marson

MR11A7

Mobile UHF Reader

Serial Commands Manual

V 1.4

2019 / 02 / 20

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Introduction

This document describes the serial commands in ASCII equivalents for host device to program MR11A7 over BT SPP / VCP profile. All commands can be sent from PC/Android using serial communication software.

Packet Format

The following table shows the general packet format of serial commands sent from host to MR11A7.

Start	Length	Function	Status	Parameter	Checksum	Stop
1 Byte	1 Byte	4 Bytes	1 Byte	(variable)	1 Byte	1 Byte
<STX>	<L>	MXXX	R/W	Parameters	<BCC>	<ETX>

Start:

One byte of data, STX(0x02), as the initial data of a command/response string.

It will be represented as <STX> in the following content.

Length:

One byte of data that indicates the length of a complete command string including Start, Length, Option, Status, Parameter, Checksum and Stop. It ranges from 10 to 254(0x0A~0xFE)

It will be represented as <L> in the following content.

Function:

Four bytes of data that always starts with an 'M'. This field represents a function.

Status:

One byte of data, R(0x52) representing read operation or W(0x57) representing write operation.

Parameter:

Variable byte of data, which specifies the detailed instruction of a function within a command string to be programmed to MR11A7, or a detailed message of a response string from MR11A7. When multiple parameters are being sent, a comma ',' (0x2C) must be inserted between parameters.

In the case of write operation (Status = W), MR11A7 will return only be one byte of data, which is can be either one of the following, in the parameter field:

(a) <ACK>(0x06): indicates the write operation is successful.

(b) <NAK>(0x15): indicates the write operation is not successful.

In the case of read operation (Status = R), the parameter field of a response string from MR11A7 will be either of the following:

(a) (variable data): indicates the read operation is successful, and also represents the current settings of a function.

(b) <NAK>(0x15): indicates the read operation is not successful.

Checksum:

One byte of data, the end result of Xor calculation of each data within Length, Function, Status and Parameter field.

It will be represented as <BCC> in the following content.

Stop:

One byte of data, ETX(0x03), as the ending data of a command/response string.

It will be represented as <ETX> in the following content.

Example:

Command String (Host to MR11A7):

ASCII: <STX><0x0A>**MDEFW**<0x30><0x67><ETX>

Hex: 02 0A **4D 44 45 46** 57 30 67 03

Response String (MR11A7 to Host):

ASCII: <STX><0x0A>**MDEFW**<ACK><0x51><ETX>

Hex: 02 0A **4D 44 45 46** 57 06 51 03

Maximum Delay Time

If MR11A7 is connected to host device over BT SPP profile, the maximum delay time, during which MR11A7 receives command string and then sends response string back to host device, can be either 1.5 second or 0.5 second depending on the Functions:

1.5 second maximum delay time:

Function = **MC01, MC02, MC03, MC04, MCET, MCPS, MCKL** (functions that start with "MC")

0.5 second maximum delay time:

Function = All the other functions that do not start with "MC"

Parameter Menus

The following content describes all the available parameters of MR11A7 supported by RFID utility that can be programmed by the Host over BT SPP profile or USB VCP (Configuration Mode).

Default

Function = **MDEF**

Status = W

Parameter = 0(0x30)

Command String (Host to MR11A7):

      `<STX><0x0A>MDEFW0<BCC><ETX>`

Response String (MR11A7 to Host):

      `<STX><0x0A>MDEFW<ACK><BCC><ETX>`

*Note: During BT SPP mode, BT-ID (Function = MB01), BT-Pin-Code (Function = MB03) and Communication Interface (Function = MG01) are not programmable.

*Note: Also configurable via RFID Utility > Toolbar >
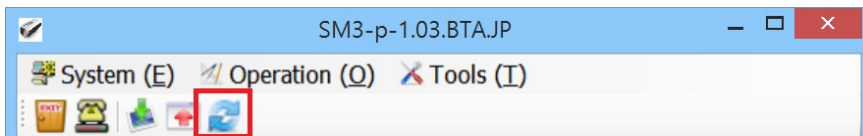
Check Firmware Version

Function = **MVER**

Status = R

Parameter = 0(0x30)

Command String (Host to MR11A7):

      `<STX><0x0A>MVERR0<BCC><ETX>`

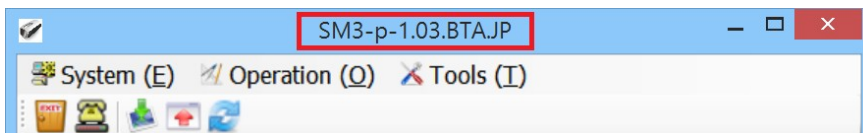Response String (MR11A7 to Host):

      `<STX><L>MVERRFirmware_Version<BCC><ETX>`

*Note: <L> here is a variable depending on the length of a complete response string.

*Note: Firmware version is also displayed on the title bar of RFID Utility

Operation Mode

Function = **MR01**

Status = W or R

Parameter = One byte of data, X, representing an option of Operation Mode (Status = W), or 0(0x30) (Status = R)

   X = <0x30>, **Trigger Mode** (Default)

   X = <0x31>, Auto Mode

   X = <0x32>, Test 5-sec Scan (for Battery Life test purpose only; MR11A7 scans for every 5 seconds.

When Status = W

Command String (Host to MR11A7):

   <STX><0x0A>**MR01**WX<BCC><ETX>

Response String (MR11A7 to Host):

   <STX><0x0A>**MR01**W<ACK><BCC><ETX>

When Status = R

Command String (Host to MR11A7):

   <STX><0x0A>**MR01**R0<BCC><ETX>

Response String (MR11A7 to Host):

   <STX><0x0A>**MR01**RX<BCC><ETX>

   *Note: Also configurable via RFID Utility > UHF-RFID settings > Operation Mode

⊟ ▣ UHF-RFID settings
   📄 Operation Mode : Trigger Mode
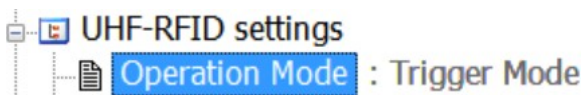
Read Mode

Function = **MR02**

Status = W or R

Parameter = One byte of data, X, representing an option of Read Mode (Status = W), or 0(0x30) (Status = R)

   X = <0x30>, **Single Tag Read** (Default)

   X = <0x31>, Multiple Tag Read

When Status = W

Command String (Host to MR11A7):

   <STX><0x0A>**MR02**WX<BCC><ETX>

Response String (MR11A7 to Host):

   <STX><0x0A>**MR02**W<ACK><BCC><ETX>

When Status = R

Command String (Host to MR11A7):

    <STX><0x0A>**MR02**R0<BCC><ETX>

Response String (MR11A7 to Host):

    <STX><0x0A>**MR02**RX<BCC><ETX>

*Note: Also configurable via RFID Utility > UHF-RFID settings > Read Mode

Tag Info

Function = **MR03**

Status = W or R

Parameter = One byte of data, X, representing an option of Tag Info (Status = W), or 0(0x30) (Status = R)

    X = <0x30>, EPC Code

    X = <0x31>, TID

    X = <0x32>, **EPC Code and TID** (Default) (Only applicable when Read Mode = Single-Tag Read)

    X = <0x33>, User Memory (Only applicable when Read Mode = Single-Tag Read)

When Status = W

Command String (Host to MR11A7):

    <STX><0x0A>**MR03**WX<BCC><ETX>

Response String (MR11A7 to Host):

    <STX><0x0A>**MR03**W<ACK><BCC><ETX>

When Status = R

Command String (Host to MR11A7):

    <STX><0x0A>**MR03**R0<BCC><ETX>

Response String (MR11A7 to Host):

    <STX><0x0A>**MR03**RX<BCC><ETX>

*Note: Also configurable via RFID Utility > UHF-RFID settings > Read Mode > Tag Info
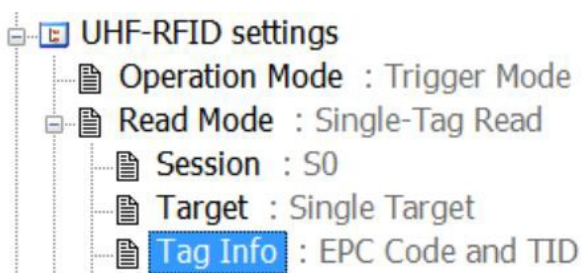
Tag-List Counter

Function = **MR04**

Status = W or R

Parameter = Two bytes of data X, representing an option of Tag-List Counter of a range from 1
to 128 (Default is **64**) (Status = W), or one byte of data, 0(0x30) (Status = R)

*Note: When sending command string, each Hex digit (half a byte) must be treated as 1 byte. For example, if
Tag-List Counter is 31, which is <0x1F> in Hex, it should be converted into <0x31><0x46> as X.

