

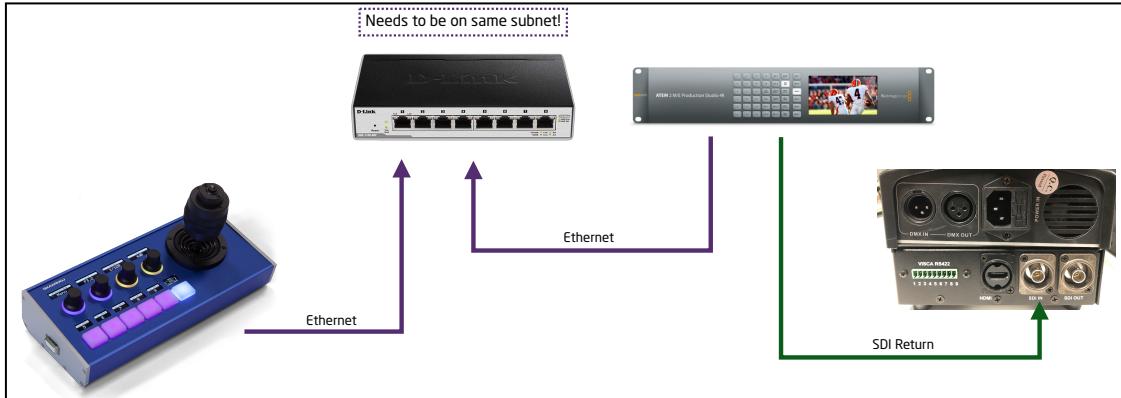
Device: RUSHWORKS PTX + BMD Micro Studio Camera 4K Combination



Introduction

Our controllers work with the RUSHWORKS PTX1 and the Blackmagic Micro Studio Camera 4K combination. This setup can be controlled two ways:

- Via the BMD CamCtrl Device Core (using the Blackmagic Arduino 3G-SDI Shield) where the control signal originates from the integrated Arduino Shield. This requires a controller fitted with the "SDI" option.
- Via the ATEM Device Core where the control signal originates from the BMD ATEM Switcher

