Blocks = Functions  

Lines = Signal Pathways

input  

Processor  

output

Wheel sensor ➔ Signal Conditioner ➔ Counter ➔ Display Driver Conditioner ➔ Display

Magnetic Pickup on Wheel ➔ Switch Debounce ➔ Counter Divide by ___

Project Block Diagram
26" wheel = 26" (12") = 2.2'

One rotation = \( C = 2\pi \frac{2.2'}{2} = 13.6\) rev

1 mile = 5,280 ft

0.01 mile = 52.8 ft

\[
\frac{\text{# of Rev.}}{\text{0.01 mile}} = \frac{52.8}{0.01 \text{ mile}} \times \frac{1 \text{ rev}}{13.6 \text{ ft}} = 3.9
\]

\[
\text{8} \div 8 \text{ counter} = \frac{1}{100} \text{ mile}
\]

\[
\times 10 \text{ counter} = \frac{1}{10} \text{ mile}
\]

\[
\times 1 \text{ counter} = 1 \text{ mile}
\]

\[
\div 10 \text{ counter} = 10 \text{ mile}
\]

\[
\div 100 \text{ counter} = 100 \text{ mile}
\]
LED Display

7447 - Decoder Driver
MAN 1 - LED Display

LCD Display

ICM 7211 - Display Driver
Digitron 6 - LCD 6 Clinic Display

> Series of Processes (Turn for Fun)

Input ➔ Process ➔ Output