datavideo

Robotic Pan Tilt Head
PTR-10/ PTR-10T
MARKII

4K ULTRA HD   **6G**

Max. Camera Weight
4kg

Aluminum
Frame

Transform any standard camera into a professional broadcast PTZ camera

PTR-10 MARK II
Robotic Pan Tilt Head

PTR-10T MARK II
HDBaseT Robotic Pan Tilt Head

Datavideo's brand-new PTR-10 Mark II is a robotic pan-tilt head that is designed to turn any small size video camera or block cameras into a robotic pan/tilt/zoom camera.

A sleek design fits seamlessly in your studio. With its weight of 3.4 Kg, it can be placed on any heavy-duty tripod or mounted on the wall and ceiling which brings up a lot of flexibility for your video production.

The PTR-10 Mark II can be controlled by the included IR controller, VISCA protocol controller, Datavideo RMC-180 Camera controller, RMC-300A Universal Remote-Control Panel, and compatible with DVIP over Ethernet and other integration solutions such as Crestron.

- Strong and sturdy aluminum frame
- Various interfaces: SDI, HDMI, RS-232, RS-422, DVIP/ HDBaseT, Tally, LANC
- Multiple choices of controllers: RMC-180, RMC-300A, HS-1600T, IR, DVIP and other integrations solutions
- Tally light built-in
- D-tap connector for DC output
- Selectable DC voltage output for different cameras (7.4 / 8.4 / 10 / 12V)
- Support optional Datavideo ZEK-1 Zoom Encoder Kit, to detect and read out the Zoom position of cameras on top
- Control Sony, Panasonic, Canon, JVC cameras
- Zoom, Focus, IRIS, Shutter, white balance mode, all these frequently used functions, can be easily controlled by Datavideo's remote controllers

Cost-Effective

PTR-10(T) Mark II makes the change from regular camcorder cameras to remote controlled PTZ very cost effective. Multi camera remote operations can be handled by a single person.

Turn camcorder into PTZ

Control of Pan, Tilt, Zoom. Supports Zoom control of various brand lens. With the optional accessories, Zoom Encoder Kit (ZEK-1) is the solution to your free running Zoom cameras. ZEK-1 converts zoom information and send back for controller to memory and recall the saved zoom position.

Wide Range of Compatible Cameras Supported

The PTR-10(T) Mark II implements LanC control that is compatible with a wide range of professional video camcorders, allowing you to select the best camcorders for your needs.

Panasonic Camera

Sony Camera

Light Weight, Strong, and Sturdy design

With a weight of 3.4 kg, PTR-10(T) Mark II is built from aluminum alloy, making it a very sturdy base for your camera. It can support cameras up to 4 kilograms.

90°

340°

Canon Camera

JVC Camera

Diversified Controller Options

Compatible with Serial, Ethernet, and Lanc. Datavideo RMC-180, RMC-300A, and HS-1600T series will fit your need.


RMC-300A

HS-1600T

RMC-180

Built-in Tally light

With the big tally light in the front to show the status of your camera.

