09.00      8:08

**7 SHOTS**

**01.46** FIRST SHOT

**05.28** LAST SHOT

**START**

# R&D OVERVIEW

## Apple Watch IMU (Non-Acoustic) Shot Timing

Current shot timing methods find shots by listening for loud sounds. This limits shot timing in groups due to other shooters shot sounds being too close. Also, loud voices, firearms manipulations, bumping the timer, and even the crunch of feet on gravel can trigger some shot timers.

JMAP uses accelerometers in consumer watches (Apple Watch currently) to detect shots using Artificial Neural Networks in real time running on the watch.

JMAP's shot detection is smart - it knows shots, not bumps, and it requires no modification to the firearm.   It's been trained on tens of thousands of shots and has accuracy surpassing acoustic shot timers.

Using JMAP Watch timing you can place shooters very close together and speed up rifle/pistol testing many times over. In our tests,  group measurements taking 2 hours with acoustic shot timers can be done in 20 minutes or less using IMU timing.

## HIGHLIGHTS

- Works on Apple Watch Series 3 or later
- Stand alone or send times to JMAP
- Uses ANN to smartly feel shots.
- Collects shot data for further ANN training.
- 20 watches will speed up time/accuracy tests 10 to 15x
- Shot splits down to .08 (12.5 times a second)
- Has stand by mode which will detect shots and log any shots that happen while watch is worn.



09.00    🎤 8:13

**STAND BY**

Want a tech demo?
Contact: Jay@scoringtech.com