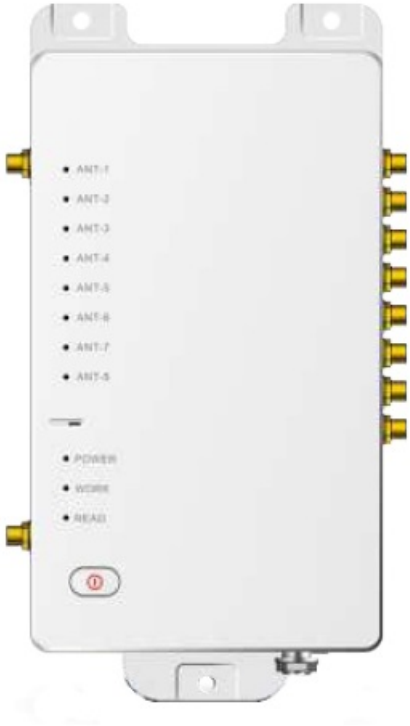
MARSON MR16 Fixed UHF Reader User Manual

Contents

1 MARSON MR16 Fixed UHF Reader
2 Product Intro
2.1 Intro
2.2 Interface
2.3 Accessory List
2.4 Device installation
3 UHF demo
3.1 Operating Interface
4 UHF tag scanning
4.1 Auto Scanning
4.2 Single Scanning
4.3 Read UHF Tag
4.4 Write Tag
4.5 Lock Tag
4.6 Kill Tag
4.7 UHF Module Version
4.8 Module Temperature
5 Config
5.1 Working mode
5.2 Output Power
5.3 R2000 settings
5.4 Protocol
5.5 RF link
5.6 QT Tag
5.7 Open tagFocus
5.8 Open FastID
5.9 Open EPC and TID
6 Documents / Resources
7 Related Posts

MARSON MR16 Fixed UHF Reader



Product Intro

Intro

MR16 is a high-performance eight-channel fixed UHF reader which adopted Android 9.0 operating system. The core chip adopts Impinj R2000 module with 8 channels and it supports RS232, RJ45 and HDMI ports. With stable and reliable capacity, excellent anti-electromagnetic interference capability and heat dissipation performance, it meets the requirements for installation and application of various indoor and outdoor environments and can be applied in multiple industries with strict RFID application standard such as warehouse management, archives and library management, bank, clothing and footwear retail, jewelry monitoring, watch industry, laundry, production line management, medical instrument cabinet and vending machines.

Interface

Pic.1-1

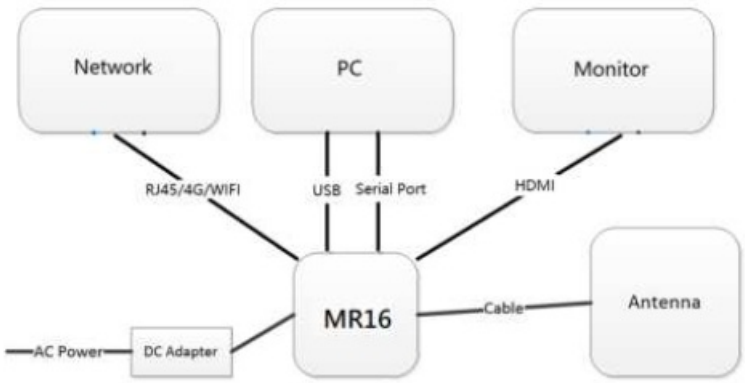
1	12V Power Supply
2	HDMI
3	GPIO (Support 2 path input photocoupler and 2 path output photocoupler with isolation.)
4	UHF antenna port, SMA female*8
5	USB port, used to connect mouse and others, touch-screen function supported. Dial *#*#555666#*#* to enter engineer mode.
6	USB port, used to connect mouse and others, touch-screen function supported.
7	RJ45 EtherCAT port, POE power supply supported
8	Serial port
9	Extended port
10	4G antenna port, SMA port
11	WIFI antenna port, SMA port
12	Power button (Long-press 3 seconds to ON/OFF)
13	SIM card slot
14	TF card slot

Accessory List

1	MR16 reader, 12V power adaptor
2	UHF antenna, 6dBi, 9dBi, 12dBi etc.
3	Feeder line, SMA male side connects with device, interface on other side needs match with antenna.
4	RJ45 Ethernet cable
5	HDMI cable
6	4G external antenna
7	WIFI external antenna

Device installation

MR16 reader adopts Android operating system, it can be connected with Internet through RJ45, WIFI and 4G etc. And connect with monitor through HDMI cable.
Developer could use USB cable to connect device with PC for developing application, device could also be connected with PC through serial port cable.