D-tap connector for DC output

The D-tap connector is widely used in the broadcast industry as a standard for powering accessories from battery or mains power. This will make it easier for you to find a ready made power cable for your specific camera. Included is a D-tap to DC 5.5mm with lock for Datavideo cameras.
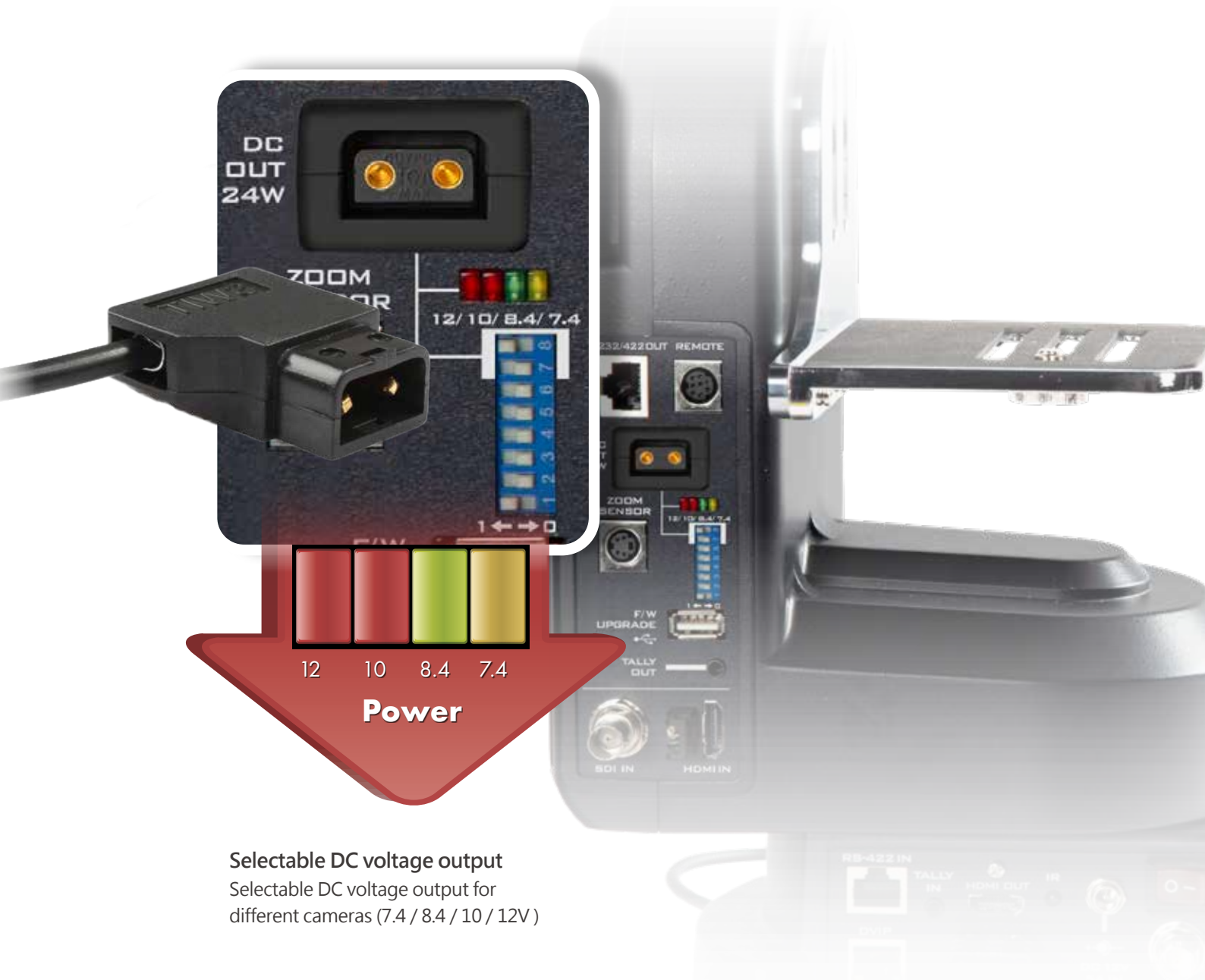
Selectable DC voltage output
Selectable DC voltage output for different cameras (7.4 / 8.4 / 10 / 12V)

PTR-10 MARK II /
PTR-10T MARK II Rear Panel

Remote Port：
Connect through different
remote cable to control Zoom/
Focus or other functions with
multiple camera brands

RS-232/422 output:
Delivers serial control signal
to the camera

DC out：
DC power supply to the camera

Zoom Sensor
Connect with Datavideo ZEK-1
to detect and send back Zoom
position information of the
camera on top

LED indicatorsl：
The 4 LED indicates the voltage
output from D-tap connector

USB Port：
for firmware upgrade

Dip Switch：
PTR-10 settings

Tally output：
Delivers tally signal to the
camera

Video In

6G-SDI
HDMI 1.4

SDI Input：
Camera video IN

HDMI Input：
Camera video IN

Control Out

Remote LanC
RS-232/ RS-422

DC Out

12/10/8.4/7.4V

Multiple Signal Interface

PTR-10 Mark II series supports a lot of signal interface for passing through the remote head. Amongst these interfaces are SDI, HDMI, RS-232, RS-422, DVIP, Tally, and LANC.

