

# datavideo

## Remote Production Solutions 2016



## HD/SD PTZ Camera / Controller

Lecture Recording | Conference Meeting | Automated Studio | Remote Production



**PTC-120**  
PTZ Camera

1080 50/60P 3G HD SDI CV DVI



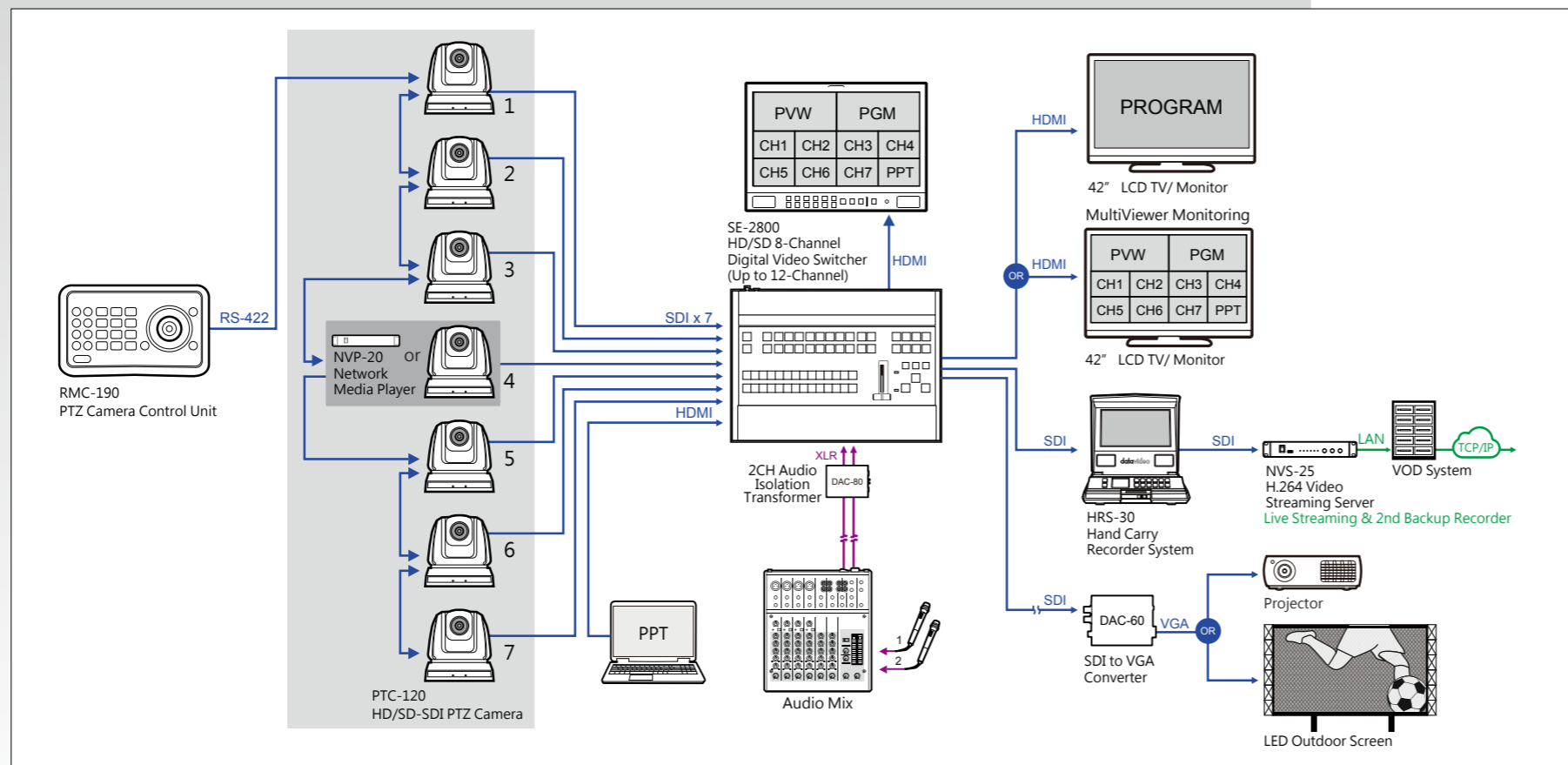
PTC-120 PTZ camera is designed for lecture recording, conference meetings and security systems. It is a full 1080 50/60p camera with a 20x optical zoom. It is designed to be simple to integrate and install.