When Status = W
Command String (Host to MR11A7):
    <STX><0x0B>**MR04**WX<BCC><ETX>
Response String (MR11A7 to Host):
    <STX><0x0A>**MR04**W<ACK><BCC><ETX>

When Status = R
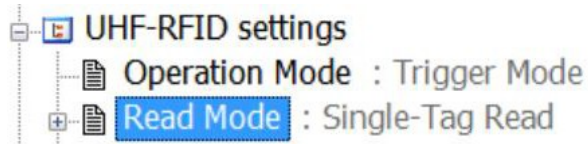Command String (Host to MR11A7):
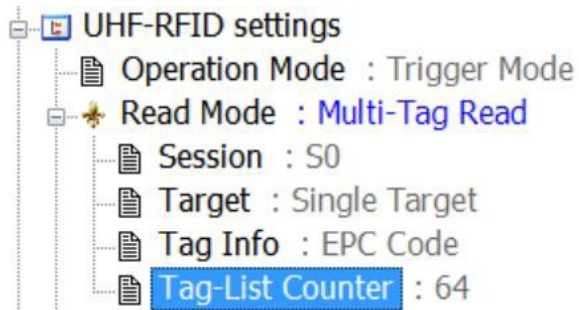   <STX><0x0A>**MR04**R0<BCC><ETX>
Response String (MR11A7 to Host):
    <STX><0x0B>**MR04**RX<BCC><ETX>

*Note: Also configurable via RFID Utility > UHF-RFID settings > Read Mode > Tag List Counter

- UHF-RFID settings
  - Operation Mode : Trigger Mode
  - Read Mode : Multi-Tag Read
    - Session : S0
    - Target : Single Target
    - Tag Info : EPC Code
    - Tag-List Counter : 64

Data Output Format -1

Function = **MR06**

Status = W or R

Parameter = 11 bytes of data, $X_1,X_2,X_3,X_4,X_5,X_6,X_7,X_8,X_9,X_{10},X_{11}$, each separated by a comma (Status = W),
or one byte of data, 0(0x30) (Status = R)

X_1 = <0x30>, **Simple Cascade** (Default) or <0x31>, Full Description

X_2 = Time Log Data

X_3 = Time Log Caption

X_4 = RSSI Data

X_5 = RSSI Caption

X_6 = EPC Scheme Data

X_7 = EPC Scheme Caption

X_8 = **EPC Code Data**

X_9 = EPC Code Caption

X_{10} = **TID Data**

X_{11} = TID caption

When $X_2,X_3,X_4,X_5,X_6,X_7,X_8,X_9,X_{10},X_{11}$ = <0x30>, it means Disable; <0x31> means Enable

(By default $X_2,X_3,X_4,X_5,X_6,X_7,X_9,X_{11}$ = <0x30>, X_8, X_{10} = <0x31>)

When Status = W

Command String (Host to MR11A7):

<STX><0x1E>**MR06**W$X_1,X_2,X_3,X_4,X_5,X_6,X_7,X_8,X_9,X_{10},X_{11}$<BCC><ETX>

Response String (MR11A7 to Host):

<STX><0x0A>**MR06**W<ACK><BCC><ETX>
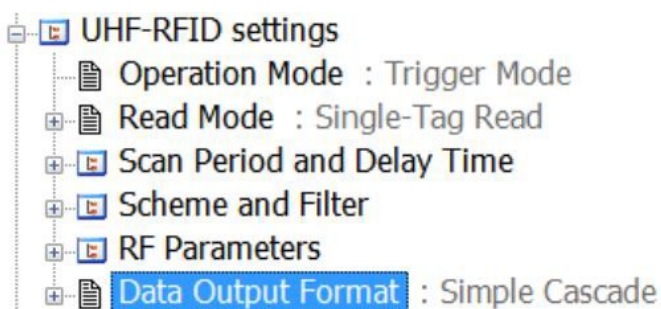

When Status = R

Command String (Host to MR11A7):

<STX><0x0A>**MR06**R0<BCC><ETX>

Response String (MR11A7 to Host):

<STX><0x1E>**MR06**R$X_1,X_2,X_3,X_4,X_5,X_6,X_7,X_8,X_9,X_{10},X_{11}$<BCC><ETX>

*Note: Also configurable via RFID Utility > UHF-RFID settings > Data Output Format

Data Output Format -2

Function = **MR07**

Status = W or R

Parameter = 7 bytes of data, $X_1,X_2,X_3,X_4,X_5,X_6,X_7$, each separated by a comma (Status = W), or one byte of
data, 0(0x30) (Status = R)

    X_1 = PC (Protocol Control) Data

    X_2 = PC (Protocol Control) Caption

    X_3 = CRC (Cyclic Redundancy Check) Data

    X_4 = CRC (Cyclic Redundancy Check) Caption

    X_5 = User Memory Data

    X_6 = User Memory Caption

    X_7 = Data Content, which determines whether to conduct Hex to Character conversion

    When $X_1,X_2,X_3,X_4,X_5,X_6,X_7$ = <0x30> (Default), it means Disable; <0x31> means Enable

When Status = W

Command String (Host to MR11A7):

    <STX><0x10>**MR07**WX_1,X_2,X_3,X_4<BCC><ETX>

Response String (MR11A7 to Host):

    <STX><0x0A>**MR07**W<ACK><BCC><ETX>

When Status = R

Command String (Host to MR11A7):

    <STX><0x0A>**MR07**R0<BCC><ETX>

Response String (MR11A7 to Host):

    <STX><0x10>**MR07**RX_1,X_2,X_3,X_4<BCC><ETX>

*Note: Also configurable via RFID Utility > UHF-RFID settings > Data Output Format

- UHF-RFID settings
  - Operation Mode : Trigger Mode
  - Read Mode : Single-Tag Read
  - Scan Period and Delay Time
  - Scheme and Filter
  - RF Parameters
  - Data Output Format : Simple Cascade

Error Message

(Only applicable when Read Mode = Single Tag Read, Tag Info = User Memory)

Function = **MR08**

Status = W or R

Parameter = One byte of data, X , representing the status of Error Message (Status = W), or 0(0x30) (Status = R)

    X = <0x30>, **Disable** (Default)

    X = <0x31>, Enable

When Status = W

Command String (Host to MR11A7):

    <STX><0x0A>**MR08**WX<BCC><ETX>

Response String (MR11A7 to Host):

    <STX><0x0A>**MR08**W<ACK><BCC><ETX>

When Status = R

Command String (Host to MR11A7):

    <STX><0x0A>**MR08**R0<BCC><ETX>

Response String (MR11A7 to Host):

    <STX><0x0A>**MR08**RX<BCC><ETX>

***Note:** Also configurable via RFID Utility > UHF-RFID settings > Data Output Format > Error Message

No Tag Message

(Only applicable when Operation Mode = Trigger Mode)

Function = **MR09**

Status = W or R

Parameter = One byte of data, X, representing the status of No Tag Message (Status = W), or 0(0x30)

(Status = R)

X = <0x30>, Disable (Default)

X = <0x31>, Enable

When Status = W

Command String (Host to MR11A7):

<STX><0x0A>**MR09**WX<BCC><ETX>

Response String (MR11A7 to Host):

<STX><0x0A>**MR09**W<ACK><BCC><ETX>
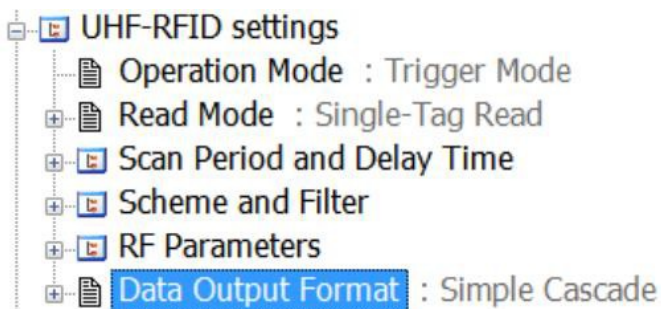

When Status = R

Command String (Host to MR11A7):

<STX><0x0A>**MR09**R0<BCC><ETX>

Response String (MR11A7 to Host):

<STX><0x0A>**MR09**RX<BCC><ETX>

*Note: Also configurable via RFID Utility > UHF-RFID settings > Data Output Format > No Tag Message

UHF-RFID settings
- Operation Mode : Trigger Mode
- Read Mode : Single-Tag Read
- Scan Period and Delay Time
- Scheme and Filter
- RF Parameters
- Data Output Format : Simple Cascade
  - Data Content : Hexadecimal
  - Time Log Data : Disable
  - RSSI Data : Disable
  - User Memory Data : Disable
  - Error Message : Disable
  - No Tag Message : Disable

Scan Period & Delay Time

Function = **MR13**

Status = W or R

Parameter = 2 variables, X_1,X_2, separated by a comma, of 4 bytes of data in total (Status = W), or one byte
of data, 0(0x30) (Status = R)

X_1 = Scan Period, 2 bytes of data, range = 0 ~ 255(0x00~0xFF), unit = Second.

