

ARKSCAN®



RFID/UHF READER (Model: U100)

User Manual V 1.0

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1. Introduction

Arkscan U100 handheld UHF RFID wand is a high-performance RFID reader designed for asset and inventory management, and powered by easy-to-use UHF Tag manager software application. With its accurate reading capability, it allows user to manage large amount of item's UHF tags within seconds. Furthermore, comparing with traditional barcode system, the UHF Reader U100 may detect tags without LoS (Line of Sight) restriction which it is an ideal technology for practical operation in warehouse, retail, logistic and other industries. It has no doubt the UHF RFID is a better choice to save time and effort while you need an efficient way to manage assets and inventory's items.

With Bluetooth communication, the user may perform tag reading without the restriction of location and distance from the host computer. The U100 UHF Reader can read tags up to 6 feet away, and user can operate the reader as far as 30 feet away from the host computer by sending tags data back to the host computer via the Bluetooth wirelessly.

It comes with an user-friendly UHF Tag manager is designed to create inventory item list or check list in one scan button away, and allows user easily to detect which items or asset are missed in a few seconds; the UFH Reader can be utilized as a detector to locate where a particular item tag is nearby, which it helps to locate an item much easier.



2. Hardware specification

CURRENT CONSUMPTION	Charge: 5 VDC. Battery: Li-Po 3.7 VDC/2500mAh.
RFID PROTOCOL SUPPORT	EPC Class 1 Gen 2, ISO18000-6C
SUPPORT EPC DRM	YES
FREQUENCY	840~960MHz band (26.5dBm)
RF POWER	10~27 dBm
TYPICAL MAXIMUM READ	Range 30~300 cm. (In ideal conditions depending on tag)
DEMODULATION	ASK or PR-ASK
DATA ENCODING	FM0 or Miller code
BACKSCATTERING LINK FREQUENCY	Supports uplink data rate of 40,160, 256,320, 640 Kbps
ANTENNA POLARIZATION	Circular Polarization
INDICATION	Internal LED, Audio and Vibration
INTERFACE	Bluetooth 2.0
DIMENSIONS	L415 x W140 x H31 mm
WEIGHT	< 420 gm
ENVIRONMENT	Operating Temp: $-0^{\circ}C \sim +50^{\circ}C$
CIRTIFICATION	CE / FCC





3. Hardware overview



REFERENCE OF INDICATION:

STATUS	Vibrator	Веер	Bluetooth LED	SCAN LED	Charge LED
Power OFF	Х	Х	Х	Х	Х
Power ON	Vibrating	Beep twice	Flash every 2 seconds	Flash twice	Х
(Bluetooth Standby)					
Charging	Х		Flash every 2 seconds	Х	ON
Charge OK	Х		Flash every 2 seconds	Х	OFF
Bluetooth Link OK	Х	Х	Flash twice every second	Х	Х
Inventory Scan	Х	Х	Flashing	Flash every second	Х
Search Scan	Х	Х	Flashing	Flash every second	Х
Search Scan match	Vibrating	Beep ~ Beep	Flashing	ON	Х
Battery Low	Х	Х	Flashing	Red LED Flash	Х





4. System Requirements

UHF Tag Manager is a Windows-based application, it requires the following:

- Windows 2000/XP/Vista/7/8/8.1/10
- 15 MB free space





5. Installation

Install the UHF Tag Manager in Windows.

1. Locate the setup file UHF_Manager_Setup_U100.exe in CD that comes with the product package, or download it from Arkscan's website, <u>www.arkscan.com</u>, double click the setup file to execute the installation.

