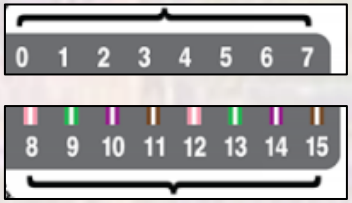
AD2 – Digital Signals

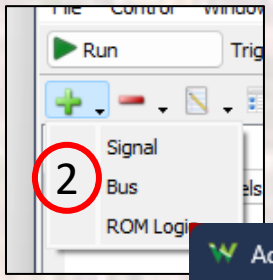
Last updated 10/7/25

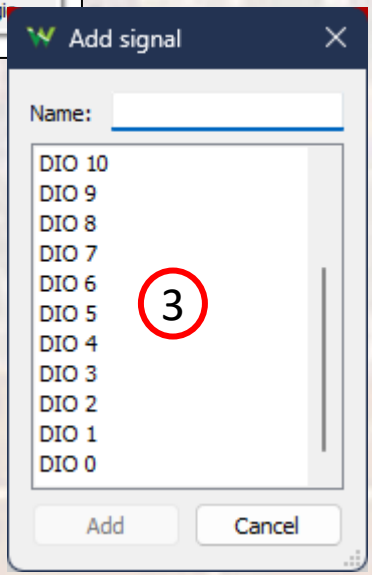
Analog Discovery 2 – Digital Signals

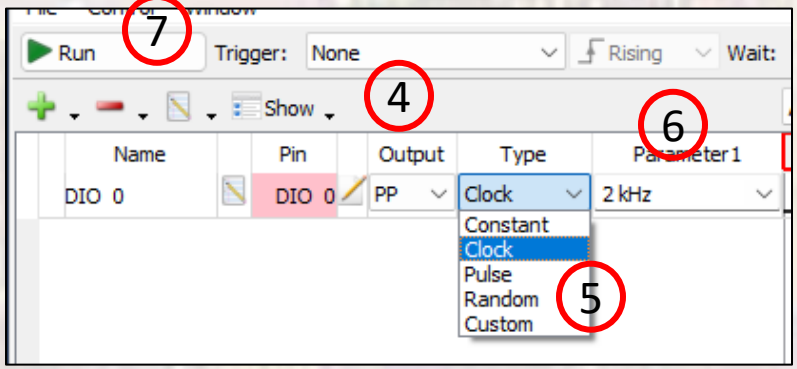
Always connect at least 1 gnd



- Create digital signals – Patterns
  - 1 pin signals
  - Creates time varying digital signals
  - Uses the 16 digital I/O pins (0 – 15)
  - Process
    1. Select Welcome + → Patterns
    2. Select + to choose Signal
    3. Select the pin to use (rename it if you wish)
    4. Select the output to be PP (push-pull)
    5. Select the signal type
    6. Select the Frequency
    7. Select Run