X_2 = Delay Time, 2 bytes of data, range = 0 ~ 15(0x00~0x0F), unit = 100mS.

*Note: When sending command string, each Hex digit (half a byte) must be treated as 1 byte. For example, if
Scan Period is 60 seconds, which is <0x3C> in Hex, it should be converted into <0x33><0x43> as X_1. If Delay
Time is 10 x 100mS, which is <0x0A> in Hex, it should be converted into <0x30><0x41> as X_2.

When Status = W

Command String (Host to MR11A7):

<STX><0x0D>**MR13**WX_1,X_2<BCC><ETX>

Response String (MR11A7 to Host):

<STX><0x0A>**MR13**W<ACK><BCC><ETX>

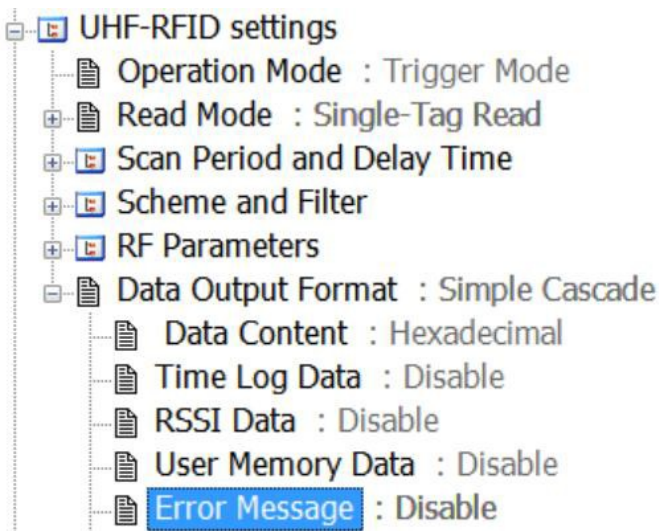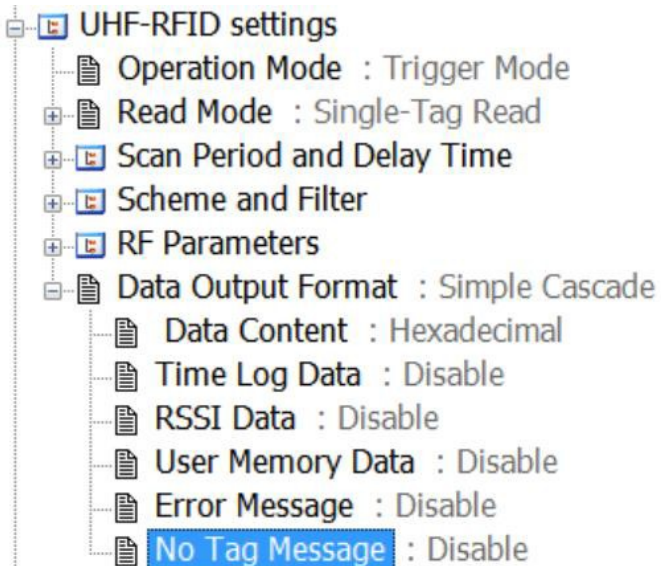When Status = R

Command String (Host to MR11A7):

<STX><0x0A>**MR13**R0<BCC><ETX>

Response String (MR11A7 to Host):

<STX><0x0D>**MR13**RX_1,X_2<BCC><ETX>

*Note: Also configurable via RFID Utility > UHF-RFID settings > Scan Period and Delay Time
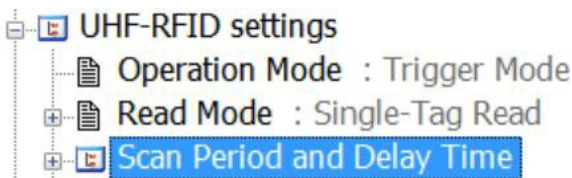
EPC Scheme Tag & Affected Scheme of Filters

Function = **MR17**

Status = W or R

Parameter = 2 variables, X_1,X_2, separated by a comma, of 6 bytes of data in total (Status = W), or one byte of data, X_1(0x30 or 0x31) (Status = R)

X_1 = EPC Scheme Tag or Affected Scheme of Filters, 1 byte of data

X_1 = <0x30>, EPC Scheme Tag

X_1 = <0x31>, Affected Scheme of Filters

X_2 = EPC Scheme and Status, 5 bytes of data, range = 0 ~ 255(<0x30><0x30>~<0x46><0x46>)

It is originally "1111 1111 1111 1111 1100" (shown below as $P_1P_2P_3P_4$ $P_5P_6P_7P_8$ $P_9P_{10}P_{11}P_{12}$ $P_{13}P_{14}P_{15}P_{16}$ $P_{17}P_{18}P_{19}P_{20}$) in binary format, with each digit representing the status of a EPC Scheme Tag, and is converted into Hex as 'FFFF8', or <0x46><0x46><0x46><0x46><0x38>.

P_1 = SGTIN-96 , P_2 = SGTIN-198, P_3 = SSCC-96, P_4 = SGLN-96,

P_5 = SGLN-195, P_6 = GRAI-96, P_7 = GRAI-170, P_8 = GIAI-96,

P_9 = GIAI-202, P_{10} = GID-96, P_{11} = GSRN-96, P_{12} = GDTI-96,

P_{13} = GTDI-113, P_{14} = ADI-var, P_{15} = CPI-96, P_{16} = CPI-var,

P_{17} = USDoD, P_{18} = Other, P_{19} = Reserved, P_{20} = Reserved

When P = <0x30>, it means Disable (for a specific EPC Scheme Tag)

When P = <0x31>, it means Enable (for a specific EPC Scheme Tag)

When Status = W

Command String (Host to MR11A7):

<STX><0x10>**MR17**WX_1,X_2<BCC><ETX>

Response String (MR11A7 to Host):

<STX><0x0A>**MR17**W<ACK><BCC><ETX>

When Status = R

Command String (Host to MR11A7):

<STX><0x0A>**MR17**RX_1<BCC><ETX>

Response String (MR11A7 to Host):

<STX><0x10>**MR17**RX_1,X_2<BCC><ETX>

*Note: Also configurable via RFID Utility > UHF-RFID settings > Scheme and Filter
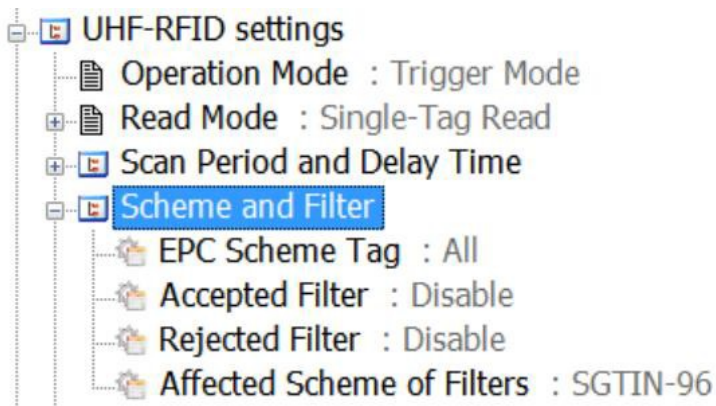
Accepted Filter & Rejected Filter

Function = **MR18**

Status = W or R

Parameter = 6 variables, X_1,X_2,X_3,X_4,X_5,X_6, each separated by a comma (Status = W), or one byte of data,

X_1(0x30 or 0x31) (Status = R)

X_1 = Accepted Filter or Rejected Filter, 1 byte of data

X_1 = <0x30>, Accepted Filter

X_1 = <0x31>, Rejected Filter

X_2 = Filter Status, 1 byte of data

X_2 = <0x30>, Disable

X_2 = <0x31>, Enable

X_3 = <0x32>, Enable-Range

X_3 = Start Bit of EPC Code, 2 bytes of data, range = 0,4,8,16…252(<0x30><0x30>~<0x46><0x43>)

X_3 = <0x30><0x30>, 0

X_3 = <0x30><0x34>, 4

X_3 = <0x30><0x38>, 8

X_3 = <0x31><0x32>, 12

…..

…..

X_3 = <0x46><0x43>, 252

X_4 = Length of Filtered Data, 2 bytes of data, range = 0,4,8,16…252(<0x30><0x30>~<0x46><0x43>)

X_3 = <0x30><0x30>, 0

X_3 = <0x30><0x34>, 4

X_3 = <0x30><0x38>, 8

X_3 = <0x31><0x32>, 12

…..