UHF Tag Manager - InstallShield Wizard				
2	Preparing to Install			
	UHF Tag Manager Setup is preparing the InstallShield Wizard, which will guide you through the program setup process. Please wait.			
	Extracting: UHF Tag Manager Setup_V1_0R3_PSW00185.msi			
	Cancel			

2. Click Next to continue.







 \sim

RFID UHF READER U100

3. Accept the license agreement and click Next to continue with the installation.

🕼 UHF Tag Manager - InstallShield W	Wizard
-------------------------------------	--------

License Agreement				
License Agreement Please read the following license agreement carefully.				
DEMOSTRATION SOFTWARE LICENSE				
Please read this agreement carefully before you start to install this demonstration software. If you do not agree please stop the installation of the software. Software developed by our company is provided "AS IS" without warranty of any kind, either express or implied, including, but not limited to, the implied warranties of fitness for a purpose, or the warranty of non-infringement. Without limiting the forgoing our				
I accept the terms in the license agreement I do not accept the terms in the license agreement				
InstallShield < Back Next >	Cancel			

4. When installation is completed, uncheck the 'Launch the program' since the Bluetooth connection has to be paired between the UHF reader and this computer before we can scan any RFID tag; please click Finish to close this dialog window for now.





6. Connect UHF Reader with Computer (Bluetooth Pairing)

Before you can read RFID tags, you need to pair the UHF Reader with a computer via Bluetooth. *You must charge the UHF Reader for at least two hours before you perform the pairing at the first time, just to make sure the connection won't be dropped due to lack of battery power.

Here are the steps to pair the UHF Reader with Windows computer:

1. Go to your Bluetooth setting in Windows, and click + to add Bluetooth device:

Settings	_	×
贷 Home	Bluetooth & other devices	
Find a setting	Add Bluetooth or other device	
Devices	Bluetooth	
Bluetooth & other devices	On	
品 Printers & scanners	Now discoverable as "JAMESWS"	
() Mouse	Mouse, keyboard, & pen	
Touchpad		

2. Then click Bluetooth, and Turn on the UHF Reader (Please follow the next step below).



3. Turn on the UHF Reader by press and hold the 'Power Switch' for about 2 seconds, you will hear two beeps and a vibrating signal to confirm the UHF reader is turned on; and another way to confirm if the UHF Reader is on, the 'Bluetooth LED' light on the UHF Reader should be flashed once every 2 seconds.





4. On Windows, you should expect to see 'PWD100' from the available device list. Click 'PWD100' to continue.



It sometimes may take a minute to two to see the UHF reader's device name PWD100 to be shown.

- a. Please check if the Bluetooth LED is flashing (it flashes once every 2 seconds when it's in pairing mode), if it doesn't, make sure the UHF device is turned on.
- b. Please make sure your computer has the Bluetooth, and make sure the Bluetooth in your computer is turned on.
- 5. It will prompt for the PIN, simply key in 0000 and then click Connect button to continue.

Add a	device			×	
Ado	d a device				
Make conn	Make sure your device is turned on and discoverable. Select a device below to connect.				
£	Apple TV (2)				
Ð	Unknown device				
Ŀ	PWD100 Connecting				
	Enter the PIN for PWD100.				
	0000			×	
	Connect		Cancel		
_					
			Cancel		

6. Click Done to complete the pairing.



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7. Two things you should verify before you move to the next step for setting UHF Tab Manager software. It expects to see the following:

a. PWD100 is shown under the Bluetooth setting, and has a 'Paired' status.

Settings	- 🗆 X
Home Find a setting P	Bluetooth & other devices
Devices	Audio
Bluetooth & other devices	Generic PnP Monitor
B Printers & scanners	Other devices
() Mouse	PWD100 Paired

b. The COM ports should be shown under device manager, port numbers are might be different than 3 and 5.



If one or both of them are not shown as what we expect like above, you may want to restart the computer and check if they come up with the correct setting. If no, please repeat the Bluetooth pairing process again.



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7. UHF Tag Manager & Reader Connectivity

The following steps will show how to use the UHF Tag Manager with the UHF Reader.

Before start running the UHF Tag Manager, please check if the Blueooth LED on the UHF Reader is flashing once every 2 seconds. If it doesn't, then the UHF Reader might be turned off, please turn it on.

1.Start UHF Tag Manager with double clicking the shortcut UHF Tag Manager on desktop or in Windows' Start menu.



