

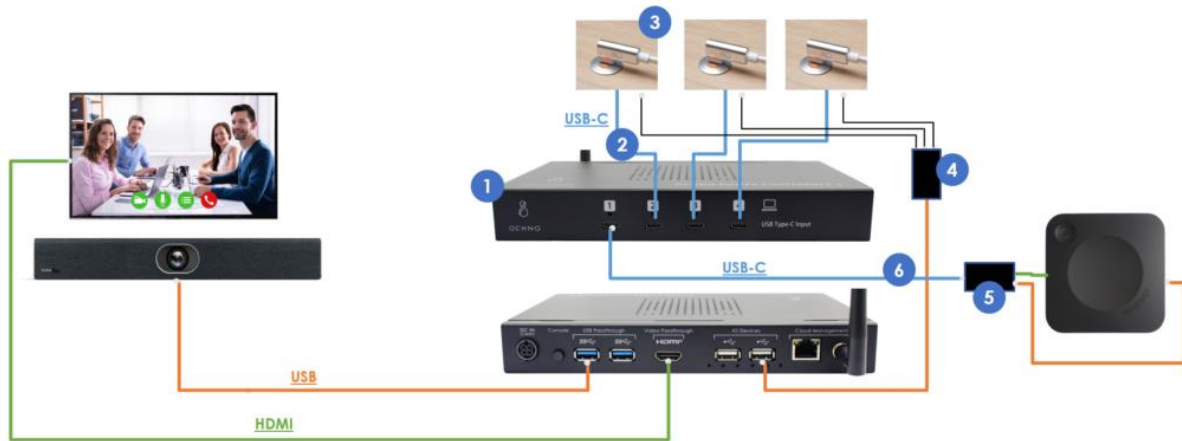
Barco ClickShare CX Reference Design

Barco ClickShare CX-20/30/50 can be combined with Ochno Power Conference 3 to provide the meeting room with both wireless and wired connectivity to video conference system.

There are 3 types of configurations that can be used for this configuration.

- BYOD-only and with Ochno LED Socket
- BYOD-only and with pull-out USB-C cable
- MTR / BYOD-switching with pull-out USB-C cable and switch button

BYOD-only and with Ochno LED Socket



In this setup, the CX-device is active per default, connected via Ochno Power Conference to TV and video conference devices. The CX wireless dongles can be used as usual.

When the user connects a laptop to the USB-C port, the device starts charging, but nothing else.

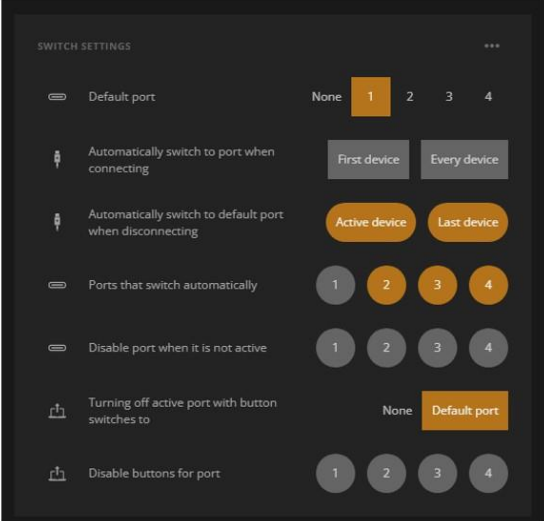
When the user presses a button the USB-C port it activates and video and conference devices are switches to the laptop.

When the user either presses the Ochno LED button again or removes the USB-C connection, the OPC3 switches automatically back to the port that connects the Barco CX and it becomes active again.

