|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs | Variables | Continuous Variables | Current State | Next State | Outputs | Actions |
| buttonPressed | - | s(t) ≥ 1 | normal | programming | - | s(t) := 0 |
| - | - | d(t) ≥ Ta | normal | alarm | buzzerOn  OledBlink | s(t) := 0 |
| buttonPressed  rotaryPot | - | s(t) ≥ 1 | programming | normal | - | Ta := a\*rotaryPot  s(t) := 0 |
| - | count = 2 | - | alarm | normal | - | s(t) := 0  count := 0  Ta := 3599 |
| - | count = 1 | s(t) > 5 | alarm | snooze | OledBlink | s(t) := 0  count := 0 |
| - | - | s(t) > 300 | alarm | normal | - | s(t) := 0  Ta := 3599 |
| buttonPressed | - | - | alarm | alarm | buzzerOn  OledBlink | count := count + 1  s(t) := 0 |
| - | count = 2 | - | snooze | normal | - | s(t) := 0  count := 0  Ta := 3599 |
| - | count = 1 | s(t) > 5 | snooze | snooze | OledBlink | s(t) := 0  count := 0 |
| - | - | s(t) > 60 | snooze | alarm | buzzerOn  OledBlink | s(t) := 0 |
| buttonPressed | - | - | snooze | snooze | OledBlink | count := count + 1 |

Diagram

Description automatically generated