

# MTG200 User Manual V1.0



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or network communication is not normal
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# 1. Overview

#### **1.1 Product Introduction**

MTG200 series is a kind of digital trunk gateway based on embedded operating system. It supports standard SIP protocol, with large-capacity carrier class telephone trunk gateway functions. Currently it supports 1/2/4 E1/T1 interfaces and can realize intercommunication with mainstream manufacturers soft switch system, and interwork with carrier's local Telephone exchange by PRI interface. A typical network diagram shows the function of MTG200 as below.

Figure 1-1-1Application topology



# **1.2 Equipment Structure**

#### 1.2.1 Rear View



Figure 1-2-1 MTG200 Rear View

 Table 1-2-1 Description of MTG200 Rear View

PWR	The power interface. DC12V.1A
Port0-Port3	E1/T1 Port. There are 4E1 if you have buy a MTG200-4E1/T1
FE0	The Service Ethernet Interface, standard 10/100BASE-TX Ethernet interfaces.
	Default IP address is 192.168.1.111, default subnet mask is 255.255.255.0
FE1	Management Ethernet Interface. Default IP address is 192.168.11.1, default
	subnet mask is 255.255.255.0

# 1.2.2 Front View

PONER	RIN ALM	WST	CONSIDLE	2 0 1 0 E1/TI FE LINK 3 1
1003	SOM WTW	871	COMPOPE	3 J E/.11 14 2660 5 0 1 0

#### Figure 1-2-2 MTG200 Front View

LED	Color	Name	Status	Description				
DOWED	Crean	Down status in disator	Off	Power is off				
POWER	Green	Power status indicator	On	Power is on				
DUN	Croon	Desister indicator	Fast blinking	Register				
KUN	Green	Register indicator	Slow blinking	Unregister				
ΔΙΝΛ	Vallaw	The failure of device indicator	Off	Normal				
ALM	renow	The failure of device indicator	On	Failed				
RST	Reset button, it is used to restart the device							
CONSOLE	RS232 console port: it can be used to debug and configure the device. The baud							
CONSOLE	rate is 115200 bps.							
F1/T1	Indicating the connection state of device E1/T1. 0, 1,2,3 indicates the connection							
	state of E1	state of E1/T1 interfaces respectively						
LINK	Indicating	the connection state of the network . 0	indicates FE0 an	d 1 indicates				
	FE1							
SDEED	Vallow	Indicating the natural handwidth	Off	10Mbps				
SFLED	Yellow	malcaling the network ballowidth	On	100Mbps				

Table	1-2	-2	Descrit	ntion	of MT	G200	Front	View
Table	1-2	-2	Descri	puon	UT IVI I	0200	FIOII	VIEW

#### **1.3 Functions and Features**

#### **1.3.1 Protocol standard supported**

- Standard SIP /PRI protocol
- Dynamic Host Configuration Protocol (DHCP)
- Point-to-Point Protocol over Ethernet (PPPoE)
- Hypertext Transfer Protocol (HTTP)
- Domain Name System (DNS)
- ITU-T G.711A-Law/U-Law, G.723.1, G.729AB, iLBC(optional)

#### 1.3.2 System function

- PLC, VAD and CNG
- DTMF mode: RFC 2833, SIP INFO and INBAND
- T.38/ Pass-Through FAX over IP
- HTTP/Telnet configuration
- Firmware upgrade by TFTP/Web

#### **1.3.3 Industrial standards supported**

- Stationary use environment: EN 300 019: Class 3.1
- Storage environment: EN 300 019: Class 1.2
- Transportation environment: EN 300 019: Class 2.3
- Acoustic noise: EN 300 753
- CE EMC directive 2004/108/EC
- EN55022: 2006+A1:2007
- EN61000-3-2: 2006,
- EN61000-3-3: 1995+A1: 2001+A2: 2005
- EN55024: 1998+A1: 2001+A2: 2003
- Certifications: FCC, CE

#### 1.3.4 General hardware specification

- Power supply: 12VDC, 1A
- Temperature:  $0 \sim 40^{\circ}$ C (operational),  $-20 \sim 70^{\circ}$ C (storage)
- Humidity: 10%~90%, no condensation
- Max power consumption: 15W
- Dimension(mm): 210\*150\*38
- Net weight: 0.75kg

# 2. Parameter setting

#### 2.1 Login

Enter the IP of FE1 or FE0 in customer's browser. FE1 default IP address is 192.168.11.1, FE0 default IP address is 192.168.1.111. It will request customer to input user name and password. Default user name and password are "admin".

