



# Xtend **ATC** Logger

Audio/Video Recording Solutions



Xtend ATC Logger is a multi-channel audio/video recording solution that works with audio channels as well as analog/digital lines and RADAR. The system has the ability to capture the audio and video data during the ATC communications and can play the recordings through the browser-based user interface.

The product helps in reviewing and monitoring the incidents that occur within the air traffic control zone. The Xtend ATC Logger provides a full overview of the incident based on time frame with the provision to playback the audio/video multiple number of times from the browser interface. The storage of the recordings are in a redundant manner so that there is no loss of data, even if the system fails.

Xtend ATC Logger is a rack mountable device that has all necessary components to store and implement RADAR-based logging. Typically, Xtend ATC Logger requires only the necessary power supply, logging lines and an Ethernet connection.

Configuration and use of the Xtend ATC Logger is via the embedded web interface. Since the unit comes pre-configured for use, it is easy to setup and is a fit and forget device.

The device comes in 4/8/16/.../128+ ports configurations.

## Highlighted Features

### **Audio and Video Logs of All Communications**

Xtend ATC Logger records the complete audio/video/RADAR and shows the details in the browser interface.

### **Web Browser User Interface**

An easy-to-use browser-based user interface makes the logging solution accessible from any part of the network. The browser-based user interface of the ATC Logger helps the supervisors/managers and top-level management to administer and monitor the whole system. Once the supervisor has logged into the browser interface, complete recorded audio/video details are displayed and the details can be used for monitoring and evaluation purposes.

### **Multi-user Login Facility**

Multiple users having different access levels can login through the browser interface (for e.g. administrator, user, etc.). The access controls can be set individually for each user.

### **Supports Remote Access**

The Xtend ATC logging system can be accessed remotely by a user through a feature-rich browser interface. The recorded data can be viewed and analysed by a user from anywhere at anytime.

### **Audio Compression Capability**

Xtend ATC Logger is capable of compressing the logged audio files at various levels. Any voice record can be exported in the industry standard MP3/PCM/GSM formats.

### **Full-fledged Reports**

Xtend ATC Logger generates advanced reports which can be viewed on the basis of present day, month or a specific time period.

### **Powerful Search Capability**

Xtend ATC Logger has a powerful 'filter search' tool

to search through the complete recorded details to locate specific audio/video records. The tool filters the recorded details based on the criteria defined by the user.

### **Encrypted and Tamper Resistant Storage**

All recorded audio files are stored encrypted together with a hash to prevent copying or modification of recorded details.

### **Ability to Tag and Comment Logs**

Ability to add comments and tags enable one to quickly retrieve a previously tagged or commented record. Comments and tags can be quickly searched to easily locate records.

### **Archiving Capability**

Backups can be taken via the web interface to a specified folder or CD/DVD. Ability to backup to a ZIP file is also present. Older records can be auto-deleted based on available disk space.

### **Incident Playback From Multiple Channels**

The fully-featured ActiveX Audio Player has the capability to list the selected logged audio/video from multiple channels. Supervisor can search and listen/view particular audio/video files from multiple channels. Multi-channel playback allows an examiner to perform interpretation of an event and based on time synchronisation an incident can be reconstructed quickly. An in-depth analysis of a particular incident can be carried out from the audio player. User can search and retrieve the specific recorded audio/video details on the basis of date, duration and many other parameters.

### **RADAR Recording**

Xtend ATC logging system has the capability to record the RADAR feeds and the recorded RADAR feeds shall be available on the network for playback.

## Software Features

### User-friendly & Feature-rich Web Interface

- ▶ Remote secure access with multi-login facility
- ▶ User accounts with administrative privileges
- ▶ Supports multi-channel RADAR recording
- ▶ Easily integrates with existing communication infrastructure

### Security and Encryption

- ▶ Tamper-evident and tamper-resistant storage
- ▶ Encrypted storage of all recorded details
- ▶ Backup and restore functionality

### Supervisor & Administrative Capabilities

- ▶ Real-time live monitoring and listening of communications
- ▶ Instant alerts for live communications
- ▶ Administer live communications from remote PC via Internet
- ▶ System failure information with error reports
- ▶ Detailed information on user session

### Reporting & Record Management

- ▶ Audio/video logs with date, time, duration and status
- ▶ Daily, weekly, monthly and date-wise reports
- ▶ Status of communications on all configured channels

### Audio/Video Recording & Playback

- ▶ Automatic recording of communications
- ▶ ActiveX based advanced audio player
- ▶ Backup to CD/DVD for restoration and export facility
- ▶ Audio compression capability to PCM/GSM formats

### User-centric Capabilities

- ▶ Audio/Video record playback with Play, Fast Forward, Rewind, Pause, Delete, Trim, Fade in/out, increase/decrease volume
- ▶ Listen to mark the specific region of a track and playback
- ▶ Add comments to recorded communications

### Advanced Search Options

- ▶ Simple search using comments, duration, date etc.
- ▶ Find/Search/Sort multiple criterions using multiple fields

