



- **Designed to reduce operational costs and integration and set-up times**
- **Compact, lightweight and portable**
- **Consistent performance in extremes of weather**
- **Highly stable smooth motion at high magnification**
- **Integrated lens control - supports all popular makes**
- **IP communication for easy integration into workflows**
- **Simple plug and play functionality - proficiency in minutes**
- **Robust control algorithms ensure jitter free motion**
- **Real-time position data export for virtual graphics etc**
- **Standardised product range - no last minute surprises**
- **External fibre converters for control over long distances**
- **Easy firmware updates over the internet**
- **Controller options - Identical MCC, smart-phone or 3rd party via cortexAPI software library**
- **Simultaneous multi-camera single operator capability**
- **Technical assistance with integration**

Cost saving Our remote heads have been designed to reduce the cost of ownership and increase revenue streams. The fast setup, IP communication, intuitive operation, high reliability and compact design help minimise operational overheads. Precision movement combined with accurate real-time position data export allow use with virtual graphics, augmented reality and target tracking solutions.

Close to the action Their small size and quiet operation combined with precise smooth motion and high payload capacity allow the heads to get up close to the action without intruding. Automatic configuration and simple operation allow any operator to quickly master the controls and fine tune the motion to suit the shot. The built in operator assist features such as smart soft-limits prevent the operator from making mistakes, giving them free rein to be creative.

Plug and play anywhere The IP communication means our heads can be quickly integrated into existing broadcast workflows. This combined with the optional fibre converters and waterproof case make for a versatile product suitable for use in a studio or outside in the elements. Their compact and lightweight design promotes portability, allowing these heads to travel around the world at minimal cost and maximum convenience.

Power and control A range of control options make our heads suitable for live events at any location. The Identical Motion Control Centre (MCC) provides joystick based control with position presets, the multi-camera single operator feature allows one operator to track a target from multiple angles. Smart-phone control is also available and brings a low cost solution for situations not requiring constant motion.

Custom integration Heads can be quickly integrated into existing production set-ups (head control software) through the cortexAPI software library. This allows your engineers to add control of our heads to your own systems quickly and easily, reducing your development costs and time to market.



DTA REMOTE HEAD

For the more demanding applications where power and agility are required, the DTA head can easily keep up with the fastest of motorsports events. The intuitive control customisations allow the operator to quickly harness the head's reflexes, letting them capture close-up fast paced action with ease.



- Designed to deliver high speed and acceleration for tracking fast moving targets in close proximity
- Slip-rings for complete freedom of movement
- High payload to carry the larger broadcast quality cameras, lenses and tele-prompters
- Detachable camera arm for ease of camera mounting
- Accepts bolt-on modules for additional features that can be made to order



DCS REMOTE HEAD

Aimed at reduced cost applications with lower speed and payload requirements but with the same smooth precision movement as the DTA head. Control options are also the same so there are no compromises on ease of use. The multi-camera single operator functionality of the MCC controller drives costs even lower.



- Designed to track targets in sporting events such as tennis or football
- Simplified design to keep purchase costs low
- Payload to carry medium sized broadcast quality cameras and lenses, and prosumer camcorders
- Easy arm adjustment for camera balancing
- Integrated external zoom servo control
- Tethering points on base for safe and secure mounting



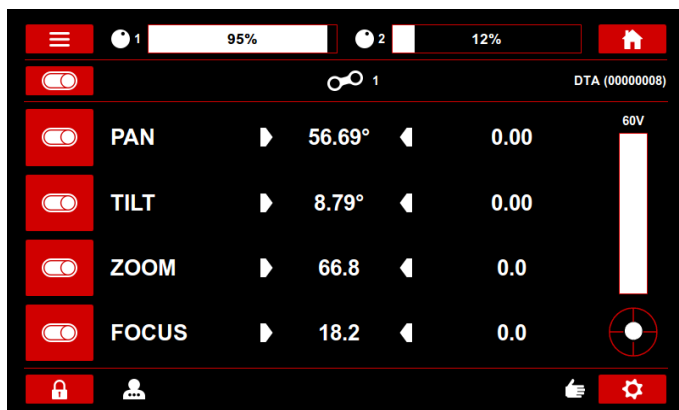


MOTION CONTROL CENTRE

The Motion Control Centre (MCC) is the brains of the system. Its automatic head detection and configuration features free the operator to focus on fine tuning the controls and head movement to suit the shot. 16 position presets, combined with the factory calibrated zero positions minimise repeat setup times and simplify operator handover. The multi-camera single operator functionality allows one operator to get shots from different angles simultaneously with the movement of the additional cameras under computer control.



