

Haroutun Haroutunian
 Professor Berhe
 ECE 442L
 27 October 2021
 Lab 1 MyDAQ
Schematic Lab 1 MyDAQ:

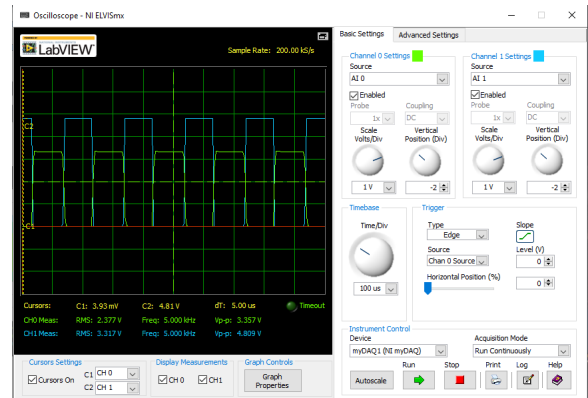
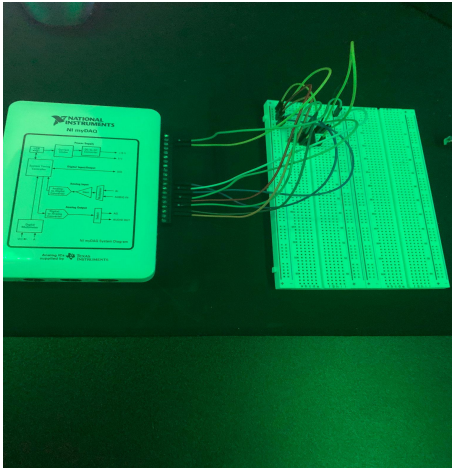


Figure 1.3 Overlapped Waveform for CMOS Inverter 5V rectangular Input Case 2 for $f = 5\text{ kHz}$

Figure 1.1 MyDAQ Circuit

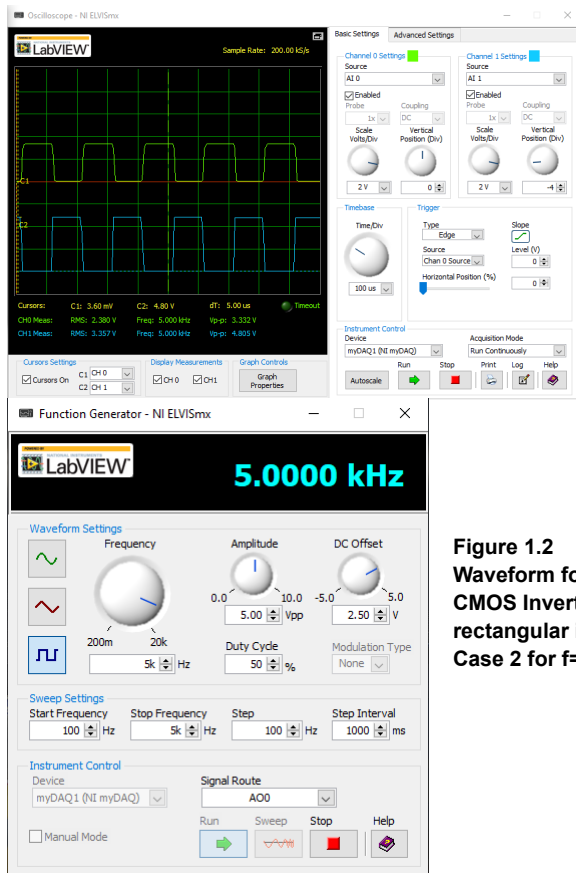


Figure 1.2 Waveform for CMOS Inverter 5V rectangular input Case 2 for $f = 5\text{ kHz}$

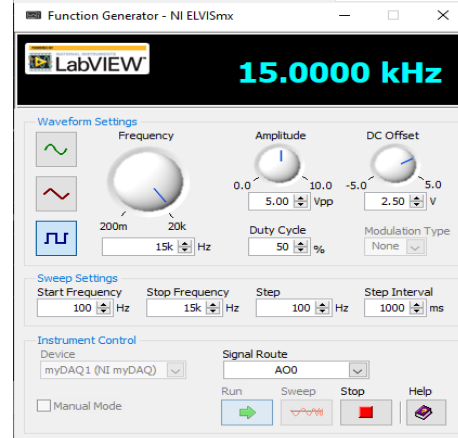
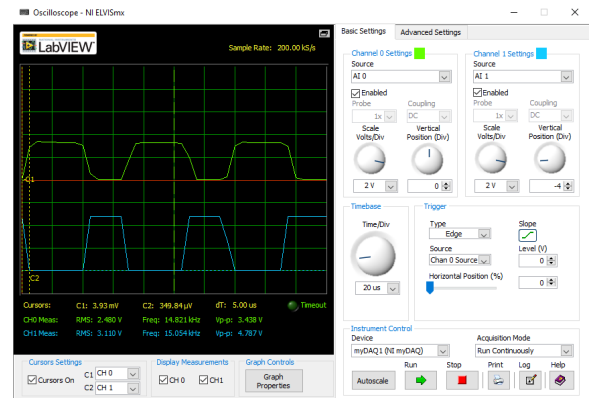