If customer modified the default IP or forgot the IP, that can't enter the configuration page. Please connect PC and device serial with the serial line. Enter the CLI to view or modify the equipment IP. Here IP is set to 172.16.33.62. In addition, hold down the RST button to restart the device, customer can regain the port's default IP. Then enter the IP address of device in the browser address bar. Customer will see the following page.

🔕 Authen	tication Required
( De la construction de la const	A username and password are being requested by http://172.16.33.60. The site says: "GoAhead"
User Name: Password:	
2	Cancel OK

Figure 2-1-1 Login interface

The default user name and password is "admin". To guarantee the system safety, when login for the first time. The system will prompt the user to modify the password. The interface is shown as below.

Figure	2 - 1	-2	Modify	Password
0				

Password modify	
Old password New password Confirm password	
[	Save

After inputting the old password, input a new password and confirm it by inputting it again.

#### 2.2 Status & Statistics

Show the status of trunk and statistics of call.

# 2.2.1 System Information

This configuration page includes general information and version information.

Figure 2-2-1 System Information

MAC Address	00 45 53 00 00 4	2	
MAC Address	00-1F-D3-00-02-A	3	
Service Ethernet Mode	static		
Service Ethernet Interface	172.16.33.60	255.255.0.0	172.16.1.1
Management Ethernet Interface	192.168.11.1	255.255.255.0	
DNS Server	172.16.1.1		
System Up Time	1d:00h:52m:53s		
Traffic Statistics	Received	90,820,016 bytes	
	Sent	21,743,300 bytes	
Version			
Equipment Type	MTG200		
Hardware Version	PCB 01		
DSP Version	5.04.02		
Web Version	2.01.01		
Software Version	2.01.01		
Built Time	Built on Aug 5 201	1, 11:51:14	

MAC address	MAC address of FE1 port.	
Service Ethernet Mode	The network mode of FE1	
Service Ethernet Interface	Include IP address, subnet mask, default gateway of FE1	
Management Ethernet Interface	Include IP address, subnet mask of FE0	
DNS Server	IP addresses of primary DNS server	
System Up Time	Time elapsed from device power on to now	
Traffic Statics	Total bytes of message received and sent by FE1 port	
Equipment Type	Equipment type; this equipment is: MTG200	
Hardware Version	Hardware version of device	
DSP Version	Driver version	
Web Version	Version of current WEB interface of device	
Software Version	Software version of device running currently	
Built Time	The build time of current software version	

#### Table 2-2-1 Description of System Information

### 2.2.2 E1/T1 Status

Physical Status       Image: Control of the status       Image: Control of the status         NOTES:       LOS Alarm       Image: RRA Alarm       Image: Alis Alarm       Image: Disable         ISDN/SS7 Signal Alarm       Image: Active-OK       Image: Control of the status       Image: Control of the status         Channel No.       0       1       2       3       4       5       6       7       8       9       10       11       12       13       14       15       16       17       18       19       20       21       22       23       24       25       26       27       28       29       30       3
NOTES: LOS Alarm RRA Alarm AlS Alarm Disable ISDN/SS7 Signal Alarm Active-OK E1/T1 Channel Status Channel No. 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 3
E1/11 Channel Status Channel No. 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 3
Port 0
Port 1

Figure 2-2-2 E1/T1 status

1.LOS Alarm: Signal loss alarm, this alarm is created when receiving is lost, please check the physical connection whether disconnected. 2.**RRA Alarm:** Receive Remote Alarm, when distant end detects LOS alarm or LFA alarm, it will insert an alarm message to near end device in transmit data, check the device of opposite terminal to see if it is perfect. 3.AIS Alarm: Alarm indicating; during a time interval, when received E1/T1 Port Status data is detected to have only 2 or less than 2 zeros, then AIS alarm is created, check line device. 4.**Disable**: Means that this E1/T1 is not used. 5.ISDN/SS7 Signal Alarm: Means physical connection is normal, signaling link has problem. 6.Active-OK: Means that physical connection and signaling link are normal. 1.Non Voice: Non voice channel, which used as a synchronization channel 2. Idle: Means this channel is idle, when the channel is enabled and the cable is connected OK. E1/T1 Channel Status 3.Signal: signal channel 4.Busy: Means this channel is occupied 5.Fault: when the channel is enabled and the cable is not connected. 6.**Disable:** Have not use this E1/T1 trunk

#### Table 2-2-2 Description of E1/T1 status

### 2.2.3 PSTN Trunk Status

Figure 2-2-3 PSTN Trunk Status

PRI Trunk No. Trunk Name E1/T1 Port No. Link Status					

Table 2-2-3 Description of PSTN Trunk Status

PRI Trunk No	The number of PRI trunk, each trunk corresponds to a PRI link
Trunk Name	Identification of the trunk can be remembered easily.
E1/T1 Port No	Indicate the E1/T1 line occupied by the PRI trunk.
Link Status	Indicate whether the PRI link is established.

