



## 3D Specialist Cameras

Providing facilities for the 3D coverage of sport, entertainment and live music events our 3D Specialist camera inventory includes:



### 3D Tracking Vehicle

The fully integrated solution consists of a STAB-C Compact stabilised mount rigged on to a Unimount Arm attached to the roof rack of a specially modified Landrover Discovery Vehicle selected for its performance and reliability in a range of terrain and applications. Incorporated into the STAB-C Compact is an ET Pulsar mirror rig in an under/through beam splitter configuration fitted with 2x Sony P1 cameras and Canon HJ22 lens, a Sony MPE200 3D processor is also supplied for real time adjustments as required with recording onboard using a Sony SRW-1 HDCAM SR recorder deck, although a 3D RF link could be used for live transmission purposes. A crew of three operate from within, including a driver, stereographer and stabilised mount operator.



### 3D Flown Railcam

Making its debut at the Rugby Super League Grand Final 2011 at Old Trafford, the 100m flown railcam provided stunning tracking shots of the action below. The left eye output was also utilised by the HD production team to provide a simultaneous 2D feed ensuring maximum utilisation and value to the host broadcaster, SKY Sports.

The 3D Flown Railcam camera rig consists of a STAB-C Compact stabilised mount in 'hanging' mode and fitted with 2x Sony P1 cameras and Canon HJ22 lenses mounted on an ET pulsar rig in side by side configuration. A Telecast Copperhead 3G fibre transmission system is also provided by ACS for picture and data transmission to and from the OB as well as a Sony MPE200 processor situated at the OB for real time correction. Interaxial 85mm-180mm.



### 3D Aerial Filming

Internationally recognised as a leading provider of aerial filming services, ACS has undertaken a number of 3D helicopter shoots to date. The aerial 3D camera package consists of a STAB-C Compact stabilised mount attached to nose mount brackets which are specially designed for AS350 or AS355 type helicopters. Depending on the filming requirement and required format, the paired camera and lens payload can be either fixed direct to the STAB-C Compact or on to an ET Pulsar rig in side by side configuration to provide real time IAD and convergence adjustments whilst in the air. For direct to TV 3D aerial filming requirements, ACS would recommend the use of 2x Sony P1 cameras and Canon HJ22 lenses supplied with a Sony SRW-1 HDCAM SR portable recorder and Sony MPE200 3D processor.



### ACS Remora

A flexible and cost effective means to provide a simultaneous HD and 3D remote head camera position, the ACS Remora consists of a HD SMARTHead™ fitted with a specially created 3D mount consisting of 2x HD minicams with fixed lenses in a side by side configuration. The system only requires one SMPTE 311 cable to transmit picture and control data (from all 3 cameras) to the OB with the 3D cameras slaved to the Pan & Tilt movement of the 2D camera providing a more dynamic and creative shot than a simple locked off 3D minicam solution. Preset Convergence & Interaxial 20mm – 100mm.



### 3D Railcam

ACS' ground based 3D railcam was first used in 2009, tracking Usain Bolt running 150m in 14.54 seconds down the streets of Manchester. Since then it has been well proven in the field having been deployed on a range of successful live 3D events.

The railcam itself can run up to 120m in length with a maximum speed of 14 m/s. The camera rig fitted to the railcam buggy consists of a STAB-C Compact stabilised mount in 'sitting' mode, fitted with 2x Sony P1 cameras and Canon HJ22 lenses mounted on a ET Pulsar mirror rig in an under/through beam splitter or side by side configuration. A Telecast Copperhead 3G fibre transmission system is also provided by ACS for picture and data transmission to and from the OB as well as a Sony MPE200 processor situated at the OB for real time correction. Interaxial 0mm-90mm.



### ACS Hammerhead

Conceptualised and developed in house, the Hammerhead is a flexible and compact 3D remote pan & tilt minicam solution which provides a motorised IAD and convergence adjustment plate for a pair of HD minicams with fixed lenses mounted on to a SMARTHead™ remote head. For live applications Hammerhead is supplied with a Telecast Copperhead 3G fibre transmission system which requires only a single SMPTE 311 fibre cable for picture transmission, control and head/camera power. A range of grip is available for the Hammerhead including floor mounts and adjustable height stands for maximum flexibility and ease of installation. Hammerhead is perfect for filming applications where space and/or line of sight is limited and a 3D camera angle is desirable. Motorised Convergence & Interaxial 40mm – 120mm.



### 3D Pulsar Rig

For live 3D production requirements, ACS can offer a complete 3D camera package consisting of an ET Pulsar Mirror Rig fitted with 2x Sony P1 cameras and Canon HJ22 lenses, Telecast 3G Copperhead and Sony MPE200 processor. Due to its more compact size the Pulsar Mirror Rig can be easily fitted to various types of medium duty cranes in addition to standard fixed tripod positions. The package is supplied with an ACS technician to ensure seamless integration and support in the live production environment.



### 3D Beautycam

For fixed 3D camera positions, ACS can offer a cost effective high quality 3D camera package consisting of manual adjustment plates attached to a camera tripod and fitted with 2x Sony P1 cameras and Canon HJ22 lenses in side by side configuration. This can be combined with a Telecast 3G Copperhead and Sony MPE200 processor for live applications or alternatively a Sony SRW-1 HDCAM SR for local record. A wide range of manual adjustment can be achieved from 80cm up to 1m ideal for creating a 3D effect for distant objects making it an ideal 3D Beautycam solution.



### 3D Operating Vehicle

As part of the ACS philosophy of full service integration within the outside broadcast environment, the company has a range of specially configured remote head camera OB operating vehicles, the latest of which is fitted with five operating/engineering positions and is 3G/3D capable up to 1080 50P with twin 40x40 routers and 16 way 3D multi-viewer with dual independent outputs. The 3D position consists of a Sony LD 2451 TD 3D monitor and Sony MPE200 and provides a perfect solution for simultaneous HD/3D applications.