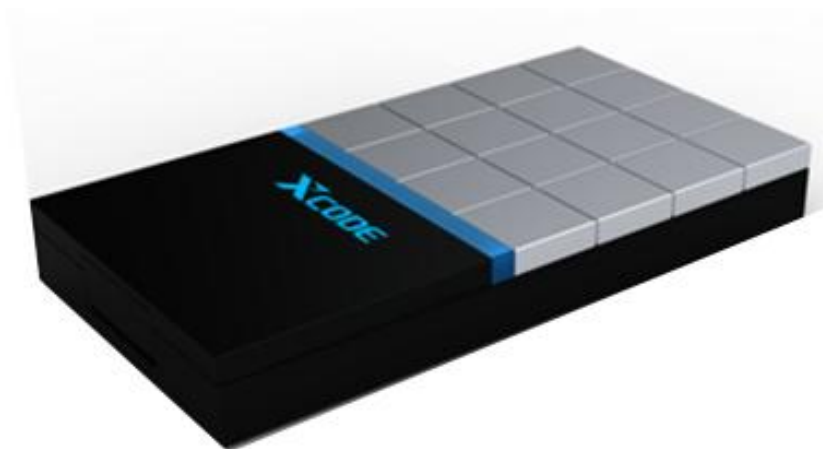


UHF USB Reader

XCODE-IU9011 UHF USB Reader

User Manual



Safety Precautions

- Read the safety precautions for an accurate use of the product.
- After reading the User Manual, place it in a location for other product users to easily read it.

Thank you for purchasing the XCODE Reader of the LS Industrial Systems Co., Ltd.

Safety Precautions

- The safety precautions are to prevent any accidents or dangers by using the product safely, so do comply with them.
- The safety precautions are classified into 2 types – “Caution” and “Warning” – and the respective details are as the following:



Caution Any cases in which severe injuries or death may occur if the instruction is not kept



Warning Any cases in which minor injuries or damages to the product may occur, if the instruction is not kept.

- The symbols in the product and the user manual have the following meanings.



It is a symbol for you to be cautious of any dangers.



It is a symbol for you to be cautious of any electric shock that may occur.

- After reading the user manual, place it in a location for other product users to easily read it.
- Before using the product, please fully read the user manual.



Caution

- **Do not deliver in an overload.**

It may cause physical or product damages.

- **Input power in accordance to the conditions set in the product power rating standards.**

It may cause electric shock, fire, malfunctioning and damages or deterioration to the product.

- **Only the experts are allowed to perform the maintenance works.**

It may cause physical damages and malfunctioning.

- **Unplug the power cord and the charger when there is a severe lightning.**

It may cause lightning strike or fire.

- **Do not use the device near the hazardous location with potential of explosion.**

It may impact the high-frequency device.

- **Do not disassemble or impact the product.**

It may cause electric leakage or fire.

- **Do not use chemical substances or detergents to cleanse the reader.**

It may damage the product, so wipe off using a soft cloth.

- **Do not place the product in fire, heat or disassemble it.**

It may cause fire or explosion.



Warning

- **Make sure that the product is not exposed to rain or snow during the delivery.**

It may degrade the product performance.

- **Do not store the product in a place that may wet or moist it.**

It may cause dielectric breakdown or degrade the product performance.

- **Do not use it under high temperature or at highly wet areas.**

It may damage the product or degrade the product performance.

- **Do not place the reader near magnetic objects including a credit card, a phone card, a bankbook or a ticket.**

The information may be damaged due to the reader magnetism.

- **Critical data must be archived or stored separately.**

When repairing the product, the critical information stored in the reader may be deleted, so make sure to perform back up. The manufacturer is not liable for any damages arising from the data loss, so please take extra care on it.

- **Be careful not to drop the device.**

Although the product passed the standard drop performance test, it may influence the device life.

- **Do not use or store it under extreme setting.**

It may impact the device performance.