- **Multiple video output formats**  
Simultaneous 3G-SDI, DVI-D, component and CVBS output.  
Video formats include :  
1920x1080\_60P/59.94P/50P/30P/29.97P/25P  
1920x1080\_60i/59.94i/50i  
1920x720\_60P/59.94P/50P/30P/29.97P/25P  
720x480i, 720x576i
- **High resolution**  
1/2.8 CMOS 2MP resolution sensor
- **High magnification zoom lens**  
20X optical zoom and 12X digital zoom
- **Auto iris control**  
Adapts to changing lighting conditions
- **White balance**  
Five modes: auto, indoor, outdoor, one-push and manual
- **Digital noise reduction**  
Built-in 2D and 3D digital noise reduction to achieve optimal image quality
- **Wide shooting range**  
-340 degrees horizontally  
-120 degrees vertically (90 degrees up; 30 degrees down)
- **Fast movement**  
300 degrees per second pan and tilt speed
- **Setting of multiple positions**  
128 default presets to memorize specific camera positions, settings and movements





## RMC-190 PTC-120 Controller



- Supports up-to 7 PTC-120 cameras
- RS-422 and RS-232 protocols for camera control
- Automatically saves settings of every PTC-120, including PTZ setting and video parameters; each PTZ camera has 128 PTZ preset positions and video calibration parameters.
- Allows the user to set parameters of each individual PTC-120 camera such as white balance, aperture value, gain, focus and etc
- Allows the user to set parameters of each camera such as white balance, gain, focus, etc
- Easy operation, fast response and automatic and manual control
- Smooth manual control via professional PTZ joystick



**PTC-150T**  
**PTZ Camera**

Easy and cost effective installation.  
Transmit video source, control signal and power to 100 meters away just by using one CAT5e/6 Cable.

1080 50/60P

3G HD SDI HDMI CV



**PTC-150T**



**PTC-150TW**

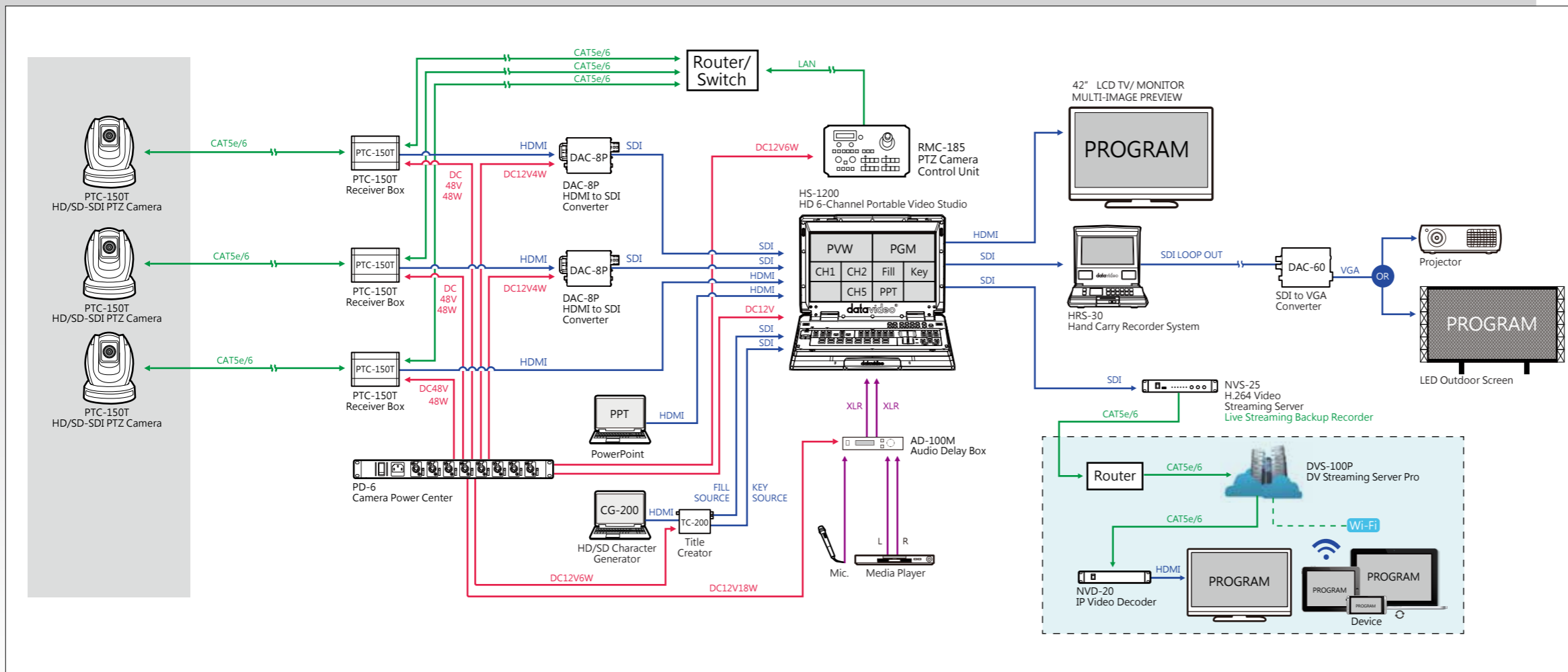
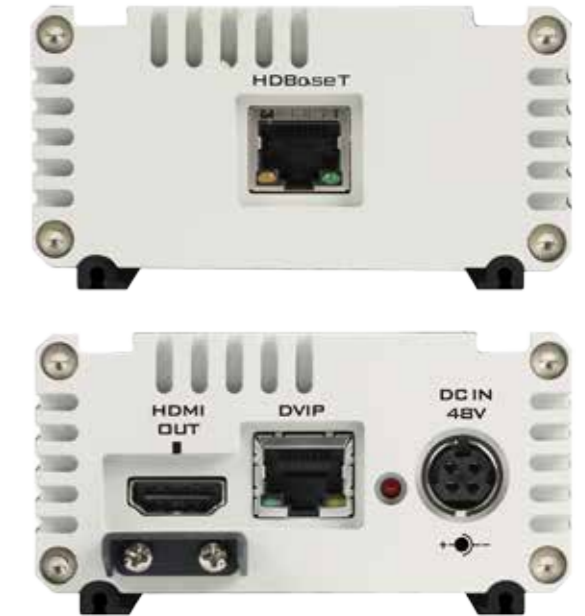
The PTC-150T HD/SD Video Camera is a PTZ camera that is equipped with HDBaseT Technology for remote control purpose, video image conveyance, power transmission and Ethernet connection. The camera captures HD video at 1920 x 1080 resolution, and features wide dynamic range with backlight compensation. In addition to the basic camera functions, the PTC-150T also has a receiver box that allows the user to control the camera at a remote location with just one Ethernet cable.