2. Choose 'Auto' for Port and then click Start Arrow to connect to the UHF Reader.

If it's connected successfully, it will automatically show the following window:





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And the Bluetooth status will be changed to 'Connected' for its Bluetooth setting:

Settings	- 🗆 X
හුං Home	Bluetooth & other devices
Find a setting	Other devices
Devices	AP-U6 Device can perform faster when connected to USB 3.0
Bluetooth & other devices	Connected
品 Printers & scanners	SK-D50B Paired
O Mouse	

Now, it's ready to read some RFID tags to the UHF Tag Manager, please go to next section for how to operate the UHF Tag Manager.

If you have issue to connect the UHF Reader's COM Port with Auto setting, you may try to connect the UHF Reader's ports manually, please try to connect a port if one of the ports will work for you.

🛃 UHF Tag Manager V1.0R17	- 0	×
provide the state of the state of the state		
	1	
Port COM3	V @ Auto V	
Auto		
COMS		_

If you still have issue with it after few tries, here are some suggestions you may want to try:

- Make sure the UHF Reader has not been connected to another computer (if the reader shows two quick blinks in every second, then it's already connected with other computer rather than the one you are working on).
- Close the UHF Tag manager and reopen it again, and try to connect the COM ports again manually,



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please always make sure the Bluetooth LED is flashing once every 2 seconds when you try to connect the UHF Reader and your computer.

• Remove the UHF Reader Bluetooth pairing from the computer, and restart the computer,

Settings	- 🗆 X
Home Find a setting	Bluetooth & other devices Other devices AP-U6 Device can perform faster when connected to USB 3.0
Devices Bluetooth & other devices Bluetooth & scanners	PWD100 Paired Remove device
() Mouse	SK-D50B Paired

and then follow the same steps (mentioned in previous section) to pair the UHF Reader with the computer again, and follow the same steps to open the UHF Tag manager software, and try to connect the UHF Reader again.



8. Use UHF Tag Manager Software Application

8.1 Create a check list for assets or inventory items (pre-defined a check list)

a. Click Inventory to open the data spreadsheet. If you don't' see this Window, the Bluetooth connection and COM port connection are not setup properly yet, please see previous sections on how to setup them.



🚽 Application - Inventory		-	- 🗆 🗙
	-+-	Show Tag EPC	< 🖻
Product Name			
Confirmed : 0			
Product Name			
Unregistered : 0			
EPC	Product Name		







b. Press the 'Scan Button' with the 'Antenna Area' point to one of your RFID tags, the EPC number of the scanned tag should be shown under the 'Unregistered' table; then type in your product name for this associated EPC.

X Make sure the Bluetooth LED flashes twice in every second, it's an indication that the UHF reader is still connected to the computer; otherwise, it needs to connect again. Please check 'The Most Common Issue' section below for additional helps if you still have issue to operate the UHF Reader!



c. Then highlight a new entry in the Unregistered table, and click 🕂 to add the item to Confirmed table.





d. After adding all the Tag/Items to the Confirmed table, then save the confirmed list (it only save the list under the Confirm table here, Checklist's and Unregistered's won't be saved). You may click the check box 'Show Tag EPC' to see each product's tag ID.

Applic	ation - Inventory	- 0	×		
Che		📑 🕂 🗕 🧭 🛛 Show Tag EPC 🚿 🛽	*		
	EPC	Product Name			
	EPC	Product Name 🔻			
•	30000648BD040000020140F6D60	iPad Air 2 SN#: 12345678			
	300030F4257BF400B7A8A6421AC0	Arkscan Shiping Label Printer 2054A			
	3000E20000162014015827000A6F	Arkscan Barcode Scanner ES301			
Unre	gistered : 9				
	EPC	Product Name	^		
•	3000E20000162014014927000A57				
	300030F4257BF400B7A8A6421AB0				
	300030F4257BF400B7A8A6421AA0				
_	3000E20000162014013827000A4D		~		

Assign a file name and save the confirmed list to a file, you already make a check list for all the items you want to compare with their presence when you scan your RFID tags later on.