Precautions for Use

(1) Delivery & Installation

- Use an appropriate method to deliver the product in accordance to the weight.
- Do not pile up multiple devices without conforming to the set standards.
- Install in accordance to the rules set in the user manual.
- Do not open the cover when delivering the product.
- Do not place a heavy object on top of the product.
- Use ONLY the charger with a suitable power rating.
- Do not disassemble on your own, but consult with the expert.

Use the product under the following conditions.

Conditions	Description
Operating Temperature	- 10 ~ 50 °C
Humidity	90% RH or under (No dew formation)
Storage Temperature	- 20 ~ 60 °C
Environmental Setting	No corrosive gas, combustible gas, oil residue or dust
Altitude· Vibration	Altitude of 1000m or under · 5.9m/sec ² (=0.6g) or under
Air Pressure	70 ~ 106 kPa



(2) Control under Test Run (Operation)

- Check various program settings before operating the product.
- Do not input voltage that exceeds the voltage range specified in the user manual.

(3) How to Use

- Do not remodel the interior of the product.
- Use the provided program and the user-convenient program.
- Be careful of losing the set program and the saved data when resetting the H/W.

(4) Preventing the Malfunctioning

- If the reader is damaged and cannot be controlled, there are cases in which the device is left without caution. In such a circumstance, unplug the power and have it stored via A/S.

(5) Disposal

- Make sure that it is discarded as an industrial waste.

(6) General

- The figures presented in the user manual for an accurate description may not correspond exactly to the actual product.



The User Manual:

- Contains information on the specification, operation, functions, maintenance and repair of the XCODE Series Reader and this is for users with basic understanding of readers.
- Carefully read the user manual for a safe, accurate use of the XCODE Reader.

XCODE-IU9011 UHF USB Reader?

Section 1 Basic Specifications

Product Features

■ Lightweight, Compact-Sized Innovative Design

XCODE-IU9011 is a 900MHZ bandwidth, micro reader module that supports the EPC Class1 GEN2. It has an excellent RFID Reader function.

■ Certified, Stable Performance

It obtained the KCC (Wireless Approval & Electromagnetic Wave Conformity) certificate, prioritizing the customer's safety.

■ Outstanding Durability & Environmental-Resistance

It is designed in consideration of the RFID performance, drop and environmental resistance properties.

1.1 Detailed RFID Specifications

Classification	Description
Material	Poly Carbonate
Weight	100g
Dimensions	95mm L x 50mm W x 12mm H
Supported tags	EPC global Gen2(ISO 1800-6C) with Anti-Collision
Host interface	USB mini-B connector, with cable terminated in A type plug
Frequency	917.3 ~ 920.3MHz
Modulation	ASK
Signals	2 color LED
Power supply	DC Voltage: 5VDC(Powered by USB Interface)
Operating temperature:	-10C to +50C
Tag Read distance	Up to 50mm dependent on type/size of tag
Built in antenna:	Ceramic patch Antenna

1.2 Certification of the Telecommunication Device

Classification	Description
Device Name (Model Name)	Wireless Device for RFID/USN (XCODE-IU9011)
Certified Trade Name	LS Industrial Systems Co., Ltd
Date of Manufacture	2011.
Manufacturer/Country	LS Industrial Systems Co., Ltd/Korea
Certified ID Code	LSR-XCODE-IU9011A

1.3 Operating Frequency

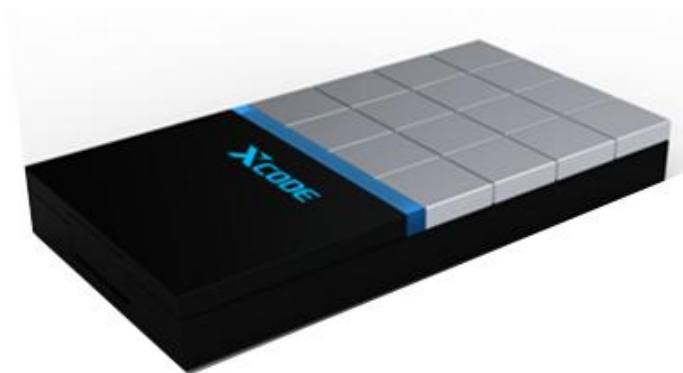
No	FREQ [MHz]
0	865.0
1	865.5
2	866.0
3	866.5
4	867.0
5	867.5
6	868.0