50 programmable presets including pan, tilt, and zoom positions, allow the camera to quickly move between predetermined camera positions using the remote, or an available PTZ controller.

For multi-camera shoots, the built-in tally light can identify active camera. Moreover, PTC-150T supports real time position reports on a per frame basis, which is helpful for virtual studio applications. The camera supports Sony VISCA protocol for PTZ control using RS-422 interface over the unit's RJ-45 port.

- **Multiple video output formats**  
Video Output: HD-SDI + CVBS + HDMI synchronously.  
Video formats include:  
1920x1080\_59.94P/50P/29.97P/25P,  
1920x1080\_59.94i/50i,  
1280x720\_59.94P /50P,  
720x480i and 720x576i.
- **High resolution**  
1/2.8" High Definition 2.0 M Pixels progressive CMOS sensor
- **High magnification zoom lens**  
30x optical zoom (f = 4.3 mm to 94.6 mm)
- **Supports HDBaseT**
- **Automatic and manual iris control**  
Adjust the iris opening (aperture), to control the amount of light coming through the lens
- **White balance**  
AWB/MWB/One push WB/ Outdoor/ Indoor/ Fluorescent
- **Wide shooting range**  
270 degrees horizontally; up 90 degrees and down 20 degrees
- **Digital Noise Reduction Function (DNR)**  
Reduce the noise and enable clearer image under low light conditions
- **Fast movement**  
Fast movement of 150 degrees per second
- **Position coordinates report**  
In real time per frame.
- **Tally LED Design**
- **Three control modes**
  1. IR Remote Control
  2. SONY Visca compatible – RS-422 connection remote control
  3. Built-in DVIP for remote control via RJ-45 Ethernet port
- **Two control modes**  
SONY Visca compatible – RS-422 connection remote control  
Built-in DVIP for signal transmission via RJ-45 port
- **Setting of multiple positions**  
50 default presets to automate camera positions and movements





## PTC-150T Receiver Box

PTC-150T Receiver Box is equipped with HDBaseT Port, which connect PTC-150T Camera HDBaseT Port by using a CAT5e/6 Cable. This allows user to transmit video source, control single and power just by using CAT5e/6 Cable that can be transmit up to 100m.

PTC-150T Receiver Box	
Protocol	DVIP / HDBaseT
Video Out	HDMI (V1.3) x 1
Power	DC 48V (Please connect DC 48V to Receiver Box)
Control	DVIP by RJ-45 interface
HDBaseT Distance	Up to 100M by Cat.6 cable (RJ-45 interface)



