



Endoscopy video recording guidance

Trial Title: A randomised, multi-centre, biomarker-stratified, open-label trial in patients newly diagnosed with Crohn's disease.

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1 Introduction

Due to the number of permutations of endoscopy stacks and existing recording hardware / software available across sites, bespoke methods of recording will need to be used. Each site will need to choose their own preferred method of recording video for their endoscopy units. We have listed the options below in order of preference for ease of use / cost efficiency for the study (i.e. if you able to use the top option that would be our preferred approach).

2 Method of recording endoscopy video

2.1 Using local site facilities

Sites are allowed / encouraged to use their own facilities for recording video if available. Some sites have video-capture software built into their endoscopy reporting tool; others may already have a laptop and 'dazzle' device with which they are familiar e.g. used for commercial drug trials.

The following equipment will be supplied:

- Encrypted memory stick

Training slides for sites that have "Osprey Ceylon" software installed are available on request.

Setting Up the video recording

1. Once terminal ileum (or furthest point managed by endoscopist) is reached, then video capture should be started and only stopped once procedure is complete and scope has been removed.
2. After the video is created, it must remain on the encrypted USB memory stick and also uploaded to server in your hospital trust.

2.2 Endoscopy monitors/stacks using the PVR Rocket box

If your endoscopy stacks or monitors have HDMI, DVI-D, s-video or RGB/YP_bP_r outputs. The following equipment will be supplied depending on the system/outputs available on your local setup:

HDMI

- HD PVR box (approx. 15 x 10 x 5 cm)
- HDMI to HDMI converter cable
- Encrypted memory stick with keypad

DVI-D

- HD PVR box (approx. 15 x 10 x 5 cm)
- DVI-D to HDMI converter cable
- Encrypted memory stick with keypad

S-video

- HD PVR box (approx. 15 x 10 x 5 cm)
- S-video to S-video cable (modified)
- Encrypted memory stick with keypad

RGB/YP_bP_r

- HD PVR box (approx. 15 x 10 x 5 cm)
- 3x BNC Male to RCA Female adapters
- RGB converter for HD PVR
- Male to male RGB connectors
- Encrypted memory stick with keypad

If there is any lack of clarity regarding your local system, you may be sent more than one set of cables.

Equipment Setup

1. Connect the output from the endoscopy primary monitor or stack into the PVR box. This can be done via HDMI, DVI-D, s-video or RGB/YP_bP_r.

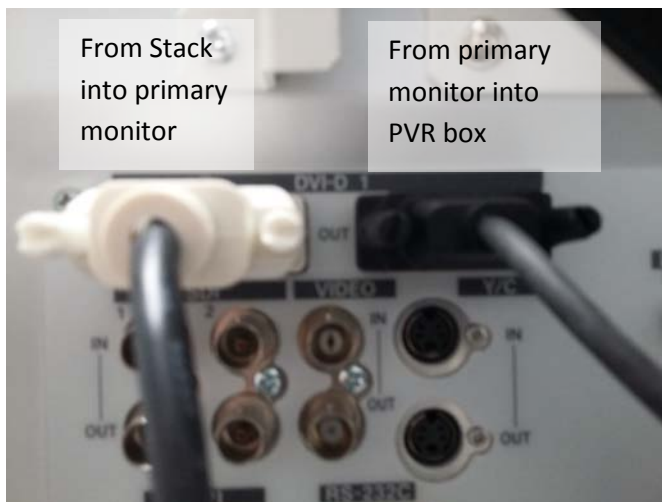
Examples:

