



AAPS – The Latest Advancement in Pedestrian Safety

The Advanced Accessible Pedestrian System is the latest development in pedestrian smart signal technology designed to satisfy guidelines specified by the Federal Highway Administration.

The AAPS provides pedestrians with audible and haptic indications to match the visual display. Each button has a locator tone to assist the pedestrian in finding the button. When a call is placed at a button, an LED lights on the button along with a brief haptic response and an acknowledgment audio indication signaling the pedestrian that the call has been registered. The pedestrian is given an informational location message when the button is held for an extended press. An audio and vibrotactile indication informs the pedestrian of the status of the visual display with the walk signal.

Features of the AAPS include the implementation of web-based technology, which enables traffic agency technicians to update and monitor the system remotely over network communication lines via traditional workstations, laptops or any device that is web browser compatible. The AAPS is password protected.

Control over system operations, audio, and visual components includes the capability to download files directly to individual pedestrian stations, or to an entire network. The AAPS provides engineers and planners with pedestrian usage information by station and time of day.



Advanced Accessible Pedestrian System

Other features include ambient gain compensation, detectable sound, groupings, and night mode offering smart sound control. Ambient gain compensation detects the volume of the environment around the button and adjusts the volume of audio messages accordingly. These features assist pedestrians navigating the intersection while reducing noise pollution.

The Advanced Accessible Pedestrian System is easy to install, manage, and maintain. The system is configured at the factory for a true plug and play installation. The AAPS meets all MUTCD guidelines and provides ADA compliance. It is manufactured in the USA by an American company.



Base Station 59 VRS R10

AAPS Technology

APC

The Advanced Pedestrian Controller (APC) interfaces with the traffic control cabinet and the Advanced Push Buttons (APB). The APC front panel displays status of APBs, and provides for all connections. Remote access is available to the APC when the cabinet is on a network. The APC uses web-based software and offers flexibility in configuration options. Access is password protected.



APC

The APC provides a single point for configuration and status information, and monitors the Advanced Pedestrian Buttons (APB) status. The APC is compatible with any traffic controller cabinet, whether it is TS1, TS2, or any other type. Most existing push button wiring is suitable for use with AAPS.

APB

The APB is a fully integrated pedestrian station. Communications with the APC is accomplished through Ethernet over Power (EoP) using the same wiring as typically found at an intersection. The APB's mute activates when communication is lost or the APC "failsafe" internal conflict monitoring identifies a problem.

Termination Board

The termination board neatly consolidates field wiring for the APC. The termination board is the first line of protection for the AAPS. Each field run uses resettable fuses so one short due to knock down will not affect the rest of the system.

Benefits

- User-friendly setup with web browser interface
- Time of day / day of week functionality
- Full synchronization of groups and phases in pedestrian movements
- Reports downloadable to laptop or network communications
- Remote access to APC
- Real-time feedback
- TS1 hardwire connections and TS2 compliant Ethernet communications
- Pedestrian call count and APS call count reports

System and Operating Features

- EoP design provides for true two wire installation at pedestrian stations
- Ambient gain compensation adjusts audio volume outputs to match ambient noise levels
- Audio messages or tones can be downloaded directly to APB's
- Night mode option reduces audio volumes at night
- Performance and self-test every 250 ms
- Software and firmware updates easily downloadable
- Forward facing speaker for improved sound control and reduced sound pollution

Applicable Guidelines

- MUTCD - meets and exceeds all guidelines
- TAC – meets and exceeds all guidelines

Warranty

- 3 year standard



Base Station 59
9 x 12 Sign





Advanced Accessible Pedestrian Station (AAPS)

Features and Specifications	
Operating Features	Performance and communications test performed every 250 ms Reports downloadable over network communications Real time clock provides time and date functions (volume) in operations Ambient gain compensation adjusts audio volume outputs to parallel ambient noise levels
Outputs	Acknowledgement – message / tone / visual LED / haptic bounce Walk cycle indications – tones / messages Walk cycle vibrotactile signal Clearance tones Emergency pre-emption tones / message
Modes	Default EP: Extended press on demand Recall Exclusive pedestrian movement
Synchronicity	Groups Phases Movements Intersections
Form Factor	APC console configuration: 4" X 8" X 6" APB Base Station: 5" X 12" X 1.75" and displays a 5" X 9" sign APB 912 adapter plate displays a 9" X 12" sign APB 915 adapter plate displays a 9" X 15" sign

General Specifications	
Size (APC)	5" x 5.5" x 6"
Weight (APC)	6 lbs
Operating Temperature	-40°C to +80°C
Input Voltage (APC)	120 VAC
Input Voltage (APB)	16 VAC
Power Consumption APB	
Current (I)	140mA at rest
Power (W)	1.68W at rest
Eight APB's	13.44W
MAX Current (I)	270mA
Power (W)	3.24W
MIN Power (W)	~15 W
MAX Power (W)	~80 W

AAPS Specifications	
Security	Password protection
Operating System	Linux
Interface	Web browser
Volume	Night/Day modes 100 dB range
Vibrotactile	Yes
LED	~3000 mcd
Remote Access Capability	Yes
Phases	8
Stations	16
Data Rate	4 Mbps
Communication Rate	250ms