Infrared Remote Control
Interfacing

• Decoding a IR Remote Control
• Reverse Engineering
Lab Goals

• Display command codes from a TEAC RC-505 remote control
TEAC RC-505 remote control
TEAC RC-505 remote control
Decoding a remote control

9.03ms 4.8ms

0.64ms 0.52ms 1.6ms
Decoding a remote control

- Use RB0 to trigger an interrupt
- Use TIMER1 to measure time between interrupts
- Use states to keep track of which phase of the pulse chain you are looking at
- Handle “postamble”
Remote control postamble

- Optional
- Sequence repeats 0-n times
- Must end with spacer pulse

- 6.5ms
- 9.03ms
- 2.1ms
- 0.64ms
- 25ms
- 0.64ms
Tasks

• Complete implementation of remote control decoder

• Display address and command codes on LCD Display

• Hand in table with command codes corresponding to each key on remote control