Video Out

6G-SDI
HDMI 1.4
HDBaseT (10T only)

Control In

RS-422
  RMC-180/ RMC-300A
DVIP
  RMC-300A
HDBaseT
  HS-1600T
IR Controller

DC In

DC 12V
POE(10T only)

RS-422 Input：
Connect to RMC-300A and RMC-180 for serial camera control

HDMI output：
Video out to switcher

IR Receiver：
Operates the PTR-10 easily with an infra-red remote control

Power Input：
DC 12V IN for camera and PTR-10

Power Switch

SDI output：
Video out to switcher

PTR-10T MARK II

HDBaseT Control:
Connect to the HS-1600T with an Ethernet cable for camera control as well as video transmission.

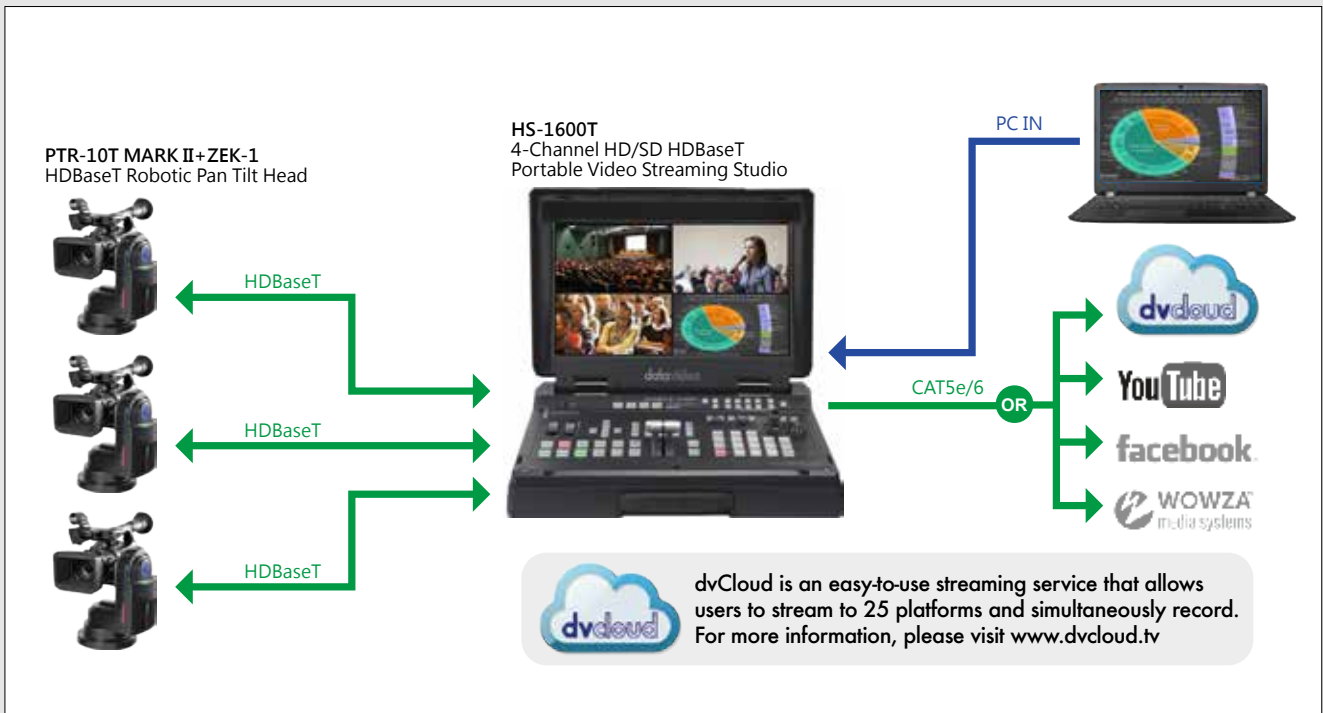**PTR-10 MARK II**

DVIP Control:
Connect to RMC-300A with an Ethernet cable for camera control.