…..

X_3 = <0x46><0x43>, 252

X_5 = Pattern1, variable data based on user demand. This pattern is used when X_2 = <0x31> or <0x32>

X_6 = Pattern2, variable data based on user demand. This pattern is used only when X_2 = <0x32>

*Note: When sending command string, each Hex digit (half a byte) must be treated as 1 byte. For example, if Pattern1 is <0x30><0x31> in Hex, it should be converted into <0x33><0x30><0x33><0x31> as X_5 If Pattern2 is <0x32><0x33> in Hex, it should be converted into <0x33><0x32><0x33><0x33> as X_6.

When Status = W

Command String (Host to MR11A7):

<STX><L>**MR18**WX$_1$,X$_2$,X$_3$,X$_4$,X$_5$,X$_6$<BCC><ETX>

Response String (MR11A7 to Host):

<STX><0x0A>**MR18**W<ACK><BCC><ETX>

*Note: <L> here is a variable depending on the length of a complete command string.

When Status = R

Command String (Host to MR11A7):

<STX><0x0A>**MR18**RX$_1$<BCC><ETX>

Response String (MR11A7 to Host):

<STX><L>**MR18**RX$_1$,X$_2$,X$_3$,X$_4$,X$_5$,X$_6$<BCC><ETX>

*Note: <L> here is a variable depending on the length of a complete response string.

*Note: Also configurable via RFID Utility > UHF-RFID settings > Scheme and Filter

- UHF-RFID settings
  - Operation Mode : Trigger Mode
  - Read Mode : Single-Tag Read
  - Scan Period and Delay Time
  - Scheme and Filter
    - EPC Scheme Tag : All
    - Accepted Filter : Disable
    - Rejected Filter : Disable
    - Affected Scheme of Filters : SGTIN-96
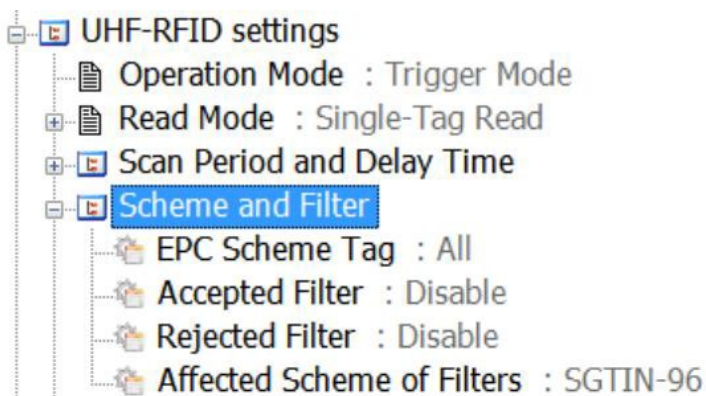
RF Output Power

Function = **MR19**

Status = W or R

Parameter = 2 variables, X_1, X_2, separated by a comma, of 2 bytes of data in total (Status = W), or one byte of data, 0(0x30) (Status = R)

    X_1 = RF Output Power, 1 byte of data

        X_1 = <0x31>, Level 1

        X_1 = <0x32>, Level 2

        X_1 = <0x33>, Level 3

        X_1 = <0x34>, Level 4

        X_1 = <0x35>, **Level 5** (Default)

    X_2 = Reserved, 1 byte of data

        X_2 = <0x30>

When Status = W

    Command String (Host to MR11A7):

    <STX><0x0C>**MR19**WX_1,X_2<BCC><ETX>

Response String (MR11A7 to Host):

    <STX><0x0A>**MR19**W<ACK><BCC><ETX>

When Status = R

    Command String (Host to MR11A7):

    <STX><0x0A>**MR19**R0<BCC><ETX>

Response String (MR11A7 to Host):

    <STX><0x0C>**MR19**RX_1,X_2<BCC><ETX>

*Note: Also configurable via RFID Utility > UHF-RFID settings > RF Parameters > RF Output Power
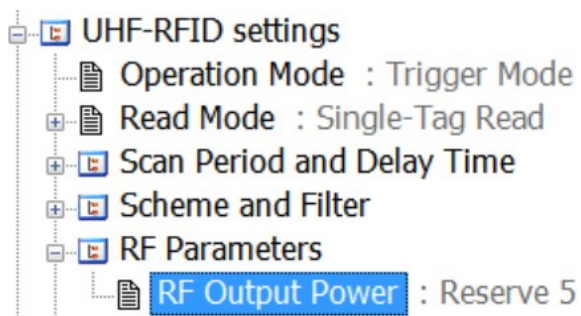
CRC Value & Access Password

Function = **MR20**

Status = W or R

Parameter = 2 variables, X_1,X_2, separated by a comma (Status = W), or one byte of data, 0(0x30) (Status = R)

X_1 = CRC Value Status, 1 byte of data

X_1 = <0x30>, **Disable** (Default)

X_1 = <0x31>, Enable

X_2 = Access Password, 4 bytes of data, range = <0x30>~<0x39>, <0x41>~<0x46>

When Status = W

Command String (Host to MR11A7):

<STX><0x13>**MR20**WX_1,X_2<BCC><ETX>

Response String (MR11A7 to Host):

<STX><0x0A>**MR20**W<ACK><BCC><ETX>

When Status = R

Command String (Host to MR11A7):

<STX><0x0A>**MR20**R0<BCC><ETX>

Response String (MR11A7 to Host):

<STX><0x13>**MR20**RX_1,X_2<BCC><ETX>

*Note: Also configurable via RFID Utility > UHF-RFID settings > Read Mode > Tag Info > Access Password and RFID Utility > UHF-RFID settings > Read Mode > CRC Value

UHF-RFID settings
- Operation Mode : Trigger Mode
- Read Mode : Single-Tag Read
  - Session : S0
  - Target : Single Target
  - Tag Info : User Memory
    - Access Password : ********

UHF-RFID settings
- Operation Mode : Trigger Mode
- Read Mode : Single-Tag Read
  - Session : S0
  - Target : Single Target
  - Tag Info : EPC Code and TID
  - CRC Value : Disable
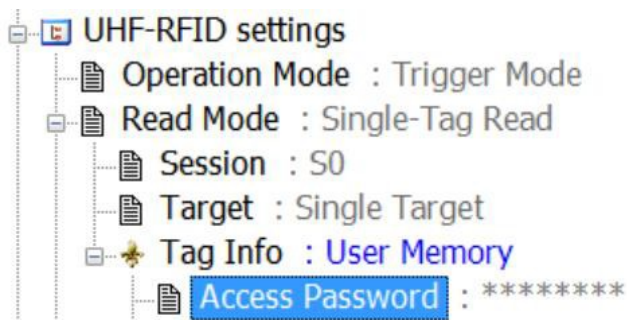
User Memory

Function = **MR21**

Status = W or R

Parameter = 2 variables, X_1,X_2, separated by a comma (Status = W), or one byte of data, 0(0x30) (Status = R)

    X_1 = Starting Pointer, 1 ~ 4 bytes of data, range = 0 ~ 511 (0x30~0x353131)

    X_2 = Data Length, 1 ~ 4 bytes of data, range = 0 ~ 512 (0x30~0x353132)

When Status = W

    Command String (Host to MR11A7):

    <STX><L>**MR21**WX_1,X_2<BCC><ETX>

Response String (MR11A7 to Host):

    <STX><0x0A>**MR21**W<ACK><BCC><ETX>

*Note: <L> here is a variable depending on the length of a complete command string.

When Status = R

    Command String (Host to MR11A7):

    <STX><0x0A>**MR21**R0<BCC><ETX>

Response String (MR11A7 to Host):

    <STX><L>**MR21**RX_1,X_2<BCC><ETX>

*Note: <L> here is a variable depending on the length of a complete response string.

