

BIXOLON

RFID Programming Manual

XM7-40R

MOBILE PRINTER

Ver. 1.00



<http://www.bixolon.com>

Table of Contents

Copyright	3
Manual Information	4
1. Basic Theory.....	5
1-1 RFID Printer	5
1-2 RFID Transponder	5
1-3 RFID Label Selection	5
1-4 EPC GEN2 Chip Memory Structure.....	6
2. RFID Printer Settings	7
3. RFID Printer Operation Sequence.....	8
3-1 RFID Printer Operation Sequence.....	8
3-2 Write/Read Operation Status	8
3-3 RFID Data Writing Sample.....	8
4. RFID Label Design	10
4-1 ASCII Formatted Label Writing	11
4-2 Hexadecimal Formatted Label Writing	12
4-3 ASCII Format Reading & Sending to Host	13
4-4 Hexadecimal Format Reading & Sending to Host.....	13
5. RFID Commands	14
6. RFID Programming Samples	27
6-1 RFID Setting	27
6-2 EPC Data Writing	28
6-3 Hexadecimal Data Writing	29
6-4 ASCII Data Writing	30
6-5 Secured Writing (Write & Lock)	31
6-6 Secured Writing (Unlock & Write)	32

Copyright

© BIXOLON Co., Ltd. All rights reserved.

This user manual and all property of the product are protected under copyright law. It is strictly prohibited to copy, store, and transmit the whole or any part of the manual and any property of the product without the prior written approval of BIXOLON Co., Ltd.

The information contained herein is designed only for use with this BIXOLON product. BIXOLON is not responsible for any direct or indirect damages, arising from or related to use of this information.

- The BIXOLON logo is the registered trademark of BIXOLON Co., Ltd.
- All other brand or product names are trademarks of their respective companies or organizations.

BIXOLON maintains ongoing efforts to enhance and upgrade the functions and quality of all our products.

In the following, product specifications and/or user manual content may be changed without prior notice.

Manual Information

This RFID programming manual provides information to RFID Tag for commands that you enter and control. It describes how to use it.

Safety Symbol Information



Precaution &
Warning

It describes death, physical injuries, serious financial losses, and damage to data etc. that can be caused to the user.



Note

It provides additional information on the function and performance of the product.

1. Basic Theory

1-1 RFID Printer

- The RFID printer is a device that facilitates the encoding and printing of labels or tickets that are embedded with an HF or UHF frequency band RFID transponder.

1-2 RFID Transponder

- The RFID transponder is also referred to as the RFID tag or inlay, and is made up of an RFID chip (IC) bonded to an antenna.
The RFID chip (IC) contains an RF circuit, encoder, decoder, memory, etc.

1-3 RFID Label Selection

- When selecting RFID labels, the type and size of RFID transponder should be considered for effective encoding.

- 1) Select an RFID transponder fitted with an EPC GEN2 type UHF band chip.
- 2) Under 87mm RFID inlay tags are recommended.

1-4 EPC GEN2 Chip Memory Structure

GEN2 (EPC Class 1 Generation 2) Tag Memory Allocation

MEM BANK	MEM BANK NAME	MEM BANK BIT ADDRESS	BIT NUMBER														R/W ADDRESS
			15	14	13	12	11	10	9	8	7	6	5	4	3	2	
10	TID (ROM)	0x10 – 0x1F	0	0	0	1	MODEL NUMBER										2,3
		0x00 – 0x0F	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0
01	EPC (NVM)	0x70 – 0x7F	EPC[15:0]													14,15	
		0x60 – 0x6F	EPC[31:16]													12,13	
		0x50 – 0x5F	EPC[47:32]													10,11	
		0x40 – 0x4F	EPC[63:48]													8,9	
		0x30 – 0x3F	EPC[79:64]													6,7	
		0x20 – 0x2F	EPC[95:80]													4,5	
		0x10 – 0x1F	PROTOCOL-CONTROL BITS (PC)													2,3	
		0x00 – 0x0F	CRC-16													0,1	
00	RESERVED (NVM)	0x30 – 0x3F	ACCESS PASSWORD[15:0]													6,7	
		0x20 – 0x2F	ACCESS PASSWORD[31:16]													4,5	
		0x10 – 0x1F	KILL PASSWORD[15:0]													2,3	
		0x00 – 0x0F	KILL PASSWORD[31:16]													0,1	

- 1) The MEM BANK consists of 00 (Reserved), 01 (EPC), and 10 (TID), and may include a User Memory Field equipped tag in the case of special chips.
- 2) The RESERVED Field is designed for security purposes and the storage of an Access Password (4Byte) and a Kill Password (4Byte), whose default values are both saved as 00 00 00 00.
- 3) The TID Field contains the unique manufacturer ID data encoded and shipped by the manufacturer, and is not for use by regular users.
- 4) The EPC Field consists of 0~15 totaling 16 bytes, with 4~15 totaling 12 bytes available for the input of data desired by the user, and 0~3 totaling 4 bytes containing the CRC-16 and PC (Protocol Control) that must not be modified at will by the user.
- 5) To read/write data in the EPC Address, the >RFW command can be used.



