COMPUTER-CONTROLLED OUTDOOR PAN-TILT-CAM

PTC-D46U17-CS780W
PTC-D46U70-CS780W

Preliminary Specification

- Easy remote computer control via RS-232/485
- IP65 protection for outdoor, marine, and industrial environments
- Precise control of pan-tilt position, speed & acceleration
- Pan-tilt speeds to 300°/sec. and resolution to 0.012857°
- 25X optical zoom, 12X digital zoom, autofocus, to 2.5 lux color, .1 lux with programmable red cut filter
- Camera enclosure sealed with nitrogen
- On-the-fly position and speed changes
- Easier to field: small, lightweight and configurable low power usage
- Built-in networking
- Applications:
  - Security & surveillance
  - Webcams
  - Industrial automation
  - Robotics, computer vision & tracking
  - Videography & special effects

DirectedPerception

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COMPUTER-CONTROLLED OUTDOOR PAN-TILT-CAM

PTC-D46U17-CS780W
PTC-D46U70-CS780W

Preliminary Specification

Technical Specifications

General Features

- Simple to connect and control remotely by computer
- IP65 weatherized for outdoor, marine & industrial environments
- Precise pan-tilt positioning and speed control *(e.g.,* for time-lapse registration, building panoramas, tracking)
- Small profile and weight
  - low wind loading
  - fits in tight spaces & atop small poles
- Advanced controls & tight mechanical support
- Low power usage & power control modes
- Camera enclosure sealed with nitrogen
- Pan-tilts are real-time tracking mounts with high repeatability, accuracy & kinematic controls
- Can be networked and controlled over a single bi-directional wireless communications link
- DC power input from an unregulated source

Pan-Tilt Specifications

	D46U17	D46U70
Max. unloaded speed (@30VDC)	300°/second	60°/second
Pan-Tilt Resolution	3.086 arc minutes (0.051428°)	0.771 arc minutes (0.012857°)

Acceleration/Deceleration: Trapezoidal. On-the-fly speed and position changes.

Tilt Range (approx): 31° up and 69° down (100° range)

Pan Range (approx): ±180° (360° range)

Camera Specifications

Picture Elements: approx 680K pixels
Lens: 25x optical zoom (f=2.4 to 60mm), 12x digital zoom
Angle of View: approx 45° (zoomed out) to 2° (zoomed in)
Zoom movement speed (wide-to-tele): 2.2 seconds
Min. Illumination:
IR cut filter on: 2.5 lux@1/60th sec, 0.2 lux@1/4 sec
IR cut filter off: 0.1 lux@1/60th sec, 0.01 lux@1/4 sec
Horizontal resolution: 470 lines (NTSC)
S/N Ratio: 49dB
Camera model: Sony FCB-EX780B
General Features: Autofocus, electronic shutter from 1/4 sec to 1/10,000 sec, software removable red cut filter for low light and near-IR, built-in image stabilizer, on-screen data/date-time, controlled via Sony VISCA™ command protocol

Specifications subject to change without notice.

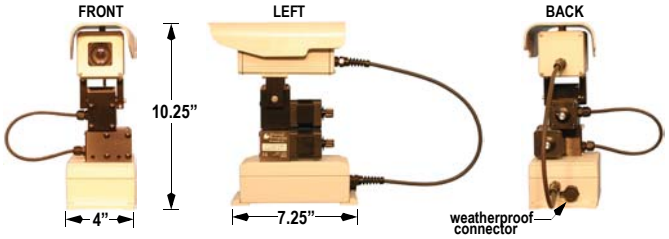
Connections

Connector Type: AMP PT02A-14-19S or compatible (MIL-C-26482)
Video out: NTSC
Input Power: 10.5-30VDC unregulated
- 18.8W continuous peak (full-power mode)
- 10.3W continuous peak (low-power mode)
- 3.8W continuous peak (holding power off mode)

Computer Controls: RS-232 standard (9600 baud), unit addressable; Built-in option of multidrop RS-485 networking

Mechanical

Weight: 6.25 lb. (2.83 kg)



Commands include:

<axis> is **T** for the tilt axis, **P** for the pan axis, or **C** for the camera.
General command form: <axis><command><value><delim> ⇒ [<status>]

Pan-Tilt Control Commands:
Go to position: <axis>**P**<position><delim> ⇒ [<status>]
Go to offset position: <axis>**O**<relative position><delim> ⇒ [<status>]
Set target speed: <axis>**S**<positions/sec><delim> ⇒ [<status>]
Set acceleration: <axis>**A**<positions/sec^2><delim> ⇒ [<status>]

Axis Queries:
General form: <axis><command><delim> ⇒ <query answer>
(Axis Control Commands become queries when the <value> argument is omitted.)
Resolution: <axis>**R**<delim> ⇒ <arc seconds per position>
Position bounds: <axis>[**N** | **X**]<delim> ⇒ <boundary position>

Unit Commands:
Await completion: **A**<delim> ⇒ <status>
Reset unit: **R**<delim> ⇒ [<status>]
Immediate mode: **I**<delim> ⇒ [<status>]
(immediate position command execution)
Slaved mode: **S**<delim>⇒ [<status>]
(position commands execute upon Await Completion command)
Defaults: **D**[<save> | <restore> | <factory settings>]<delim> ⇒ [<status>]
(Saves and restores unit defaults at power up)

Available Options

- Cables
- International AC/DC Power Supply (model PT-PS-INT30V)
- PAL camera versions available
- C Programmer's Interface (model PTU-CPI)

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