lssued by	Date	Checked by	Document Id	Comba		
WHGZ	11-02-11	DLGZ	WE-TN-10022-005			
Title			Project No	Revision	Page	
RA-5700 Tune Up Procedures			WE-TN-10022	R1A	1 / 23	

RA-5700 Tune up Procedures

Index

1	EQUIPE	EMENT CONNECTION	2
	1.1 GO	UNDING CONNECTION	2
	1.2 LI-I	ON BATTERY CONNECTION	2
	1.3 OP	TICAL CONNECTION	3
	1.4 EX	FERNAL ALARM CONNECTION	4
	1.5 BTS	S ALARM CONNECTION	5
	1.6 CO	NNECT TO PC	5
2	LED IN	DICATORS	6
	2.1 MU	LED INDICATORS	6
	2.2 RU	LED INDICATORS	6
3	WEB O	MT	7
	3.1 CO	NNECTION FROM PC TO EQUIPMENT	7
	3.2 OM	T CONFIGURATION	8
	3.2.1	SYSTEM INFORAMTION	8
	3.2.2	RF INFORMATION	. 11
	3.2.3	ALARM INFORMATION	. 15
	3.2.4	PROPERTIES INFORMATION	. 16
	3.2.5	USER MANAGEMENT	. 19
	3.2.6	HELP	. 20
	3.3 CH	ANGE PASSWORD	. 20
4	TROUE	LE SHOOTING	. 22

Revision History

Revision	Date	Author	Remarks
P1A	11Feb11	WHGZ	Prepared by SXGZ
R1A	11Feb11	WHGZ	Checked by DLGZ

lssued by	Date	Checked by	Document Id	Comba		
WHGZ	11-02-11	DLGZ	WE-TN-10022-005			
Title		Project No	Revision	Page		
RA-5700 Tune Up Procedures		WE-TN-10022	R1A	2 / 23		

1 EQUIPEMENT CONNECTION

1.1 GOUNDING CONNECTION

Ground connection

To ensure safe operation of the product, a ground (earth) connection is required. For single phase AC power source, the product must be grounded by connecting the "earth wire" of the power cord to the ground terminal of the AC supply. For operating this product with DC power system (such as rectifiers), the product should not be connected to power systems that switch open the return lead because the return lead could function as the ground (earth) connection for the equipment.

Protective Ground Connection

The enclosure must be grounded securely by connecting a copper wire (CSA 16mm²) to the grounding terminal on the equipment/rack, and the other end to a protective ground (i.e. building earth point). An internationally acceptable colour code of the ground connection wire is green/yellow.

Such a ground connection implements the "Protective Ground Connection", and must be connected to the equipment at the designated ground point. In general, do not connect the supply before establishing an adequate ground (earth) connection.

MU Grounding Connection

Connect the grounding terminal located on the back panel of MU to a protective ground (i.e. building earth point).

RU Grounding Connection

The equipment must be grounded securely. Connect a copper wire to the grounding terminal on the mounting tab/enclosure, and connect the other end to a protective ground (i.e. building earth point). An internationally acceptable coloring code of the ground connection wire is green/yellow.

1.2 LI-ION BATTERY CONNECTION

Li-ion battery is provided with this system to ensure power is supplied to the system monitoring unit and MCU and to ensure the alarm message could be sent to OMC effectively in case of mains power failure.

Caution: Be careful of the risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

lssued by	Date	Checked by	Document Id	Comba		
WHGZ	11-02-11	DLGZ	WE-TN-10022-005			
Title		Project No	Revision	Page		
RA-5700 Tune Up Procedures		WE-TN-10022	R1A	3 / 23		

1.3 OPTICAL CONNECTION

MU is connected to RU via optical fiber (length<13km). Connect MU front panel's OP1-OP4 with RU's OP OUT/IN (via an optical jumper) respectively.

Refer to the following connection:



Figure 1: Optical Connection

lssued by	Date	Checked by	Document Id	Comba		
WHGZ	11-02-11	DLGZ	WE-TN-10022-005			
Title			Project No	Revision	Page	
RA-5700 Tune Up Procedures			WE-TN-10022	R1A	4 / 23	

1.4 EXTERNAL ALARM CONNECTION

For MU, this is a DB9 connector. The following figure and table show the pin allocation and definition. Pin numbering are shown looking-into the connector on the enclosure.



Figure 2: Pins Allocation for "EXT_ALM" Port for MU

Pin number	1	2	3	4	5	6	7	8~9
Alarm definition	EXT. Alarm 1	Reserved	EXT. Alarm 2	Reserved	EXT. Alarm 3	Reserved	EXT. Alarm 4	Reserved

Table 1: Pin Definition of "EXT_ALM" Port for MU

For RU, this is a 7-pin CPC connector. The following figure and table show the pin allocation and definition. Pin numbering are shown looking-into the connector on the enclosure.



