



RFID Desktop Reader NEO2 LF & HF
Custom-specific Firmware

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1 2 Operation Modes

1.1 Automatic Mode (default after power ON)

Implemented as is plus these additional 2 functions:

- Reply any incoming letters with “S” (0x53) and add CR + LF to them.
- Then stop automatic mode; switch to halt mode.

Examples

```
>> S                >> 0x53
<< S<\r><\n>        << 0x53 0D 0A
Halt mode.
```

```
>> F                >> 0x46
<< S<\r><\n>        << 0x53 0D 0A
Halt mode.
```

```
>> DN               >> 0x44 4E
<< S<\r><\n>        << 0x53 0D 0A
Halt mode.
```

```
>> V                >> 0x56
<< S<\r><\n>        << 0x56 0D 0A
Halt mode.
```

Automatic Mode (default after power ON)

Reply any incoming letters and add CR + LF to them.

Execute only a few commands few commands. Pls see “1.2 Commands in Halt Mode”

1.2 Commands in Halt Mode

If any of the letters “dg”, “DG”, “dr”, “DR” are received, do this:

- Reply these letters and add CR + LF to them.
- Switch the mainboard LED to red.

If any of the letters “dn”, “DN” are received, do this:

- Reply these letters and add CR + LF to them.
- Switch the mainboard LED back to blue (standard colour).

If the letter “v” or “V” is received, do this:

- Reply this info string: “MULTITAG-125 01<\r><\n>” (0x 4D 55 4C 54 49 54 41 47 2D 31 32 35 20 20 30 31 0D 0A).

Remark

This means: when in automatic mode and you want to get the version, you must send “v” or “V” twice!

The first “v” or “V” will switch to halt mode. The second “v” or “V” is then executed as “Get Firmware Info”.

If any the letter “x”, “X”, “z”, “Z” is received do this:

- Reply this info string: “MULTITAG-125 01<\r><\n>” (0x 4D 55 4C 54 49 54 41 47 2D 31 32 35 20 20 30 31 0D 0A).
- Switch to automatic mode. You can perform a FW reset if you prefer this.

If any the letter “c”; “C” is received do this:

- Switch to automatic mode. You can perform a FW reset if you prefer this.

For every other letter do this:

- Reply “?” (0x3F) and add CR + LF to them.

Examples

>> S	>> 0x53
<< ?<\r><\n>	<< 0x3F 0D 0A

>> F	>> 0x46
<< ?<\r><\n>	<< 0x3F 0D 0A

>> G	>> 0x47
<< ?<\r><\n>	<< 0x3F 0D 0A

2 Selection of RFID Tag Types

To set which RFID data carrier types are to be detected, the device must first be set to halt mode. In other words, send a byte to the device.

Only ISO14443A

```
>> M1                >> 0x4D 31
<< M1<\r><\n>        << 0x4D 31 0D 0A
```

Only Hitag-S

```
>> M2                >> 0x4D 0x32
<< M2<\r><\n>        << 0x4D 32 0D 0A
```

ISO14443A and Hitag-S

```
>> M3                >> 0x4D 0x33
<< M3<\r><\n>        << 0x4D 33 0D 0A
```

Finally

Once set-up is complete, the reader must be switched on again or a command must be used to switch to automatic mode.