

RHP-CT (RHP Camera Tracker)



Intelligent Video Surveillance Tracking and Detection

The RHP Camera Tracker allows unattended operations to capture close-ups of the action in the scene using two cameras. A wide angle still camera will detect motion in its field of view and will automatically direct your PTZ camera to follow and zoom in or out to monitor the "activity". This unit also employs an alarm output trigger for recording.

Give Your Guard a Break!

Security cameras are a cost-effective means to keep large areas under 24/7 surveillance. Add a recorder and you've got an automated system.

But the short focal-length lens that covers that wide area yields recorded video that is too coarse to blow up to see detail. A digital zoom doesn't help if the data isn't there – you only get bigger pixels, not details.

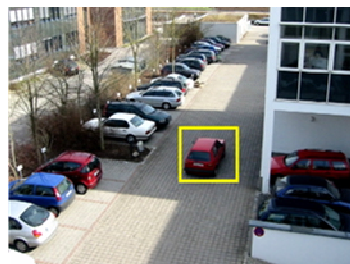
Of course you can use the powerful optical zoom of your PTZ camera to zoom in on interesting objects while they are on-camera to get the detail you need. But this requires an operator – until now.

The RHP Camera Tracker, designed by the motion experts at Rock House Products allows unattended operations to capture close-ups of the action in the scene.

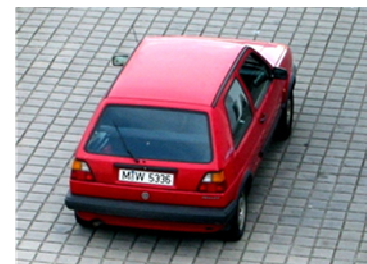
It watches the wide-angle video, just like an electronic watchman only with two cameras. When there is detected motion in the field of view, it automatically directs your PTZ camera to zoom in and look at the "activity". In addition the Camera Tracker deploys an alarm output to trigger recording, faces, car license plates, as well as other fine details of interest are recorded by your DVR for later review and action.



(1) Original View from Reference Camera



(2) Diagnostic View from Camera Tracker



(3) Automatic Close-Up View from PTZ Camera

Application Scenarios

RHP Camera Tracker is particularly suitable for:

- Large Outside Areas such as Parking Lots or Car Dealerships
- Large Inside Areas such as Warehouses or Factories
- Secure Critical Infrastructure on Campuses and Military Bases
- Entrance and Exit Roads
- Gates and Doorways - Front-end for Face or Car License Plate Recognition

RHP Camera Tracker at a glance

Based on RHP's advanced video algorithms and motion tracking technologies, Camera Tracker is a real-time video surveillance unit featuring:

- Compatible with all the standard color, b/w and IR analog NTSC and PAL cameras
- New installations and retro-fit market
- Supports leading PTZ camera platforms for unattended operations
- Camera Control: RS 422 and RS 232 SubD-9 connector
- On-screen setup and programming
- Activity alarm outputs to trigger enhanced system activity
- Manual override of PTZ control through controller (e.g. KBD300A) possible





RHP Camera Tracker

Intelligent Video Surveillance Tracking and Detection

RHP CloseView at a glance

Camera Control:

- RS232 or RS485/422 protocol
- 9-pin Sub-D male connector for PTZ camera
- 9-pin Sub-D female connector for optional remote control from Joystick or DVR
- External control protocol: Pelco P
- Optional manual override of PTZ control through external controller

Supported Cameras and Protocols:

- PELCO Spectra III series, Pelco D-Protocol
- American Dynamics SpeedDome Ultra
- BOSCH AutoDome
- SONY EVI D30/D31/D100, Visca Protocol
- CANON VC-C4, Canon Protocol

Operating Feature for all Camera Types:

- Selectable RS232/RS485, baud-rate and camera address
- Manual correction for zoom
- Diagnostic tool to verify camera communication

Operating Levels:

- User level (no accidental change of vital settings)
- Admin level

Four Operating Modes:

- Calibration Mode
- Normal Mode
- Demo Mode (tracking only, no PTZ control)
- Firmware Upload Mode

Motion Detection Sensitivity:

- High/medium/low

Adjustable Object Size For Detection:

- Minimum/maximum

Target Selection Modes:

- Stick with one target only
- Toggle between all detected targets

Home On Inactivity:

- Automatic return of camera to 'overview' position on inactivity

Exclusion Areas:

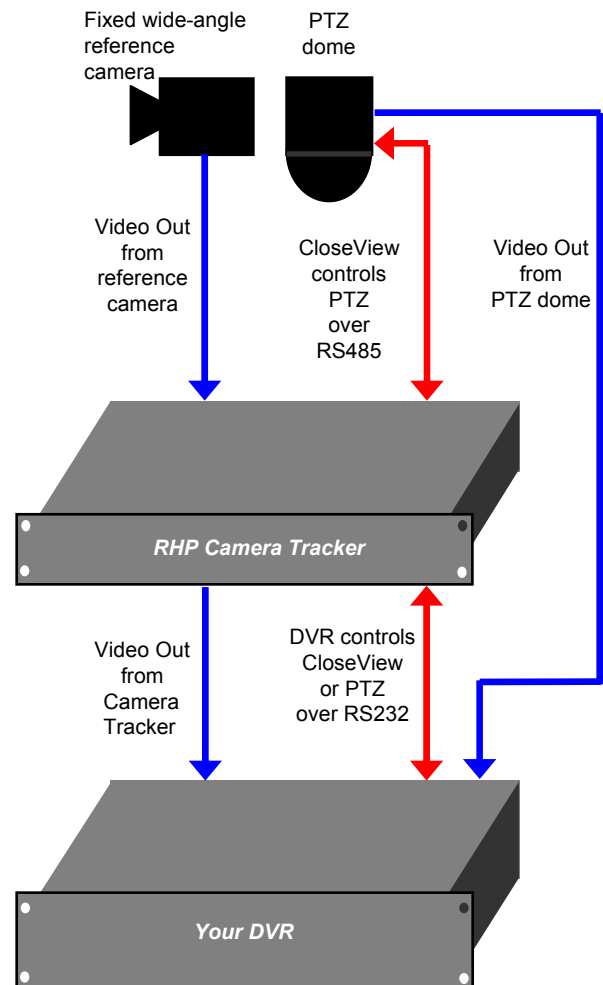
- Ten freely adjustable exclusion areas
- PTZ camera won't follow targets into these areas