**PTC-150**

## PTZ Camera

The first PTZ camera to output PTZ positions in real time



**PTC-150**

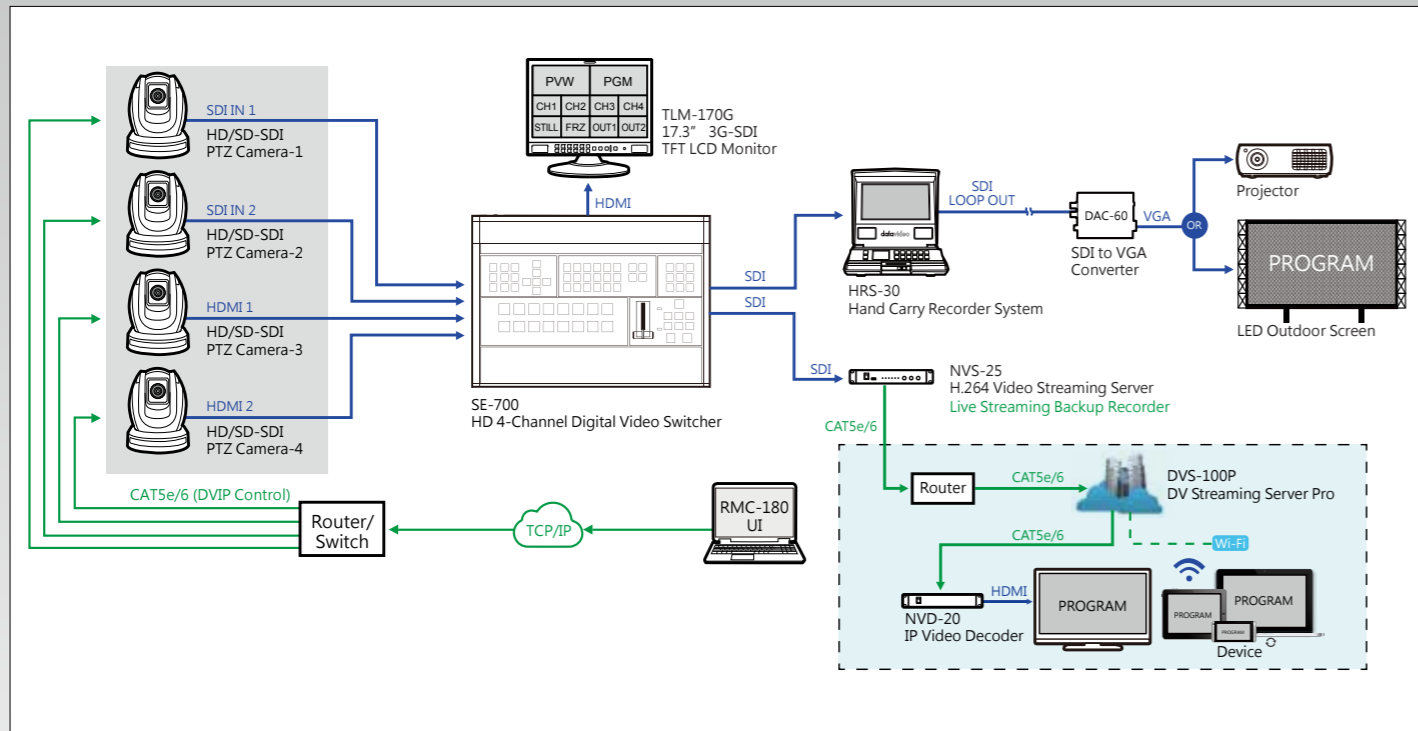


**PTC-150W**

PTC-150 is designed specifically for lecture recording, conference meetings, religious events and automated studios. Its unique position tracking function is able to output frame accurate PTZ positions in real time. With a big tally light, 3G 1080p50/60 resolution, and 2m Pixels, PTC-150 can satisfy applications that require high image quality. Our innovative removable lens on the PTZ camera allows the user to use 52-mm filter lenses or wide angle lenses in order to suit every type of production.

- **Multiple video output formats**  
Simultaneous outputs of 3G-SDI, HDMI and CVBS  
Video formats include  
1920x1080\_59.94P/50P/29.97P/25P,  
1920x1080/59.94i/50i, 1280x720\_59.94P/50P, 720x480i and 720x576i.
- **High resolution**  
1/2.8" High Definition 2.0 M Pixels progressive  
CMOS sensor
- **High magnification zoom lens**  
30X optical zoom
- **Automatic and manual iris control**  
Adjust the iris opening (aperture), to control the amount of light coming through the lens
- **White balance**
- **AWB/ MWB/ One push WB/ Outdoor/ Indoor/ Fluorescent**
- **Wide shooting range**  
270 degrees horizontally; up 90 degrees and down 20 degrees
- **Fast movement**  
Fast movement of 150 degrees per second
- **Two control modes**  
SONY Visca compatible – RS-422 connection remote control  
Built-in DVIP for signal transmission via RJ-45 port
- **Setting of multiple positions**  
50 default presets to automate camera positions and movements