🔜 Save As					×
$\leftarrow \rightarrow \cdot \uparrow$. A oc	uments > UHF Tag Manager > Demo Data >	Inventory	✓ Ö Search In	ventory	Q
Organize 👻 New folder					- ()
Custom O ^	Name	Date modified	Туре	Size	
- Freemake	My_Asseet_Inventory.csv	2/7/2018 6:25 PM	Microsoft Excel C	1 KB	
My Labels	MY100_UHF.csv	1/24/2018 10:26 PM	Microsoft Excel C	4 KB	
UHF Tag N					
Demo Da					
🔄 Invento					
Images					
Log File					
Temp ~					
File <u>n</u> ame: My_As	seet_Inventory.csv				~
Save as type: CSV (*.	csv)				~
A Hide Folders			<u>S</u> av	re Ca	ancel



The file you save from the Confirmed list is the CSV format by default, you may manually open the CSV file in the Microsoft Excel to update the content as you wish, and save it as the original CSV format; it's not recommended to make any change on the PID(EPC) column.

6	⊒						1	/ly_Asse	et_Inver	ntory -	Excel
F	ile Home Insert Pa	ge Layout Fo	ormulas Da	ata Review	View	Help	QuickBoc	ks 🕻	⁾ Tell m	e what y	ou want to
Pas	te ✓ Format Painter	• 11 <u>U</u> • ⊞ •	• A A =		•	Wrap Tex Merge &	t Center 👻	Genera \$ • %	l 69	▼ •.0 .00 •.0 •.0	Condition Formatting
	Clipboard 🕞	Font	F ₂		Alignmen	t	G.	N	umber	Es.	
B6		s fx									
	A			В		С		0	E		F
1	PID(EPC)	Pro	duct Name								
2	30000648BD04000002014	40F6D60 iPad	d Air 2 SN#:	12345678							
3	300030F4257BF400B7A8A	6421AC0 Ark	scan Shipin	g Label Print	er 2054/	4					
4	3000E20000162014015827	7000A6F Ark	scan Barcoo	de Scanner E	S301						
5											

8.2 Check which tags are missing from pre-defined check list.

a. Load the pre-defined check list

🛃 Application - Inventory			\times
	📑 🕂 🗕 📀	Show Tag EPC 💉 🔎	2
Product Name		with a	
		N 198 BEES	
Confirmed : 0	🔛 Open	×	
Product Name	A Sector A Se	earch Inventory	7
	Organize 👻 New folder	BII - 🔟 😗	
	Inventc ^ Name	Date modified Type	
	My_Asseet_Inventory.csv	2/7/2018 6:25 PM Microsoft	
(2) sel	Temp	1/24/2018 10:26 PM Microsoft	
	Updater 🚫		
Unregistered :	Wondersh v <	Xi4	
EPC	File name: My_Asseet_Inventory.csv V	CSV (%) Cancel	1



App	lication - Inventory	×
		📄 🕂 🗕 🧭 🗹 Show Tag EPC 💉 📂
	EPC	Product Name
۲.	30000648BD040000020140F6D60	iPad Air 2 SN#: 12345678
	300030F4257BF400B7A8A6421AC0	Arkscan Shiping Label Printer 2054A
	3000E20000162014015827000A6F	Arkscan Barcode Scanner ES301
	EPC	Product Name
	EPC	Product Name

b. Scan your inventory item or asset by the UHF Reader.

X Make sure the Bluetooth LED flashes twice in every second, it's an indication that the UHF reader is still connected to the computer; otherwise, it needs to connect again.

