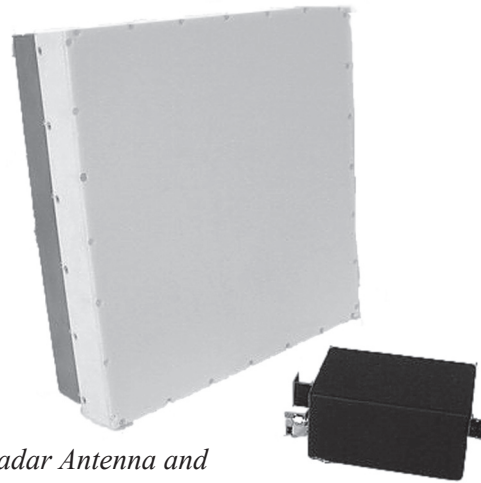


## Suicide Watch System

*(Preliminary)*



*Receiver*



*Radar Antenna and  
Camera with Microphone*

- Cost-saving solution
- Portable/transportable
- Vital signs monitoring/alarm
- Alarm and recording

Watcher is specially manufactured to replace the 24-hour visual officer monitoring often required by potentially harmful situations. Watcher provides remote monitoring of the area, with video and audio recording, plus constant monitoring of vital signs with a remote alarm feature. The vital signs are monitored without contact with the person being monitored.

The remote unit is connected to the monitoring station using a high quality 2.4 GHz. radio link. The radio link provides wireless transmission of color or black-and-white video, plus audio, plus the vital signs data from the person being monitored. The vital signs are monitored using a state-of-the-art very low power Doppler radar system that constantly monitors the area where the person is confined and transmits back the vital signs data (respiration and heartbeat). An information readout and alarm unit located at the monitoring point provides an alarm when the

vital signs exceed predetermined limits. The alarm alerts monitoring officer of a potential problem. The officer quickly assesses the situation using the video and audio data and can immediately dispatch other officers if necessary.

One monitoring station can monitor one or several remote units (up to 10) simultaneously. In cellblock situations the vital sign monitoring can be accomplished through the cell door or through the cell walls in most cases.

Batteries or plug-in power as required can power each remote monitoring station. Battery packs can be sized to provide sufficient battery power for most situations.

The diagram on the back page shows the typical system operation. The Radar System display also shown shows the monitoring operation of the vital signs monitoring and displays the vital signs being received.

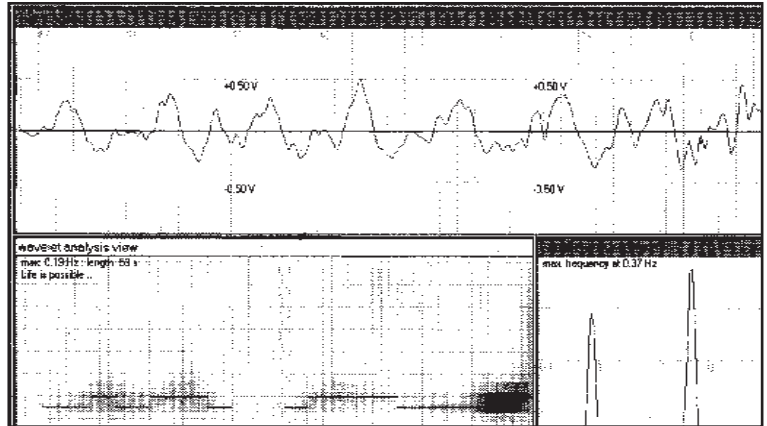
### Audio/Video System

- Camera – Pin-hole style, 28 mm (other lenses available upon request)
- Bandwidth – 7 MHz.
- Microphone – condenser style (mounted with camera)
- 3 inch LCD screen (monitoring location)
- Video and audio outputs for additional monitors
- Built-in VCR for video and audio recording

### Vital Signs Monitoring

- RF output – less than 2 mw
- Frequency – 1350 MHz.
- Bandwidth – 100 MHz.
- Sensitivity - -80 dBm (S/N 10 dB)
- Antenna angle – 55 degrees
- Operating distance – ½ mile (estimated)
- Frequency range – 2450-2483.5 MHz.
- Output power – 0.25 watts (Other output levels available)
- Bandwidth – 7 MHz.
- Antenna – Selected depending upon requirement

*Radar System*



*Line Diagram*

