Audio Emergency Warning And Notification System
Model: AEWNS2020

The Audio Emergency Warning and Notification System is a combination of hardware and software products designed for mass outdoor notification. Since the electronic siren supports pre-recorded voices messages and live broadcast, it is suitable for multi hazard applications.

APPLICATIONS

- Early Warning Systems
- Siren and Alarm Systems
- Fire alarm systems
- Emergency notifications for industries and public places
- Bird Scare

FEATURES

- Remote activation, testing and reporting
- Remote and local silent testing
- Web based system configuration
- Redundant communication methods including IP, Ethernet, GPRS, cellular and satellite communications.
- NEMA 4X weather proof enclosure
- Remote monitoring of power supply parameters
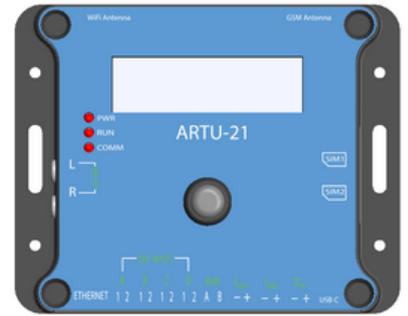- Common Alerting Protocol Compliant

BENEFITS

- Multi hazard
- Real Time even suitable for earthquake warning
- Lower power consumption, allowing solar and battery operation
- Digital connection allowing control and monitoring over the internet

Audio Remote Terminal Unit
ARTU-21

The Audio Remote Terminal Unit ARTU-21 is a microprocessor based digital audio device that can be used for mass notifications. The memory is enough to hold hours of recorded sound messages that can be triggered locally or remotely via radio, cellular network, satellite network or internet. The ARTU can be connected to SCADA systems or cloud based systems to automate mass notifications. The ARTU is also suitable for unattended remote locations as the health of the system can be monitored online through the internet. The ARTU has a built in GPRS modem and ethernet port for internet connectivity.

Specifications:

- Interface for Activation:
  - NO/NC hard wires switches x 4 ch
  - SMS (with only registered mobile numbers)
  - Internet via built in modem supporting dual SIM
  - Ethernet port
- Data logging
  - For monitoring electrical parameters
    - Battery voltage
    - Solar voltage
    - Power consumption
- Encryption: AES 128 bits
- Built in modem with dual SIM
- 4G compliant backwards compatible to 3G, GPRS, Edge and GSM
- Internet based online configurations and downloading pre-recorded audio messages via central monitoring and control software.
- WIFI and Ethernet Interface
- Audio codec
  - Audio resolution: 24 bits
  - Supporting mp3 and wma
  - Supports up to 25 pre-configurable alerts
- 2.4Ghz remote control support
- Operating temperature: -20°C to +80°C

HIGH EFFICEINCY AUDIO AMPLIFIER

HEAA is a high efficiency class D audio power amplifier. The typical output power is 2 x 150W with a speaker of load impedance 4Ω.
Features:

- Low noise
- Smooth pop noise-free start-up and switch off
- High efficiency
- Low quiescent current
- Full short-circuit proof across load

REMOTE CONTROL UNIT

The remote control unit is a battery operated device to trigger pre-recorded audio messages in the ARTU, record and broadcast voice messages to the ARTU.
Features:

- Wifi Configuration
- 2.4Ghz proprietary wireless protocol supporting 800M line of sight
- 2.4Ghz Lora connection supporting 10Km line of sight (optional)
- Secure pairing with ARTU
- Monitor ARTU power parameters and health status
  - displays real time battery voltage & solar voltage
  - displays error messages
- LiFePo4 rechargeable battery with very long life
  - ideal condition > 2 months
- Push to talk for emergency custom voice recording
- USB-C charger included

HORN SPEAKER ARRAY

Rugged aluminum horn with audio driver.
Number of horn speaker arrays are dependent on specific requirements.
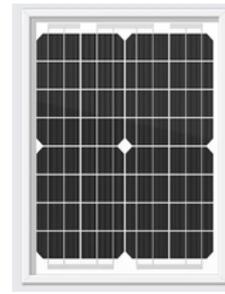**Features:**

- Waterproof and rugged aluminum horn
- The two horns can be facing the same or opposite direction
- Built in pole mount structures
- Each drivers are of 300W
- Frequency response: 160hz to 6 Khz
- SPL (1W/1m,1000Hz): 120 dB
- Neodymium Magnet

POWER SUPPLY

Battery backed solar power system
- VRLA battery 12V 75AH
- LiFePO4 12V 56 AH (Optional)
- Solar Panels (50W x 2)
- Solar charge controller 30A
- Battery Life > 5 years

WEATHER PROOF EQUIPMENT HOUSING

- Rittal AE1057.500
- Dimension: 700 x 500 x 250 mm
- Protection category: IP66 to EN60 529/09.2000, complies with NEMA 4
- Mounting plate: Zinc-plated