🛃 Applic	ation - Inventory	– 🗆 X				
		📑 🕂 🗖 🧭 🛛 Show Tag EPC 💉 📂				
	EPC	Product Name				
•	3000E20000162014015827000A6F	Arkscan Barcode Scanner ES301				
	If the item / product is found by UHF reader scan, then it will move to Confirm list. The remained item in the Check list is absent.					
Com	innied : 2					
	EPC I	Product Name				
-	30000648BD040000020140F6D60	iPad Air 2 SN#: 12345678				
•	300030F4257BF400B7A8A6421AC0	Arkscan Shiping Label Printer 2054A				
	A new item is not in the original Check List, you can click[+] to add to the confirm list and save a new file to make a new Check List.					
Unre	gistered : 1					
	EPC	Product Name				
•	3000E2002064900901712190327F					

If the items in the Checklist table are found through the UHF Reader's scan, the items will be moved from Check list to Confirmed table automatically. The remained items in Check list are missed or absent tags. The items in the Unregistered list are new items, which you can click + to add the new items to Confirmed list, then save to a file to make a new Check list.



8.3 Search an item

You have many items, sometimes it's hard to locate where an item is located; the Search mode will be really helpful here. You may right click on any item from any one of the tables (Checklist, Confirmed & Unregistered tables), then select 'Search Mode' to open the Searching dialog window, and press and hold the UHF Reader's scan button to read RFID tags. It will be buzzed and vibrated when the targeted tag is nearby.

🛃 Appli	cation - Inventory				- 0	×	
Che	cklist : 1			🖳 Search Mode	-		×
	EPC	Product Name		So	archi		
•	3000E20000162014015827000A6F	Arkscan Barcode Scanne	er ES301	36	arciii	IJ	•••
Con	firmed + 2				• • • •		
	FRC	Des dust Name					
	300030F4257BF400B7A8A6421AC0	Arkscan Shiping Label P	rinter 2054A				
	30000648BD040000020140F6D60	iPad Air 2 SN# 12345678	A				
		'Search Mode', ther hold the UHF Reade button; reader vibr. is found.	ect i press and er 'Scan' ates if item			<u>,</u>	
Unn	egisterea : 1						
	EPC	Product Name		Product Name	e:		
	300030F4257BF400B7A8A6421AB0	File name and product be the same in order t on the dialog windows	t name must o see image	iPad Air 2 SN#	# 12345678		
File	Home Share View Man	age					
*	Cut	🔽 🗋 🗙 🛋 🗌	New item -	🗸 🛛 🖡 Open 🝷	E Select all		
Pin to Qu	iick Copy Paste	Move Copy Delete Rename	New Easy access •	Properties Edit	Select none		
access	Paste shortcut	to • to • •	folder	🚽 💊 History	Invert selection		
	Clipboard	Organize	New	Open	Select		
$\leftarrow \rightarrow$	This PC > Local Disk (C:) > Users > admin > Documen	⊯s → UHF Tag Manager	> Demo Data > Inve	ntory	~ U	Search Inver
	development 🖈 ^ N	lame	Date modif	ied Type	Size		
	Direct_Vendor	Arkscan Barcode Scanner ES301	2/8/2018 12	2:29 AM JPG File	116 K	В	
	Inventory	iPad Air 2 SN# 12345678	2/8/2018 12	2:31 AM JPG File	65 K	В	
•	MT100A_ES301	My_Asseet_Inventory	2/8/2018 12	2:32 AM Microsoft Ex	cel C 1 K	В	
	user_manual	MY100_UHF	1/24/2018	10:26 PM Microsoft Ex	cel C 4 K	В	

* To show product's image:

- 1. Image file name should be the same as product name and must be .jpg file type.
- 2. Image file path:

C:\Users\UserName\Documents\UHF Tag Manager\Demo Data\Inventory





9. Settings

Frequency Default Setting:

Click Japan, USA, or Europe button to reset frequency to defaults.

Performance Settings:

1. Output power: value range is from -19 to 0.

2. Vibrator: if this item is checked, UHF Reader will vibrate in **Search** mode when it finds the target.

3. Buzzer: if this item is checked, UHF Reader will buzz in **Search** mode when it finds the target.

4. Set button: after you change the **performance settings**, you need to click the **Set** button to complete your settings to UHF Reader.

5. Get button: the program gets the settings automatically when **Settings** window is opened. If it gets the settings failed, you can click Get button to get settings manually.

