



## AsReader Wired BOX-Type

### Objective-C SDK Reference Guide

## Revision History

Ver.	Description	Revised by	Date
1.0	Initial version	Trinity Liu	2021/04/29
1.1	<ul style="list-style-type: none"><li>1. Adds property isShowPrintNSLog</li><li>2. Modifies function setRecharging</li><li>3. Adds function getRechargedStatus</li><li>4. Adds function tX</li><li>5. Adds function getRFIDModuleVersion</li><li>6. Modifies delegate name readTimeForMultiAntennaReceivedAnt1</li><li>7. Modifies delegate name didSetReadTimeForMultiAntenna</li><li>8. Adds delegate setRecharging</li><li>9. Adds delegate rfidModuleVersionReceived</li><li>10. Adds delegate receivedRechargedStatus</li><li>11. Modifies Enum AsReaderWiredBOXTySDKBOXNetworkState</li><li>12. Adds Enum AsReaderWiredBOXTySDKResultSetRecharging</li></ul>	Trinity Liu	2022/4/6
1.2	<ul style="list-style-type: none"><li>1. Adds property connectMethod</li><li>2. Adds enum AsReaderWiredBOXTyConnectMethod</li></ul>	Trinity Liu	2022/5/16
1.3	Modifies the parameter type of the function setFHLBTPParamReadTime: the rfLevel parameter type is changed from uint16_t to int	Trinity Liu	2022/5/23

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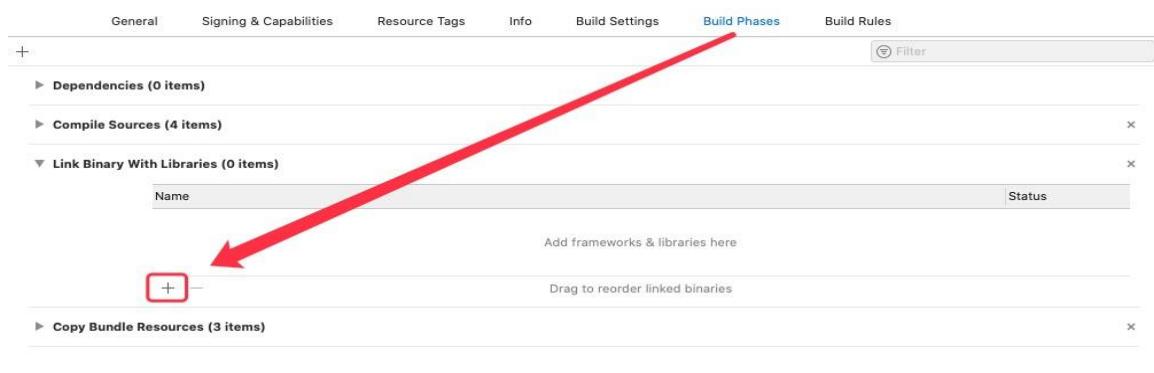
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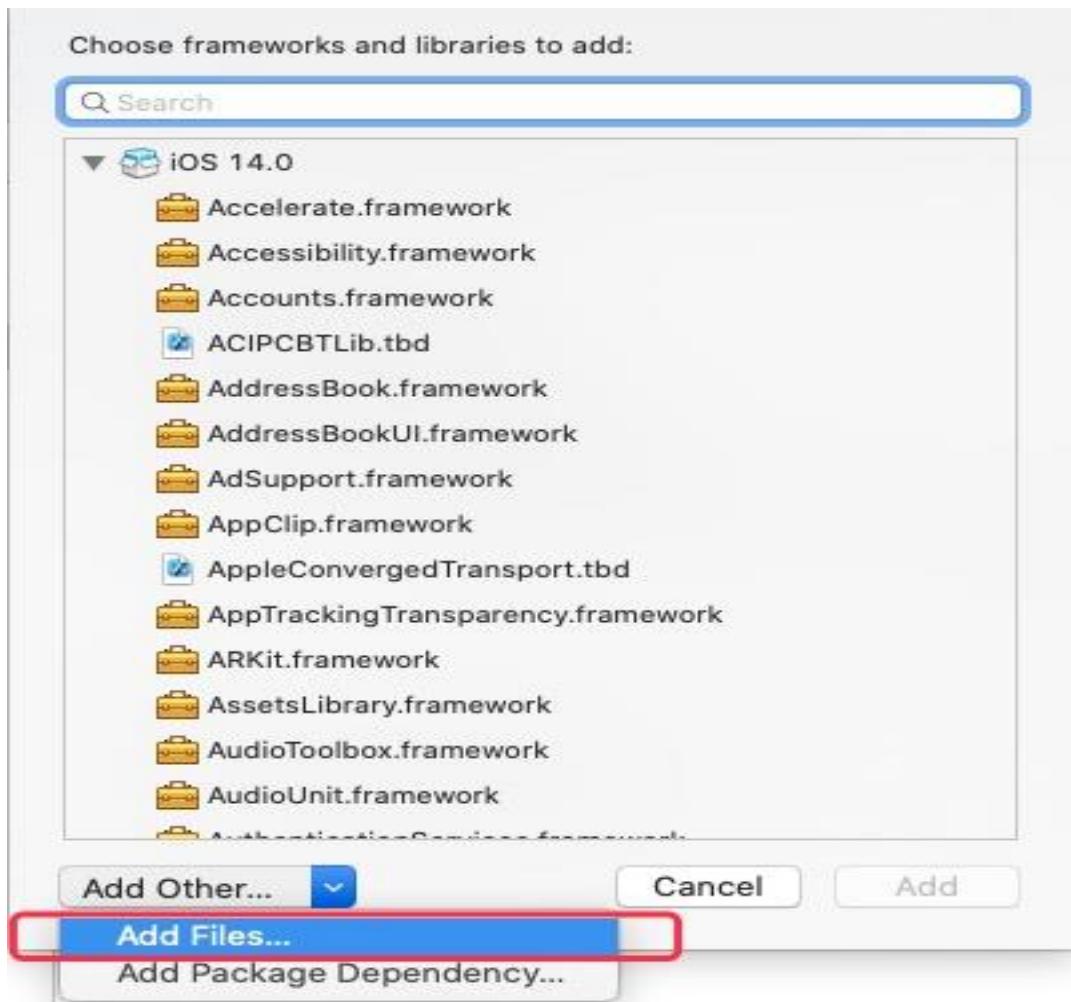
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# 1. SDK Usage

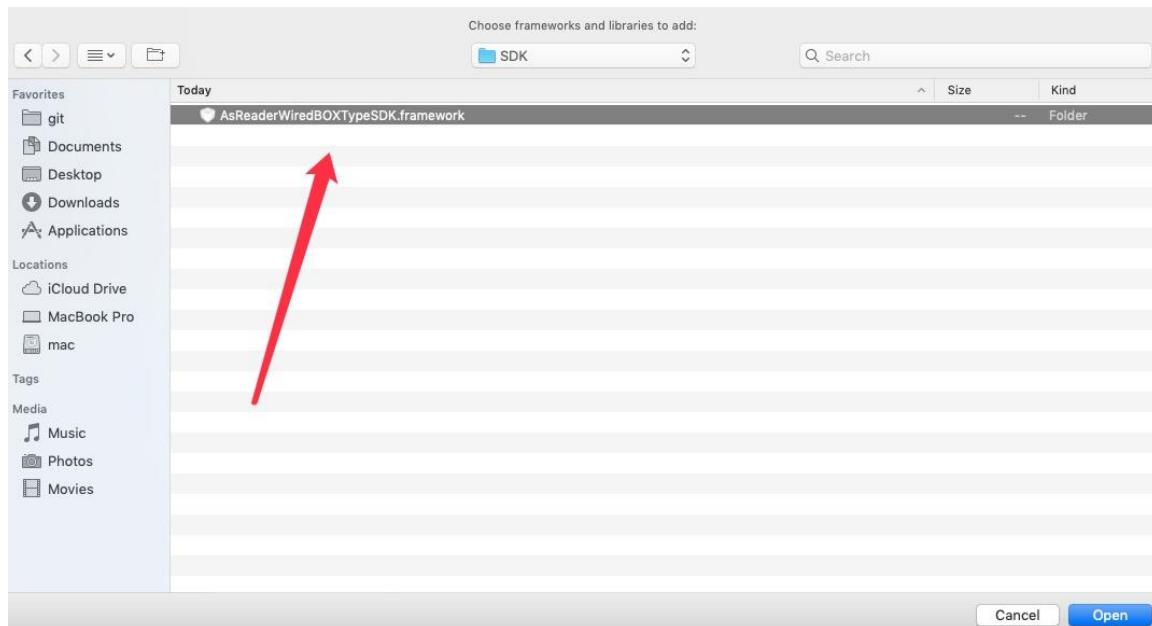
## 1.1. Add SDK

### 1) TARGET -> Build phases -> Link Binary with Libraries

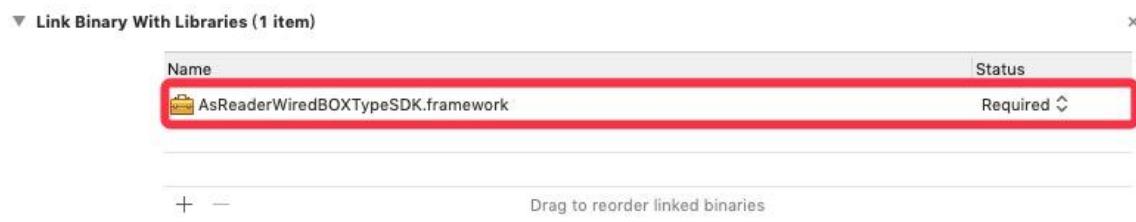


**2) Select “Add Other...”, “Add Files...”**

### 3) Add AsReaderWiredBOXTyPeSDK.framework



### 4) SDK is added.



## 1.2. Import Header Files

Objective-C projects need to import header files in classes that use the SDK. The following is a reference.

```
#import <AsReaderWiredBOXTyPeSDK/AsReaderWiredBOXTyPeSDK.h>
```

## 1.3. SDK Usage

### 1.3.1. create and initialize an AsReaderWiredBOXTyPe object (singleton pattern).

```
AsReaderWiredBOXTyPe*asReaderWiredBOXTyPe = [AsReaderWiredBOXTyPe  
sharedInstance];
```

### 1.3.2. Set delegates

```
asReaderWiredBOXTypedelegate = self;
```

### 1.3.3. Start to search

```
[asReaderWiredBOXTypedeleteSearchDevice];
```

Receive the delegate "searchingIP" that retrieved the IP (2.3.1)

### 1.3.4. Connect to the AsReaderWiredBOXTypede object.

Connect through the IP address obtained by this delegate "searchingIP" (see [2.3.1](#))

```
[asReaderWiredBOXTypedeconnectServer:@ "192.168.1.10"port:9600];
```

The result of a change in device connection status is notified by delegate "networkStateChanged" (see [2.3.2](#)).