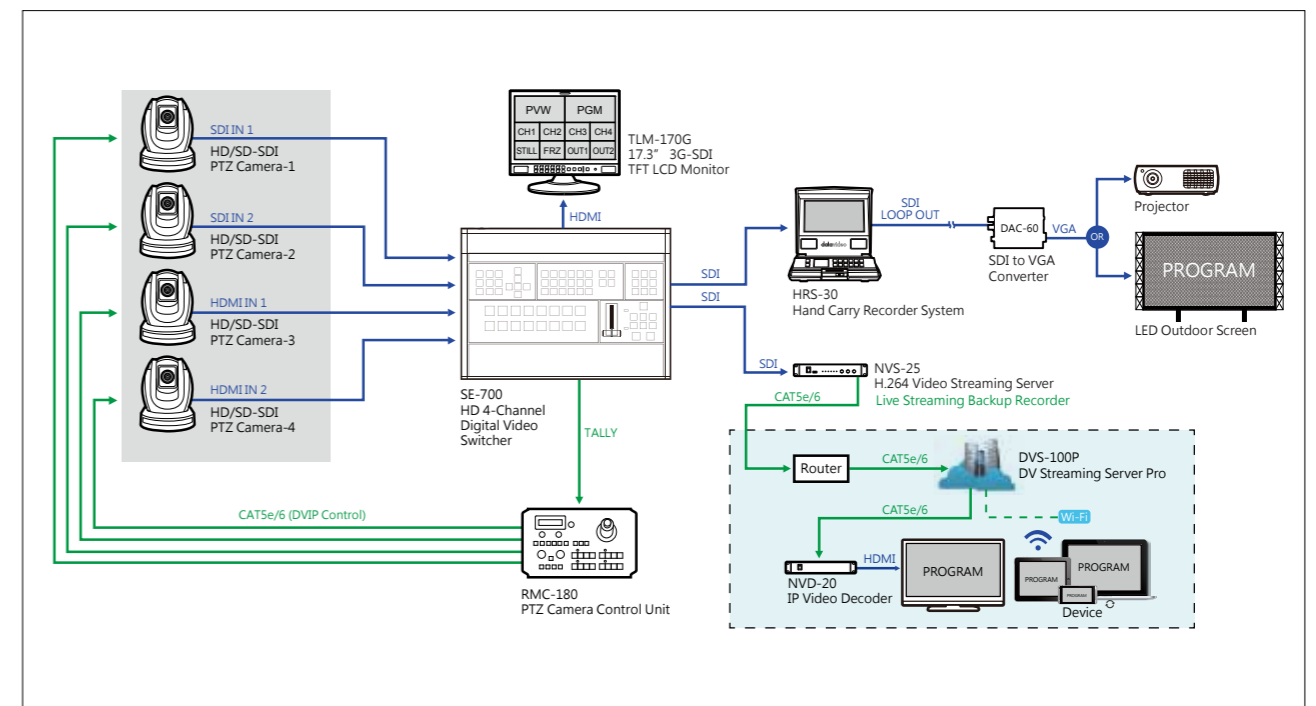
## RMC-180 PTC-150 Controller

1. Supports up-to 4 PTC-150 cameras
2. Individually set the white balance, iris, gain, focus and other parameters of each camera

3. Automatically saves settings of every PTC-150, including PTZ setting and video parameters; each PTZ camera has 50 PTZ preset positions and 4 shortcut keys and video calibration parameters.
4. Easy operation, fast response and automatic and manual control
5. Smooth manual control professional PTZ joystick
6. PTZ joystick speed control



52-mm filter lens or wide-angle lens can be used



A complete, remotely controlled solution for recording lectures and conferences



**SE-1200MU**

HD 6-Channel Switcher

**PTC-150**

PTZ Camera

SE-1200MU is a switcher with remote control and dual-camera chromakey. It is the first device in the world that allows remote multiview monitoring and switcher operation via Ethernet. The delay of the image broadcast over the network is less than 7 frames, making mid-to-long distance switching no different from live switching using a directly attached panel.

The unit's 6 input channels and remote operation make it suitable for use in lecture and conference recording systems.

SE-1200MU has two built-in chromakeyers which can be used in conjunction with saved images (the system can hold up-to 24 images). Any two images can be selected as a background to easily achieve a two-camera virtual studio to product of programs such as course tutorials, TV shopping and talk shows.





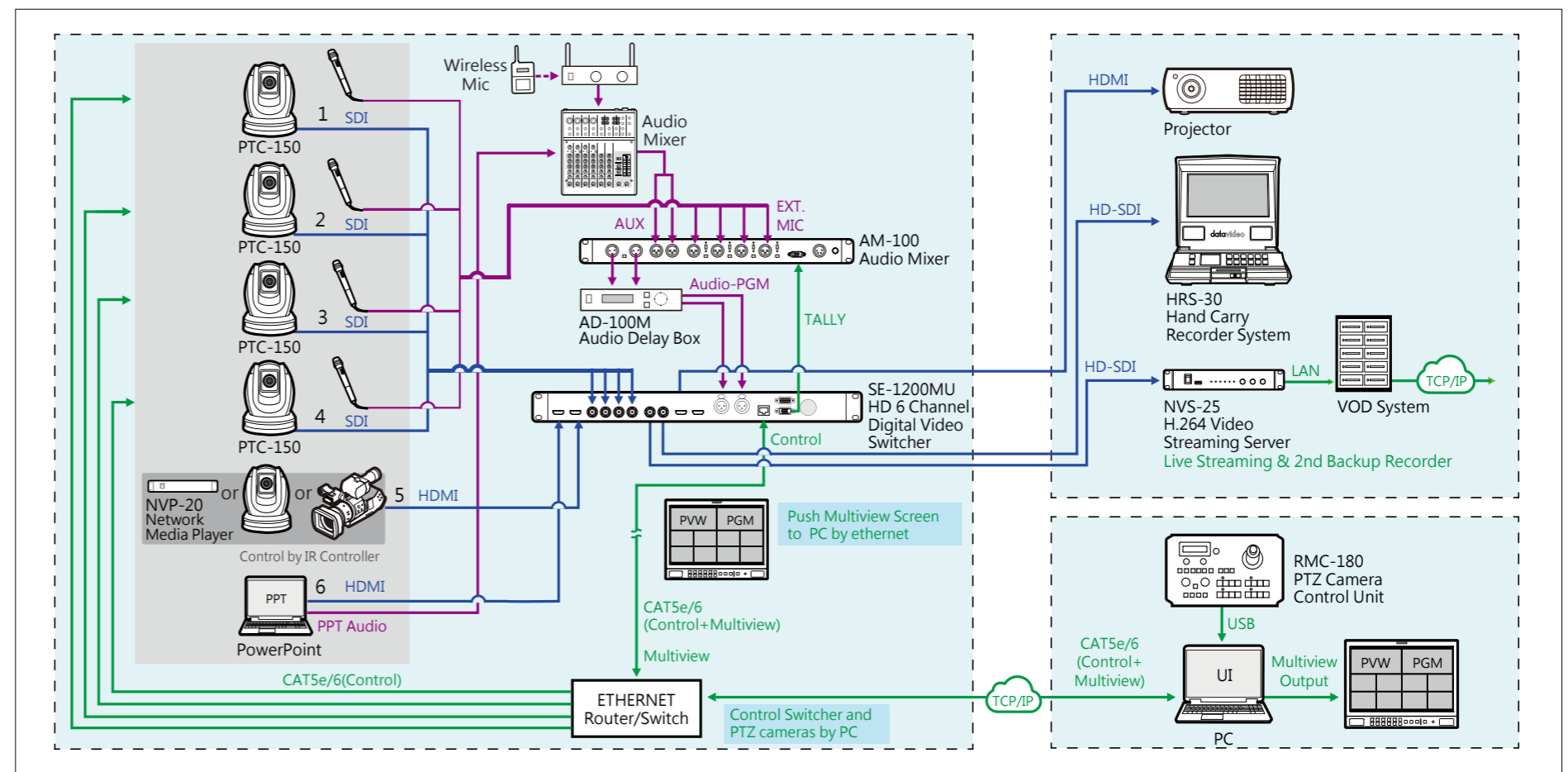
- 6 video inputs (SDI x 4 + HDMI x 2) Frame Sync on each input
- Flexible Mix/Effects Processor with
  - 2 Chromakey
  - 2 DSK, supporting Linear & Luma Key Modes
  - 1 PIP (assignable to any of the 4 keys)
  - Wipe Generator: 32 Wipe Patterns
  - Wipe, Mix & Cut Transitions
  - Full M/E Preview function
- Any Input (1-6) can be used as a Frame store (Stills Store)
- Assignable Outputs
- XPT (Cross Point Assignment)
- PC & Tablet control
- Remote streaming of Multiview out using built-in Motion JPEG Streaming processor
- Tally output
- GPI output

