

## Setting Function Configuration

### Function Configuration List

Cmd No.	Function	GPIO1 Behavior	Notes
0x00	Standard Mode	Blank	
0x02	Automatic reading tags. Wiegand 34 output(in-phase)	GPIO1 High Level On	
0x03	Automatic reading tags. Wiegand 26 output(in-phase).	GPIO1 High Level On	
0x04	Automatic reading tags. Fast switch antenna mode.	Blank	Can't be controlled by GPIO
0x05	GPIO trigger once, automatic reading tags. Fast switch antenna mode (Time can be set)。	GPIO1 High Level On	
0x06	Automatic reading tags. Wiegand 26 output (reversed-phase).	GPIO1 High Level On	
0x07	Function Park, Serial port output.	GPIO1 High Level On	
0x08	Automatic burn-in.	GPIO1 Low level On	
0x09	Automatic reading tags. Fast switch antenna mode, Wiegand 26 output(in-phase).	GPIO1 High Level On	
0x0A	Automatic reading tags. Fast switch antenna mode, Wiegand 26 fast output(in-phase, time between datas is 5mS).	GPIO1 High Level On	
0x0B	Automatic reading 6B tags. Wiegand 26 output(in-phase).	GPIO1 High Level On	
0x0C	Automatic reading 6B tags. Wiegand 26 output(reversed-phase).	GPIO1 High Level On	
0x0D			
0x0E			
0x0F	Automatic reading tags. Fast switch antenna mode.	GPIO1 Low level On	
0x10	Automatic reading tags. Fast switch antenna mode. Can get buffer.	GPIO1 High Level On	
0x11	Automatic reading tags. Fast switch antenna mode. Reading Identifier of Reader at the same time.	GPIO1 High Level On	Intervals due to quantity of tags.
0x12	Automatic reading tags. Fast switch antenna mode. Every times read tag will trigger GPIO3 output (High).	GPIO1 High Level On	Set trigger time via set Switch Interval between antennas, unit: s
0x13	Low power consumption mode		Mobile device

### 3.1 Setting Function Configuration

#### 3.1.1 Setting Function Configuration via Cmd.

Launch the supplied Software: **Function\_ID**, the following screen displays:

The screenshot shows the 'UHF RFID Function Configuration' window. It has two tabs: 'Connection' and 'Set function ID'. The 'Connection' tab is active, showing options for RS232 and TCP/IP. Under RS232, the Serial Port is set to 'COM1' and the Baudrate is '115200'. Under TCP/IP, the Reader IP is '192.168.0.178' and the Port is '4001'. There are 'Connect' and 'Disconnect' buttons for both. The 'Set function ID' tab is also visible, showing 'Set' and 'Get' buttons, a 'Function ID (HEX)' dropdown, and an 'Antenna Switch Sequence' section with four antenna settings (A, B, C, D) each with a 'Round' value of 1 and a 'Switch Interval (mS)' of 0. An 'Operation history' section is at the bottom.

Connecting **Reader** with **UHF RFID Function Configuration**. Selecting the corresponding **Function ID**:

This screenshot shows the same software interface, but with the 'Function ID (HEX)' dropdown menu open. The 'Set' button in the 'Set function ID' section is circled in red. The dropdown menu lists hexadecimal values from 00 to 1D, with '03' highlighted in blue. A red arrow points to the '03' option. The 'Operation history' section at the bottom shows a log entry: '2015/8/6 10:34:27 Reader connected COM3@115200'.

Click **Set**, the **Operation history** column displays:

UHF RFID Function Configuration

Connection

☒ RS232 ☐ TCP/IP

RS-232

Serial Port: COM3 Connect

Baudrate: 115200 Disconnect

TCP/IP

Reader IP: 192.168.0.178 Connect

Port: 4001 Disconnect

Set function ID

**Set** Get Function ID (HEX): 03

Antenna Switch Sequence

Set Get

A	Round	B	Round	C	Round	D	Round	Switch Interval (ms)
Ant1	1	Ant2	1	Ant3	1	Ant4	1	0

Operation history:

```
2015/8/6 10:34:27 Reader connected COM3@115200
2015/8/6 11:19:29 Function ID set
```

Now, **Function Configuration** has been set successfully. Reader will work as the corresponding Function Mode.

