

AD2 Pattern Generation

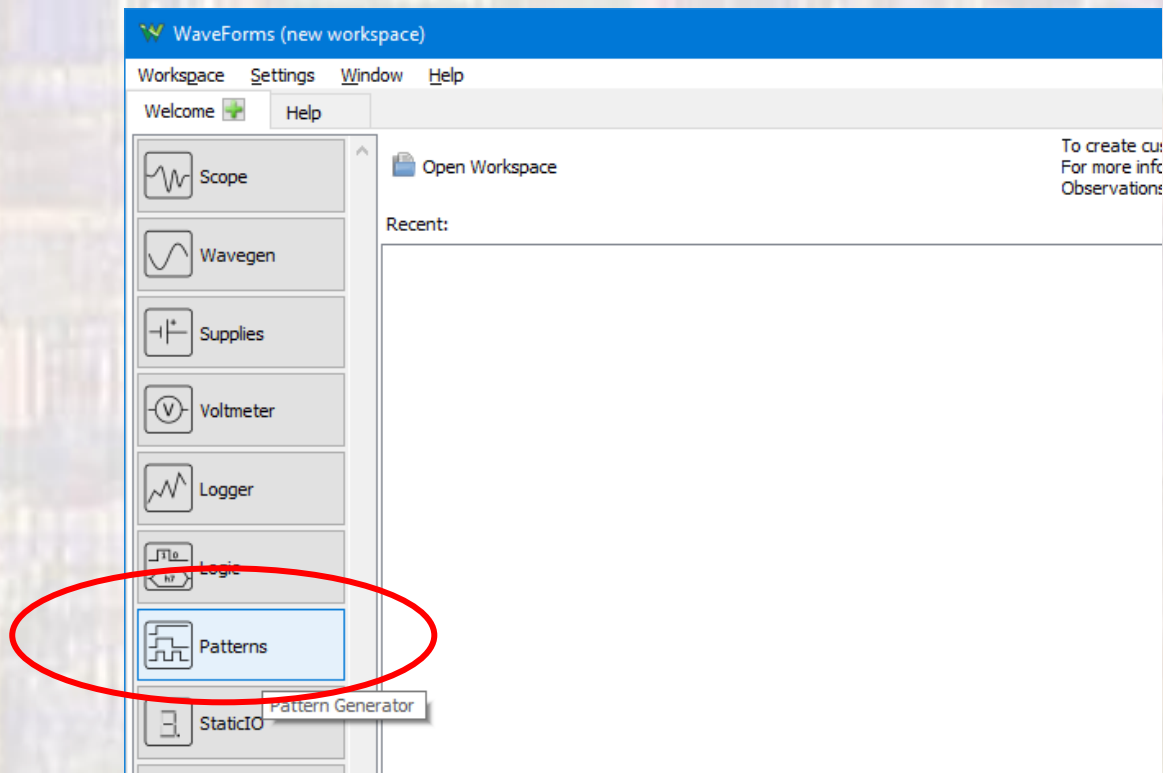
Last updated 8/6/21

AD2 Pattern Generation

- The AD2 hardware and software can be used to generate a variety of digital signals
 - Digital Patterns
 - Digital Protocols
- The patterns can be setup in the software or loaded from a file

