

Āpatsandeśayantram

Brief Introduction on LoRa Technology:

A LoRa-based SoS device is a communication system that uses LoRa (Long Range) technology to send and receive messages over long distances with low power consumption. These devices are often used in remote areas where cellular or Wi-Fi coverage is limited.

Key Features of a LoRa-Based Messaging Device:

- **Long-Range Communication** – Can transmit messages over distances of up to 10km.
- **Low Power Consumption**
- **Decentralized Network**
- **Mesh Networking (Optional)**
- **End-to-End Encryption** – Ensures secure communication between devices.
- **GPS Integration** – Can include GPS for location sharing and tracking.
- **Private or Public LoRaWAN Support**

LORA BASED SoS MESSAGING DEVICE

- ❖ A LoRa Module (Low Power Radio waves to transmit data over long Range) is use to enable communication between 2 devices. **(1 transmitter & 1 receiver)**
- ❖ The SoS Messaging Device which we are presenting uses LoRa Technology.
- ❖ The Device can send SoS message from one to other.
- ❖ **Transmitter** has a keyboard where each key has different prerecorded message.
- ❖ **Receiver** has a build in speaker with display where message can be seen thru display and same audio can be listen thru speaker
- ❖ The receiver also has a 3.5 mm jack to connect an external speaker
- ❖ Each device comes with 12dBi antenna attached.
- ❖ In an Ideal Condition the Device can achieve ranges of several Km.
- ❖ Some tests have shown the result up to 10Km.
- ❖ The device consists of small build-in speaker.



Use Cases:

- **Emergency Communication** – Used in disaster recovery when traditional networks fail.
- **Outdoor Adventures** – Ideal for hikers, campers, and explorers in remote areas.
- **Military & Defense** – Secure and reliable field communication.
- **IoT Applications** – Smart agriculture, remote monitoring, and industrial automation.
- **Community Networks** – Localized messaging systems in areas with poor connectivity.

Satisfied Customer:

- 16 Garhwal Rifles
- 846 FD Wksp
- 17 Corps Sig Regt.
- 31 Punjab
- 9 Corps Sig Regt.
- 17 Madras
- 26 IDSR
- 25 IDSR
- 20 MDSR
- 74 Armd Wksp
- 34 Armd Bde

REGISTERED OFFICE- H 410, H block, Nilaya Greens, Raj Nagar Extension Ghaziabad 201003
CORPORATE OFFICE - **1ST FLOOR, SHOP NO. 15, SECTOR-5 CHOWK GURGAON HR 122001 INDIA**

WWW.MISHINE.CO.IN

EMAIL- ADMIN@MISHINE.CO.IN

MOBILE-7065515883