- Automatic head detection and configuration for fast setup
- Intuitive touch-screen interface with simple navigation requiring minimal training
- Precision joystick, focus and zoom controls
- Two dials for instant adjustment of speeds and accelerations
- Trigger outputs for monitor video switching when controlling multiple cameras
- Video input for synchronisation of real-time position data to video frames for virtual graphics etc
- Save and restore of settings to USB stick
- Pin protected multiple user accounts can be created



SMART-PHONE APP

To prevent damage to the camera and lens, position limits can be set during rigging to restrict the head movement to within a safe range. Using the smart-phone app allows this to be done while standing next to the head, so you can be sure there will be no contact with surrounding objects. The absolute position sensing of the heads mean these limits will still be correct even after power loss, giving the operator and owner complete peace of mind.



- Free to download Android app
- Compatible with most smart-phones
- USB on-the-go cable connects the smart-phone to the head via the phone's USB port and our USB to serial cable
- Communication with the head is automatically established
- Available axes (e.g. pan/tilt) are displayed along with the axis position, upper and lower position limits, the head supply Voltage and the connection status of the MCC
- The head can be gently moved around and position limits set
- The position limits are sent back to the MCC via the network connection as well as being stored in the phone for transfer to the MCC later should the network connection be unavailable



DTA SPECIFICATION

PERFORMANCE

MAXIMUM SPEED: 240°/s (60V)
 MINIMUM SPEED: 0.03°/s
 ACCELERATION: 720°/s²
 POSITION RESOLUTION: 0.001°
 PAN & TILT ROTATION LIMIT 100 TURNS
 PAYLOAD: 15KG MAX.
 WEIGHT: 7.5KG

FEATURES

ABSOLUTE POSITION MEASUREMENT OF PAN AND TILT - I.E. THE MEASUREMENT IS ALWAYS TRUE EVEN IF MOVED WHILE POWERED DOWN
 FACTORY CALIBRATED AXIS ZERO POSITION - OUR STANDARDISED PRODUCT RANGE ASSURES YOU OF A CONSISTENT STRAIGHT FORWARD SET-UP
 3G-SDI SLIP-RINGS ALLOW MULTIPLE PAN ROTATIONS
 TWO PAIRS OF GENERAL PURPOSE TRIGGER INPUTS AND OUTPUTS
 WATERPROOF (IP65)
 OPERATIONAL TEMPERATURE RANGE -20°C TO +70°C
 SMOOTH MOTION THROUGHOUT SPEED RANGE REGARDLESS OF PAYLOAD
 ROBUST CONTROL ALGORITHMS MANAGE IMPERFECT COMMS TO PREVENT JITTER
 DUAL SERIAL PORTS FOR SIMULTANIOUS LENS AND CAMERA CONTROL

OPTIONAL BOLT ON MODULES

3-AXIS DC MOTOR CONTROL
 ADDITIONAL I/O (TRIGGERS)
 DUAL POWER OUTPUTS (5V - 30V)

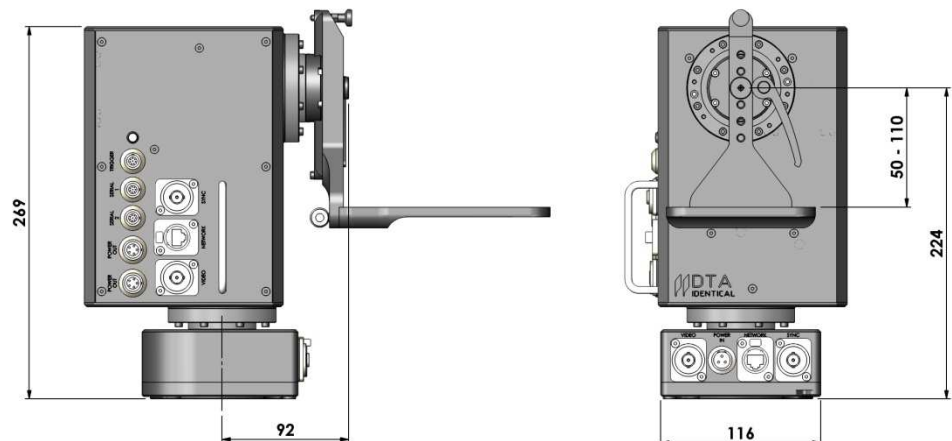
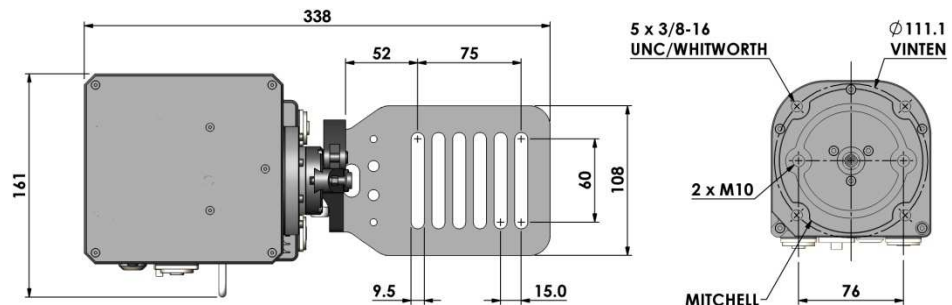
MOUNTING

