British Judo CARE System Manual

1.   Introduction

The below guide is intended to provide a basic overview of the setup process for the current IJF CARE system software and hardware available in the UK. As there are currently several sources for this equipment, some connection methods may slightly vary.

This guide will outline the full connection of equipment available from British Judo and the Northern Ireland Judo Federation. It is recommended that if you loan a CARE system for an event that it be set up and tested prior to use on competition day to allow time for troubleshooting.

Any technical questions are welcome and can be directed to Paul Grady (paulgenkijudo@gmail.com)

2.   Components

System Requirements (per mat) are listed below. When borrowing a system please ensure you have enough cable length to cover your event's mat area, and sufficient power cables to reach each mat table and desired camera position.

- Laptop loaded with IJF CARE software
- Camera (with HDMI output)
- Camera tripod
- Camera Power cable (either USB to mini USB or a USB extension)
- Blackmagic H.264 capture card
- Blackmagic HDMI to SDI micro converter
- USB to mini-USB x 2 (if used to power the camera)
- USB to micro-USB
- USB power socket x 2
- Mini HDMI to HDMI cable OR micro HDMI to HDMI cable depending on the camera
- SDI cable
- Power cables to both judge table and desired camera location

Laptop loaded with
IJF CARE software

Camera (with HDMI output) both NIJF and BJA
camera options shown above

Camera tripod

Camera power cable
(mini USB to USB)

OR

USB extension
cable

Blackmagic H.264 video
capture unit

Blackmagic H.264
power supply

mini USB to USB cable

Blackmagic HDMI to SDI micro converter unit

Micro converter power (USB to micro-USB)
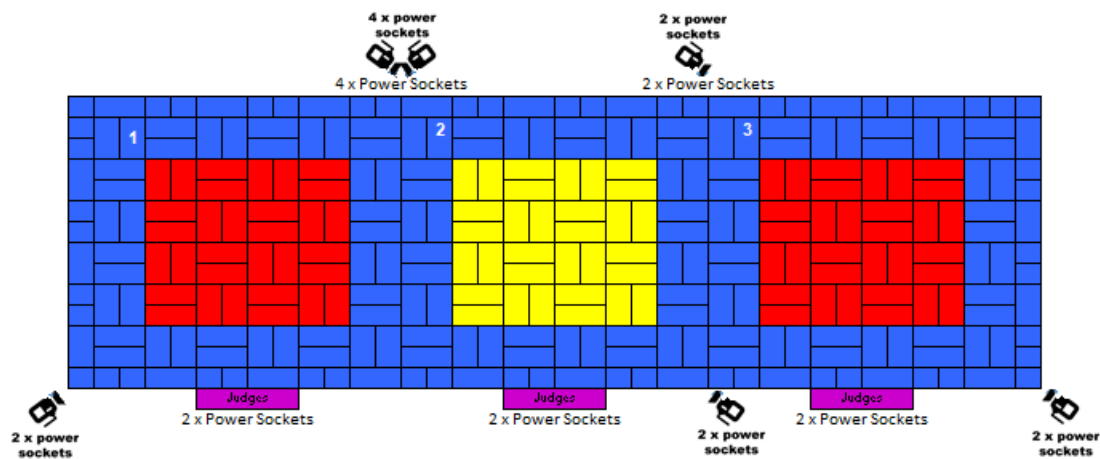

USB plug adapter

Mini HDMI to HDMI cable   OR   Micro HDMI to HDMI cable

SDI video cable

3. Position of Cameras, Judges & Power

When using one CARE system per contest area it is preferable to locate the camera on the opposite corner from the table judges, so as to allow for an alternative angle of scrutiny. Hall size, number of contest areas, length of cable and availability of power sockets may limit camera position. Below is an example showing an ideal set up for a 3 mat competition with locations of required power sockets.

The power sockets at each mat table noted are for CARE system requirements only. If you are using powered scoreboards or a combination of laptops / screens additional sockets will be required for these devices.

Cable running from the camera locations to each table must not run under the tatami, as this will both damage the cable and will create a raised area under the mats.

4.   Camera Setup

There are two different models of cameras provided with CARE systems from the BJA and the NIJF. Connection of both is explained below and differences explained.

BJA Sony Camera
1) Remove lens cap and attach camera base to tripod base plate by screwing onto the base of the camera body (pictured).

2) Attach USB extension cable to the camera (handle side, pictured) and connect to a USB plug adapter.

3) Attach micro HDMI to HDMI cable to the camera side body behind the view finder flap (pictured).

NIJF Orpro Camera

1) Remove both caps on the wide angle lens and remove lens cover on the camera. Screw external lens to the camera body (pictured).

2) Attach camera body to tripod base plate as pictured above.

3) Attach mini USB to USB cable to the power input port on the camera (pictured).

4) Power up the camera and press the DISP button inside the view finder flap until the display shows no additional information. This will ensure a clear feed to the laptop display.

5) Connect the mini HDMI to HDMI cable to the camera (pictured). The display on the camera will go blank, this is NOT a fault.

