copy is intended for court evidence and should be sealed (refer <u>Intranet</u> <u>Movie</u> or the DVD inserted inside the cover of the manual) and placed in a secure place.

#### Copy Deck 3 (When installed)

The Client recorder can only be used for recording. The client copy cannot be rewound in the interview unit. The Client recorder can record a second copy when dubbing.

#### Audible Warning Alarms

<u>Recording Alarms</u> - (Note: Most of the audible alarms can be disabled. Refer to the "service set up menu's").

- 1. At power on, any media left in the recorders will be automatically ejected.
- 2. If any recorder is not recording eight seconds after the record button is pressed, all media is ejected and the alarm sounds continuously.
- 3. If any recorder fails at all during record mode, the alarm sounds continuously and both media is ejected.
- 4. Five minutes before the end of the shortest recording space the alarm will sound once, and then every 30 seconds until the last remaining 30 seconds, when the alarm sounds

more frequently. When a media runs out recording space the alarm sounds continuously and all media is ejected. (After being finalized).

- 5. If the audio is removed from either channel to any recorder while in record mode only, the alarm sounds for two seconds every 10 seconds until audio is restored. LED #8 is illuminated for a left channel failure and LED #9 is illuminated for a right channel failure. The controller tests for 25 seconds before activating the alarm.
- 6. If the video is removed from any recorder while in record mode only, the alarm sounds for two seconds every 10 seconds until audio is restored.
- The 12VDC power input gets below 10.5VDC. This can also indicate that the battery is getting flat.

## **Trouble Shooting**

No Picture on the Monitor

• Ensure the monitor power switch is on. Both power switches on the front of the controller must illuminate. If they do not either the power fuse in the controller has blown or the unit is not connected to an active power supply. A simple test of the power supply is to plug the monitor directly into the power source using the interview power lead connected directly to the monitor.

Please refer to the "Recording Interview" section for on screen display alarm details.



# User Instructions S106 -Interview Unit

## The S106 Interview System

The Melview Series 106 Video interview system range has been developed from the previous Series 105 interview system. The user-friendly controller has been reduced in size allowing for a reduced form factor resulting in a lightweight portable option.

The Panasonic DVD recorders have been replaced with a BDT developed recorder that hardware encodes the video signal into a M-PEG DVD formatted signal that is initially recorded directly to the internal hard drive (HDD).

Once the recording is completed the recorder formats the Meta-data and transfers the recordings onto the DVD's.

This new process allows for continuous multiple (DVD 2 hour block) recordings to be recorded without interrupting the interview.

Should a burn fail during the finalisation process due to faulty DVD media the operator is prompted to insert new media so the interview can be transferred to fresh media. Once the burn is successful the recording is erased from the HDD. This is a built in software function and occurs automatically.

In the future it is possible for the recorder to become a video server that can either transfer the interview to a central server or be used as a local interview server to allow authorised personnel to access the interviews.

The Series 106 recorder also has high-speed full digital dubbing so is capable of making copies in a same timeframe as a PC.

The Audio Only dub button has been replaced with a Camera Mute button to allow interviews to be conducted as audio only when interviewee's decide that they do not want to be recorded on video.

### S106 Components

The Series 106 interview systems are made up of 8 key components:

- 1. The camera to capture the image.
- 2. The stereo Boundary microphones to capture the audio.
- 3. The Series 106 controller that provides the user interface acts as a skilled operator to ensure that all the connected components and camera/microphone signals are correct:
  - a. Camera inputs
  - b. Time/date generation and insertion
  - c. Keyboard input
  - d. Microphone preamplifier
  - e. User control panel and LCD display
  - f. Audio headphone and power amplifier
  - g. Recorder control via RS232
  - h. Simple LAN interface for remote status monitoring and system checks
  - i. Video detection
  - j. Audio detection
  - k. On screen messages and warning prompts
- 4. The Series 106 Recorder which is Linux based using:
  - a. Mini ITX Motherboard
  - b. 2GB Ram
  - c. Sony 24 \* DVD burners
  - d. 2.4GHZ T8300 Core 2 Duo Processor
  - e. 500GB Western Digital HDD
  - f. Specially developed software
  - g. Video capture card with real time MPEG2 encoding.
- 5. VGA ~ PAL converter to allow the recorded video to be displayed on the composite video monitor.
- 6. 5" PrimeView TFT monitor (Or an external Video Monitor for B102 model).
- 7. R.F. Modulator for remote interview monitoring in a different room.
- Power Supplies that consist of a 12V 8.5A supply for the recorder, which then supplies a 120w 12v to multiple voltage adaptor to supply the motherboard. When there are more than 2 DVD burners and an internal TFT monitor a second 12V 5A power supply is used to supply the Series 106 controller, camera and TFT monitor.