#	SKU	Product
1	O-PC-3	Ochno Power Conference 3
2	O-SWD-100-2	Ochno LED Socket, aluminium color
3	O-USBG2-70-2	O-USBG2-70-2
4	O-SBC-200-1	Adapter for Ochno LED Socket
5	O-HDMI-TO-USBC-2	HDMI+USB-A to USB-C adapter
6	O-USBG2-200-3	USB-C to C cable, 2m, Black

Configuration

For the topology above, use Ochno Management Console or Ochno Operated to configure the system like this:



- ← Default port is active when system starts up. CX connected to this port
- ← No auto-switching when inserting USB-C cable
- ← When USB-C cable / laptop disconnects, the system switches to CX
- ← Ports that should apply the above auto-switching

- ← When user disables video, revert back to CX port

BYOD-only and with pull-out USB-C cable



In this setup, the CX-device is active per default, connected via Ochno Power Conference to TV and video conference devices. The CX wireless dongles can be used as usual.

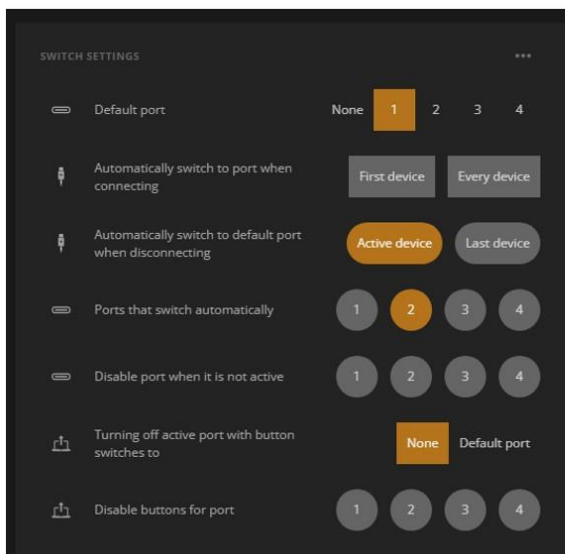
When the user connects a laptop using the USB-C cable, the OPC3 will auto-switch over to that port.

When the user removes the USB-C connection, the OPC3 switches automatically back to the port that connects the Barco CX and it becomes active again.

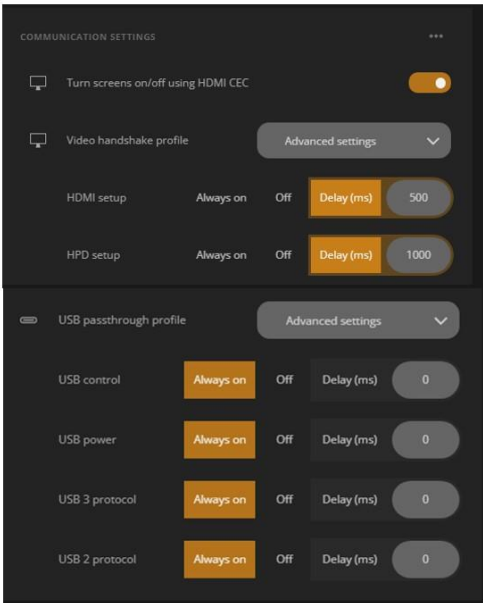
#	SKU	Product
1	O-PC-3	Ochno Power Conference 3
2	O-USBG2-200-3	HDMI+USB-A to USB-C adapter
3	O-HDMI-TO-USBC-2	USB-C to C cable, 2m, Black

OPC3 Configuration

For the topology above, use Ochno Management Console or Ochno Operated to configure the system like this:



- ← Default port is active when system starts up. CX connected to this port
- ← No auto-switching when inserting USB-C cable
- ← When USB-C cable / laptop disconnects, the system switches to CX
- ← Ports that should apply the above auto-switching



← Enabled HDMI CEC if you have a TV that doesn't start on signal

← Configure HDMI 5V and Hot-plug-detect delays to ensure CX wakes up when USB-C port is activated

← Depending on what USB devices is connected these settings might change, but start with "Always On" on all settings

Barco CX Configuration

Some information regarding Barco configuration as well. Ensure that the CX has the latest firmware installed. CEC can be turned off since it is the OPC3 which is interfacing the TV. Hard-code resolution to 1920x1080. The integration supports both screensaver and ECO so it is recommended to use those.