Figure 3: Pins Allocation for "EXT_ALM" Port for RU

Pin number	1	2	3	4	5	6	7
Alarm definition	EXT. Alarm 1	EXT. Alarm 2	EXT. Alarm 3	GND	Reserved	Reserved	Reserved

Table 2: Pin Definition of "EXT_ALM" Port for RU

lssued by	Date	Checked by	Document Id	Comba		
WHGZ	11-02-11	DLGZ	WE-TN-10022-005			
Title		Project No	Revision	Page		
RA-5700 Tune Up Procedures		WE-TN-10022	R1A	5 / 23		

1.5 BTS ALARM CONNECTION

The equipment alarms can be signalled to the BTS via voltage-free relay contacts. The voltage-free relay connections are connected to the DB-9 port "BTS_ALAM" located on the MCU of MU. The following figure and table shows the pin allocation and definition.



Figure 4: Pins Allocation for "BTS_ALM" Port

Pin Number	Definition	Description
1	BTS_OPEN	Connects to the normally open terminal of the voltage free relay.
2	BTS_COM	Connects to the common terminal of the voltage free relay.
3	BTS_CLOSE	Connects to the normally close terminal of the voltage free relay.
4~9	NC	Reserved.

Depending on OMT/OMC configuration, alarm to BTS can be signalled equipment by either: a) pin1 and pin2 'open' or b) Pin2 and Pin3 'close'.

1.6 CONNECT TO PC

The local commissioning and management for MU and RU is achieved through connecting to the OMT PC locally.

Connect MU to PC

Connect "OMT" port (RJ45) to the serial port of PC with ethernet cable supplied to achieve local monitoring and management. A build-in wireless modem is available for OMC connection to realize remote commissioning.

Connect RU to PC

Local commissioning and management of RU is achieved through "OMT" port and the OMT PC via field commissioning cable supplied.

With the equipment enclosure opened, the OMT PC can be connected internally.

End of section

lssued by	Date	Checked by	Document Id	Comba		
WHGZ	11-02-11	DLGZ	WE-TN-10022-005			
Title			Project No	Revision	Page	
RA-5700 Tune Up Procedures			WE-TN-10022	R1A	6 / 23	

2 LED INDICATORS

2.1 MU LED INDICATORS

Diagnostic LEDs are located on the MU; each indicates the status of a particular function:

Identifier	Color	Indication
POWER	Green	It stands in green when power on.
RUN	Green	Operation indicator – power is supplied to the MU. Flashes once every second to indicate normal system operation.
ALM	Red	Alarm indicator. ON = alarm; OFF = no alarm
MOD	Red	Diagnostic LED for FSK communication and MODEM operation. Flashes once every two seconds to indicate normal communication between MU and RU.
OP1-OP4	Green	When the green indicators are on, the relative optical channel is in normal reception.

Table 3: MU LED Indicators

2.2 RU LED INDICATORS

LED Diagnostic indicators are located on the MCU integrated in the RU; each indicates the status of a particular function.

Identifier	Colour	Indication
ALM (on bottom panel)	Red	Synchronized LED indicator of LED4 on MCU. Alarm indicator. ON = alarm; OFF = no alarm
LED 5	Green	Operation indicator – power is supplied to the RU. Flashes twice every 2 seconds to indicate normal system operation.
LED 4	Red	Alarm indicator. ON = alarm; OFF = no alarm
LED 3	Red	Diagnostic LED for FSK communication. Flashes once every two seconds to indicate normal communication between MU and RU.
		Table 4: RU LED Indicators

The LEDs LED5, LED4, LED3 will flash simultaneously five times during system self-checking after equipment power-up. Then LED5 flashes every second to indicate system commissioning can be proceeded with.

End of section

Issued by WHGZ	Date 11-02-11	Checked by DLGZ	Document Id WE-TN-10022-005	Com	ba
Title RA-5700 Tune	e Up Procedures		Project No WE-TN-10022	Revision R1A	Page 7 / 23

3 WEB OMT

3.1 CONNECTION FROM PC TO EQUIPMENT

Before accessing to the OMT, physical connection between the OMT software and the equipment must be made. A straight-through RJ45 cable shall be applied for the connection.

Comba recommends an IE8 browser to connect with Web OMT.

The default IP address of RA-5700 MU is 192.168.8.101 and RU is 192.168.8.102. Subnet mask is 255.255.255.0.

Execute the IE browser and enter 192.168.8.101/102 in the address bar. A pop-up window will be shown, requiring user name and password. The default user is *admin* and password is *123456*.