### 2.2.4 IP Trunk Status

#### Figure 2-2-4 IPTrunk Status

SIP Trunk Status				
SIP Trunk No.	Username	Trunk Mode	Register Status	Link Status
		Refresh		

Table 2-2-4 Description of IP Trunk Status

SIP Trunk No	The number of SIP trunk	
Username	When SIP trunk is under registered mode, change the value in the	
	configuration shown in the account registration, If SIP trunk is	
	under non-registered mode, the value is meaningless, as ''	
Trunk Mode	Peer and Access, peer is peer to peer mode, access is access mode	
Register Status	Indicate the status of SIP trunk (access mode), register or	
	unregister, when is under peer to peer mode, the values is	
	meaningless, as ''	
Link Status	Established and Fault status.	

# 2.2.5 PRI Call Statistics

Figure 2-2-5 PRI cal	ll statistics
----------------------	---------------

PRI Trunk Call Statistics					
PRI T	runk No.	Trunk Name	Current Calls	Accumulated Calls	Percent of Call Completed
	Refresh				

Table 2-2-5 Description of PRI call statistics

PRI Trunk No	The number of PRI trunk
Trunk Name	The name used to describe the PRI trunk
Current Calls	Number of lines that are being called currently
Accumulated Calls	Total number of calls from running start of system to current
	time.
Percent of Call	The percent of calls completed in all calls.
Completed	

# 2.2.6 SIP Call Statistics

#### Figure 2-2-6 SIP Call Statistics

SIP Trunk Call Statistics		
SIP Trunk No.	Trunk Name	Current Calls
	Refresh	

Table 2-2-6 Description of SIP Call Statistics

SIP Trunk No	The number of SIP trunk
Trunk Name	The name used to describe the PRI trunk
Current Calls	Number of lines that are being called currently

# 2.3 Network Configuration

Network Configuration				
Sopuico Ethornot Interface				
O Obtain IP address automatically				
Use the following IP address				
IP Address	172. 16. 33. 60			
Subnet Mask	255.255.0.0			
Default Gateway	172. 16. 1. 1			
PPPoE				
Account	guest			
Password	•••••			
Service Name				
Management Ethernet Interface				
IP Address	192.168.11.1			
Subnet Mask	255. 255. 255. 0			
DNS Server				
Obtain DNS server address a	automatically			
Use the following DNS server	raddresses			
Primary DNS Server	Primary DNS Server 172 16 1 1			
Secondary DNS Server				
	Save			
NOTE: It mu	ust restart the device to take effect.			

Figure	2 - 3 - 1	Network	Config	iration
riguit	2-3-1	NULWOIK	Connigi	nation

Service	Obtain IP address	If Selected, the MTG will obtain IP address via DHCP
Ethernet	automatically	
Interface	Use the following IP	If Selected ,Set a static IP for Service Ethernet
	address	Interface . You need to fill the IP address, Subnet Mask,
		and Default Gateway
	PPPoE	If users approach the net via PPPoE, please Select it and
		fill your account and password.
Manageme	IP Address	Fill the IP of Management Ethernet Interface
nt Ethernet		
Interface	Subnet Mask	Fill the Subnet Mask of Management Ethernet Interface
	Obtain DNS server	If selected, the MTG will obtain DNS server IP address
DNC Comion	address automatically	via DHCP
Divo Server	Use the following DNS	If selected, you need fill Primary DNS server addresses,
	server addresses	the secondary DNS Server is Optional

Table 2-3-1	Description	of Network	Configura	tion
14010 2 3 1	Description	or rection.	Compara	uon

**Note**: FE0 port IP and FE1 port IP should be set in different segments. After configure the network address, and restart the gateway configuration to take effect.

# 2.4Voice & Fax Configuration

Voice Parameter	
Disconnect Call on Silence Detection	🖲 Yes 🔘 No
Silence Detection Period	60 s
PSTN in Gain	-1 dB
IP in Gain	2 dB 🗨
PSTN in No Answer Timeout	60 s
IP in No Answer Timeout	60 s
Fax Parameter	
Fax Transport Mode	T. 38

Figure 2-4-1 Voice & Fax Configuration

Table 2-4-1 Description of Voice & Fax Configuration

Disconnect Call on Silence	Silence time out is detected, end of the call when selected
Detection	"Yes"
Silence Detection Period	The interval time of silence detection
PSTN in Gain	Incoming PSNT gain
IP in Gain	Incoming IP gain
PSTN in No Answer Timeout	The no answer timeout of a call which make from PSTN
IP in No Answer Timeout	The no answer timeout of a call which make from VoIP
Fax Transport Mode	Two modes are provided: T.38 and Pass-through, default
	option is T.38