1.4 Output Power Level

DAC	POWER LEVEL	DAC	POWER LEVEL
10	2	80	20
20	7	90	21
30	11	100	22
40	13	110	23
50	15	120	23
60	18	130	23
70	19	140	23

1.5 Product Components & Names

XCODE-IU9011_Reader Body

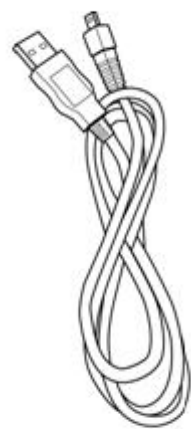


XCODE-IU9011 [90mm*50mm*11.5mm]

XCODE-IU9011_Accessory

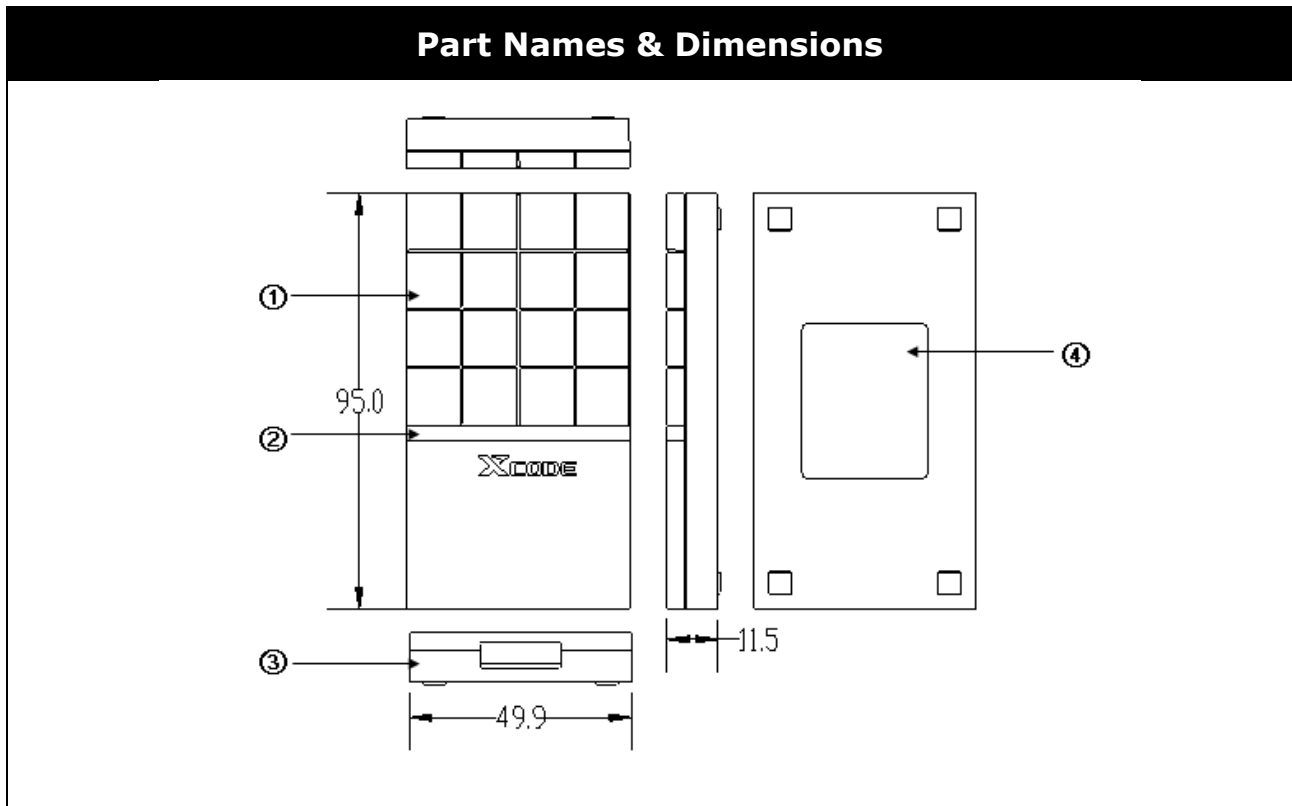


CD Manual



USB Cable

1.6 Part Names & Dimensions



Name	Functions
① Antenna	Antenna is built in to recognize the Tag.
② LED	It displays the power and Tag operations. Green: Power, Blue: Tag Recognition
③ USB	Power is supplied and the program is started through the USB communication.
④ Name Plate	It displays the basic product specification. (Certificate No., Date of Manufacture and etc))