Output

Resolution: 1920x1080

Enable CEC

Enable audio

Screensaver

Show screensaver after (minutes): Never 1 5 10 15 30 45 60

Energy Savers

Standby after (minutes): Never 1 5 10 15 30 45 60

ECO mode

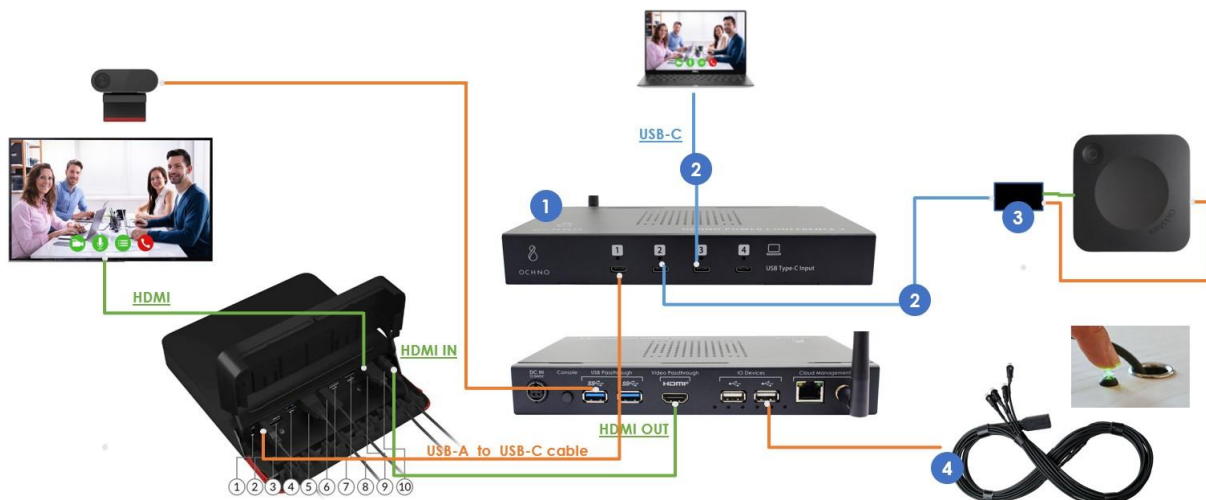
When the Base Unit enters ECO standby mode, it will disable the HDMI output signal. The Base Unit's LEDs will be breathing white. The Base Unit will activate the output with one of the following actions:

- Button or app connecting with the Base Unit
- Press the standby button on the Base Unit
- Pairing a Button on the Base Unit's USB port
- Plugging in an HDMI display
- When a CEC event is received

Standby mode

When the Base Unit goes in Deep standby mode, it will shut down all processes, including the Wi-Fi access point and LAN connection. The Base Unit's LEDs will be dark to indicate this standby mode. The Base Unit will wake up only when the standby button on the Base Unit is pressed.

MTR / BYOD-switching with pull-out USB-C cable and switch button



In this setup, both the CX wireless connection and the wired USB-C connection can be used to both run a MTR-hosted meeting or run a meeting from the laptop (BYOD).

In MTR-mode, the wireless or wired connection will ingest the video from the laptop into the Teams meeting hosted by the MTR system. In BYOD-mode, the USB video conference devices will be forwarded to the laptop instead, allowing for running a local VC client like Google Meet or Zoom.

Switching between CX and USB-C cable is done automatically. Switching between MTR-mode and BYOD-mode is done using a single LED-button, with Light On = MTR mode and Light Off = BYOD mode.

#	SKU	Product
1	O-PC-3	Ochno Power Conference 3
2	O-USBG2-200-3	USB-C to C cable, 2m, Black
3	O-HDMI-TO-USBC-2	HDMI+USB-A to USB-C adapter
4	O-PC-LS-1	LED Button Cable