🖉 Internet Explorer cannot display the webpage - Windows Internet Explorer		- 7 🛛
(C) - 2 http://192.168.8.101	💌 🄶 🗙 🛛 Baidu Search	P •
File Edit View Favorites Tools Help		📆 -
🖋 McAfee 🖉 👻		
😭 🏟 🍘 Internet Explorer cannot display the webpage	🟠 🔹 🗟 👘 🖶 🖬 Page	e 🔹 🎲 Tools 🔹 🥍
Internet Explorer cannot display the webpage		<
Most likely causes:		
You are not connected to the Internet.		
 The website is encountering problems. 		
 There might be a typing error in the address. 		
What you can try:		
Diagnose Connection Problems		

Figure 5: Web OMT Access

lssued by WHGZ	Date 11-02-11	Checked by DLGZ	Document Id WE-TN-10022-005	Com	ba
Title RA-5700 Tune	e Up Procedures		Project No WE-TN-10022	Revision R1A	Page 8 / 23

Comba	Operation and Maintenance Terminal
	User Login User Name: admin Password: •••••• Login

Figure 6: Log in

Items	Default Value
PC IP Address	Automatically distributed by system
PC Subnet Mask	255.255.255.0
PC Gateway	Automatically distributed by system
System IP Address	192.168.8.101 (for MU) / 192.168.8.102 (for
	RU)
System Subnet Mask	255.255.255.0
User name	admin
Password	123456

Table 5: IP Setting Quick Look-up Table

3.2 OMT CONFIGURATION

OMT parameters include: Common Information, RF Information, Alarm Information, Properties Information, User Manager and Help.

3.2.1 SYSTEM INFORAMTION

3.2.1.1 System Information

Click on [System Information], system information will be displayed in the right interface of the OMT screen. In the interface the site ID of MU is described and the currently accessed unit is indicated.

lssued by WHGZ	Date 11-02-11	Checked by DLGZ	Document Id WE-TN-10022-005	Com	ba
Title RA-5700 Tune	e Up Procedures		Project No WE-TN-10022	Revision R1A	Page 9 / 23

Ope	ration and Maintenance Terminal	Current User : admin	Change Password	Log Off
	System Information			
System Info.	1.			
System Information	🗰 Equipment00(Model : RA-5700D;Site ID : 00000000;Site Sub ID : 00)			
Firmware Opdate				
Maintenance				
Config Data Import				
Data Export				
RF Info.				
Alarm Info.				
Properties Info.				
User Manager				
Help				
	Refresh	Sub SitelD Config		

Figure 7: System Information

As illustrated, MU in green is under monitoring,

• To switch to the RU or other sites, customer can choose RU (in grey) or other site by clicking to switch to RU or other sites.

3.2.1.2 Firmware Update

Op	eration and Maintenance Terminal Current User: : admin Change Password Log Off
	♦ Firmware Update
System Info.	Add Filon : Add filon
System Information	Add Hies.
Firmware Update	Directory
Maintenance	No file added
Config Data Import	
Data Export	Please note: Upload "1" files from PC,only " .dnl" file update is available.
RF Info.	Updating Cancel All
Alarm Info.	
Provident lafe	Figure 8: Firmware Update

lssued by WHGZ	Date 11-02-11	Checked by DLGZ	Document Id WE-TN-10022-005	Com	ba
Title RA-5700 Tune	e Up Procedures		Project No WE-TN-10022	Revision R1A	Page 10 / 23

3.2.1.3 Maintenance

Ope	ration and Maintenance Terminal	Current User::admin Change Password Log Of
	◆ Maintenance	
System Info.		
System Information		C
Firmware Update		Firmware Switch
Maintenance		
Config Data Import		Device Reboot
Data Export		
RF Info.	1	
Alarm Info.		Clear History Alarm
Properties Info.	1	
User Manager		
Help		
	Figure 9: M	aintenance

- 1> Firmware Switch: can switch to the previous firmware version which was saved in the system when update to current firmware. It is to say there are 2 firmware versions available in same system. This function is not available in current phase.
- 2> Device Reboot: restart the device
- 3> Clear History Alarm: delete all history alarm records

3.2.1.4 Config Data Import

ration and Maintenance Terminal	Current User: : admin	Change Password	Log Of
🔶 Config Data Import			
Add Files : Add files			
Add files .			
Directory			
No file added			
Please note: Upload "1" files from PC. only ".csv" file upload	is available.		
Uploading	Cancel all		
•			
J			
	Add Files : Add files Directory No file added Please note: Upload "1" files from PC, only ".CSV" file upload Uploading	Add Files: Add files Directory No file added Please note: Upload "1" files from PC. only ".CSV" file upload is available. Uploading Cancel all	Add Files Add files Directory No file added Please note: Upload "1" files from PC. only ".CSV" file upload is available. Uploading Cancel all

lssued by	Date	Checked by	Document Id	Comba				
WHGZ	11-02-11	DLGZ	WE-TN-10022-005					
Title RA-5700 Tune	e Up Procedures		Project No WE-TN-10022	Revision R1A	Page 11 / 23			

3.2.1.5 Data Export

Oper	ration and Maintenance Terminal	Current User: : admin Change Password	Log Off
	◆ Export Data		
System Info.			
System Information			
Firmware Update			
Maintenance		Config Data Export	
Config Data Import			
🛛 🛛 Data Export		Status Data Export	
RF Info.	r		
Alarm Info.	▶ I		
Properties Info.	J		
User Manager			
Help			

Figure 11: Data Export

[Export]: Export all site records. The records can be exported to a CSV file.

- 1> Config Data Export: can export the config. data and save in PC. The exported data can be input to the same kind of equipment if necessary.
- 2> Status Data Export: can export status data and save in PC. The data is save-only, can not import.

