The system comprises two separate units, a post mounted weatherproof box which accommodates the electronic control circuitry, power supply and ambient noise monitor microphone plus an Aldridge Traffic Systems (ATS) audio tactile push-button assembly. The push-button assembly accommodates the tactile transducer fitted to the front escutcheon plate and also houses the audio signal transmitter. Two models are available, the push-button assembly as illustrated or an ATS CW series type assembly.

Audio Tactile Pedestrian Detector Push Button Assembly

Representing a major technology advance from ATS, the audio tactile detector and push-button assembly, is available with a selection of either audio only, tactile only or audio plus tactile indication. The audio tactile facilities can be partnered with either the ATS pedestrian push-button assembly, where uniformity at existing installations or visual wait indication is desired. All pedestrians, including those with sight and/or hearing impairments, are catered for with the ATS pedestrian detection and indication system.

FEATURES

- Provides both tactile and audio indication facilities
- Emits a continuous audio signal to aid push-button assembly location and identification
- Distinct audio and tactile signal for positive walk (cross) indication
- Audible signal level controls automatically adjust for ambient noise
- Time lapse sensing electronics ensure smooth automatic level control
- Only responds to consistent increases in ambient noise, ignoring isolated transient fluctuations
- Maximum level audio tone adjustment
- Reliable proven audio and tactile adjustment
- Reliable proven audio and tactile transducer
- Sensitive ambient noise monitoring
- Factory adjustable zero set, change tone, tactile, walk tone and don’t walk tone levels
- Operationally proven design
- Utilisation of Standard push button assemblies universal pedestrian acceptance and to facilitate maintenance support
- Solid state circuitry, proven transducer and means of signal interlocking ensure ultimate safety and reliability

AUDIO INSTALLATION AND MAINTENANCE

The audio tactile detector is simple to install and commission. Full details for installation and servicing are provided in the product manual. The plug-in printed circuit board in the audio tactile drive unit serves to facilitate maintenance procedures. The all weather drive unit CW45-5 housing is supplied with U bolt mounting facilities to suit 100mm nominal bore traffic signal posts (pedestals).

LEVEL CONTROL SELECTION

The Standard unit is wired to provide automatic level control over the Don’t Walk tone only. Facilities are available to expand this control to also include automatic Walk tone adjustment.
SIGNAL DETAILS AUDIBLE LOCATION SIGNAL
- Tone approximately 1000 Hz with a slow repetition rate (0.52 Hz)

AUDIBLE CROSSING SIGNALS
- Change Tone: Initial burst of tone (2 kHz) decaying in frequency to 500 Hz
- Pulse Tone: A tone of approximately 50 Hz a fast repetition rate (8.3 Hz)

TACTILE SIGNALS
- Tactile Don't Walk Signal:
  - Pulse repetition rate (0.52 Hz)
- Tactile Crossing Signal:
  - Rapid pulse tactile indication (8.3 Hz)

AUDIO TACTILE SIGNALS
The system produces two distinct types of audio signals and two distinct tactile pulse rates. The functions of these signals are:

1. The audible location signal continuously present for the Don’t Walk condition. This serves to assist pedestrians with sight impairment to locate the push-button assembly thereby permitting use of both audio and tactile indication facilities available.

2. The audible crossing signal comprises two tone audible signals, the first of which is a change tone which immediately peaks and then decays followed by a rapid pulsing tone of a fixed frequency. This sequence ensures positive identification by pedestrians with sight impairments and also serves to enhance pedestrian walk indication to all pedestrians at the traffic signal installation.

3. During the Don’t Walk condition, a tactile signal pulses at the same rate as the corresponding audio signal, thereby giving second sensory confirmation of the Don’t Walk condition.

4. During Walk (Cross) interval the tactile indication pulse rate operates coincident with the distinctive audible Walk (Cross) signal pulse rate.

SUPPLY VOLTAGE
Standard voltage: 240V, 50Hz
(Models to suit 50/60Hz, 110 Hz, 240V, are also available.)