

Xtive Utility V2.60

User Manual

Product Name : RFID Wirstband Tag

Model Number : SYTAG245-TM-C01
SYTAG245-TM-A01
SYTAG245-TM-AA1
SYTAG245-TM-A03
SYTAG245-TM-AA3
SYTAG245-TM-B01
SYTAG245-TM-BA1
SYTAG245-TM-CA1
SYTAG245-TM-C03
SYTAG245-TM-CA3



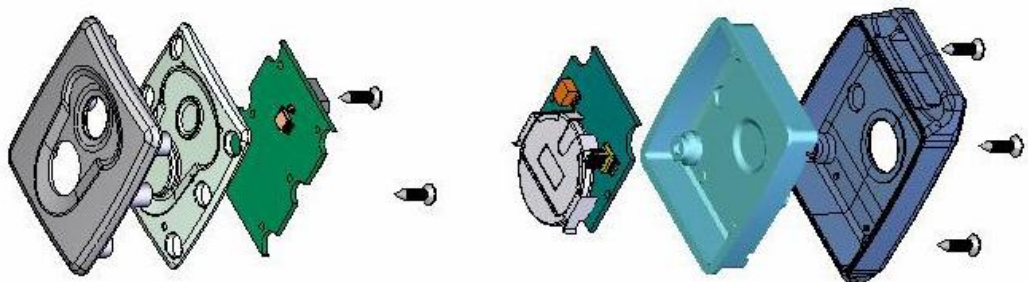
Version 2.60

2007/08/06

SYTAG245-TM-A Wristband Tag



1. Diagram



2. Features:

- Wristband design.
- Call button: Emergency reporting / Signal transmission / ON-OFF Tag.
- Remote ON/OFF Tag.
- Wireless Tag programming.
- Two colors LED visual indication: Generally, the emitting signal will glitter green light; when it's low battery or detect light sensor, it will glitter red sight.
- Built-in two thermal sensors for continuously monitoring the temperature of infants or patients. One thermal sensor detects the

skin temperature. The other detects the ambient temperature.

- Built-in light sensor for tamper proof.
- Buzzer : Remote active beep or click active beep.

3. How to replace battery:

---Loosen the screw to pull out the bracket of the battery carefully.

---Replace the battery and than put the bracket back to the case.

---Tighten the screw.

4. Set Parameters:

You can set TAG emitting frequency, receive frequency, ON/OFF Tag, LED indication and buzzer with SYRIS Xtive utility.

(Please refer to [Xtive Utility user manual](#))

5. Battery Life:

Battery type: Replaceable coin cell (CR2032 x1)

Battery life is affect by TAG emitting frequency and receives frequency. Increasing emitting/receives frequency will shorten the battery life.

Ex.

Battery life for 3 month setting :

Set TAG active time = 1 x 2.5 sec, Set Tag Receive Count =10

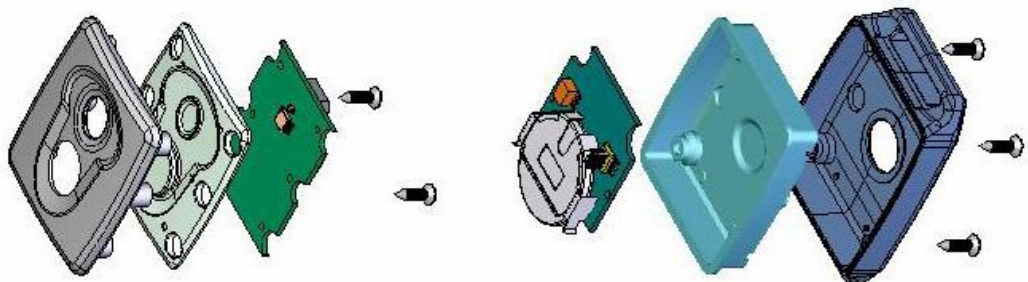
Battery life for 1 year setting :

Set TAG active time = 1 x 30 sec, Set Tag Receive Count =10

SYTAG245-TM-B Wristband Tag



1. Diagram



2. Features:

- Wristband design.
- Call button: Emergency reporting / Signal transmission / ON-OFF Tag.
- Remote ON/OFF Tag.
- Wireless Tag programming.
- Two colors LED visual indication: Generally, the emitting signal will glitter green light; when it's low battery or detect light sensor, it will glitter red sight.
- Built-in light sensor for tamper proof.