DVI-D



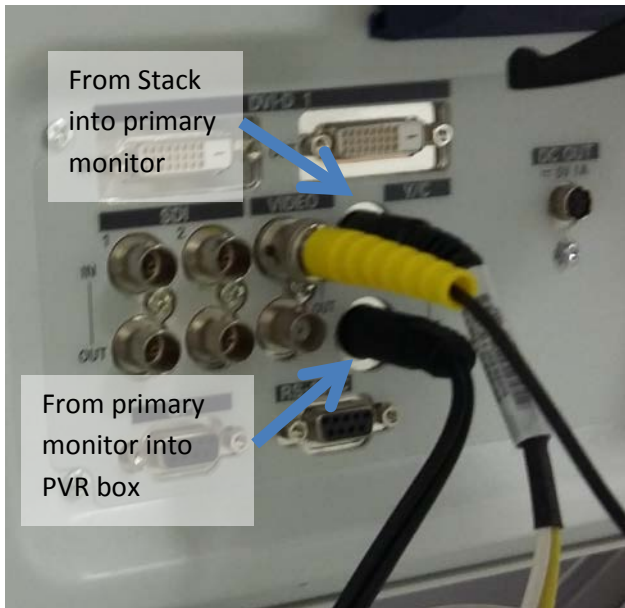
DVI-D output from stack

Or



DVI-D output from monitor

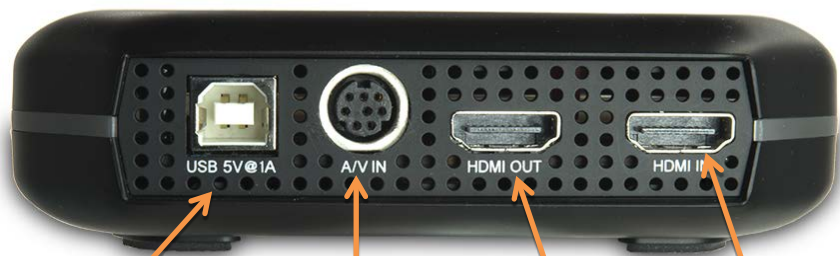
S-video



S-video output from monitor

RGB – Please See Section 3 for detailed guidance

2. Connect the output from the monitor or stack into the PVR box.



USB power cable goes here

Input for RGB / YP_bP_r / S-video

Optional output / pass through

Input using HDMI or DVI-D

3. Plug the USB power cable into the PVR box



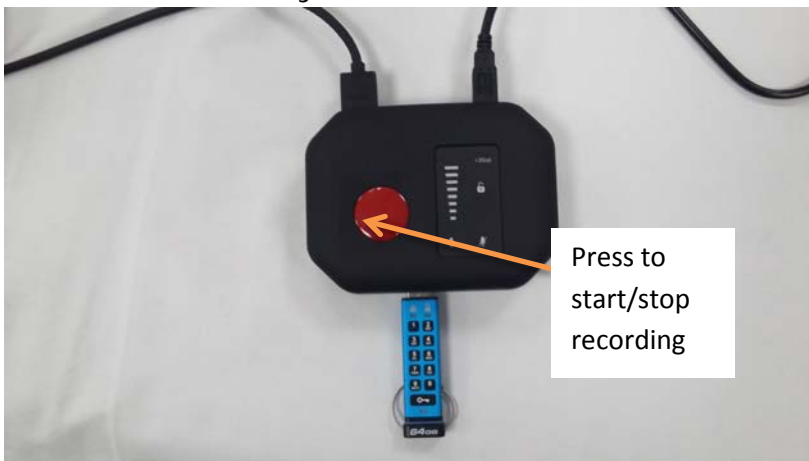
4. Plug red USB plug into a powered USB port or a USB plug (i.e. mobile phone charger plug).



Or



5. Plug the USB memory stick with keypad into the PVR box and unlock the memory stick.



Setting Up the video recording

1. Ensure patient identifiable information is not present on the video screen.
2. Ensure test video is taken prior to starting the procedure.
3. Once terminal ileum (or furthest point managed by endoscopist) is reached, then video capture should be started by pressing the red button on top of the PVR box, the light around the edge will turn from green to red.
4. Continue to withdraw the scope and record the video.
5. When the endoscope has been removed and you are finished, press the red button on top of the PVR box to stop recording, the light around the edge will turn from red to green.
6. After the video is created, it must remain on the encrypted USB memory stick and the trust server.