# **2.5 Protocol Configuration**

#### 2.5.1 PRI Parameter

Calling Party Numbering Plan	ISDN/Telephony numbering plan	
Calling Party Number Type	Unknown	
Screening Indicator for Displaying Caller Number	User provide, no shield	
Screening Indicator for No Displaying Caller Number	User provide, no shield	
Called Party Numbering Plan	ISDN/Telephony numbering plan	
Called Party Number Type	Unknown	
Information Transfer Capability	Speech	
Restore default configuration of PRI	Restore	
Save		

	Table 2-5-1 Description of PRI Parameter
Calling Party Numbering	Provide 6 plans: Unknown, ISDN/Telephony numbering plan, data
Plan	numbering plan, telegraph numbering plan, national standard
	numbering plan, private numbering plan. The default is
	ISDN/Telephony numbering plan.
Calling Party Number Type	6 optional types are provided for calling party: Unknown,
	International number, National number, Network special number,
	User number, Short code dialing. The default option is Unknown.
Screening Indicator for	4 options available: User provider, no shield; User provide, check
Displaying Caller Number	and send; User provide, check and having failure; Network
	provide. The default option is: User provider, no shield.
Screening Indicator for No	4 options available: User provider, no shield; User provide, check
Displaying Caller Number	and send; User provide, check and having failure; Network
	provide. The default option is: User provider, no shield.
Called Party Numbering	Provide 6 plans: Unknown, ISDN/Telephony numbering plan, data
Plan	numbering plan, telegraph numbering plan, national standard
	numbering plan, private numbering plan. The default is
	ISDN/Telephony numbering plan.
Called Party Number Type	6 optional types are provided for called party: Unknown,
	International number, National number, Network special number,
	User number, Short code dialing. The default option is Unknown.
Information Transfer	Support speech and 3.1khz audio
Capability	

### Figure 2-5-1 PRI Parameter

# 2.5.2 SIP Parameter

	Figure 2-5-2 SIP Parameter
SIP Parameter	
Local SIP Port	5060
	Save



Local SIP Port   Local SIP monitoring port, the default is 5060
---

# **2.6 Profile Definitions**

### 2.6.1 Coder Group

Coder G	roup ID		0		3	
	Coder Name	e Payload Type	Packetization Time(ms)	Rate(kbps/s	) Silence ) Suppression	
1st	G711A -	8	20	▼ 64	Disable	•
2nd	G711U -	- 0	20	▼ 64	Disable	-
3rd	G729	- 18	20	▼ 8	Disable	•
4th	G723	- 4	30	▼ 6.3	Disable	<b>T</b>

Figure 2-6-1 Coder Group



Coder Group	Used for configure the voice codec parameters, through it can
	configured voice capabilities into 8 groups, each group can have
	different audio capabilities, such as the priority of voice codec,
	packaging length and whether to support silence suppression
Coder Group ID	ID standard for Voice Ability, total with 8 groups, where 0 is the default
	group ID number, the codec that MTG equipment support in the
	grouping will be displayed in 0 group ,on the map only shows 4 kinds ,
	mean MTG equipment only support this 4 codecs.
Coder Name	Support 4 kinds of audio codec. G711A/G711U/G729/G723/iLBC
Payload Type	Coder name is the interpretation of the field, each codec has a unique
	value, refer to RFC3551
Packetization Time(ms)	Voice Codec packetization time, you can define different kinds of
	coding
	and decoding, minimum packetization time
Rate(kbps/s)	The proportion of the data-stream that is useful
Silence Suppression	It is disabled by default. During talking, the bandwidth occupied by
	voice transmission will be released automatically for silence party or
	when talk is paused.

#### 2.6.2 Dial Plan

#### Figure 2-6-2 Dial Plan

Dial Plan Index	Prefix	Minimum Length	Maximum Length
0		0	30

Dial plan configuration used to receive numbers, you can configure different prefix number, these rules can be divided into 5 groups, separate with a dial plan ID, where 0 is the default setting. **Notes:** 

- 1. In order to ensure each rule can take effect, long matching numbers (prefix) rule dial plan index value need smaller, so when through the file into the rules, need put t long matching numbers (prefix) rule before the file
- 2. No maximum length is 30, this value is the number of the total length, including the prefix length, such prefix is 0755, the maximum value of Maximum Length is only 26, and "." Wildcard is not included in the number length

Dial Plan ID		1	-	
Dial Plan Index		1999	-	
Prefix				
Minimum Length				
Maximum Length				
	OK I	Reset Cancel	]	