Micro converter connection
1) Connect the HDMI cable from the camera to the HDMI IN on the micro converter.
2) Connect a micro USB to USB cable to the power input on the micro converter and use a USB power adapter to power the unit.
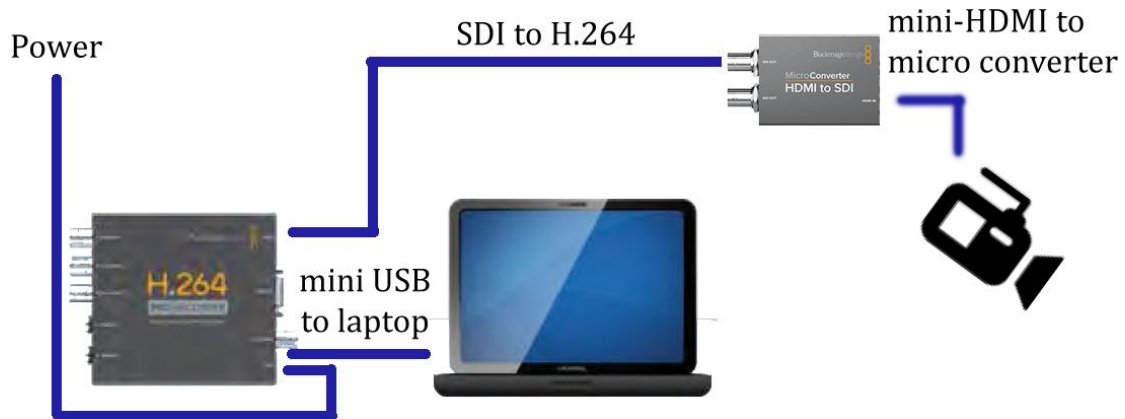3) Connect SDI cable to micro converter and run cable to the judge table position as pictured in section 3.

5. **Capture Card & Laptop Setup**

Connect the laptop and capture card as below, ensuring the system is connected before opening the IJF CARE software.

1) Connect laptop to it's power supply.
2) Connect H.264 capture card to it's power supply (left connection port pictured below).
3) Connect mini-USB cable from the capture card to USB port on the laptop (2nd from left connection port pictured below).
4) Connect SDI video cable from the camera position to SDI port on the capture card (3rd from left connection port pictured below).
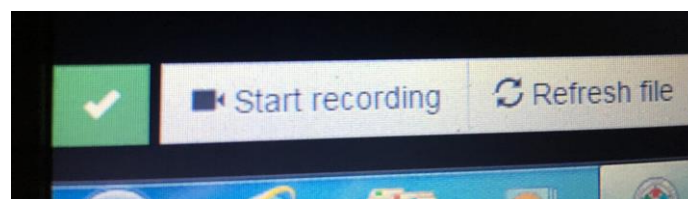
Below is a diagram showing signal connection from camera to laptop.

Power   SDI to H.264   mini-HDMI to micro converter

H.264

mini USB to laptop

6. Software Setup, Use & Troubleshooting

1) Once all hardware has been connected, start the laptop and open the desktop icon 'IJF CARE".

2) The software will display a green tick in the bottom left corner once it has acknowledged all hardware and available space on the computer hard drive.

3) Click "Start Recording" to begin recording footage. A short delay will follow as the camera records the first few seconds and then will display a delayed view of the camera.
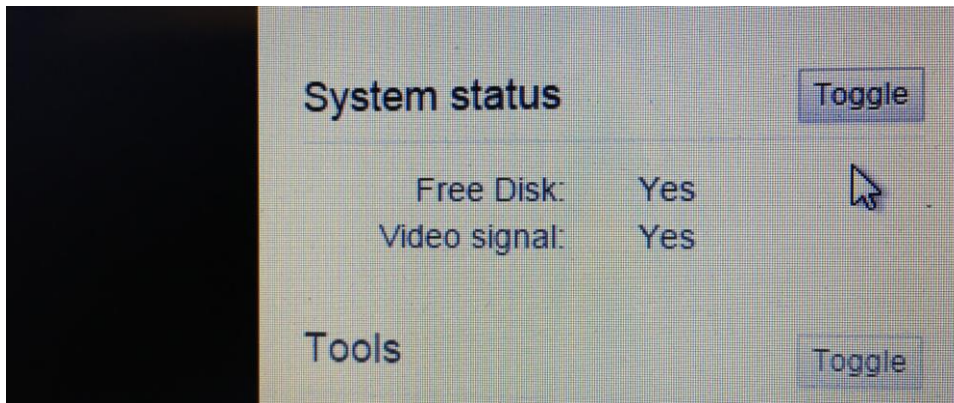

4) To review footage, use the mouse or trackpad on the laptop to rewind using the << button in the software. Pause, zoom and frame-by-frame viewing are also possible. It is advisable that judges take some time to familiarise themselves with the operation of the software prior to the first contest of the event.

Troubleshooting

In the event of a red cross in the bottom left box, follow the following troubleshooting instructions:

1) Click the "<" symbol at the top right of the software screen.
2) Click "Toggle" next to "System Status".
3) Both "Free Disk" and "Video Signal" should display "Yes" as pictured below for operation.

Free Disk = No
If free disk indicates "No", the software is telling us that there is no free space to record more footage. Check there is available disk space on your desired drive. This can be a USB pen drive or external hard drive if necessary.

Video signal = No
If video signal indicates "No", the software is telling us that it cannot see the feed from the camera. Check all physical connections are plugged in correctly and securely, that the camera, micro converter and capture card all have power supplied and that the camera is switched on. This may require you to turn the laptop off and on again. If the problem persists there may be a faulty cable in use.

7.   Technical Support & Training

It is strongly advised that someone is allocated to technical support for any event making use of the CARE system to allow for assistance with setup and any operational issues through your event. Technical support may be available from British Judo on borrowing equipment.

Training on the setup of hardware and software is available from British Judo (on site at National Events during setup), the Northern Ireland Judo Federation and Clyde Judo Club in Scotland.