

Universal Transmitter UTX830

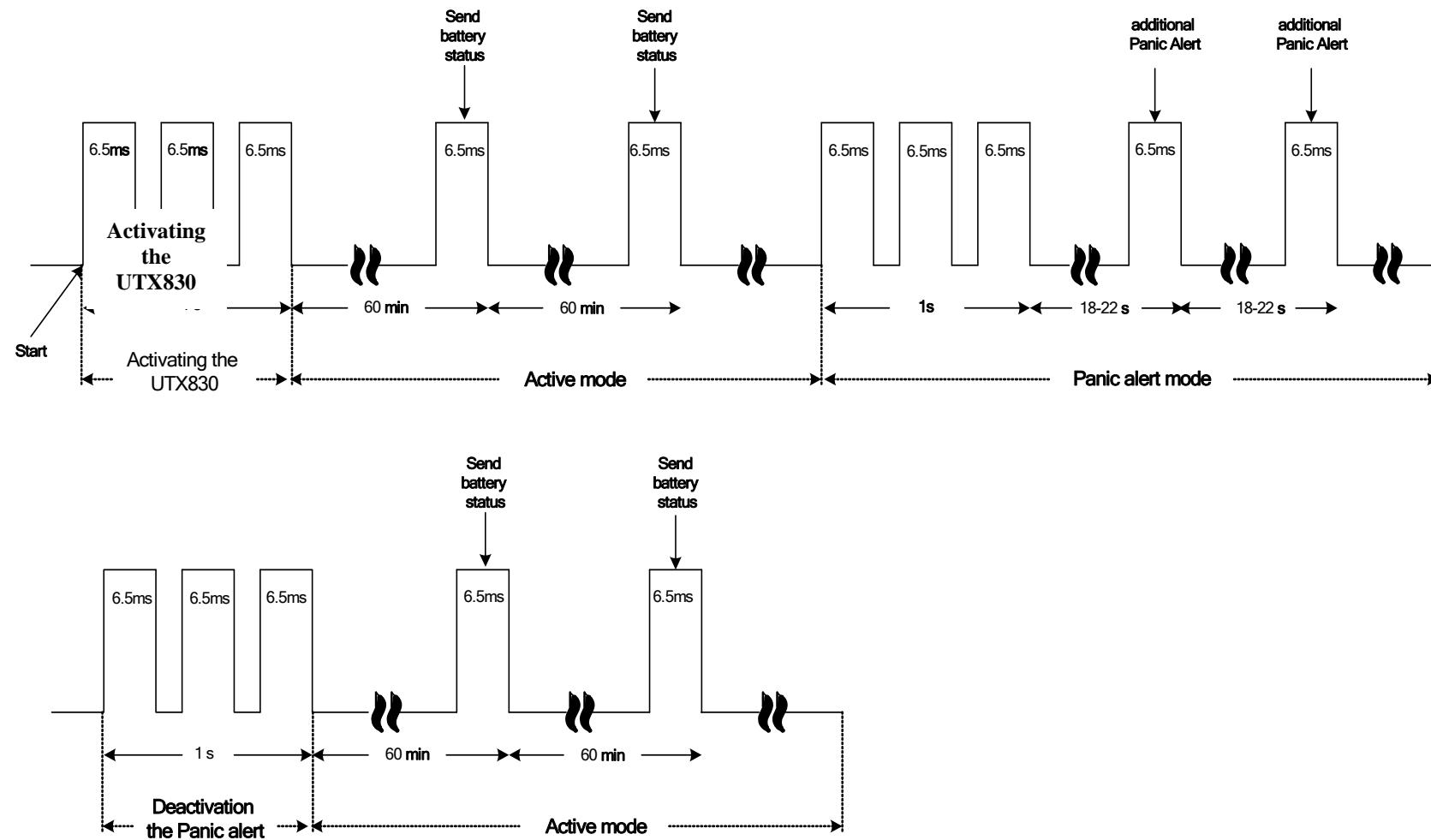
Operational description

1. General Description

- 1.1. The UTX830 is a small frame-head device, to be installed at internal or external doors of nursing homes and assisted leaving homes. The device is combined with a magnet on the door to detect door open / close status. When the door is open, the device shall transmit panic messages once every 18-22 seconds (random interval within this range), until closed door is detected. It will be possible to turn the UTX830 on and off by pulling out the battery (for saving battery life and for aviation safety while shipped). While UTX830 is ON, it shall transmit a status message, once every hour, to indicate that it is still functioning and to report its battery level.
- 1.2. The UTX830 is a stand-alone unit. It can be battery operated or externally powered by a dedicated AC adaptor; it has RF transmitter module, a microcontroller, which controls the UTX830 operation, one PCB, and a door magnet.
- 1.3. The UTX830 has one RF channel. It is 318 MHz carrier with FSK modulated data.

2. Functional Description

- 2.1. The UTX830 has four modes of operation.
 - a) ACTIVATING THE UTX830:
Three 6.5ms transmissions within 1s.
 - b) ACTIVE (door closed):
The UTX830 sends a status message to the monitoring station (one 6.5ms transmission per hour) to indicate the current battery status.
 - c) ACTIVE to PANIC transition:
The UTX830 sends a panic transition alert message to the monitoring station in the following way. A burst of three 6.5ms transmissions within 1s.
 - d) PANIC ALERT (door open):
The UTX830 sends a 6.5ms alert message transmission every randomly chosen interval of 18-22 s. This panic alert message is re-sent until the "door close" is detected.
 - e) PANIC to ACTIVE transition:
The UTX830 sends an active transition alert message to the monitoring station in the following way. A burst of three 6.5ms transmissions within 1s.



UTX830 time diagram