

Sensors broadcast ESPNOW and MQTT data for flexibility and redundancy

Car Stall (door, motion, temperature, humidity, light, flood)

Car Presence (Sonic mounted on ceiling above car measures vertical distance)

Car Hatch (open/close)

Cart Stall (door, motion, temperature, humidity, light, flood)

Actuators

Kasa smart plug to disable garage motor when car hatch is open

Ambient\_HUB controls garage wireless remote control

Controllers (use one or both)

Ambient\_HUB accesses cellular IoT network

IF not using cellular network, use esp32 to control garage remote wireless control

Home Assistant accesses local wifi as well as internet communication

Communication Protocols

ESPNOW (Sensors to Ambient HUB for display and automations)

CLOSE the door actuator (relay soldered to remote control)

Cellular - Hologram

AdaFruit - IFTTT (primary path)

eMail (widget) & Google Sheets for logging

IFT (backup path if primary path fails)

dweet scratchpad (backup backup path!)

MQTT (Sensors to Home Assistant for display and automations)

eMail (widget)

Speaker (announcements)

MQTT (Ambient\_HUB to Home Assistant - redundant path for display and automations)

eMail (widget)

Speaker (announcements)

MQTT (Home Assistant to Ambient HUB)

CLOSE the door actuator (relay soldered to remote control)

