

iDEN 800MHz RRH User Guide

Written by	Reviewed by	Approved by
JINHEE LEE	KSHIN	MICHALE YOON

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1. FCC Information

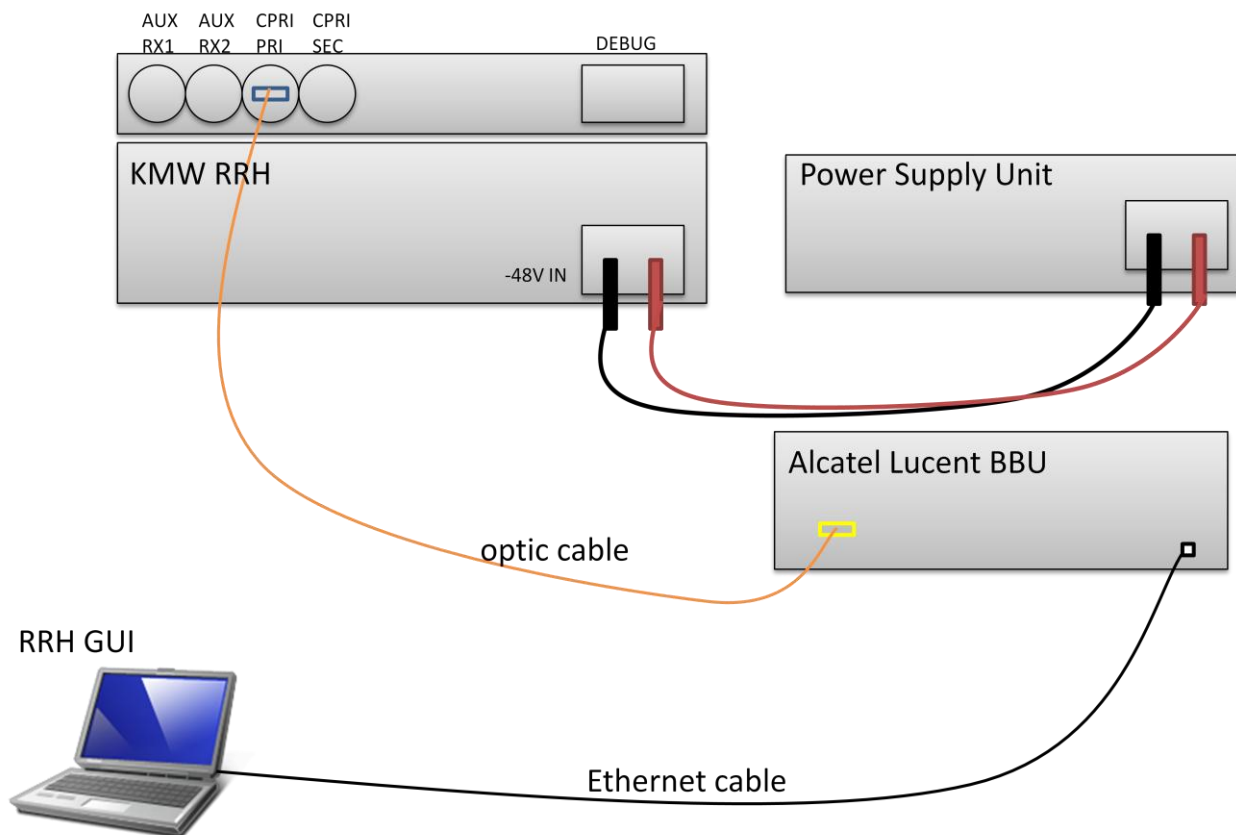
RF Exposure compliance must be addressed at the time of licensing

2. Test Environment

2.1. Preperation List

- iDEN 800Mhz RRH (Remote Radio Head 800MHz)
- PSU (Power Supply Unit)
- BBU (Base Band Unit, Alacaltel Lucent)
- Optic transceiver 2EA (Yellow- 1550nm, Blue- 1310nm)
- Optic Cable
- RJ45 Ehternet Cable
- Laptop computer for RRH GUI

2.2. Testing Environement Configuration



- PSU Setting Table

Voltage	Current Limit
Low : -38V	12 A
Normal : -48V	9.5 A
High : -57V	8 A

2.3. RRH Setup Procedure

- Checke PSU Power 48V off
- Connect PSU power to RRH Power connector
- Connect BBU and RRH with Optic transceiver and Optic cable
RRH side; Blue Transceiver (1310nm)
BBU side; Yellow Transceiver (1550nm)
- Turn on PSU to power up RRH
- Make sure computer to join RRH and BBU network.

