



begin()

Initialize Timer2
Initialize pin-change interrupt

Interrupt service routines

ISR(TIMER2_COMPA_vect)

```
if _tx_buffer_pointer_max == 0
    output = high,
    OCR2A = TICKS_PER_FRAME
    tx_buffer_pointer = 0
else
    read _tx_buffer[tx_buffer_pointer]
    wait until run_start_micros
    output = run_value
    OCR2A = this_run_duration / MICROSECONDS_PER_TICK - SUP
    tx_buffer_pointer++
    if tx_buffer_pointer == _tx_buffer_pointer_max
        _tx_buffer_pointer_max = 0
```

ISR(PCINT2_vect)

```
next_run_start_time = micros()
previous_run_duration = uint16_t(min(uint32_t(FRAME_DURATION), (next_run_start_time - previous_run_start_time)))

If previous_run_duration == MICROSECONDS_PER_FRAME
    if capturing
        capturing = false
        _rx_buffer_pointer_max = rx_buffer_pointer
        _rx_buffer[rx_buffer_pointer] = MICROSECONDS_PER_FRAME
    else { // We have not been capturing bus data.
        if _rx_buffer_pointer_max == 0
            capturing = true
            rx_buffer_pointer = 0
    }
else
    if capturing
        _rx_buffer[rx_buffer_pointer] = previous_run_duration
        rx_buffer_pointer++
previous_run_start_time = next_run_start_time
```