PTR-10T MARK II+ZEK-1

HDBaseT Control

HS-1600T One Operator Solution

Pair PTR-10T With HS-1600T HDBaseT Mobile Cast Studio. A single Ethernet cable provides power, video, camera control, and tally.
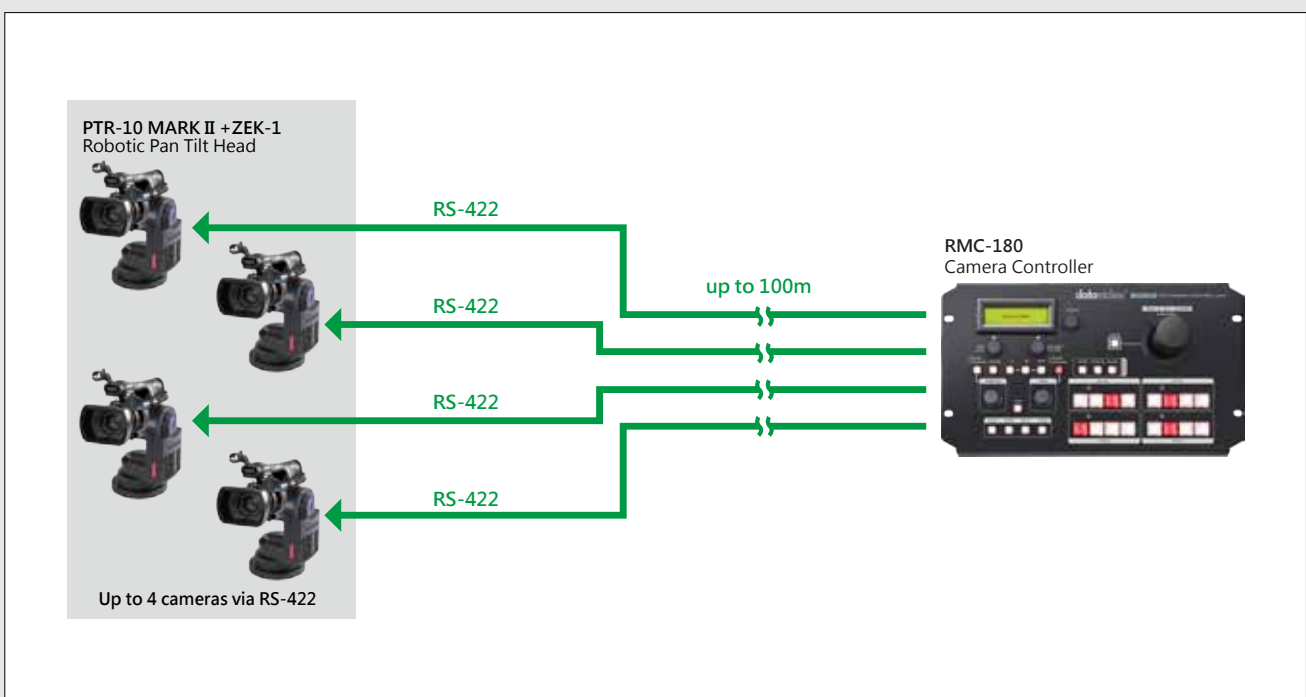
PTR-10T MARK II+ZEK-1
HDBaseT Robotic Pan Tilt Head

HDBaseT

HDBaseT

HDBaseT

HS-1600T
4-Channel HD/SD HDBaseT
Portable Video Streaming Studio

PC IN

CAT5e/6   OR

dvcloud

You Tube

facebook

WOWZA
media systems

dvcloud is an easy-to-use streaming service that allows users to stream to 25 platforms and simultaneously record. For more information, please visit www.dvcloud.tv