- Buzzer : Remote active beep or click active beep
2. How to replace battery:
 - Loosen the screw to pull out the bracket of the battery carefully.
 - Replace the battery and than put the bracket back to the case.
 - Tighten the screw.
 3. Set Parameters:

You can set TAG emitting frequency, receive frequency, ON/OFF Tag, LED indication and buzzer with SYRIS Xtive utility.

(Please refer to [Xtive Utility user manual](#))
 4. Battery Life:

Battery type: Replaceable coin cell (CR2032 x1)

Battery life is affect by TAG emitting frequency and receives frequency. Increasing emitting/receives frequency will shorten the battery life.

Ex.

Battery life for 2 month setting :

Set TAG active time = 1 x 2.5 sec, Set Tag Receive Count =10

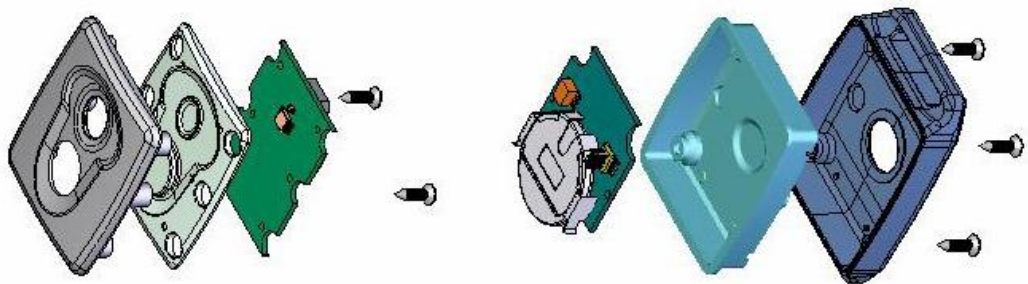
Battery life for 1 year setting :

Set TAG active time = 1 x 30 sec, Set Tag Receive Count =10

SYTAG245-TM-A03 Temperature Record Tag



1. Diagram



2. Features:

- Call button: Emergency reporting / Signal transmission / ON-OFF Tag.
- Remote ON/OFF Tag.
- Wireless Tag programming.
- Two colors LED visual indication: Generally, the emitting signal will glitter green light; when it's low battery or detect light sensor, it will glitter red sight.
- Built-in RTC (Real Time Clock)
- Temperature Sensor Range: -40 ~ 123.8°C
- Temperature accuracy: $\pm 0.5^{\circ}\text{C}$ @25°C
- Memory: 32K bytes for 5000 temperature data log
- Built-in light sensor for tamper proof.
- Buzzer : Remote active beep or click active beep.

- Support password protect
3. How to replace battery:
 - Loosen the screw to pull out the bracket of the battery carefully.
 - Replace the battery and than put the bracket back to the case.
 - Tighten the screw.
 4. Set Parameters:

You can set TAG emitting frequency, receive frequency, ON/OFF Tag, LED indication and buzzer with SYRIS Xtive utility.

(Please refer to [Xtive Utility user manual](#))

Battery Life:

Battery type: Replaceable coin cell (CR2032 x1)

Battery life is affect by TAG emitting frequency and receives frequency.

Increasing emitting/receives frequency will shorten the battery life.

Ex.