### 1.3.5. Start to receive RFID data

```
[asReaderWiredBOXTypedeleteReceiveRFIDData];
```

### 1.3.6. Start to inventory RFID tags

```
[asReaderWiredBOXTypedeleteInventoryWithTagsMaxTagCount:0  
readTime:0  
repeatCycle:0  
enableAntenna1:YES  
enableAntenna2:YES  
enableAntenna3:YES  
enableAntenna4:YES  
enableAntenna5:YES  
enableAntenna6:YES  
enableAntenna7:YES  
enableAntenna8:YES];
```

Receive the result returned from the delegate "inventoryStartedWithStatus" (see [2.3.4](#)) that returns the result of the execution of the event "Start Inventory".

Receive the results which returned from the delegate "receivedPCEPCData" (see [2.3.6](#)) that can return the RFID data read by the device.

### 1.3.7. Stop taking inventory of RFID tags

```
[asReaderWiredBOXTypedeleteInventory];
```

Receive the result returned from the delegate "inventoryStoppedWithStatus" (see [2.3.5](#)) that returns the result of the execution of the event "Stop Inventory".

### 1.3.8. Disconnect from the AsReaderWiredBOXTyp object.

```
[asReaderWiredBOXTyp disconnectServer];
```

The result of a change in device connection status is notified by delegate "networkStateChanged" (see [2.3.2](#)).

## 2. AsReaderWiredBOXTyp Class

ASReaderWiredBOXTyp Object has the functions of searching/connecting/disconnecting Wired BOX-Type devices, inventorying RFID tags, stopping inventory, setting inventory related parameters, receiving HID data from USB connected devices, etc.

### 2.1. Properties

Property Name	Property	Type	Descriptions
host	nonatomic, strong, readonly	NSString	IP address.
delegate	nonatomic, assign	AsReaderWiredBOXTypDelegate	Delegate (see <a href="#">2.3</a> ).
isConnected	nonatomic, assign, readonly	BOOL	Connection states.
isShowPrintNS Log	nonatomic, assign	BOOL	Whether to print Log
connectMethod	nonatomic, assign	AsReaderWiredBOXTypConnectMethod	AsReaderWiredBOXTypConnect Method Enum (See 4.1.12)

### 2.2. Functions

#### 2.2.1. sharedInstance

+ (AsReaderWiredBOXTyp *) sharedInstance;				
	Parameter Name	In/Out	Type	Descriptions
Return Values	-	Out	AsReaderWiredBOXTyp	AsReaderWiredBOXTyp object.
■ Function Descriptions:				
Create and initialize an AsReaderWiredBOXTyp object (singleton pattern).				
■ Sample Code:				

```
AsReaderWiredBOXTyp *asReaderWiredBOXTyp = [AsReaderWiredBOXTyp
sharedInstance];
```

## 2.2.2.getAsWiredBOXPrinter

- (AsWiredBOXPrinter \*) getAsWiredBOXPrinter;

	Parameter Name	In/Out	Type	Descriptions
Return Values	-	Out	AsWiredBOXPrinter	AsWiredBOXPrinter object.
<b>■ Function Descriptions:</b>				
Creates AsWiredBOXPrinter object.				
<b>■ Sample Code:</b> (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.) AsWiredBOXPrinter *asPrinter = [asReaderWiredBOXTyp getAsWiredBOXPrinter];				

## 2.2.3. startSearchDevice

- (BOOL) startSearchDevice;

	Parameter Name	In/Out	Type	Descriptions
Return Values	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.
<b>■ Function Descriptions:</b>				
Searches for Wired BOX-Type devices in the same network segment. After this function is executed, call back the “searchingIP” (see <a href="#">2.3.1</a> ), “searchedUPDSearchingDeviceInfo” (see <a href="#">2.3.3</a> ) delegate				
<b>■ Sample Code:</b> (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.) BOOL status = [asReaderWiredBOXTyp startSearchDevice];  if (status) { //The command was sent successfully. } else { //The command failed to be sent. }				

## 2.2.4. connectServer

- (BOOL) connectServer:(NSString\*) ip port:(int) port;

	Parameter Name	In/Out	Type	Descriptions
Parameter	ip	In	NSString	IP address.
Parameter	port	In	int	Port number. (Default port: 9600)

<b>Return Values</b>	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.
<b>■ Function Descriptions:</b>				
Specify the TCP port and IP and connect to the device.				
After this function is executed, the connection state of the device is invoked by the delegate function "networkStateChanged" (see <a href="#">2.3.2</a> ).				
<b>■ Sample Code:</b> (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.) <pre>BOOL status = [asReaderWiredBoxType connectServer:@&gt;"192.168.1.10" port:9600]; if (status) {     //The command was sent successfully. } else {     //The command failed to be sent. }</pre>				

## 2.2.5. disconnectServer

<b>- (BOOL) disconnectServer;</b>				
	<b>Parameter Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
<b>Return Values</b>	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.
<b>■ Function Descriptions:</b>				
Disconnect from the Wired BOX-Type device.				
After this function is executed, the disconnected state is invoked by the delegate function "networkStateChanged" "networkStateChanged" (see <a href="#">2.3.2</a> ).				
<b>■ Sample Code:</b> (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.) <pre>BOOL status = [asReaderWiredBoxType disconnectServer]; if (status) {     //The command was sent successfully. } else {     //The command failed to be sent. }</pre>				

## 2.2.6. startReceiveHIDData

<b>- (BOOL) startReceiveHIDData;</b>				
	<b>Parameter Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
<b>Return</b>	-	Out	BOOL	YES: The command was sent successfully.

<b>Values</b>				NO: The command failed to be sent.
<b>■ Function Descriptions:</b>				
Starts to receive data from the HID device connected by USB and Wired BOX-Type device, so that the App can communicate with the HID module. If a Wired BOX-Type device is connected to a HID device, the App can receive data from the HID device.				

**■ Sample Code:** (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)

```
BOOL status = [asReaderWiredBoxType startReceiveHIDData];
if (status) {
    //The command was sent successfully.
} else {
    //The command failed to be sent.
}
```

### 2.2.7. stopReceiveHIDData

- (BOOL) stopReceiveHIDData;				
	Parameter Name	In/Out	Type	Descriptions
<b>Return Values</b>	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.
<b>■ Function Descriptions:</b>				
Stops receiving HID data, so that the application can no longer communicate with the HID module, and the application can no longer receive the data from the HID input device.				

**■ Sample Code:** (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)

```
BOOL status = [asReaderWiredBoxType stopReceiveHIDData];
if (status) {
    //The command was sent successfully.
} else {
    //The command failed to be sent.
}
```

### 2.2.8. startReceiveRFIDData

- (BOOL) startReceiveRFIDData;				
	Parameter Name	In/Out	Type	Descriptions
<b>Return Values</b>	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.
<b>■ Function Descriptions:</b>				
Starts receiving or sending RFID data. The App can receive data from the RFID module inside				

the Wired BOX-Type device.

■ **Sample Code:** (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)

```
BOOL status = [asReaderWiredBoxType startReceiveRFIDData];
if (status) {
    //The command was sent successfully.
} else {
    //The command failed to be sent.
}
```

## 2.2.9. stopReceiveRFIDData

- (BOOL) stopReceiveRFIDData;				
	Parameter Name	In/Out	Type	Descriptions
<b>Return Values</b>	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.
■ <b>Function Descriptions:</b>				
Stops receiving/sending RFID data. The App can not receive data from the RFID module inside the Wired BOX-Type device.				
■ <b>Sample Code:</b> (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)				
BOOL status [asReaderWiredBoxType stopReceiveRFIDData]; if (status) {     //The command was sent successfully. } else {     //The command failed to be sent. }				

## 2.2.10. startInventoryWithTagsMaxTagCount

- (BOOL) startInventoryWithTagsMaxTagCount:(uint8\_t) maxTagCount  
   readTime:(uint8\_t) readTime  
   repeatCycle:(uint16\_t) repeatCycle  
   enableAntenna1:(BOOL) antenna1  
   enableAntenna2:(BOOL) antenna2  
   enableAntenna3:(BOOL) antenna3  
   enableAntenna4:(BOOL) antenna4  
   enableAntenna5:(BOOL) antenna5  
   enableAntenna6:(BOOL) antenna6  
   enableAntenna7:(BOOL) antenna7  
   enableAntenna8:(BOOL) antenna8;

	Parameter Name	In/Out	Type	Descriptions

<b>Parameter</b>	maxTagCount	In	uint8_t	The maximum number of RFID tags that can be inventory in one time inventory.
<b>Parameter</b>	readTime	In	uint8_t	The maximum amount of time one time inventory can last.
<b>Parameter</b>	repeatCycle	In	uint16_t	The maximum number of query cycles for one time inventory.
<b>Parameter</b>	antenna1	In	BOOL	Sets whether to use antenna 1. YES: use. NO: not use.
<b>Parameter</b>	antenna2	In	BOOL	Sets whether to use antenna 2. YES: use. NO: not use.
<b>Parameter</b>	antenna3	In	BOOL	Sets whether to use antenna 3. YES: use. NO: not use.
<b>Parameter</b>	antenna4	In	BOOL	Sets whether to use antenna 4. YES: use. NO: not use.
<b>Parameter</b>	antenna5	In	BOOL	Sets whether to use antenna 5. YES: use. NO: not use.
<b>Parameter</b>	antenna6	In	BOOL	Sets whether to use antenna 6. YES: use. NO: not use.
<b>Parameter</b>	antenna7	In	BOOL	Sets whether to use antenna 7. YES: use. NO: not use.
<b>Parameter</b>	antenna8	In	BOOL	Sets whether to use antenna 8. YES: use. NO: not use.
<b>Return Values</b>	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.
<b>■ Function Descriptions:</b>				
Takes inventory of RFID tags.				
After this function is executed, call back the "inventoryStartedWithStatus" (see <a href="#">2.3.4</a> ), "receivedPCEPCData" (see <a href="#">2.3.6</a> ) delegate.				