The cabinet is designed to separate the controller, which processes the analogue signals and the digital recorder.

#### Series 106 Controller

Series 106-computer controller via internal RS232 controls the recording device(s). The Series 106

now uses a BDT developed DVD recorder. At power on from stand-by the Series 106 controller sets each recording device on into interview mode.

If the controller is switched off the recorders will automatically switch back to stand-by after 30 seconds.

At switch on:

- 1. All recorders are tested to see if they have media inserted.
- 2. All recorders are turned on, set to external and the VIDEO switch is turned on.
- 3. At this point the unit is ready to operate. NOTE: It can take up to 10 seconds for the controller and 90 seconds for the recorder to power on.

*Continuous Monitoring of Events* The Series 106 controller polls the unit continuously and analyses the data for errors. Any detected errors are actioned.

The computer also scans the switches on the front panel and operates the Audio MUTE functions. Internally inside the Series 106 controller there is 1 video detector for the record video signal. There are also 3 stereo audio level detectors for Recorders  $1 \sim 3$ . Recorder 1 audio input also feeds the VU meter on the LCD display. This differs from the series 102 controller were the audio detection was done on the multilink module.

## Using the S106 System

**Note:** If the camera is not connected or faulty the monitor will display a blue screen with the following warning message.



When the camera is correctly connected this warning message will disappear. The Dubbing and playback mode will still function correctly.

## Recording Interviews (DVD)

To Activate the Unit

Press the Power Switch for 7 seconds. The power switch must be held down for 7 seconds for the unit to turn on. This feature makes it more difficult for non-authorized persons to turn on the system. The LCD display will display:

## Melview Controller 14/06/06 -4.06

#### Where

• 18/06/05 = The Firmware Build date

• 1.10 = the current firmware version number The LCD display will then display:

## Connecting R1 R2 R3

Where

- R1 = Working Copy Recorder 1
- R2 = Master Copy Recorder 2
- R3 = Copy Recorder 3

The LCD display will then display for up to 2 seconds:

## Connected R1 R2 R3

#### Where

• The recorders found will be displayed. If recorders are not found that should be in the system the system will stay in this position until the fault is located. This display is a service diagnostic tool.

The Monitor will display several status messages as the controller tests and activates the required processes.

The system will then go through a set of displays checking the hardware and software until the following screen is displayed.

Melview Video Interview System

To Prepare for the Interview

#### Please Press EJECT to open trays

Deck 1: No Media Deck 2: No Media Deck 3: No Media *Note:* If the system is left inactive for 40 minutes it will automatically turn itself off to save power and to protect the equipment.

#### Recording Interviews

Press the Eject button to open the trays. Insert a  $\underline{DVD-R}$  media into each tray and press the tray in to close the trays. Alternatively press the Eject button.

Melv	iew Video Interview System
Please	Wait until the media is ready
Deck 1: Tr	ay Closed
Deck 2: Tr	ay Closed
Deck 3: Tr	ay Closed

Once the media has been identified as being blank the information template entry screen will be displayed. If a tray opens automatically indicates that the disc is faulty or not blank. Press the disc in again. If it eject again then replace the defective disc with a new disc.

#### Information Template Entry

A keyboard is standard and when connected a data entry screen will appear. Although these fields are not mandatory please complete as much information as possible.

Interviewee:	
Date of birth:	
Interviewer:	
QID:	
File No/Event No:	
Crime Type:	
Age Category:	

Simply type in the details and hit the enter key or the tab key. Using Shift tab will move the curser back to the previous field.