Dial Plan ID	The number to identify a dial plan
Dial Plan Index	Dial plan priority rules take effect in accordance with dial plan index size,
	and not according to the maximum number received.
Prefix	Match number, "." representative of any number
	The minimum receiving Number length (0 to 30). If receive a number equal
	to the minimum length greater than, less than equal to the maximum length,
Minimum Length	the number will be used to continue the call. If the maximum length,
	determine the number to receive a complete, will no longer receive a new
	number, and immediately began to number analysis, if there are numbers
	continue to be received, the system will give up these numbers.
	The largest Received number length (0 to 30), the maximum number length
	that can be received, if the received number in this length, the system will
	determine the receiving number is completed, no longer continue to receive
Maximum Length	numbers, immediately begin numbers analyzed, If there are numbers keep
	to send over, the system will drop the new numbers dial plan rules can
	through management configuration-> Data Restore into dial plan, the file is
	a txt format.

Table 2-6-2 Description of Add Dial Plan

# 2.6.3 Dial Timeout

Figure 2-6-4 Dial Timeout

Dial Timeout ID	Description	Initial Digit Timeout(s)	Before Minimum Number Length Timeout(s)	After Minimum Number Length Timeout(s)
0	Default	20	10	10

Figure 2-6-5 Add Dial Timeout

Dial Timeout ID	1
Description	
Initial Digit Timeout	s
Before Minimum Number Length Timeout	s
After Minimum Number Length Timeout	s

Table 2-6-3 Description of Add Dial Timeout

Dial timeout ID	The number to identify a dial timeout rule
description	Description of dial timeout
Initial Digit Timegant	Generally refer to the time from user dial first digit to harvest in
Initial Digit Timeout	prefix number
Before Minimum Number	After receiving prefix number, the number has not yet reached the
Length Timeout(S)	length of the minimum receiving number, the length of timeout
After Minimum Number	After receiving number, the number has reached the minimum
Length Timeout(S)	length, but not reached the maximum length of the dial timeout

# 2.6.4 PSTN Profile

PSTN I	Profile											
	PSTN Profile ID	Description	Code Group ID	RFC2833 Payload	1st Tx DTMF	2nd Tx DTMF	3rd Tx DTMF	Dial Plan ID	Dial Timeout ID	Receiving of Overlap Dialing	Remove CLI	to PSTN
	0	Default	0	101	RFC2833	SIP INFO	Inband	0	0 <default></default>	Disable	Not remove	No

PSTN profile is used to configure PSTN call number rules and parameter.

#### Figure 2-6-7Add PSTN Profile

PSTN Profile ID	1	-
Description		
Code Group ID	0	-
RFC2833 Payload Type	101	
1st Tx DTMF Option	RFC2833	-
2nd Tx DTMF Option	RFC2833	-
3rd Tx DTMF Option	RFC2833	-
Dial Plan ID	0	-
Dial Timeout ID	0 (Default)	-
Receiving of Overlap Dialing	Disable	-
Remove CLI	Not remove	-
Play Busy Tone to PSTN	No	-

Table 2-6-4 Description of Add PSTN Profile

PSTN Profile ID	The number to PSTN Profile
Description	Description of the PSTN Profile
Code Group ID	Refer to "Coder Group"
RFC2833 Payload Type	The item is 101 by default
	There are three ways to send DTMF: RFC2833/SIP INFO/
1 <sup>st</sup> /2 <sup>nd</sup> /3 <sup>rd</sup> Tx DTMF Option	INBAND, in accordance with the priority choice to send the
	configuration mode
Dial Plan ID	Refer to "Dial Plan"
Dial Timeout ID	Refer to "Dial Timeout"
Receiving of Overlap Dialing	Not enabled by default, only enable this feature, "Dial plan" and
	"Dial timeout" have the meaning
Remove CLI	Default does not remove CLI
Play busy tone to PSTN	Equipment will play busy tone from IP to PSTN

### 2.6.5 IP Profile

Figure 2-6-8 IP Profile

IP Pro	file							
	IP Profile ID	Description	Declare RFC2833 in SDP	Support Early Media	Play Ringback Tone to PSTN from	Play Ringback Tone to IP from	Wait Peer RTP	T.30 SDP Expand Type
	0	Default	Yes	Yes	Local	Local	No	Huawei
Total: 1e	ntry 16entry/page	e 1/1page Page	1 💌					
			1	Add Delete	Modify			



IP Profile ID	1	•
Description		
Declare RFC2833 in SDP	No	-
Support Early Media	Yes	-
Play Ringback Tone to PSTN from	Local	-
Play Ringback Tone to IP from	Local	•
Wait Peer RTP	No	•
T.30 SDP Expand Type	Huawei	-