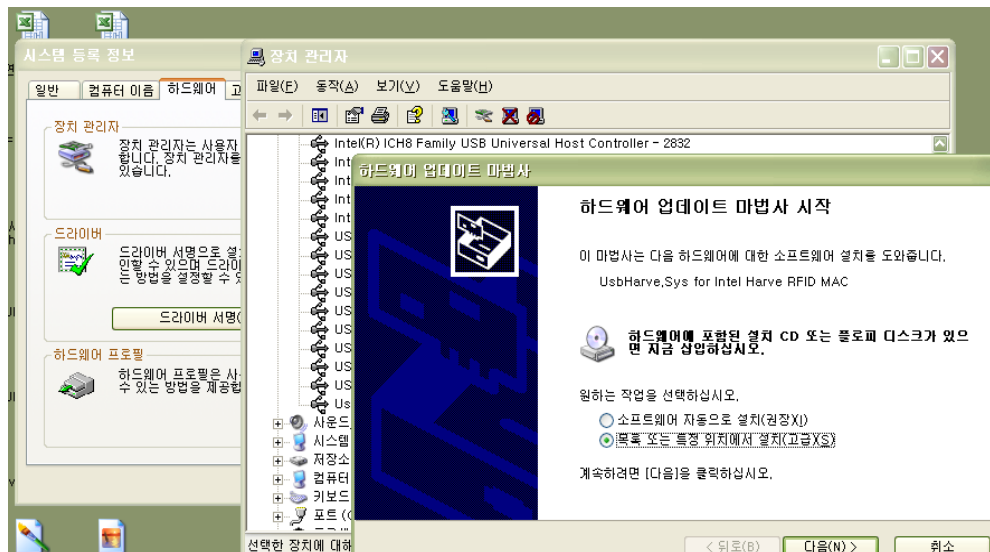
Section 2 How to Use the Product

2.1 How to Use the Product

2.1.1 USB Driver Installation

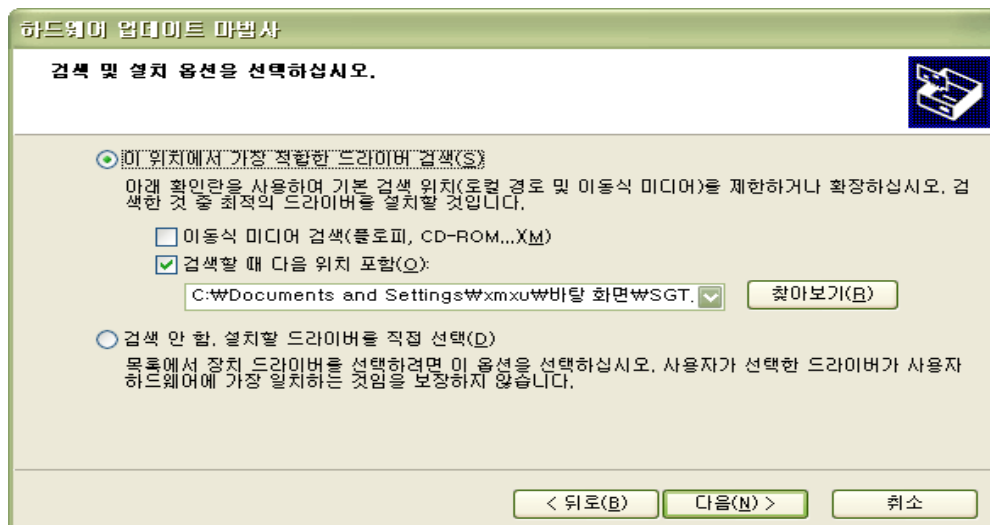
Install the USB Driver in accordance to the procedure described below.
Refer to the CD Manual for further details.

■ USB Driver Installation