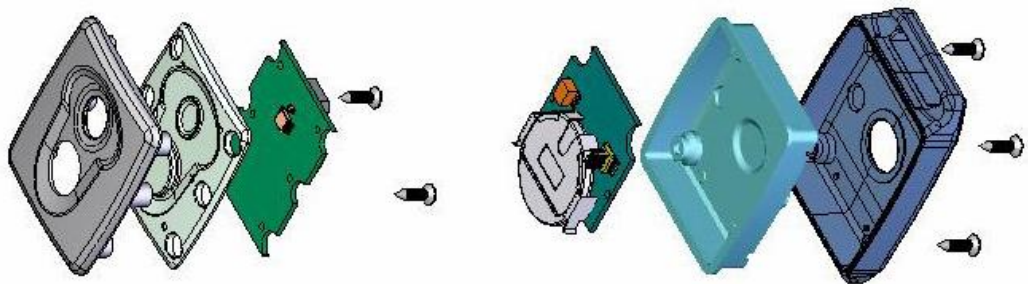
Battery life for 2 month setting :

Set TAG active time = 1 x 2.5 sec, Set Tag Receive Count =10

SYTAG245-TM-C Temperature Record Tag



3. Diagram



4. Features:

- Call button: Emergency reporting / Signal transmission / ON-OFF Tag.
- Remote ON/OFF Tag.
- Wireless Tag programming.
- Two colors LED visual indication: Generally, the emitting signal will glitter green light; when it's low battery or detect light sensor, it will glitter red sight.
- Built-in RTC (Real Time Clock) (TM-C03/CA3)
- Temperature Sensor Range: -40 ~ 123.8°C
- Temperature accuracy: $\pm 0.5^{\circ}\text{C}$ @25°C
- Memory: 32K bytes for 5000 temperature data log (TM-C03/CA3)
- Built-in light sensor for tamper proof.
- Buzzer : Remote active beep or click active beep.

- Built-in MEMS inertial sensor (Linear Accelerometer)
 - Support password protect(TM-C03/CA3)
5. How to replace battery:
- Loosen the screw to pull out the bracket of the battery carefully.
 - Replace the battery and than put the bracket back to the case.
 - Tighten the screw.
6. Set Parameters:
- You can set TAG emitting frequency, receive frequency, ON/OFF Tag, LED indication and buzzer with SYRIS Xtive utility.
(Please refer to [Xtive Utility user manual](#))

Battery Life:

Battery type: Replaceable coin cell (CR2032 x1)

Battery life is affect by TAG emitting frequency and receives frequency.

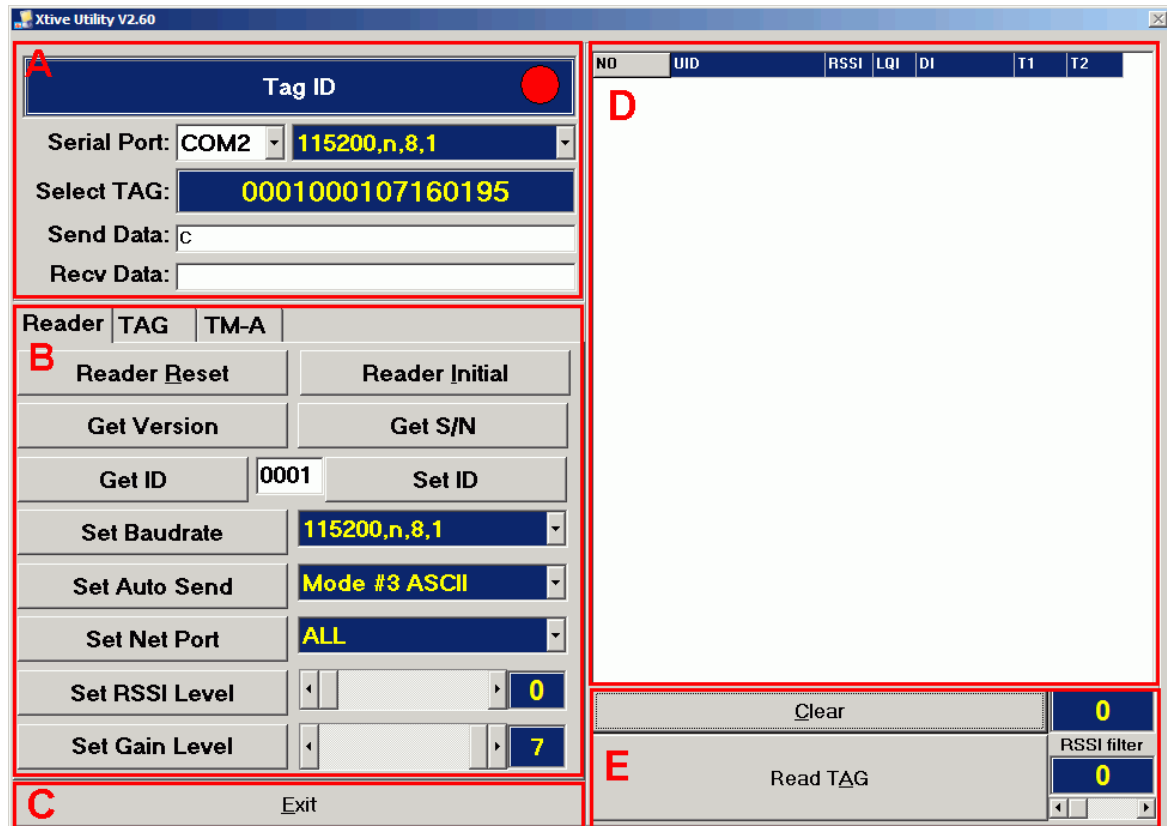
Increasing emitting/receives frequency will shorten the battery life.