An Ethernet connection provides the multiview for remote control at a delay of less than 7 frames.

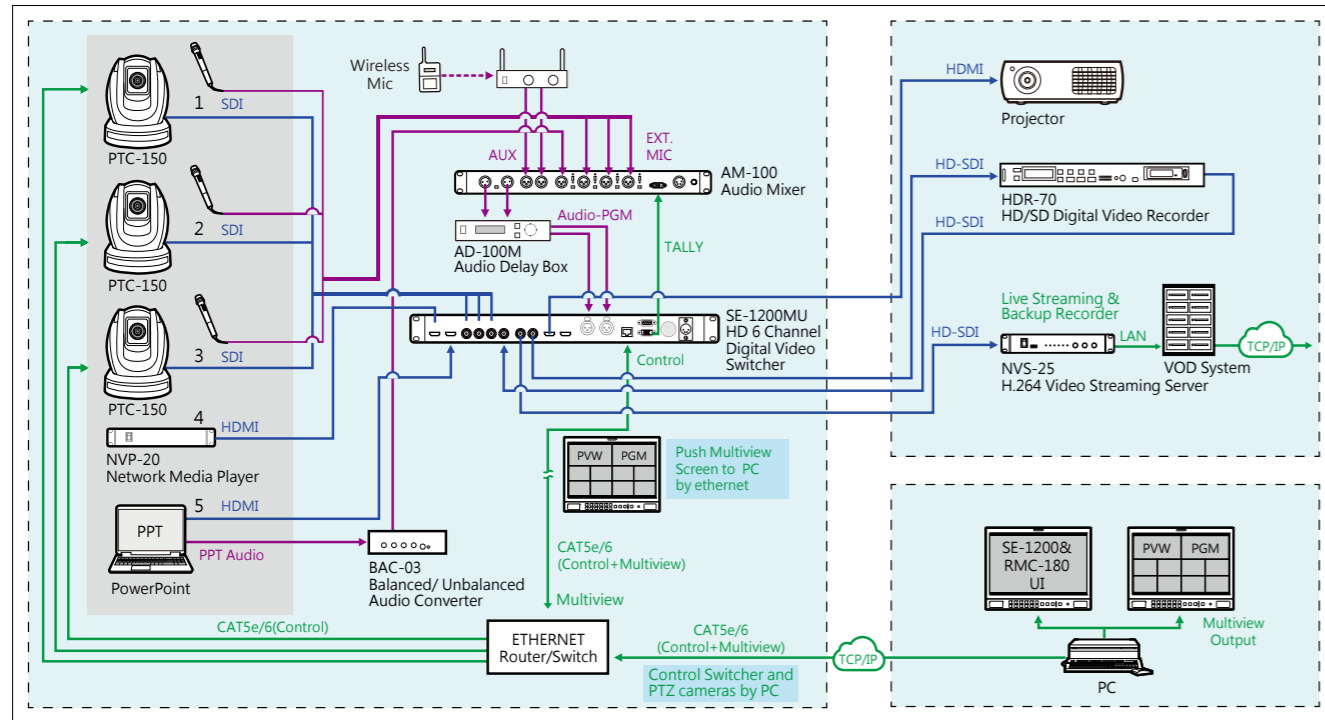
1. The PTC-150 can be independently controlled by the RMC-180. An illustration of application using a computer to control the SE-1200MU switcher is shown below.



