

# Wireless Lightning warning System (WLS-2002)



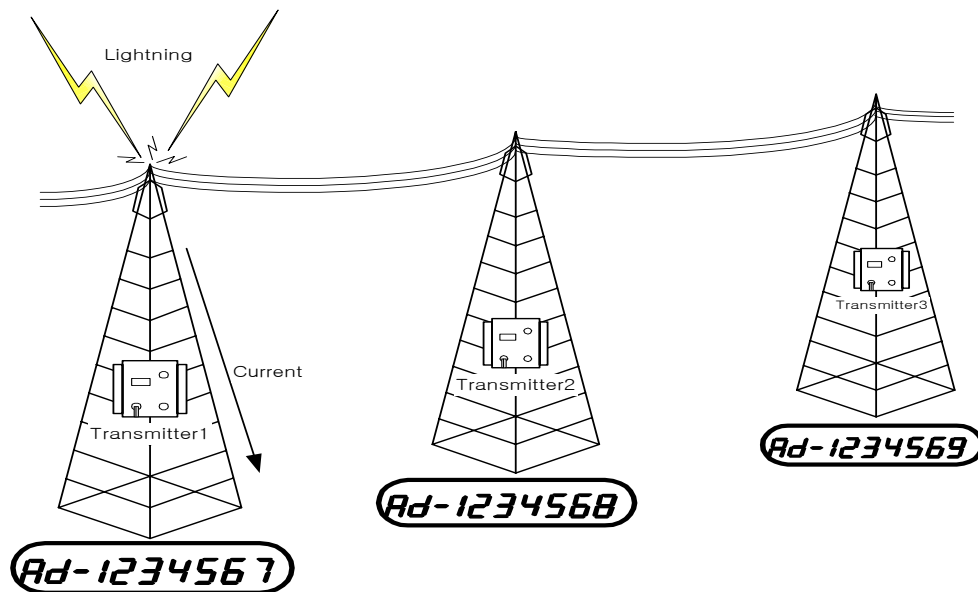
ENCOMM CO., LTD.

# 1. Operational Description

## 1-1. Application

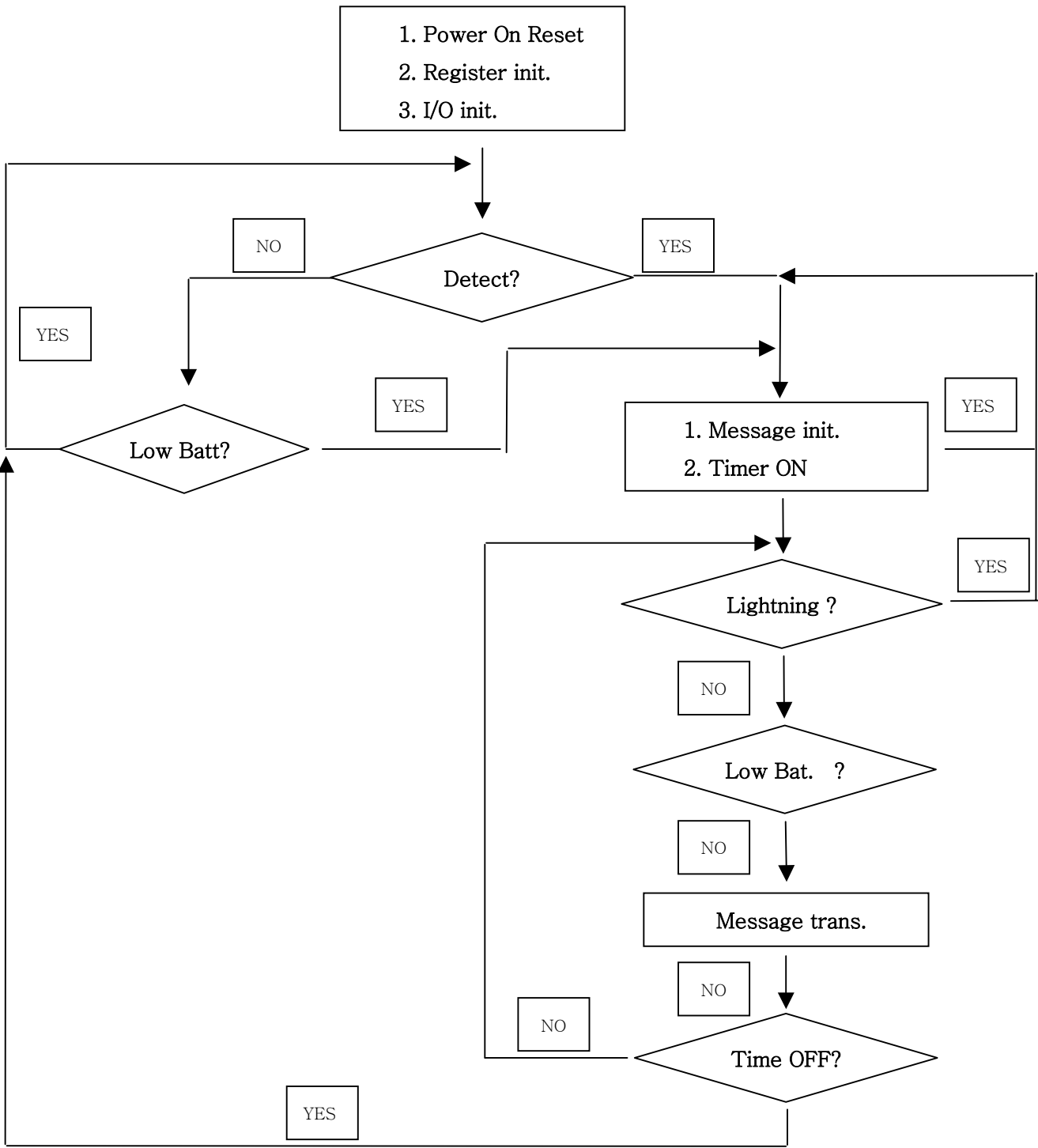
WLS2002 is installed on the transmission tower. When the tower is struck by lightning, the transmitter transmits a RF signal. The receiver displays information, which will be used to discover the exact location of a lightning strike.