■ **Sample Code:** (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)

```
BOOL status = [asReaderWiredBOXTyp startInventoryWithTagsMaxTagCount:0
```

```
    readTime:0
```

```
    repeatCycle:0
```

```
    enableAntenna1:YES
```

```
    enableAntenna2:YES
```

```
    enableAntenna3:YES
```

```
    enableAntenna4:YES
```

```
    enableAntenna5:YES
```

```
    enableAntenna6:YES
```

```
    enableAntenna7:YES
```

```
    enableAntenna8:YES];
```

```
if (status) {
```

```
//The command was sent successfully.
```

```
} else {
```

```
//The command failed to be sent.
```

```
}
```

### 2.2.11. stopInventory

- (BOOL) stopInventory;

	Parameter Name	In/Out	Type	Descriptions
<b>Return Values</b>	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.

■ **Function Descriptions:**  
 Stops inventory.  
 After this function is executed, call back the “inventoryStoppedWithStatus” (see [2.3.5](#)) delegate.

■ **Sample Code:** (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)

```
BOOL status = [asReaderWiredBOXTyp stopInventory];
```

```
if (status) {
```

```
//The command was sent successfully.
```

```
} else {
```

```
//The command failed to be sent.
```

```
}
```

### 2.2.12. updateRegistry

- (BOOL) updateRegistry;

	Parameter Name	In/Out	Type	Descriptions
--	----------------	--------	------	--------------

<b>Return Values</b>	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.
<b>■ Function Descriptions:</b>				
Use it when you want to permanently save your RFID settings after changing them.				
After this function is executed, call back the "updatedRegistryStatus" (see <a href="#">2.3.7</a> ) delegate.				
<b>■ Sample Code:</b> (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)				
BOOL status = [asReaderWiredBOXTyp updateRegistry];				
if (status) {				
//The command was sent successfully.				
} else {				
//The command failed to be sent.				
}				

## 2.2.13. setRecharging

<p>-</p> <p><b>(ASREADERWIREDBOXTYPESDKRESULTSETRECHARGING)SETRECHARGING:(BOOL)STATUS;</b></p>				
	Parameter Name	In/Out	Type	Descriptions
<b>Parameter</b>	status	In	BOOL	YES: Charging the phone. NO: not charging the phone.
<b>Return Values</b>	-	Out	AsReaderWiredBOXTyp eSDKResultSetRechargi ng	AsReaderWiredBOXTypSDK ResultSetRecharging, Enum (See <a href="#">4.1.11</a> )
<b>■ Function Descriptions:</b>				
Sets whether to charge the connected phone while charging Wired BOX-Type.				
Once this function is executed, the delegate "setRecharging" (see <a href="#">2.3.19</a> ) is called back.				
<b>■ Sample Code:</b> (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)				
AsReaderWiredBOXTypSDKResultSetRecharging status = [asReaderWiredBOXTyp setRecharging:YES];				
if (status) {				
//The command was sent successfully.				
} else {				
//The command failed to be sent.				
}				

## 2.2.14. getRechargedStatus

- **(BOOL)getRechargedStatus;**

	Parameter Name	In/Out	Type	Descriptions
<b>Return Values</b>	-	Out	BOOL	YES: Get charging status successfully NO: Get charging status failed

**Function Descriptions:**

Gets the charging status of the phone which connected with the Wired BOX-Type device.  
Once this function is executed, the delegate "receivedRechargedStatus" (see 2.3.21) is called back.

**Sample Code:** (Note: asReaderWiredBOXTyp is an instance of AsReaderWiredBOXTyp class.)

```
BOOL status = [asReaderWiredBOXTyp getRechargedStatus];
if (status) {
    // Gets charging status successfully.
} else {
    // Gets charging status failed.
}
```

## 2.2.15. getSession

<b>- (BOOL) getSession;</b>				
	Parameter Name	In/Out	Type	Descriptions
<b>Return Values</b>	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.

**■ Function Descriptions:**

To get the session value in the RFID settings.  
After this function is executed, call back the "receivedSession" (see [2.3.9](#)) delegate.

**■ Sample Code:** (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)

```
BOOL status = [asReaderWiredBOXTyp getSession];
if (status) {
    //The command was sent successfully.
} else {
    //The command failed to be sent.
}
```

## 2.2.16. setSession

<b>- (BOOL) setSession:(uint8_t) session;</b>				
	Parameter Name	In/Out	Type	Descriptions

<b>Parameter</b>	session	In	uint8_t	S0 (0x00) 、 S1 (0x01) 、 S2 (0x02) 、 S3 (0x03)
<b>Return Values</b>	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.

**■ Function Descriptions:**  
Sets the session value in the RFID settings.  
After this function is executed, call back the “didSetSessionStatus” (see [2.3.10](#)) delegate.

**■ Sample Code:** (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)

```
BOOL status = [asReaderWiredBoxType setSession:0];
if (status) {
    //The command was sent successfully.
} else {
    //The command failed to be sent.
}
```

## 2.2.17. getOutputPowerLevelForMultiAntenna

<b>- (BOOL) getOutputPowerLevelForMultiAntenna;</b>				
	<b>Parameter Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
<b>Return Values</b>	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.

**■ Function Descriptions:**  
Gets the output power of each antenna in the RFID settings.  
After this function is executed, call back the “receivedOuputPowerAntenna1” (see [2.3.11](#)) delegate.

**■ Sample Code:** (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)

```
BOOL status = [asReaderWiredBoxType getOutputPowerLevelForMultiAntenna];
if (status) {
    //The command was sent successfully.
} else {
    //The command failed to be sent.
}
```

## 2.2.18. setOutputPowerLevelAntenna1

**-(BOOL) setOutputPowerLevelAntenna1:(uint16\_t) powerLevel1  
Antenna2:(uint16\_t) powerLevel2  
Antenna3:(uint16\_t) powerLevel3  
Antenna4:(uint16\_t) powerLevel4**

```

Antenna5:(uint16_t) powerLevel5
Antenna6:(uint16_t) powerLevel6
Antenna7:(uint16_t) powerLevel7
Antenna8:(uint16_t) powerLevel8;

```

	<b>Parameter Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
<b>Parameter</b>	powerLevel1	In	uint16_t	The output power of antenna 1.
<b>Parameter</b>	powerLevel2	In	uint16_t	The output power of antenna 2.
<b>Parameter</b>	powerLevel3	In	uint16_t	The output power of antenna 3.
<b>Parameter</b>	powerLevel4	In	uint16_t	The output power of antenna 4.
<b>Parameter</b>	powerLevel5	In	uint16_t	The output power of antenna 5.
<b>Parameter</b>	powerLevel6	In	uint16_t	The output power of antenna 6.
<b>Parameter</b>	powerLevel7	In	uint16_t	The output power of antenna 7.
<b>Parameter</b>	powerLevel8	In	uint16_t	The output power of antenna 8.
<b>Return Values</b>	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.

#### ■ Function Descriptions:

Sets the output power of each antenna in the RFID settings.

After this function is executed, call back the “didSetOutputPowerForMultiAntenna” (see [2.3.12](#)) delegate

■ **Sample Code:** (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)

```
BOOL status = [asReaderWiredBoxType setOutputPowerLevelAntenna1:10
```

```

    Antenna2:10
    Antenna3:10
    Antenna4:10
    Antenna5:10
    Antenna6:10
    Antenna7:10
    Antenna8:10];

```

```

if (status) {
    //The command was sent successfully.
} else {
    //The command failed to be sent.
}

```

#### 2.2.19. **getOutputPowerLevel**

<b>- (BOOL) getOutputPowerLevel;</b>
--------------------------------------

	Parameter Name	In/Out	Type	Descriptions
Return Values	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.
<b>■ Function Descriptions:</b>				
Gets the common output value of each antenna in the current RFID settings, and the maximum and minimum output power that can be set.				
After this function is executed, call back the “receivedOutputPowerLevel” (see <a href="#">2.3.13</a> ) delegate				
<b>■ Sample Code:</b> (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)				
BOOL status = [asReaderWiredBOXTyoe getOutputPowerLevel];				
if (status) {				
//The command was sent successfully.				
} else {				
//The command failed to be sent.				
}				

## 2.2.20. setOutputPowerLevel

- (BOOL) setOutputPowerLevel:(uint16_t) power;				
	Parameter Name	In/Out	Type	Descriptions
Parameter	power	In	uint16_t	Output power (output power range of the Japan version: 18 ~ 23dbm, output power range of the non-Japan version: 18 ~ 27dbm).
Return Values	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.
<b>■ Function Descriptions:</b>				
Sets the common output value of each antenna in the RFID settings				
After this function is executed, call back the “didSetOutputPowerLevelStatus” (see <a href="#">2.3.14</a> ) delegate				
<b>■ Sample Code:</b> (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)				
BOOL status = [asReaderWiredBOXTyoe setOutputPowerLevel:20];				
if (status) {				
//The command was sent successfully.				
} else {				
//The command failed to be sent.				
}				

## 2.2.21. getFHLBTPParam

**- (BOOL) getFHLBTPParam;**

	Parameter Name	In/Out	Type	Descriptions
<b>Return Values</b>	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.

**■ Function Descriptions:**  
Gets the values of FH and LBT in the RFID settings.  
After this function is executed, call back the “receivedFHLBTDData” (see [2.3.15](#)) delegate  
**■ Sample Code:** (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)  

```
BOOL status = [asReaderWiredBOType getFHLBTPParam];
if (status) {
    //The command was sent successfully.
} else {
    //The command failed to be sent.
}
```

**2.2.22. setFHLBTPParamReadTime**

**- (BOOL) setFHLBTPParamReadTime:(uint16\_t) readTime  
idleTime:(uint16\_t) idleTime  
carrierSenseTime:(uint16\_t) carrierSenseTime  
rfLevel:(uint16\_t) rfLevel  
frequencyHopping:(uint8\_t) frequencyHopping  
listenBeforeTalk:(uint8\_t) listenBeforeTalk  
continuousWave:(uint8\_t) continuousWave;**

	Parameter Name	In/Out	Type	Descriptions
<b>Parameter</b>	readTime	In	uint16_t	the reading time (Unit: ms)
<b>Parameter</b>	idleTime	In	uint16_t	the idle time (Unit: ms).
<b>Parameter</b>	carrierSenseTime	In	uint16_t	Carrier listening time, fixed value: 50.
<b>Parameter</b>	rfLevel	In	int	Carrier listening RF level, fixed value: -740.
<b>Parameter</b>	frequencyHopping	In	uint8_t	Enable FH (0x01 or above); disabled FH (0x00).
<b>Parameter</b>	listenBeforeTalk	In	uint8_t	Enable LBT (0x01 or above); disabled LBT (0x00).
<b>Parameter</b>	continuousWave	In	uint8_t	CW, fixed value:0x00
<b>Return Values</b>	-	Out	BOOL	YES: The command was sent successfully.