If the first block number=10 and the number of blocks=6, reading/writing of the EPC Address 10~15 can be done.

2. RFID Printer Settings

After first installing the RFID label printer, make sure to perform the following steps 1~5.

1) RFID Transponder Selection

This step involves the selection of the RFID transponder type and entails the ">RFS" command.

2) Read/Write Retries (Retry Number Coding) Setting

This step involves the setting of the number of retries to execute with an RFID label when the initial writing of the RFID label fails, and entails the use of the ">RFS" or ">RR" command.

3) Number of Labels (Number of Labels Upon Retry) Setting

This step involves the setting of the number of labels for a retry when the initial writing of the RFID label fails, and entails the use of the ">RFS" or ">RR" command.

4) RF Send/Receive Power Setting

This step involves the setting of the sending/receiving power when reading or writing via the RFID transponder, and entails the use of the ">RFS" or ">RFP" command.

Ex.) >RFS,5,3,2,15

- 5: Transponder Type (5: GEN2)

- 3: Write/Read Retries

- 2: Number of Labels

- 15: Send/Receive Power

(0~30, higher the number the higher the power)

5) RFID Label Coding Position (Read/Write Position of Transponder) Setting

When using an RFID label for the first time with the printer, to determine the optimal position for RFID label coding (write/read), the automatic transponder position calculation function of the printer can be used as follows.

- Use Command

(1) Insert the RFID label into the printer and turn on the printer power.

(2) Send the ">RFCP" command to the printer.

(3) When the printer receives the ">RFCP" command, the optimal coding position is automatically calculated and subsequently saved on the printer. The saved value remains even when the printer is turned off, and is permanently stored.

3. RFID Printer Operation Sequence

3-1 RFID Printer Operation Sequence

- Start Printing → Print (Feed) → Stop when Reaching RFID Transponder Coding (Write/Read) Position → (Unlock RFID Transponder) → (Write RFID Data) → (Lock RFID Transponder) → Resume Printing → End Printing