SIREN MAST / TOWER

The height of the siren is site specific. It has to be at least 3 meters above the ground.
- 3m mast with 1m extension as per site requirements
- Lightning arrestor and grounding Kit
- Galvanized iron with stainless steel joints
- Anchor bolts for base foundation
- Lightning arrestor and grounding kit with separate electrical grounding

WARNING LIGHT

A warning light can be setup on the top of the mast
- Flashes when an alert is triggered
- DC light requiring no mains connection
- Light intensity 32cd, Type B
- Working voltage: 12V to 80V DC
- IP68

SATELLITE MODEM

Orbcomm ST2100 provides reliable, global satellite connectivity to the most remote areas of the world.
- Two-way communication using IsatData Pro
- Typical Latency: <15sec
- Elevation Angle: +20° to +90°
- Frequency: » Rx: 1525.0 to 1559.0 MHz; » Tx: 1626.5 to 1660.5 MHz
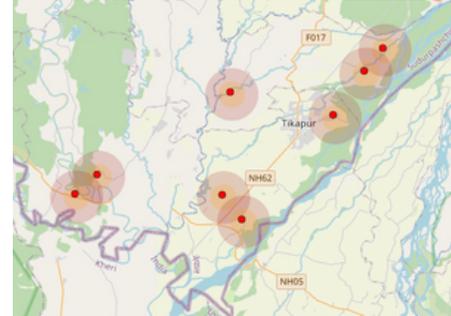- EIRP: <7.0 dBW

Central Monitoring and Control Software

The central monitoring and control software is a centralized web based application to activate, control and monitor all the siren stations deployed with no geographical limitations. The control station software can be used to broadcast live public address and trigger pre recorded messages. Additionally the software also allows the monitoring of each stations remotely.

Features:

- Web based application accessible by web browsers
- User friendly interface requiring minimal training
- Supports common alerting protocol (CAP) as a receiver for alerts
- Administration of multiple siren groups
- User and roles management for providing access to multiple users
- ARTUs or AEWNS configurable via internet
- Trigger Logs and report generation
- Monitor health of AEWNS

AEWNS Activation Module

Activate audio playback from:

- Pre-recorded messages in ARTU
- Send pre-loaded audio files in the server
- Record live voice messages
- Text to speech (English, Nepali and all languages supporting Devanagari)
- Combination of all the options above

ARTU Online Configuration Module

Allows online configuration of ARTUs remotely

- Online configuration changes in ARTU
- Set authorized mobile numbers for triggering
- Paired remote control units
- Upload / remove pre-recorded audio messages

User and Roles Management Module

Different kinds of roles can be defined and users created

- Define roles on which module is accessible to view / modify
- Provide access to users for each or group of AEWNS

Metadata Management Module
- Record site information with pictures
- Locate AEWNS on a map
- Store / display contact person, mobile numbers etc.
- Add custom metadata fields as required
- Create tags to group AEWNS

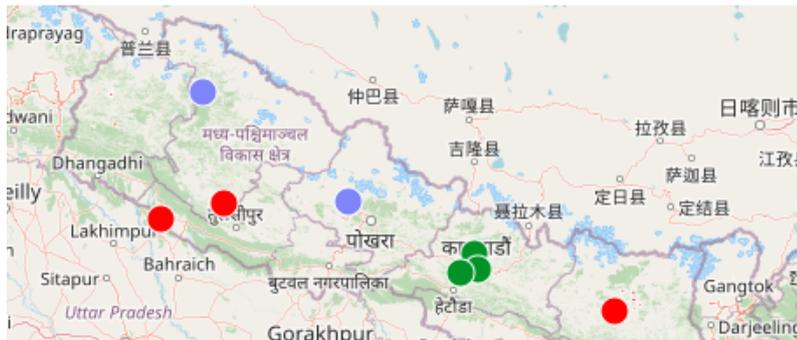## History and Reporting Generation Module
- View triggers made including playback triggered audio/s
- Generate reports of each AEWNS or a group of AEWNS
- Generate reports on frequency, who, when, which AEWNS were triggered

Inventory Management Module
- Store inventory for each sites with serial numbers
- Parts replacement tracking

Maintenance Management Module
- Web based application accessible by web browsers
- Check health of AEWNS at sites
- Monitor battery voltage, solar voltage, signal strengths
- Create and assign tickets and work orders
- Tickets and work orders support chit chat with emails
- Plan site visits

Status	Reason	Action
🔴	Critical	
🔵	No Communication	
🟡	Warning	
	Closed	
🟢	Open	

FN00000020 ✕   FN00000030 ✕

Duration : 10 sec   Current: 0 sec

SAVE   REC   PLAY   MERGE

Add Media

Upload File

Text to Speech