## Hardware Features

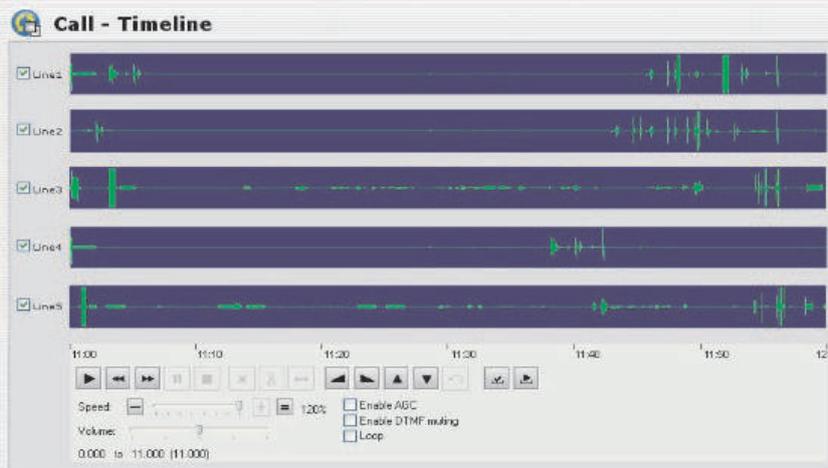
- ▶ 19" Rack mountable server
- ▶ Built-in LCD Display
- ▶ In-built Basic Keypad for backup and other operations
- ▶ Built-in DVD reader/writer
- ▶ 2 x SATA HDD for redundant data storage
- ▶ Secure back-panel - No standard PC connectors like USB, Keyboard, Display are exposed for security
- ▶ Back-panel has LAN, Power and individual RJ11 sockets
- ▶ Separate Watchdog processor board with secondary RTC for reliable operation and time keeping



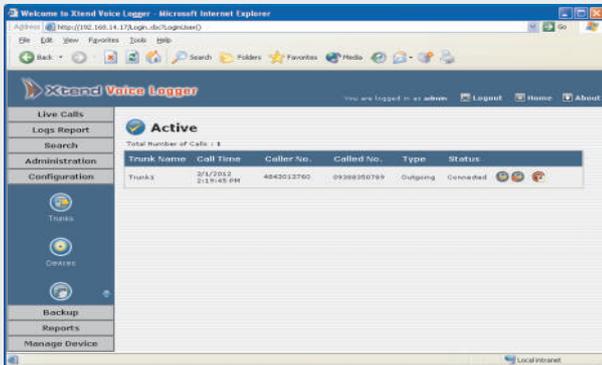
- ▶ Automatic restart after power failure
- ▶ Can be expanded from 4 port to 128 ports using add-on cards
- ▶ Embedded Operating System

# Browser Interface

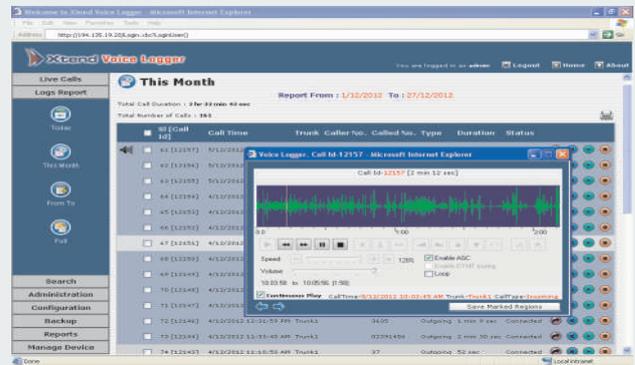
## Incident Playback From Multiple Channels



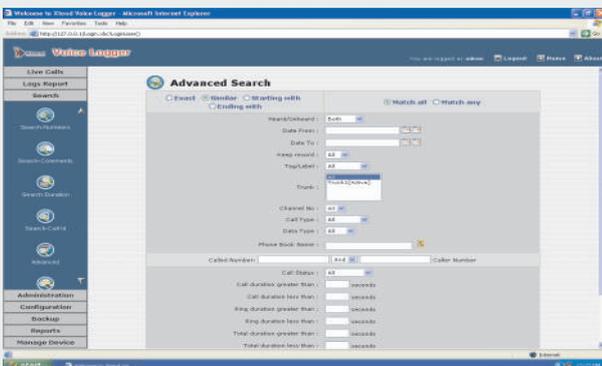
Live Calls



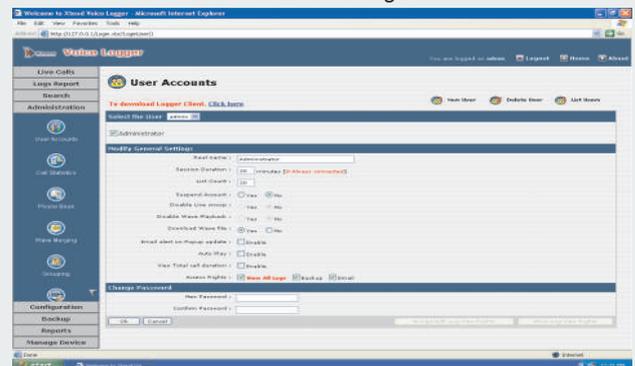
Logs Report-Full



Advanced Search



User Account Management



- Note:**
- 1) Live monitoring feature is available for monitoring purposes and should not be used for real time operations/controls.
  - 2) The features discussed are the capability of Xtend ATC Logger. The actual features available will be based on the options selected.
  - 3) The Xtend ATC logging unit provides optional support for dual redundant operations. Two Xtend ATC logging units can be installed in redundant mode and these shall operate in parallel, providing redundancy. The redundancy offers an immediate type of data protection, as it prevents the logged data from being lost in case of failure of any one of the logging system. If one unit stops working, then the audio/video logs will be recorded in the redundant system and upon rectification, the recorded logs will be automatically synchronised to the logging system from the redundant system. The redundancy feature in Xtend ATC logging system allows the availability of recorded data at all times.

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