Figure 1.4 Waveform for CMOS Inverter 5V rectangular input case 4 for $f = 15\text{ kHz}$

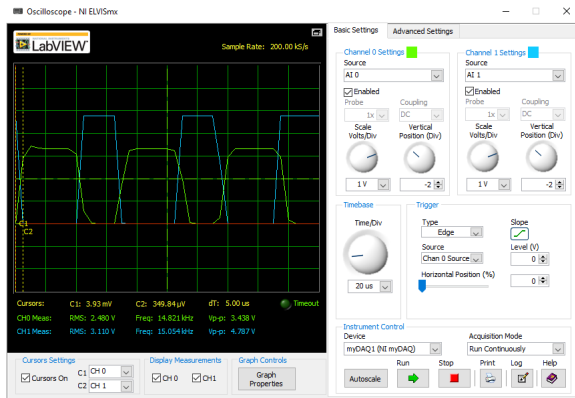


Figure 1.5 Overlapped Waveform for CMOS inverter 5V rectangular input case 4 for $f=15\text{kHz}$

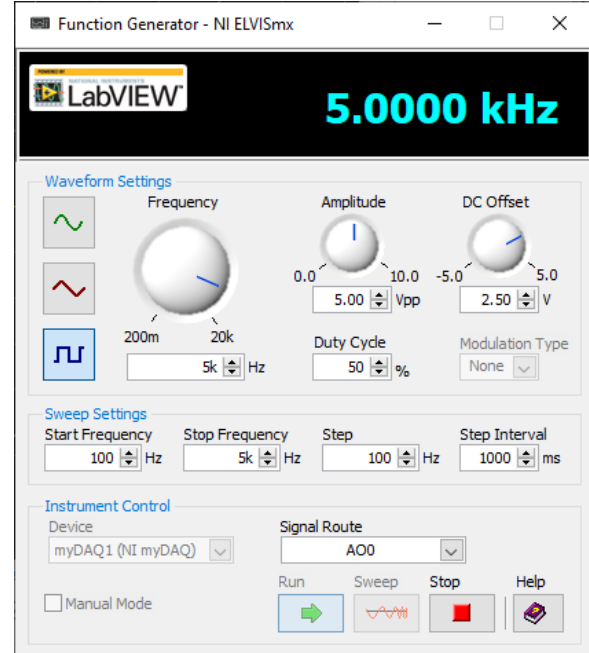
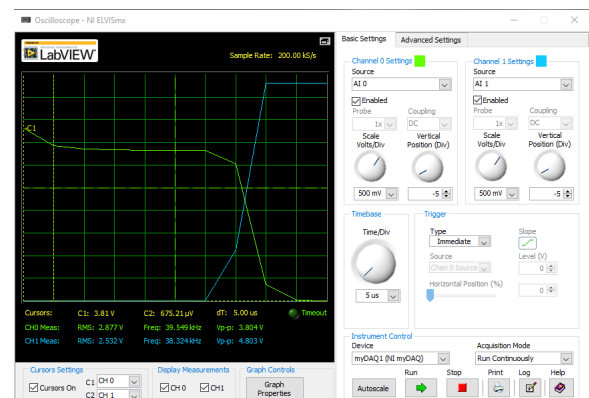


Figure 1.7 Waveform for Case 2 CMOS inverter Propagation Delay LOW to HIGH for $f=5\text{kHz}$