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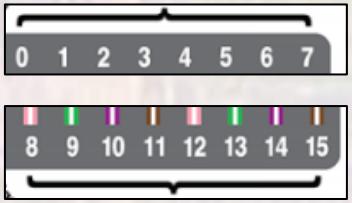
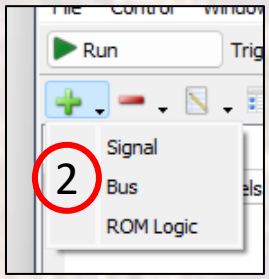
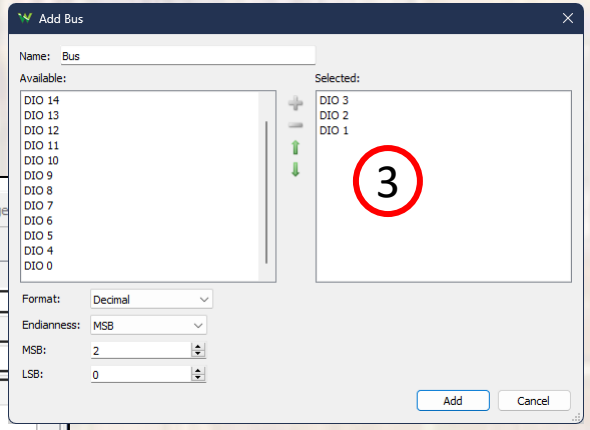
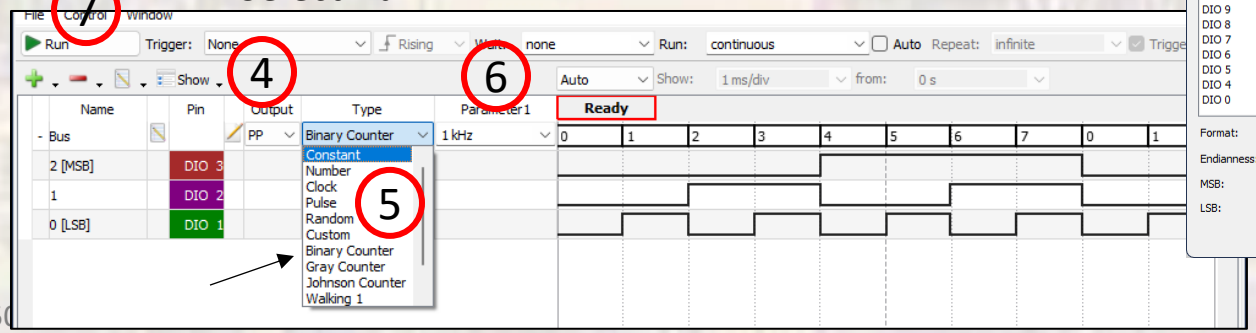
Always connect at least 1 gnd



- Create digital signals – Patterns
  - Multi-pin signals (Bus)
  - Creates time varying digital signals
  - Uses the 16 digital I/O pins (0 – 15)
  - Process
    1. Select Welcome + → Logic
    2. Select + to choose Bus
    3. Select the pins to use (add to right column) order from MSB at top to LSB at bottom
    4. Select the output to be PP (push-pull)
    5. Select the signal type
    6. Select the Frequency
    7. Select Run



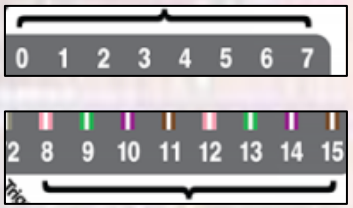


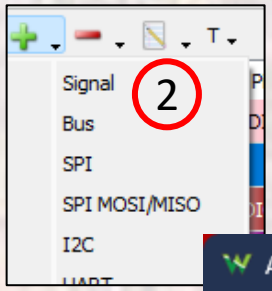


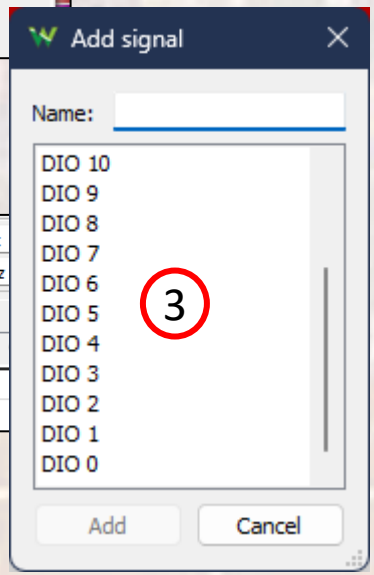
Analog Discovery 2 – Digital Signals

Always connect at least 1 gnd

- Measure Digital Signals - Logic
  - 1 pin signals
  - Measures time varying digital signals
  - Uses the 16 digital I/O pins (0 – 15)
  - Process
    1. Select Welcome + → Logic
    2. Select + to choose Signal
    3. Select the pin to use (rename it if you wish)
    4. Select Single or Run







