

Pull Cord – PC-800
Operational description

1. General Description

- 1.1. The Pull Cord is a small wall-mounted device, to be installed at bedside and in the bathroom of nursing homes and assisted living homes. Once pulled, the Pull Cord Device shall transmit panic messages once every 18-22 seconds (random interval within this range), until it is reset by a nurse. It will be possible to turn the Pull Cord on and off (for saving battery life and for aviation safety while shipped). While the Pull Cord 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 Pull Cord is a stand-alone unit. It is battery operated; it has RF transmitter module, a microcontroller, which controls the Pull Cord operation, and one PCB.
- 1.3. The Pull Cord has one RF channel. It is 318 MHz carrier with FSK modulated data.

2. Functional Description

- 2.1. The Pull Cord has four modes of operation.
 - a) **ACTIVATING THE PULL CORD:**
Three 5ms transmissions with interval 150 ms.
 - b) **ACTIVE:**
The Pull Cord sends a status message to the monitoring station (one 5ms transmission per hour) to indicate the current battery status.
 - c) **PANIC ALERT:**
The Pull Cord sends a panic alert message to the monitoring station in the following way. The first burst consists of three 5ms transmissions with 150ms interval (total burst duration 315 ms) and after that additional panic alert messages are sent, one 5ms alert message transmission once every randomly chosen interval of 18-22 s. This additional panic alert message is re-sent until the PANIC ALERT is deactivated.
 - d) **DEACTIVATION OF PANIC ALERT:**
Three 5ms transmissions with interval 150 ms. after that the transmitter returns to ACTIVE mode.