#### Table 2-6-5 Description of Add IP Profile

IP Profile ID	The number to mart the IP Profile
Description	Description of the PSTN Profile
Declare RFC2833 in SDP	Support by default
Support Early Media	Whether support Early Media(183)
Play Ringback Tone to	I IP-> PSTN call ring back tone player side, if set to local, it will
PSTN from	play from the equipment and set to IP, it will play by the called
Play Ringback Tone to IP	PSTN->IP call ring back tone player side, if set to local, it will play
from	from the equipment and set to PSTN, it will play by the called
	If set to No, will auto send RTP packets during the call, if set to Yes,
Wait Peer RTP	will wait the RTP packet was sent by the opposite end first ,then
	send out RTP packets
T.30 SDP Expand Type	T30 extended types in SDP: Huawei/ZTE

# 2.7 Trunk Configuration

#### 2.7.1 E1/T1 Parameter

E1/T1 Clo	ck Source Mod	e Remote	•		
	Port No.	Work Mode	PCM Mode	Frame Mode	Line Code
	0	E1	ALAW	CRC-4	HDB3
	1	E1	ALAW	CRC-4	HDB3

Figure 2-7-1 E1/T1 Parameter

Figure 2-7-2 Modify E1/T1 Parameter

E1/T1 Parameter Modify			
Port No. Work Mode	0 E1		
PCM Mode	A LAW	<b>V</b>	
Frame Mode	CRC-4	•	
Line Code	HDB3	-	
	OK Reset Cancel		

Table 2-7-1 Description of Modify E1/T1 Parameter

Work Mode	E1 or T1, the default is E1		
PCM Mode	CM mode: A LAW and Mu LAW, the default is A LAW		
Frame Mode	The frame modes of E1/T1 are: DF, CRC-4, CRC4_ITU, the default is		
	CRC-4; the frame modes of T1 are: F12, F4, ESF, F72, the default is F4		
Line Code	Line codes of E1/T1 are: NRZ, CMI, AMI, HDB3, the default is HDB3. The		
	line codes of T1 are: NRZ, CMI, AMI, B8ZS, the default is B8ZS		

# 2.7.2 PRI Trunk

Figure 2-7-3 PRI Trunk

1	PRI Tr	unk								
		PRI Trunk No.	PRI Trunk Name	PRIID	D-Channel	E1/T1 Port No.	Standard Type	ISDN Terminal Side	ISDN Ring Signal	PSTN Profile ID
					Add	Delete	Modify			

In this configuration page, users can "Add", "Delete", "Modify" PRI trunk.

Figure 2-7-4 Add PRI Trunk

Yes	-
ISDN	-
Vser Side	-
ALERTING	-
0 (Default)	-
	Yes ISDN ISDN User Side ALERTING 0 (Default)

Table 2-7-1 Description of Add PRI Trunk

	The number of PRI trunk; when you add PRI trunk, 0~7 number will appear
	in the pull-down box to be selected (the number here depends on E1/T1
	physical port number actually existed in MTG). After trunk number is
Select Trunk No	established, fill in corresponding port number in "E1/T1 Port No.", so as to
	assign E1/T1 to designated trunk; each PRI trunk corresponds to a E1/T1
	port, if it is required to share D channel by several E1/T1, please refer to
	"PSTN trunk binding" in route configuration.
PRI Trunk Name	Identification of PRI trunk, which can be remembered easily
PRI ID	Identification of PRI trunk number to outside (switch side), this number
	definition generally begin from 0
Is D channel	Indicate whether this E1/T1 has D channel, the default is YES, which means
	it has D channel.
E1/T1 Port No	E1/T1 port number is numbered according to the physical position sequence
	of E1/T1, it generally begins from 0.
Standard Type	Interface type of PRI, two types available: ISDN and QSIG; the default is
	ISDN.
ISDN Terminal	Indicate PRI network property of E1/T1, it is divided into: "User side" and
Side	"Network side". When PRI loopback is carried out, the network properties
	of E1/T1 port at both receiving and sending sides must be different.
ISDN Ring signal	The ring signal include Alerting and progress
PSTN profile ID	Refer to PSTN profile

### 2.7.3 SIP Trunk

Figure 2-7-5 SIP Trunk

SIP T	runk										
	Trunk No.	Trunk Name	SIP-T Supported	Registration to the Remote Party	Call Mode	Detect Link Status	Enable SIP Trunk	Remote IP	Remote Port	Incoming Authentication Type	IP Profile ID
Total: 0e	entry 16entry/pa	age 1/0page	T								
					Add	Delete	Modify				

Click "Add" to add a SIP Trunk. If costomer want to delete or modify a SIP Trunk, please select the SIP Trunk you want to operation.