3 Setting up endoscopy video recording with RGB signals

Method 1 for monitors with RGB/YP_bP_r passthrough ports

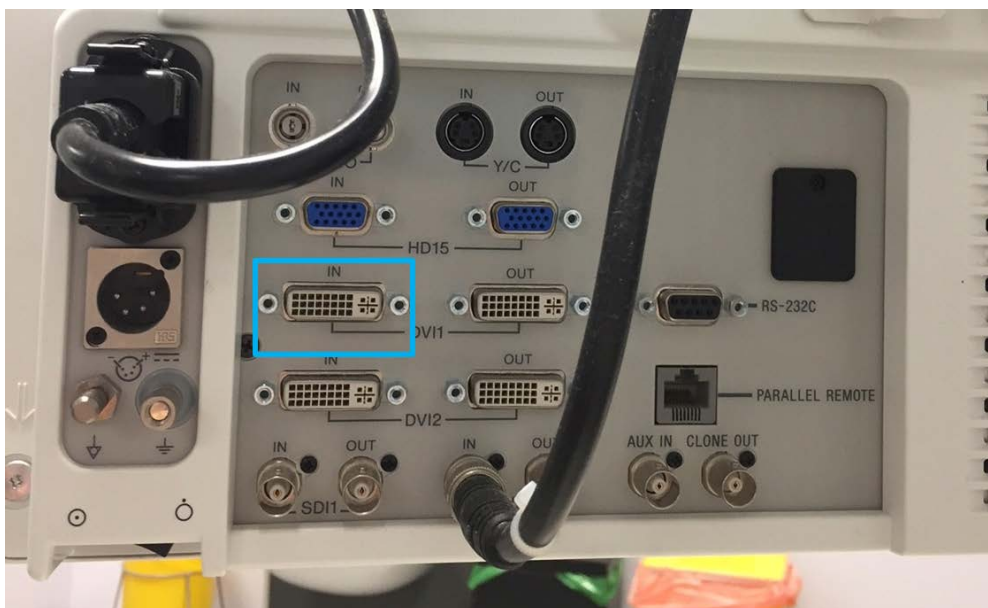
Video feed: Stacks→Monitor→Recorder

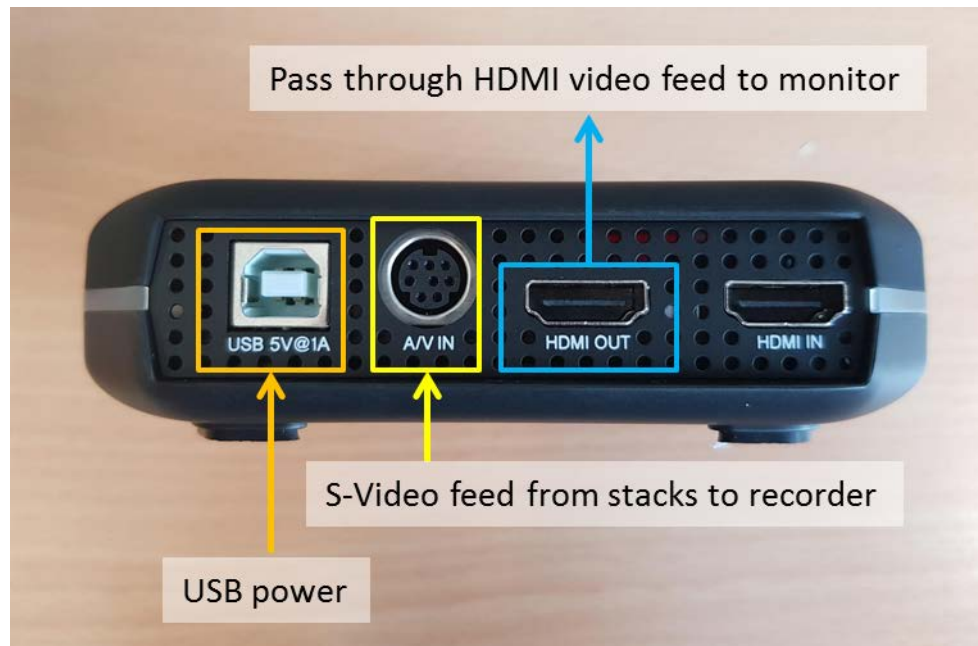


Using cables arrangements A/B, plug the RGB cables into the monitor and S-video end to the recorder.*

Method 2 for stacks with RGB/YP_bP_r outputs and monitors with DVI input

Video feed: Stacks→Recorder→Monitor





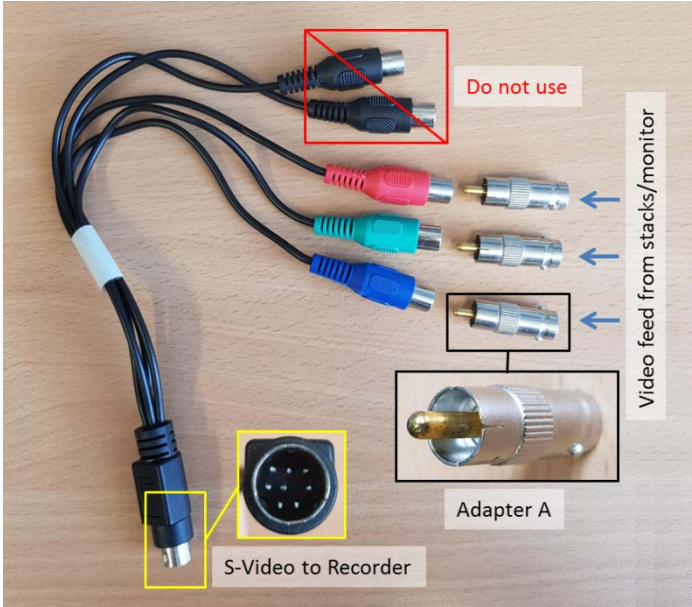
Take RGB video feed from stack directly (instead of from monitor) and convert to S-Video using the cable set up from cable arrangement A/B.*

Plug the S-video plug into the recorder.

