

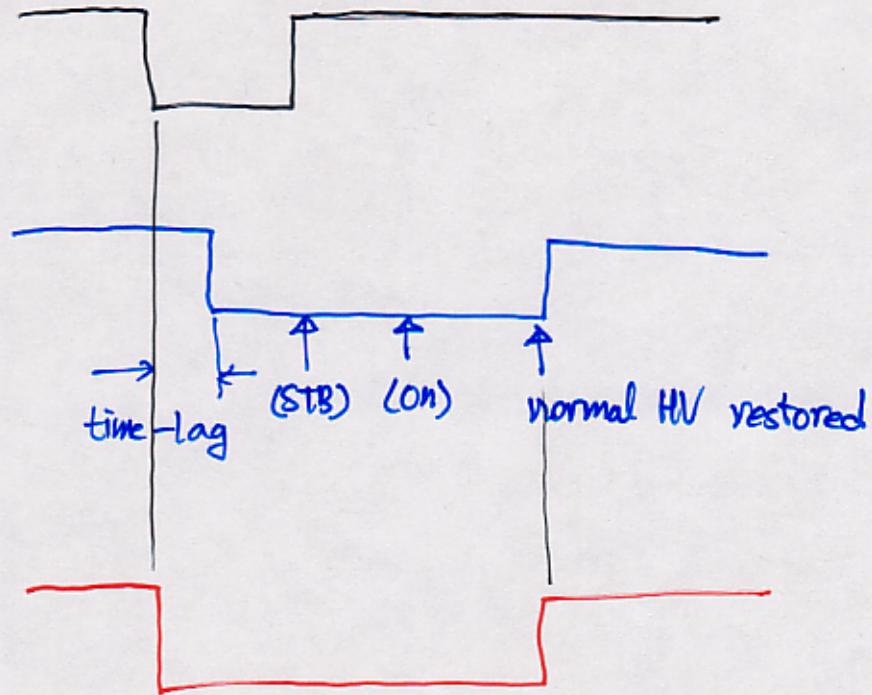
A problem with the trigger inhibit

Normal Operation

- Hardware TI



- Software TI



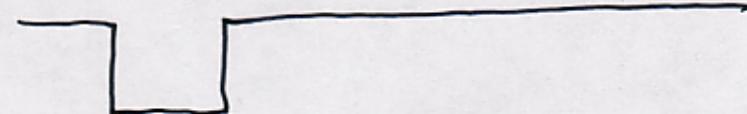
- System TI



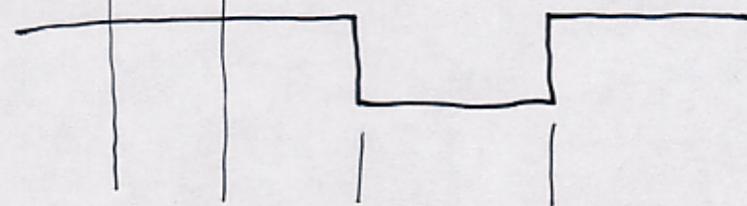
Time Lag = (HVmon++ Scan Time) + (TI Control Program Scan Time) +
(TCP: moun3 -> cdfs2) + (cdf2 Internal) +(TCP: cdfs2 -> apacs)

A Problematic Operation

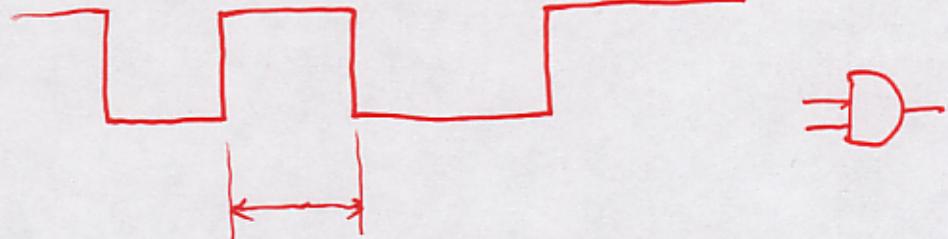
- Hardware TI



- Software TI



- System TI



DAQ with Bad HV

Solution 1

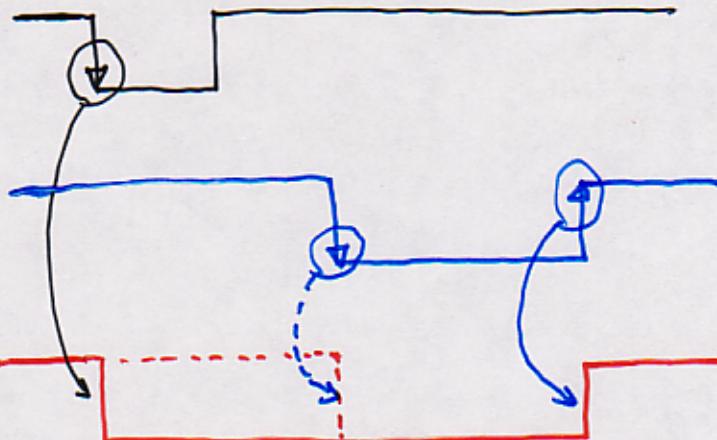
Implement TI Control routine in HVmon++

Problem may not be fixed, but frequency may be reduced.

Solution 2

Implement a state machine in apacs

- Hardware TI



- Software TI

- System TI

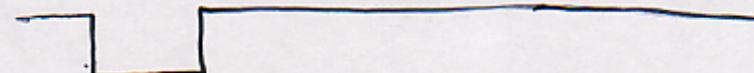
An apacs expert must implemented.

Missing Software TI can cause nuisance.

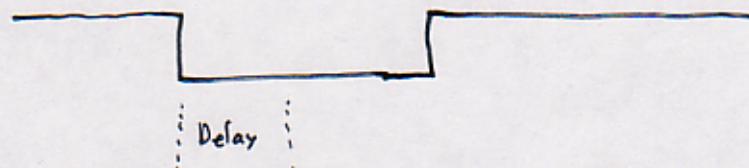
Solution 3

Basic Idea: Block HV control until TI is verified

- Hardware TI



- Software TI
(@muon3)



- Software TI
(after APACS)



- Control Block



- System TI



Communication delay could be a big problem.

Solution 4

Dedicated Hardware solution.
Extend Hardware TI near CAEN.

- Hardware TI
(Extended)



- Software TI



- System TI