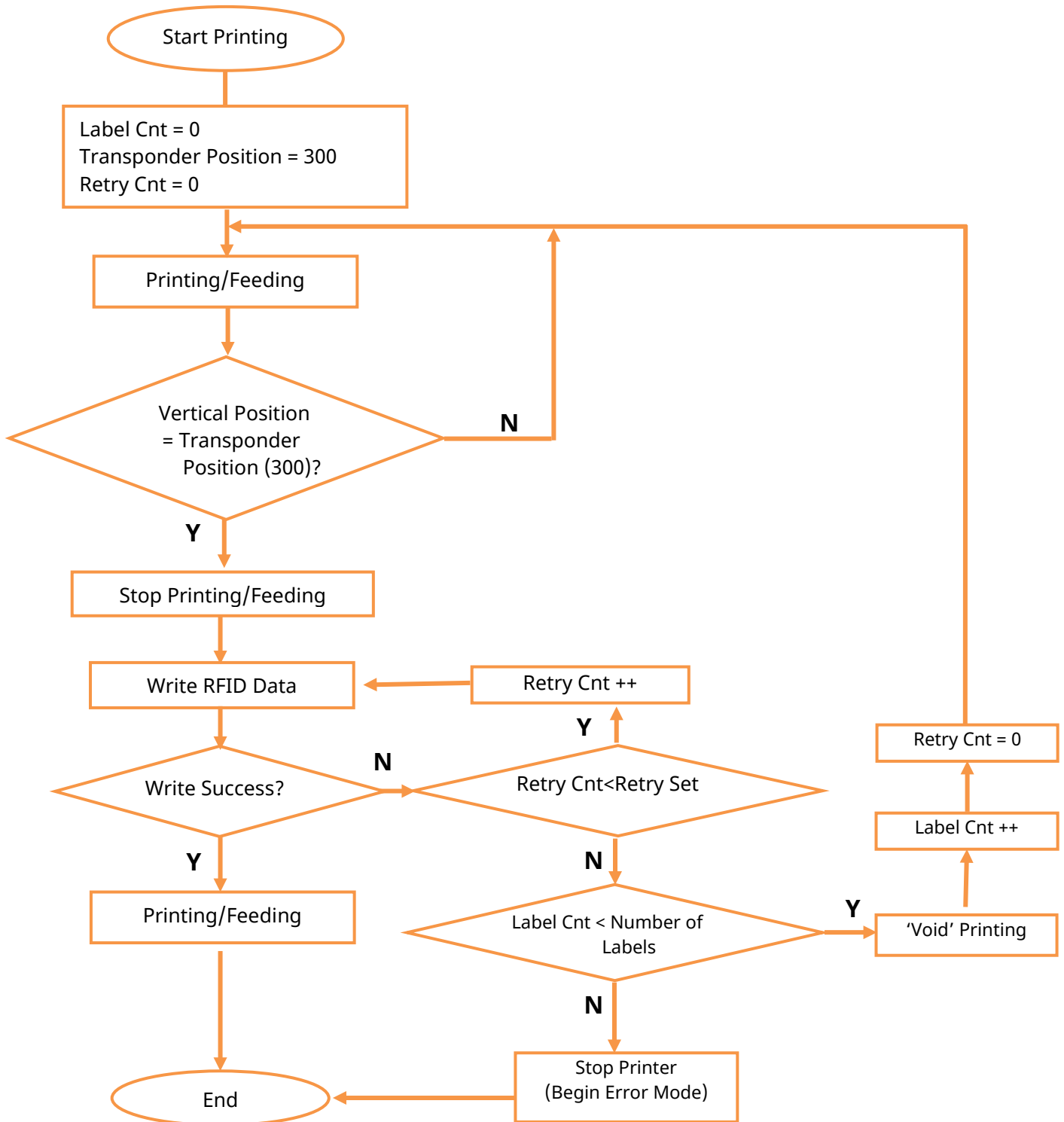
3-2 Write/Read Operation Status

- 1) Write/Read Successful : No additional notifications.
- 2) Write/Read Failed : The text 'void' is printed.
(Occurs with write failures in excess of the designated number of retry)

3-3 RFID Data Writing Sample

- 1) Basic Settings
 - Retry Set = 3
 - Number of Labels = 2
- 2) Command Coding Values
 - >RFS,5,3,2,15
 - T50,50,3,1,1,0,0,N,N,'Label Printer Test 1'
 - >RFW,A,4,12,'ABCDEFABCDEF'
 - P1

3) Flow Chart (TX40xR)



4. RFID Label Design

The RFID Label Design function can be used only after setting the following values.
(Refer to “3. RFID Printer Settings”)

- RFID Transponder Type (Tag Type)
- Number of Labels Upon Retry
- Number of coding Retries
- Sending/Receiving Power
- RFID Label Coding Position

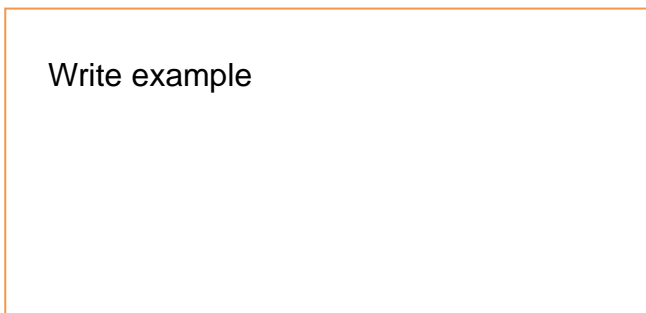
4-1 ASCII Formatted Label Writing

- Writing Labels of Gen2 96-bit Data in ASCII Format

1) Commands

Line	SLCS Command	Description
1	T100, 100, 3, 1, 1, 0, 0, N, N, 'Write example'	Print 'Write example' at the (100,100) point of the label
2	>RFW, A, 4, 12, 'ABCDEFABCDEF'	W, A: Write ASCII 4, 12: to 12 bytes (Writing is possible from Block 4 of the GEN2 Tag) Write Data: ABCDEFABCDEF
3	P1	Start printing

2) Printed Label



(Entered RFID Transponder Value: ABCDEFABCDEF)