				NO: The command failed to be sent.
<b>■ Function Descriptions:</b>				
Sets the parameters of FH and LBT in the RFID settings.				
After this function is executed, call back the “didSetFHLBTStatus” (see <a href="#">2.3.16</a> ) delegate				
<b>Note:</b> To set up the Hopping is enabled, you need to set up ParameterfrequencyHopping as 0x02, Parameter listenBeforeTalk as 0x01;				
To set up the Hopping disabled, you need to set up ParameterfrequencyHopping as 0x01, ParameterlistenBeforeTalk as 0x02.				
<b>■ Sample Code:</b> (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)				
BOOL status = [asReaderWiredBOXTypr setFHLBTParamReadTime:10 idleTime:10 carrierSenseTime:50 rfLevel:-749 frequencyHopping:1 listenBeforeTalk:2 continuousWave:0];				
if (status) { //The command was sent successfully. } else { //The command failed to be sent. }				

## 2.2.23. getReadTimeForMultiAntenna

- (BOOL) getReadTimeForMultiAntenna;				
	Parameter Name	In/Out	Type	Descriptions
<b>Return Values</b>	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.
<b>■ Function Descriptions:</b>				
Gets the read time of each antenna in the RFID settings.				
After this function is executed, call back the “readTimeForMultiAntennaReceivedAnt1” (see <a href="#">2.3.17</a> ) delegate				
<b>■ Sample Code:</b> (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)				
BOOL status = [asReaderWiredBOXTypr getReadTimeForMultiAntenna];				
if (status) { //The command was sent successfully. } else { //The command failed to be sent. }				

## 2.2.24. setReadTimeForMultiAntennaReceivedAnt1

```
-(BOOL) setReadTimeForMultiAntennaReceivedAnt1:(uint16_t) ant1
Ant2:(uint16_t) ant2
Ant3:(uint16_t) ant3
Ant4:(uint16_t) ant4
Ant5:(uint16_t) ant5
Ant6:(uint16_t) ant6
Ant7:(uint16_t) ant7
Ant8:(uint16_t) ant8;
```

	Parameter Name	In/Out	Type	Descriptions
<b>Parameter</b>	ant1	In	uint16_t	The read time of antenna 1.
<b>Parameter</b>	ant2	In	uint16_t	The read time of antenna 2.
<b>Parameter</b>	ant3	In	uint16_t	The read time of antenna 3.
<b>Parameter</b>	ant4	In	uint16_t	The read time of antenna 4.
<b>Parameter</b>	ant5	In	uint16_t	The read time of antenna 5.
<b>Parameter</b>	ant6	In	uint16_t	The read time of antenna 6.
<b>Parameter</b>	ant7	In	uint16_t	The read time of antenna 7.
<b>Parameter</b>	ant8	In	uint16_t	The read time of antenna 8.
<b>Return Values</b>	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.

### ■ Function Descriptions:

Sets the read time for each antenna in the RFID settings.

After this function is executed, call back the “didSetReadTimeForMultiAntenna” (see [2.3.18](#)) delegate

**■ Sample Code:** (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)

```
BOOL status = [asReaderWiredBoxType setReadTimeForMultiAntennaReceivedAnt1:10
```

```
Ant2:10 Ant3:10 Ant4:10 Ant5:10 Ant6:10 Ant7:10 Ant8:10];
```

```
if (status) {
```

```
//The command was sent successfully.
```

```
} else {
```

```
//The command failed to be sent.
```

```
}
```

## 2.2.25. setDHCPOnMac

```
- (BOOL) setDHCPOnMac:(NSString*) macAddr;
```

	Parameter Name	In/Out	Type	Descriptions
Parameter	macAddr	In	NSString	MAC address.
Return Values	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.
<b>■ Function Descriptions:</b>				
Sets a dynamic IP address.				
<b>■ Sample Code:</b> (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)				
BOOL status = [asReaderWiredBoxType setDHCPOnMac:@"AC:BC:32:02:8D:32"]; if (status) { //The command was sent successfully. } else { //The command failed to be sent. }				

## 2.2.26. setDHCPOffMac

**-(BOOL) setDHCPOffMac:(NSString\*) macAddr**

**IP:(NSString\*) ip**

**Subnet:(NSString\*) subnet**

**Gateway:(NSString\*) gateway**

**DNSServer:(NSString\*) dnsServer;**

	Parameter Name	In/Out	Type	Descriptions
Parameter	macAddr	In	NSString	MAC address.
Parameter	ip	In	NSString	IP address.
Parameter	subnet	In	NSString	Subnet mask.
Parameter	gateway	In	NSString	Gateway.
Parameter	dnsServer	In	NSString	Domain name system server.
Return Values	-	Out	BOOL	YES: The command was sent successfully. NO: The command failed to be sent.
<b>■ Function Descriptions:</b>				
Sets a static IP address and the network information.				
<b>■ Sample Code:</b> (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.)				
BOOL status = [asReaderWiredBoxType setDHCPOffMac:@"AC:BC:32:02:8D:32" IP:@"192.168.1.10" Subnet:@"255.255.255.255" Gateway:@"255.255.255.255" DNSServer:@"255.255.255.255"]; if (status) {				

```
//The command was sent successfully.
} else {
//The command failed to be sent.
}
```

## 2.2.27. tX

<b>- (BOOL)tX:(NSData *)data;</b>				
	Parameter Name	In/Out	Type	Descriptions
Parameter	data	In	NSData	Data command
Return Values	-	Out	BOOL	YES: Send command successfully NO: Send command failed

**Function Descriptions:**

Send data commands to the Wired BOX-Type device.

**Sample Code:** (Note: asReaderWiredBOXTyp is an instance of AsReaderWiredBOXTyp class.)

```
Byte buf[6] = {0x00,0xB1,0x00,0x00,0x7E,0x30};
NSData *data = [NSData dataWithBytes:buf length:8];
BOOL status = [asReaderWiredBOXTyp tx:data];
if (status) {
// Sends command successfully.
} else {
// Sends command faild.
}
```

## 2.2.28. getRFIDModuleVersion

<b>- (BOOL) getRFIDModuleVersion;</b>				
	Parameter Name	In/Out	Type	Descriptions
Return Values	-	Out	BOOL	YES: Get firmware version of the RFID module successfully NO: Get firmware version of the RFID module failed

**Function Descriptions:**

Gets the RFID module firmware version of the Wired BOX-Type.

Once this function is performed, the entrusted "rfidModuleVersionReceived" (see [2.3.20](#)) is the callback.

**Sample Code:** (Note: asReaderWiredBOXTyp is an instance of AsReaderWiredBOXTyp class.)

```
BOOL status = [asReaderWiredBOXTyp getRFIDModuleVersion];
if (status) {
    // Gets firmware version successfully
} else {
    // Gets firmware version failed
}
```

## 2.3. Delegates

### 2.3.1. searchingIP

**- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp\*) AsReaderWiredBOXTyp  
searchingIP:(NSString\*) ip isFinish:(BOOL) isFinish;**

	Parameter Name	In/Out	Type	Descriptions
Parameter	AsReaderWiredBOXTyp	Out	AsReaderWiredBOXTyp	AsReaderWiredBOXTyp object.
Parameter	ip	Out	NSString	The IP address of the device.
Parameter	isFinish	Out	BOOL	The searching status. YES: Searching finished. NO: Searching continuously.

**■ Function Descriptions:**

Receives the IP address of the Wired BOX-Type device.

Once calling back the function startSearchDevice (see [2.2.3](#)), this delegate will be called back.

**■ Sample Code:**

```
NSMutableArray *arrayIPs = [[NSMutableArray alloc] init];
- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp *) AsReaderWiredBOXTyp
searchingIP:(NSString*) ip isFinish:(BOOL) isFinish{
    if(isFinish == YES) {
        // Searching finished.
    } else {
        // Searching continuously.
        if (![arrayIPs containsObject:ip]) {
            [arrayIPs addObject:ip];
        }
    }
}
```

### 2.3.2. networkStateChanged

```
-(void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp*) AsReaderWiredBOXTyp
networkStateChanged:(AsReaderWiredBOXTypSDKBOXNetworkState) state
error:(NSError *) error;
```

	Parameter Name	In/Out	Type	Descriptions
Parameter	AsReaderWire dBOXTyp	Out	AsReaderWiredBOXT ype	AsReaderWiredBOXTyp object.
Parameter	state	Out	AsReaderWiredBOXT ypeSDKBOXNetwork State	AsReaderWiredBOXTypS DKBOXNetworkState,ENU M(see <a href="#">4.1.2</a> )
Parameter	error	Out	NSError	Error message generated when network state changes.

**■ Function Descriptions:**

This delegate will be called back once the Wired BOX-Type device connection status changes. Once calling back the function connectServer (see [2.2.4](#)), disconnectServer (see [2.2.5](#)), this delegate will be called back.

**■ Sample Code:**

```
- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp *) AsReaderWiredBOXTyp
networkStateChanged:(AsReaderWiredBOXTypSDKBOXNetworkState) state error:(NSError *)
{
    if (state == AsReaderWiredBOXTypSDKBOXNetworkStateConnected) {
        //Connected.
    } else if (state == AsReaderWiredBOXTypSDKBOXNetworkStateDisconnected) {
        //Disconnected.
    } else if (state == AsReaderWiredBOXTypSDKBOXNetworkStateRecievedData) {
        //Received some data.
    } else {
        //error: the corresponding content returned when a network error occurred
    }
}
```

### 2.3.3. searchedUPDSearchingDeviceInfo

```
-(void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp*) AsReaderWiredBOXTyp
searchedUPDSearchingDeviceInfo:(NSArray *) arrInfos;
```

	Parameter Name	In/Out	Type	Descriptions
--	----------------	--------	------	--------------

<b>Parameter</b>	AsReaderWiredBOXTYPE	Out	AsReaderWiredBOXTYPE	AsReaderWiredBOXTYPE object.
<b>Parameter</b>	arrInfos	Out	NSArray	An array of device IP address.

**■ Function Descriptions:**  
 Receives the got IP address of the Wired BOX-Type device.  
 Once calling back the function startSearchDevice (see [2.2.3](#)), this delegate will be called back.