3.2.2 **RF INFORMATION**

It is recommended to configure the following RF parameters for the first installation.

3.2.2.1 Switch

Switch is to enable/disable power for internal modules. When user checks and sets non-RF parameters, such as checking physical antenna connection, switching off will disable equipment power temporarily to protect PA in operation.

One	ration	and	Maintenance Terminal		: ()		0	
					Current U	ser: admin	Change Password	Log Off
	♦ Sw	itch						
System Info.	-	AII 🗖	Parmeter Name	Status	Setting	MinValue	MaxValue	Unit
RF Info.	1		700MHz RF Switch	ON	×			
Switch	2		850MHz RF Switch	ON	OFF			
Alarm Threshold	з		1900MHz RF Switch	ON	ON			
Temperature	4		AGC Switch 01	ON	~			
ATT	5		700MHz Optimized IIP3	OFF	×			
Bauer	6		850MHz Optimized IIP3	OFF	×			
Power	7		1900MHz Optimized IIP3	OFF	~			
Gain	8		Modem Control Mode	OFF	~			
Miscellaneous								
Alarm Info.								
Properties Info.								
User Manager								
Help								
	1							
	U.							

Figure 12: Switch

lssued by	Date	Checked by	Document Id	Comba				
WHGZ	11-02-11	DLGZ	WE-TN-10022-005					
Title RA-5700 Tune	e Up Procedures		Project No WE-TN-10022	Revision R1A	Page 12 / 23			

Config:

Select the required state in setting columns of RF information window for RF switch, then press [ON] or [OFF] button to finish the configuration operation.

3.2.2.2 Alarm Threshold

Users can set alarm threshold according to the specific situation. If the measured value is lower than the threshold lower limit or more than the threshold upper limit, the appropriate alarm will be generated.

Cpci	ation	ana	Maintenance Terminal		Current L	lser:admin C	hange Password	Log
	🔶 Ala	m Thr	eshold					
System Info.	A	🔲	Parmeter Name	Status	Setting	MinValue	MaxValue	U
RF Info.	1		Over-Temperature Threshold	176		-40	257	
Switch	2		700MHz DL Input Power Overload Threshold	10		-10	10	d
Alarm Threshold	з		850MHz DL Input Power Overload Threshold	10		-10	10	d
Temperature	4		1900MHz DL Input Power Overload Threshold	10		-10	10	đ
Miscellaneous								
Alarm info.								
Alarm Info. Properties Info.								
Alarm Info. Properties Info. User Manager	C							
Alarm Info. Properties Info. User Manager Help	Ţ							

3.2.2.3 Temperature

Oper	ation and Main	tenance Terminal			Current L	lser:admin C	hange Password	Log Off
	◆ Temperature							
System Info.	All 🔲	Parmeter Nam	9	Status	Setting	MinValue	MaxValue	Unit
RF Info.	1 🔲 Device To	emperature		120	Read only			Ŧ
Switch								
Alarm Threshold								
Temperature								
ATT								
Power								
Gain								
Miscellaneous								
Alarm Info.								
Properties Info.								
User Manager								
Help								
		Figur	e 14: Tempera	ture				

lssued by	Date	Checked by	Document Id	Comba				
WHGZ	11-02-11	DLGZ	WE-TN-10022-005					
Title RA-5700 Tune	Up Procedures		Project No WE-TN-10022	Revision R1A	Page 13 / 23			

3.2.2.4 ATT

Oper	Operation and Maintenance Terminal			Curre	Password	Log Off		
	• A	п						
System Info.	All		Parameter Name	Status	Setting	MinValue	MaxValue	Unit
RF Info.	1		700MHz UL ATT	0	Read only			dB
Switch	2		850MHz UL ATT	0	Read only			dB
Alarm Threshold	3		1900MHz UL ATT	0	Read only			dB
Temnerature	4		700MHz DL ATT	0	Read only			dB
ATT	5		850MHz DL ATT	0	Read only			dB
811	6		1900MHz DL ATT	0	Read only			dB
Power								
Gain								
Miscellaneous								

Figure 15: ATT

[ATT]: read-only parameters. ATT = Rating Gain - Gain

3.2.2.5 Power

Oper	Operation and Maintenance Terminal						Change Password	Log Off
	Pow	/er						
System Info.	A		Parmeter Name	Status	Setting	MinValue	MaxValue	Unit
RF Info.	1		Optical RX Power 01	0	Read only			dBm
Switch	2		Optical TX Power 01	5	Read only			dBm
Alarm Threshold	3		700MHz DL Input Power		Read only			dBm
Temperature	4		850MHz DL Input Power		Read only			dBm
ATT	5		1900MHz DL Input Power		Read only			dBm
Power								
Gain								
Miscellaneous								
Alarm Info								
Properties Info								
User Manager								
Holp								
neip								

Figure 16: Power

lssued by	Date	Checked by	Document Id	Comba			
WHGZ	11-02-11	DLGZ	WE-TN-10022-005				
Title RA-5700 Tune	e Up Procedures		Project No WE-TN-10022	Revision R1A	Page 14 / 23		

