Walk sensor

enclosure: https://www.newageenclosures.com/enclosures/battery-handheld/4-aa-palm-held.php

top view

4”

1.6”

4”

on/off button

power light

status lights

IR transmitter, receiver

bottom view

Operation

- power:
  - push the button to turn it on
    - battery ok: light continually blinks green (.05s every 5s)
    - battery marginal: light continually blinks red (.05s every 5s)
    - battery too low: light blinks long red (5x: .5s every 1s), then unit shuts off
  - push the button to turn it off
    - light blinks red once (.5s), then shuts off
  - after 8 hours
    - unit turns off automatically
- mode: when the unit turns on, it tries to detect an opposing IR transmitter
  - if no IR signal detected, it becomes the IR transmitter
    - yellow status light blinks continually (.05s every 1s)
  - if an IR signal is detected: it becomes the IR receiver
    - when the IR signal is interrupted for >.2s
      - blue light turns on until IR signal returns
      - send a Bluetooth message (format TBD)