1. Double click on the 'Device Manager → General Serial Bus Controller → UsbHarve.sys for Intel RFID MAC'.

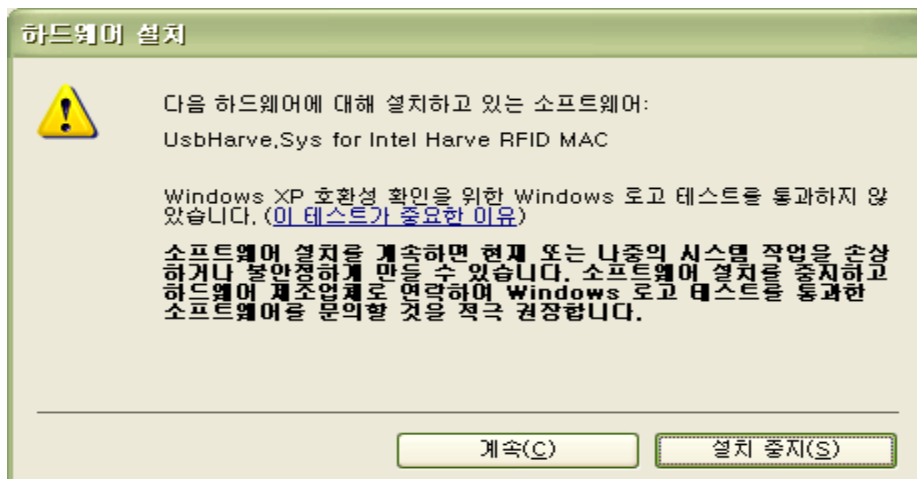
Check 'Install from a list or a specific location (Advanced)' and then click on Next.



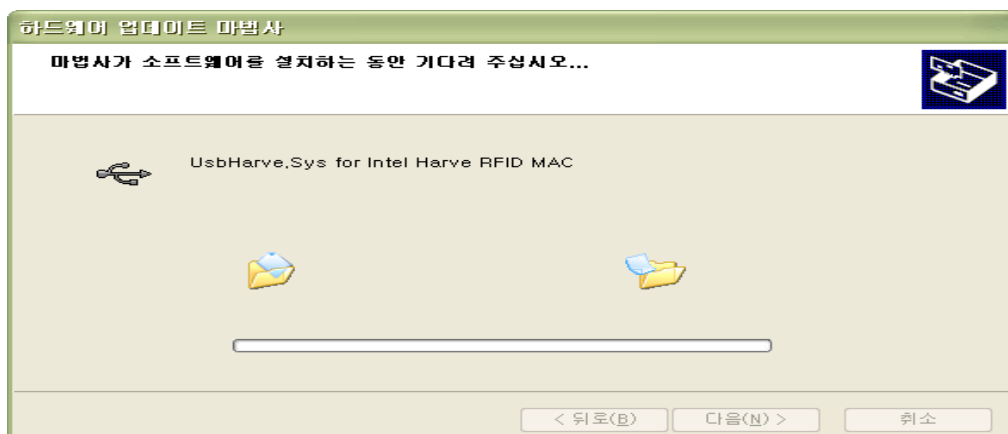
2. As shown above, perform a search to designate a folder that contains 'UsbHarve.sys'.
Then click on Next.