If the computer joined the same network which BBU joined, it is able to access RRH network from the GUI.



3. Network Configuration

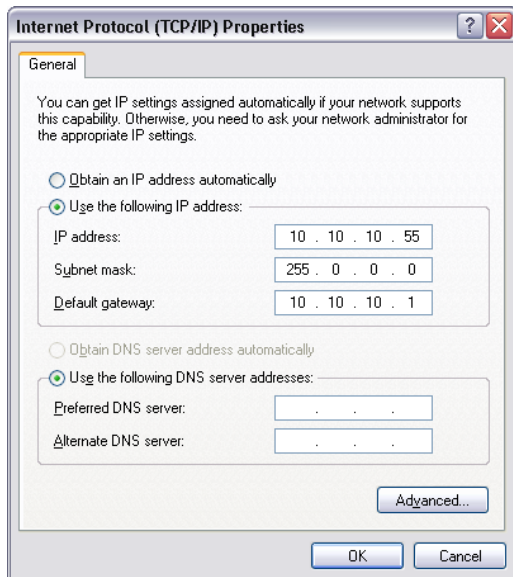
- **Setup computer network configuration**

IP: **assigned by ALU** (ex; 10.10.10.55)

Subnet mask: **255.0.0.0**

Default gateway: **assigned by ALU** (ex; 10.10.10.1)

