

# NEWTON S2

## STABILIZED HEAD

4K BROADCAST



## ENABLING MOVING TV CAMERAS CLOSER TO THE ACTION

NEWTON S2 IS THE WORLD'S MOST DISCREET AND COST-EFFICIENT STABILIZED HEAD SUPPORTING UNLIMITED PAN OF TV CAMERAS IN LIVE 4K BROADCAST. NEWTON S2 OFFERS 3-AXIS STABILIZATION IN ALL ANGLES AND RELIABLE REMOTE CONTROL OF CAMERA AND LENS.

### MAIN FEATURES

- ▶ Reliable stabilization and auto-horizon performance, both indoors and outdoors, with low gyro-drift.
- ▶ Slip ring with fiber or 3G-SDI passthrough, supporting genlock and remote camera control.
- ▶ Compact, lightweight and discreet.
- ▶ Made in rugged aluminium with water protected design.
- ▶ Reliable long-range wireless data links or control over cable.
- ▶ Compatible with a wide range of cameras and lens control systems.
- ▶ Mountable over-slung and under-slung.
- ▶ Hot-swappable batteries without flight restrictions.
- ▶ Up to 150 W power out for camera & accessories.
- ▶ Instantly integratable and offers power out for standard third party broadcast and film equipment.
- ▶ Short setup time with quick release systems.
- ▶ Optional camera cage with counterweights, for storing camera & lens balanced and ready to quickly mount onto NEWTON.
- ▶ Proven on various applications, for several years, at the world's most prestigious broadcast events.

**NEWTON S2** is a versatile, lightweight, gyro-stabilized, remote controlled camera head, enabling professional TV broadcasters and cinema production companies to capture steady shots from a variety of moving devices.

**THE RELIABLE GYRO-STABILIZATION**, compact features, unlimited pan and full 4K broadcast compatibility make NEWTON S2 the preferred remote head on 1D/2D/3D cable camera systems, towers, rails, cranes, jib arms and vehicles. Due to its discreet design NEWTON enables TV productions to place moving cameras right between performances and audiences.

**NEWTON S2 IS MADE FOR LIVE BROADCAST** where reliable and constant high performance is key. To ensure that every production is successful, NEWTON is sold with training and our dedicated support. Combined with robust and weather protected design, tool and device free handling, ease of transportation and intuitive control, NEWTON has grown popular among service and rental companies around the world. NEWTON S has since its introduction in early 2016, been used extensively in live broadcast events such as Eurovision Song Contest and the Oscars. In late 2018, the successor NEWTON S2 was launched, including performance upgrades such as stronger motors, higher power and passthrough for higher video resolution.

**THE DOMINION REMOTE CONTROLLER** is made for high-precision control of the NEWTON head as well as Fujinon, Canon and Teradek RT lens motors. It is made for long broadcast sessions and is highly appreciated by operators for its ergonomics, customizability and intuitive control feel. Between its comfortable wrist rests it features a joystick, focus wheel, iris knob, zoom rocker and start/stop button for film cameras. The large high-resolution display supplies real-time gimbal, camera and lens data and lets the operator define the input functions of all buttons and knobs.

**NEWTON'S FIRMWARE** is under constant improvement and the connectors on the products allows for standard communication and broadcast signals. Together with a passthrough supporting uncompressed fiber-optic communication, NEWTON S2 will match the latest broadcast standards for years to come.



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# NEWTON S2 STABILIZED HEAD

## PHYSICAL

## DIMENSIONS

Mounted size (approx):  
410 x 285 x 380 mm (HxWxD).  
Packing size:  
390 x 170 x 350 mm (HxWxD).

## MATERIAL

Machined aluminum.

## WEIGHT

6.7 kg empty.  
7.2 kg with camera mount and dove tail.

## ROTATION SPECIFICATION

Pan rotation: unlimited.  
Tilt: +45/-135 degrees.  
Roll: +/-45 degrees.

## MAX ROTATION SPEED

360 deg/sec.

## MOUNTING

Mitchell mount or cheeseplate.  
Mounted over-slung & under-slung.

## DISPLAY

2.4" TFT-LCD Color (320 x 240).

## ENVIRONMENTAL

## PROTECTION

Dust and water protected.

## TEMPERATURE RANGE

-20 °C to +45 °C (-4 °F to 113 °F).

## POWER

## INPUT SUPPLY

24–36 V DC.  
12-24 V with reduced power.

## BATTERY

2 x battery (14.4 V).

## POWER CONSUMPTION

Standby: approx. 15 W.  
Average: approx. 35 W.

## POWER OUTPUT

Mounting point:  
15 V regulated 30 W.  
Camera:  
15 V regulated, up to 150 W.

## CONTROL DATA LINK

## WIRELESS

2.4000-2.4835 GHz frequency  
hopping spread spectrum.  
Supports other frequencies via third  
party links.

## WIRELESS RANGE

Up to 1000 m.

## WIRED

Ethernet UDP.

## INTEGRATION

## CINEMA CAMERA RUN/STOP

RED Epic/Dragon/Weapon.  
ARRI Alexa Mini.  
Others via RTMotion Lens control.

## LENS CONTROL

Canon Broadcast lenses.  
Canon Cine-Servo.  
Fujinon Broadcast lenses.  
Teradek RT MK3.1.

## MOUNTING POINT CONNECTORS

1x 3G-SDI or ST-UPC single mode fiber  
passthrough.  
1x HD-SDI passthrough.  
1x Ethernet control.  
1x Ethernet camera passthrough.  
1x Power in.  
1x Power out.  
1x CAN bus (IA-CAN).

## CAMERA CONNECTORS

1x 3G-SDI or ST-UPC single mode fiber  
passthrough.  
1x HD-SDI passthrough.  
1x Ethernet camera passthrough.  
1x Power out.  
1x CAN bus (IA-CAN).

## SOFTWARE UPGRADE

Via CAN bus (IA-CAN).  
(Mac OS X, Windows)

# DOMINION CONTROLLER

## DIMENSIONS

396 x 209 x 115 mm.

## MATERIAL

Machined Aluminum.

## MOUNTING

100 mm NATO accessory rail.  
Tripod mount.  
Neck strap and harness attachment rail.

## CONNECTORS

2x IA-CAN connectors.  
2x Power out.  
1x Power in.  
1x SD-card.  
1x USB.  
1x Ethernet control.

## DISPLAY

5" TFT-LCD Color (800 x 480).

## POWER INPUT SUPPLY

12-24 V DC.

## POWER CONSUMPTION

5 W.

## POWER OUTPUT

External supply voltage  
(12-24 V) or;  
battery voltage  
(14.4 V nom), Max 2.5 A.

## BATTERY

Integrated 14.4 V Li Ion.