Interactive Calibration:

- Works for arbitrary mounts and orientations of overview and PTZ camera
- Supports reference cameras with opening angles up to 170 degrees
- Interactive calibration using selected markers
- Onscreen help for calibration process

Adjustable Visualization:

- Detected motion
- Detected objects
- Exclusion areas
- Onscreen help





Technical Specifications

Video Input:

- 1 input channel
- Auto-detect PAL or NTSC
- 75 Ohm BNC connector

Video Output:

- 1 output channel
- Output automatically adapted to input format
- 75 Ohm BNC connector

Power:

- External power supply
- 12VDC, 1.2A
- DC Power Plug 2.5x5.5x14mm, Center+

Operating Conditions:

- Temperature: 30 – 120°F (0 – 50°C)
- Humidity: 20 – 95%, non-condensing

Dimensions and Mechanics:

- Height: 2.2" (5.5 cm)
- Width: 6.7" (16.9 cm)
- Length: 7.3" (18.5 cm)
- Weight: 2.4 lbs (1.1 kg)
- Finish: Black powder-coated aluminum
- Protection: Classification IP 65

EMC Compliance:

- FCC part 15B class A
- EN55022 class A
- EN61000-3-2
- EN61000-3-3
- EN61000-6-2

Firmware Upgrade Ability:

- Capability to upload new firmware from Laptop or PC through serial port

Application Setup:

- Via OSD (On Screen Display) from external joystick or DVR
- Via OSD from 6-button keypad at front panel
- 12 DIP-switches for basic configuration

Alarm Output:

- 1 alarm port
- 3-pole Mini-DIN connector
- Loads up to 0.5A at 125 VAC and 1A at 24 VAC.
- NO (normally open) as well as NC (normally closed) output.

Alarm Relay Output:

- Open/closed contacts,
- Video mode: relay active as long as there is a target
- Snapshot mode: relay active only once for each new target
- Adjustable post-motion-recording time

Board Features:

- Equator BSP-15 DSP
- 64 MB SDRAM
- 4 MB Flash
- 4 kbit parameter memory
- Real Time Clock with battery backup
- Video decoder, ITU 656 YUV 4:2:2 format
- Video encoder, ITU 656 YUV 4:2:2 format

Power Failure Safe:

- All user settings stored in EEPROM



RHP Camera Tracker Rack

19" Rack Unit Intelligent Video Surveillance Tracking and Detection



This version of the RHP Camera Tracker is a 19" Rack mount solution for professional security customers. It can be equipped with a maximum of two of our board based video processing modules. The 19" Rack Unit includes all the features of the Desktop Unit plus Ethernet connectivity.

Technical Specifications 19" Rack Unit

Video Input:

- Up to 2 input channel
- Auto-detect PAL or NTSC
- 75 Ohm BNC connector
- S-Video on 4-pin mini-DIN connector

Video Output:

- Up to 2 output channel
- Output automatically adapted to input format
- 75 Ohm BNC connector
- S-Video on 4-pin mini-DIN connector

Power:

- 100–240 VAC, 50/60Hz

Operating Conditions:

- Temp.: 0 – 50°C (32 – 122°F)
- Humidity: 20 – 90%, non-cond.

Dimensions and Mechanics:

- Height: 1U (44 mm)
- Width: 448 / 482 mm (19")
- Depth: 284 mm (11")

Camera Control:

- Terminal Block for PTZ control
- RS232 or RS422 connection

External Control:

- Terminal Block for Joystick / Keyboard or DVR control
- RS232 or RS422 connection

Alarm Output:

- 1 alarm port via Terminal Block
- Loads up to 0.5A at 125 VAC
1A at 24 VAC.
- NO (normally open) as well as NC (normally closed) output.

EMC compliance:

- FCC part 15B class A
- CE
- UL and CSA

Application Setup:

- Via OSD (On Screen Display) from external joystick or DVR
- Via OSD from keypad at front panel
- Via Web browser

Board Features:

- Equator BSP-15 DSP
- 64 MB SDRAM
- 4 MB Flash
- 4 kbit parameter memory
- Real Time Clock with battery backup
- Video decoder
ITU 656 YUV 4:2:2 format
- Video encoder
ITU 656 YUV 4:2:2 format

Firmware upgrade ability:

- Through 9-pin serial (COM) port
- Though terminal block
- Via Ethernet connection

Power Failure Safe

- All settings stored in EEPROM