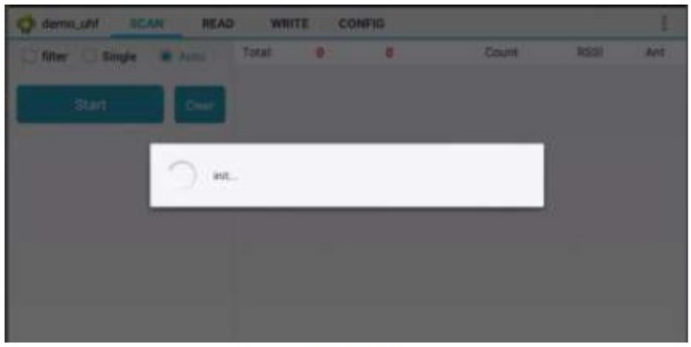
Pic.3-1

UHF demo

Operating Interface

Pic.4-1

Connect monitor through HDMI cable and long-press power button for 3 seconds to switch on device. Click demo_uhf icon to enter demo as Pic.4-1, UHF module will initiate as Pic.4-2, if there is no error messages show up, then initiation process has been successfully finished. “init. fail” means UHF module failed to initiate, need to exit application and repeat operation. If initiation cannot successfully finished, need to contact tech support for further.



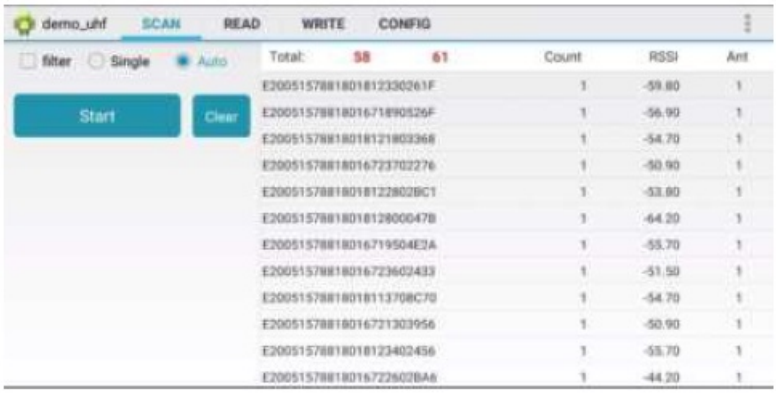
Pic.4-2

UHF tag scanning

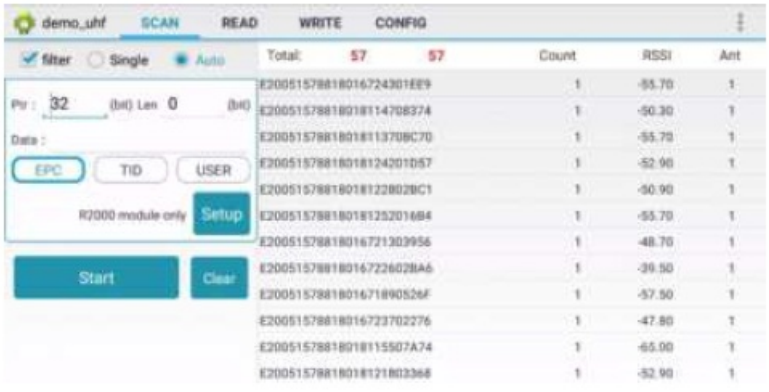
Click SCAN on top of navigation bar to enter tags reading page.

Auto Scanning

Select “Auto”, then click “Start” button to start tags scanning circularly, the information such as EPC or TID, Count, RSSI and Ant. number. As Pic.5-1.
“filter” button can be used to setup tag which has been filtered, user could setup address, data length to filter tags. EPC, TID and USER areas can be selected, setup data length to 0 and clear EPC list, then click “Setup” to confirm in Pic.5-2.



Pic.5-1



Pic.5-2

Single Scanning

Select “Single” button and click “Start” to start scanning tag, EPC or TID, Count, RSSI and Ant.number will display on right side, as Pic.5- 3.

Pic.5-3

Read UHF Tag

Click “READ” on top of navigation bar to enter page of tag reading.
User could read data of 4 areas, RESERVED, EPC, TID and USER, setup address and data length, default password is “00000000”, click “Read” to read tags in Pic.6-1.

