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Ref:

RFID Module LF-AH1-A1

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USER MANUAL

RFID Module LF-AH1-A1

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Revision	Date	Prepared by	Verify by	Validated by
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PSION TEKLOGIX

Printing date: 12/05/2005 14:35:00



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1. SCOPE OF DOCUMENT

This document describes the method to install the RFID Module LF-AH1-A1 in the Psion Teklogix WORKABOUT PRO and to install the preliminary software package.

2. TERMINOLOGY

UPDATING OF DOCUMENT 3.

Version	Evolutions	Author	Date
A00	Creation	Philippe PORTE	12/01/05
A10	Up date	Philippe PORTE	09/02/05
A20	Antenna LF-A1, FCC and CE	Philippe PORTE	02/05/05
A30	New demo software	Philippe PORTE	04/05/05

4. **ENVIRONMENT**

4.1. **Documents and reference elements**

Document	Reference	Version	Date



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RFID MODULE INSTALLATION 5.

Easily installable expansion modules for the WORKABOUT PRO allow you to customise this hand-held to meet your specific mobile computing requirements. This chapter outlines how to install the RFID Module LF-AH1-A1 (this module is composed of one RFID Coupler LF-AH1 and one RFID Antenna LF-A1).

5.1. **Removing the End-Cap and Back Plate**

To install a module, you'll need to remove the end-cap and back plate on the WORKABOUT PRO. This is a simple process of unfastening four screws on the end-cap and six screws on the back plate.





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5.2. What's inside



5.3. Shutting OFF power

Before installing a module in the WORKABOUT PRO, all power sources must be turned off.

- Remove the batteries. If your unit is using AC power, disconnect it.
- Remove the end-cap at the top of the WORKABOUT PRO.
- Slide the SW1401 switch to the left to shut off internal battery power.





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5.4. Installing the RFID Module LF-AH1-A1

The RFID Module LF-AH1-A1 snaps onto the expansion connector on your WORKABOUT PRO.



With the power shut down, you can install the RFID Module LF-AH1-A1.

Remove and discard the two screws on the bottom of the metal frame.



- Put the RFID Coupler LF-AH1 in the same alignment of the expansion connector on the WORKABOUT PRO. Apply slight pressure to snap the module into place on the hand-held.
- Use for new screws (M2 x 6 mm) provided to secure the module in place.



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• Connect the RFID Antenna LF-A1 to the RFID Coupler LF-AH1.



- Slide the SW1401 switch to the right to turn power back on.
- Replace the end-cap, back plate and batteries.



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5.5. **RFID Reading area**

This area depend of the TAG type, TAG packaging, configuration of the WORKABOUT PRO (scanner, Compact flash...), environment (metallic or not).





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SOFTWARE PACKAGE 6.

RFID Demo installation 6.1.

To install the RFID Demo on your WORKABOUT PRO: you can copy the folder "RFID ٠ Setup" on your system via ActiveSync or you can execute directly via an SD/MMC memory card. Consult WORKABOUT PRO USER manual for details.



Open the folder "RFID Demo". Select the file "Setup" and double click. •



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• Installation is processing.



• After installation, a Warm reset is automatically executed. Installation of RFID Demo is terminated.



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6.2. **RFID Demonstration**

With this demonstration you can read and write the following TAGs: EM4x02, EM4x50, Hitag 1, Hitag 2 and ISO FDX-B.

Launch the file: "Software DEMO RFID.exe". .



To configure RFID Demo, select the configuration tab.

	Demo RFID 📃 🖪 🗙	Demo RFID 📃 🗖 🗙	Select TAG type
Select COM 1	Configuration Read ID Read/Write	Configuration Read ID Read/Write	
•	Type	Type	
	COM 1 V	COM 1	
	Options Read ID Continus reading Beep Detection Different tag	Options Read ID 🔽 Continus reading 🔽 Beep 🕙 Detection Different tag	Select the display of Read and write mode
Select Read ID options	Options O Hex R/W O Text	Options O Hex R/W O Text	
	DLL v3.0.0 : MULTITAG 0.12b Demo RFID LF-AH1 : v0.5 Switch On the power to the module Open port : 1 - Open Reader : 1	<===== Hitag 1 =====>	
			Window status



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• To read the ID of TAG, select Read tab and press the button Read. Put the TAG in front of the antenna (on the side of the back plate).





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• To read the memory of a TAG. Select Read/Write tab, put the TAG in front of the antenna (on the side of the back plate) and press the button Read.

	Demo RFID		_ 🗆 ×	
	Configuration	Read ID	Read/Write	
	Hitag 1 Write	Τe	Clear	Status
Result	Read	Read S	ucces	
	Read test			
	K	P	5 8 X 01	

• To write the memory of a TAG. Select Read/Write tab, put the TAG in front of the antenna (on the side of the back plate) and press the button write.