PTR-10 Mark II / PTR-10T Mark II+ZEK-1

Up to 4 cameras

RS-422 Control

Serial Control with RMC-180

PTR-10 MARK II +ZEK-1
Robotic Pan Tilt Head

RS-422

RS-422

RS-422

RS-422

up to 100m

RMC-180
Camera Controller

Up to 4 cameras via RS-422

PTR-10 Mark II / PTR-10T Mark II+ZEK-1

RS-422 Control

Serial Control with RMC-300A

PTR-10 MARK II +ZEK-1
Robotic Pan Tilt Head

RS-422

RS-422

RS-422

RS-422

RS-422

RS-422

RS-422

RS-422

up to 100m

RMC-300A
Camera Controller

Up to 8 cameras via RS-422
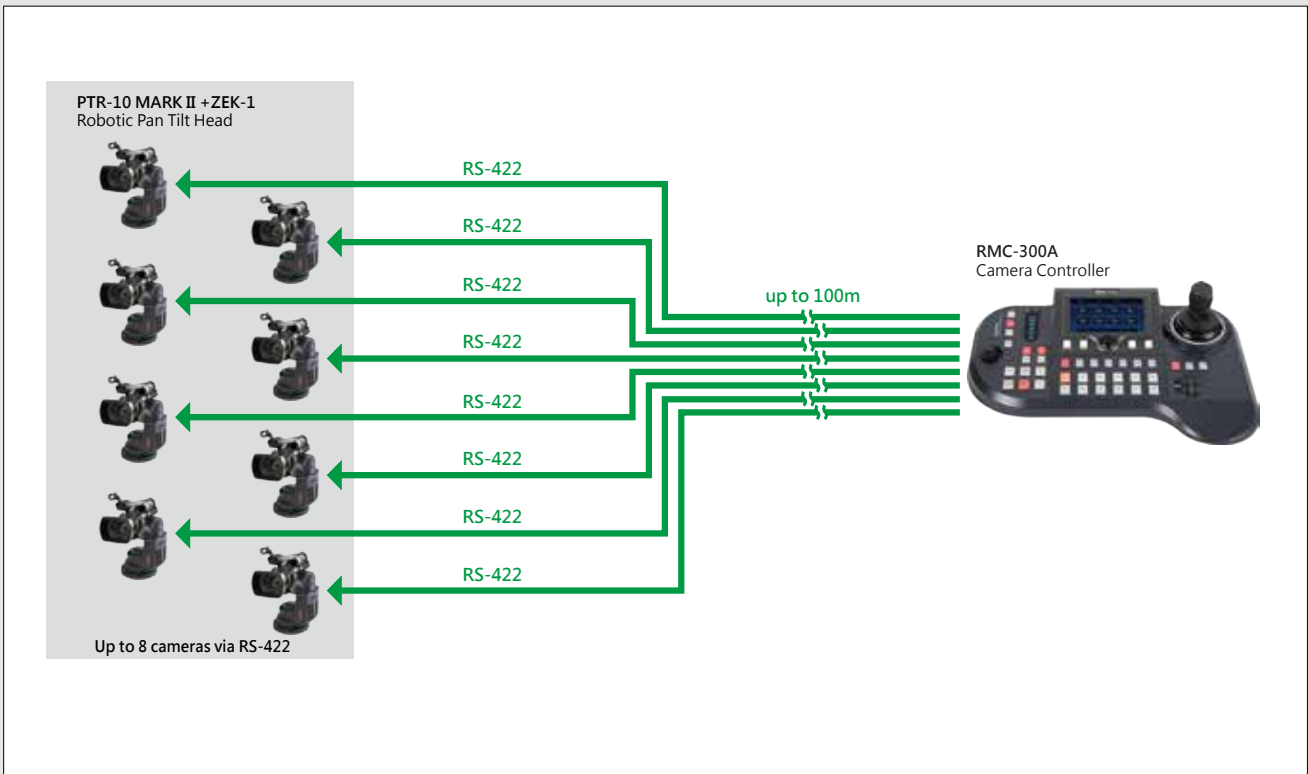
PTR-10 MARK II+ZEK-1