Users also can click **Get** to check the Reader working mode:

UHF RFID Function Configuration

Connection

☒ RS232 ☐ TCP/IP

RS-232

Serial Port: COM3 Connect

Baudrate: 115200 Disconnect

TCP/IP

Reader IP: 192.168.0.178 Connect

Port: 4001 Disconnect

Set function ID

Set **Get** Function ID (HEX): 03

Antenna Switch Sequence

Set Get

A	Round	B	Round	C	Round	D	Round	Switch Interval (ms)
Ant1	1	Ant2	1	Ant3	1	Ant4	1	0

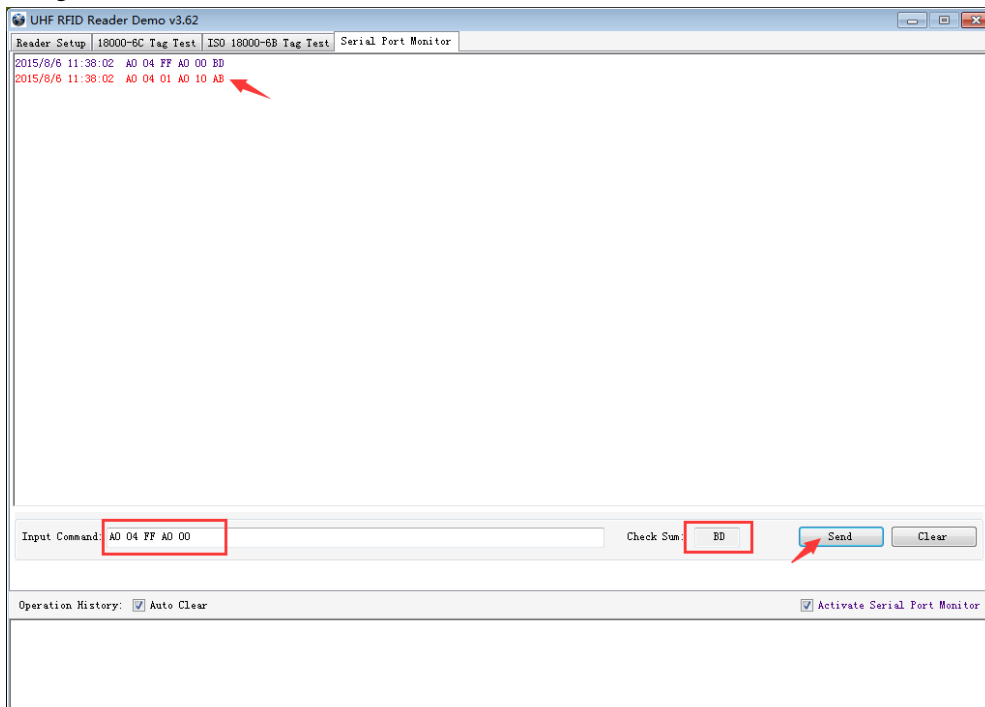
Operation history:

```
2015/8/6 10:34:27 Reader connected COM3@115200
2015/8/6 11:19:29 Function ID set
2015/8/6 11:24:34 Current function ID (HEX): 03
```