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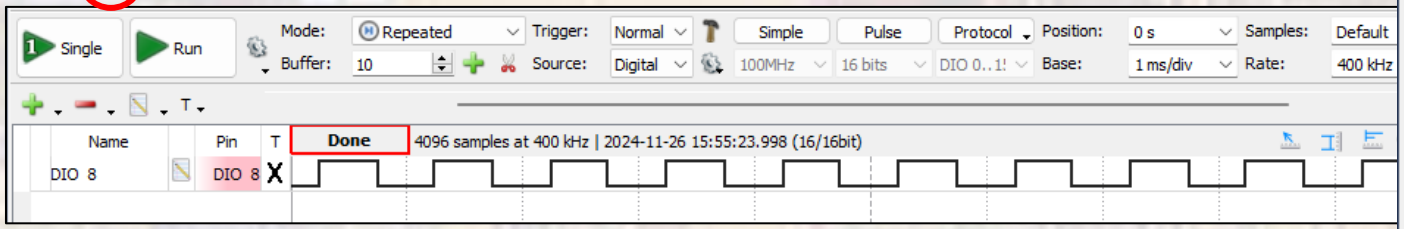
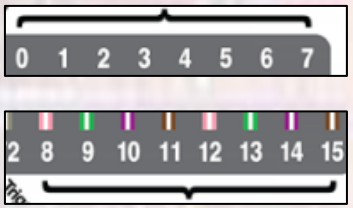
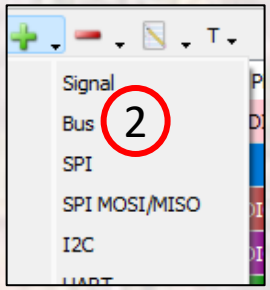


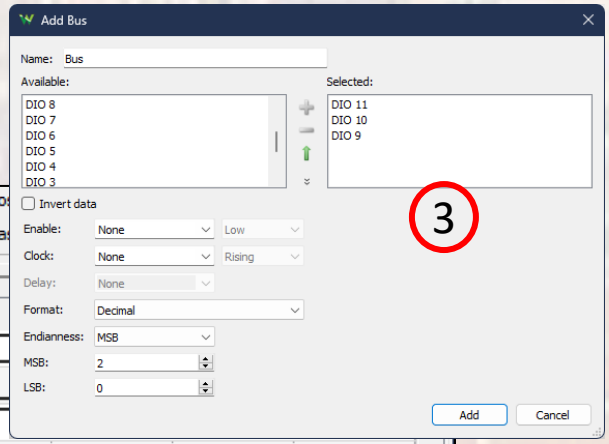
Analog Discovery 2 – Digital Signals

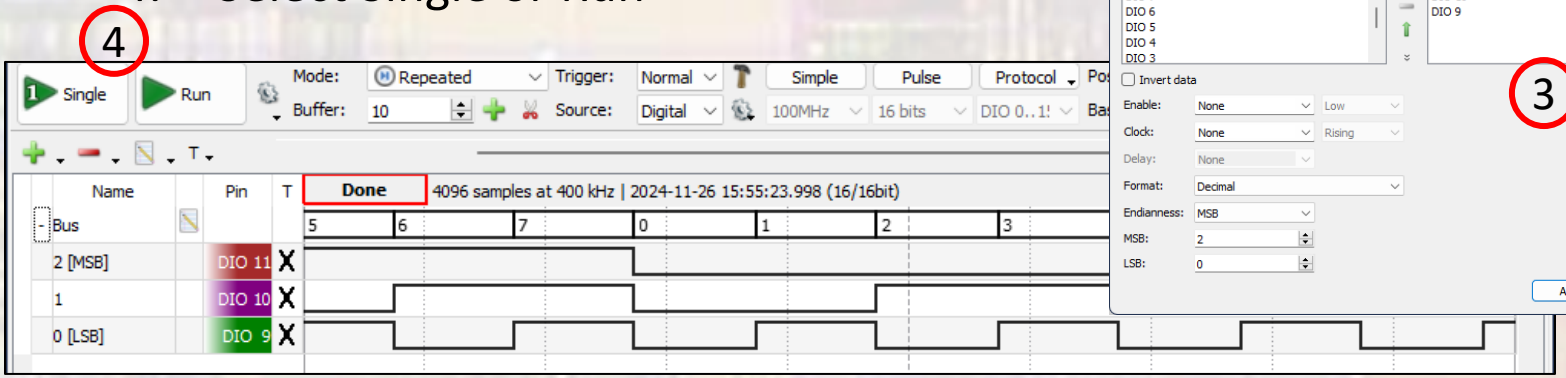
Always connect at least 1 gnd

- Measure Digital Signals - Logic
  - Multi-pin signals
  - Measures time varying digital signals
  - Uses the 16 digital I/O pins (0 – 15)
  - Process
    1. Select Welcome + → Logic
    2. Select + to choose Bus
    3. Select the pins to use (add to right column) order from MSB at top to LSB at bottom
    4. Select Single or Run