DVIP Control

DVIP Control with RMC-300A

PTR-10 MARK II
Robotic Pan Tilt Head

DVIP

DVIP

DVIP

DVIP

DVIP

DVIP

DVIP

DVIP

Switch Hub

RMC-300A
Camera Controller

Up to 24 cameras via DVIP
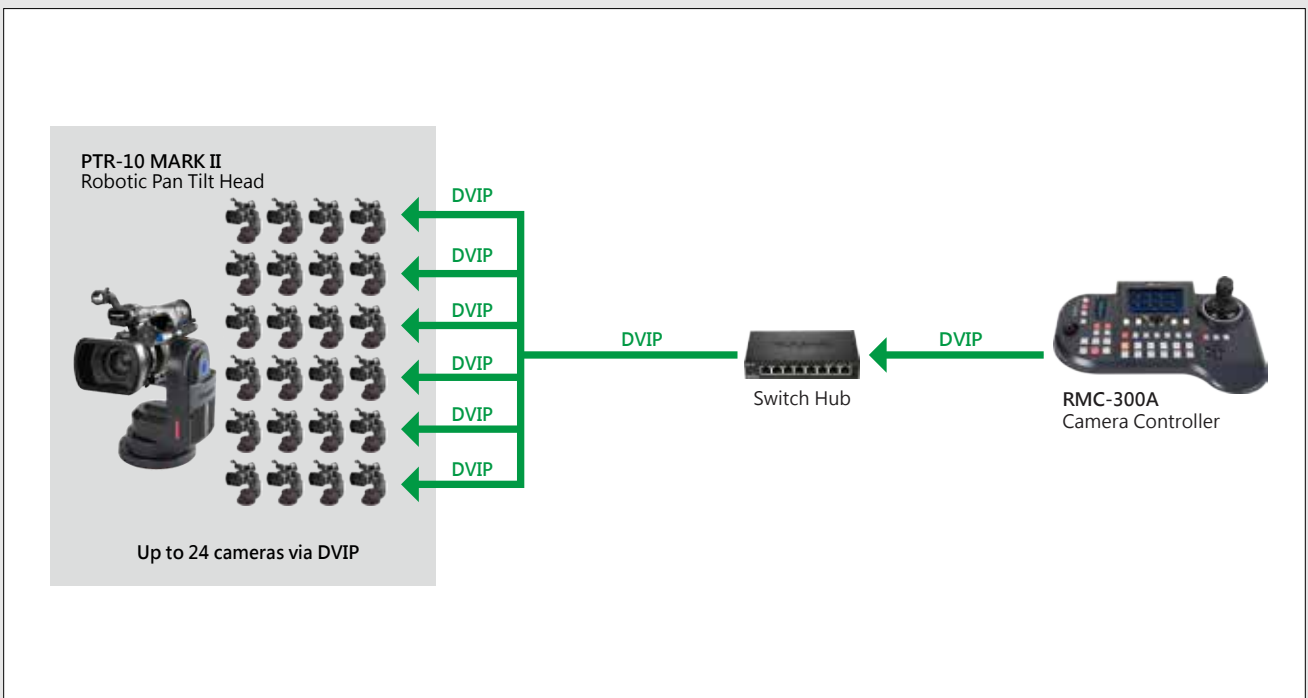
Optional Accessories

ZEK-1
Zoom Encoder Kit

ZEK-1 is the solution to your free running Zoom cameras.
PTR-10 Mark II can read its own Pan/Tilt movement and send back to controller for position memory and recall. Now, with ZEK-1, it can detect and read out the Zoom changes. And convert those information into Zoom position to send back for controller to memory and recall the saved zoom position.
Compatible with cameras via zoom moving ring.

How does ZEK-1 work?

ZEK-1 can read out the rotation of the zoom ring on your camera by a little wheel that sits snug to you camera zoom ring. This gear must have a tight fit and the same thread as your camera lens. Standard it's equipped with M0.8 gearing, which is the standard in most lenses. In some cases, M0.6 is used so an extra gear is included. In other cases, when your camera doesn't have a threaded zoom lens, you can use a belt with M0.8 or M0.6 gearing. gear design.

