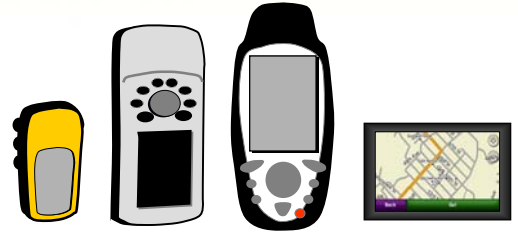


# GPS Receiver Categories

(Main distinguishing features)

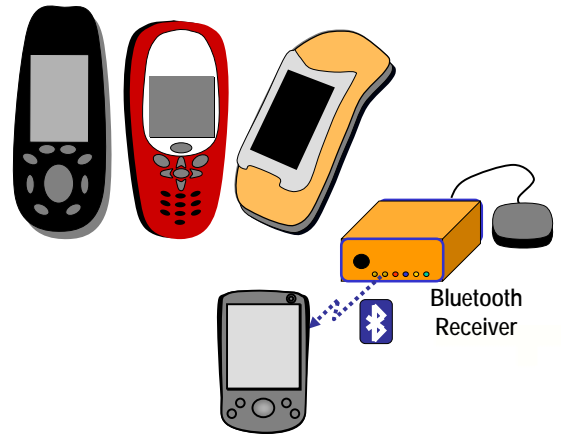
## RECREATIONAL RECEIVER

- Low-end Single-frequency receiver
  - Permits navigation and recording waypoints/tracks
  - Multiple screens and navigation features
  - Many display vector maps (proprietary)
- Communication port(s) (USB / Serial / Bluetooth)
  - To upload maps and POI (points of interest)
  - To download waypoints and tracks
  - Some can output realtime positions (NMEA format)
  - Some can receive RTCM corrections (from beacon or CDGPS radio)



## MAPPING-GRADE RECEIVER

- High-end Single-frequency Receiver
  - Receiver, antenna and controller: Integrated or separate
  - Will run mapping (GIS) software
  - Many can collect raw GPS data (Code and Phase) for post-processing
- Communication port(s) (USB / Serial / Bluetooth)
  - To upload and download maps, imagery, points of interest and waypoints/tracks
  - Most can output realtime positions (in NMEA format)
  - Most can receive RTCM realtime corrections



## GEODETTIC-GRADE RECEIVER

- Dual-frequency Receiver
- Receiver, antenna and controller
  - Usually as separate components
  - Geodetic quality antenna
- Meant for centimetric accuracy surveys
  - Can collect raw GPS data (dual-frequency Code and Phase) for post-processing
  - Most permit RTK (Real-time Kinematic)
- Multiple communication ports
  - To output/input realtime corrections (RTK or RTCM)
  - To output realtime positions (NMEA format)
  - To output raw GPS data