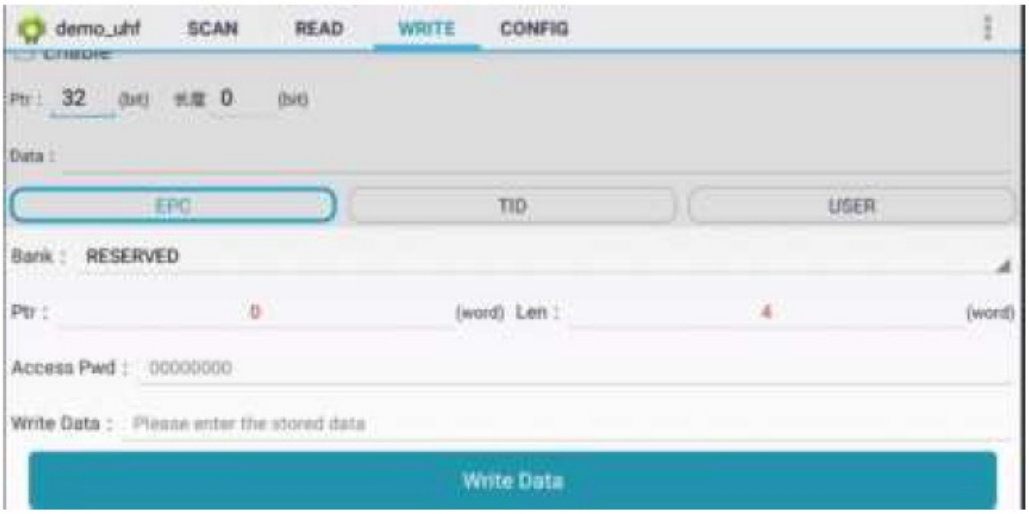
Pic.6-1

Comment: user could filter tags by setup address, data length and data in EPC, TID and USER areas, select “Enable” button to switch on filter function in Pic.6-2.

Pic.6-2

Write Tag

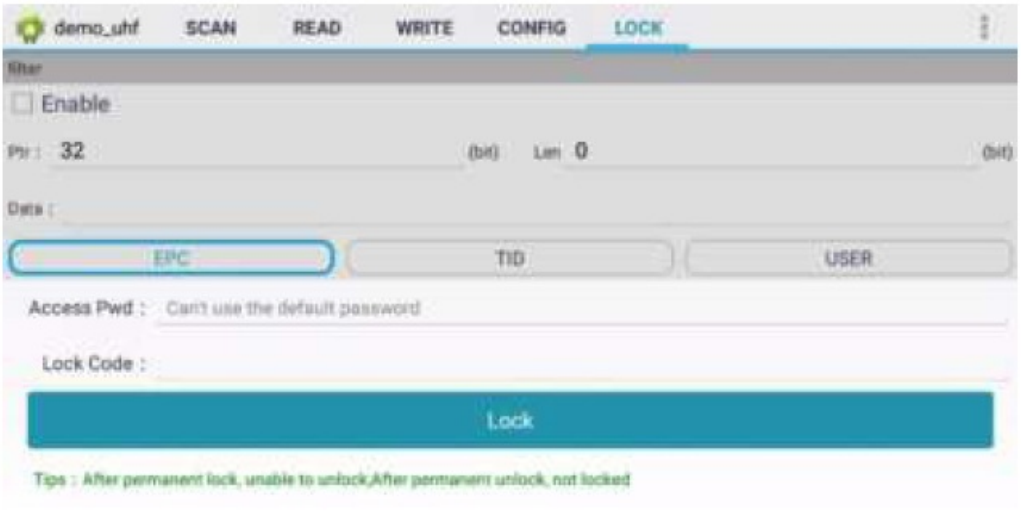
Click “WRITE” on top of navigation bar to enter tag writing page.
User could write data in RESERVED, EPC, TID and USER areas, setup start address and data length, input access password and data(hex), click “Write Data” to write data in Pic.7-1.
Comment: user could filter tags by setup address, data length and data in EPC, TID and USER areas, select “Enable” button to switch on filter function.