Using a HDMI-DVI cable, connect the HDMI end to HDMI OUT and connect DVI end to the monitor. This will output the video feed from the recorder to the monitor.

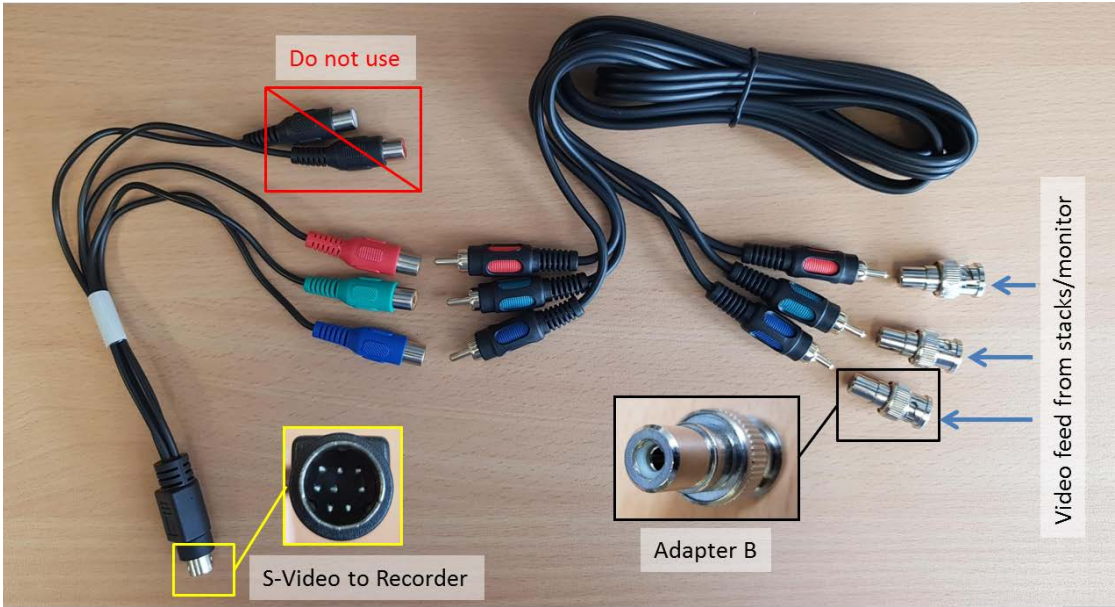
Note: You may need to change monitor settings to display DVI input

