TextWand Programmable LED Display

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User Interface

- 16-button alphanumeric keypad
- Real time LCD display
- Straps to users wrist
Output Device

Choice of strobed LED line display, or simple scrolling character screen
System Description

• SRAM buffer stores up to 128 character message

• LCD display continuously updates from SRAM buffer data, until user presses “enter”

• LCD Character ROM stores LCD letters

• After user presses “enter,” accelerometer impulse begins message scrolling

• Can connect either scrolling LED display or strobed line display

• Keypad and LCD wearable on wrist, display mounted on glove
Important Milestones

- Make test display wand - already done
- Accelerometer Interface & Testing (Both) – By Monday 4/25
- Make character and line ROMs (Both) – By Monday 4/25
- Implement input buffer and LCD display (Andy) – By Friday 4/29
- Get LED output devices working (Carlos) – By Friday 4/29
- Interface keypad input with LED output (Both) – By Wednesday 5/4
Additional Functionality: Memory

- Include RAM with programmable and canned message options for user
- Scroll through memory with arrow keys
- Store, Clear and Memory Recall buttons save and recall messages
- Canned messages loaded into SRAM buffer so they can be edited