💀 Simple Settings 🛛 🕹						
Frequency	Default Se	tting				
Japan	USA	Europe				
Performanc	Performance Settings Output Power -7 dBm					
Vibrator	⊠ B	uzzer				
	Set	Get				

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10. Re-install UHF Tag Manager

1. Uninstall UHF Tag Manager:

Perform a Windows search by typing in **uninstall uhf**, the program **Uninstall UHF Tag Manger** should show up, just click Uninstall UHF Tag Manger to remove the application from Windows.



A dialog box is shown to confirm, and continue by clicking Yes to start the removing process.

Windows Installer	×				
Are you sure you want to uninstall this product?					
Yes	No				

2. Follow the installation instruction and install the UHF Tag Manager again.





11. The Common Issues

11.2 Timeout Issue

If the UHF Reader had been working fine, and suddenly stop working, most likely the reader is lost the wireless connection with the computer due to the power off timeout. The fundamental rule is, If the Bluetooth LED is NOT emitting 2 quick blinking lights, then it is the confirmation of losing connection.

% When power off timeout happens, connect is lost, and power up the UHF Reader will NOT lead to automatically reconnect the device, you have to connect the COM port again.

The UHF Reader is enabled a 30-minutes power off timeout by default, the reader will be automatically turn itself off after 30 minutes of inactivity; it was made it this way to save battery life. If power off timeout happens, you must reconnect the COM port of the UHF Reader from the UHF Tag Manager software in order to use the reader again. You have to go back to the main windows like below, and click **u** to reset the connection,







Then **turn on** the UHF Reader and make sure the Bluetooth LED is flashing (emit one light) once every 2 seconds, and then click to connect the COM port again. Use Auto port and try manually assign port if Auto port doesn't work.



11.2 Open Port failed

If you see 'Open Port failed!' message when you try to connect the COM port, here are the common possible issues:



1. The UHF Reader is power off, 9 out 10 the issue is caused by this. To fix it, you need to turn on the UHF Reader and connect the COM port again.

2. The UHF Reader's COM ports are not working properly. To fix it, check if the ports are still in the device manager. You may try to disable the COM ports, and then enabled them, and try to connect it again. If it still





doesn't work, you may want to remove the Bluetooth paring of the UHF Reader from the computer and start it all over again.

11.3 Tags Compatibility

Please make sure the tags you scan with are one of the following RFID types, the UHF Reader only supports them for now:

EPC Class 1 Gen 2

ISO18000-6C



SAFETY CERTIFICATION



Test standard: FCC rules Part 15 subpart C 15.247 (2011 - 10)

Test Result: No deviations from the technical specification(s) were ascertained in the course of the tests performed.

Test standard: FCC rules Part 15 subpart B

Test Result: Radiated Emission. FCC Part 15. 109 Class B. Test passed.

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.

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

End Product Labeling

This transmitter module is authorized only for use in devices where the antenna may be installed such that 20 cm may be maintained between the antenna and users. The final end product must be labeled in visible area with the FCC ID.



End Product Manual Information

The user manual for end users must include the following information in a prominent location "IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter." 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.

IMPORTANT NOTE: In the event that these conditions can not be met (for example certain laptop configurations or collocation with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for reevaluating the end product (including the transmitter) and obtaining a separate FCC authorization. This device is intended only for OEM integrators under the following conditions: The antenna must be installed such that 20 cm is maintained between the antenna and users. As long as a condition above is met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).



LIMITED WARRANTY

ARKSCAN, LLC warrants that the products sold pursuant to this Agreement will perform in accordance with ARKSCAN, LLC's published specifications. This warranty shall be provided only for a period of **one year** from the date of the shipment of the product from ARKSCAN, LLC (the "Warranty Period"). This warranty shall apply only to the "Buyer" (the original purchaser, unless that entity resells the product as authorized by ARKSCAN, LLC, in which event this warranty shall apply only to the first re-purchaser).