3.2.2.6 Gain

Oper.	atio	n ai	nd Maintenance Terminal	Curre	nt User: : admin	Change I	Password	Log Off
	🔶 Gi	ain						
System Info.	All		Parameter Name	Status	Setting	MinValue	MaxValue	Unit
RF Info.	1		700MHz UL Gain	0		-50	-10	dB
Switch	2		850MHz UL Gain	0		-50	-10	dB
Alarm Threshold	3		1900MHz UL Gain	0		-50	-10	dB
Temperature	4		700MHz DL Gain	0		-50	-7	dB
ATT	5		850MHz DL Gain	0		-50	-7	dB
Power	6		1900MHz DL Gain	0		-50	-7	dB
D Gain	7		700MHz UL Rating Gain	-10		-20	20	dB
Miscellaneous	8		850MHz UL Rating Gain	-10		-20	20	dB
Alarm Info.	9		1900MHz UL Rating Gain	-10		-20	20	dB
Properties Info.	10		700MHz DL Rating Gain	-7		-20	20	dB
User Manager	11		850MHz DL Rating Gain	-7		-20	20	dB
Help	12		1000MHz DL Rating Gain	7		20	20	dp
	12			-/		-20	20	dB

Figure 17: Gain

Rating Gain: be set before delivery. Comba recommends no change of rating gain value. **Gain**: User can set according to the real application.

3.2.2.7 Miscellaneous

Oper	atio	n ai	nd Maintenance Terminal	Curre	nt User: : admi	Change I	Password	Log Off
	♦ M	iscel	aneous	_		9	F Ø	IH all
System Info.	All		Parameter Name	Status	Setting	MinValue	MaxValue	Unit
RF Info.	1		Equipment Response Overtime	8	Read only			S
Switch	2		Transmit Interval	100	Read only			mS
Alarm Threshold	3		Transmit Pause Waiting Time	2	Read only			S
Temperature	4		Firmware Update Waiting Time	2	Read only			S
ATT	5		700MHz BS Coupling Loss	0		0	60	dB
Power	6		850MHz BS Coupling Loss	0		0	60	dB
Gain	7		1900MHz BS Coupling Loss	0		0	60	dB
Miscellaneous	8		Modem Operating Frequency Band	MONO1900	~			
Alarm Info. Properties Info. User Manager Help	J				MON0850 MON0900 MON01800 MON01900 BI8501900 BI9001800 BI9001900			

Figure 18: Miscellaneous

lssued by WHGZ	Date 11-02-11	Checked by DLGZ	Document Id WE-TN-10022-005	Com	ba
Title RA-5700 Tune	e Up Procedures		Project No WE-TN-10022	Revision R1A	Page 15 / 23

3.2.3 ALARM INFORMATION

Click any tree node in [Alarm Info] group, [Alarm Information] window will appear in the right side. The figures below show the alarm information.

3.2.3.1 Master Alarm

	Oper Oper	atio	n ai	nd Maintenance Terminal	ent User: : admin Ch	ange Password Log Off
		◆ Ma	ister	Alarm		
	System Info.	All		Parameter Name	Status	Enable 🗌
	RF Info.	1		AC Power Failure Alarm	🖲 Normal	\checkmark
	Alarm Info.	2		DC Power Fault Alarm	🕒 Normal	✓
Ð	Master Alarm	3		Li-ion Battery Fault Alarm	🖲 Normal	✓
	Channel Alarm	4		Over-Temperature Alarm	🖲 Alarm	V
	External Alarm	5		Door Open Alarm	🖲 Normal	✓
	Broportion Info	6		700MHz ALC Alarm	🖲 Normal	V
	Properties into.	7		850MHz ALC Alarm	\varTheta Normal	V
	User Manager	8		1900MHz ALC Alarm	\varTheta Normal	✓
	Help	9		700MHz Shutdown Alarm	🖲 Normal	✓
		10		850MHz Shutdown Alarm	🖲 Normal	V
		11		1900MHz Shutdown Alarm	🖲 Normal	V
		12		Module Software Alarm	🙆 Normal	\checkmark

Figure 19: Master Alarm

3.2.3.2 Channel Alarm

Oper	atio	n ai	nd Maintenance Terminal	ent User: : admin Chang	e Password Log Off
	🔶 Ch		el Alarm		
System Info.	All		Parameter Name	Status	Enable 🗌
RF Info.	1		Optical RX Alarm	\varTheta Normal	
Alarm Info.	2		Optical TX Alarm	Normal	
Master Alarm	3		700MHz UL LNA Alarm	Normal	✓
Channel Alarm	4		850MHz UL LNA Alarm	Normal	✓
Evternal Alarm	5		1900MHz UL LNA Alarm	Normal	
Descertion Info	6		700MHz DL PA Alarm	Normal	
Properties into.	7		850MHz DL PA Alarm	Normal	V
User Manager	8		1900MHz DL PA Alarm	Normal	V
Help	9		700MHz DL Output Power Overload Alarm	Normal	V
	10		850MHz DL Output Power Overload Alarm	Normal	V
	11		1900MHz DL Output Power Overload Alarm	Normal	V
	12		700MHz DL Output Power Low Alarm	Normal	
	13		850MHz DL Output Power Low Alarm	Normal	
	14		1900MHz DL Output Power Low Alarm	Normal	V