SE-1200MU transmits the multiview via the network with minimal delay for real-time video switching. SE-1200MU is the first switcher the world to offer multiview transmission via Ethernet network for remote monitoring and switching.



2. This system diagram illustrates control of the PTC-150 and the SE-1200MU using a computer with two monitors, one monitor for the SE-1200MU and RMC-180 control interface, the other for multiview monitoring



## SPECIFICATION

Model	PTC-150T	PTC-150TW	PTC-150	PTC-150W	PTC-120
Video format	1080p 59.94/50/29.97/25 Hz 1080i 59.94/50 Hz 720p 59.94/50 Hz 480i, 576i (on CVBS)		1080p 59.94/50/29.97/25 Hz 1080i 59.94/50 Hz 720p 59.94/50 Hz 480i, 576i (on CVBS)		1080p 60/59.94/50/30/29.97/25 Hz 1080i 60/59.94/50 Hz 720p 60/59.94/50/30/29.97/25 Hz 480i, 576i (on CVBS)
Image Sensor	1/2.8" type progressive scan CMOS sensor		1/2.8" type progressive scan CMOS sensor		1/2.8" type CMOS
Effective Pixels (approx.)	2.14 Mega pixels		2.14 Mega pixels		2 Megapixels
Min. Illumination	Color : 0.4 lx B/W : 0.03 lx (F1.6, 1/30 sec, 50IRE, Gain: High)		Color : 0.4 lx B/W : 0.03 lx (F1.6, 1/30 sec, 50IRE, Gain: High)		5 Lux
Electronic Shutter	1/50 (1/60), 1/120 (1/100), 1/250, 1/500, 1/1000 sec		1/50 (1/60), 1/120 (1/100), 1/250, 1/500, 1/1000 sec		1/1 ~ 1/10,000 sec
Zoom Ratio	30x Optical zoom		30x Optical zoom		20x Optical zoom ; 12x Digital zoom
Gamma Control	Off / Normal / Standard Mode 1-4		Off / Normal / Standard Mode 1-4		Yes, 4 modes
Iris Control	Auto / Manual		Auto / Manual		Auto
Digital Noise Reductions	Yes		Yes		2D & 3D
White Balance	AWB /MWB /One push WB /Outdoor / Indoor /Fluorescent		AWB /MWB /One push WB /Outdoor / Indoor /Fluorescent		Auto /Indoor /Outdoor /One-Push / Manual
AGC / Gain Control	Auto / Manual Max. Gain Limit		Auto / Manual Max. Gain Limit		Auto / Manual
Mirror / Flip Image	Yes		Yes		Yes
Focus Mode	Auto / Manual		Auto / Manual		Auto / Manual
Panning/Tilting Range	Pan: 270°, Tilt: +90° to -20°		Pan: 270°, Tilt: +90° to -20°		Pan: 340°, Tilt: +90° to -30°
Panning/Tilting Speed	Manual: 1~150°/Sec Swing: 1~150°/Sec		Manual: 1~150°/Sec Swing: 1~150°/Sec		1~300°/sec
Preset	50 Position		50 Position		128 Position
Field of View (Horizontal, Wide)	Approx. 63.7 degrees (WIDE END) / 2.3 degrees (TELE END)		Approx. 63.7 degrees (WIDE END) / 2.3 degrees (TELE END)		63°
Image Compensation	Day & Night function		Day & Night function		Backlight, Exposure
Video Output	HDMI (V1.3) x 1, HD/SD SDI x 1 CVBS x 1, HDBaseT x 1 to PTC-150T Receiver Box		3G-SDI x 1, HDMI x 1, CVBS x 1		3G-SDI x 1, DVI-D x 1 Component x 1, CVBS x 1
Tally LED	Dual color (Red, Green)		Dual color (Red, Green)		N/A
Filter	Yes		Yes		N/A
Remote Control Interface	RS-422, HDBaseT (RJ-45); DVIP on Receiver Box		RS-422, DVIP (RJ45)		RS-232 & RS-422
Camera Control Unit	RMC-185		RMC-180		RMC-190
Accessories	---		---		CB-55, CB-57
Color	dark blue	white	dark blue	white	dark blue

