

Remote Observation Post Day and Night

Tactical Support Equipment Inc.'s new Day and Night Remote Observation Post is a redesigned and enhanced lightweight system that ensures ultimate mobility and rapid system setup.

The Day/Night pan/tilt camera comes with a Day Color Camera with a 35x optical zoom lens, a Night 640 x 480 Thermal Camera with a 15-100mm Continuous zoom lens and an internal stabilization mechanism. The internal vibration dampening system ensures jitter-free and crisp video feeds. The cameras and lenses are housed in an anodized and waterproof aluminum cases.

Users can operate the system manually via direct cable to 6.4-inch monitor/controller or remotely via the 224-400 MHz Digital Command and Control Radio with 4 watt output power and a 900 MHz Video Transmitter with 2/4/8 watt selectable output power.

The benefit of using TSE Inc.'s Remote OP Large is its light weight and small form-factor, which allows surveillance operators to deploy and operate the system quickly.

Other benefits include:

Integration with existing legacy CCTV systems and with most third-party encoders, DVRs, video servers and other surveillance monitors or recorders.



Part #: TSE-OP-D/N-L

Features

- Auto-Focus
- Image Stabilization
- Manual or Remote Setup
- Color/NIR/Fixed FOV 26X Optical / 12X Digital Zoom (312X with Optical Zoom)
- Uncooled 640 x 480 Thermal with 15-100mm Continuous Zoom Lens
- Pressurized Nitrogen Backfilled to Avoid Fogging
- Lightweight & Small Form-Factor
- Low Power Usage



Tactical Support Equipment

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Specifications

Cameras & Pan/Tilt Specifications

- **Pan Angle Range** 540°
- **Tilt Angle Range** 190°
- **Pan Speed** 0.5° to 180°/S
- **Tilt Speed** 0.3° to 45°/S
- **Pan/Tilt Encoder Resolution** 0.5°
- **Weight** <22 lbs (Depending on configuration)
- **Housing Material** Anodized Aluminum (Available in Black or Tan)
- **Power** 12 to 30 vdc, 500ma, 3A peak
- **Vibration** 3 grms 3 axis, Random 5 to 1000 MHz
- **Temperature** -20° to +70° C (-4° to +158°F)
- **Mounting** 3/8" tripod mounting screw
- **Optical Zoom** 35 X (Day) and 15-100mm (Night)
- **Digital Zoom** 12 X /312 X with Optical Zoom (Day)
- **Imaging Modes** Color / Near Infrared and Thermal
- **TV Lines** NTSC 470 / PAL 460 (Day & Night)
- **PEL Count** NTSC 680,000 / PAL 800,000 (Day)
- **Dynamic Range** 49 dB (Day)
- **Sensor Sensitivity** .05 Lux NIR Mod (Day) and 7.5-13.5um (Night)
- **Low Light-Long Integration** Yes / .25 sec. (Day)
- **Tripod** Carbon Fiber

Command & Control Radio Specifications:

Transmitter

- **Frequency Range** 225-400 MHz (FHSS) or Single Frequency at One Time
- **Output Power** 4 Watt
- **Range, Line-of-Sight** 30 Miles
- **Modulations** 2 and 4 Level GFSK
- **Occupied Bandwidth** 21 kHz
- **Hopping Patterns** 15 per Band, 105 Total, User Selectable
- **Hopping Channels** 28,000 Possible, Maximum 64 or Single Frequency at One Time
- **Channel Spacing** 25 kHz
- **Hopping Bands** 7, User Selectable

Receiver

- **Sensitivity** -108 dBm for BER 1X10⁻⁶ 2 Level GFSK, -100 dBm for BER 1X10⁻⁶ 4 Level GFSK
- **Selectivity** 20 dB at fc plus/minus 27 kHz (2nd IF)
- **System Gain** 144 dB

Video Transmit and Receive Specifications

900 MHz 2 to 8 Watt Transmitter:

- RF:**
- **Frequency Range** 886 - 923 MHz
 - **RF Power Output** 2, 4, 8 Watts selectable
 - **Transmit Duty Cycle** Continuous duty cycle with natural convection cooling
- Electrical:**
- **VSWR Mismatch** Circulator protected. No damage with mismatch.
- Interfaces:**
- **Video Input** BNC Female, 75 ohm
 - **RF Output** BNC Female, 50 ohm
 - **DC Input** Tajimi TR05 RB 2F, 2-pin flange mount
- Power:**
- **Operating Voltage** 9-17 VDC
 - **Current Consumption** Transmit: 2.3A @ 13.6 VDC, 2.1A typical @ 8W
- Mechanical:**
- **Dimensions** 1.55"H x 5.4"W x 4.85"D
 - **Weight** 1 Lb. 12 Oz
 - **Material** Aluminum-engineered enclosure
 - **Color** Black
- Environmental:**
- **Operating Temperature** -20 C to +60 C
 - **Storage Temperature** -40 C to +70 C
 - **Humidity** 0 to 95% non-condensing

900 MHz 6-Channel Receiver:

- RF:**
- **Frequency Range** 886 – 900 MHz
- Electrical:**
- **Video Output Format** NTSC or PAL
 - **Video Output Level** 1 V p/p
 - **Video Output Impedance** 75 ohm unbalanced
- Interfaces:**
- **Video Output** BNC Female, 75 ohm
 - **RF Input** BNC Female, 50 ohm
 - **DC Input** Tajimi TR05 RB 2F, 2-pin flange mount
- Power:**
- **Operating Voltage** 9 – 17 VDC
 - **Current Consumption** Receive 200mA @ 13.6 VDC
- Mechanical:**
- **Dimensions** .85" x 4.0" x 2.25"
 - **Weight** 8.5 Oz
 - **Material** Aluminum-engineered enclosure
 - **Color** Black
- Environmental:**
- **Operating Temperature** -20 C to +55 C
 - **Storage Temperature** -40 C to +70 C
 - **Humidity** 0 to 95% non-condensing

System Components

System includes:

- Day/Night Camera w/Tilt/Pan
- Carbon Fiber Tripod
- Monitor/Controller
- Digital Command & Control Radios
- Cables
- Antennas
- Video Receiver & Transmitter
- Weatherproof Case



For more information, contact sales@tserecon.com

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