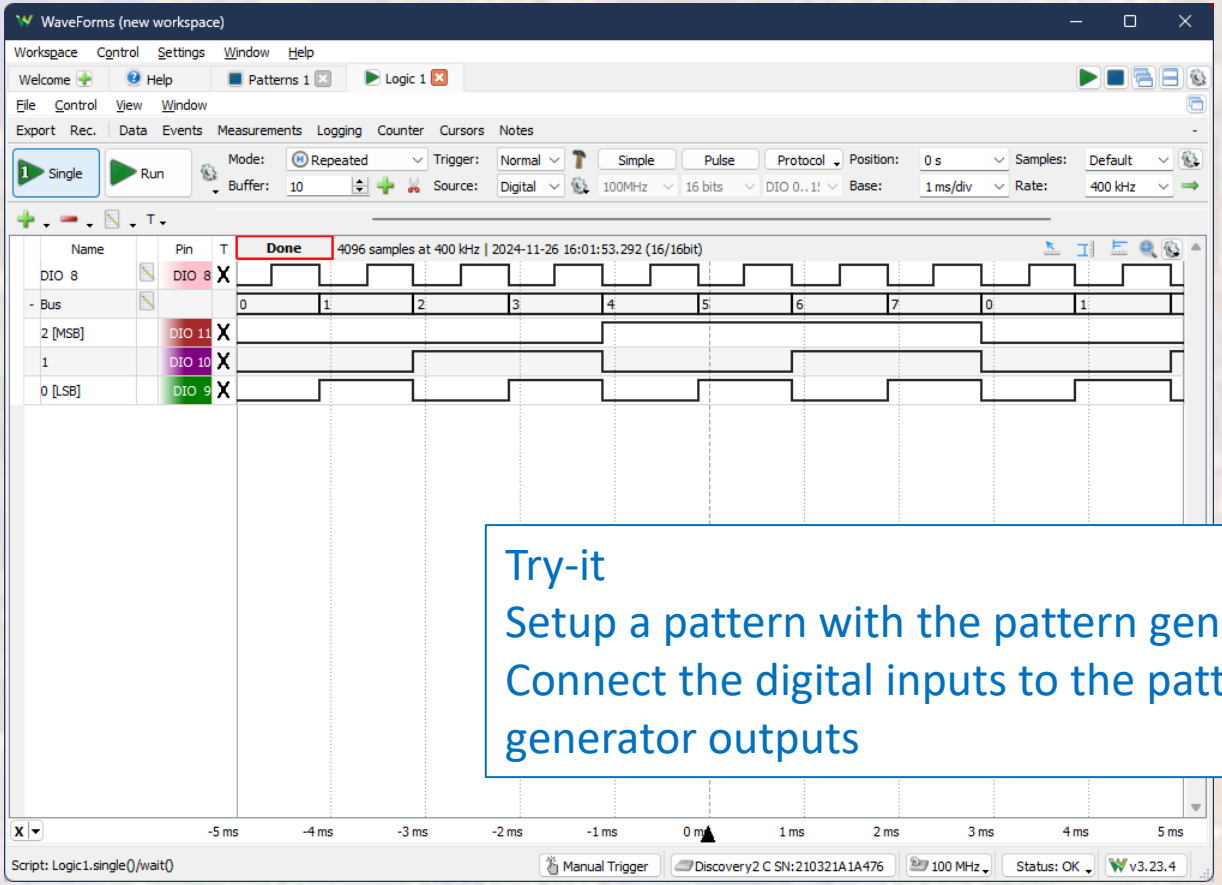




Analog Discovery 2 – Digital Signals

Always connect at least 1 gnd

- Digital Signals
  - Create and measure time varying digital signals



Try-it
Setup a pattern with the pattern generator
Connect the digital inputs to the pattern generator outputs