Figure 20: Channel Alarm

lssued by WHGZ	Date 11-02-11	Checked by DLGZ	Document Id WE-TN-10022-005	Com	ba
Title RA-5700 Tune	Up Procedures		Project No WE-TN-10022	Revision R1A	Page 16 / 23

3.2.3.3 External Alarm

Company Company	ntion	and	Maintonanco Torminal	· · · · · · · · · · · · · · · · · · ·			
	ution	unu	Municolunice Ienninun	Current User : admin	Change Password Log Off		
	🔶 Ext	ernal <i>i</i>					
System Info.	A	II 🔲	Parameter Name	Status	Enable 🗌		
RF Info.	1		External Alarm 01	🖯 Normal			
Alarm Info.	2		External Alarm 02	🕒 Normal			
Master Alarm	3		External Alarm 03	🕒 Normal			
Channel Alarm	4		External Alarm 04	🕒 Normal			
External Alarm							
Properties Info.							
User Manager							
Help							
	-						
			Figure 21: External Alarm				

3.2.4 PROPERTIES INFORMATION

3.2.4.1 Equipment ID

Equipment ID is to be configured after local commission has been completed, which includes Site ID and Site Sub ID.

Item	Description
Site ID	Site ID is the unique equipment identification. It is a hexadecimal string of eight characters in the range of [0x00000000-0xFFFFFFFF]. e.g. 12345678
Site Sub ID	Site Sub ID is used for Master-Slave System. It is the unique identification of each Master/ Slave Unit and is a hexadecimal string of two characters in the range of [0x00-0xFF] For the system located with single equipment, the Site Sub ID should be 0xFF. e.g. 00 For Master-Slave system, the Site Sub ID for Master Unit is 0x00, and the Site Sub ID for each Slave Unit is represented in the range of [0x00-0xFE] in ascending order. e.g. Master Site ID: 00 Slave Site ID: 01

Table 6: Equipment ID

Open	ation	and	Maintenance Terminal	Current Us	ser : admin Change Passy	vord Log Off
	🔶 Equi					
System Info.	, A	al 🗖	Parameter Name	Status	Setting	Remark
RF Info.	1		Site ID	00000000		
Alarm Info.	2		Site Sub ID	00	Read only	00site ID
Properties Info.	3		Slave Site Sub ID 01	01		
Equipment ID	4		Slave Site Sub ID 02	FF		FF is invalid site
Equipment Info.	5		Slave Site Sub ID 03	FF		FF is invalid site
Site Location	6		Slave Site Sub ID 04	FF		FF is invalid site
System Clock						
Comm. Config						
Firmware Info.						
User Manager						
Help						

Figure 22: Equipment ID

lssued by WHGZ	Date 11-02-11	Checked by DLGZ	Document Id WE-TN-10022-005	Com	ba
Title RA-5700 Tune	e Up Procedures		Project No WE-TN-10022	Revision R1A	Page 17 / 23

3.2.4.2 Equipment Info.

Open	atio	1 a1	ud Maintenance Terminal	Current User : comba	O Change Password	Log Off
	♦ Eq	uipm	ient Info.			
System Info.	All		Parameter Name	Status	Setting	Remark
RF Info.	1		Vendor ID	Comba	Read only	
Alarm Info.	2		Equipment Type	Fiber Optic Master Unit	Read only	
Properties Info.	з		Equipment Model	RA5700D		
Equipment ID	4		Serial No.	09091158		
Equipment Info.	5		Firmware Run Mode	Normal	Read only	
Site Location						
System Clock						
Comm Config	[
Eirmware Info						
Hear Managor	J					
User Manager						
Heip						
			Read		ontig	

Figure 23: Equipment Info.

3.2.4.3 Site Location

Oper	atio	n at	nd Maintenance Terminal	Current User: : admin	Change Password	Log Off
	♦ Si	te Lo	cation			
System Info.	All		Parmeter Name	Status	Setting	Remark
RF Info.	1		Longitude			
Alarm Info.	2		Latitude			
Properties Info.						
Equipment ID						
Equipment Info.						
Site Location						

Figure 24: Site Location

[Site Location]: input the current longitude and latitude in the blank.

lssued by WHGZ	Date 11-02-11	Checked by DLGZ	Document Id WE-TN-10022-005	Com	ba
Title RA-5700 Tune	e Up Procedures		Project No WE-TN-10022	Revision R1A	Page 18 / 23

3.2.4.4 System Clock

Opt	ratio	n at	nd Maintenance Terminal	Current User: : admin	Change Password	Log O
	♦ Sy	/sten	i Clock			
System Info.	All		Parmeter Name	Status	Setting	Rema
RF Info.	1		Date/Time	2009-07-22 04:41:50		
Alarm Info.						
Contractor and Management and Article						
Properties Info.						
Properties Info. Equipment ID						
Properties Info. Equipment ID Equipment Info.						
Properties Info. Equipment ID Equipment Info. Site Location	n					
Properties Info. Equipment ID Equipment Info. Site Location System Clock						

[System Clock]: it shows the current time/date information. It is settable.