**■ Sample Code:**  

```
- (void) AsReaderWiredBOXTYPE:(AsReaderWiredBOXTYPE *) AsReaderWiredBOXTYPE
searchedUPDSearchingDeviceInfo:(NSArray *) arrInfos {
// arrInfos An array of device IP address.
}
```

### 2.3.4. inventoryStartedWithStatus

**-(void) AsReaderWiredBOXTYPE:(AsReaderWiredBOXTYPE\*) AsReaderWiredBOXTYPE  
 inventoryStartedWithStatus:(AsReaderWiredBOXTYPESDKBOXStatusCode)  
 statusCode;**

	<b>Parameter Name</b>	In/Out	Type	<b>Descriptions</b>
<b>Parameter</b>	AsReaderWiredBOXTYPE	Out	AsReaderWiredBOXTYPE	AsReaderWiredBOXTYPE object.
<b>Parameter</b>	statusCode	Out	AsReaderWiredBOXTYPESDKBOXStatusCode	AsReaderWiredBOXTYPESDKBOXStatusCode, ENUM( see <a href="#">4.1.9</a> ).

**■ Function Descriptions:**

Receives the state of starting inventory.

Once calling back the function startInventoryWithTagsMaxTagCount (see [2.2.10](#)), this delegate will be called back.

**■ Sample Code:**

```
- (void) AsReaderWiredBOXTYPE:(AsReaderWiredBOXTYPE *) AsReaderWiredBOXTYPE
inventoryStartedWithStatus:(AsReaderWiredBOXTYPESDKBOXStatusCode) statusCode {
// statusCode AsReaderWiredBOXTYPESDKBOXStatusCode, ENUM(see 4.1.9)
}
```

### 2.3.5. inventoryStoppedWithStatus

**-(void) AsReaderWiredBOXTYPE:(AsReaderWiredBOXTYPE\*) AsReaderWiredBOXTYPE  
 inventoryStoppedWithStatus:(AsReaderWiredBOXTYPESDKBOXStatusCode)  
 statusCode;**

	<b>Parameter Name</b>	In/Out	Type	<b>Descriptions</b>
<b>Parameter</b>	AsReaderWiredBOXTYPE	Out	AsReaderWiredBOXType	AsReaderWiredBOXTYPE object.
<b>Parameter</b>	statusCode	Out	AsReaderWiredBOXTypeSDKBOXStatus	AsReaderWiredBOXTYPESDKBOXStatus, ENUM(see <a href="#">4.1.9</a> ).

**■ Function Descriptions:**  
 Receives the state of stopping inventory.  
 Once calling back the function stopInventory (see [2.2.11](#)), this delegate will be called back.

**■ Sample Code:**

```
- (void) AsReaderWiredBOXTYPE:(AsReaderWiredBOXTYPE *) AsReaderWiredBOXTYPE
inventoryStoppedWithStatus:(AsReaderWiredBOXTYPESDKBOXStatus) statusCode {
// statusCode AsReaderWiredBOXTYPESDKBOXStatus, ENUM(see 4.1.9).
}
```

### 2.3.6. receivedPCEPCData

```
- (void) AsReaderWiredBOXTYPE:(AsReaderWiredBOXTYPE *) AsReaderWiredBOXTYPE
receivedPCEPCData:(NSData *) pcEpc
selectAntenna:(AsReaderWiredBOXTYPESDKBOXSelectAntenna) antenna;
```

	<b>Parameter Name</b>	In/Out	Type	<b>Descriptions</b>
<b>Parameter</b>	AsReaderWiredBOXTYPE	Out	AsReaderWiredBOXTYPE	AsReaderWiredBOXTYPE object.
<b>Parameter</b>	pcEpc	Out	NSData	The read RFID data.
<b>Parameter</b>	antenna	Out	AsReaderWiredBOXTYPESDKBOXSelectAntenna	AsReaderWiredBOXTYPESDKBOXSelectAntenna, ENUM(see <a href="#">4.1.3</a> ).

**■ Function Descriptions:**  
 Receives the read RFID data.  
 Once calling back the function startInventoryWithTagsMaxTagCount (see [2.2.10](#)), this delegate will be called back.

**■ Sample Code:**

```
- (void) AsReaderWiredBOXTYPE:(AsReaderWiredBOXTYPE *) AsReaderWiredBOXTYPE
receivedPCEPCData:(NSData *) pcEpc
selectAntenna:(AsReaderWiredBOXTYPESDKBOXSelectAntenna) antenna {
// pcEpc The read RFID data.
// antenna AsReaderWiredBOXTYPESDKBOXSelectAntenna, ENUM(see 4.1.3).
```

```
}
```

### 2.3.7. updatedRegistryStatus

**- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp \*) AsReaderWiredBOXTyp  
updatedRegistryStatus:(AsReaderWiredBOXTypSDKBOXStatusCode) statusCode;**

	Parameter Name	In/Out	Type	Descriptions
Parameter	AsReaderWiredBOXTyp	Out	AsReaderWiredBOXTyp	AsReaderWiredBOXTyp object.
Parameter	statusCode	Out	AsReaderWiredBOXTypSDKBOXStatusCo de	AsReaderWiredBOXTypSDKBOXStatusCode, ENUM( see <a href="#">4.1.9</a> ).

**■ Function Descriptions:**

Calls back this function after the RFID settings are permanently saved.

Once calling back the function updateRegistry (see [2.2.12](#)), this delegate will be called back.

**■ Sample Code:**

```
- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp *) AsReaderWiredBOXTyp  
updatedRegistryStatus:(AsReaderWiredBOXTypSDKBOXStatusCode) statusCode {  
//statusCode AsReaderWiredBOXTypSDKBOXStatusCode, ENUM(see 4.1.9).  
}
```

### 2.3.8. HIDDataReceived

**- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp \*) AsReaderWiredBOXTyp  
HIDDataReceived:(NSData \*) HIDData;**

	Parameter Name	In/Out	Type	Descriptions
Parameter	AsReaderWiredBO XType	Out	AsReaderWiredBOXTyp	AsReaderWiredBOXTyp object.
Parameter	HIDData	Out	NSData	HID interface data.

**■ Function Descriptions:**

Receives HID data read by the HID input device.

**■ Sample Code:**

```
- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp *) AsReaderWiredBOXTyp  
HIDDataReceived:(NSData *) HIDData {  
// HIDData HID interface data.  
}
```

### 2.3.9. receivedSession

- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp \*) AsReaderWiredBOXTyp  
receivedSession:(uint8\_t) session;

	Parameter Name	In/Out	Type	Descriptions
Parameter	AsReaderWiredBOXTyp	Out	AsReaderWiredBOXTyp	AsReaderWiredBOXTyp object.
Parameter	session	Out	uint8_t	Set the value of RFID session.

■ **Function Descriptions:**

Receive the value of Session.

Once calling back the function getSession (see [2.2.14](#)), this delegate will be called back.

■ **Sample Code:**

```
- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp *) AsReaderWiredBOXTyp
receivedSession:(uint8_t) session {
// session Set the value of RFID session.
}
```

### 2.3.10. didSetSessionStatus

- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp \*) AsReaderWiredBOXTyp  
didSetSessionStatus:(AsReaderWiredBOXTypSDKBOXStatusCode) state;

	Parameter Name	In/Out	Type	Descriptions
Parameter	AsReaderWiredBOXTyp	Out	AsReaderWiredBOXTyp	AsReaderWiredBOXTyp object.
Parameter	state	Out	AsReaderWiredBOXTypSDKBOXStatusCode	AsReaderWiredBOXTypSDKBOXStatusCode, ENUM (see <a href="#">4.1.9</a> ).

■ **Function Descriptions:**

Receives the result of setting the session.

Once calling back the function setSession (see [2.2.16](#)), this delegate will be called back.

■ **Sample Code:**

```
- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp *) AsReaderWiredBOXTyp
didSetSessionStatus:(AsReaderWiredBOXTypSDKBOXStatusCode) state {
// state AsReaderWiredBOXTypSDKBOXStatusCode, ENUM(see 4.1.9)
}
```

### 2.3.11. receivedOuputPowerAntenna1

```
- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp *) AsReaderWiredBOXTyp
receivedOuputPowerAntenna1:(uint16_t) antenna1
    Antenna2:(uint16_t) antenna2
    Antenna3:(uint16_t) antenna3
Antenna4:(uint16_t) antenna4
    Antenna5:(uint16_t) antenna5
    Antenna6:(uint16_t) antenna6
    Antenna7:(uint16_t) antenna7
    Antenna8:(uint16_t) antenna8
    Min:(uint16_t) min
    Max:(uint16_t) max;
```

	<b>Parameter Name</b>	In/Out	Type	<b>Descriptions</b>
<b>Parameter</b>	AsReaderWiredBOXTyp	Out	AsReaderWiredBOXTyp	AsReaderWiredBOXTyp object.
<b>Parameter</b>	antenna1	Out	uint16_t	The output power of antenna 1.
<b>Parameter</b>	antenna2	Out	uint16_t	The output power of antenna 2.
<b>Parameter</b>	antenna3	Out	uint16_t	The output power of antenna 3.
<b>Parameter</b>	antenna4	Out	uint16_t	The output power of antenna 4.
<b>Parameter</b>	antenna5	Out	uint16_t	The output power of antenna 5.
<b>Parameter</b>	antenna6	Out	uint16_t	The output power of antenna 6.
<b>Parameter</b>	antenna7	Out	uint16_t	The output power of antenna 7.
<b>Parameter</b>	antenna8	Out	uint16_t	The output power of antenna 8.
<b>Parameter</b>	min	Out	uint16_t	the minimum power output of the antenna
<b>Parameter</b>	max	Out	uint16_t	the maximum power output of the antenna

**■ Function Descriptions:**

Receives the power output of each antenna.

Once calling back the function `getOutputPowerLevelForMultiAntenna` (see [2.2.17](#)), this delegate will be called back.

**■ Sample Code:**

```
- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp *) AsReaderWiredBOXTyp
receivedOuputPowerAntenna1:(uint16_t) antenna1 Antenna2:(uint16_t) antenna2
Antenna3:(uint16_t) antenna3 Antenna4:(uint16_t) antenna4 Antenna5:(uint16_t) antenna5
Antenna6:(uint16_t) antenna6 Antenna7:(uint16_t) antenna7 Antenna8:(uint16_t) antenna8
Min:(uint16_t) min Max:(uint16_t) max {
// antenna1: the output power of antenna 1.
// antenna2: the output power of antenna 2.
// antenna3: the output power of antenna 3.
// antenna4: the output power of antenna 4.
// antenna5: the output power of antenna 5.
// antenna6: the output power of antenna 6.
// antenna7: the output power of antenna 7.
// antenna8: the output power of antenna 8.
// min: the minimum power output of the antenna
// max: the maximum power output of the antenna
}
```

### 2.3.12. didSetOutputPowerForMultiAntenna

**- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp \*) AsReaderWiredBOXTyp  
didSetOutputPowerForMultiAntenna:(AsReaderWiredBOXTypSDKCommonStatus)  
statusCode;**

	Parameter Name	In/Out	Type	Descriptions
Parameter	AsReaderWiredBOXTyp	Out	AsReaderWiredBOXTyp	AsReaderWiredBOXTyp object
Parameter	state	Out	AsReaderWiredBOXTypSDKCommonStat us	AsReaderWiredBOXTypSDKCommonStatus, ENUM (see <a href="#">4.1.10</a> )

**■ Function Descriptions:**

Receives the execution result of setting the output power value for each antenna.