During the Warranty Period, should this product fail to conform to ARKSCAN, LLC's specifications, ARKSCAN, LLC will, at its option, repair or replace this product at no additional charge except as set forth below. Repair parts and replacement products will be furnished on an exchange basis and will be either reconditioned or new. All replaced parts and products become the property of ARKSCAN, LLC. This limited warranty does not include service to repair damage to the product resulting from accident, disaster, unreasonable use, misuse, abuse, negligence, or modification of the product not authorized by ARKSCAN, LLC. ARKSCAN, LLC reserves the right to examine the alleged defective goods to determine whether the warranty is applicable.

Without limiting the generality of the foregoing, ARKSCAN, LLC specifically disclaims any liability or warranty for goods resold in other than ARKSCAN, LLC's original packages, and for goods modified, altered, or treated without authorization by ARKSCAN, LLC.

Service may be obtained by delivering the product during the warranty period to ARKSCAN, LLC (420 W 42nd Street, Suite 11C, New York, NY 10036 USA). If this product is delivered by mail or by an equivalent shipping carrier, the customer agrees to insure the product or assume the risk of loss or damage in transit, to prepay shipping charges to the warranty service location, and to use the original shipping container or equivalent. ARKSCAN, LLC will return the product, prepaid, via a three (3) day shipping service. A Return Material Authorization ("RMA") number must accompany all returns. Buyers may obtain an RMA number by contacting with support@arkscan.com.

EACH BUYER UNDERSTANDS THAT THIS ARKSCAN, LLC PRODUCT IS OFFERED AS IS. ARKSCAN, LLC MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND ARKSCAN, LLC DISCLAIMS ANY WARRANTY OF ANY OTHER KIND, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

IF THIS PRODUCT DOES NOT CONFORM TO ARKSCAN, LLC'S SPECIFICATIONS, THE SOLE REMEDY SHALL BE REPAIR OR REPLACEMENT AS PROVIDED ABOVE. ARKSCAN, LLC'S LIABILITY, IF ANY, SHALL IN NO EVENT EXCEED THE TOTAL AMOUNT PAID TO ARKSCAN, LLC UNDER THIS AGREEMENT. IN NO EVENT WILL ARKSCAN, LLC BE LIABLE TO THE BUYER FOR ANY DAMAGES, INCLUDING ANY LOST PROFITS, LOST SAVINGS, OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF, OR INABILITY TO USE, SUCH PRODUCT, EVEN IF ARKSCAN, LLC HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR FOR ANY CLAIM BY ANY OTHER PARTY.



LIMITATION ON LIABILITY

EXCEPT AS PROVIDED IN THE SECTIONS RELATING TO ARKSCAN, LLC'S LIMITED WARRANTY, ARKSCAN, LLC'S LIABILITY UNDER THIS AGREEMENT IS LIMITED TO THE CONTRACT PRICE OF THIS PRODUCT.

ARKSCAN, LLC MAKES NO OTHER WARRANTIES WITH RESPECT TO THE PRODUCT, EXPRESSED OR IMPLIED, EXCEPT AS MAY BE STATED IN THIS AGREEMENT, AND ARKSCAN, LLC DISCLAIMS ANY IMPLIED WARRANTY, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

ARKSCAN, LLC SHALL NOT BE LIABLE FOR CONTINGENT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES TO PERSONS OR PROPERTY. ARKSCAN, LLC FURTHER LIMITS ITS LIABILITY OF ANY KIND WITH RESPECT TO THE PRODUCT, INCLUDING ANY NEGLIGENCE ON ITS PART, TO THE CONTRACT PRICE FOR THE GOODS. ARKSCAN, LLC'S SOLE LIABILITY AND BUYER'S EXCLUSIVE REMEDIES ARE STATED IN THIS SECTION AND IN THE SECTION RELATING TO ARKSCAN, LLC'S LIMITED WARRANTY.





BATTERY CAUTION

Danger of explosion if battery is incorrectly replaced.

Replace only with same or equivalent type recommended by the manufacturer.

Do not discard used batteries in to regular trash.

These batteries need to be recycled according to the manufacturer's instructions.