The Air Guard series of Wireless Video & P/T/Z Control Systems have been developed specifically for use in professional CCTV installations. These units include both wireless video as well as wireless P/T/Z control systems housed in NEMA enclosures and come completely assembled and ready to install.

**FEATURES:**
- Full motion color video & P/T/Z control;
- Complete with antennas in 0.5 & 2.0 mile configurations;
- Standard 120 VAC with 24 VAC option;
- Standard RS-422/485 data format with RS-232 option;
- Completely assembled in NEMA 4X enclosures;
- No user license required (FCC Certified under Part 15)

**BENEFITS**
- Cost Savings: By eliminating the need for costly labor & materials to install cable.
- Multi-Camera Installations: These systems have been specifically designed to allow multi-camera installations.
- Immediate Installation: These systems are typically available within a short time of ordering and are easily installed.
- Technical Support: Experienced technical support is available from Premier from bid phase through installation.

**FOUR CAMERA SYSTEM**

- **For 0-0.5 Mile Range**
  - AG-1400/1500 (Qty 1)
  - AG-1410/1510 (Qty 3)

- **For 0-2.0 Mile Range**
  - AG-1450/1550 (Qty 1)
  - AG-1460/1560 (Qty 3)
Support

In the past the ability to successfully install a wireless system has been somewhat of a mystery to many. Premier Wireless has taken the mystery out of wireless by offering superb support and products with the best performance and features. To take the mystery out of your next installation we suggest you take advantage of the following support capabilities at Premier Wireless.

• Involve Premier at the bid phase. We will guide you through a preliminary site survey as well as help determine which P/T/Z or dome model of your camera manufacturers product would work best and of course help specify the correct Air Guard systems (available at no cost).
• Review the Premier Wireless "Installation Guide for Wireless CCTV Systems" prior to starting installation and request a technical review by Premier of your specific installation (available at no cost).
• Immediately contact Premier Wireless if there are problems during or subsequent to the installation; we have technical personnel on hand with years of field experience installing wireless systems (available at no cost).
• If necessary Premier can provide field support, either through our field sales reps or factory technical personnel.

Applications

Air Guard systems can be used in any CCTV application. Because of their performance and features they are found in many large multi-camera projects. These include:

- Surveillance at Sea Ports and other ports of entry by commercial and customs organizations.
- Public surveillance in high crime metropolitan areas by law enforcement organizations.
- Surveillance on large corporate campuses.
- Traffic monitoring by federal, state and local transportation agencies.

One of the distinct advantages of using wireless is that when required the camera locations can easily be moved, something not possible with hard-wired installations.

Compatibility

Air Guard systems are compatible with the P/T/Z control of all major camera manufacturers, included but not limited to:

- Kalatel
- Panasonic
- Pelco
- Phillips
- Sensormatic
- Vicon

Note: Any model of these manufacturers that provide a standard RS-232 or RS-422/485 interface will work with the Air Guard systems. Other models may require special converters to change their control signals to meet RS-232 or RS-422/485 standard.
The AG-1300 & 1500 use the 5.8 GHz ISM band that is virtually unused by other equipment at the present time. Interference problems that made the 900 MHz band unusable for video and the 2.4 GHz band difficult in dense urban environments are virtually non-existent. Large multi-camera projects are easier using the 10 independent transmission channels combined with Premier’s antenna technology. It is now possible to install over 40 wireless cameras at one location.

Using the “System Test” mode simplifies the whole installation process. In System Test the video transmitter will transmit status information to the video receiver on a sub-carrier. This will minimize the number of “trips up the pole” to optimize system performance.

Available on the AG-1300 & 1500 are four (4) contact inputs to the transmitter which are relayed to the receiver. These contacts can be used for monitoring gate openings, video motion detection and many other similar applications.

Multi-Camera Projects:

Air Guard systems are ideal for use in large multi-camera projects. Each system includes a video transmitter and receiver. P/T/Z control is accomplished with point-to-multipoint data transmission. Only one data transmitter is required at each site (located at the control center), and one data receiver at each camera. The camera “joystick” controller sends a camera address with each command, but only that camera being addressed will respond. All Air Guard models have a data receiver but only some have a data transmitter. In the “How To Order” section on the back page “1st Camera” models have a data transmitter, “additional camera” models do not. Select a “1st Camera” model for your longest link and “additional camera” models for every other link (see illustration on first page).