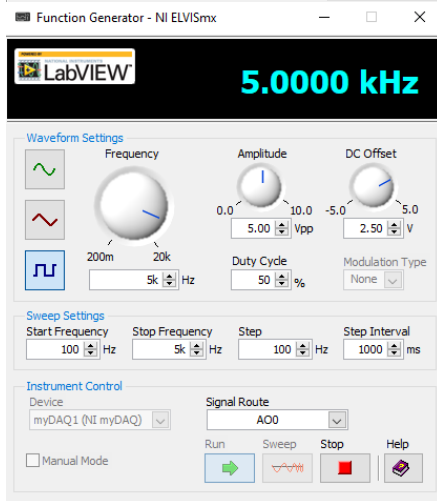
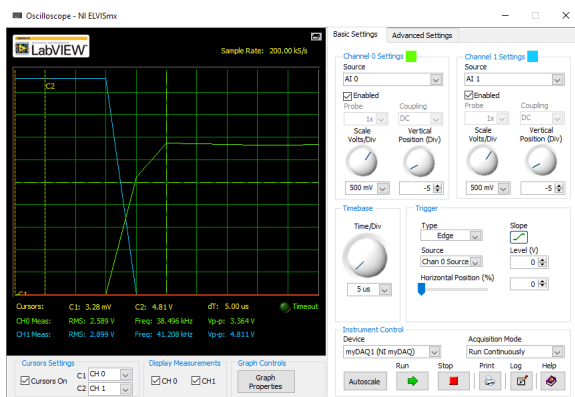
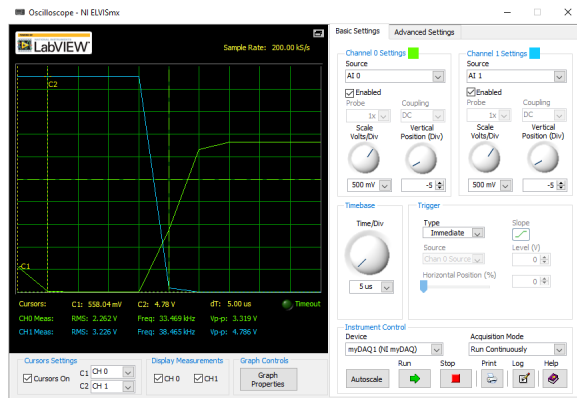


Figure 1.6 Waveform for Case 2 CMOS inverter Propagation Delay HIGH to LOW for $f=5\text{kHz}$



Function Generator - NI ELVISmx

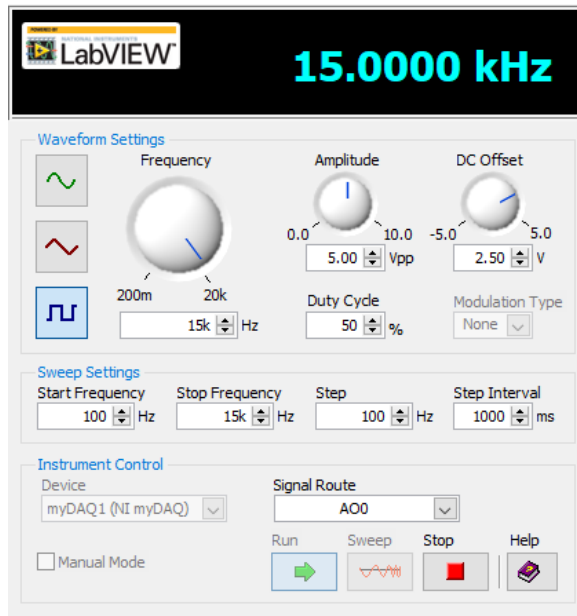
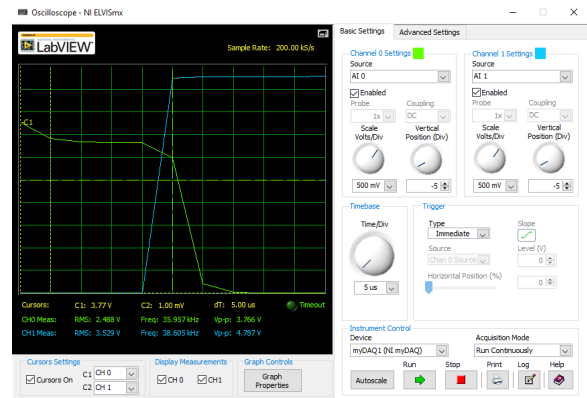


Figure 1.8 Waveform for Case 4 CMOS inverter
Propagation Delay HIGH to LOW for $f=15\text{kHz}$



