ACS SMARThead™

Exclusive to ACS, the SMARThead™ is a highly versatile compact remote head, created to provide a comprehensive robotic camera solution for high quality broadcast applications delivering in HD and UHD.

Designed and developed in-house, the widely acclaimed ACS SMARThead™ remote head family includes a range of advanced features that are key to an efficient workflow in today's production environment. With an array of mounting hardware available, SMARThead™ is fast to rig, features diverse control functions and is highly configurable for different applications.

SMARThead™ primarily makes use of the Sony HDC-P50 (UHD/HDR/HFR) and Sony HDC-P1 (HD) broadcast standard brick style cameras. This considerably reduces the length and weight versus standard hand held cameras and therefore provides a much more compact 2/3" HD/UHD remote solution. In addition SMARThead™ supports Canon and Fujinon serial digital lens protocols and automatically identifies lens make and model.

This unique remote head solution is optimised for multi-camera remote use with facilities such as a dedicated video router that is control integrated so that operator preview from multiple cameras can be managed efficiently.

SMARThead™ with 40x lens

When combined with the large lens cradle adaptor, SMARThead™ can carry a Canon HJ40 with excellent performance across the full focal length of the lens. Additional extensions can also be fitted to the yoke to achieve full look down in 'hanging' mode.

SMARThead™ features include:

*   Single operator and shared multi-camera control capability
*   Programmable shot box for repeat moves and positions
*   Microprocessor controlled direct drive motors ensure excellent control performance

*   Single SMPTE fibre cable per camera for video/power and control with additional options such as audio transmission and return video
*   Highly configurable production rack housing base stations, routers and power with various outputs available
*   Utilises standard camera remote control panels (RCP)

The latest addition to the SMARThead™ family is the SMARThead3™. Created to fulfill the growing demand for a compact remote head system SMARThead3™ is capable of handling a much wider range of camera and lens combinations whilst maintaining the range of control features, reliability and high performance standards associated with ACS SMARThead™ technology.

SMARThead™ with box lens

SMARThead3™ key features include:

*   Highly versatile and capable of handling a varied range of remote head applications e.g Beautycams, 2/3" box zoom lenses (Canon 25x, 86x, 100x), large lens format digital film cameras (e.g Sony F55)
*   Environmentally sealed for protection in adverse weather conditions
*   Compact, low profile design minimises space requirements and potential line of sight issues
*   Remote switching of lens features e.g. lens doubler, lens stabiliser etc
*   Extremely high control performance even when fully zoomed in with a 100x lens (with doubler)

SMARThead™ Additional features

ACS has developed a SMPTE powered fibre adapter that provides SMARThead™ power, data control and all camera services such as HD-SDI transport and gen lock. This can operate with all SMARThead™ systems including the large lens option and represents a single cable solution. The consolidated cabling infrastructure improves reliability and reduces rig time and installation costs onsite.

SMARThead™ systems can also provide highly accurate positioning data for custom graphics AR applications and the latest generation desks feature IP control capability for remote control over Ethernet networks (remote production).

Camera Types
• Standard SMARThead™ with Sony HDC-P50 or HDC -P1 box camera and full servo Fujinon or Canon HD lenses
• Alternative options are available on request (subject to application) including Sony HKC-T adapters for HDC-2500 as well as Ikegami HDL-51 and GV LDX C86 brick cameras. Further custom types inlcude Sony F55 and Alexa with PL mount remote servo lenses e.g. Fuji Cabrio series
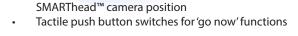
Control Desk
• SMARThead™ control desk represents a significant step forward in multi-camera control
• High quality force sensitive joysticks employed for pan/tilt functions
• Force sensor used in a unique arrangement for zoom control
• Sophisticated active matrix OLED touch screen display incorporated as the primary user interface for set-up
• Tactile push button switches for 'go now' functions
• All traditional controls associated with remote head desks provided in a manner familiar to operators
• High performance Pan Bar control system option utilising a Vinten 430i head, Canon lens demands, OLED display and SMPTE fibre solution

Fibre Transmission
• Highly flexible and versatile powered fibre transmission system utilises standard SMPTE 311 cabling for easy integration into OB or fly-away applications
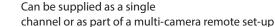• Single cable solution provides: head power, control data, camera power, RCP data, HD SDI transport, genlock, GPI/O, 4 channels of 24bit EBU/AES analogue (bi-directional) audio and remote head/camera power control

• Case can be located up to 15 metres away from the SMARThead™ camera position
• Tactile push button switches for 'go now' functions

CCU and RCP
• Each channel offers camera control via fully featured RCP, multiple HD SDI outputs, down converted SDI and composite outputs, genlock inputs and distribution
• Can be supplied as a single channel or as part of a multi-camera remote set-up
• Fibre base stations configured as full function camera CCU's, integrating the SMARThead™ functions and offering industry standard breakouts (XLR-3 & 26 way multi) for ancillary functions such as audio & data camera power control

Multi-System Production Base Stations
• Base stations available as standalone 3U half width racks or in multi-camera systems 4 channels are racked in 19" flight cased sleeves
• Additional built in features such as a dedicated HD switcher for handling operator previews synced and set up via the SMARThead™ desks
• Configurable Evertz Multi-Viewer, internal mains distribution, tail-board style BNC patch panel, utility spaces, extensive audio and data connectivity
• SMPTE power provided via Telecast HDX
• Can be positioned individually or as quad-racks independently of the base stations
• Offers real versatility in cable planning for all types of temporary installation offering industry

Mounting Hardware
• A wide range of mounting hardware that includes self supporting adjustable stands with variety of bases and column heights from 500mm to 4 metres are available
• Many other mounting options exist including a circular heavy duty base plate that permits very close to the ground/ floor positions to be achieved with a very small footprint