



communications

CyTerra
7558 Southland Boulevard, Suite 130
Orlando, FL 32809
Tel: (407) 926-1900 Fax: (407) 859-5131
www.L-3com.com/cytterra

October 12, 2012

To Whom It May Concern:
Advanced Compliance Solutions, Inc.
3998 N.W. 8th Avenue (FAU Blvd.) Suite #310
Boca Raton, FL 33431-0991

L-3 CyTerra attests and confirms that the power settings for the RANGE-R Link WiFi module, FCC ID YKD-25TWD3000-029, are hard coded to the following settings:

- Mode 802.11b: All channels set to high power (+16 to +17dBm)
- Mode 802.11g: All channels set to low power (+7dBm)
- Mode 802.11n: All channels set to medium power (+10dBm)

These settings are embedded in the firmware that is loaded onto the module which is subsequently connected to the USB port of the RANGE-R radar. The Renesas microcontroller communicates with the RedPine part via serial link using the command protocol defined in the RedPine "Software Programming Reference Manual", see attached. Page 34 (attached) of the manual describes the "Join" command, which we use to specify the transmit rate and power as specified by this excerpt:

TxPower: This fixes the Transmit Power level of the module. This value can be set as follows:

- 0 – Low power (7dBm)
- 1 – Medium power (10dBm)
- 2 – High power (16 to 17dBm)

The firmware load is done as part of the assembly of the module at the L-3 CyTerra factory and is not changeable by the L-3 CyTerra technician or the end user. The only means of changing these settings is the creation of a new firmware build by design engineering.

Sincerely,

Donald C. Wright
Director Location & Surveillance Programs
L-3 Communications CyTerra Corporation
7558 Southland Blvd., Suite 130
Orlando, Florida 32809
Office (407) 926-1909

Command

at+rsi_authmode

Usage

at+rsi_authmode=value\r\n

Parameters

The valid values for the parameter for this command are as follows:

- 0 - Open Key Authentication
- 1 - Shared Key Authentication

Response

Result Code	Description
OK	Successful execution of the command
ERROR	Failure Possible error codes = -8

Example: at+rsi_authmode=1\r\n

```
.....
0x61 0x74 0x2B 0x72 0x73 0x69 0x5F 0x61 0x75 0x74
0x68 0x6D 0x6F 0x6F 0x64 0x65 0x3D 0x31 0x0D 0x0A
```

2.3.12 Join

Description

This command is used to join a network. The SSID is selected from the list of SSID's returned after performing scan operation. It is also used to create an IBSS network in creator mode.

Prerequisite

The developer is expected to execute "Set Network Type" and Pre Shared Key (if Access Point is in Secure mode) commands prior to the execution of this command

Command

at+rsi_join

Usage

at+rsi_join=SSID name,TxRate,TxPower\r\n

Parameters

SSID name: The SSID name of the network. The maximum length of the SSID name is 32 characters. This can be the SSID of the Access Point or Client to which the module has to connect to in Infrastructure or IBSS Joiner modes respectively. It can also be the SSID of the IBSS that is to be created by the module, according to the inputs to the `at+rsi_network` command.

TxPower: This fixes the Transmit Power level of the module. This value can be set as follows:

- 0 – Low power (7dBm)
- 1 – Medium power (10dBm)
- 2 – High power (16 to 17dBm)

TxRate: Rate at which the data has to be transmitted. Refer to the table below for the various data rates and the corresponding values.

Input parameter delimiter

The input parameters are delimited by commas (0x2C in ASCII format) in this command.