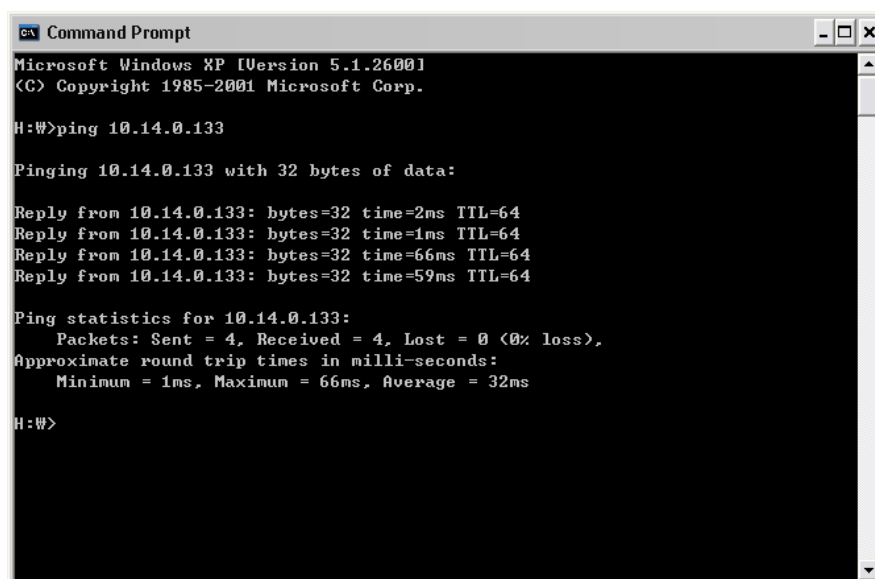
DNS: **assigned by ALU**



- **Test network configuration**

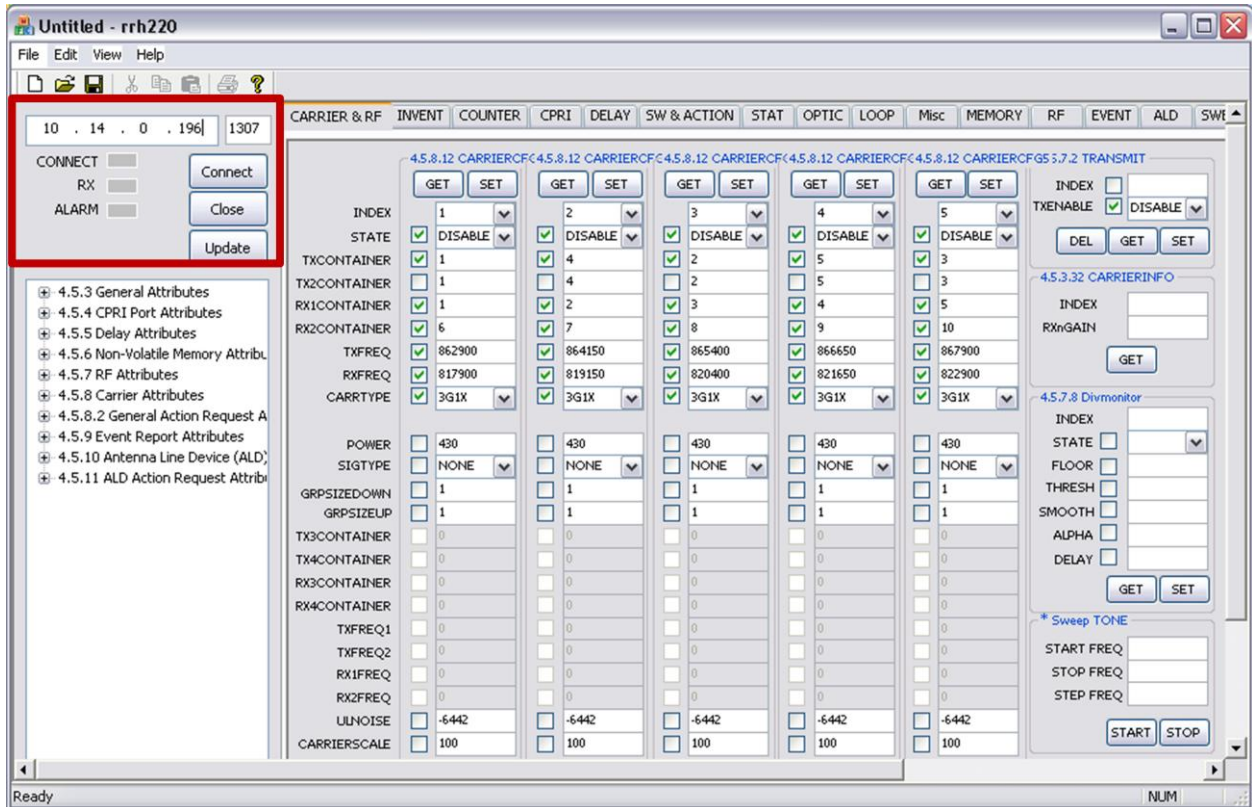
Windows Start > Run > CMD [Enter]

C:\> ping RRH IP(10.14.0.196) [Enter]



4. Operate GUI Program

- Run GUI Program.
Input RRH's IP and click the Connect button



- Setup the carrier configuration on the index to turn on carrier power.
If you want to make LTE single carrier configuration, please follow below setting and click (A) SET button.

Ex) 1FA setup with LTE signam on Index 3 (Tx; 865.4MHz, Rx; 820.4MHz)

Index : 3

STATE : [v] Enable

TXCONTAINER : [v] 2

TX2CONTAINER : [v] 2

RX1CONTAINER : [v] 3

RX2CONTAINER : [v] 8

TXFREQ : [v] 865400

RXFREQ : [v] 820400

CARRTYPE : [v] LTE

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- Change TXENABLE[v] from DISABLE to ENABLE and click (B)SET button to turn on RF Power

The screenshot shows the 'rrh220' software interface with a table of carrier configurations. The table has columns for carrier indices 1 through 5. The 'STATE' row shows that carrier 3 is set to 'ENABLE', while others are 'DISABLE'. A red box labeled 'A' highlights the 'ENABLE' dropdown menu for carrier 3. To the right, the 'TRANSMIT' section (4.5.3.7.2) has a 'TXENABLE' checkbox checked and a 'SET' button highlighted with a red box labeled 'B'. Other sections like 'CARRIERINFO' and 'Divmonitor' are also visible.

INDEX	1	2	3	4	5
STATE	DISABLE	DISABLE	ENABLE	DISABLE	DISABLE
TXCONTAINER	1	4	2	5	3
RX1CONTAINER	1	2	3	4	5
RX2CONTAINER	6	7	8	9	10
TXFREQ	862900	864150	865400	866650	867900
RXFREQ	817900	819150	820400	821650	822900
CARRTYPE	3G1X	3G1X	3G1X	3G1X	3G1X
POWER	430	430	430	430	430
SIGTYPE	NONE	NONE	NONE	NONE	NONE
GRPSIZEDOWN	1	1	1	1	1
GRPSIZEUP	1	1	1	1	1
TX3CONTAINER	0	0	0	0	0
TX4CONTAINER	0	0	0	0	0
RX3CONTAINER	0	0	0	0	0
RX4CONTAINER	0	0	0	0	0
TXFREQ1	0	0	0	0	0
TXFREQ2	0	0	0	0	0
RX1FREQ	0	0	0	0	0
RX2FREQ	0	0	0	0	0
ULNOISE	-6442	-6442	-6442	-6442	-6442
CARRIERSCALE	100	100	100	100	100

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- If you set up Signal Analyzer, you can monitor carrier power just like below image.