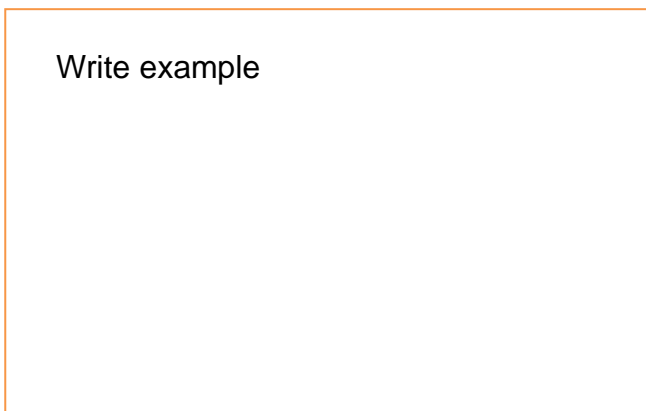
4-2 Hexadecimal Formatted Label Writing

- Writing Labels of Gen2 96-bit Data in Hexadecimal Format

1) Commands

Line	SLCS Command	Description
1	T100, 100, 3, 1, 1, 0, 0, N, N, 'Write example'	Print 'Write example' at the (100,100) point of the label
2	>RFW, H, 4, 12, '112233445566778899001122'	W, H: Write Hex 4, 12: 4 to 12 bytes (Writing is possible from Block 4 of the GEN2 Tag) Write Data: 112233445566778899001122
3	P1	Start printing

2) Printed Label



(Entered RFID Transponder Value: 112233445566778899001122)

4-3 ASCII Format Reading & Sending to Host

- Reading Data Stored on the RFID Transponder in ASCII Format & Sending to Host

1) Command

Line	SLCS Command	Description
1	>RFR, A, 4, 12, S	R, A: Read ASCII 4, 12: 4 to 12 bytes S: Send data to host

2) Execution Results

- Data Stored in RFID Transponder: ABCDEFABCDEF
- Data Sent to Host: ABCDEFABCDEF

4-4 Hexadecimal Format Reading & Sending to Host

- Reading Data Stored on the RFID Transponder in Hexadecimal Format & Sending to Host

1) Command

Line	SLCS Command	Description
1	>RFR, H, 4, 12, S	R, H: Read Hex 4, 12: 4 to 12 bytes S: Send data to host

2) Execution Results

- Data Stored in RFID Transponder: 112233445566778899001122
- Data Sent to Host: 112233445566778899001122

5. RFID Commands

>RFS - RFID Setup

Description

For setting the RFID transponder type, number of coding(write/read) retries, number of labels upon retry, and sending/receiving power

Syntax

>RFS, p1, p2, p3, p4

Parameters

p1: RFID Transponder Type

- 0 = none
 - 1 = ISO 18000-6 Type A
 - 2 = ISO 18000-6 Type B
 - 3 = EPC Class 0
 - 4 = EPC Class 1
 - 5 = EPC Class 1 Generation 2
- Default: 5

p2: Number of Coding Retries Upon Coding Failure (Write/Read Retries)

Can set from 0~10 times
Default: 3

p3: Number of Labels Upon Retry Following RFID Label Writing Failure
(Number of Labels)

Can set from 0~10 times
Default: 2

p4: Sending/Receiving Power Adjustment (0~30)

0: Minimum Output
30: Maximum Output
Default: 15



Must be executed when modifying the RFID label or using it for the first time.

Example

For GEN2 Tag, Number of coding Retries = 4, Number of Labels = 2,
Sending/Receiving Power = 15

>RFS, 5, 4, 2, 15

>RFCP - RFID Calibration of Transponder Position

Description

For calculating and saving the optimal coding position (read/write position of the transponder) of the RFID label on the printer and printing

Syntax

>RFCP

Examples

- After determining optimal coding position, for saving to the printer

>RFCP

Usage

- 1) Insert the RFID label in the printer and turn on the printer power.
- 2) Do Media Calibration and then recognize the RFID Label(Tag).
- 3) Send the ">RFCP" command to the printer.
- 4) When the printer receives the ">RFCP" command, the optimal coding position is automatically calculated and subsequently saved on the printer. The saved value remains even when the printer is turned off, and is permanently stored.



- The >RFI command can be used to send position values to the host.
- Must be used only after executing the ">RFS" command
- This process must be repeated each time a different RFID label type is used.

