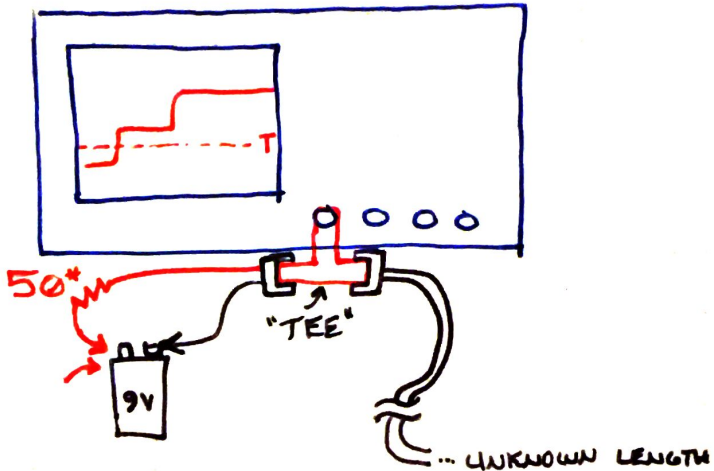


SUPER SIMPLE TEST SETUP



VERTICAL: - DC COUPLING
 - 2V / DIVISION
 - POSITION NEAR BOTTOM

HORIZONTAL: - 5ns TO 50ns / DIV
 - TRIGGER POSITION $\approx 10\%$

TRIGGER: - SOURCE CH1
 - DC COUPLING
 - RISING EDGE
 - $\approx 2V$ THRESHOLD
 - NORMAL OR SINGLE MODE

QUICK TDR CALCULATIONS

SPEED OF "LIGHT": (EXPRESSED AS DISTANCE TRAVELED EACH NS)

$$c = \frac{0.9836'}{ns} \quad \text{OR} \quad = \frac{0.2998m}{ns}$$

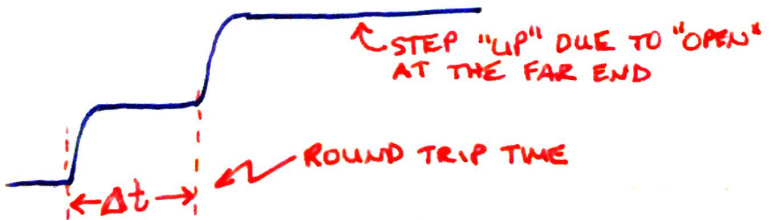
VELOCITY FACTOR: % OF SPEED OF LIGHT

TYPICAL COAX VALUES: 66% - 85%

TYPICAL "TWISTED PAIR": 64% - 74%

- YOU CAN USUALLY LOOK UP V.F. BASED ON THE CABLE TYPE

COMPUTE LENGTH:



CALCULATION OF LENGTH:

$$\text{LENGTH} = \frac{\Delta t * c * \text{V.F.}}{2}$$