3/8" WHITWORTH
 VINTEN (STANDARD FOUR HOLE MOUNTING)
 MITCHELL
 TRUSS CLAMP (x2)
 CUSTOM (AVAILABLE ON REQUEST)

POWER OUTPUT

12V (24W)
 5V (20W)

DIMENSIONS



COMMUNICATION

ETHERNET (GbE - UDP/TCP, DHCP)
 SERIAL (RS232/422/485)
 GIGABIT ETHERNET COMMS FOR EASY INTEGRATION INTO FIBRE NETWORKS
 TWO RJ45 CONNECTORS FOR NETWORK DAISY-CHAINING

LENS INTERFACE (SERIAL)

CANON
 FUJINON
 PRESTON
 CMOTION
 RED
 IO INDUSTRIES
 LANC

CONTROL OPTIONS

IDENTICAL MOTION CONTROL CENTRE
 PAN-BARS
 HAND WHEELS
 PC/LAPTOP (WINDOWS + LINUX)
 ANDROID APP
 API LIBRARY (WINDOWS + LINUX)

POWER SUPPLY

SUPPLY VOLTAGE RANGE: 14-60VDC
 EXTERNAL PSU (90-264VAC)
 BATTERY PACK



DCS SPECIFICATION

PERFORMANCE

MAXIMUM SPEED: 100°/s (24V), 150°/s (36V)
MINIMUM SPEED: 0.03°/s
ACCELERATION: 360°/s²
POSITION RESOLUTION: 0.001°
PAN & TILT ROTATION LIMIT 100 TURNS
PAYLOAD: 8KG MAX.
WEIGHT: 4.6KG

FEATURES

ABSOLUTE POSITION MEASUREMENT OF PAN AND TILT - I.E. THE MEASUREMENT IS ALWAYS TRUE EVEN IF MOVED WHILE POWERED DOWN
FACTORY CALIBRATED AXIS ZERO POSITION - OUR STANDARDISED PRODUCT RANGE ASSURES YOU OF A CONSISTENT STRAIGHT FORWARD SET-UP
WATERPROOF (IP65)
OPERATIONAL TEMPERATURE RANGE -20°C TO +70°C
SMOOTH MOTION THROUGHOUT SPEED RANGE REGARDLESS OF PAYLOAD
ROBUST CONTROL ALGORITHMS MANAGE IMPERFECT COMMS TO PREVENT JITTER
INTEGRATED SERVO MOTOR CONTROL - AUTOMATE MANUAL ZOOM LENSES ETC.

MOUNTING

3/8" WHITWORTH
VINTEN (STANDARD FOUR HOLE MOUNTING)
TRUSS CLAMP (x2)
CUSTOM (AVAILABLE ON REQUEST)

POWER OUTPUT

12V (24W)
5V (5W)

COMMUNICATION

ETHERNET (GbE - UDP/TCP, DHCP)
SERIAL (RS232/422/485)
GIGABIT ETHERNET COMMS FOR EASY INTEGRATION INTO FIBRE NETWORKS
TWO RJ45 CONNECTORS FOR NETWORK DAISY-CHAINING

LENS INTERFACE (SERIAL)

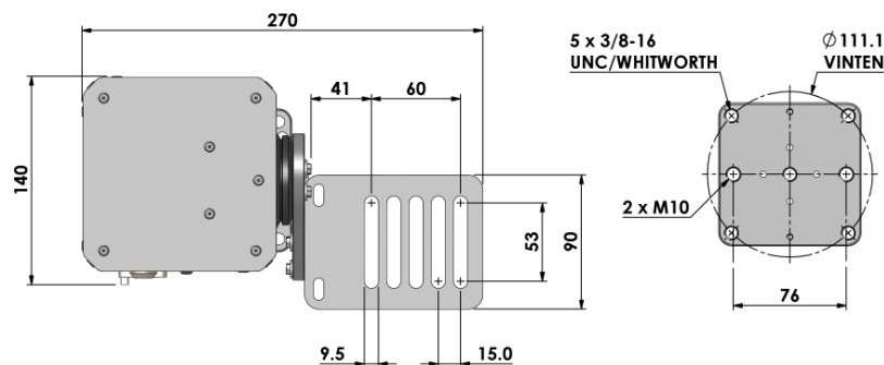
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CONTROL OPTIONS

