XANDEM
Synergistic Sensing

TMD Android Application User Guide

Revision A

(Updated Feb 25, 2013)

Introduction

Congratulations on purchasing a tablet with the Xandem TMD Application. This guide will provide details for using and understanding the application itself, see the TMD user guide for the sensing aspects of your TMD Kit. The Xandem TMD Android application is essential to understanding and demonstrating the technology live.

Getting Started

You'll need 3 items to get started:
- Nexus 7 Tablet with the Xandem TMD application installed
- On the Go (OTG) USB cable with micro USB connectors (Male to Male)
- Xandem Processing Unit (PU)

Steps:
1. Turn on your tablet and unlock the user screen
2. Plug the PU into the black end of the OTG cable
3. Plug the red end of the OTG cable into the micro USB port on the tablet
4. Xandem TMD App should fire up automatically and start running

Troubleshooting:
- If the app starts but says no PU detected, touch the home button to get back to the desktop and unplug the OTG from the tablet. Wait a few seconds and then plug the OTG back into the tablet.
- If the app starts and no data appears (the graph isn't moving) check the settings on the PU and make sure your TMD network of nodes are powered up and on the same channel and pan as the PU.
- If the tablet has gone to sleep it will not power the PU properly. Wake up the tablet before you unplug the PU.

Interpreting the Data

Graph - The graph is plotting the current motion score. There will be a red line on the graph indicating the current motion threshold. When that threshold is met the PU will open its contacts to indicate motion has been detected in the network. The motion score will also be printed as a number under the graph on the left.

Number of Triggers - This indicates how many triggers have happened. A single trigger is the default, but if you have multiple triggers enabled it will tell you how many triggers out of your total have happened.

Countdown to Reset - This is only applicable with multiple triggers, it is a countdown to the Multi Trigger Reset time. When a trigger happens there is a set time that it will wait for another trigger before it resets the trigger count.

Multi Trigger Reset - This is the reset time after each trigger. If no triggers happen within this time the trigger count will reset.

Node Outage - This will read either none or a number. If it shows a number, that indicates the number of the

node that is out.

Channel, Chan Shift, Pan, Threshold, Num Nodes, Quick Reset, Multi Trigger, am, av - These are all settings on the PU, see the TMD user guide for more explanation on them.

Pu & Node # - The last column(s) are health readings. They indicate what percentage of communication they are receiving from the entire network. If any of the nodes are low (less that 50%) try moving those nodes around. If the PU is low then move the PU closer to the network.