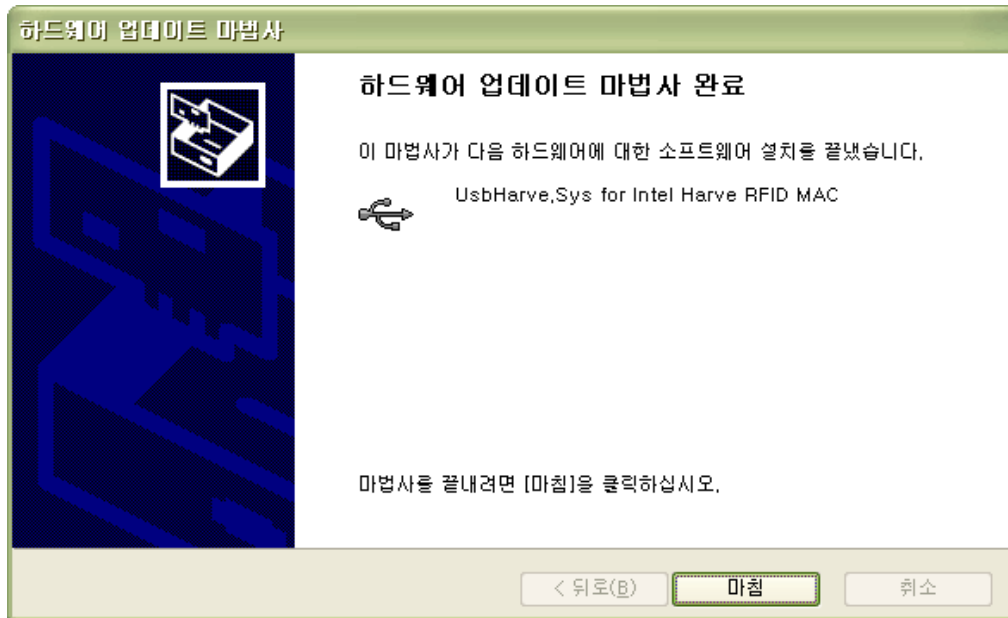
3. A search window pops up as shown above.