Ex.

Battery life for 1.5 month setting :

Set TAG active time = 1 x 2.5 sec, Set Tag Receive Count =10

A. Xtive Utility program Introduction



A area : Setting/Reading status, COM port setting, Select TAG ID, Transmission data.

B area : Set Reader and Tag parameters.

C area : Exit Xtive Utility program.

D area : Received TAG information.

E area : Start/Stop Read TAG 、 Clear received data 、 Filter Tag RSSI

B. COM port setting

1. Xtive Utility program will detect available Serial Port automatically.

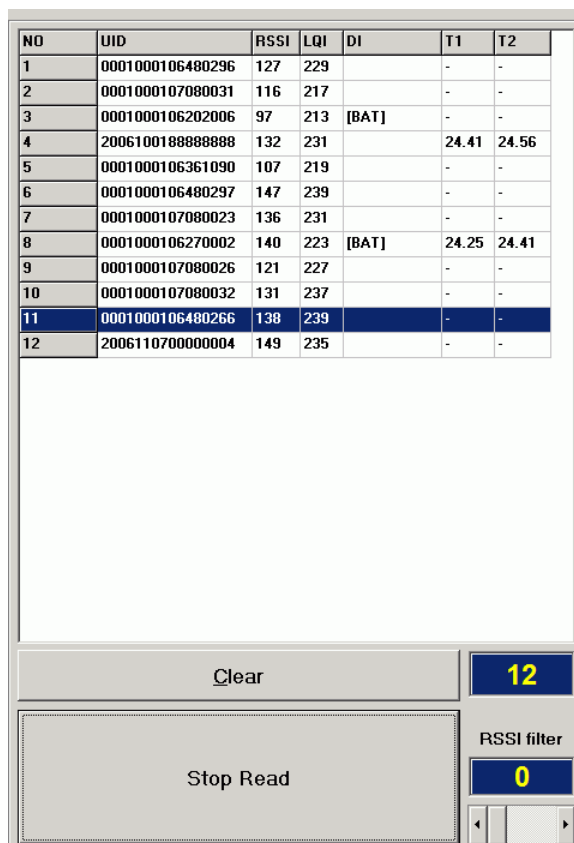


Serial Port: COM2

Select TAG: COM1
COM2

Send Data:

2. Select correct COM port to communicate with Reader.
3. If COM port select correctly, starting read TAG will receive Tag information from reader.



NO	UID	RSSI	LQI	DI	T1	T2
1	0001000106480296	127	229		-	-
2	0001000107080031	116	217		-	-
3	0001000106202006	97	213	[BAT]	-	-
4	2006100188888888	132	231		24.41	24.56
5	0001000106361090	107	219		-	-
6	0001000106480297	147	239		-	-
7	0001000107080023	136	231		-	-
8	0001000106270002	140	223	[BAT]	24.25	24.41
9	0001000107080026	121	227		-	-
10	0001000107080032	131	237		-	-
11	0001000106480266	138	239		-	-
12	2006110700000004	149	235		-	-