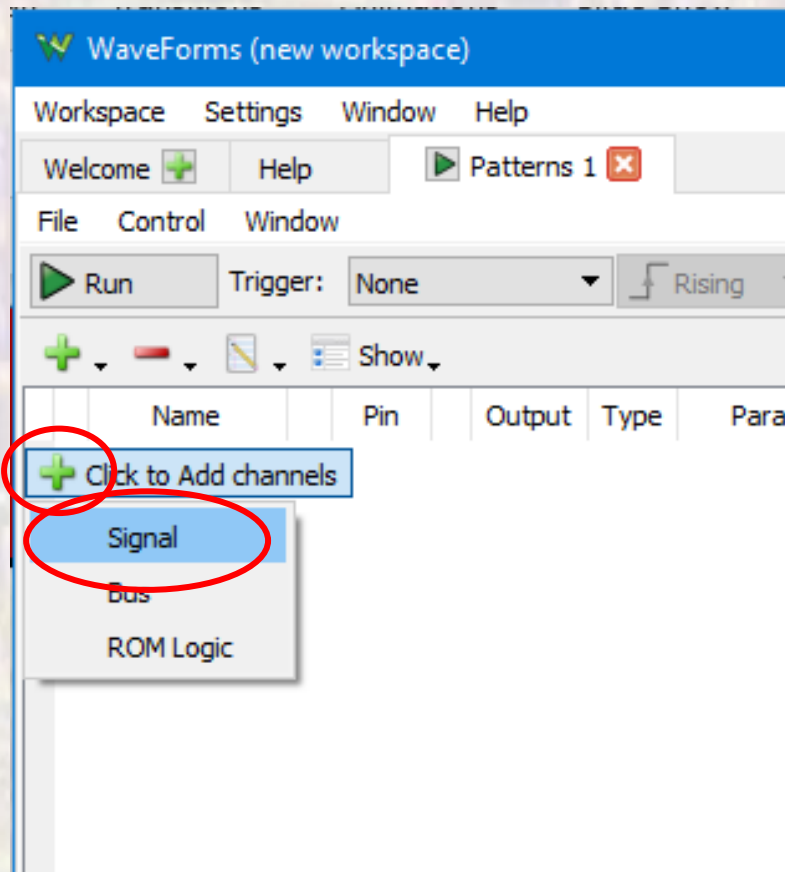
AD2 Pattern Generation

- Digital Pattern Generation
 - Open Waveforms
 - Select Patterns



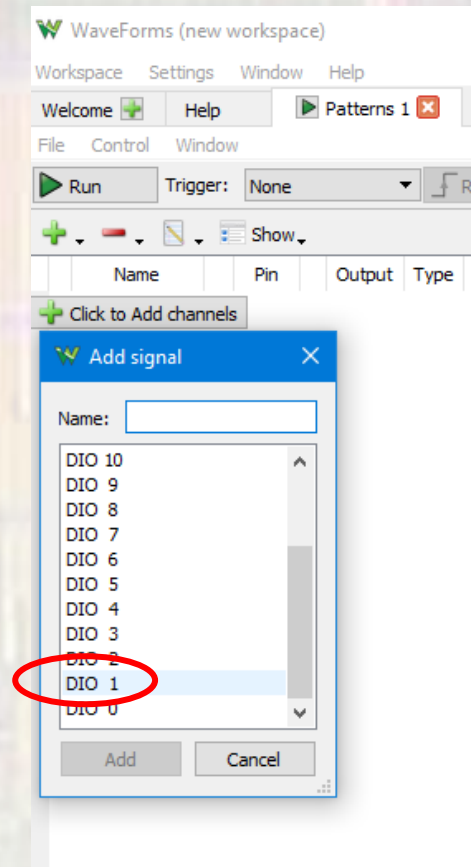
AD2 Pattern Generation

- Digital Pattern Generation
 - Click to add a channel
 - Select Signal



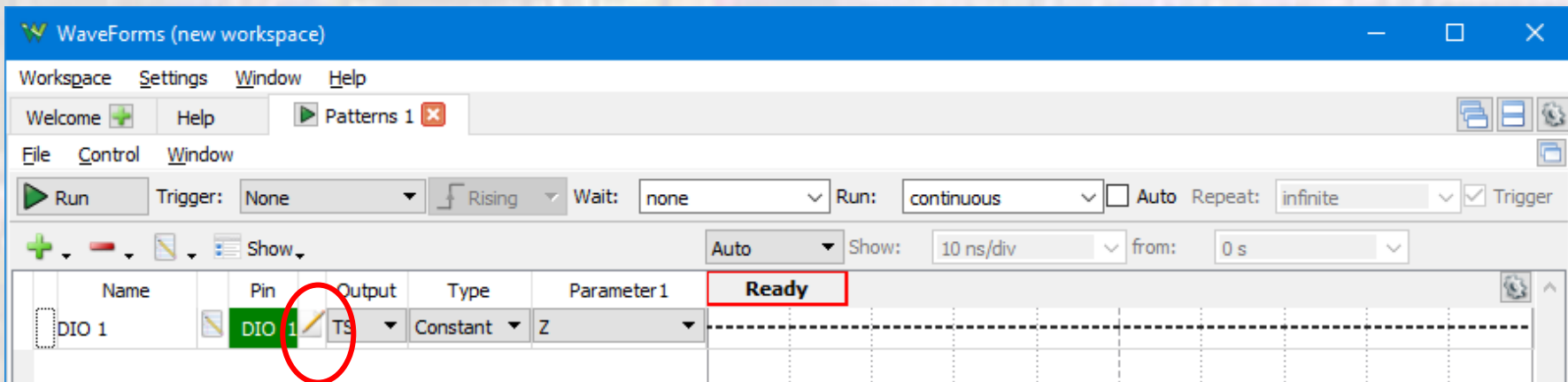
AD2 Pattern Generation

- Digital Pattern Generation
 - Select the desired output pin
 - Select Add

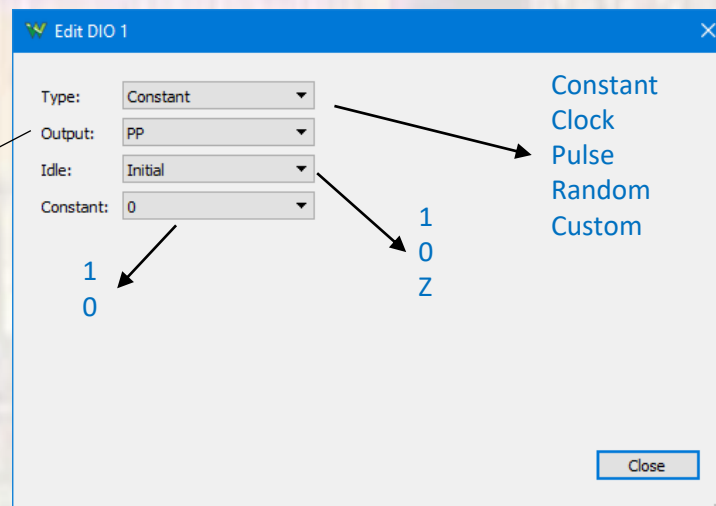


AD2 Pattern Generation

- Digital Pattern Generation
 - Select the edit button



Push Pull
Open Drain
Open Source
Tri-State



AD2 Pattern Generation

- Digital Pattern Generation

The screenshot displays the WaveForms software interface for digital pattern generation. The main window, titled "WaveForms (new workspace)", shows a control panel with a "Run" button, a "Trigger" dropdown set to "None", a "Rising" edge trigger, and a "Wait" dropdown set to "none". The "Run" mode is set to "continuous", and the "Repeat" is set to "infinite". The "Show" dropdown is set to "Auto", and the "Show" rate is "50 us/div" from "0 s".

The main workspace shows a table with columns: Name, Pin, Output, Type, Parameter 1, and a waveform display. The table contains one entry: "DIO 1" with Pin "DIO 1", Output "PP", Type "Pulse", and Parameter 1 "Low". The waveform display shows a pulse train. A "Ready" status indicator is highlighted in red.

An "Edit DIO 1" dialog box is open, showing the following settings:

| Parameter | Value | Minimum | Maximum |
|--------------|---------|-----------|---------|
| Type | Pulse | | |
| Output | PP | | |
| Idle | 0 | | |
| Start | Low | | |
| Low | 25k | 250 us | 0 |
| High | 5k | 50 us | 0 |
| Counter Init | Start | 249.99 us | 0 |
| Divider | 1 | 10 ns | 1 |
| Divider Init | Divider | 10 ns | 0 |

The dialog box also features a "Close" button. The main workspace shows a time axis from 0 us to 500 us. The status bar at the bottom indicates "Manual Trigger", "Discovery2 SN:210321A 1A476 USB", and "Status: OK".

AD2 Pattern Generation

- Digital Pattern Generation
 - Load from a file (csv format)
 - Select edit
 - Choose Custom
 - Select Import
 - Select frequency