>RFP - Read/Write Power Control

Description

For setting the sending/receiving power (read/write power)

Syntax

>RFP, p1

Parameter

p1: Sending/Receiving Power Adjustment (0~30)

0: Minimum Output

30: Maximum Output

Default: 15

Example

For changing the sending/receiving power to 18

>RFP, 18

>RR - Set Write/Read Retries & Number of Labels

Description

For setting the number of retries as well as number of labels upon retry when read/write failures occur

Syntax

>RR, p1, p2

Parameters

p1: Number of Coding Retries Upon Coding Failure (Number of retry)

Default: 3

P2: Number of Labels Upon Retry Following RFID Label Writing Failure
(Number of Label)

Default: 2

Example

>RR, 5, 3 (5 retries, 3 labels)

>RFTP - Trans-Position

Description

For setting the RFID label coding position (read/write position of the transponder)

Syntax

>RFTP, p1

Parameter

p1: RFID Label Coding Position (Y-Axis Value)

Default: 0(dot)



- The RFTP command serves to modify the previously determined optimal coding position via the >RFTP position and should thus be used with extreme caution.
- When the RFID label coding position is not known with precision, the use of the >RFTP command is recommended.

Example

For setting the RFID label coding position to 400

>RFTP, 400

>RFES - Define EPC Data Structure

Description

For defining the EPC data structure for EPC data writing

Syntax

>RFESn, 'p1, p2, p3,.....p15'

Parameters

n : Total Bits of a Field

p1,....p15: Bits Per Field

Example

For total bits: 64bit,

field1: 2bit,

field2: 3bit,

field3: 14bit,

field4: 20bit,

field5: 25bit

>RFES64, '2, 3, 14, 20, 25'

>RFW, E, '0, 3, 12345, 454332, 22111221'



- The set EPC data structure is erased when the printer power is turned off.
- The EPC data structure must be set each time the printer power is reset.

>RF - RFID Read / Write

Description

For reading or writing RFID labels

Syntax

>RFn, p1, (p2), (p3), (p4), ('DATA')

Parameters

n: Function Selection

W = Write RFID Label

R = Read RFID Label

p1: Data Type

A = ASCII

H = Hexadecimal

E = EPC

U = User field Select

p2: Starting Block Number

Default: 4

p3: Number of Bytes for Reading or Writing

Default: 12 (*must be designated in units of 2 bytes*)

p4: Processing Method for Read Data (omit when writing)

S = Send Reading Value to Host

DATA: A (ASCII) = Enter data in ASCII format

H (Hexadecimal) = Enter data in Hex format

E (EPC) = Enter data in EPC format (must not be larger than the number of bits set per field)



- For the write command, writing does not begin directly after receiving the command but rather after the RFID coding position is reached following the commencement of printing via the P command.
- For the read command, reading begins after moving to the RFID coding position directly following receipt of the command.

Examples

• Writing

A (ASCII) : >RFW, A, 4, 12, '123456789012'
H (Hexadecimal) : >RFW, H, 4, 12, '123456789012123456789012'
E (EPC) : >RFES96,'16,16,16,16,16,16'
>RFW, E, '13000, 18, 33, 33, 33, 65034'

• Reading

>RFR, A, 4, 12, S (Reading value sent to host)
Value Stored in RFID Transponder: ABCDEFABCDEF
Data Sent to Host: ABCDEFABCDEF

>RFZ - RF Password

Description

For setting the RFID access password and kill password

Syntax

>RFZ, 'p1, p2, p3 , p4'

Parameters

p1: Old Access Password 4byte (Currently Active Access Password)

p2: Old Kill Password 4byte (Currently Active Kill Password)

p3: New Access Password 4byte (Modified Access Password)

p4: New Kill Password 4byte (Modified Kill Password)



- The desired passwords must be set each time the Lock command.
- The accurate tag passwords must be set each time the Unlock command. (Default Setting value : 00 00 00 00)

Example

>RFZ, '00000000, 00000000, 33333333, 33333333'

>RFLK - RF Lock

Description

For locking kill, access, and EPC data via the access password

- *Kill Password Read/Write Lock*
- *Access Password Read/Write Lock*
- *EPC Memory Write Lock*

Syntax

>RFLK

Example

For locking the kill, access, EPC data of a tag

```
>RFZ, '00000000, 00000000, 33333333, 33333333'
```

```
>RFLK
```

```
P1
```



- Must be used only after the >RFZ command is executed
- Excluding the kill, access, and EPC data, use the >RFLP command to lock the TID and user data.
- When printing labels and/or using the P command, the commands are executed at the RFID coding position.

>RFUL - RF Unlock

Description

For unlocking the locked kill, access, and EPC data via the access password

Syntax

>RFUL

Example

For unlocking the kill, access, EPC data of a tag

```
>RFZ, '00000000, 00000000, 33333333, 33333333'
```

```
>RFUL
```

```
P1
```



- Must be used only after the >RFZ command is executed
- Excluding the kill, access, and EPC data, use the >RFLP command to unlock the TID and user data.
- When printing labels and/or using the P command, the commands are executed at the RFID coding position.