3.2.4.5 Comm. Config

The Comm. Config information requires to be manually entered by users after successful connection to the equipment.

	- Con	nm. Co	nfig			
System Info.	-	All 🔲	Parameter Name	Status	Setting	Rem
RF Info.	1		AP:C Protocol Max. Length	920	Read only	
Alarm Info.	2		MCP:B Data Frame	Single-ACK	Read only	
Properties Info.	3		Continuous Transmit Coefficient	3	Read only	
Equipment ID	4		SMSC No.(Equipment SIM Card)	+8613800200500		
Equinment Info	5		OMC Server IP	192.168.8.104		
Oite Leastian	6		OMC Server IP Port	161		
Sile Location	7		GPRS User Name	**		
System Clock	8		GPRS Password	**		
Comm. Config			Alarm Notice Phone No. 1	**		
Firmware Info.	10		Alarm Notice Phone No. 2	**		
User Manager	11		Alarm Notice Phone No. 3	**		
Help	12		Alarm Notice Phone No. 1 Enable	OFF	~	
	13		Alarm Notice Phone No. 2 Enable	OFF	~	
	14		Alarm Notice Phone No. 3 Enable	OFF	v	

Figure 26: Comm. Config.

SMSC NO. (Equipment SIM Card)	The SMS centre number of SIM card in equipment.
OMC Server IP	OMC IP Address. For equipment which support TCP/IP.
OMC IP Port No.	OMC IP Port No. For equipment which support TCP/IP.
GPRS User Name	Login GPRS network user name.
GPRS Password	Login GPRS network password.
Alarm Notice Phone NO.	The telephone number of alarm receiver.
Alarm Notice Phone NO. Enable	Enable the telephone number of alarm receiver.

lssued by WHGZ	Date 11-02-11	Checked by DLGZ	Document Id WE-TN-10022-005	Com	ba
Title RA-5700 Tune	e Up Procedures		Project No WE-TN-10022	Revision R1A	Page 19 / 23

3.2.4.6 Firmware Information

Op	eration	ı aı	nd Maintenance Terminal	Current User: : admin	Change Password	Log Off
	 Fit 	mwa	are Info.			
System Info.	All		Parmeter Name	Status	Setting	Remark
RF Info.	1		Firmware Version	M63RA5700D3GH10V7001	Read only	
Alarm Info.						
Properties Info.						
Equipment ID						
manifest and lade						

Figure 27: Firmware Information

3.2.5 USER MANAGEMENT

3.2.5.1 User Info.

Open	ation	and .	Maintenance Terminal	Current User: : adr	nin Change Password Log Off
	🔶 Use	r Infor	mation		
System Info.	All		User Name	User Group	Connect Status
RF Info.	1		admin	admin	online
Alarm Info.					
Properties Info.					
User Manager					
User info.					
Set SessionTime					



3.2.5.2 Set Session Time

Op.	eration and Ma	intenance Terminal	Current User: : admin Change Password Log Off		
	🔶 User Informatio	n			
System Info.	All 🗌	User Name	User Group	Connect Status	
RF Info.	1	Set SessionTime	X Din	online	
Alarm Info.					
Properties Info.		Set SessionTime:	120 minute		
User Manager					
User info.			Submit		
Set SessionTime	r.				
Help	•				
	J				

Figure 29: Set Session Time

[Set Session Time] is to set the automatic log-off time.

lssued by	Date	Checked by	Document Id	Comba	
WHGZ	11-02-11	DLGZ	WE-TN-10022-005		
Title RA-5700 Tune	e Up Procedures		Project No WE-TN-10022	Revision R1A	Page 20 / 23

3.2.6 HELP

3.2.6.1 Help

Oper	ation and Maintenance Terminal	Current User : admin	Change Password	Log Off
	♦ Help			
System Info.	Q System Description			
RF Info.	Please note before operation:			
Alarm Info.	Suctom maintananco			
Properties Info.				
User Manager	RF information			
Help	Q Alarm parameter			
Help	Properties information			
About				

Figure 30: Help

3.2.6.2 About

Ope	ration and Maintenance Terminal	Current User : admin	Change Password Log Off
	◆ Heip		
System Info.	System Description		
RF Info.	Please note before operation:		
Alarm Info.			
Properties Info.	Abart		
User Manager	RF information		
Help	Alarm parameter Web Operation and Maintenance Terminal		
Help	*/1.00.100520		
About			
	Version Type:Web Operation and Maintenance Terminal (OMT)		
	Copyright © 2002/2010 Conha Telecom System Holdings Ltd. All rights reserved. Warning: This computer program is protected by copyright law and international		
	treaties. Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe tivil and criminal penalties, and will be prosecuted under the more than the production back low.		
	maximum extent possible under law.		
	virance, the analysis of products of protocols of the protocol of the program and metanological treatiles. Unsubhorized epopulation or distribution of this program, care any portion of it, incay result in severe civil and criminal penalities, and will be prosecuted under the maximum extent possible under law.		