SIP Trunk Add	
Trunk No.	0
Trunk Name	
Registration to the Remote Party	Yes 🗸
Call Mode	Peer 🗸
SIP Username	
SIP Password	
Confirm SIP Password	
Expire Time	1800 s
IP Profile ID	0 (Default)
Detect Link Status	Yes 💌
Remote IP	
Remote Port	5060
Incoming SIP Authentication Type	Password 💌
Password	
Confirm Password	
IP to PSTN Limitation	No
PSTN to IP Limitation	No
IP to PSTN Time Control	Disable 💌
Enable SIP Trunk	Yes 💌
OK Reset	Cancel

Figure 2-7-6 Add SIP Trunk

	•
Trunk No	The range of number is 1~50
Trunk Name	It can be edited freely, which can be identified and remembered easily.
Registration to	Defined by IETF work group RFC3372, it is a standard used to establish
Remote Party	communication between SIP and ISUP; the default is "Yes"; if SIP
	trunk does not support, then set it to "No".
Call mode	Whether register request message to far-side equipment will be sent or
	not, you can select "Yes" or "No". There are two modes: peer and
	access
SIP Username	SIP user name which registers to soft switch/SIP server
SIP Password	SIP password which registers to soft switch/SIP server
Confirm SIP Password	Make sure the password matches the password entered above
Expire Time	Time interval of sending register request message to opposite equipment
	each time; the range is from 1-3600 seconds.
IP Profile ID	Refer to IP Profile
Detect Link Status	If select it, the MTG200 will send HEARTBEAT message to peer to
	make sure the link status is OK.
Remote IP	IP address of remote platform interfacing with this MTG.
Remote Port	Q.931 port of SIP of remote platform interfacing with this MTG, the
	default is 5060
Incoming SIP	You can select IP address authentication or password authentication,
Authentication Type	when "IP Address" authentication is selected, the calling initiated from
	remote will not subject to domain name or password authentication, only
	judge whether the IP address is legal or not; if "No" is selected,
	authentication realm/password authentication will be carried out.
Password	It constitutes SIP protocol safety authentication together with domain
	name of authentication.
Confirm Password	Input password again to verify password
IP to PSTN Limitation	IP to PSTN calls; the range is 0~65535, the default is no limitation; If
	Yes is selected, then input limited calls in the edit box appeared.
PSTN to IP Limitation	PSTN to IP calls, the range is 0~65535; the default is no limitation; If
	Yes is selected, then input limited calls in the edit box appeared.
IP to PSTN Time	The default setting is disabled. If Enabled is selected, then you can edit
Control	the start and stop time of prohibition time interval. Within this time
	interval, all calls from IP to PSTN are prohibited. (Calls from PSTN to
	IP are not limited)
Enable SIP Trunk	A switch used to enable this SIP trunk or not; you can select "Yes" or
	"No", when "No" is selected, this SIP trunk is invalid.

Table 2-7	7-3 Desc	ription	of Add	SIP	Trunk
14010 - /	0 2000		011100	~	

# 2.8 Management Configuration

# 2.8.1 Management Parameter

Figure 2-8-1	Management	Parameter
1 iguic 2-0-1	wianagement	1 arameter

Management Parameter	
WEB Configuration	
WEB Port	80
Telnet Configuration	
Teinet Port	23
Syslog Configuration	
Syslog Enable	🖲 Yes 🔘 No
Server Address	
Syslog Level	DEBUG
NTP Configuration	
NTP Enable	Yes O No
Primary NTP Server Address	64. 236. 96. 53
Primary NTP Server Port	123
Secondary NTP Server Address	18.145.0.30
Secondary NTP Server Port	123
Check Interval	604800 s
Time Zone	GMT+8:00 (Beijing, Singapore, Taipei)

#### Save

#### NOTE: It must restart the device to take effect.

.

Table 2-8-1 Description	of Management Parameter
1	0

WEB Port	Listening port of local WEB service, the default is 80.
Telnet Port	Listening port of local Telnet service, the default is 23.
Syslog Enable	The default is "No".
Server Address	Address for saving system log.
Syslog Level	None, Debug, Notice, Warning and Error
NTP Enable	Simple Network Management Protocol is enabled or not; the default is No.
Primary NTP server	The Primary IP address of SNMP management host computer. The host
Address	computer of the IP address will carry out monitoring and management to
	MTG.
Primary NTP server	The port where managed device (MTG) provides trap message (it is
Port	generally alarm message) to SNMP management host computer, the default
	is 123.
Secondary NTP	The Secondary IP address of SNMP
server Address	
Secondary NTP	The port of the Secondary IP address of SNMP
server Port	
Check Interval	Time interval of check
Time Zone	The time zone of local

