

## Mass Notification In-Plant Personnel Warning System

**Whelen's IPS Series Products deliver clear, powerful tone and voice warnings, eliminating confusion at the onset of an emergency.**

### IPS1600 SYSTEM FEATURES

- Type II Natural Finish Aluminum Cabinet
- Public Address Capability
- Two Lead Acid Batteries
- Battery Powered, Minimum of 30 Minutes of Full Power Output
- AC Temperature Compensated 10 Amp Battery Charger
- Local Controls or Remote Controls
- Four Power Amplifiers for use with combinations of speakers
- Electronic Siren Controller
- Tone Generator
- Timer
- Local Control Push-Buttons
- Battery Switch
- SI TEST®
- Battery Tray
- Six Standard Public Warning Tones - Wail, Whoop, Attack, Hi-Lo, Alert, Airhorn.

### SYSTEM OPTIONS

- RDVM - Digital Voice Message Capability<sup>1</sup>
- WPSNMCIC - Noise Cancelling Microphone
- STCTRL - Light Controller for Strobes / LEDs
- Alternate Tone Set

#### NOTES:

<sup>1</sup> RDVM - 1-16 message capability with 240, 480 or 960 seconds available for recording

### ACTIVATION CONTROLS

Our VHF High and UHF siren activation control packages include the following:

- Radio
- Radio Interface
- Tone Squelch
- 2-3dB Gain Omni-Directional Antenna with Bracket
- 35' of RG58 Antenna Cable

Other features are dependent upon one or two-way controls. Whelen equipment can be interfaced with many different types of two-way radio communications products and systems including 800Mhz trunking, Motorola's MOSCAD, FSK, Narrow-Band and VHF Low Band. The following is available as standard options. Contact factory for special applications.

#### ONE WAY CONTROLS

- AUXIN - Auxiliary Board for Contact Closure Activation
- D2020LL - 10 Digit DTMF Landline Activation
- D2020H - 10 Digit DTMF VHF High Band / 150-170 Mhz
- D2020U - 10 Digit DTMF UHF / 450-470 Mhz
- WPSTT - Two Tone Sequential Option

#### TWO-WAY CONTROLS

- AUXCS - Two-Way Contact Closure Activation and Status Board
- C2020LL - Two-Way Landline Activation
- C2020H - 10 Digit DTMF VHF High Band / 150-170 Mhz
- C2020U - 10 Digit DTMF UHF / 450-470 Mhz
- C2020NH - 10 Digit DTMF VHF High Band Narrow-Band
- C2020NU - 10 Digit DTMF UHF Narrow-Band

#### OPTIONS

- FSKXMOD - Converts the Above Siren Activation Controls to FSK Format
- STATUS - Cabinet Window LED Status Indicator
- PGINT - Paging Interface to Interface Whelen Tones with Existing Paging Systems
- INTRU - Intrusion Alarm (available with two-way only)

#### SPEAKER OPTIONS

- WS15T - Wide Angle, 15 Watt Speaker
- WS15TR - Recess Mount, 15 Watt Speaker
- WS15TEN - Recess Mount, 15 Watt Speaker with Grill
- WS30T - Wide Angle, 30 Watt Speaker
- WS60T - Wide Angle, 60 Watt Speaker
- WSXPL60T - Explosion-Proof, 60 Watt Speaker
- WS100 - Wide Angle, 100 Watt Speaker
- WS100TCH - Wide Angle, 100 Watt Speaker with Weatherproof Housing

All of the above speakers (except WS100) include level adjustment multi-tab transformers and a capacitor for line level supervision.