*Note: Also configurable via RFID Utility > UHF-RFID settings > Read Mode > Tag Info

UHF-RFID settings
    Operation Mode : Trigger Mode
    Read Mode : Single-Tag Read
        Session : S0
        Target : Single Target
        Tag Info : User Memory
        Access Password : ********
        Starting Pointer : 0
        Data Length : 1
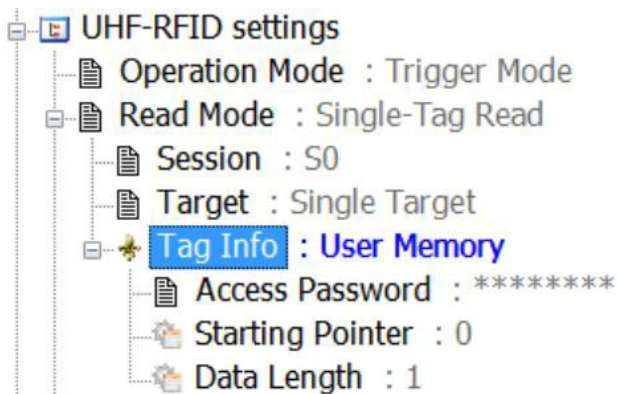
Session and Target

Function = **MR22**

Status = W or R

Parameter = 2 variables, X_1, X_2, separated by a comma, of 2 bytes of data in total (Status = W), or one byte of data, 0(0x30) (Status = R)

X_1 = Session, 1 byte of data

X_1 = <0x30>, **S0** (Default)

X_1 = <0x31>, S1

X_1 = <0x32>, S2

X_1 = <0x33>, S3

X_2 = Target, 1 byte of data

X_2 = <0x30>, Dual Target (A & B)

X_2 = <0x31>, **Single Target (A)** (Default)

When Status = W

Command String (Host to MR11A7):

<STX><0x0C>**MR22**WX_1,X_2<BCC><ETX>

Response String (MR11A7 to Host):

<STX><0x0A>**MR22**W<ACK><BCC><ETX>

When Status = R

Command String (Host to MR11A7):

<STX><0x0A>**MR22**R0<BCC><ETX>

Response String (MR11A7 to Host):

<STX><0x0C>**MR22**RX_1,X_2<BCC><ETX>

*Note: Also configurable via RFID Utility > UHF-RFID settings > Read Mode > Session / Target

Date Format & Time Format

Function = **MM01**

Status = W or R

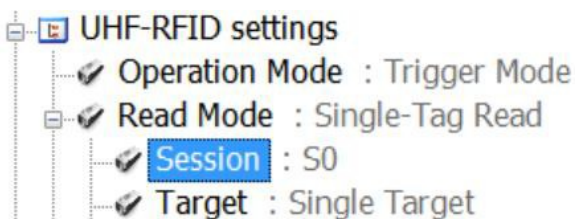Parameter = 2 variables, X_1,X_2, separated by a comma, of 2 bytes of data in total (Status = W), or one byte
of data, 0(0x30) (Status = R)

X_1 = Date Format, 1 byte of data

   X_1 = <0x30>, DD-MM-YYYY

   X_1 = <0x31>, MM-DD-YYYY

   X_1 = <0x32>, DD-MM-YY

   X_1 = <0x33>, MM-DD-YY

   X_1 = <0x34>, YYYY-MM-DD

   X_1 = <0x35>, YY-MM-DD

   X_1 = <0x36>, DD-MM

   X_1 = <0x37>, MM-DD

   X_1 = <0x38>, DD/MM/YYYY

   X_1 = <0x39>, **MM/DD/YYYY** (Default)

   X_1 = <0x3A>, DD/MM/YY

   X_1 = <0x3B>, MM/DD/YY

   X_1 = <0x3C>, YYYY/MM/DD

   X_1 = <0x3D>, YY/MM/DD

   X_1 = <0x3E>, DD/MM

   X_1 = <0x3F>, MM/DD

X_2 = Time Format, 1 byte of data

   X_2 = <0x30>, **HH:MM:SS** (Default)

   X_2 = <0x31>, HH:MM

When Status = W

   Command String (Host to MR11A7):

   <STX><0x0C>**MM01**WX_1,X_2<BCC><ETX>

Response String (MR11A7 to Host):

   <STX><0x0A>**MM01**W<ACK><BCC ><ETX>

When Status = R

   Command String (Host to MR11A7):

   <STX><0x0A>**MM01**R0<BCC ><ETX>

Response String (MR11A7 to Host):

   <STX><0x0C>**MM01**RX_1,X_2<BCC><ETX>

*Note: Also configurable via RFID Utility > Normal > Date Format / Time Format

- ⊟ Normal
  - ☑ Date Format : MM/DD/YYYY
  - ☑ Time Format : HH:MM:SS

Inter-block Interval Time & Inter-character Interval Time

Function = **MG03**

Status = W or R

Parameter = 2 variables, X_1,X_2, separated by a comma, of 2 bytes of data in total (Status = W), or one byte of data, 0(0x30) (Status = R)

X_1 = Inter-block Interval Time, 1 byte of data

X_1 = <0x30>, **0 ms** (Default)

X_1 = <0x31>, 50 ms

X_1 = <0x32>, 100 ms

X_1 = <0x33>, 150 ms

X_1 = <0x34>, 200 ms

X_1 = <0x35>, 250 ms

X_1 = <0x36>, 300 ms

X_1 = <0x37>, 350 ms

X_1 = <0x38>, 400 ms

X_1 = <0x39>, 450 ms

X_1 = <0x3A>, 500 ms

X_2 = Inter-character Interval Time, 1 byte of data

X_2 = <0x30>, **0 ms** (Default)

X_2 = <0x31>, 1 ms

X_2 = <0x32>, 2 ms

X_2 = <0x33>, 3 ms

X_2 = <0x34>, 4 ms

X_2 = <0x35>, 5 ms

When Status = W

Command String (Host to MR11A7):

<STX><0x0C>**MG03**WX_1,X_2<BCC><ETX>

Response String (MR11A7 to Host):

<STX><0x0A>**MG03**W<ACK><BCC><ETX>

When Status = R

Command String (Host to MR11A7):

<STX><0x0A>**MG03**R0<BCC><ETX>

Response String (MR11A7 to Host):

<STX><0x0C>**MG03**RX$_1$,X$_2$<BCC><ETX>

*Note: Also configurable via RFID Utility > Normal > Communication Interface > Inter-block Interval Time
        Inter-character Interval Time

Normal
- ✔ Date Format : MM/DD/YYYY
- ✔ Time Format : HH:MM:SS
- ✦ Communication Interface : BT-SPP
  - Bluetooth
  - ✔ Inter-block Interval Time : 0 ms
  - ✔ Inter-character Interval Time : 0 ms
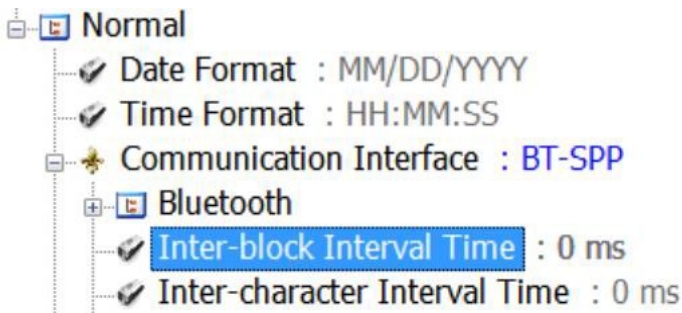
Data Terminator

Function = **MG04**

Status = W or R

Parameter = 2 variables, X$_1$,X$_2$, separated by a comma (Status = W), or one byte of data, 0(0x30) (Status = R)

    X$_1$ = Data Terminator of USB-HID / BT-HID interface, 2 or 4 bytes of data
    X$_2$ = Data Terminator of USB-VCP / BT-SPP interface, 2 or 4 bytes of data

*Note: When sending command string, each Hex digit (half a byte) must be treated as 1 byte. For example, when Data Terminator of USB-HID / BT-HID interface is <0xE7><0x00> in Hex, it should be converted into <0x45><0x37><0x30><0x30> as X$_1$. If Data Terminator of USB-VCP / BT-SPP interface is <0x0D><0x0A> in Hex, it should be converted into <0x30><0x44><0x30><0x41> as X$_2$.

When Status = W
    Command String (Host to MR11A7):
    <STX><L>**MG04**WX$_1$,X$_2$<BCC><ETX>
Response String (MR11A7 to Host):
    <STX><0A>**MG04**W<ACK><BCC><ETX>
*Note: <L> here is a variable depending on the length of a complete command string.

When Status = R
    Command String (Host to MR11A7):
    <STX><0A>**MG04**R0<BCC><ETX>
Response String (MR11A7 to Host):
    <STX><L>**MG04**RX$_1$,X$_2$<BCC><ETX>
*Note: <L> here is a variable depending on the length of a complete response string.

