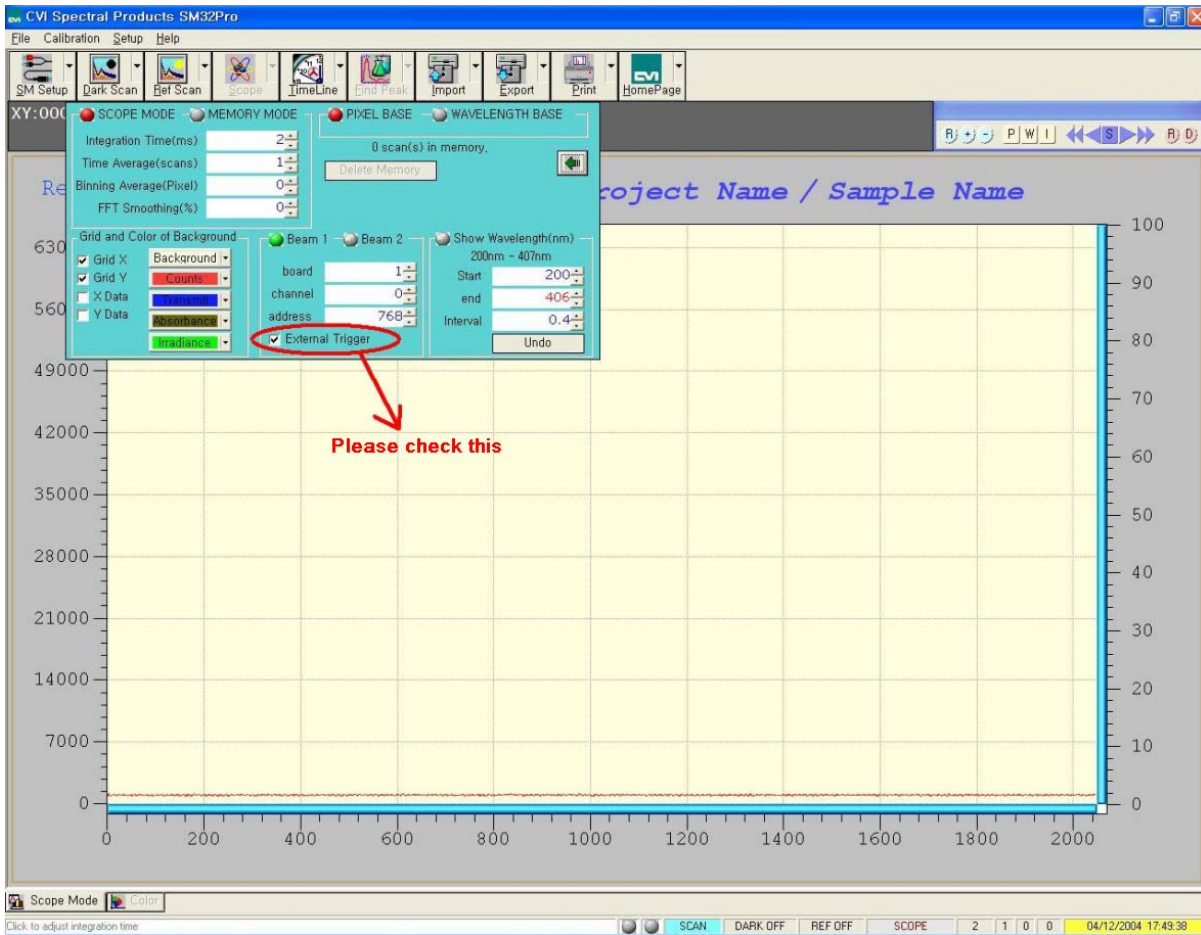
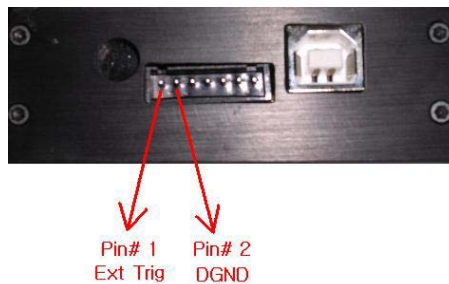


Check the External Trigger Option in SM32 Setup Tool Box.

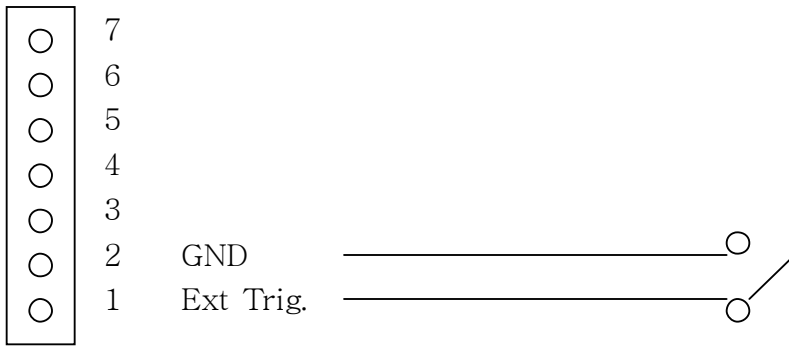


In back-plate of the SM240, there is a 7 pin connector. The pin#1 (TTL Signal Input) and pin #2 (Digital Ground) are related to the external triggering (ref, below)



There are two methods for external triggering. One is using an electrical (or mechanical) on-off switching system. The other is using a TTL pulse training (3.3V or 5V) generated by a function generator.

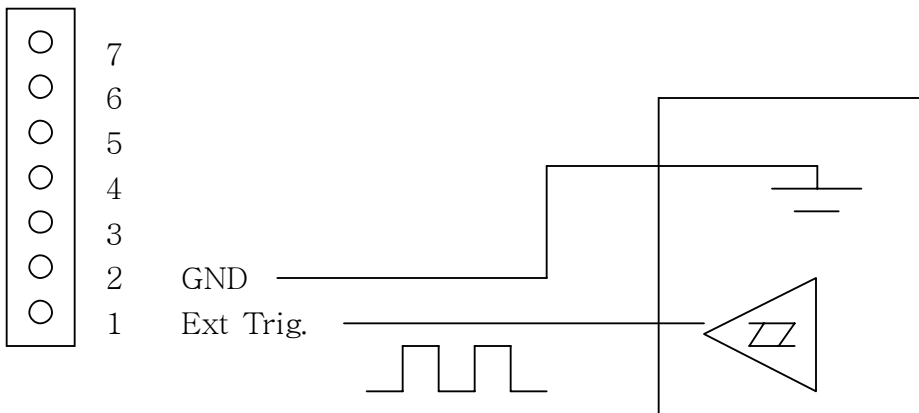
Method1) On-Off Switch



First, make a mechanical or electrical on/off switch (such as a “Relay”) and connect both terminals to pin# 1 and pin# 2.

When the switch is on, the signal is triggered and you can capture the spectrum, and when switch is off, the signal holds.

Method2) TTL Pulse



If you are using an external TTL sources (3.3V or 5V TTL Train Source), just connect the TTL line to pin# 1, and connect GND to pin# 2. During the TTL train running, the triggering will happen when TTL signal drops (Falling Edge Triggering).

For synchronizing the in/out signals between the external triggering source and our USB board, the period of the TTL signal should be larger than “CCD Integration Time + ~ 15msec” (USB2.0).

The “~ 15msec” is a data transferring rate via USB2.0 and it can vary according to the computer performance (CPU speed, Memory speed and so on).