- 1) The lightning detector consists of surge sensor.
- 2) The lightning detector wakes up a controller.
- 3) The controller operates transmitter.
- 4) The FSK part of transmitter modulates and transmits RF signal.
- 5) A receiver demodulates the received signals, and then patrols get status of tower.

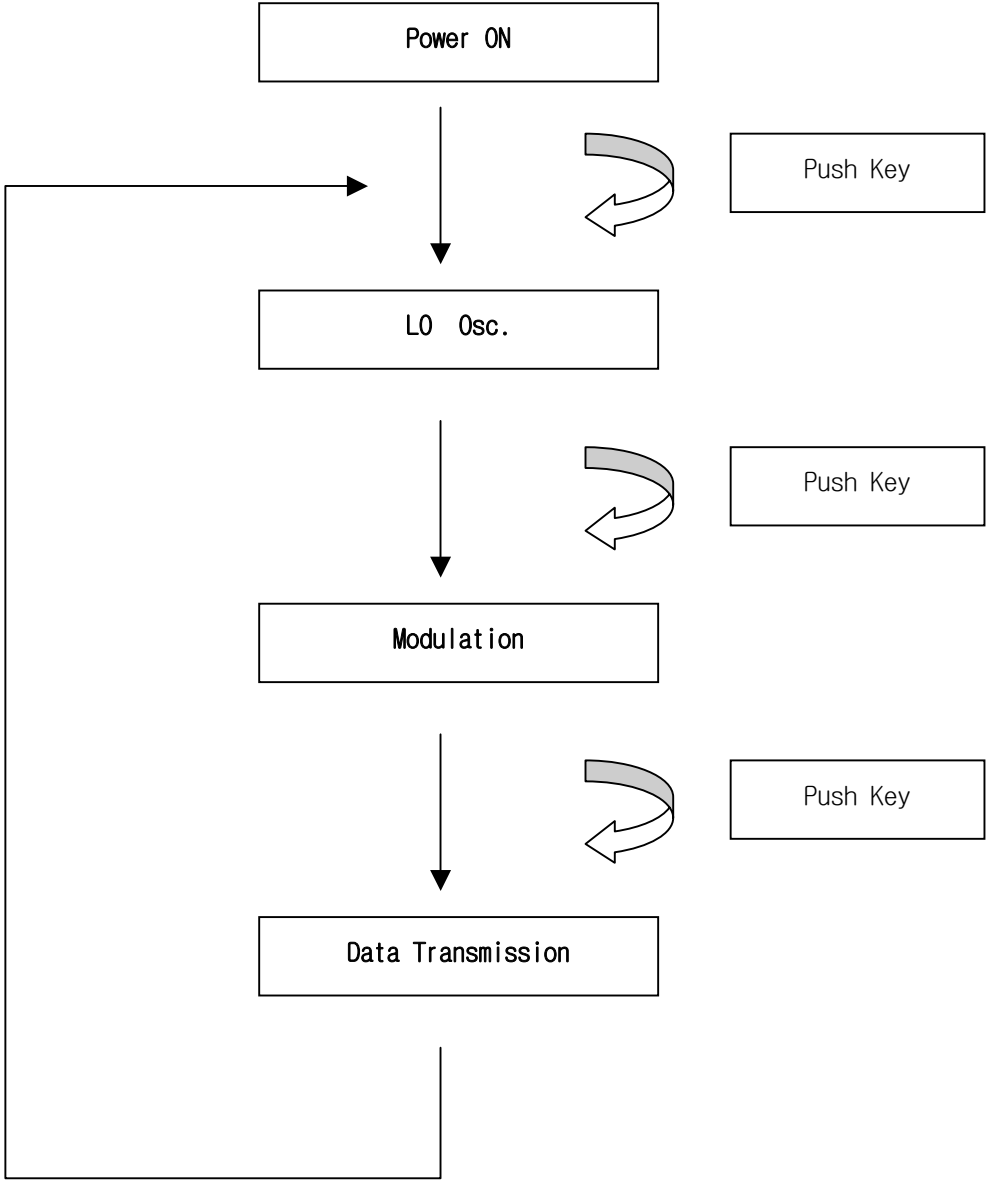


- A. The transmitter1 is 1234567, Transmitter2 is 1234568, and Transmitter3 is 1234569.
- B. When lightning strikes transmission tower #1, the transmitter on the tower transmits the ID number (1234567) of #1.
- C. An inspector can easily recognize the transmission towers struck by lightning in real-time.

1-2. Flow Chart



1-3. Key Operation



### 3. EUT's Spec.

ITEM	Spec.
<b>Frequency</b>	<b>447.2625MHz</b>
<b>Modulation</b>	<b>NRZ-FSK</b>
<b>Transmit time</b>	<b>3days/hit</b>
<b>Battery</b>	<b>3.6V</b>
<b>Antenna</b>	<b>Helical</b>
<b>Power Consumption</b>	<b>60mA (operation), 50uA(standby)</b>
<b>Output Power</b>	<b>Below 10mW</b>
<b>Dimension</b>	<b>132(L) x 145(W) x 46(H)mm</b>