### 3.1.2 Setting Function Configuration via Cmd.

**Command :** A0 04 FF A0 \*( Cmd No.) \*(Check)

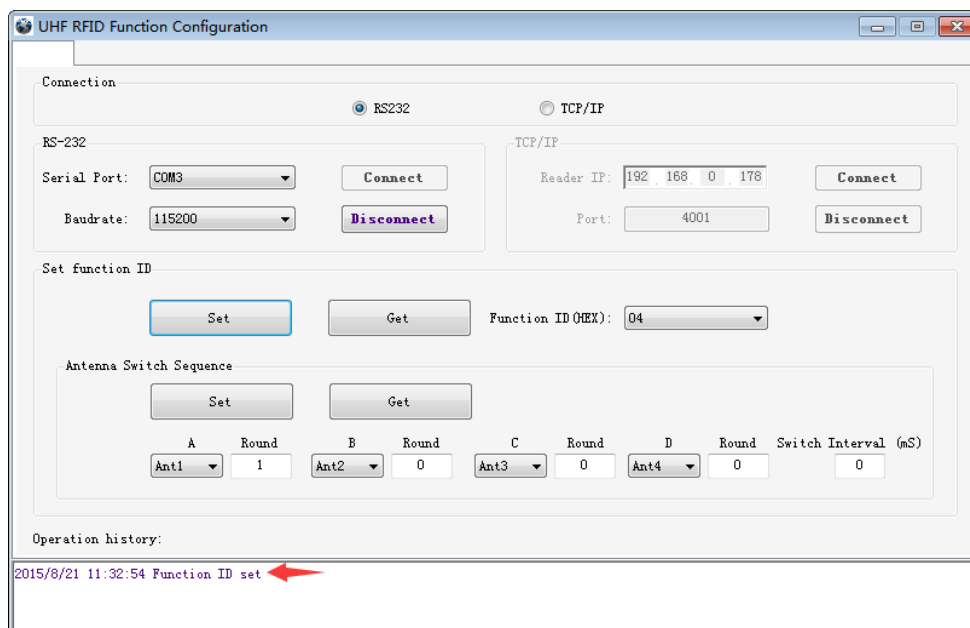
eg: Standard Mode: **A0 04 FF A0 00 BD**



**Note:** About check pls see *Serial\_Protocol\_User's\_Guide\_V2.38\_en*.  
Then, Reader will work as the corresponding Function Mode.

### 3.2 Setting Antenna Switch Sequence

For example: Setting antenna Switch Sequence under 04 mode, using Ant 1 only.  
First step: Set 04 mode.



Second step: set Ant2, Ant3, Ant4 Round times to 0, click **Set**:

The screenshot shows the 'UHF RFID Function Configuration' window. The 'Connection' section has 'RS232' selected. The 'Set function ID' section has 'Set' and 'Get' buttons. The 'Antenna Switch Sequence' section has a 'Set' button highlighted with a blue border. Below it, the configuration table shows Ant1 with Round 1, and Ant2, Ant3, and Ant4 with Round 0. The 'Switch Interval (mS)' is set to 0. The 'Operation history' at the bottom shows two entries: '2015/8/21 11:32:54 Function ID set' and '2015/8/21 11:33:19 Antenna switch configuration set' with a red arrow pointing to it.

A	Round	B	Round	C	Round	D	Round	Switch Interval (mS)
Ant1	1	Ant2	0	Ant3	0	Ant4	0	0

Operation history:  
2015/8/21 11:32:54 Function ID set  
2015/8/21 11:33:19 Antenna switch configuration set

Then click **Get**, the follow screen as below means set **Antenna Switch Sequence** successfully:

The screenshot shows the 'UHF RFID Function Configuration' window after clicking 'Get'. The 'Get' button in the 'Antenna Switch Sequence' section is highlighted with a blue border. The 'Operation history' at the bottom now includes several entries confirming the successful configuration of the antenna switch sequence and inventory rounds for all four antennas.

A	Round	B	Round	C	Round	D	Round	Switch Interval (mS)
Ant1	1	Ant2	0	Ant3	0	Ant4	0	0

Operation history:  
2015/8/21 11:32:54 Function ID set  
2015/8/21 11:33:19 Antenna switch configuration set  
2015/8/21 11:34:42 Antenna switch sequence :  
2015/8/21 11:34:42 Ant 1 inventory 1 round(s)  
2015/8/21 11:34:42 Ant 2 inventory 0 round(s)  
2015/8/21 11:34:42 Ant 3 inventory 0 round(s)  
2015/8/21 11:34:42 Ant 4 inventory 0 round(s)  
2015/8/21 11:34:42 Switch interval: 0 ms