Clear

12

Stop Read

RSSI filter

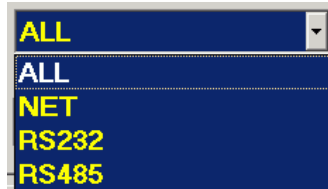
0

C. Reader Tab Introduction

Reader	TAG	TM-A	
Reader Reset			Reader Initial
Get Version			Get S/N
Get ID	0001		Set ID
Set Baudrate			115200,n,8,1
Set Auto Send			Mode #3 ASCII
Set Net Port			ALL
Set RSSI Level			0
Set Gain Level			7

1. **Reader Reset:** Reset online reader. Reader will warm restart.
2. **Reader Initial:** Initial online reader. All setting will set to factory default.
3. **Get version:** Get reader's firmware version.
4. **Get S/N:** Get reader's serial number.
5. **Get ID:** Get the ID of the reader.
6. **Set ID:** Input the number to ID field and then click "Set ID" to change Reader's ID.
7. **Set Baudrate:** Select communication Baudrate and then click "Set Baudrate" to change Reader's Baudrate.

8. **Set Auto Send:** Change data format of TAG from reader to PC client.
9. **Set Net Port :** Select communication port and than click “Set Net Port” to change Reader’s communication port.



Ex. Select NET to set transmit data via RJ-45.

Reader will transmit received data to NET, RS232 and RS485 when you set net port to ALL. But this mode will cause slow transmit speed.

10. **Set RSSI Level:** Adjust RSSI level (0~250) to filter TAG which have low RSSI signal in reader.
(This function was available in version 1.30 or above.)

Ex. Set RSSI Level to 120, Reader will receive tag which RSSI are stronger than 120.



11. **Set Gain Level :** Adjust Gain level (1~7) to control reader’s read range.
Level 7 is the max range (default setting), Level 1 is the shortest read range.



D. TAG Tab Introduction

Reader	TAG	TM-A	
1	X	2.5 Sec	
<input type="text"/> <input type="text"/> <input type="text"/>			Set TAG Active Time
TAG Off		TAG On	Get TAG Active Time
10			Set TAG Receive Count
0-255 (0=No Receive)			Get TAG Receive Count
1			TAG Beep
X 0.1 second			
<input checked="" type="checkbox"/> LED1		<input checked="" type="checkbox"/> LED2	TAG LED Mode
1			TAG LED
X 0.1 second			

Execute the function of this tab should select TAG first.

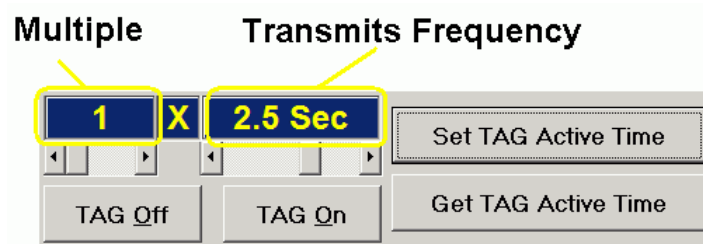
NO	UID	RSSI	LQI	DI	T1	T2
1	0001000106480296	119	235		-	-
2	0001000107080026	126	215		-	-
3	2006100188888888	123	233		25.06	25.19
4	0001000106480262	95	191		-	-
5	0001000106361090	114	225		-	-
6	0001000106480297	150	239		-	-
7	0001000107080023	157	235		-	-

“Select TAG” field will show current selected TAG ID.

Select TAG: **0001000106361090**

Set selected TAG parameters now.

▫ **Tag Parameters Introduction :**



1. **Set TAG Active Time:** Modify transmits frequency of selected TAG.

TAG Active Time = Multiple x Transmits Frequency

Ex. Set TAG active time to 1 minute:

Multiple (6) x Transmits Frequency (10 sec) = 60 sec

2. **Get TAG Active Time:** Get the current transmits frequency of selected tag.
3. **TAG Off:** Turn off selected TAG. TAG will stop signal transmission automatically.

