

6.101 Checklist - Wireless analog drawing board

Henry Love & Nicholas Klugman

| Module | Commitment | Goal | Stretch |
|----------------------|--|---|---|
| Drawing Board | Two pots that act as an etch-a-sketch | Conductive paper that takes pencil position and maps it to two voltages | Using IR sensors to read pencil above paper |
| VCO | Convert voltage from drawing board to a frequency (drawing signal) | -- | -- |
| Mixer | Mix the carrier and drawing signal | -- | -- |
| Transmitter | one channel AM transmitter with manual switch for x, y | Two channel AM transmitter | One channel AM transmitter that sends both X, and Y coordinates |
| Receiver | one channel AM receiver with manual switch for x, y | Two channel AM receiver | One channel AM receiver that sends both X, and Y coordinates power from arduino/ps/2 cable |
| Frequency to Voltage | Convert frequency signal to a voltage | -- | Normalize this voltage such that distance does not impact output voltage. |
| Display | Display on oscilloscope with x, y mode | Display on computer screen via arduino | Display on computer screen via PS/2 |

General Stretch Goal: Make PCBs (othermill or from China) for modules/circuits