Once calling back the function `setOutputPowerLevelAntenna1` (see [2.2.17](#)), this delegate will be called back.

**■ Sample Code:**

```
- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp *) AsReaderWiredBOXTyp
didSetOutputPowerForMultiAntenna:(AsReaderWiredBOXTypSDKCommonStatus) statusCode {
```

```
// statusCode AsReaderWiredBOXTypSDKCommonStatus,ENUM(see 4.1.10)
}
```

### 2.3.13. receivedOutputPowerLevel

**- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp \*) AsReaderWiredBOXTyp receivedOutputPowerLevel:(uint16\_t) powerLevel maxPower:(uint16\_t) maxPower minPower:(uint16\_t) minPower;**

	Parameter Name	In/Out	Type	Descriptions
Parameter	AsReaderWiredBOXTyp	Out	AsReaderWiredBOXTyp	AsReaderWiredBOXTyp object.
Parameter	powerLevel	Out	uint16_t	The current output power.
Parameter	maxPower	Out	uint16_t	The maximum output power that can be set.
Parameter	minPower	Out	uint16_t	The minimum output power that can be set.

**■ Function Descriptions:**

Receives the common output power of the antennas and the range of output power that can be set.

Once calling back the function getOutputPowerLevel (see [2.2.19](#)), this delegate will be called back.

**■ Sample Code:**

```
- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp *) AsReaderWiredBOXTyp receivedOutputPowerLevel:(uint16_t) powerLevel maxPower:(uint16_t) maxPower minPower:(uint16_t) minPower {
    // powerLevel: the current output power.
    // maxPower: the maximum output power that can be set.
    // minPower: the minimum output power that can be set.
}
```

### 2.3.14. didSetOutputPowerLevelStatus

**- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp \*) AsReaderWiredBOXTyp didSetOutputPowerLevelStatus:(AsReaderWiredBOXTypSDKBOXStatusCode) statusCode;**

	Parameter Name	In/Out	Type	Descriptions
Parameter	AsReaderWired	Out	AsReaderWiredBOXT	AsReaderWiredBOXTyp

	BOXTyp		ype	object.
<b>Parameter</b>	statusCode	Out	AsReaderWiredBOXTy <sup>e</sup> SDKBOXStatusCo <sup>d</sup> e	AsReaderWiredBOXTy <sup>e</sup> sDKBOXStatusCode,ENUM(see <a href="#">4.1.9</a> ).

**■ Function Descriptions:**  
 Receives the execution result of the common output power of the antennas.  
 Once calling back the function setOutputPowerLevel (see [2.2.20](#)), this delegate will be called back.

**■ Sample Code:**

```
- (void) AsReaderWiredBOXTye: (AsReaderWiredBOXTye *) AsReaderWiredBOXTye
didSetOutputPowerLevelStatus:(AsReaderWiredBOXTyeSDKBOXStatusCode) statusCode {
// statusCode AsReaderWiredBOXTyeSDKBOXStatusCode,ENUM(see 4.1.9).
}
```

### 2.3.15. receivedFHLBTData

<b>- (void) AsReaderWiredBOXTy<sup>e</sup>: (AsReaderWiredBOXTy<sup>e</sup> *) AsReaderWiredBOXTy<sup>e</sup> receivedFHLBTData:(NSData *) data readTime:(int) readTime idleTime:(int) idleTime;</b>				
	<b>Parameter Name</b>	In/Out	Type	<b>Descriptions</b>
<b>Parameter</b>	AsReaderWiredBOXTy <sup>e</sup>	Out	AsReaderWiredBOXTy <sup>e</sup>	AsReaderWiredBOXTy <sup>e</sup> object
<b>Parameter</b>	data	Out	NSData	Read time (16bit). Idle time (16bit). Carrier listening time (16bit). Carrier listening RF level (16bit). FH (8bit). LBT (8bit). CW (8bit).
<b>Parameter</b>	readTime	Out	int	Read time.
<b>Parameter</b>	idleTime	Out	int	Idle time.

**■ Function Descriptions:**  
 Receives the values of FH and LBT.  
 Once calling back the function getFHLBTParam (see [2.2.21](#)), this delegate will be called back.

**■ Sample Code:**

```
- (void) AsReaderWiredBOXTye: (AsReaderWiredBOXTye *) AsReaderWiredBOXTye
receivedFHLBTData:(NSData *) data readTime:(int) readTime idleTime:(int) idleTime {
```

```
// data
Read time (16bit).
Idle time (16bit).
Carrier listening time (16bit).
Carrier listening RF level (16bit).
FH (8bit)
LBT (8bit)
CW (8bit)
// readTime
Read time
// idleTime
Idle time.
}
```

### 2.3.16. didSetFHLBTStatus

- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp \*) AsReaderWiredBOXTyp  
didSetFHLBTStatus:(AsReaderWiredBOXTypSDKBOXStatusCode) statusCode;

	Parameter Name	In/Out	Type	Descriptions
Parameter	AsReaderWire dBOXTyp	Out	AsReaderWiredBOXT ype	AsReaderWiredBOXTyp object.
Parameter	statusCode	Out	AsReaderWiredBOXT ypeSDKBOXStatusCo de	AsReaderWiredBOXTypS DKBOXStatusCode, ENUM( see <a href="#">4.1.9</a> ).

■ **Function Descriptions:**

Receives the result of setting the FH and LBT.

Once calling back the function setFHLBTPParamReadTime (see [2.2.21](#)), this delegate will be called back.

■ **Sample Code:**

```
- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp *) AsReaderWiredBOXTyp  
didSetFHLBTStatus:(AsReaderWiredBOXTypSDKBOXStatusCode) statusCode {  
// statusCode AsReaderWiredBOXTypSDKBOXStatusCode, ENUM(see 4.1.9)  
}
```

### 2.3.17. readTimeForMultiAntennaReceivedAnt1

- (void) AsReaderWiredBOXTyp:(AsReaderWiredBOXTyp \*) AsReaderWiredBOXTyp  
readTimeForMultiAntennaReceivedAnt1:(uint16\_t) ant1 Ant2:(uint16\_t) ant2  
Ant3:(uint16\_t) ant3 Ant4:(uint16\_t) ant4 Ant5:(uint16\_t) ant5 Ant6:(uint16\_t) ant6  
Ant7:(uint16\_t) ant7 Ant8:(uint16\_t) ant8;

	<b>Parameter Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
<b>Parameter</b>	AsReaderWiredBOXTy <e>pe</e>	Out	AsReaderWiredBOXTy <e>pe</e>	AsReaderWiredBOXTy <e>pe</e> object.
<b>Parameter</b>	ant1	Out	uint16_t	The read time of antenna 1.
<b>Parameter</b>	ant2	Out	uint16_t	The read time of antenna 2.
<b>Parameter</b>	ant3	Out	uint16_t	The read time of antenna 3.
<b>Parameter</b>	ant4	Out	uint16_t	The read time of antenna 4.
<b>Parameter</b>	ant5	Out	uint16_t	The read time of antenna 5.
<b>Parameter</b>	ant6	Out	uint16_t	The read time of antenna 6.
<b>Parameter</b>	ant7	Out	uint16_t	The read time of antenna 7.
<b>Parameter</b>	ant8	Out	uint16_t	The read time of antenna 8.

**■ Function Descriptions:**

Receives the read time of the antennas.

Once calling back the function getReadTimeForMultiAntenna (see [2.2.22](#)), this delegate will be called back.

**■ Sample Code:**

```
- (void) AsReaderWiredBOXType: (AsReaderWiredBOXType *) AsReaderWiredBOXType
readTimeForMultiAntennaReceivedAnt1:(uint16_t) ant1 Ant2:(uint16_t) ant2 Ant3:(uint16_t)
ant3 Ant4:(uint16_t) ant4 Ant5:(uint16_t) ant5 Ant6:(uint16_t) ant6 Ant7:(uint16_t) ant7
Ant8:(uint16_t) ant8 {
// ant1      The read time of antenna 1.
// ant2      The read time of antenna 2.
// ant3      The read time of antenna 3.
// ant4      The read time of antenna 4.
// ant5      The read time of antenna 5.
// ant6      The read time of antenna 6.
// ant7      The read time of antenna 7.
// ant8      The read time of antenna 8.
}
```

### 2.3.18. didSetReadTimeForMultiAntenna

<b>- (void) AsReaderWiredBOXTy<e>pe</e>: (AsReaderWiredBOXTy<e>pe</e> *) AsReaderWiredBOXTy<e>pe</e> didSetReadTimeForMultiAntenna: (AsReaderWiredBOXTy<e>pe</e>SDKCommonStatus) status;</b>				
	<b>Parameter Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>

<b>Parameter</b>	AsReaderWiredBOXTy pe	Out	AsReaderWiredBOXTy pe	AsReaderWiredBOXTy pe object.
<b>Parameter</b>	status	Out	AsReaderWiredBOXTy peSDKCommonStat us	AsReaderWiredBOXTy peSDKCommonStatus, ENUM(s ee <a href="#">4.1.10</a> ).

**■ Function Descriptions:**  
 Receives the result of setting the read time of each antenna.  
 Once calling back the function setReadTimeForMultiAntennaReceivedAnt1 (see [2.2.23](#)), this delegate will be called back.

**■ Sample Code:**

```
- (void) AsReaderWiredBOXTy:(AsReaderWiredBOXTy *) AsReaderWiredBOXTy  
didSetReadTimeForMultiAntenna:(AsReaderWiredBOXTySDKCommonStatus) status {  
// status AsReaderWiredBOXTySDKCommonStatus, ENUM(see 4.1.10)  
}
```

### 2.3.19. setRecharging

<b>- (void)AsReaderWiredBOXTy:(AsReaderWiredBOXTy *)AsReaderWiredBOXTy setRecharging:(AsReaderWiredBOXTySDKBOXStatusCode)statusCode;</b>				
	<b>Parameter Name</b>	In/Out	Type	<b>Descriptions</b>
<b>Parameter</b>	AsReaderWiredBOXTy	Out	AsReaderWiredBOXTy	AsReaderWiredBOXTy object

**Function Descriptions:**

Receives the execution results of the charging setting for the iOS device connected to the Wired BOX-Type device.