When you reach the "Crime Type" field this is free text and should be a broad category description ie Violence, Dishonesty etc.

When you reach the "Age Category" field this is free text and should be either Adult or Youth.

Pressing enter will automatically scroll back. Pressing F1 will save the data and get back to the interview screen or just press the record button to commence the interview.

Melview Vid Syst	eo Interview tem
All Blank Reco	ordable Media
To Start Th	e Interview
Press the REC	CORD Button
Deck 1: Ready	DVD 120 Min
Deck 2: Ready	DVD 120 Min
Deck 3. Ready	DVD 120 Min

Should you find you have made a mistake or need to change the entry template information explain you are about to pause the interview, press **STOP** to pause, Press F1 to bring the information template entry screen up again and make the changes. Then Press F1 to go back to interview mode, then press **RECORD** to begin again and change the information on the template entry screen.

To turn the input data screen on/off press F1 on the keyboard at any time when recording is stopped. To begin recording press the **RECORD** button and the unit will automatically begin recording.

The unit will beep to acknowledge that the button has been pressed. When all decks are recording the unit will double beep and the input screen will be superimposed onto the picture for 2 seconds.

The display will show message "All Media now recording" for two seconds along with the station name.



The unit will now record the interview writing a different serial number onto each frame of the picture.

Controls During Interview

All buttons are locked except the **STOP** button, which will **PAUSE** the recording if pressed. Recording can be resumed by pressing the **RECORD** button again.

*Note:* If the system is left in the stop mode for more than 40 minutes the unit will shutdown. To resume the interview, press the power button for 7 seconds and wait for the interview system to reboot.

#### Reviewing

At any stage during the interview the recording of the video thus far can be viewed by pressing the **STOP** button. A message will be displayed saying, "Info Write" on each of the DVDs. The Info Write process formats the data recorded into a playback form ready for transferring to the discs. The process time will take from a few seconds to several minutes depending on the length of the recording. Then the following message will be displayed.

MELVIEW VIDEO INT	ERVIEW SYSTEM
WARNI	NG
NOT all Blan	k Media
All media is Re	cordable
To Continue the	Interview
Press the RECO	RD Button
Deck 3: NOT BLANK	DVD 159 MINS
Deck 2: NOT BLANK	DVD 159 MINS
Deck 1: NOT BLANK	DVD 159 MINS

Once the above screen is displayed the **PLAY** buttons can be used. Navigation is possible using the **FORWARD** and **REWIND** buttons. When play is pressed a playback screen will allow you to select the chapters recorder. Use the up/down keys to select the correct chapter or choose the first chapter to play the entire interview.

As the discs are not finalised by this process continued recording is possible by pressing the **STOP** and then the **RECORD** buttons.

# *Note: Alignment of the working copy is automatic on DVD*

#### Finalizing Interview & Eject

Once the recording is completed and stopped the **EJECT** button must be pressed. If any recordings have been made then the discs will automatically finalize before they eject. The trays will automatically open – once the trays are open the finalized discs can only ever be played back. The longer the recording the longer the discs will take to finalize.

The Monitor will display following:

- Finalizing Depending on the media used and the length of the interview this process will take between 2 ~ 15 minutes. DVR – R must always be used for the initial recording. Estimated finalization time will be displayed on the finalisation screen.
- **Complete** Finalizing now complete.
- Over 2 hour Recordings When the first 2hour set of discs have been finalised you will be prompted to insert the next set of discs. Ensure that you label which disk has been formatted. For example a 7-hour interview will produce 4 sets of discs. The first set of 4 discs has the first 2 hours of the interview and the last set (4<sup>th</sup> set) of discs will have the last hour recorded.



#### S106 Playback

The middle DVD deck can be used to play back the interview, however this should only be used as a last resort if no PC is available. Simply place a pre-recorded disc into the middle deck. The title menu for the deck will automatically be displayed. All buttons work as per a normal DVD player.