NOTE: See photos on back for Receiver Dish on AG-1525, 1535, 1550 & 1560
### Video I/O
- **Signal Formats**: NTSC & PAL
- **Input Level**: 1.0 Volt p-p
- **Output Level**: 1.0 ± 0.2 Volt p-p
- **Impedance**: 75 ohms
- **Connector**: BNC

### Data I/O (For P/T/Z Control)
- **Baud Rate**: 38.4 Kbps, max
- **Half Duplex RS-422**: Control Lines: Tx-/+, Rx-/+, GND
- **Transmission Delay**: 15 msec
- **Data Connector**: Screw Terminals

### RF System (For P/T/Z Control)
- **Output Power**: 0.725 mW, max
- **BER**: 10E-6 @ -92 dBm
- **Receiver Sensitivity**: -100 dBm
- **Signal Acquisition Time**: 8.0 msec
- **Operating Frequency**: 902 - 925 MHz
- **Radio Technique**: DSSS
- **Channels**: 21 User Selectable

### Microwave System
- **Radiated Power**: FCC Part 15
- **Modulation**: FM

**Model 1300 & 1500 (5.8 GHz)**
- **Operating Frequency**: 5725 - 5875 MHz
- **Channels (User Selectable)**: 10
  - (14.75 MHz channel bandwidth)

**Model 1200 & 1400 (2.4 GHz)**
- **Operating Frequency**: 2400 - 2483 MHz
- **Channels (User Selectable)**: 4
  - (20 MHz channel bandwidth)

### Controls & Indicators
- **Channel Change**: Push Button
- **System Test**: Push Button (TX Only)
- **RSSI Level**: Push Button (RX Only)
- **LED Indicators**: TX & RX
  - Channel & Low Supply Voltage
  - TX Only: No Video Input & System Test
  - RX Only: RSSI Level

### Contact I/O (5.8 GHz wireless video only)
- **Number of Input**: 4
- **Input**: 5 V Logic (normally high) or Contact (open or close)
- **Output**: 5 V Logic, 10 mA max
- **Connectors**: Screw Terminals

### Mechanical
- **Weight (per enclosure)**: 8.5 lbs
- **Dimensions (each enclosure)**:
  - 1200 & 1300 Series: 11.5” x 13.5” x 5.5”
  - 1400 & 1500 Series: 13” x 15” x 6”

### Environmental
- **Operating Temperature**: -20° C to +65° C
- **Storage Temperature**: -50° C to +85° C

### Power
- **Input Voltage**: 120 VAC
- **Input Current (max)**:
  - 1200 & 1300 Series: 0.2 A
  - 1400 & 1500 Series: 0.5 A

### Option A: 24 VAC Power Input
- **Option B**: RS-232 only
- **Option C**: Add audio for 2.4 GHz systems
- **Option D**: Full duplex data, AG-1400, 1450, 1500, 1525, 1550
- **Option D**: Full duplex data, AG-1410, 1460, 1510, 1535, 1560
- **Option E**: 12 VDC Power Input

### Microwave System
- **Radiated Power**: FCC Part 15
- **Modulation**: FM

**Model 1300 & 1500 (5.8 GHz)**
- **Operating Frequency**: 5725 - 5875 MHz
- **Channels (User Selectable)**: 10
  - (14.75 MHz channel bandwidth)

**Model 1200 & 1400 (2.4 GHz)**
- **Operating Frequency**: 2400 - 2483 MHz
- **Channels (User Selectable)**: 4
  - (20 MHz channel bandwidth)

<table>
<thead>
<tr>
<th>Channel Frequencies</th>
<th>AG-1550</th>
<th>AG-1560</th>
</tr>
</thead>
<tbody>
<tr>
<td>5733.75 MHz</td>
<td>5807.50 MHz</td>
<td></td>
</tr>
<tr>
<td>5748.50 MHz</td>
<td>5822.25 MHz</td>
<td></td>
</tr>
<tr>
<td>5763.25 MHz</td>
<td>5837.00 MHz</td>
<td></td>
</tr>
<tr>
<td>5778.00 MHz</td>
<td>5851.75 MHz</td>
<td></td>
</tr>
<tr>
<td>5792.75 MHz</td>
<td>5866.50 MHz</td>
<td></td>
</tr>
</tbody>
</table>

**Model 1200 & 1400 (2.4 GHz)**
- **Operating Frequency**: 2400 - 2483 MHz
- **Channels (User Selectable)**: 4
  - (20 MHz channel bandwidth)

<table>
<thead>
<tr>
<th>Channel Frequencies</th>
<th>AG-1550</th>
<th>AG-1560</th>
</tr>
</thead>
<tbody>
<tr>
<td>2412.5 MHz</td>
<td>2432.5 MHz</td>
<td></td>
</tr>
<tr>
<td>2452.5 MHz</td>
<td>2472.5 MHz</td>
<td></td>
</tr>
</tbody>
</table>