Once the function setRecharging (see [2.2.13](#)) is called, this delegate is called back.

**Sample Code:**

```
- (void)AsReaderWiredBOXTy:(AsReaderWiredBOXTy *)AsReaderWiredBOXTy  
setRecharging:(AsReaderWiredBOXTySDKBOXStatusCode)statusCode {  
// statusCode AsReaderWiredBOXTySDKBOXStatusCode, Enum (see 4.1.9).  
}
```

### 2.3.20. rfidModuleVersionReceived

<b>- (void)AsReaderWiredBOXTy:(AsReaderWiredBOXTy *)AsReaderWiredBOXTy rfidModuleVersionReceived:(NSString *)rfidModuleVersion;</b>
---

	<b>Parameter Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
<b>Parameter</b>	AsReaderWiredBOXTy <e>pe</e>	Out	AsReaderWiredBOXTy <e>pe</e>	AsReaderWiredBOXTy <e>pe</e> object
<b>Parameter</b>	rfidModuleVersion	Out	NSString	Firmware version of RFID module
<b>Function Descriptions:</b>				
Receives the RFID module firmware version of the Wired BOX-Type device. Once the function getRFIDModuleVersion (see <a href="#">2.2.28</a> ) is called, this delegate is called back.				
<b>Sample Code:</b>				
<pre>- (void)AsReaderWiredBOXTy<e>pe</e>:(AsReaderWiredBOXTy<e>pe</e> *)AsReaderWiredBOXTy<e>pe</e> rfidModuleVersionReceived:(NSString *)rfidModuleVersion { // rfidModuleVersion: The RFID module firmware version of the Wired BOX. }</pre>				

### 2.3.21. receivedRechargedStatus

<b>- (void)AsReaderWiredBOXTy<e>pe</e>:(AsReaderWiredBOXTy<e>pe</e> *)AsReaderWiredBOXTy<e>pe</e> receivedRechargedStatus:(AsReaderWiredBOXTy<e>pe</e>SDKBOXStatusCode)statusCode;</b>				
	<b>Parameter Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
<b>Paramet er</b>	AsReaderWiredB OXType	Out	AsReaderWiredBOXTy <e>pe</e>	AsReaderWiredBOXTy <e>pe</e> object
<b>Paramet er</b>	statusCode	Out	AsReaderWiredBOXTy <e>pe</e> SDKBOXStatusCo <e>de</e>	AsReaderWiredBOXTy <e>pe</e> SDKBOXStatusCode, Enum (see 4.1.9).
<b>Function Descriptions:</b>				
Receives the charging status of the phone which is connected to the Wired BOX-Type device. Once the function getRechargedStatus (see <a href="#">2.2.14</a> ) is called, this delegate is called back.				
<b>Sample Code:</b>				
<pre>- (void)AsReaderWiredBOXTy<e>pe</e>:(AsReaderWiredBOXTy<e>pe</e> *)AsReaderWiredBOXTy<e>pe</e> receivedRechargedStatus:(AsReaderWiredBOXTy<e>pe</e>SDKBOXStatusCode)statusCode { // statusCode AsReaderWiredBOXTy<e>pe</e>SDKBOXStatusCode, Enum (see 4.1.9). }</pre>				

## 3. AsWiredBOXPrinter Class

AsWiredBOXPrinter object can be used to get printer status, to print text, images, and QR codes, and to cut paper, open the money box, and perform other user-defined functions.

### 3.1. Properties

Property Name	Property	Type	Descriptions
printDelegate	nonatomic, weak	AsReaderWiredBOX TypePrinterDelegate	Delegate (see <a href="#">3.3</a> ).
isConnected	nonatomic, assign, readonly	BOOL	Connection status.

### 3.2. Functions

#### 3.2.1. initWithAsReaderWiredBOXTy

<b>-(id) initWithAsReaderWiredBOXTy:(AsReaderWiredBOXTy * )asReaderWiredBOXTy;</b>				
	Parameter Name	In/Out	Type	Descriptions
<b>Parameter</b>	asReaderWiredBOX Type	In	AsReaderWiredBOXTy pe	AsReaderWiredBOXTy pe object.
<b>Return Values</b>	-	Out	AsWiredBOXPrinter	AsWiredBOXPrinter object.
<b>■ Function Descriptions:</b> Creates AsWiredBOXPrinter object. <b>■ Sample Code:</b> (Note: asReaderWiredBoxType is an instance of AsReaderWiredBoxType.) AsWiredBOXPrinter *asWiredBOXPrinter = [[AsWiredBOXPrinter alloc] initWithAsReaderWiredBOXTy:asReaderWiredBOXTy];				

#### 3.2.2. getPrinterStatus

<b>-(void) getPrinterStatus;</b>
<b>■ Function Descriptions:</b>

Gets the current status of the printer.

After this function is executed, call back the “AsReaderWiredBOXTypewriterStatus” (see [3.3.1](#)) delegate.

■ **Sample Code:** (Note: asPrinter is an instance of AsWiredBOXPrinter class.)

```
[asPrinter getPrinterStatus];
```

### 3.2.3. addPrintText

```
-(void) addPrintText:(NSString*) text
                  font:(AsReaderWiredBOXTypedeSDKMNPprintFont) font
                  printerAlignment:(AsReaderWiredBOXTypedeSDKPrinterAlignment) printerAlignment;
```

	Parameter Name	In/Out	Type	Descriptions
Parameter	text	In	NSString	Data to be printed.
Parameter	font	In	AsReaderWiredBOXTypedeSDKMNPprintFont	AsReaderWiredBOXTypedeSDKMNPprintFont, ENUM (see <a href="#">4.1.6</a> ).
Parameter	printerAlignment	In	AsReaderWiredBOXTypedeSDKPrinterAlignment	AsReaderWiredBOXTypedeSDKPrinterAlignment, ENUM (see <a href="#">4.1.5</a> ).

■ **Function Descriptions:**

Add the print data for each line.

■ **Sample Code:** (Note: asPrinter is an instance of AsWiredBOXPrinter class.)

```
[asPrinter addPrintText:@"123456" font:AsReaderWiredBOXTypedeSDKMNPprintFont_1
                  printerAlignment:AsReaderWiredBOXTypedeSDKPrinterAlignmentRight];
```

### 3.2.4. addPrintQRCode

```
-(void) addPrintQRCode:(NSString*) qrCode
                  size:(AsReaderWiredBOXTypedeSDKQrDotSize) size
                  printerAlignment:(AsReaderWiredBOXTypedeSDKPrinterAlignment) printerAlignment;
```

	Parameter Name	In/Out	Type	Descriptions
Parameter	qrCode	In	NSString	The QRCode to be printed.
Parameter	size	In	AsReaderWiredBOXTypedeSDKQrDotSize	AsReaderWiredBOXTypedeSDKQrDotSize, ENUM (see <a href="#">4.1.8</a> ).
Parameter	printerAlignment	In	AsReaderWiredBOXTypedeSDKPrinterAlignment	AsReaderWiredBOXTypedeSDKPrinterAlignment, ENUM (see <a href="#">4.1.5</a> ).

■ **Function Descriptions:**

Add the QRCode to print.

■ **Sample Code:** (Note: asPrinter is an instance of AsWiredBOXPrinter class.)  
[asPrinter addPrintQRCode:@ "123456" size: AsReaderWiredBOXTypeSDKQrDotSize\_1  
printerAlignment: AsReaderWiredBOXTypeSDKPrinterAlignmentLeft];

### 3.2.5. addPrintImage

```
-(void) addPrintImage:(UIImage *) image
               width:(float) width
              height:(float) height
printerAlignment:(AsReaderWiredBOXTypeSDKPrinterAlignment) printerAlignment;
```

	Parameter Name	In/Out	Type	Descriptions
<b>Parameter</b>	image	In	UIImage	The images to be printed.
<b>Parameter</b>	width	In	float	The width of image to be printed.
<b>Parameter</b>	height	In	float	The height of image to be printed.
<b>Parameter</b>	printerAlignment	In	AsReaderWiredBOXTypeSDKPrinterAlignment	AsReaderWiredBOXTypeSDKPrinterAlignment, ENUM (see <a href="#">4.1.5</a> ).

■ **Function Descriptions:**

Add the image to print.

■ **Sample Code:** (Note: asPrinter is an instance of the AsWiredBOXPrinter class, pic is the name of the local picture)  
UIImage \*image = [UIImage imageNamed:@ "pic"];  
[asPrinter addPrintImage:image width:200 height:200 printerAlignment:  
AsReaderWiredBOXTypeSDKPrinterAlignmentCenter];

### 3.2.6. addCutCommand

```
-(void) addCutCommand:(AsReaderWiredBOXTypeSDKCutType) cutType;
```

	Parameter Name	In/Out	Type	Descriptions
<b>Parameter</b>	cutType	In	AsReaderWiredBOXTypeSDKCutType	AsReaderWiredBOXTypeSDKCutType, ENUM (see <a href="#">4.1.4</a> ).

■ **Function Descriptions:**

Add a paper cutting instructions.

■ **Sample Code:** (Note: asPrinter is an instance of AsWiredBOXPrinter class.)

[asPrinter addCutCommand:AsReaderWiredBOXTypSDKCutTypeHalf];
--

### 3.2.7. openDrawer

<b>-(void) openDrawer;</b>
----------------------------

■ **Function Descriptions:**

Open the drawer.

■ **Sample Code:** (Note: asPrinter is an instance of AsWiredBOXPrinter class.)

[asPrinter openDrawer];

### 3.2.8. cleanPrintData

<b>-(void) cleanPrintData;</b>
--------------------------------

■ **Function Descriptions:**

Clear the added print data.

■ **Sample Code:** (Note: asPrinter is an instance of AsWiredBOXPrinter class.)

[asPrinter cleanPrintData];

### 3.2.9. doPrint

<b>-(void) doPrint;</b>
-------------------------

■ **Function Descriptions:**

Prints the previously added print data, and the added print data will be emptied after successful printing.

After this function is executed, call back the “AsReaderWiredBOXTypPrinterConnected” (see [3.3.2](#)), “retryPrintOnError” (see [3.3.3](#)), “whenPrintSuccessed” (see [3.3.4](#)) delegate

■ **Sample Code:** (Note: asPrinter is an instance of AsWiredBOXPrinter class.)