>RFLP - RF Lock Payload

Description

For modifying the lock payload of a tag via the access password

Refer to the chart below to calculate the desired 3-byte value and modify the lock payload.

Lock-Command Payload

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	-	-	-	-	20	21	22	23
Access Action	EPC Action		TID Action		User Action		EPC Mask		TID Mask		User Mask		Kill Action						Kill Mask		Access Mask		

Masks and Associated Action Fields

Kill pwd		Access pwd		EPC memory		TID memory		User memory	
0	1	2	3	4	5	6	7	8	9
Skip/write	Skip/write	Skip/write	Skip/write	Skip/write	Skip/write	Skip/write	Skip/write	Skip/write	Skip/write
10	11	12	13	14	15	16	17	18	19
Pwd Read/write	Perma Lock	Pwd Read/write	Perma Lock	Pwd Write	Perma Lock	Pwd Write	Perma Lock	Pwd Write	Perma Lock

Lock action-field functionality

Pwd-write	Perma lock	Description
0	0	Associated memory bank is writeable from either the open or secured states
0	1	Associated memory bank is permanently writeable from either the open or Secured states and may never be locked
1	0	Associated memory bank is writeable from the secured state but not form The open state.
1	1	Associated memory bank is not writeable from any state.
Pwd read/write	Perma lock	Description
0	0	Associated password location is readable and writeable from either the open or secured states.
0	1	Associated password location is permanently readable and writeable from either the open or secured states and my never be locked
1	0	Associated password location is readable and writeable from the secured but not from the open states.
1	1	Associated password location is not readable writeable from any state.

Syntax

>RFLP, n, 'p1, p2, p3'

Parameters

n: Function Selection

L: Lock

U: Unlock

p1							p2							p3									
MSB				LSB			MSB				LSB			MSB				LSB					
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	-	-	-	-	20	21	22	23
Access		EPC		TID		User		EPC		TID		User		Kill						Kill		Access	
Action		Action		Action		Action		Mask		Mask		Mask		Action						Mask		Mask	
		n				n																	

Examples

1. Kill Password Read/Write Lock
Access Password Read/Write Lock
EPC Memory Write Lock

```
>RFZ, '00000000, 00000000, 33333333, 33333333'
```

```
>RFLP,L,'A0,82,0A'
```

```
P1
```

2. Kill Password Read/Write Unlock
Access Password Read/Write Unlock
EPC Memory Write Unlock

```
>RFZ, '00000000, 00000000, 33333333, 33333333'
```

```
>RFLP,U,'00,08,0A'
```

```
P1
```



- Must be used only after the >RFZ command is executed
- When using the P command, the command is executed at the RFID coding position.
- Due to complicated operation, the use of the >RFLK and >RFUL commands is recommended.

>RFI - RF Information

Description

For sending the current RFID settings information and historical data to the host

Syntax

>RFI, p1

Parameter

p1: Item

1: Tag Type

2: Sending/Receiving Power (Read/Write Power)

3: Coding Position (Read/Write Position of the Transponder)

4: Number of Retries

5: Number of Labels

Converted Value Format

Text String + 0x0d +0x0a

Example

>RFI, 1

Converted Value: GEN2 + 0x0d +0x0a

>RFI, 2

Converted Value: 20 + 0x0d +0x0a

6. RFID Programming Samples

6-1 RFID Setting

- 1) Insert the RFID label and turn on the printer power.
- 2) Use the **">RFS" Command** to set the RFID transponder type, transponder read/write position, error handling, and sending/receiving power.

Ex) >RFS, 5, 3, 2, 15

- 3) Execute Command(">RFCP") or Pause button to calculate the optimal RFID transponder coding position (read/write position of the transponder).

- Use Command

- (1) Insert the RFID label into the printer and turn on the printer power.
- (2) Send the ">RFCP" command to the printer.
- (3) When the printer receives the ">RFCP" command, the optimal coding position is automatically calculated and subsequently saved on the printer. The saved value remains even when the printer is turned off, and is permanently stored.



