The Cobham Broadcast Camera Control System offers next-generation features in a rugged, easy to use ‘plug and play’ system architecture. Designed in close consultation with experienced operators, many of the undesirable features present on ‘first generation’ systems have been overcome.

The system interfaces with camera manufacturers standard control panels (OCPs), giving the operator complete familiarity with standard cabled systems and eliminating the need to rig separate OCP’s when RF cameras are required.

Available RF spectrum is becoming increasingly congested and expensive. Whereas conventional systems require a single UHF channel per camera, the Cobham system enables control of up to four cameras per channel, minimising operating costs and enabling users to control multiple RF cameras at large events. Flexibility is further enhanced by the wide bandwidth of the system. Operating in the UHF band 403-473MHz, users have access to more available channels without the need to change hardware.

Conventional systems have a single rack-mount TX unit which directly outputs the RF signal. Not only is it un-desirable to have high power RF signals present in the OB truck, the antenna must be rigged close to the unit to avoid significant cable-loss. In many events, this may mean the antenna is not mounted in the optimal location, giving poor system performance, or requiring higher output power than would normally be required, which can increase the RF noise-floor and degrade the performance of other RF systems. The Cobham system utilises a two-box solution – an indoor unit (IDU) interfaces with the OB struck systems and an outdoor unit (ODU) to transmit the RF signal. The units are connected by a single RS422 data circuit, carried on a conventional twisted-pair audio cable. Distances up to 3Km are possible with this system.

The camera unit is small and lightweight, using the same form-factor as the Cobham H.264 TX. Utilising a separate unit gives greater mounting flexibility than conventional systems, where the camera control RX is often integrated into the Video TX.

Features:
- Control of all major camera functions via standard camera manufacturers OCP
- Control of up to 4 cameras via single UHF channel
- Green and Red tally lights
- Separate indoor (IDU) and outdoor (ODU) units enable flexible TX antenna location via standard twisted-pair audio cable (~3Km)
- Wide frequency range 403-473MHz (other bands available on request)
- TX power 100mW/200mW/500mW/1W (user select)
Specication:

**Camera Unit**
- RX RF In: BNC-F
- Control Data Out: Lemo 0B
- Power In: 12-16VDC Lemo 0B
- Power Out (loop-thru): Lemo 0B

**Indoor Unit (IDU)**
- OCP Inputs 1 to 4: D9F (Sony optional)
- Green Tally Inputs 1-4: 8-pin DIN
- Red Tally Inputs 1-4: 8-pin DIN
- Data Out to ODU: XLR3-M
- Power In 12-16VDC: XLR4-M

**Outdoor Unit (ODU)**
- RF Out: BNC-F
- Data Input from IDU: XLR3-M
- Power In 12-16VDC: XLR4-M

**RF**
- Frequency: 403-473MHz
- Channel BW: 12.5/20/25kHz
- Modulation: 4PSK, GMSK
- TX Power: 100/200/500/1000mW
- RX Sensitivity: -114dBm @ 12.5kHz
  -111dBm @ 25kHz

**Data**
- TX Data: 19200bps @ 25kHz BW
  9600bps @ 12.5kHz
- Control Data (IDU-ODU): 300-38400bps
- IDU-ODU Interface: RS485 via twisted pair audio cable

**Control**
- Camera Unit: Front Panel OLED display with navigation keys
- IDU: Front Panel OLED display with navigation keys
  Web-browser interface (optional)
- ODU: Controlled via IDU

**Physical**
- Camera Unit: W 80mm, D 130mm, H 30mm
  400g
- IDU: W 220mm, D 358mm, H 44mm (1RU)
  TBC
- ODU: W 190mm, L 100mm, H 30mm
  600g

**Environment**
- Temperature Range: -25 to +55 deg C (Camera Unit & ODU)
- Sealing: Splash-proof (Camera Unit)
  IP67 (ODU)

**Product Codes:**
- CCCAM-x-403473: Camera Unit, RF in, Control data out cable + antenna
- CCIDU-x: Indoor Unit, 1x camera manufacturer, 1x OCP interface
- CCODU-403473: Outdoor unit + antenna

**Options**
- CCCAM-xUP: Add additional camera manufacturer to Cam unit
- CCIDU-xUP: Add additional camera manufacturer to IDU
- CCIDU-OCPUP: Add additional OCP input to IDU
- CCIDU-SCONUP: Replace IDU D9-F connectors with circular OCP-type

**Supplied Accessories**
- UHF antenna for Camera Unit
- DC Output cable (to Cobham TX) for Camera Unit
- Data output cable to camera for Camera Unit
- AC Power Supply for IDU
- Tally break-out cable for IDU
- UHF antenna for ODU

**Optional Accessories**
- PSU-12EXT: External (IP67) PSU for ODU