Camera Mount Plate
The larger mounting plate from ZEK-1 gives more space for you to mount the camera

M0.6 Gear
If you are using Cameras with M0.6 gears on the zoom ring (ex: Sony X200), the additional M0.6 gear can directly match with the Lens

Metal Bar & Bar Holder
The metal bar holds the zoom encoder in place.

Zoom Encoder(M0.8 gear)
The gear should engage with the camera's zoom ring and the 4-pin mini-DIN connector should be connected to the Zoom Sensor port on the PTR-10/10T MARK II.

Gear Ring Belt designed for M0.8 gear
Wrap the gear ring belt around the zoom ring if your camcorder's zoom ring is neither M0.6 nor M0.8.on the PTR-10/10T MARK II.

Compatible with most cameras that have a moving zoom ring except:

- A single zoom/focus ring
- When the zoom ring is blocked by the servo motor

For more information on compatible cameras, please visit our website on www.datavideo.com

Optional Accessories

WM-1 1

Professional Wall Mount for Robotic Pan Tilt Head

Weight of the WM-11 : 4.0 Kg
Maximum Load Weight Limit : 50 Kg

The WM-11 is a professional wall mount which is designed for Datavideo Robotic Pan Tilt Head PTR-10/PTR-10T Mark Ⅱ and Datavideo PTZ camera series including PTC-150/PTC- 150T. The WM-11 is made of 6063 Aluminum and 3mm carbon steel plate, making it possible to hold up to 50kg and still maintain absolute stability. The metal expanding screws included in the WM-11 package will mount the WM-11 securely to any wall. The powerful torque that drives the PTR-10(T) and the inertia that is generated by the weight of the camera demands a sturdy wall mount like WM-11. WM-11 contains multiple bubble level meters to make mounting easy.

Three bubble level meters

Strong and steady metal expansion bolts
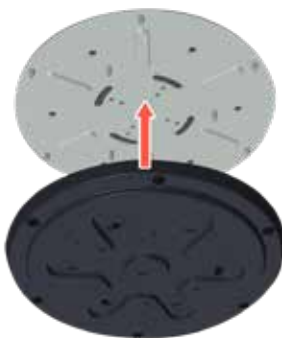
Upside down

On the wall

WM-11

Camera Tray

L-shaped
Bracket

On the celling

CM-10

Celling Mount

L-shaped
Bracket

Related Products

Camera Controller

RMC-300A
Universal Remote Control Panel

RMC-300A is a multi-functional Multi-camera Controller. It is able to control up to 12 PTZ and block cameras by Ethernet or up to 8 cameras by serial port RS-422 transmission.

Intro.

RMC-180
PTZ Camera Controller

RMC-180 is a PTZ camera control unit, and it simple multi-camera control at your fingertips. With its ergonomic joystick and tactile button layout, the RMC-180 makes it easy to set up and control up to four Datavideo PTZ cameras.

Intro.

Switcher Series

HS-1600T Mark II (HDBaseT only)
4-Channel HD/SD HDBaseT Portable Video Streaming Studio

The HS-1600T Mark II brings a new level of simplicity to production workflows. You'll set up faster and easier thanks to its portable "briefcase" design and HDBaseT Technology. And thanks to its built-in H.264 web streaming encoder, you can stream your show to virtually any CDN like YouTube and Facebook in no time.

Intro.

