

# RE: Psion Teklogix 75xx series terminals with integral RAxxxx intentional radiators

Sirs,

We write respectfully to request special dispensation for the above-referenced ruggedized hand-portable devices from recently-adopted FCC guidelines regarding the placement upon electronic devices of FCC-mandated ID labeling.

It is the policy of Psion Teklogix to comply in all respects with the provisions of all FCC regulations, rules, guidelines and OET bulletins, as they pertain to all devices that we place upon the United States market.

In the case of the above-referenced devices, we have however encountered a technical difficulty in meeting concurrently two FCC labeling provisions, specifically:

- That the label bearing the FCC ID for the device should be affixed indelibly and permanently to the device.
- That the label should not be placed in the battery compartment of the device, unless the device is a cellular telephone.

The 75xx series of terminals have been offered to the US market for a period of several years. A substantial number of devices are installed and in current use by customers in the United States. These customers benefit from the versatility of the device to be reconfigured in the electro-mechanical sense, for example to accept new field-upgradeable handheld grip options, replaceable carrying straps, additional battery capacity options as new technological advances permitted, and so forth.

It was recognized at the time that the devices were first offered that the versatility of the devices was a crucial factor to their commercial success. It was also the goal of this company to ensure that customers would be able to purchase new configuration options to add value to their initial investment, rather than be required to replace the entire device and discard an otherwise fully functional enterprise computing aid.

The photographs attached in Annex 1 demonstrate some of the versatility options available to our customers. These fall under several categories which we shall briefly describe below.



### 1. Handgrip Options

Some users of the 752x series terminals may have mobile or highly portable applications for the devices. In these cases the terminal may be supplied to the customer with an essentially flat rear face, permitting for example its insertion into a carrying holster or pouch.

Other users may desire to use the internal barcode scanning capability of the device according to highly intensive usage patterns. Ergonomic balance of the unit in the hand is a key factor for extended usage in such environments. The Pistol Grip option is in these cases applied to the back of the terminal, whereupon it occupies the upper half of the rear face of the device.

A third group of users may wish to possess a number of devices configured for each of the above applications; or they may wish to re-affect the usage from no-grip (mobile) to grip (scanner) applications at some future point in time.

### 2. End-cap Options

The 752x series of terminals are configurable at the factory with a large number of internal radio, scanning and memory options, to select but a few for mention here. In order to accept the various form factors and volumes of these optional devices, a range of protective endcaps have been developed to permit each device to be integrated within the rugged shell of the unit and to benefit from full protection from drop, shock, vibration, water or dust ingress, and other environmental factors.

#### 3. Battery Capacity Options

It is fully accepted within the mobile computing industry that advances in battery technology should be made available to customers in the most timely manner possible, to permit devices to keep pace with increasingly power-hungry software and hardware requirements and/or to extend the usable operational shift life of hand-portable computing devices. The release of new battery options with increased milli-Ampere-hour (mAh) capacities to our customers typically occurs every six to twelve months. The new batteries are designed to be field-upgradeable and are supplied in a kit with a new battery compartment cover to permit larger physical volumes to continue to meet the ingress, shock and drop ratings to which the entire device is specified.



#### **Label Placement Locations**

In order to meet the requirements relating to the indelible and permanent affixation of the FCC ID label on a rugged hand-portable device, it is necessary not only to use indelible inks on a label material that will adhere to the substrate (housing), but also to provide some sort of mechanical protection for the label through a combination of careful placement and other mechanical arrangements.

Typically, this would imply either:

- affixing the label under a cover of some kind, or
- recessing the label into a planar surface, such that its edges are protected from peeling and/or scratching objects.

The placement of the label upon a convex-curved external surface in extreme environments will certainly lead to peeling, erasure of the inks and other deterioration leading to an unreadable FCC ID. Further, creating a recess for label placement would carry the dual penalties of obligatory re-tooling of the device housing and of compromised integrity of the rugged device due to reduction of the housing wall thickness.

#### A. Front face

For reasons which will become apparent upon examining the photographs in Annex 1, it is impossible to locate the FCC ID label on the front face of the device, which is fully occupied by the display and keyboard areas.

#### B. Side faces

The sides of all Psion Teklogix devices, as is customary in the industry for hand-portable units, are curved in an ergonomic fashion and intended to permit the device to sit comfortably in the hand. The curvature also in part permits the device to meet the drop rating expected for a rugged device. These curved surfaces are unsuitable locations for an indelible and permanent label.

#### C. End faces

The upper and lower end faces are occupied by connectors and end-caps, respectively. The end-caps, being changeable according to factory-fitted internal electronic options or field-replaceable by service personnel, represent a non-permanent surface that will almost certainly be removed or exchanged for like parts during the life of the rugged device.



#### D. Rear face

The upper half of the rear face is fully occupied by the location for the field-upgradeable Pistol Grip assembly.

The pistol grip assembly itself is entirely composed of curved surfaces offering no suitable location for the FCC ID label on a rugged device.

The lower half of the rear face is fully occupied by the battery compartment cover. This is a non-permanent fixture that will almost certainly be replaced or exchanged during the life of the product, for reasons of upgradeability of the battery option as presented above.

### Resolution

It is the submission of Psion Teklogix, Inc. that the only suitable location for a label of the importance of the FCC ID is the battery compartment of the device. We reach this conclusion on three counts:

- 1. This location is mechanically protected.
- 2. It is the only planar part of the terminal's unfettered structure that is not subject to permanent obstruction by a configurable option, or to high probability of replacement during the life of the product.
- 3. The unit, when shipped into the United States of America and upon any occasion to a customer, is packaged with the battery assembly removed and the rear of the unit facing upward. The FCC ID label is therefore fully visible to both inspecting Customs agents and to the user upon receipt.

We conclude that the battery compartment location is the only one that can guarantee the integrity of the label for the entire operational life of the product. It is our proposal and request therefore to place the label in such location, in order to ensure that our customers may continue to benefit from the ability to locate and determine the FCC ID of our product at any moment of their choosing. In order to facilitate this, we propose additionally to draw the attention of the customer to the location of the FCC ID label in the User Manual.

Yours,

Iain Roy

Manager, RF Engineering and Regulatory Approvals

Psion Teklogix Inc.

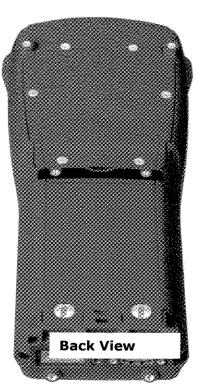
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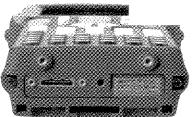


# ANNEX 1: PHOTOGRAPHS OF 75xx HAND-PORTABLE TERMINAL

#### **WORKABOUTPRO - Standard Product Configuration**







**Bottom View** 



#### **Handle Options**

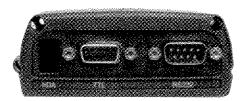


**Pistol Grip** 



Handstrap

# **Endcap Options**



IrDA/TTL/RS232 Endcap



**Imager Endcap** 





**Extended Endcap** 

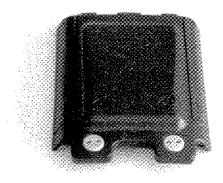
## **Battery Cover Options**



High Capacity Battery Cover with Slot Screws



**Standard Capacity Battery Cover with Slot Screws** 



High Capacity Battery Cover with Security Screws