*Note: Also configurable via RFID Utility > Normal > Communication Interface > Data Terminator
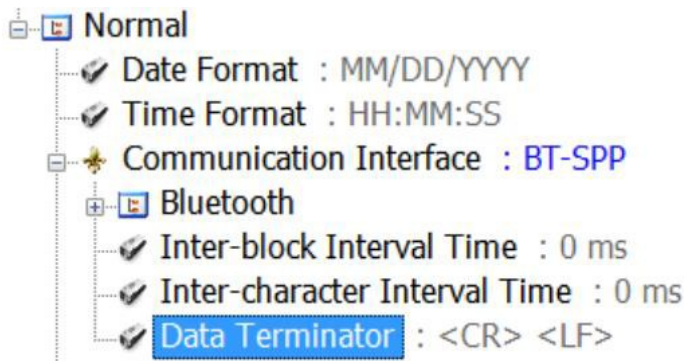
Enter Sleep Mode & Timer of Sleep Mode

Function = **MG05**

Status = W or R

Parameter = 3 variables, X_1, X_2, X_3, each separated by a comma, of 5 bytes of data in total (Status = W), or
    one byte of data, 0(0x30) (Status = R)

    X_1 = Enter Sleep Mode, 1 byte of data

        X_1 = <0x30>, Disable

        X_1 = <0x31>, **Enable** (Default)

    X_2 = Timer of Sleep Mode (Minute), 2 bytes of data, range = 0~60 (0x00~0x3C), unit = Minute

    X_3 = Timer of Sleep Mode (Second), 2 bytes of data, range = 0~59 (0x00~0x3B), unit = Second

*Note: When sending command string, each Hex digit (half a byte) must be treated as 1 byte. For example, when Timer of Sleep Mode (Minute) is 60min, or <0x3C> in Hex, it should be converted into <0x33><0x43> as X_2. If Timer of Sleep Mode (Second) is 59sec, or <0x3B> in Hex, it should be converted into <0x33><0x42> as X_3.

When Status = W

    Command String (Host to MR11A7):

    <STX><0x10>**MG05**WX_1, X_2, X_3<BCC><ETX>

Response String (MR11A7 to Host):

    <STX><0x0A>**MG05**W<ACK><BCC><ETX>

When Status = R

    Command String (Host to MR11A7):

    <STX><0x0A>**MG05**R0<BCC><ETX>

Response String (MR11A7 to Host):

    <STX><0X10>**MG05**RX_1, X_2, X_3<BCC><ETX>

*Note: Also configurable via RFID Utility > Normal > Enter Sleep Mode

- Normal
  - ✓ Date Format : MM/DD/YYYY
  - ✓ Time Format : HH:MM:SS
  - ✦ Communication Interface : BT-SPP
  - ✓ Enter Sleep Mode : Enable
    - ✓ Timer of Sleep Mode : 05:00

Beep Tone & Beep Time

Function = **MG06**

Status = W or R

Parameter = 2 variables, X_1,X_2, separated by a comma, of 3 bytes of data in total (Status = W), or one byte

of data, 0(0x30) (Status = R)

X_1 = Beep Tone, 1 byte of data

X_1 = <0x30>, Off

X_1 = <0x31>, Low

X_1 = <0x32>, **Medium** (Default)

X_1 = <0x33>, High

X_2 = Beep Time, 2 bytes of data, range = 5~50(0x05~0x32), unit = 10mS

*Note: When sending command string, each Hex digit (half a byte) must be treated as 1 byte. For example,

when Beep Time is 500mS, or <0x32> in Hex, it should be converted into <0x33><0x32> as X_2.

When Status = W

Command String (Host to MR11A7):

<STX><0x0D>**MG06**WX_1,X_2<BCC><ETX>

Response String (MR11A7 to Host):

<STX><0x0A>**MG06**W<ACK><BCC><ETX>

When Status = R

Command String (Host to MR11A7):

<STX><0x0A>**MG06**R0<BCC><ETX>

Response String (MR11A7 to Host):

<STX><0x0D>**MG06**RX_1,X_2<BCC><ETX>

*Note: Also configurable via RFID Utility > Normal > Beep Tone

Vibrator

Function = **MG07**

Status = W or R

Parameter = One byte of data, X (Status = W), representing the Vibrator Status, or 0(0x30) (Status = R)

    X = <0x30>, **Disable** (Default)

    X = <0x31>, Enable

When Status = W

    Command String (Host to MR11A7):

    <STX><0x0A>**MG07**WX<BCC><ETX>

Response String (MR11A7 to Host):

    <STX><0x0A>**MG07**W<ACK><BCC><ETX>

When Status = R
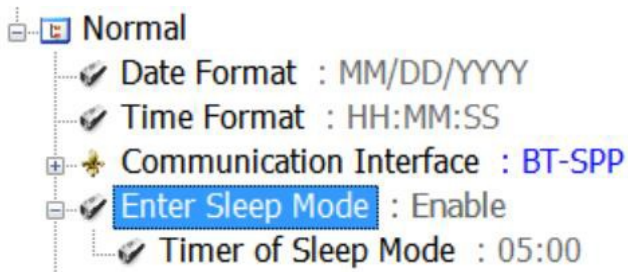
    Command String (Host to MR11A7):

    <STX><0x0A>**MG07**R0<BCC><ETX>

Response String (MR11A7 to Host):

    <STX><0x0A>**MG07**RX<BCC><ETX>

*Note: Also configurable via RFID Utility > Normal > Vibrator
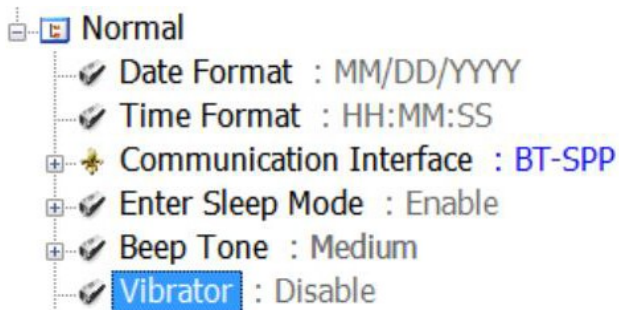
System Time

Function = **MG09**

Status = W or R

Parameter = 12 bytes of data, X (Status = W), representing the System Time, or 0(0x30) (Status = R)

       X = System Time, 12 bytes of data, with every two digits representing Year, Month, Date, Hour, Minute and Second respectively.

       For example, 140628195030 = 2014/06/28 19:50:30, or in Hex:

       <0x31><0x34><0x30><0x36><0x32><0x38><0x31><0x39><0x35><0x30><0x33><0x30>

When Status = W

    Command String (Host to MR11A7):

    <STX><0x15>**MG09**WX<BCC><ETX>

Response String (MR11A7 to Host):

    <STX><0x0A>**MG09**W<ACK><BCC><ETX>

When Status = R
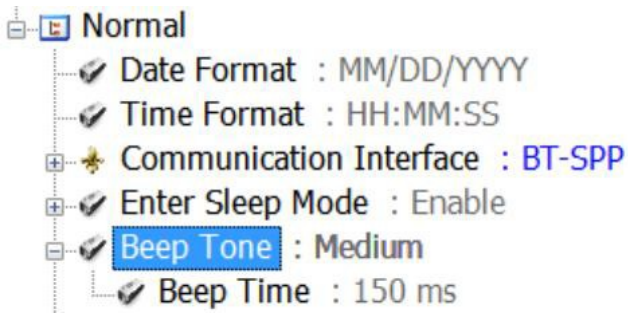
    Command String (Host to MR11A7):

    <STX><0x0A>**MG09**R0<BCC><ETX>

Response String (MR11A7 to Host):

    <STX><0x15>**MG09**RX<BCC><ETX>

*Note: Also configurable via RFID Utility > Normal > System Time
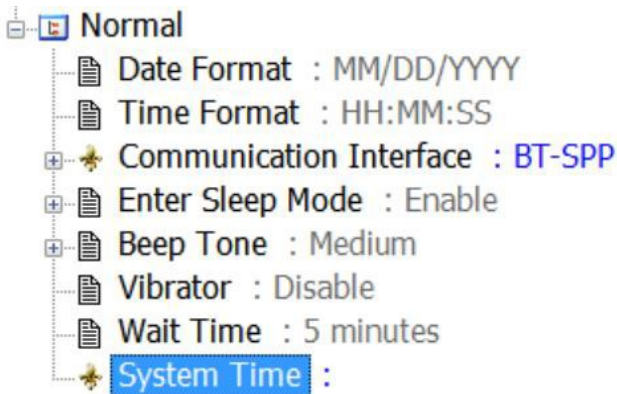
Write/Lock/Lock Permanently/Unlock/Unlock Permanently Procedure

Please follow below procedure to Write/Lock/Lock Permanently/Unlock/Unlock Permanently a tag:

1. Read EPC & TID

2. Read Access Password

3. Write User Memory/Lock/Lock Permanently/Unlock/Unlock Permanently

Read EPC & TID

Function = **MCET**

Status = R

Parameter (Host to MR11A7) = 0(0x30)

Parameter (MR11A7 to Host) = 2 variables, X_1,X_2, separated by a comma, with X_1 representing EPC (maximum length = 62 bytes) and X_2 representing TID (maximum length = 24 bytes)

Command String (Host to MR11A7):

    <STX><0x0A>**MCET**R0<BCC><ETX>

    Example: <02><0A>MCETR0<77><03>

Response String (MR11A7 to Host):