IPS1600 TYPE II  
ELECTRONIC CABINET

# IPS1600

## Specification Data

### PHYSICAL DATA

Height: 57.5" (146cm)  
Width: 30.0" (76cm)  
Depth: 14.0" (35.5cm)

### ELECTRICAL DATA

AC input: 120 / 240 V, 60Hz,  
7 amp Fuse  
DC Output: 28VDC @ 10 amp  
Power Amplifier: 1600 watts  
total from four amplifiers with  
4 channels each @100 watts  
output per channel  
Tone Generation: 6 warning  
signals, standard  
Public Address: Standard

### ORDERING INFORMATION

#### SYSTEM COMPONENT LISTING:

- **IPS1600** - Electronics Cabinet
- SPEAKERS:**
- **WS15T** - Wide angle, 15 watt speaker
- **WS15TR** - Recessed mount, 15 watt speaker
- **WS15TEN** - Recessed mount with grille, 15 watt speaker
- **WS30T** - Wide angle, 30 watt speaker
- **WS60T** - Wide angle, 60 watt speaker
- **WSXPL60T** - Explosion-proof, wide angle 60 watt speaker
- **WS100** - Wide angle, 100 watt speaker
- **WS00TCH** - Wide angle, 100 watt speaker with weatherproof housing
- All of the Above Speakers (Except WS100) have Adjustable Output.

#### OPTIONS:

- **RDVM** - Remote Station Digital Voice<sup>1</sup>
- **AUXIN** - Auxiliary Board for Contact Closure Activation
- **AUXCS** - Auxiliary / Status Control Board for Contact Closure Activation and Status
- **D2020LL, D2020H, D2020U** - One Way Radio Control<sup>2</sup>
- **C2020LL, C2020H, C2020U** - Two Way Radio Control / Status Monitoring, COMM/STAT™<sup>2</sup>
- **C2020NH, C2020NU** - Two-Way Radio Control/Status Monitoring, COMM/STAT™<sup>2</sup>
- **WPSTT** - Two Tone Sequential
- **FSKXMOD** - FSK Format
- **STATUS** - Cabinet Window LED Status Indicator
- **PGINT** - Paging Interface to Interface Whelen Tones with Existing Paging Systems
- **INTRU** - Intrusion Alarm

# WHELEN®

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### SPEAKER OPTIONS



**WS15T / WS30T / WS60T**  
Weatherproof, 15, 30 or 60 watt re-entrant loud speakers with multi-tapped, line matching transformers for output adjustment. Includes mounting bracket for vertical or horizontal installation.



**WS15TR / WS15TEN**  
15 watt re-entrant loud speakers with multi-tapped, line matching transformers for output adjustment. Ideal for recessed mount applications.



**WS100**  
Heavy-duty 100 watt re-entrant loud speaker with wide angle horn. Mounting bracket is included for vertical, horizontal or stacked installations.



**WS100TCH**  
Heavy-duty, waterproof, 100 watt wide angle re-entrant loud speakers with multi-tapped, line matching transformers for output adjustment. Rugged cast aluminum housing. Includes mounting bracket for horizontal or vertical installations.



**WSXPL60T**  
For explosive or combustible atmospheres. 60 watt re-entrant, wide-angle loud speaker features a heavy-duty cast aluminum housing. Includes mounting bracket for horizontal or vertical installations, and multi-tapped line matching transformer. Specify environment by Class and Group when ordering.

#### NOTES:

- 1 RDVM - 1-16 message capability with 240, 480 or 960 seconds available for recording
- 2 10 digit DTMF Controls • Landline • VHF High Band / 150-170 Mhz • UHF / 450-470 Mhz  
Our VHF High and UHF activation control packages include tone squelch, radio, radio interface, 2-3dB gain omni-directional antenna with bracket, 35' of RG58 antenna cable and polyphaser
- 3 Contact Factory

### A SYSTEM APPROACH

A facility has two main control centers monitoring plant operations. One plant area is used for light manufacturing and office operations. This requires many low powered speakers allocated over several zones. The second plant area includes heavy manufacturing with high ambient noise levels and requires powerful speakers and visual alerting. In this area alarms may also require local activation. The system diagram below illustrates one solution for the application.