4. Click on Continue.

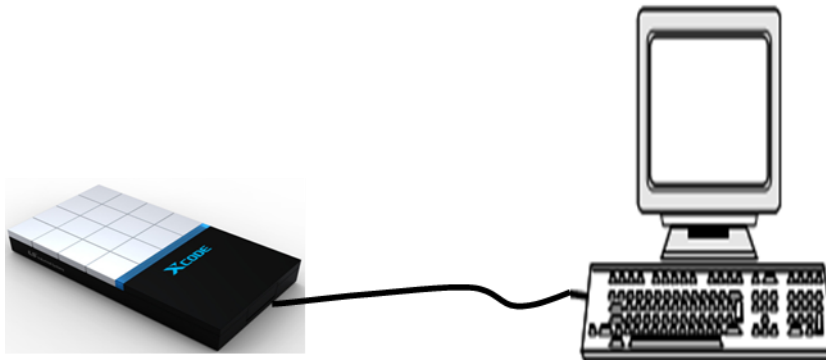


5. Installation is in progress as shown above.

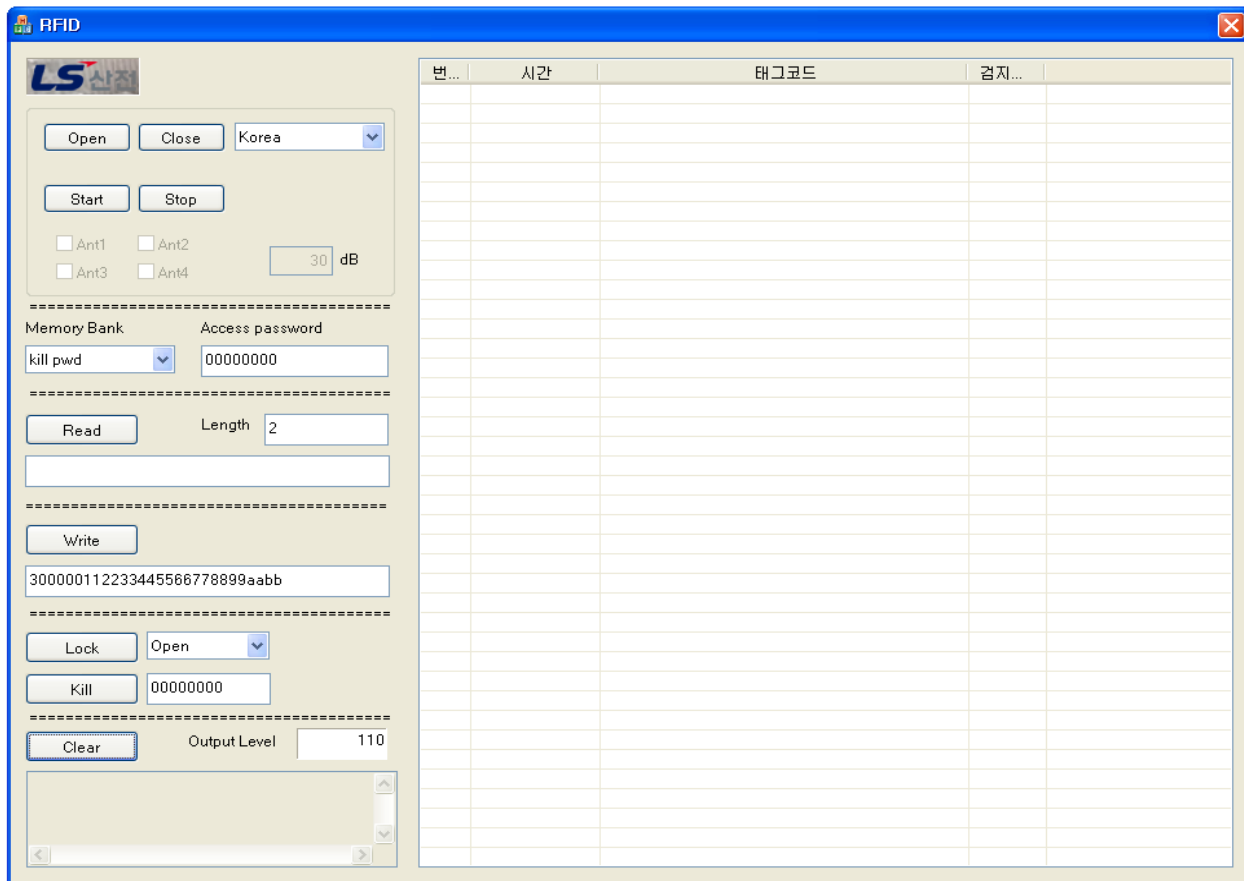


6. When this screen is shown, the installation is completed. It completes the drive installation.

■ Test Device Connection



2.1.2 How to Use the XCODE-IU9011 Program



Buttons	Description
Open	Communication Port Open
Close	Communication Port Close
Select Country	Select Korea, China or Iran
Start	Tag Read Start
Stop	Tag Read Stop
Memory Bank	Select Memory Bank
Access Password	Insert Access Password
Read	Memory Bank Selection Area Read
Length	Set Memory Bank Selection Area Data Length
Write	Memory Bank Selection Area Write
Lock	Tag Lock Execution
Kill	Tag Kill Execution
Clear	Tag Data Delete
Output Level	Output Power Setting (Refer to '1.4 Output Power Level')

Section 3 Others

3.1 Before You Think the Device is Out of Order

Trouble	Diagnosis
No USB Recognition	Check whether the Driver in the CD is installed.
No Tag Recognition	Check the Program Setting conditions. (National, DAC Level)
	Check the Cable connection status.
	Check the program Open status.