    <STX><0x0A>**MCET**RX_1,X_2<ACK><BCC><ETX>

    OK Example:

    <02><3A>MCETR300833B2DDD9014000000000,E28011052000405A11DF0079<5C><03>

    <STX><0x0A>**MCET**R<NAK><BCC><ETX>

    NG Example: <02><0A>MCETR<15><52><03>

*Note: Also configurable via UHF Tag > EPC-TID
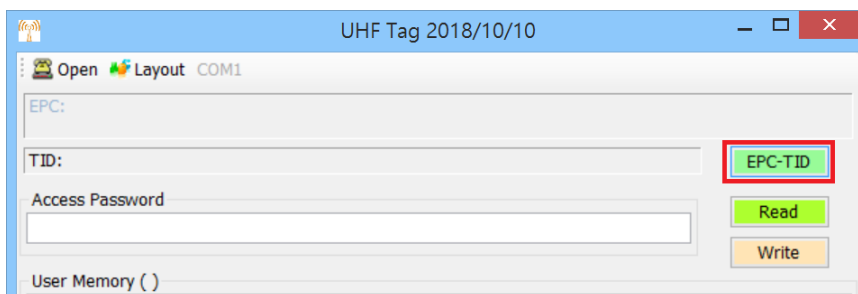
Write/Read Access Password

Function = **MC01**

Status = W or R

Parameter = 8 bytes of data, X (Status = W), representing Access Password, or 0(0x30) (Status = R)

*Note: When sending command string, 1 byte of Hex data is to be converted into 2 bytes of ASCII data. For example, if Access Password is 1234, or <0x31><0x32><0x33><0x34> in Hex, X should be converted into <0x33><0x31><0x33><0x32><0x33><0x33><0x33><0x34>

When Status = W

    Command String (Host to MR11A7):

    <STX><0x11>**MC01**WX<BCC><ETX>

    Example: <02><11>MC01W31323334<4D><03>

    Response String (MR11A7 to Host):

    <STX><0x0A>**MC01**W<ACK><BCC><ETX>

    OK Example: <02><0A>MC01W<06><54><03>

    <STX><0x0A>**MC01**W<NAK><BCC><ETX>

    NG Example: <02><0A>MC01W<15><47><03>

When Status = R

    Command String (Host to MR11A7):

    <STX><0x0A>**MC01**R0<BCC><ETX>

    Example: <02><0A>MC01R0<67><03>

    Response String (MR11A7 to Host):

    <STX><0x11>**MC01**RX<BCC><ETX>

    OK Example: <02><11>MC01R31323334<48><03>

    <STX><0x11>**MC01**R<NAK><BCC><ETX>

    NG Example: <02><0A>MC01R<15><42><03>

    *Note: Also configurable via UHF Tag > EPC-TID

Write/Read User Memory

Function = **MC02**

Status = W or R

Parameter = 3 variables, X_1,X_2,X_3, each separated by a comma (Status = W), or one byte of data, 0(0x30)
        (Status = R)

   X_1 = Transmission number, 2 bytes of data, range = 1~255(0x01~0xFF).

   X_2 = Total number of transmission, 2 bytes of data, range = 1~255(0x01~0xFF).

   X_3 = Variable data, X (Status = W), representing User Memory data to write in Hex, range =
0~9(0x30~0x39) and A~F(0x30~0x39), maximum length of each transmission is 112 bytes (displayed in 224
bytes)

 When Status = W

   Command String (Host to MR11A7):

   <STX><L>**MC02**WX_1,X_2,X_3<BCC><ETX>

   Response String (MR11A7 to Host):

   <STX><0x0C>**MC02**WX_1<ACK><BCC><ETX>

   <STX><0x0C>**MC02**WX_1<NAK><BCC><ETX>

   Single Transmission (32 words) Example:

   (Host to MR11A7)

   <02><8F>MC02W01,01,31224330325730300681670 20A4D43303257065703010201020102010201020 10
   20102010201020102010201020102010201020102010201020102010201020304056666<D0><03>

   (MR11A7 to Host, OK)

   <02><0C>MC02W00<06><51><03>

   (MR11A7 to Host, NG)

   <02><0C>MC02W01<15><43><03>

   Multiple Transmissions (64 words) Example:

   (Host to MR11A7, part 1)

   <02><8F>MC02W01,01,31224330325730300681670 20A4D43303257065703010201020102010201020 10
   20102010201020102010201020102010201020102010201020102010201020304056666<D0><03>

   (MR11A7 to Host, part 1, OK)

   <02><0C>MC02W01<06><50><03>

   (MR11A7 to Host, part 1, NG)

   <02><0C>MC02W01<15><41><03>

(Host to MR11A7, part 2)

<02><2F>MC02W02,02,FF9988776655443322110000000000088<74><03>

(MR11A7 to Host, part 2, OK)

<02><0C>MC02W00<06><51><03>

(MR11A7 to Host, part 2, NG)

<02><0C>MC02W02<15><43><03>

When Status = R

Command String (Host to MR11A7):

<STX><0x0B>**MC02R**X_1<BCC><ETX>

Response String (MR11A7 to Host):

<STX><L>**MC02R**X_1,X_2,X_3<BCC><ETX>

<STX><L>**MC02R**<NAK><BCC><ETX>

Single Transmission (32 words) Example:

(Host to MR11A7)

<02><0B>MC02R01<54><03>

(MR11A7 to Host, OK)

<02><8F>MC02R01,01,31224330325730300681670204D43303257065703010201020102010
2010201020102010201020102010201020102010201020102010201020304056666<D8><03>

(MR11A7 to Host, NG)

<02><0A>MC02R<15><41><03>

Multiple Transmissions (64 words) Example:

(Host to MR11A7, part 1)

<02><0B>MC02R01<54><03>

(MR11A7 to Host, part 1, OK)

<02><EF>MC02R01,02,31321122334455667788999AABBCCDDEEFF000000000000000000000000000
0000000000000000000000000000000000000000000CCD0000000000000000000000000000000000
000000000000000000000000000000000000000000000000055001122334455667788999AABBCC
DDEE<C5><03>

(MR11A7 to Host, part 1, NG)

<02><0A>MC02R<15><41><03>

(Host to MR11A7, part 2)

<02><0B>MC02R02<57><03>

(MR11A7 to Host, part 2, OK)
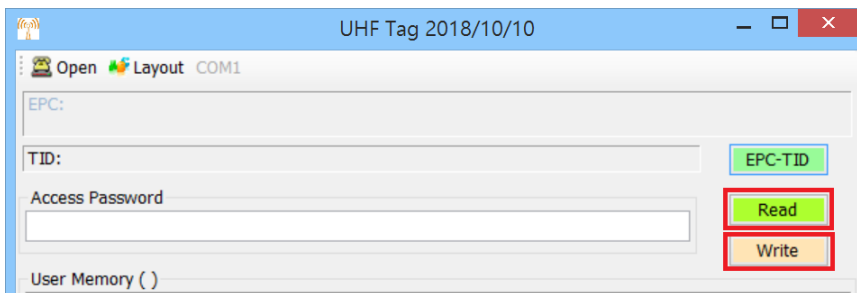
<02><2F>MC02R02,02,FF99887766554433221100000000088<71><03>

(MR11A7 to Host, part 2, NG)

<02><0A>MC02R<15><41><03>

Note: <L> here is a variable depending on the length of a complete command string.

Note: Also configurable via UHF Tag > Read / Write

Lock / Unlock

Function = **MC04**

Status = W

Parameter = One byte of data, X, representing the status of Lock/Unlock

    X = <0x30>, Unlock

    X = <0x31>, Lock

Command String (Host to MR11A7):

    <STX><0x0A>**MC04**WX<BCC><ETX>

    Example: <02><0A>MC04W0<67><03>

Response String (MR11A7 to Host):

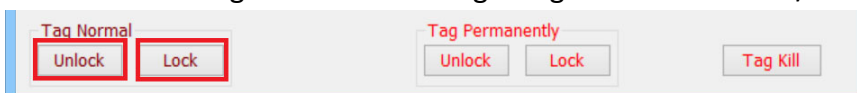   <STX><0x0A>**MC04**W<ACK><BCC><ETX>

    OK Example: <02><0A>MC04W<06><51><03>

    <STX><0x0A>**MC04**W<NAK><BCC><ETX>

    NG Example: <02><0A>MC04W<15><42><03>

Note: Also configurable via UHF Tag > Tag Normal > Unlock / Lock

Lock / Unlock Permanently

Function = **MCPS**

Status = W

Parameter = One byte of data, X, representing the status of Lock/Unlock Permanently

    X = <0x30>, Unlock permanently

    X = <0x31>, Lock permanently

Command String (Host to MR11A7):