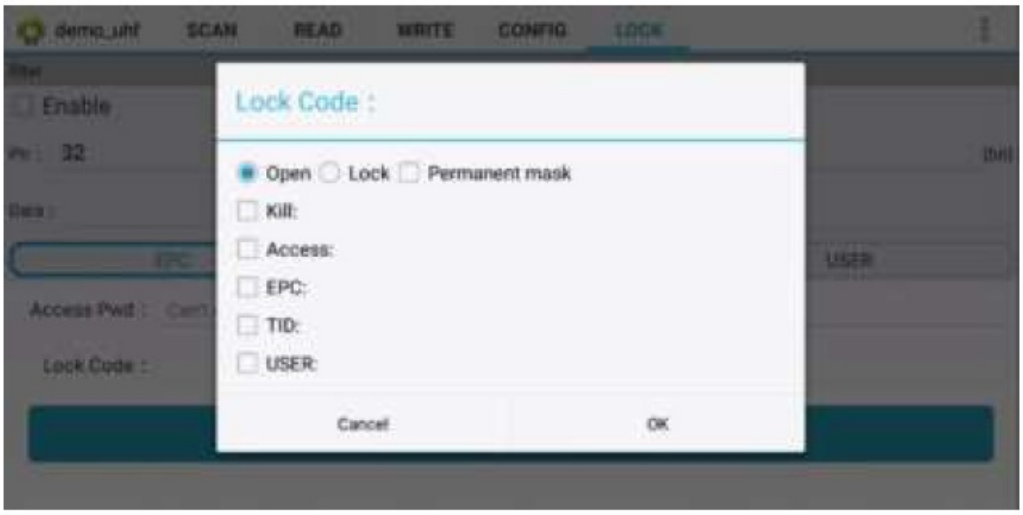
Pic.7-1

Lock Tag

Click “LOCK” on top of navigation bar to enter tag locking page.
Input access password(DONOT input default password.), then click column of “Lock Code”, it will display window for selecting different methods of locking, click “OK” to generate lock code automatically, then click “Lock” to lock tags in Pic.8-1 and Pic.8-2.
Comment: user could filter tags by setup address, data length and data in EPC, TID and USER areas, select “Enable” button to switch on filter function.
NOTE: If permanent mask has been locked, then it cannot be unlocked. Vice versa.



Pic. 8-1



Pic.8-2

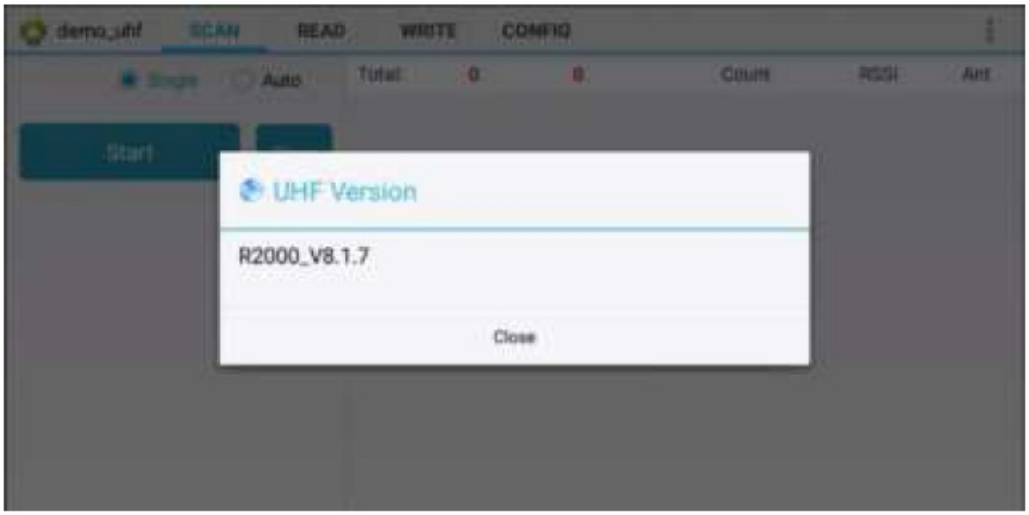
Kill Tag

Click “KILL” on top of navigation bar to enter operating page.
Input access password (DONOT input default password.), click “Kill” button to destroy tags in Pic.9-1.
Comment: user could filter tag by setup address, data length and data for selecting EPC, TID or USER area.

Pic.9-1

UHF Module Version

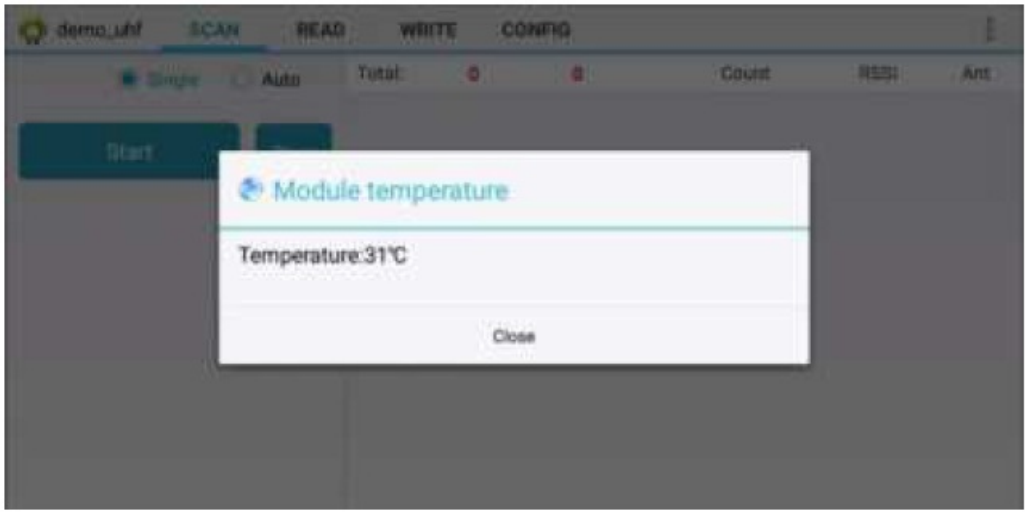
Click 3 dots on top right of application and click “About” in list to check version of UHF module in Pic.10-1.



