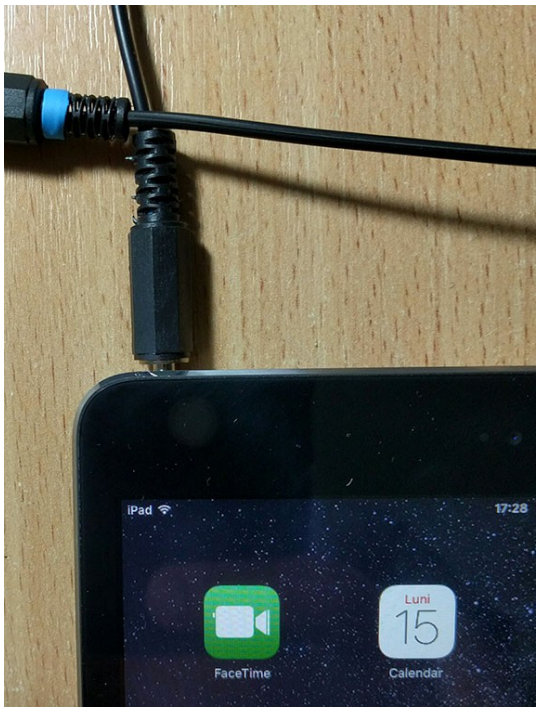
Smartphone and tablet tester

The smartphone tester is simple and easy to use. Plug the sensor in the 3.5mm audio jack from the smartphone or tablet.



If you have a protective case for your device make sure the case thickness does not interfere with the complete insertion of the 3.5mm jack.

Start the appropriate sound editing app that you chose. Set up the sensor, camera and light source. Put the light source in front of the camera and the sensor in the back. It should be like taking a photo of the light source and the sensor is the film. Fire the shutter.

Select the measuring area as shown in the screenshot below. Spikes may have different shapes and sizes but as a general rule, start measuring where you see a sharp rise in the spike (not the tip of the bottom spike) and stop where the spike starts to go down (tip of the upper spike).

Avoid:
- Light setups with multiple light sources (like flashlights with multiple LEDs).

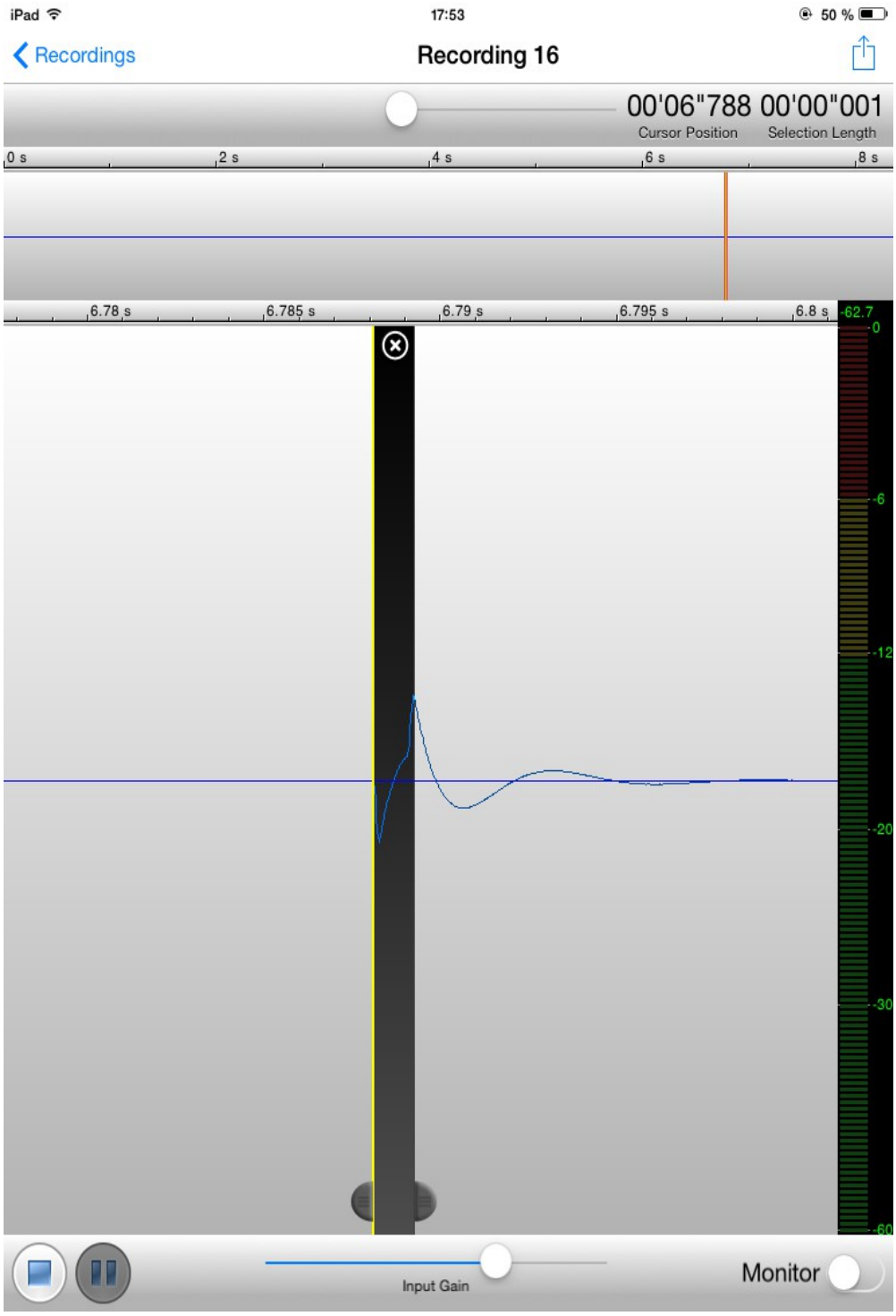
-Avoid light sources with a reflective hood (shiny part).
- Lasers can cause permanent eye injuries and require a lot of effort to align with the tester. Also, there is a better alternative to lasers when it comes to the accuracy of this tester.

In the case of light setups with multiple light sources the graph will display some aberrations and the readings will be incorrect. On some tests the error created by multiple light sources exceeded 150%. That means that in the case of a 1/500 exposure the error would make you believe your shutter is running at a 1/200. This is one example of the huge difference made by the light source.

For cameras with removable lens you can use a single bright LED from something simple like a key chain with a single LED without a reflective hood.

If you test cameras with non-removable lens you need a brighter light source. Ideally it's better to have a light source with a lower light intensity than a brighter one. If the light source is too bright you might get errors in the readings. If the light source is not bright enough you might not have a spike you can work with but this option is better because you can see right away that there is a problem.

Also you should use a light source without a reflector. Each light source has its own “fingerprint” in the graph. This is why you should choose a good light source and stick to it. When you choose/change your light source you should spend some time testing and analyzing the graph to find the different particularities of your new light source.
The screenshot below was made with the app TWRecorder on an Ipad mini at 1/1000 of a second



If you start the app and notice it records sound, rotate the plug into the smartphone or tablet jack a little bit until it does not react to sound anymore.

Very important! As mentioned in the listing, it is the buyers responsibility to to provide their own apps. I do not provide or endorse any apps! You can choose a dedicated paid app or a free sound recorder or sound editor app that can count in 1 millisecond increments.

If you have any questions don't hesitate to ask. If you don't understand something or feel that it could be better explained, please tell me and I will see what I can change in the manual.

Common sense and communication can go a really long way! Please don't be like these people: https://somevfmotocustomers.wordpress.com/

Contact email address: shuttertester@gmail.com