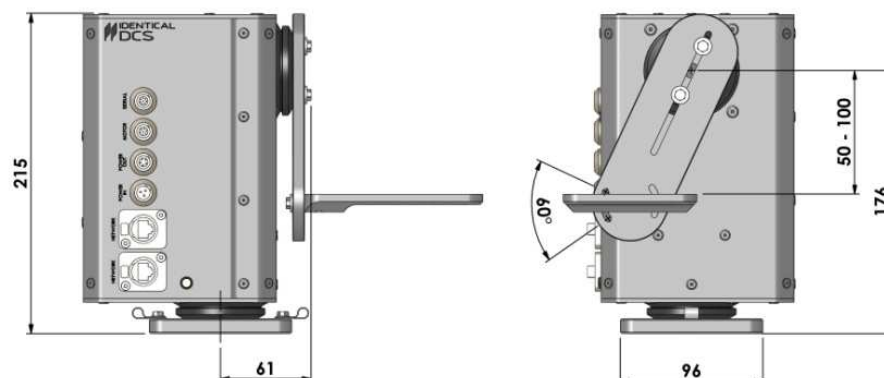
IDENTICAL MOTION CONTROL CENTRE
PAN-BARS
HAND WHEELS
PC/LAPTOP (WINDOWS + LINUX)
ANDROID APP
API LIBRARY (WINDOWS + LINUX)

POWER SUPPLY

SUPPLY VOLTAGE RANGE: 14-36VDC
EXTERNAL PSU (90-264VAC)
BATTERY PACK



DIMENSIONS





MCC SPECIFICATION

CONNECTIVITY

CONTROL OF UP TO 32 HEADS

ADDITIONAL HEAD CONTROLS (E.G. PAN-BARS) CAN BE CONNECTED BY ETHERNET AND/OR SERIAL

AUTOMATIC IDENTIFICATION AND CONFIGURATION OF CONNECTED DEVICES (HEADS, CONTROLS AND TRIGGERS)

TWO PAIRS OF GENERAL PURPOSE TRIGGER INPUTS AND OUTPUTS (OPTO-ISOLATED PULL-TO-GROUND)

MULTI-FORMAT VIDEO SYNC INPUT ACCEPTS ANALOG SD, ED AND HD VIDEO WITH EITHER BI-LEVEL OR TRI-LEVEL SYNC (BNC CONNECTOR)

USER INTERFACE

TOUCHSCREEN INTERFACE FOR SYSTEM SET-UP AND DIAGNOSTICS

TWO-AXIS HALL-EFFECT JOYSTICK, ZOOM ROCKER AND FRICTION HOLD FOCUS ROLLER

SPEED AND DAMPING DIALS FOR IMMEDIATE SENSITIVITY ADJUSTMENT OF CONTROLS (E.G. JOYSTICK)

PUSH BUTTONS WITH TACTILE MICRO-SWITCH RESPONSE THAT ILLUMINATE IN RED AND GREEN

CUSTOMISABLE CAMERA TRIGGER BUTTON (FOR USE WITH STILL AND VIDEO CAMERAS)

FEATURES

UP TO 16 POSITIONS CAN BE SAVED AND RECALLED VIA PUSH BUTTONS

JOYSTICK SENSITIVITY CAN VARY IN PROPORTION TO ZOOM LEVEL, GIVING AUTOMATIC FINE MOTION CONTROL WHEN CLOSE-UP (ZRS)

MULTIPLE USER ACCOUNTS AND PROFILES CAN BE CREATED FOR FAST RECALL OF CUSTOMISED SETTINGS TO SUIT DIFFERENT INSTALLATIONS

PIN PROTECTED SCREEN LOCK TO PREVENT UNAUTHORISED HEAD MOVEMENT AND CHANGE OF SETTINGS

SAVE AND RESTORE OF SETTINGS AND POSITIONS VIA USB MEMORY STICK

3/8" WHITWORTH THREAD IN BASE FOR TRI-POD MOUNT

ERGONOMIC LAYOUT OF CONTROLS FOR FINGERTIP REACH

SOFT NEOPRENE FOAM COVERED CONTROL PANEL FOR USER COMFORT

SUPPLIED WITH CARD INSERTS FOR USER TO LABEL BUTTON FUNCTIONS (E.G. CAMERA 1)

POWER SUPPLY

MAINS 90-264VAC

BATTERY PACK 18-60VDC

PHYSICAL

DIMENSIONS: 390W x 340D x 130H (mm)

WEIGHT: 7.5KG

DIMENSIONS