Pic.10-1

Module Temperature

Click 3 dots on top right of application, click “Module temperature” in list to check UHF module temperature in Pic.11-1.



Pic.11-1

Config

Click “CONFIG” on top of navigation bar to enter setup page.

Working mode

User could setup different frequency band for different countries, as Pic.12-1, click “Set Frequency” to confirm frequency band. Click “Get Frequency” to check current frequency band.

Pic.12-1

Output Power

User could select different output power from 5 to 30dBm in Pic.12-2, click “Set Power” to confirm setup. Click “Get Power” to get current output power.

Pic.12-2

R2000 settings

Select ANT1-ANT8 to setup antenna, selected antenna will start functioning, unselected antenna will in OFF in Pic.12-3.
Click “Set Antenna” to confirm setup, “Get Antenna” to check current antenna status.

Pic.12-3

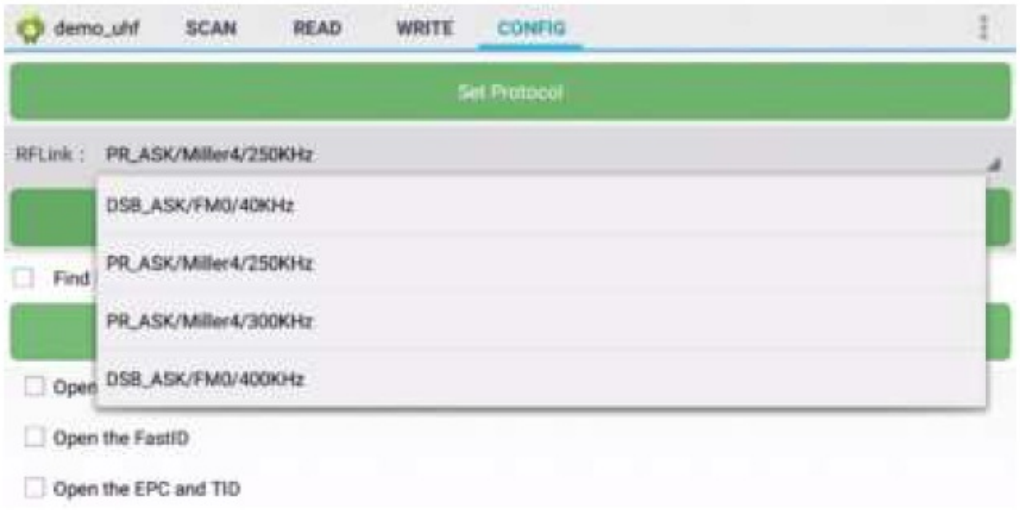
Protocol

There are two protocols can be selected in Pic.12-4, click “Set Protocol” to confirm.

Pic.12-4

RF link

There are four parameters can be selected in this parameter, as Pic.12-5. Click “Set link parameter” to confirm, click “Get link parameters” to check current RF link parameters.



Pic.12-5

QT Tag

Select “Set QTPara” to switch ON and OFF hidden areas of QT tag, click “Get QTPara” to check current status.

Pic.12-6

Open tagFocus

Select ON/OFF of tagFocus in Pic.12-6.

Open FastID

Select ON/OFF of “Open the EPC and TID” in Pic.12-6.

Open EPC and TID

Select ON/OFF of “Open the EPC and TID” in Pic.12-6.

Documents / Resources

	**MARSON MR16 Fixed UHF Reader** [pdf] User Manual MR16, Fixed UHF Reader, UHF Reader, Fixed Reader, MR16, Reader
	**MARSON MR16 Fixed UHF Reader** [pdf] User Manual MR16, Fixed UHF Reader, MR16 Fixed UHF Reader, UHF Reader, Reader