

# WIRELESS



You need Wireless Video/Audio connectivity with your video conference that provides complete mobile freedom anywhere in your operation.



## ***Liberty 2000 Wireless Videoconferencing Solution***

The Liberty 2000 is a mobile wireless video/audio communication system that provides high quality video/audio connectivity to your video conference system wherever in your facility it is required.

It allows an individual to transmit a video image (color, full motion) to the local codec while maintaining a full duplex conversation with someone at the remote end of a video call.

## IMAGINE THE POSSIBILITIES!

# VIDEO CONFERENCING

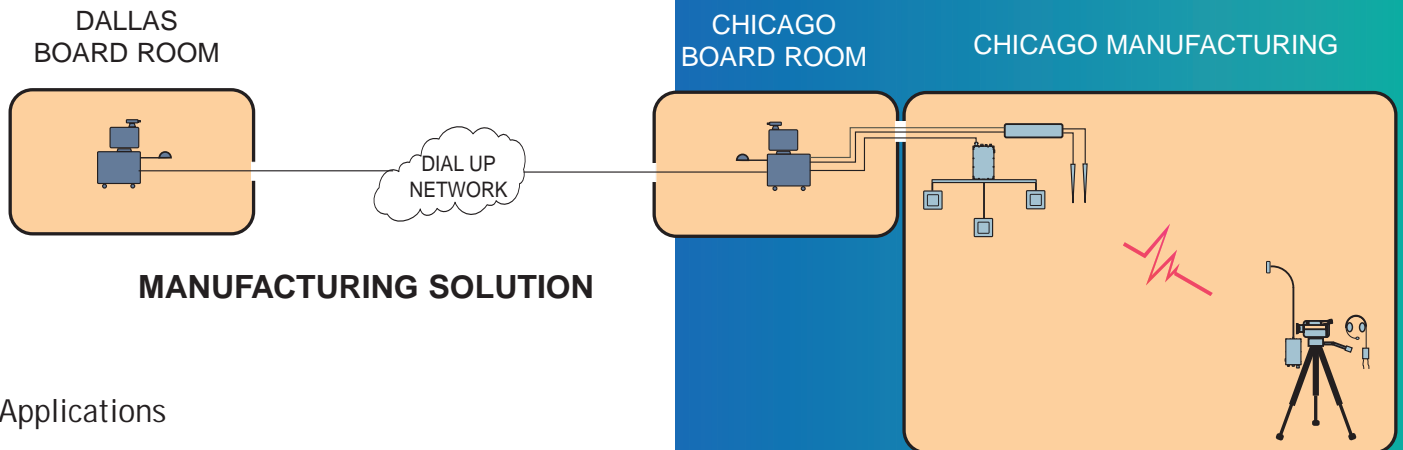
# SAVE MONEY-SAVE TIME

## Features:

1. Interface to any Videoconferencing System
2. High quality wireless Video transmission and full duplex audio
3. Light weight mobile transmission system, can easily be carried anywhere
4. Compact audio transceiver and head set allows hands free communication
5. Full communication with both local and remote video conference participants
6. Unique Diversity Video Receiver substantially reduces multipath and allows operation without a line of sight
7. FCC Certified, no user license required

## Benefits

1. Reduce production down time by immediate connectivity with your technical experts and OEM's; wherever in the world they are. Allows local personnel to service equipment with real time support from experts at distant locations.
2. Reduce training costs via distance learning by utilizing trained personnel on operating production lines and equipment. Training can be immediate, new knowledge disseminated very quickly.
3. Improve manufacturing efficiency by "tweaking" production processes in real time with experts from other company locations or equipment vendors
4. Reduce product development time as engineers at remote locations collaborate in real time to provide immediate feedback during prototype development of products and processes.



## MANUFACTURING SOLUTION

## Applications

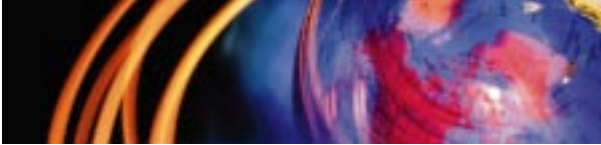
### *Imagine...*

**Manufacturing:** The tremendous savings in time and money when live video from the manufacturing floor can be shared with other corporate divisions, vendors and customers anywhere, any time.

**Airline Operations:** How much faster aircraft with technical problems could depart if local service personnel can provide live video to trained experts at headquarters.

**Distance Learning:** The benefits to your educational program when video can be transmitted live from the manufacturing floor or from the inside of a museum or zoo.

**Telemedicine:** How practical live video from the operating room will be without the danger of cables distracting surgeons and assistants from the critical tasks at hand.



▲ PORTABLE TRANSMISSION UNIT (2000T)  
Included with the 2000T is:

- ▼ Video Transmitter
- ▼ Transmitter Battery Pack
- ▼ Light Weight professional tripod
- ▼ Fluid Head with full three way action each axis
- ▼ Antenna support with flexible arm to adjust antenna direction



▲ WIRELESS AUDIO BASE UNIT (2000A)  
Included with the 2000A is:

- ▼ Wireless intercom base unit
- ▼ Transmit and Receive antennas with cables

## SYSTEM DESCRIPTION

The Liberty 2000 consist of three major sub-systems: A mobile transmission system (2000T); a wireless video receiver (2000V) and a wireless audio intercom base unit (2000A).