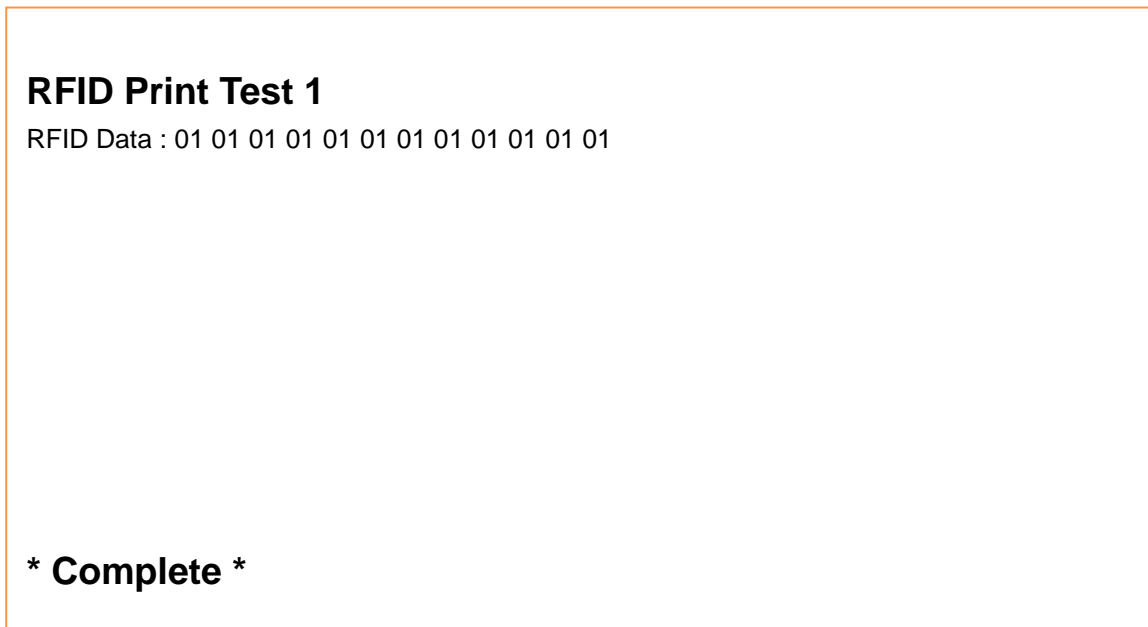
Must be executed when modifying the RFID label or using it for the first time.

6-2 EPC Data Writing

1) Commands

```
T56, 32, 4, 1, 1, 0, 0, N, B, 'RFID Print Test 1'  
T57, 81, 2, 1, 1, 0, 0, N, N, 'RFID Data: 01 01 01 01 01 01 01 01 01 01 01 01'  
>RFES96,'8,8,8,8,8,8,8,8,8,8'  
>RFE, E, '1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1' → EPC Data Writing  
T59, 351, 4, 1, 1, 0, 0, N, B, '*Complete *'  
P1
```

2) Printed Label



3) RFID Transponder Data

```
: 0x01 0x01 0x01 0x01 0x01 0x01 0x01 0x01 0x01 0x01 0x01 0x01  
(Hexadecimal 12 byte)
```

6-3 Hexadecimal Data Writing

1) Commands

T56, 32, 4, 1, 1, 0, 0, N, B, 'RFID Print Test 1'

T57, 81, 2, 1, 1, 0, 0, N, N, 'RFID Data: 11 22 33 44 55 66 77 88 99 AA BB CC'

>RFW, H, 4, 12, '112233445566778899AABBCC' → Hexadecimal Data Writing

T59, 351, 4, 1, 1, 0, 0, N, B, '* Complete *'