	Demo RFID	
	Configuration Read ID Read/Write	
	Hitag 1 Clear Statu	S
Result	Write Write Succes	
	Write test	
	Read	
	✐	



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6.3. **RFID Performance**

This table contains the maximum reading performance (in mm) of different TAGs:

TAG type	EM4x02	EM4x50	Hitag 1	Hitag 2	ISO FDX-B
Packaging					
World TAG 20 mm	26 mm	\land	\backslash	\mathbf{i}	\backslash
World TAG 30 mm	40 mm	\land	40 mm	40 mm	\backslash
World TAG 50 mm	59 mm	\land	\backslash	$\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{$	\backslash
Glass Tag 4 x 34 mm	13 mm		\backslash	$\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{$	\backslash
Glass Tag 2.12 x 12 mm	34 mm		\searrow		



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7. **RFID REGULATORY INFORMATION**

The following Regulatory Information shall be read in conjunction with the Approvals and Safety sections of your WORKABOUT PRO hand-held computer Quick Start Guide.

CE Marking

When used in a residential, commercial or light industrial environment the product and its approved UK and European peripherals fulfil all requirements for CE marking.

R&TTE Directive 1999/5/EC

This equipment complies with the essential requirements of EU Directive 1999/5/EC (Declaration available: www.psionteklogix.com).

Cet équipement est conforme aux principales caractéristiques définies dans la Directive européenne RTTE 1999/5/CE. (Déclaration disponible sur le site: www.psionteklogix.com).

Die Geräte erfüllen die grundlegenden Anforderungen der RTTE-Richtlinie (1999/5/EG). (Den Wortlaut der Richtlinie finden Sie unter: www.psionteklogix.com).

Questa apparecchiatura è conforme ai requisiti essenziali della Direttiva Europea R&TTE 1999/5/CE. (Dichiarazione disponibile sul sito: www.psionteklogix.com).

Este equipo cumple los requisitos principales de la Directiva 1995/5/CE de la UE, "Equipos de Terminales de Radio y Telecomu-nicaciones". (Declaración disponible en: www.psionteklogix.com).

Este equipamento cumpre os requisitos essenciais da Directiva 1999/5/CE do Parlamento Europeu e do Conselho (Directiva RTT). (Declaração disponível no endereço: www.psionteklogix.com).

Ο εξοπλισμός αυτός πληροί τις βασικές απαιτήσεις της κοινοτικής οδηγίας EU R& TTE 1999/5/EK. (Η δήλωση συμμόρφωσης διατίθεται στη διεύθυνση: www.psionteklogix.com).

Deze apparatuur voldoet aan de noodzakelijke vereisten van EU-richtlijn betreffende radioapparatuur en telecommunicatie-eindappa-ratuur 199/5/EG. (verklaring beschikbaar: www.psionteklogix.com).

Dette udstyr opfylder de Væsentlige krav i EU's direktiv 1999/5/EC om Radio- og teleterminaludstyr. (Erklæring findes på: www.psionteklogix.com).

Dette utstvret er i overensstemmelse med hovedkravene i R&TTE-direktivet (1999/5/EC) fra EU. (Erklæring finnes på: www.psionteklogix.com).

Utrustningen uppfyller kraven för EU-direktivet 1999/5/EC om ansluten teleutrustning och ömsesidigt erkännande av utrustningens överensstämmelse (R&TTE). (Förklaringen finns att läsa på: www.psionteklogix.com).

Tämä laite vastaa EU:n radio- ja telepäätelaitedirektiivin (EU R&TTE Directive 1999/5/EC) vaatimuksia. (Julkilausuma nähtävillä osoitteessa: www.psionteklogix.com).

PSION TEKLOGIX tímto prohlašuje, že 7525S je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1995/5/ES (NV č. 426/2000 Sb.) a Prohlášení o shodě je k dispozici na www.PsionTeklogix.com.

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Toto zariadenie je možné prevádzkovať v Slovenskej republike na základe Všeobecného povolenia č. VPR-01/2001.



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IMPORTANT NOTE FOR NORTH AMERICA:

The RFID must not be used whilst the host WORKABOUT PRO is being powered by the ac/dc adaptor.

FCC Information to Users:

This product and it antennas must not be co-located or operated in conjunction with any other antenna or transmitter.

Radiation Exposure Compliance

This product complies with the FCC RF exposure limits for an uncontrolled environment. For continued compliance, the product must not be held closer than 20 cm from the rest of the body.

Federal Communication Commission Interference Statement.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Emissions Information for Canada:

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.