- **Play** When pressed the buzzer will beep then double beep and illuminate the play LED when Recorder 1 is in play mode.
- **Pause** When pressed the buzzer will beep then double beep and illuminate the pause and play LEDs when RECORDER 1 is in play pause mode.
- **Rewind** When pressed the buzzer will beep then double beep and illuminate the Rewind LED when RECORDER 1 is in rewind mode. **On DVD models this button will change the chapter when in title mode**.
- **Fast Forward** When pressed the buzzer will beep then double beep and illuminate the Fast Forward LED when RECORDER 1 is in Fast Forward mode.

On DVD models this button will change the chapter when in title mode.

- Forward Speed Search. If the Fast Forward button is pressed during play the deck will display the picture in forward speed search.
- Stop The "Stop" button will stop any of the above Working RECORDER 1 commands.

# Dubbing (High Speed Digital to Digital Dubbing)

- 1. Place the recorded media in Working deck;
- Place a blank disc(s) Master and/or Copy -(the system can do either one or two copies at once).

The Series 106 provides a high-speed digital to digital dubbing where the original disk placed in the working copy is copied to the HDD at high speed then transferred to the Master and Copy burners.

Ensure that either Master and or Copy decks (depending on the number of copies required) have blank media inserted. Press **Full Dub** button. If making only one copy place blank media in Copy deck. The unit will see that there is no media detected in the Master deck and the following message will be displayed.



If making two copies insert blank media into both Copy and Master decks and the following message will be displayed.



### Special Record Mode – Camera Mute

In this mode the recording is made with the camera Muted. A blue screen with the onscreen messages and time/date is recorded instead of the camera image. This mode allows audio only recording to be made.

# To activate this mode press both the **Camera Mute Button** then the **RECORD** button.

The mode mutes the camera for <u>all</u> recordings.

#### Witness Mode

Should you require your triple DVD unit to be used as a dual DVD unit you can change the unit configuration by holding your finger on the **Camera Mute Button** during the power up process. This tells the unit to mute the LCD display divert the image to an external monitor (if attached) and only accept and burn two DVD's

#### Normal Recording

The unit will record the interview writing a different serial number onto each frame of the picture. The following vital signals are continually monitored.

- Dew Timer (Usually turned of on Series 106 Units)
- Audio Record Levels from each recorder for change
- Camera Video Signal
- Record Video signal from each recorder
- That the Recorder(s) are still recording
- Media spare remaining time on each recorder (Ignored with continuous recording)

Should the controller sense any of the above conditions are out of specification the following warning alarms will be displayed:

- A. <u>Dew Warning</u> If the recorders have not been continuously connected to a power supply for 20 minutes the Dew Warning message will be displayed with the number of minutes remaining before the interview can start. The Dew warning message is a reminder message and can be over ridden by pressing the record button again. For more details on DEW problems refer to the warning message at the beginning of the user instructions. Note: Most fixed station systems this has been disabled in the service menu.
- B. <u>Audio Record Levels</u> The computer monitors both audio channels for audio level change. If there is no audio level change for 25 seconds the warning buzzer sounds. If audio is detected the alarm is reset for another 5 minutes. If no audio change is detected a warning message is displayed indicating which audio channel(s) (Microphone) is disconnected. The alarm will sound every tensecond for two seconds until the fault is repaired.

- C. <u>Camera Video Signals</u> If the camera is disconnected a "BLUE" mute screen will be displayed stating "Warning No Camera Signal". The system will still function as an audio only record system still writing the Time & Date stamp on each video frame.
- D. <u>That the recorders are still recording</u> If any Recorder stops recording that buzzer will sound continuously. All the media in the faulty recorder will be ejected and the faulty recorder number will be displayed on the monitor and LCD panel. To turn off the alarm press the STOP button. Try a new media in the faulty recorder if it still ejects the media contact your authorised service dealer.
- E. <u>Time Remaining on Each Recorder</u> This feature is monitored but redundant with the Series 106 recorder as the recording is to the HDD and automatically stored as 2-hour block recordings.

#### **General Recording Operation notes:**

- 1. If an actual burner fails then the interview can be retrieved once the faulty burner is replaced.
- 2. During a power cut tests have shown that about 3 seconds of the interview may be lost.