## CB-55

### RJ-45 to RS-232 Converter



connect from CAT 5 to 8 pin mini Din RS-232

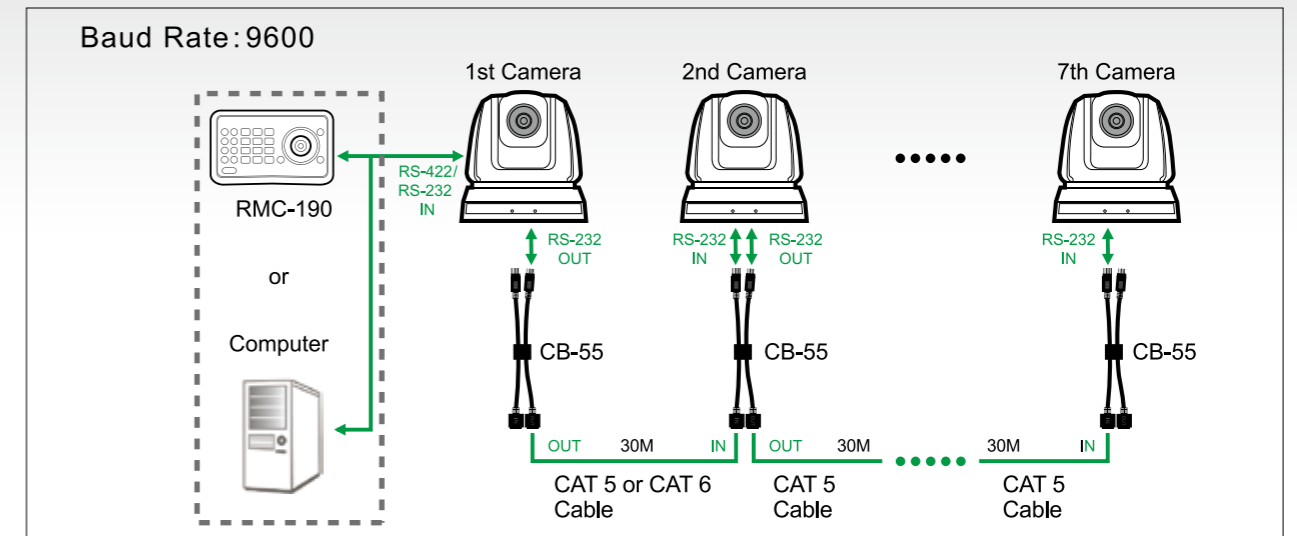
## CB-57

### RS-232 to RJ-45 Converter

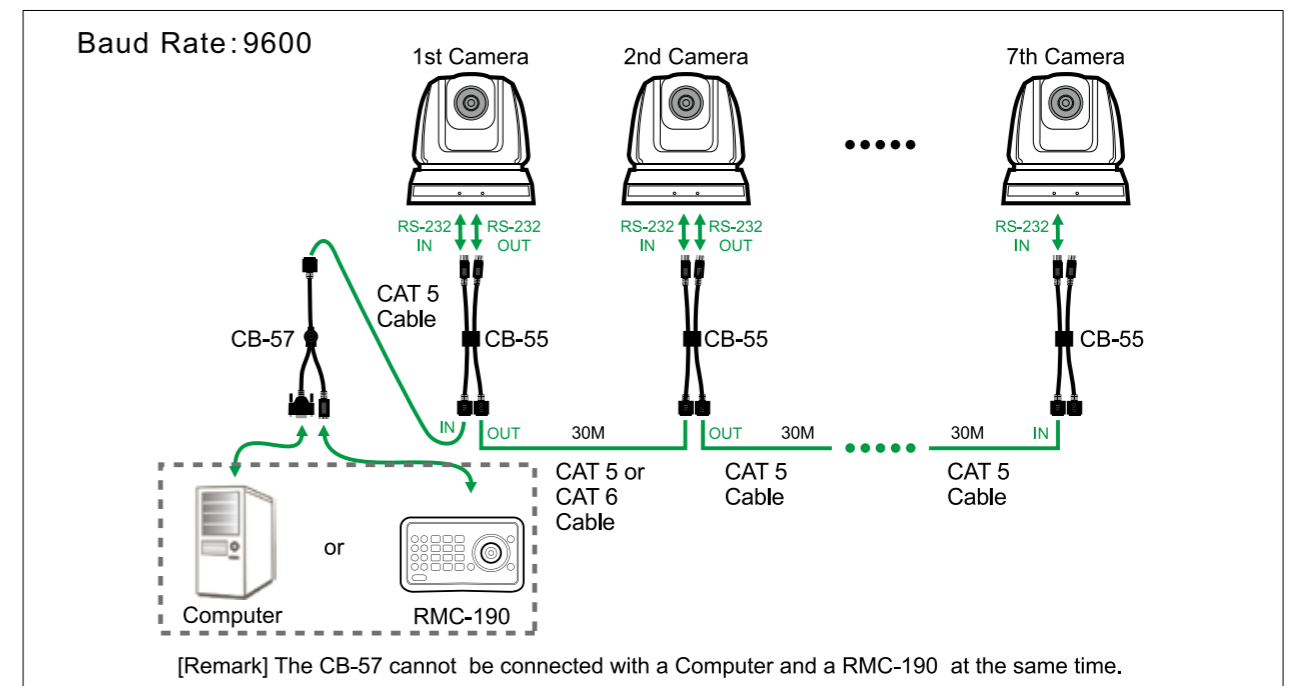


connect from control panel to CAT 5

1. With CB-55, you can cascade up to 7 PTC-120s by CAT 5 or CAT 6 cable



2. With CB-55 and CB-57, you can control far from PTC-120s and cascade up to 7 PTC-120s



#### Disclaimers of Product and Services

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