Figure 31: About

3.3 CHANGE PASSWORD

Click [User Info.]-> select the wanted user as illustrated.

Oper	ration and Mo	aintenance Terminal	Current User: : admin	Change Password Log Off
	🔶 User Informati	ion		
System Info.	All 🗌	User Name	User Group	Connect Status
RF Info.	1 🔽	admin	admin	online
Alarm Info.				
Properties Info.				
User Manager				
User info.				
Set SessionTime				
Help	(

Issued by WHGZ	Date 11-02-11	Checked by DLGZ	Document Id WE-TN-10022-005	Com	ba
Title RA-5700 Tune	e Up Procedures		Project No WE-TN-10022	Revision R1A	Page 21 / 23

Sumit the request of <Edit User> buttom in the bottom, a pop-up window might shown out to indicate an on-going step.

Oper	ration and M	aintenance	Terminal	Current User: : admin	Change Password	Log Off
	🔶 User Informati		Edit usor information	X		<u>^</u>
System Info.	All 🗌	User Nan			Connect Status	
RF Info.	1	admin	User name: admin		online	
Alarm Info.			Old password:			
Properties Info.			New Deserved			
User Manager			New Password:			
User info.			Reenter Password:			
Set SessionTime			User Group :	*		
Help	1					
	1			Submit		
	5					
	Refres	h	Add user	Edit User	Delete	×

Figure 32: Change Password

End of Section

Issued by	Date	Checked by	Document Id	Comba	
WHGZ	11-02-11	DLGZ	WE-TN-10022-005		
Title			Project No	Revision	Page
RA-5700 Tune Up Procedures			WE-TN-10022	R1A	22 / 23

4 TROUBLE SHOOTING

Following installation and commissioning, occasional operation tasks to handle alarms may be required:

Alarm condition	Diagnosis
AC Power Failure Alarm/ DC Power Fault Alarm	Check AC power cable and verify AC mains supply is normal. During Power Fault alarm, DC power supply has no output. Check if DC output power is overloaded or short-circuited. The PSU could be faulty.
Li-ion Battery Fault Alarm	Check the connection between battery and power supply cable. Or replace the faulty modules and return it to the factory for repair.
External Alarm	Check to make sure if the external device connected is working normally
Over- Temperature alarm	Eliminate alarm by correct setting of temperature threshold, if alarm can not be cleared, apply climatic protection to the system under severe environment.
Door Open Alarm	Check whether the enclosure door is closed.
ALC Alarm	Check to see if PA alarm or DL input power overload alarm occur via OMT/OMC. If so, adjust DL input power or replace a new PA.
Shutdown Alarm	Alarm occurs when automatically shut off the system. Turn on the system and check if the DL output power overload alarm persists, adjust the DL output power overload threshold to a proper value.
Manual Shutdown Alarm	Alarm occurs when manually shut off the system. Turn on the system to eliminate the alarm.
Module Software Alarm	Alarm occurs when the module software failed. Reboot the system or update the software.
Optical TX Alarm	The optical power at the TX port of the Optical TX/RX Module is lower than the minimum requirement, which is resulted by the faulty of the optical TX part of Optical TX/RX Module or damaged optical fiber link. If so, replace the optical TX/RX module. If not, check the working status of the optical fiber to eliminate the alarm.
Optical RX Alarm	The optical RX part of Optical TX/RX Module is faulty. Check and replace the faulty module and return it to the factory for repair.
UL LNA, DL PA alarms	Check power and signal connections of respective modules. If the power and signal wire connections are OK, then the respective modules may be faulty. Replace the faulty modules and return it to the factory for repair.
Master/Slave Unit Link Alarm	The communication between the MU and RU is abnormal. Check the working status of Optical TX/RX Module and FSK.
DL Input Power Overload Alarm	Eliminate alarm by correct setting of DL Input Power Overload threshold. If the setting is OK but alarm persists, the DL input power might be higher than the threshold. Decrease the gain to reduce the input power or replace the coupler with a new one

lssued by	Date	Checked by	Document Id	Comba	
WHGZ	11-02-11	DLGZ	WE-TN-10022-005		
Title			Project No	Revision	Page
RA-5700 Tune Up Procedures			WE-TN-10022	R1A	23 / 23

	of high coupling effect.
DL Output Power Overload Alarm	Eliminate alarm by correct setting of DL Output Power Overload threshold. If the setting is OK but alarm persists, the DL output power might be higher than the threshold. Decrease the gain to reduce the output power.
DL Output Power Low Alarm	Eliminate alarm by correct setting of DL Output Power Low threshold. If the setting is OK but alarm persists, the DL output power might be lower than the threshold. Increase the gain to high up the output power.
External Alarm	Check to make sure if the external device connected is working normally

Table 7: Alarms Diagnosis

End of Document