#### Summer/Winter Time Adjustments

The Summer/Winter time adjustments are automatic and set-up in the service menus. For additional details refer to adjusting time and date in the service menus.

Unit Identification and Metadata Information This feature displays a 35-character message while the unit is going into Record. The factory default is "MELVIEW SERIES 106", but this can be changed to any character message or no message if required. Examples; "STATION UNIT 6" or "FIELD UNIT 99"

Note: If a keyboard is connected then the characters can be entered using the keyboard

### UNIT IDENTIFICATION SETUP ABCDEFGHIJKLMNOPORSTUVWXYZ01

Metadata warning/Copyright ETC that is digitally recorded onto the DVD disc

1-□ 2- □ 3- □ 4- □ 8- Exit 9- WRT 1 2 3 4 5 6 7 8 9 **Vol** + Increases character - a range of 63 characters is available.

Vol - Decreases character

**Stop** - Moves cursor left, 35 positions are possible.

Record - Moves cursor right

Monitor/Audio Dub (Button 9) - Toggles between Reset Message to a blank line, and Message to Factory Default. "MELVIEW SERIES 106" Finalig/Figst\_Exit and Save message

Finalise/Eject - Exit and Save message

The Metadata data is recorded both as a analogue signal along with the station ID and in the digital Metadata signal in the "Prepairer ID" on the final DVD recording.

#### Series 106 External Monitor

Any standard colour television can be used that has AV inputs. The volume can be controlled via the series 102 controllers. It is recommended that the Colour Televisions control panel be disconnected.

<u>WARNING -</u> Never switch the CTV back to STBY after servicing using a remote control, as the interview units are not supplied with remote controls. Also ensure that CH1 is selected and the volume control is set to minimum.

#### Melview TFT Monitor Option

A 5" TFT colour monitor is as factory fitted. The TFT monitor is connected to the controller using 28 way loom which includes.

- 1. 12 VDC
- 2. Composite Video
- 3. Control

The control is via I<sup>2</sup>C to a TFT interface that has an 8 way I<sup>2</sup>C controlled DAC to adjust the TFT monitor settings.

All the TFT monitor adjustments are made via the controllers on-screen menu system.

#### Computer Controller

A Renenas M16 CPU is used with internal RAM and Flash memory. The M16 has 3 serial communication ports and 2 serial communication ports. We also use 10 analogue inputs for audio level detection and video loss detection.

#### Flash Firmware Upgrades

Using the Melflash software the controller and other devices can be updated via the RS232 connection on the rear of the controller.

The Series 106 Recorder

The Melview Series 106 DVD recorder consists of a Gigabyte GA-6KIEH-RH Intel® mini-ITX Motherboard with 2 GB RAM, 2.4GHz Pentium core 2 duo processor, 500GB Western Digital HDD and Sony 24 \* DVD burners.

The video is captured on a Hauppauge video capture card with real-time hardware MPEG2 video and stereo audio encoding.

The Recorder is powered via 12Vdc using a special power supply that converts 12VDC to all the voltages required by the motherboard. For playback we use a VGA ~ PAL converter to output the PAL signal to feed back into the analogue inputs on the Series 106 controller.

The operating system is Linux with specially developed interview system programs.

The recording process is via the AUX AV inputs on the capture card, which encodes the signal to a DVD-V MPEG 2 video stream. The interview is then recorded to HDD. When the recording is stopped the stored copy is converted to a true DVD-V compatible file so that it can be played back in the recorder. If the recording is longer than 2 hours the files and limited to 2 hours and converted while the next 2-hour block continues to record. This allows for many hours of uninterrupted interviews.

Once the interview is completed the Metafile data in added and the HDD copy transferred to all the burners in parallel.

Should a recording fail to burn then a new set of discs are requested, to be inserted and the burn process is attempted again. Once the recording has been successfully burnt then the original recording is erased from the HDD.

#### Future Server Option

The Series 106 interview system can be updated in the future to become a station video server. When this option is implemented the interviews will be stored on the HDD to allow authorized users to download the interview to their desktop.