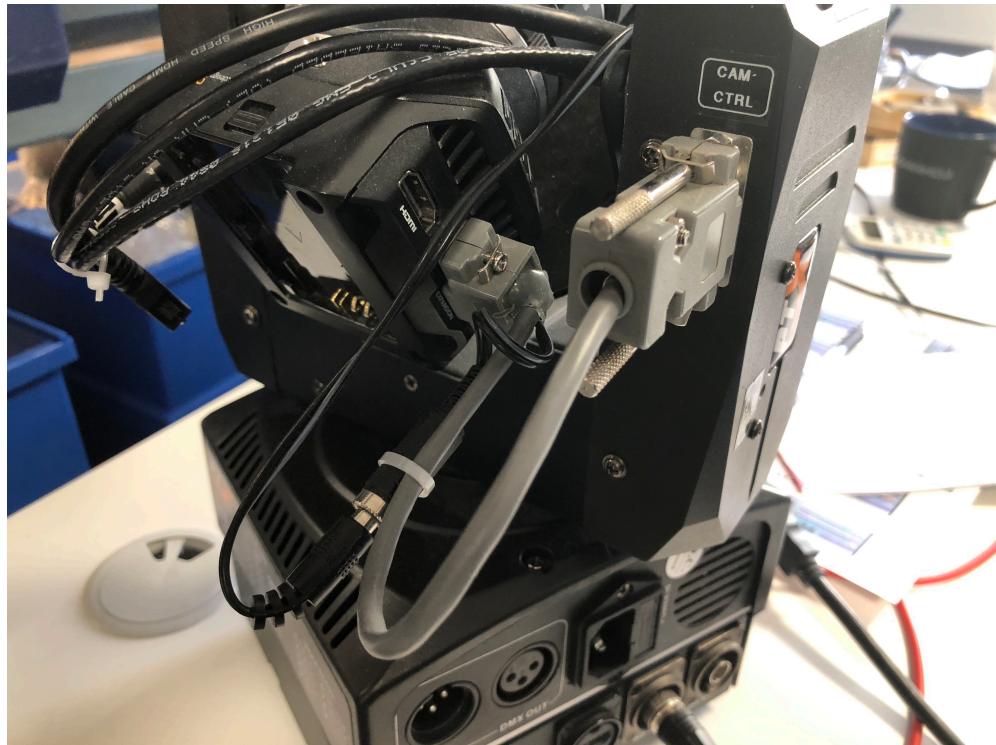


SKAARHOJ DEVICE CORES

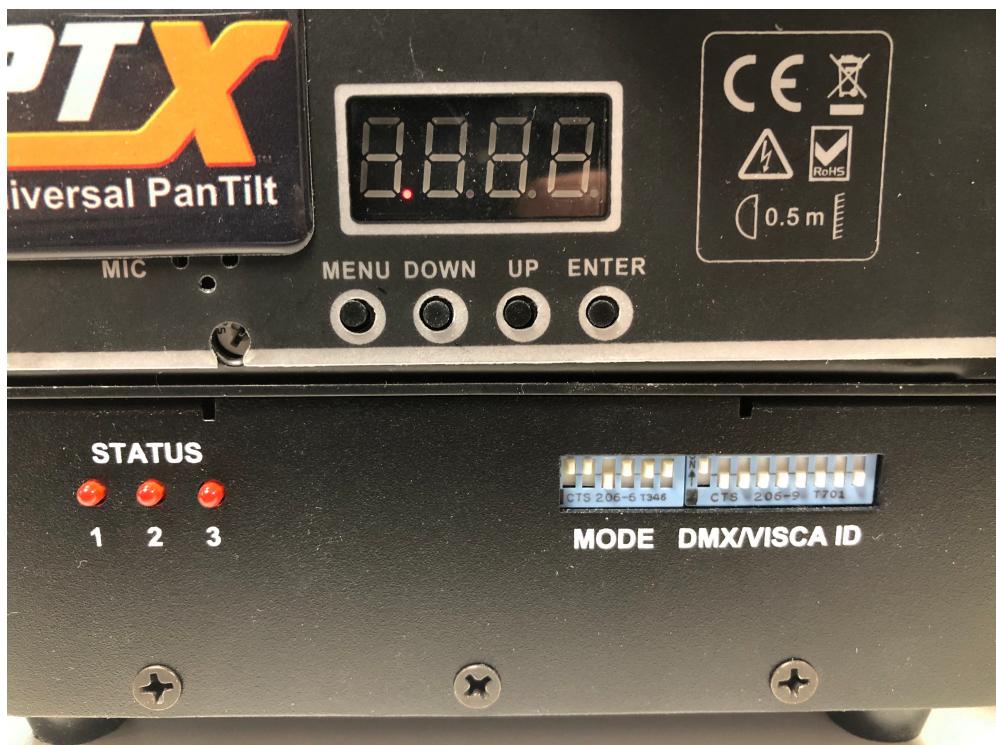
This is the breakout cable used from the Micro Studio Camera 4K to the Rushworks head.

The signal path is as follows

- SDI signal embedded with ancillary data (control data for the camera + head) originating from SKAARHOJ controller or ATEM are fed into the SDI IN on the Rushworks head (an onwards to the camera)
- A breakout cable from the Expansion port on the camera are fed into the "CAM CTRL" plug on the Rushworks head



This is how the jumper settings looks like in the setup we have been testing with.



Zoom on the Micro Studio Camera 4K

If a servo zoom lens is put on the camera zoom can be controlled from our controllers as well. See the official Blackmagic note to find a compatible lens:

<https://www.blackmagicdesign.com/support/faq/59009>

Blackmagic Studio and Micro Studio Camera 4K Servo... Blackmagicdesign □□

[Which active MFT lenses are zoom servo controllable from the Blackmagic Studio Cameras and Blackmagic Micro Studio Camera 4K?](#) ▾

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Small Demo

See a small demo of the PTZ Fly with SDI + Rushworks in action here:

https://github.com/kasperskaarhoj/SKAARHOJ-Open-Engineering/raw/master/Manuals/Files/RUSHWORKS_BMD_MicroStudioCamera4K_Demo.MOV



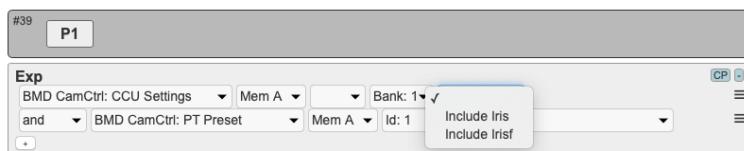
Controlling multiple cameras/PTX Heads

This is possible. The SDI return feed to the camera needs to be distributed from either the SKAARHOJ controller with SDI option or the ATEM. On the BMD camera you need to select proper camera ID.

Notice about saving/recalling presets

When saving/recalling a preset for a BMD camera/PTX head combination one would typically utilize two actions. One saving "CCU Settings" such as white balance, color adjustments and so forth and another action saving pan/tilt presets.

For CCU settings iris can be included or excluded for the preset.



Please notice *only* a total of 6 banks/IDs are available to save CCU settings/PT Presets. Not per camera but **in total**. The reason being is that the actions was originally developed for the RCP which as designed to control just one camera at a time.



Please also observe zoom and focus are not included in either the CCU Settings or PT Presets