What's in the box accessories

IR remote control	DC 12V Adaptor	AC cord	D-tap to DC 5.5 with lock cable
HDMI cable	SDI cable	Remote cable (mini-din 8 pin to 2.5mm phone jack)	1/4" screws

Dimension

295.5mm

191mm

226.5mm
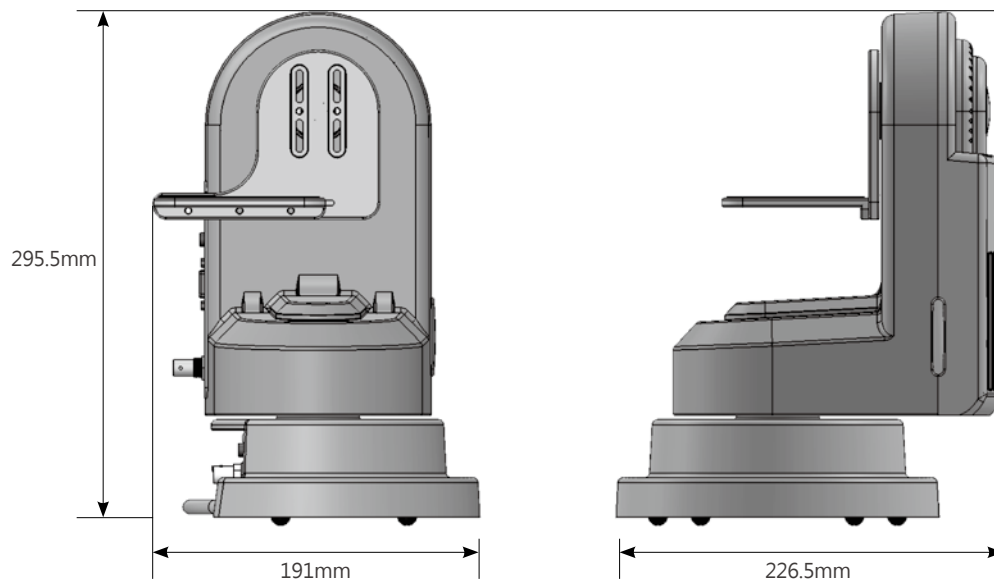
Model No.	PTR-10 MARK II	PTR-10T MARK II
Name	Robotic Pan Tilt Head	Robotic Pan Tilt Head (HDBaseT)
Video Interface	HDMI x 1 SDI x 1	HDMI x 1 SDI x 1 RJ45 x 1 (HDBaseT)
Video Output Format	2160p 29.97/25 1080p 59.94/50 1080i 59.94/50 720p 59.94/50	2160p 29.97/25 1080p 59.94/50 1080i 59.94/50 720p 59.94/50
Control Unit	RMC-180 RMC-300A RMC-300C VISCA Protocol Controller IP Control IR remote	RMC-180 HS-1600T HS-1600T Mark II RMC-300A VISCA Protocol Controller IP Control IR remote
Panning / Tilting Range	Pan: 340° Tilt: ±45°	Pan: 340° Tilt: ±45°
Panning / Tilting Speed	Pan: 0.2~15° /Sec Tilt: 0.1~10° /Sec	Pan: 0.2~15° /Sec Tilt: 0.1~10° /Sec
Preset	Pan/Tilt position 50	Pan/Tilt position 50
Control Distance	1,200M by RS422 100M by DVIP	1,200M by RS422 100M by HDBaseT
Control Protocal	Sony VISCA DVIP	Sony VISCA DVIP
Control Input	RS-422 DVIP	RS-422 HDBaseT
Maximum Load	4 KG Max	4 KG Max
Control Output	RS-232 RS-422 BX-Lens LanC	RS-232 RS-422 BX-Lens LanC
Power Requirement	DC 12V~ 18V, 3A (Without Camera) DC 12V~ 18V, 5A (With Camera)	DC 12V~ 18V, 3A (Without Camera) DC 12V~ 18V, 5A (With Camera)
Power Supply	DC 12/10/8.4/7.4V, 24W Max	DC 12/10/8.4/7.4V, 24W Max
Operating Temp. Range	0~40 C°	0~40 C°
Operating Humidity Range	10~80%	10~80%
Storage Temp. Range	-10~60C°	-10~60C°
Storage Humidity Range	5~80%	5~80%
Weight	3.4 kg	3.4 kg
Dimension (LxWxH)	230 x 190 x 300 mm	230 x 190 x 300 mm
Optional accessories	ZEK-1 WM-10 WM-11 CM-10	ZEK-1 WM-10 WM-11 CM-10