

BUILDING AN OB FROM SCRATCH

By Jamie & Dan

BASIC COMPONENTS

- Streaming PC
 - Sends the stream to MCR
 - Adds graphical overlay (scoreboard)
- Video Switcher
 - It switches between cameras
- Router & switch
 - Creates a private network in the OB kit so we can do networking shenanigans and gives an internet connection to everything
- Audio Interface
 - Attaches the radio's audio
- Power distribution
 - I reckon you can guess this one boss

CONNECTING CAMERAS

- SDI or HDMI
- SDI is used for long cable runs, HDMI only for very short runs
- If a camera only has HDMI out, you will need to convert it to SDI using a converter
- If using Y-OB3, the ATEM only has HDMI in so you will need to convert all inputs back from SDI to HDMI



Left: SDI
Right: HDMI



"HARDWARE SWITCHERS" (OOH ERR)

- Y-OB1, Y-OB2, Y-OB3
- These OB kits use ATEM hardware switchers
- A separate machine whose role is just to switch cameras so they're good at it right? Plot twist no
- The biggest pain with them is networking (notworking)



"SOFTWARE SWITCHERS"

- Y-OB0, Y-OB5
- They use decklinks
- SDI ports are on the back of the stream PC
- Each camera is added as an individual source in OBS
 - Add Video Capture Device or Blackmagic Device to sources
 - Set device to e.g. DeckLink 8K Pro (4)
 - Repeat for all inputs
 - This should already be done for you
- Vision mixer uses a stream deck which connects to OBS for switching
- Multiview from OBS

STREAM DECKS

- Customisable macro pads
- We can program them to do pretty much anything
- We use them for vision mixers to cut between cameras
- This should already be configured for you
- We use BitFocus Companion to program them



GETTING AN INTERNET CONNECTION

- Each OB kit has a router
- Find an ethernet port on the wall nearby, run a cable and plug from the port on the wall into the router
- You should automatically get an internet connection
- Plug in your ethernet cable before turning everything on

GOING LIVE

- Stream keys will be already configured in OBS/vMix
- All you will need to do is hit start streaming which will send it to MCR
- Once you are ready, let MCR know
 - Put a message in #2024-mcr
 - Say what fixture you are streaming, what OB kit you are using and your location
- They will check your stream is OK
- Once everything is OK, MCR will put your stream live on YouTube and Roses Live

ENDING THE STREAM

- Once the stream has finished, go to holding card
- Let MCR know you are finished
 - Put a message in #2024-mcr as before
- They will take you off air