(2K/2S TAG can't access this command)

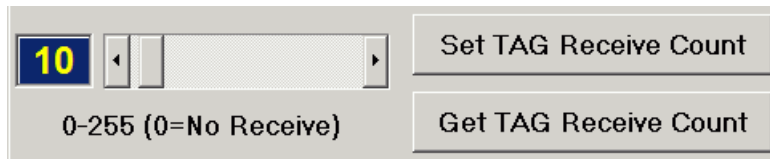


4. **TAG ON:** Turn on selected TAG. TAG will start signal transmission automatically.

(2K/2S TAG can't access this command)



Note: Click Call button will increase communication speed when you set selected TAG parameters.



The screenshot shows a control panel with a numeric input field containing the value '10'. Below the input field is the text '0-255 (0=No Receive)'. To the right of the input field are two buttons: 'Set TAG Receive Count' (top) and 'Get TAG Receive Count' (bottom).

5. **Set TAG Receive Count:** Modify receive frequency of selected TAG.

TAG receive frequency = TAG Active Time x Receive Count

Ex. TAG Active time = 1 x 2.5sec Receive Count =10

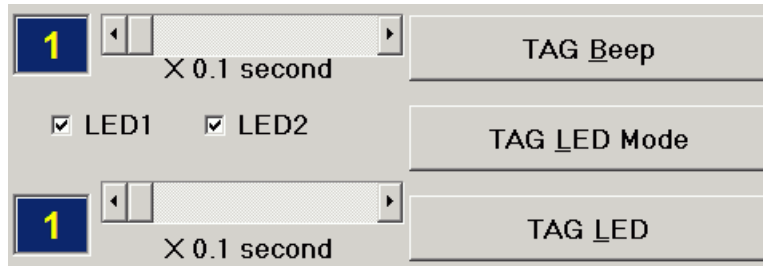
TAG receive frequency = 1 x 2.5sec x 10 = 25 sec

Note: Set TAG receive count=0, TAG will stop received any signal from reader.
Remove the TAG case and reload battery to set factory default will solve this problem.

6. **Get TAG Receive Count:** Get the current receiving count of selected TAG.

- TAG Beep:** Remote TAG to beep. Adjust the beep second to set time of beep on. (Only for Wristband TAG & Card TAG)

Ex. Set Beep second to 30 and then click "TAG Beep". TAG will beep for 3 seconds when received this command.



- TAG LED Mode:** Set selected TAG LED mode. (Only for Wristband TAG & Card TAG)
 - Mark "LED1" and then click "TAG LED Mode", LED flash indicates that tag is transmitting the signal.
 - Mark "LED2" and then click "TAG LED Mode", red LED on indicates the low battery.
- TAG LED:** Turn on the LED of selected TAG. Adjust the LED second to set time of LED on.

Ex. Set LED second to 30 and then click "TAG LED". TAG will turn on the LED for 3 seconds when received this command.

E. Received TAG Information Introduction

NO	UID	RSSI	LQI	DI	T1	T2
1	2006100188888888	121	211	[SENSOR]	25.91	25.75
2	0001000107080026	117	215		-	-
3	0001000106480263	101	215		-	-
4	0001000106361090	113	225		-	-
5	0001000106480296	116	223		-	-
6	0001000107063044	96	179		25.19	25.19
7	0001000107080072	105	217		-	-
8	0001000106202006	96	197	[BAT]	-	-
9	2006110700000004	154	229		-	-
10	0001000106361187	100	217	[BAT]	-	-
11	0001000106480266	141	237	[SW]	-	-
12	0001000106480267	94	217		-	-
13	0001000106480297	144	237		-	-