3.2 Disposal

1. The non-metal (liquid or liquefied substances) elements should be separated from the RFID Reader conforming to the ISO 14000, and the materials that are harmful to the environment and the materials that can be reused should be classified before disposing them to the designated locations.
2. If there are any materials to be reused, please contact us.
3. Any materials that emit toxic gas during the incineration process may cause respiratory diseases, so they must be discarded in the authorized location.

1000

Model Name

Date of Purchase

Serial No

Memo

[illegible]

3.4 Quality Assurance Service Standards

3.4.1 Introduction to the Quality Assurance Service Standards

QA Related Claims			QA Related Claims	
			Within the Warranty Period	After the Warranty Period
Performance/Function Troubles under a normal operation	Repair Possible	In case of a Defect	Free Repair	Free Repair
		Recurring troubles for the same defect repaired (4 th time)	Exchange the product	Charged Repair
	Repair Impossible	Although there are repair parts, it is not possible to perform the repair.	Exchange the product	-
	When the critical part must be repaired right after the purchase		Exchange the product	-
Performance/Function Troubles due to the Customer's intentional negligence	Repair Possible		Charged Repair	
	Repair Impossible	An abnormal appearance cannot be repaired; only the performance troubles can be fixed	Exchange the product after collecting the amount equivalent to the charged repair	-

3.4.2 A/S Tips

- If any abnormalities occur as using the product, reread the user manual and then contact our customer service team by 1544-2080. We will promptly take appropriate actions.

3.4.3 Warranty Terms & Conditions

■ Free A/S Service

We will repair the product free-of-charge, if the product is malfunctioning under a normal status from the date of purchase to the warranty termination.

■ Charged A/S Service

Under the following situations, we will repair the product by charging a suitable service fee (repair cost, parts cost and etc):



1. The warranty period has terminated;
2. If within the warranty period;

- Troubles owing to the natural disasters (fire, salt damage, gas damage, earthquake, damage from storm and flood, lightning strike, abnormal power input and etc);
- Troubles due to the careless handling and use (drop, impact and damage)
- Troubles because a person other than the service center engineer repaired the product;
- If the product is disassembled or the name plate is not attached;
- Troubles due to the abnormal power input;
- If it is used for other purposes;
- If an user remodeled the interior part;
- Unexpected problems occurred which were impossible to be anticipated at the time the product was manufactured;

- We are not responsible for any safety accidents that occur due to the customer's negligence.

Warranty

Product Name	LS Industrial Systems XCODE		Date of Purchase	
Model Name	XCODE-IU9011		Warranty Period	
Customer	Name			
	Address			
	Phone No			
Sales Store	Name			
	Address			
	Phone No.			

This product is manufactured under a strict quality control and inspection processes by the LS Industrial Systems Technical Team.

The warranty period is generally 12 months from the date of purchase. If the date of purchase is not filled in, 12 months from the date of manufacture will be applied. However, this can be changed in accordance to the contract terms and conditions.

User Manual Version

No.	Issued Date	Revision	Version No.	Remarks
1	2011.10	First Version	1.00	

Environmental Management

LS Industrial Systems prioritizes the environmental preservation in managing the company, and all executives and staff members do their best to achieve a more pleasant environment for all to share.

How to Dispose the Product

LS Industrial Systems Reader is designed to protect the environment. When discarding the product it can be classified into iron, aluminum and synthetic resin (cover) parts to be recycled.