Application Note: Multi Function Switches

SUMMARY

freETarget supports a pair of push button switches that can be used to customize the operation of the unit while in the target holder.

MULTIFUNCTION SWITCHES

When not in calibration mode, ie the CAL jumper is empty, the PIN headers A and B can be used as auxiliary switches to provide extra functionality, for example feed the witness paper.

There are two switches that can be used interchangeably, ie what can be done with A can be done with B. The JSON string {"MFS":AB} packs the values shown in Table 1 and the values can be used separately.

Table 1: MFS Values

Value	Use
0	Switch is not used
1	Paper feed witness paper
2	Read pin into software
3	Use pin for output
4	Send test string to PC for debugging
5	
6	
7	
8	
9	

For example {"MFS":41} would use input B to send a test string to the PC, while Input A acts as a paper feed.

OPERATION

The switches have multiple modes depending on how long the switches are held down for.

Quick Tap - Turn on the LEDs and be ready for operation

Hold for 2 seconds - Operation as per Table 1

Press Both for 5 seconds - Turn off LEDs and go to sleep

- Wake up if switches tapped or PC connection