### 2.8.2 Data Backup

Data Backup	
Olisk Deskurl for download database file to your computer.	Deslaur
Click Backup for download database life to your computer.	Васкир
Click 'Backup' for download dialplan file to your computer.	Backup
Click 'Backup' for download exception file to your computer.	Backup

Table 2-8-2 Description of Data Backup

database	Click the <b>Backup</b> , and save the database in your PC
dialplan	Click the <b>Backup</b> , and save the dialplan in your PC
exception	Click the <b>Backup</b> , and save the exception in your PC

### 2.8.3 Data Restore

#### Figure 2-8-3 Data Restore

Send data file from your comp	uter to the device.
Database	浏览···· Restore
Dialplan	浏览···· Restore
IS:	

Table 2-8-3 Description of Data Restore

Database	Click "Browse" to select the Database file, and then click "Restore".
Dialplan	Click "Browse" to select the Dialplan file, and then click "Restore".

#### 2.8.4 Version Information

File Type	Version	Built Date	Built Time
Software	2.01.01	2011-08-05	11:52:21
Database	2.00.00	2011-06-17	06:40:28
Web	2.01.01	2011-08-05	13:11:02

Figure 2-8-4 Version Information

Table 2-8-4 Description of Version Information

Software	The information of firmware
Database	The information of database
Web	The information of Web software

# 2.8.5 Firmware Upload

#### Figure 2-8-5 Firmware Upload

Send "Idf" file from your comp	uter to the device.
Software	浏览···· Upload
Web	浏览···· Upload
S:	

Table 2-8-5 Description of Firmware Upload

Software	Click "Browse" to select the firmware , and then click "Upload".
Web	Click "Browse" to select the Web software, and then click "Upload".

### 2.8.6 Modify Password

#### Figure 2-8-6 Modify Password

Old Password	
New Password	
Confirm Password	

Table 2-8-6 Description of Modify Password

Old Password	Current password
New Password	The new password
Confirm Password	verify password

### 2.8.7 Restart Device

Device Restart		
	Click the button below to restart the device	
	Restart	

Figure 2-8-7 Restart Device

If you click Restart, a message ("Are you sure?") will be popped up, and then click OK.

# **3. FAQ**

#### 3.1 How to get the IP address if I have modified the default IP or forgot it ?

Customers have two ways to get the IP address:

- 1) Press the RST button, then users can regain default IP. Refer to 1.2.1 Front View
- 2) Connect the CONSOLE with your PC Serial Port. The baud rate is 115200 bps. The user name is "admin", password is telnet/web login password. If password is reset, the default password is "admin". When customers have accessed it and input the command "show int" to get the IP.
- 3.2 Equipment physical connection to normal, but the network cannot be connected or

network communication is not normal

1) Make sure the network cable is ok or not, can through view the device WAN port or LAN port indicator light to determine the work states of physical connection

2) Makeing sure the connected network devices (router, switch or hub) support 10M/100M adaptive.

Else, connecting the Equipment directly to PC and landing Web , then in the "local connection" .Selecting the correct Ethernet Work Mode

- 3) Check whether there is a LAN port conflict with the existing IP address
- 4) Login using the serial port, in the enable mode to view the correct IP and mask, and ping the same segment of the PC or device to see if can pass.

#### **3.3** Equipment can't register

If the Run LED flashes slowly, it means unregistered.

- 1) Check the network connection is working (see above section), whether the Configuration is correct
- 2) Check whether the LAN firewall setting is inappropriate (such whether limit the network Communication); If it is, there are two ways to try to resolve:
- (2.1) Ask network administrators to open limitation with the equipment's network communications (it is a special equipment, not afraid of virus attacks);
- (2.2) Try to enable the equipment tunnel (Through the WEB for Configuration, Also, please NOTE, open the tunnel will impact voice quality, Please do not enable the tunnel as far as possible, reference WEB Configuration Interface, Description section).
- 4) Check whether the Local Network to the SIP PROXY platform network environment is relatively poor or not, and if so, please check Local Network or contact the service provider.
- 5) If go through those steps, the device still be in trouble, please contact the equipment provider.

### 4. Glossary

PRI: Primary rate interface DND: Do-not-Disturb FMC: Fixed Mobile Convergence SIP: Session Initiation Protocol DTMF: Dual Tone Multi Frequency USSD: Unstructured Supplementary Service Data PSTN: Public Switched Telephone Network STUN: Simple Traversal of UDP over NAT IVR: Interactive Voice Response IMSI: International Mobile Subscriber Identification Number IMEI: International Mobile Equipment Identity DMZ: Demilitarized Zone