Cable Arrangement A



Note: Adapter A = RCA male to BNC female adapter

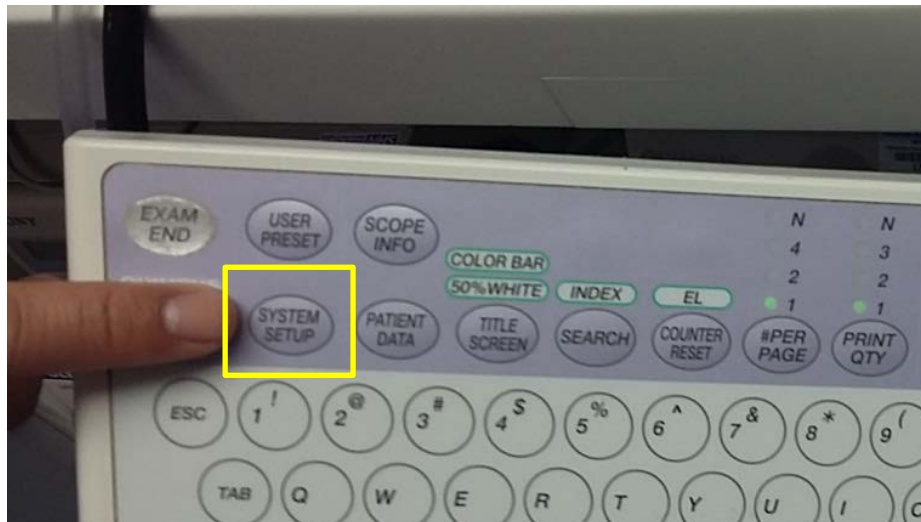
Cable Arrangement B



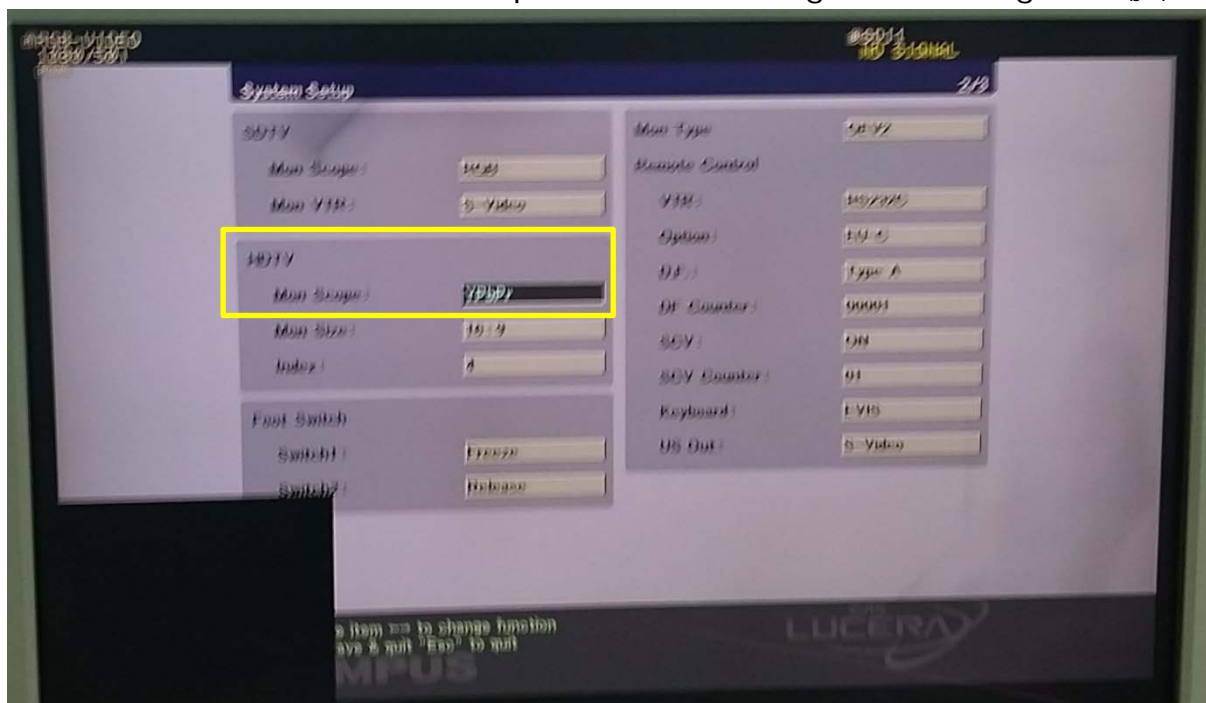
Note: Adapter B = BNC male to RCA female adapter

* If the stack is outputting a RGBSync signal, the video recorded may be bright pink even though video feed on monitor looks fine. Please ensure the stack is outputting a YP_bP_r signal.

To change the video output setting for Olympus 260 models, go to system settings (there may be a "System setup" button on your stack's keyboard).



Use the arrows to navigate to the second page of settings. Under the HDTV section, select Mon Scope: RGB and change this setting to YP_bP_r.



Exit the system setup menu and the video feed should now display correctly.

4 Trouble shooting

The PVR box will light up around its edge. Different coloured lights have different meanings.

- Solid green: Ready to record
- Solid red: Recording
- Flashing red: No USB drive (this can also mean the encrypted memory stick is not unlocked)
- Flashing blue: No video input

There can be a short delay in the changing of colours (~5 seconds) when making any changes to the equipment i.e. unlocking the memory stick.

Some USB ports do not provide enough power (this will be rare), if this is the case please plug in both red and black USB plugs or plug the red USB plug into a phone charger (see point 4 of equipment set up).

Unlocking the encrypted USB memory stick

1. Press the key button
2. Enter the passcode (11223344)
3. Press the key button again
4. The green unlock light will light up and this means the memory stick can be used.

If problems still persist, please feel free to give the PROFILE trial coordinators at 01223 254 666.