

Shake Mode

WHY (Reason to Build This Technology)



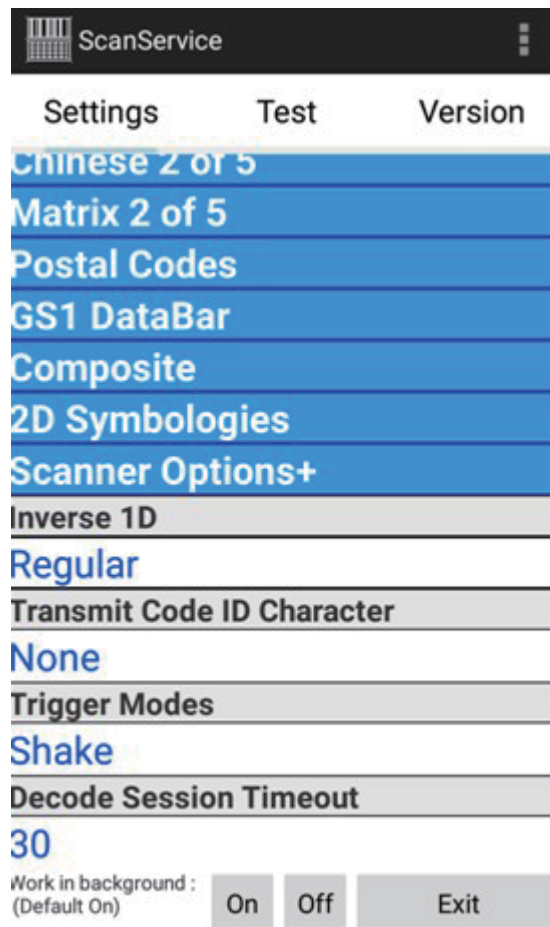
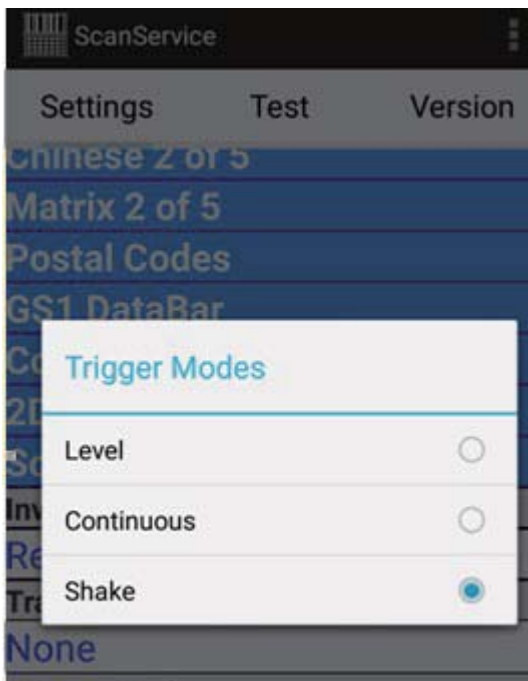
Compare to the retail and logistic market application, the warehouse workers need more sparing hands to implement their jobs by using data collecting devices. Generally observed, the majority of warehouse and logistics industries are still using 1D barcodes scanning for their application. In order to solve the needs of the warehousing workers and easy to carry the inventory of goods with both hands, unitech has developed the so-called “Shake mode” in all Android mobile devices for barcode scanning sectors.

After working with many customers, unitech has figured out that our customers care about the process efficiency and productivity as well as the correct inventory. Usually, using the handheld device with barcode scan requires to operate by trigger scan keys in order to let the camera emit light for recognizing the barcodes. Workers must pick up the goods, operate fork lift as well as take the terminal then press key to scan at the same time. The entire process seems to be complicated and redundant, also it is not so efficient from a long-term view.

In particular, at the increasing cost of labor nowadays, the intelligent mobile device can be created more values to save time. Although making more productivity will be a biggest challenge, unitech engineers created a particular feature to fulfill this task mission in all Android mobile devices. We call, “Shake Mode”.



HOW (Concept of This Technology)



In order to solve the needs of customers, unitech engineers developed a feature combined into a scanning application (Scan Service APP), called "Shake Mode". Users only need to turn on this mode before operating barcode scanning. unitech engineers created a software program to link G-sensor function, using to detect the behavior of the device automatically, where the device has been taken from the standstill to activate the barcode scanning. Through the precision logical math of the program and justify the picking up angles, behaviors for determination of activation of the barcode scanning.

However, it is not enough if the program just use through the G-sensor module for activation barcode feature. It needs more complex conditions and circumstances for the attributes judgments; these are for the key technologies of activation for barcode imager. unitech is dedicated to make this technology more progress and precise.

WHAT (Case Study Benefits)



For unitech PA700 enterprise PDA, we let the warehouse workers use PA700 for real field tests. One is attaching PA700 on his arms and set on "Shake Mode", and the other one is using PA700 in a traditional way by pressing the trigger key without "Shake Mode". In this field test, the worker's device with "Shake Mode" helped him hands free, no need to do redundant movements for checking goods, because when a working person raises his arm to let the imager camera detect the barcodes on any goods. The imager will scan them immediately. With Shake Mode, data collection makes the work easy, fast and more efficient.

In summary, using PA700 with the Shake Mode increases the 50% productivity compared with none Shake Mode. Therefore, unitech Shake Mode not only helps customers to increase productivity, but for warehousing and logistics sectors will also be a good news in saving manpower costs, time and increasing the work efficiency.