    <STX><0x0A>**MCPS**WX<BCC><ETX>

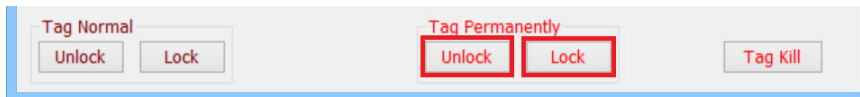   *Example: <02><0A>MCPSW0<60><03>*

Response String (MR11A7 to Host):

    <STX><0x0A>**MCPS**W<ACK><BCC><ETX>

    OK Example: <02><0A>MCPSW<06><56><03>

    <STX><0x0A>**MCPS**W<NAK><BCC><ETX>

    NG Example: <02><0A>MCPSW<15><45><03>

*Note: Also configurable via UHF Tag > Tag Permanently > Unlock / Lock

Kill Procedure

Please follow below procedure to Kill a tag:

1. Read EPC & TID
2. Read Kill Password
3. Kill

Kill Password

Function = **MC03**

Status = W or R

Parameter = 8 bytes of data, X (Status = W), representing Kill Password, or 0(0x30) (Status = R)

*Note: When sending command string, 1 byte of Hex data is to be converted into 2 bytes of ASCII data. For example, if Kill Password is 5678, or <0x35><0x36><0x37><0x38> in Hex, X should be converted into <0x33><0x35><0x33><0x36><0x33><0x37><0x33><0x38>

When Status = W

    Command String (Host to MR11A7):

    <STX><0x11>**MC03**WX<BCC><ETX>

    Example: <02><11>MC03W35363738<47><03>

    Response String (MR11A7 to Host):

    <STX><0x0A>**MC03**W<ACK><BCC><ETX>

    OK Example: <02><0A>MC03W<06><56><03>

    <STX><0x0A>**MC03**W<NAK><BCC><ETX>

    NG Example: <02><0A>MC03W<15><45><03>

When Status = R

    Command String (Host to MR11A7):

    <STX><0x0A>**MC03**R0<BCC><ETX>

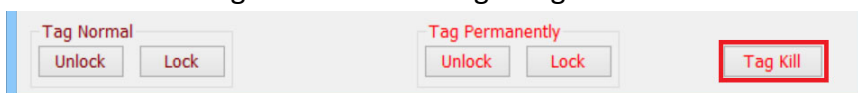   *Example: <02><0A>MC03R0<65><03>*

    Response String (MR11A7 to Host):

    <STX><0x11>**MC03**RX<BCC><ETX>

    OK Example: <02><11>MC03R35363738<42><03>

    <STX><0x11>**MC03**R<NAK><BCC><ETX>

    NG Example: <02><0A>MC03R<15><40><03>

*Note: Also configurable via UHF Tag > Tag Kill

Kill

(Not applicable when Kill Password = "0000")

Function = **MCKL**

Status = W

Parameter = 1(0x31)

Command String (Host to MR11A7):

      <STX><0x0A>**MCKL**WX<BCC><ETX>

      Example: <02><0A>MCKLW1<65><03>

Response String (MR11A7 to Host):

      <STX><0x0A>**MCKL**W<ACK><BCC><ETX>

      OK Example: <02><0A>MCKLW<06><52><03>

      <STX><0x0A>**MCKL**W<NAK><BCC><ETX>

      NG Example: <02><0A>MCKLW<15><41><03>

*Note: Also configurable via UHF Tag > Tag Kill
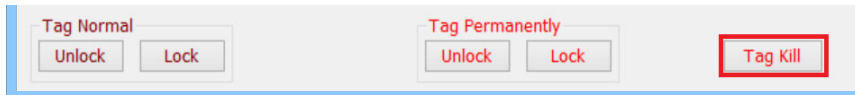
Other Functions (Start/Stop Reading, Aloha, Beeps, Green LED, Vibration)

Packet Format does not apply to below functions; in BT SPP profile MR11A7 will simply react to the command strings described below:

(1) Start Reading

    Host: CR LF {   T   G   } CR   LF   (8 bytes)

    or   0x0D 0x0A 0x7B 0x54 0x47 0x7D 0x0D 0x0A (8 bytes)

    MR11A7: Starts reading

(2) Stop Reading

    Host: CR LF {   T   S   } CR   LF   (8 bytes)

    or   0x0D 0x0A 0x7B 0x54 0x53 0x7D 0x0D 0x0A (8 bytes)

    MR11A7: Stops reading

(3) Aloha

    Host: CR LF {   A   L   } CR   LF   (8 bytes)

    or   0x0D 0x0A 0x7B 0x41 0x4C 0x7D 0x0D 0x0A (8 bytes)

    MR11A7: O   K   CR   LF

    or   0x4F 0x4B 0x0D 0x0A

(4) Beep

    Host: CR LF {   M   1   } CR   LF   (8 bytes)

    or   0x0D 0x0A 0x7B 0x4D 0x31 0x7D 0x0D 0x0A (8 bytes)

    MR11A7: Emits a short beep for 80mS

    (*Note: If Beep Tone is Off, this command will not be working. Beep Tone is either configurable by RFID Utility or command string over BT SPP profile)

(5) Green LED

    Host: CR LF {   G   L   } CR   LF   (8 bytes)

    or   0x0D 0x0A 0x7B 0x47 0x4C 0x7D 0x0D 0x0A (8 bytes)

    MR11A7: Turns on Green LED indicator for 200mS

(6) Vibration

    Host: CR LF {   B   Z   } CR   LF   (8 bytes)

    or   0x0D 0x0A 0x7B 0x42 0x5A 0x7D 0x0D 0x0A (8 bytes)

    MR11A7: Turns on vibrator for 200mS

    (*Note: If Vibrator is Disable, this command will not be working. Vibrator is either configurable by RFID Utility or command string over BT SPP profile)

Default Value

Function = **MDEF**
Default = N/A

Function = **MVER**
Default = <STX><L>**MVER**RSM3-p-x.xx.BTA.xx   <BCC><ETX>
(*Note: There are 9 spaces between ~.xx and <BCC>~)

Function = **MR01**
Default = <STX><0x0A>**MR01**R0<0x76><ETX>

Function = **MR02**
Default = <STX><0x0A>**MR02**R0<0x75><ETX>

Function = **MR03**
Default = <STX><0x0A>**MR03**R2<0x76><ETX>

Function = **MR04**
Default = <STX><0x0B>**MR04**R40<0x46><ETX>

Function = **MR06**
Default = <STX><0x1E>**MR06**R0,0,0,0,0,0,0,1,0,1,0<0x65><ETX>

Function = **MR07**
Default = <STX><0x16>**MR07**R0,0,0,0,0,0,0,0<0x6C><ETX>

Function = **MR08**
Default = <STX><0x0A>**MR08**R0<0x7F><ETX>

Function = **MR09**
Default = <STX><0x0A>**MR09**R0<0x7E><ETX>

Function = **MR13**
Default = <STX><0x0E>**MR13**R00,00<0x6D><ETX>

Function = **MR17**
Default = <STX><0x10>**MR17**R0,FFFFC<0x04><ETX>
        <STX><0x10>**MR17**R1,80000<0x7E><ETX>

Function = **MR18**

Default = <STX><0x14>**MR18**R0,0,00,00,,<0x7C><ETX>

<STX><0x14>**MR18**R1,0,00,00,,<0x7D><ETX>

Function = **MR19**

Default = <STX><0x0C>**MR19**R5,0<0x60><ETX>

Function = **MR20**

Default = <STX><0x13>**MR20**R0,00000000<0x40><ETX>

Function = **MR21**

Default = <STX><0x12>**MR21**R0000,0001<0x71><ETX>

Function = **MR22**

Default = <STX><0x0C>**MR22**R0,1<0x6C><ETX>

Function = **MM01**

Default = <STX><0x0C>**MM01**R9,0<0x7A><ETX>

Function = **MG03**

Default = <STX><0x0C>**MG03**R0,0<0x7B><ETX>

Function = **MG04**

Default = <STX><0x12>**MG04**RE700,0D0A<0x15><ETX>

Function = **MG05**

Default = <STX><0X10>**MG05**R1,05,00<0x79><ETX>

Function = **MG06**

Default = <STX><0x0D>**MG06**R2,0F<0x3B><ETX>

Function = **MG07**

Default = <STX><0x0A>**MG07**R0<0x65><ETX>

Function = **MG09**

Default = N/A

Function = **MCET**

Default = N/A

Function = **MC01**

Default = N/A

Function = **MC02**

Default = N/A

Function = **MC04**

Default = N/A

Function = **MCPS**

Default = N/A

Function = **MC03**

Default = N/A

Function = **MCKL**

Default = N/A