[asPrinter doPrint];

### 3.2.10. txRawData

<b>-(void) txRawData:(NSData *) txRawData;</b>
--

	Parameter Name	In/Out	Type	Descriptions
Parameter	txRawData	In	NSData	Functions included with the printer, but not supported by the SDK.

■ **Function Descriptions:**

Users can communicate directly with the printer through this function to realize functions not supported by the SDK.

After this function is executed, if the printer returns the result of execution, the delegate "

rxRawData " (see [3.3.5](#)) will be called back.

■ **Sample Code:** (Note: asPrinter is an instance of the AsWiredBOXPrinter class, data is NSData type.)

```
[asPrinter txRawData:data];
```

## 3.3. Delegates

### 3.3.1. AsReaderWiredBOXTypewriterStatus

<b>-(void) AsReaderWiredBOXTypewriterStatus:(AsReaderWiredBOXTypewriterSDKPrinterStatus) printerStatus;</b>				
	Parameter Name	In/Out	Type	Descriptions
Parameter	printerStatus	Out	AsReaderWiredBOXTypewriterSDKPrinterStatus	AsReaderWiredBOXTypewriterSDKPrinterStatus, ENUM (see <a href="#">4.1.1</a> ).
<b>■ Function Descriptions:</b>				
Receives the status of the printer. Once calling back the function getPrinterStatus (see <a href="#">3.2.2</a> ), this delegate will be called back.				
<b>■ Sample Code:</b>				
<pre>- (void) AsReaderWiredBOXTypewriterStatus:(AsReaderWiredBOXTypewriterSDKPrinterStatus) printerStatus {     // printerStatus AsReaderWiredBOXTypewriterSDKPrinterStatus,ENUM (see <a href="#">4.1.1</a>). }</pre>				

### 3.3.2. AsReaderWiredBOXTypewriterConnected

<b>- (void) AsReaderWiredBOXTypewriterConnected:(BOOL) isConnected;</b>				
	Parameter Name	In/Out	Type	Descriptions
Parameter	isConnected	Out	BOOL	YES: Connected. NO: Disconnected.
<b>■ Function Descriptions:</b>				
Returns the connection status of the printer. Once calling back the function doPrint (see <a href="#">3.2.9</a> ), this delegate will be called back.				
<b>■ Sample Code:</b>				
<pre>- (void) AsReaderWiredBOXTypewriterConnected:(BOOL) isConnected {</pre>				

```
// isConnected YES: Connected.  
NO: Disconnected.  
}
```

### 3.3.3. retryPrintOnError

<b>- (BOOL) retryPrintOnError;</b>				
	Parameter Name	In/Out	Type	Descriptions
<b>Return Values</b>	-	In	BOOL	YES: Reprint. NO: Not reprint.
<b>■ Function Descriptions:</b>				
Try to reprint without clearing the data. Once calling back the function doPrint (see <a href="#">3.2.9</a> ), this delegate will be called back.				
<b>■ Sample Code:</b>				
<pre>- (BOOL) retryPrintOnError{     return YES; }</pre>				

### 3.3.4. whenPrintSuccessed

<b>- (void) whenPrintSuccessed;</b>				
	Parameter Name	In/Out	Type	Descriptions
<b>■ Function Descriptions:</b>				
This function is called after printing data. Once calling back the function doPrint (see <a href="#">3.2.9</a> ), this delegate will be called back.				
<b>■ Sample Code:</b>				
<pre>- (void) whenPrintSuccessed {     // Prints data successfully. }</pre>				

### 3.3.5. rxRawData

<b>- (void) rxRawData:(NSData *) rxRawData;</b>				
	Parameter Name	In/Out	Type	Descriptions
<b>Parameter</b>	rxRawData	Out	NSData	Receives the execution results returned by the printer.
<b>■ Function Descriptions:</b>				

Receives the execution results of functions that come with the printer but are not supported by the SDK.

Once calling back the function txRawData (see [3.2.10](#)), this delegate will be called back.

■ **Sample Code:**

```
- (void) rxRawData:(NSData *) rxRawData {  
    // rxRawData Receives the execution results returned by the printer.  
}
```

## 4. AsReaderWiredBOXTypeSDKDefine Class

AsReaderWiredBOXTypeSDKDefine object is an enumerated type of each parameter.

### 4.1. Enum

#### 4.1.1. AsReaderWiredBOXTypeSDKPrinterStatus

The printer status:

Definition	Value	Descriptions
AsReaderWiredBOXTypeSDKPrinterStatus_NOERRO R	0	No error.
AsReaderWiredBOXTypeSDKPrinterStatus_NOPAPE R	1	No paper.
AsReaderWiredBOXTypeSDKPrinterStatus_Institution alFailure	2	The machine is out of order.
AsReaderWiredBOXTypeSDKPrinterStatus_CoverOp en	3	The cover of the machine is open.

#### 4.1.2. AsReaderWiredBOXTypeSDKBOXNetworkState

The network status:

Definition	Value	Descriptions
AsReaderWiredBOXTypeSDKBOXNetworkStateConnected_	0	Connected
AsReaderWiredBOXTypeSDKBOXNetworkStateDisconnected	1	Disconnected
AsReaderWiredBOXTypeSDKBOXNetworkStateConnecting	2	Connecting
AsReaderWiredBOXTypeSDKBOXNetworkStateRecievedData	3	Received data
AsReaderWiredBOXTypeSDKBOXNetworkStateError	4	Error occurred

#### 4.1.3. AsReaderWiredBOXTypeSDKBOXSelectAntenna

The selected antenna:

Definition	Value	Descriptions
AsReaderWiredBOXTypeSDKBOXSelectAntennaNone_	0	No antenna
AsReaderWiredBOXTypeSDKBOXSelectAntenna1	1	Antenna 1
AsReaderWiredBOXTypeSDKBOXSelectAntenna2	2	Antenna 2
AsReaderWiredBOXTypeSDKBOXSelectAntenna3	3	Antenna 3
AsReaderWiredBOXTypeSDKBOXSelectAntenna4	4	Antenna 4
AsReaderWiredBOXTypeSDKBOXSelectAntenna5	5	Antenna 5
AsReaderWiredBOXTypeSDKBOXSelectAntenna6	6	Antenna 6
AsReaderWiredBOXTypeSDKBOXSelectAntenna7	7	Antenna 7
AsReaderWiredBOXTypeSDKBOXSelectAntenna8	8	Antenna 8

#### 4.1.4. AsReaderWiredBOXTypeSDKCutType

Paper cutting status:

Definition	Value	Descriptions
AsReaderWiredBOXTypeSDKCutTypeFull_	0x69	All cut.
AsReaderWiredBOXTypeSDKCutTypeHalf	0x6D	Half cut

#### 4.1.5. AsReaderWiredBOXTypeSDKPrinterAlignment

Location of the print content:

Definition	Value	Descriptions
AsReaderWiredBOXTypeSDKPrinterAlignmentLeft	0	In the left of the page.
AsReaderWiredBOXTypeSDKPrinterAlignmentCenter	1	In the middle of the page.
AsReaderWiredBOXTypeSDKPrinterAlignmentRight	2	In the right of the page.

#### 4.1.6. AsReaderWiredBOXTypeSDKMNPprintFont

The font-size of the text to be printed:

Definition	Value	Descriptions
AsReaderWiredBOXTypeSDKMNPprintFont_1	0x00	Font-size 1
AsReaderWiredBOXTypeSDKMNPprintFont_2	0x11	Font-size 2
AsReaderWiredBOXTypeSDKMNPprintFont_3	0x22	Font-size 3
AsReaderWiredBOXTypeSDKMNPprintFont_4	0x33	Font-size 4
AsReaderWiredBOXTypeSDKMNPprintFont_5	0x44	Font-size 5
AsReaderWiredBOXTypeSDKMNPprintFont_6	0x55	Font-size 6
AsReaderWiredBOXTypeSDKMNPprintFont_7	0x66	Font-size 7
AsReaderWiredBOXTypeSDKMNPprintFont_8	0x77	Font-size 8

#### 4.1.7. AsReaderWiredBOXTypeSDKQrModel

QR Model:

Definition	Value	Descriptions
AsReaderWiredBOXTypeSDKQrModel_1	49	QR Model1
AsReaderWiredBOXTypeSDKQrModel_2	50	QR Model2

#### 4.1.8. AsReaderWiredBOXTypeSDKQrDotSize

QR dot size:

Definition	Value	Descriptions
AsReaderWiredBOXTypeSDKQrDotSize_1	1	QR dot size 1x1
AsReaderWiredBOXTypeSDKQrDotSize_2	2	QR dot size 2x2
AsReaderWiredBOXTypeSDKQrDotSize_3	3	QR dot size 3x3
AsReaderWiredBOXTypeSDKQrDotSize_4	4	QR dot size 4x4
AsReaderWiredBOXTypeSDKQrDotSize_5	5	QR dot size 5x5
AsReaderWiredBOXTypeSDKQrDotSize_6	6	QR dot size 6x6

AsReaderWiredBOXTypeSDKQrDotSize_7	7	QR dot size 7x7
------------------------------------	---	-----------------

#### 4.1.9. AsReaderWiredBOXTypeSDKBOXStatusCode

The status of setting:

Definition	Value	Descriptions
AsReaderWiredBOXTypeSDKBOXStatusCodeUnknown	-1	Unknown
AsReaderWiredBOXTypeSDKBOXStatusCodeSuccess	0	Success
AsReaderWiredBOXTypeSDKBOXStatusCodeFailed	1	Failed

#### 4.1.10. AsReaderWiredBOXTypeSDKCommonStatus

The status of setting:

Definition	Value	Descriptions
AsReaderWiredBOXTypeSDKCommonStatusNone	0	Unknown
AsReaderWiredBOXTypeSDKCommonStatusSuccess	1	Success
AsReaderWiredBOXTypeSDKCommonStatusFailure	2	Failed

#### 4.1.11. AsReaderWiredBOXTypeSDKResultSetRecharging

Charging status

Definition	Value	Descriptions
AsReaderWiredBOXTypeSDKResultSetRechargingSucceed	0	Charge successfully
AsReaderWiredBOXTypeSDKResultSetRechargingFailed_Type_C_Busy	1	Failed to charge due to inventory taking
AsReaderWiredBOXTypeSDKResultSetRechargingFailed	2	Chage failed

#### 4.1.12. AsReaderWiredBOXTypeConnectMethod

Connection type

Definition	Value	Descriptions
AsReaderWiredBOXTypConnectMethod_TCP	0	TCP connection
AsReaderWiredBOXTypConnectMethod_MQTT	1	MQTT connection