Function Generator - NI ELVISmx

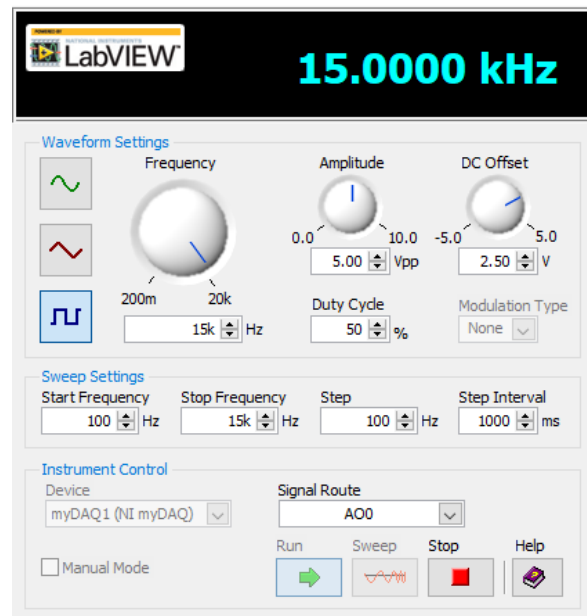
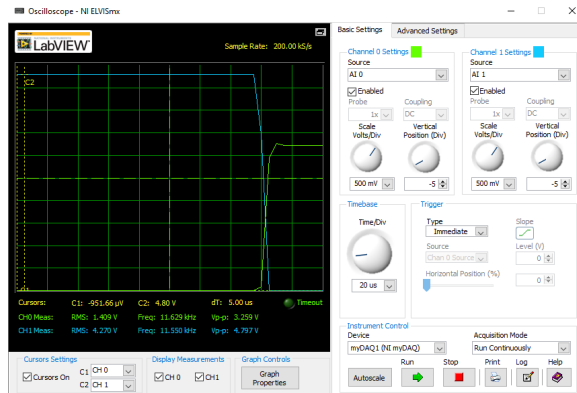


Figure 1.9 Waveform for Case 4 CMOS inverter
Propagation Delay LOW to HIGH for $f=15\text{kHz}$



Function Generator - NI ELVISmx

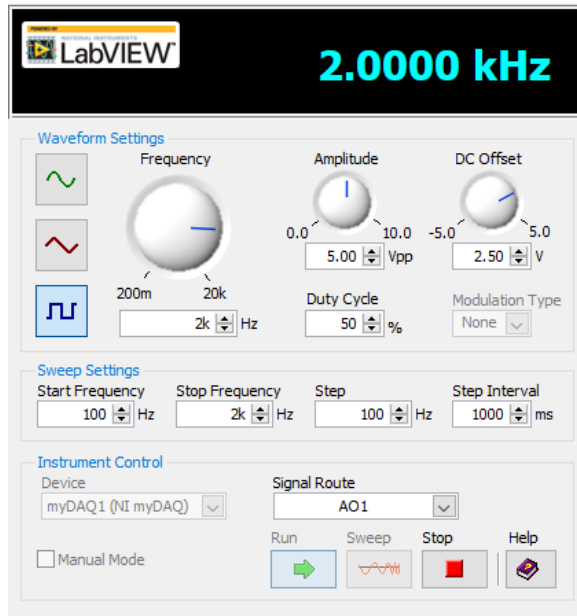
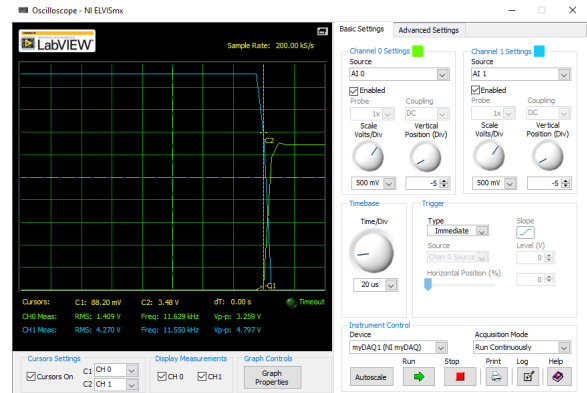


Figure 1.10 Waveform for ramp case 2 CMOS Inverter voltage transfer for triangular Wave for $f = 2\text{kHz}$ and Slope = 4.14V



Function Generator - NI ELVISmx

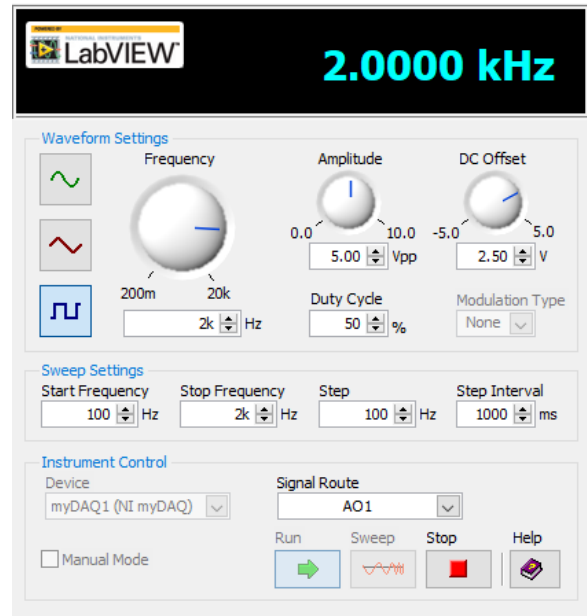


Figure 1.11 Waveform for ramp case 2 CMOS Inverter voltage transfer for triangular Wave for $f = 2\text{kHz}$ and Slope = 0.3 V