In operation a video signal is transmitted from a camera on the mobile platform to a local receiver typically mounted near the ceiling or against one wall. This video signal is then sent via coax or twisted pair to the local video conference system. The camera operator wears an audio headset with boom mic attached to a beltpack transceiver that permits full duplex audio transmission via the intercom base unit with personnel at both the remote and local codec.



▲ WIRELESS VIDEO RECEIVER (2000V)  
Included with the 2000V is:

- ▼ Patented Diversity Receiver
- ▼ Three high gain circular polarized Panel antennas
- ▼ Antenna support with cables

## Coverage

A receiver with the standard antenna option can cover 120,000 to 150,000 feet in a single indoor space (line of sight not required). When a large building is divided by internal walls into smaller spaces then it may be necessary to have one receiver per space. Signals from multiple receivers are routed through a switch into the local video codec.

## How Does It Work?

Microwave video transmissions inside manufacturing facilities or in outside environments with many reflecting surfaces usually result in video signals with a substantial amount of “break up” due to multipath interference. With the Premier Wireless system high quality microwave video transmissions are maintained even with out a line of sight, by the use of a unique diversity video receiver.

# Liberty 2000 SPECIFICATIONS

## 2000T PORTABLE TRANSMISSION UNIT

### Wireless Video Transmitter:

#### Video Input

Signal Format: NTSC and PAL  
 Level: 1.0 Volt P-P  
 Impedance: 75 Ohm  
 Video Connector: BNC

#### Microwave

Frequency: 2400 to 2483 MHz  
 Channels (switchable): 4  
 Channel Frequencies: 2412.5 MHz

2432.5 MHz  
 2452.5 MHz  
 2472.5 MHz

Radiated Power: FCC Part 15.249

Modulation: FM  
 Antenna: Patch (circular polarized)

#### Power

Input Voltage: 11 to 16 VDC  
 Input Current: <80 mA

## WIRELESS AUDIO TRANSCIVER (BELTPACK)

### Transceiver

RF Frequency Range: 150-216 MHz  
 RF Power Output: 50 mW typical  
 Modulation: FM  
 Bandwidth: 300 to 5000 Hz  
 Antennas: 1/4 wave wire (attached)

### Audio

Mic Audio Input: 30 to 3500 ohms  
 Audio Output: 21 mW into 600 ohms  
 Connector: Male XLR-4

### Overall

Power Requirements: 6AA cells  
 Dimensions: 4.25" W X 4.125" H x 2.0" D  
 Weight: 13 oz.

### Headset

Earphone Type: Dynamic/Single  
 Microphone Type: Dynamic Noise Canceling  
 Cable Length: 6 ft.  
 Cable Connector: Female XLR-4

## Mobile Platform

### Mechanical

Tripod Height: 54.25 inches max.  
 Tripod Load: 11.0 lbs max.  
 Fluid Head Height: 5.125 inches  
 Fluid Head Load: 13.2 lbs. max  
 Total Weight: 13.0 lbs. typ.  
 (All components including camera)

### Transmitter Battery

Voltage: 12.0 volts  
 Capacity: 2200 mA/H

## 2000V DIVERSITY VIDEO RECEIVER

### Video Output

Output Level: 1.0± .2 volts P-P  
 Impedance: 75 ohms  
 Video Connector: BNC

### Microwave

Channels: (See video transmitter)  
 Frequencies: (See video transmitter)  
 Antennas: Panels (circular polarized)  
 Diversity: Three antenna (automatic switching)  
 Range: 400 feet indoors  
 2000 feet with clear line of sight

### Power

Input Voltage: 11 to 16 VDC  
 Input Current: <240 mA

### Mechanical

Weight: 36 oz. (With antennas and support)  
 Dimensions: 26" x 44" x 2" (With antennas and support)

## 2000A AUDIO BASE UNIT

### Transceiver

RF Frequency Range: 150-216 MHz  
 RF Power Output: 50 mW typical  
 Modulation: FM  
 Bandwidth: 300 to 5000 Hz  
 Antennas: 5/8 wave

### Audio

Audio Input: 60 mV RMS typical  
 Input Connector: Male XLR-3  
 Audio Output: 430 mV RMS into 600 ohm load typical  
 Output Connector: Female XLR-3

### Overall

Input power: 13.0 VAC @ 300 mA with adaptor  
 Dimensions: 15.75W x 1.75H x 10.5D  
 Weight: 4.5 lbs.

## OPTIONS:

### Option

Option	Description
001	NTSC Camcorder
002	PAL Camcorder
003	220 VAC Substitution
004	High Power Transmitter Substitution
005	Analog Scrambling System
006	Digital Encryption System
007	Ranger 400 Microwave Video Stabilizer
008	European CE & Type Approval
023	Patch Antenna Substitution
031	Rod Antenna Substitution

## ACCESSORIES:

### Part Number

Part Number	Description
4000005000	4 to 1 Video Switch
4000006000	6 to 1 Video & Audio Switch

## SUPPORT SERVICES:

**VAR/Dealer Certification Program:** Two day training course for technical personnel. Provides attendees with the necessary skills and information to properly select, install, configure and maintain a Wireless Video/Audio system for use in a video conferencing application.

**Field Technical Support:** On site support by Premier Wireless Technical personnel for surveys and installation.

**Technical Consulting:** On call support for certified Dealers, VARs and OEMs provides technical assistance for unique and critical installations.

## Premier Wireless, Inc.

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Specifications subject to change without notice.

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