

**Q137**

**FRONT PANEL CONTROL**



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## Q137 Front Panel Controls

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### Introduction

This board contains the controls used for system debugging and reset. It contains 2 push button switches, one for RESET and one for MI. The remaining toggle switches activate halting of each CPU and enabling of the appropriate labelled function.

### Operation

The 555 timer is wired as a low frequency oscillator and is used to flash the LED associated with each "armed" switch.

The CMOS NAND gate is used for debouncing the pushbutton switches.

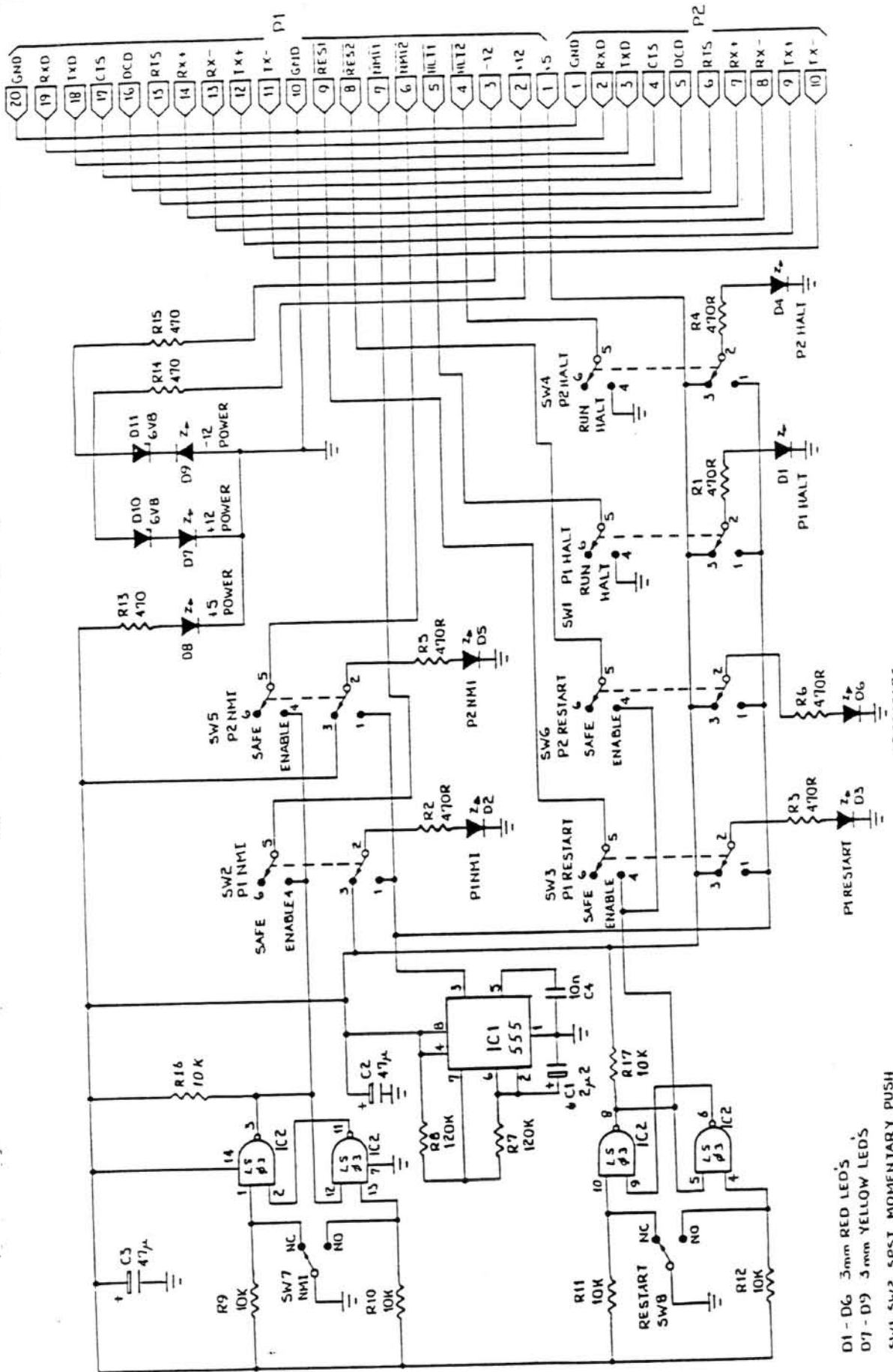
Each switch has two poles. One activates the function while the other is used to connect the oscillator to the LED.

For a function to operate the associated LED must flash.

### Communications Port

The front panel also carries a 10 way flat cable connector, P2, that contains serial communications lines from the Q133 card.

Front Panel Controls Q137-02



Front Panel Controls

DRAWN: PV REVISION: 2

- D1 - D6 3mm RED LED'S
- D7 - D9 3mm YELLOW LED'S
- SW1, SW2 5PST MOMENTARY PUSH
- SW3, 4, 5, 6, 7, 8 DPDT TOGGLE
- IC1 555
- IC2 74LS03
- \* TAG TANTALUM

*fairlight*