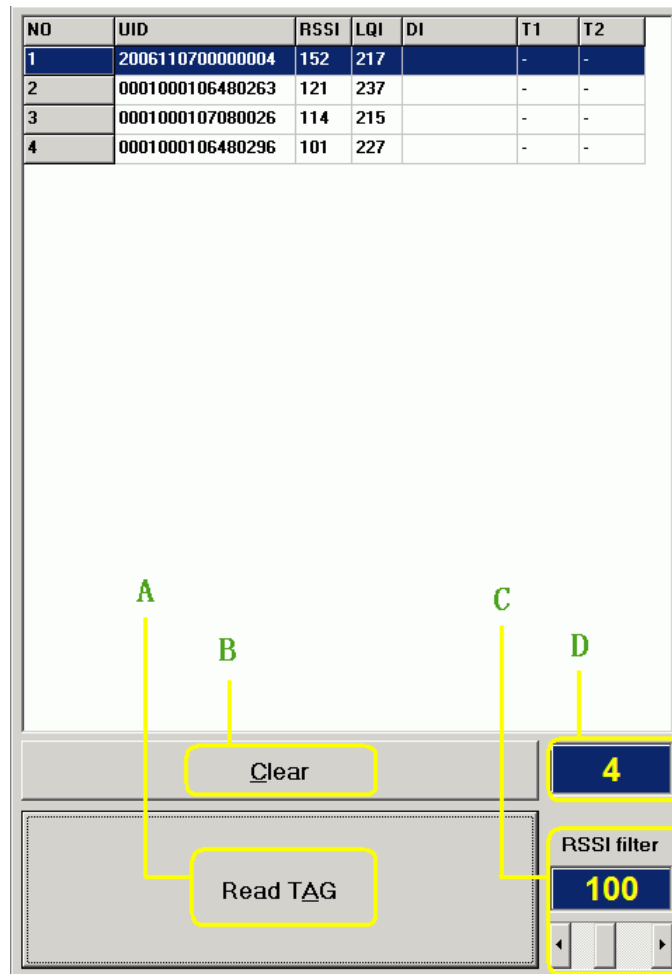
Start reading TAG, TAG information will show up on utility screen.

▫ Field Introduction:

1. **UID:** Tag's identification number.
2. **RSSI:** Received Signal Strength Indication (0-255). Reading range and RSSI are inverse proportion.
3. **LQI:** Link quality indicator (0-255).
4. **DI:** TAG status and indicator.
 [BAT] means TAG battery was low.
 [SW] means TAG call button was clicked.
 [SENSOR] means light sensor have detect light.
 (Only for Wristband TAG)
 [START] means TAG restart.
5. **T1:** Ambient temperature sensor (Only for Wristband TAG)
6. **T2:** Skin temperature sensor (Only for Wristband TAG)

Note: T1 / T2 / SENSOR are use for anti-tamper capability.

F. Other functions Introduction

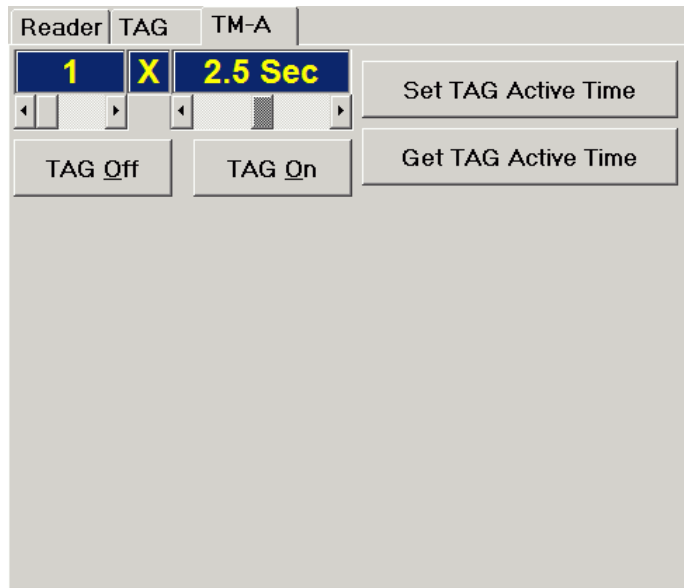


- A. Read TAG / Stop Read: Start/Stop to read TAG data.
- B. Clear: Clear received TAG data.
- C. RSSI filter: Adjust RSSI filter (0~255) to reject TAG which have low RSSI signal in this utility program.

Ex. Set RSSI filter to 100, utility program will show tag which RSSI stronger than 100.

- D. The count of received TAG.

G. TM-A Tab Introduction



This page is only use for TM-A TAG. Process is same with TAG tab.

FCC Caution:

1. The 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.

2. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

3. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.