P1

2) Printed Label

RFID Print Test 1

RFID Data : 11 22 33 44 55 66 77 88 99 AA BB CC

*** Complete ***

3) RFID Transponder Data

: 0x11 0x22 0x33 0x44 0x55 0x66 0x77 0x88 0x99 0xAA 0xBB 0xCC

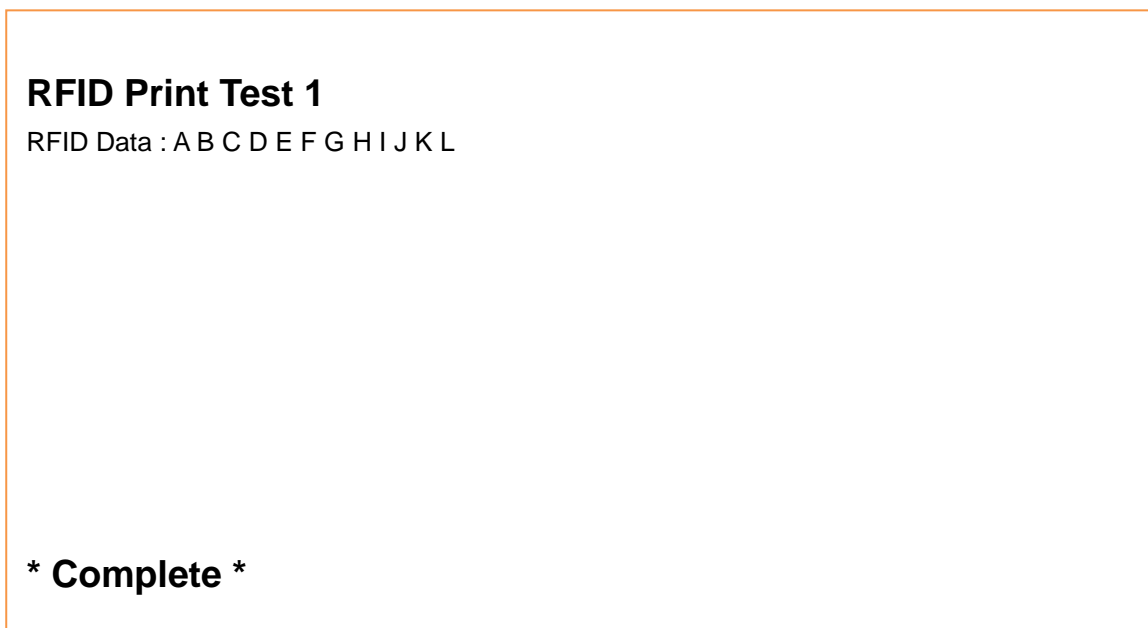
(Hexadecimal 12 byte)

6-4 ASCII Data Writing

1) Commands

T56, 32, 4, 1, 1, 0, 0, N, B, 'RFID Print Test 1'
T57, 81, 2, 1, 1, 0, 0, N, N, 'RFID Data: A B C D E F G H I J K L'
>RFW, A, 4, 12, 'ABCDEFGHijkl' → ASCII Data Writing
T59, 351, 4, 1, 1, 0, 0, N, B, '* Complete *'
P1

2) Printed Label



3) RFID Transponder Data

: 0x41 0x42 0x43 0x44 0x45 0x46 0x47 0x48 0x49 0x4A 0x4B 0x4C
(Hexadecimal 12 byte)

6-5 Secured Writing (Write & Lock)

1) Commands

>RFZ, '00000000, 00000000, 33333333, 33333333' → Access/Kill Password Modification
T56, 32, 4, 1, 1, 0, 0, N, B, 'RFID Write and Lock Test '
T57, 81, 2, 1, 1, 0, 0, N, N, 'RFID Data: 01 01 01 01 01 01 01 01 01 01 01 01'
>RFES96,'8,8,8,8,8,8,8,8,8,8'
>RFW, E, '1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1' → EPC Data Writing
>RFLK → Regular Locking of Kill, Access, and EPC Data
T59, 351, 4, 1, 1, 0, 0, N, B, '* Complete *'
P1

2) Printed Label

RFID Write and Lock Test

RFID Data : 01 01 01 01 01 01 01 01 01 01 01 01

*** Complete ***

3) RFID Transponder Data

: 0x01 0x01 0x01 0x01 0x01 0x01 0x01 0x01 0x01 0x01 0x01 0x01

(Hexadecimal 12 byte)

Kill, Access, and EPC Data Locked.

(Data cannot be modified unless first unlocked.)

6-6 Secured Writing (Unlock & Write)

1) Commands

```
>RFZ, '00000000, 00000000, 33333333, 33333333' → Access/Kill Password Modification
>RFUL      → Unlocking Locked Kill, Access, and EPC Data to Facilitate Writing
T56, 32, 4, 1, 1, 0, 0, N, B, 'RFID Unlock and Write Test '
T57, 81, 2, 1, 1, 0, 0, N, N, 'RFID Data: 01 01 01 01 01 01 01 01 01 01 01 01'
>RFES96,'8,8,8,8,8,8,8,8,8,8,8'
>RFW, E, '1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1' → EPC Data Writing
T59, 351, 4, 1, 1, 0, 0, N, B, '* Complete *'
P1
```

2) Printed Label

RFID Unlock and Write Test

RFID Data : 01 01 01 01 01 01 01 01 01 01 01 01

*** Complete ***

3) RFID Transponder Data

: 0x01 0x01 0x01 0x01 0x01 0x01 0x01 0x01 0x01 0x01 0x01 0x01

(Hexadecimal 12 byte)

