ARTDIO

Voice Internet Phone Gateway

User Manual

IPC 1000 Series

version：1.0　update date：2003/12/21

ARTDio Company Inc.

Safety Instructions

Warning

1. Do not attempt to service or repair the product. Any servicing or repair of this equipment should be referred to qualified service technicians.

2. To avoid electric shock, do not put fingers, pins, wires, or objects of any sort into vents, or other openings in the equipment.

3. To avoid accidental fire, or shock, do not twist the power cord, or place heavy items on it.

4. The equipment should be connected to a power supply of the type described in the user's manual, or as marked on the product.

5. Dispose of the product's plastic packaging carefully in order to prevent hazards to children and pets.

6. The in-coming telephone line should always be connected to the FXO jack, or interface. It should not be connected to the FXS jack or interface, as this will cause damage to the product.

7. Please read all the instructions before using this product.

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1. PREFACE

IPP is the latest in communication technology, combing PBX and VoIP functions. The system enables no cost telephone and fax communications for significant saving of operations costs. The system is easy to install, reliable, and is capable of multiple applications.

1-1 PBX Function：

- **Extension to extension：**
  The IPP provides the same inter-office communications as an advanced PBX, accommodating 12 extensions, numbered 11-22. Internal extension calling is easy, just pick up the receiver, listen for the dial tone, and dial the two digit extension number you wish to connect with.
- **Extensions to any IPP unit's extension：**
  Calls can be placed from a IPP extension to extensions at other IPP units via the internet. Simply dial the number of the remote IPP unit, and add the two digit extension you wish to reach.
- **Extensions to any IPH/IPC unit's FXS access port：**
  With the IPP you can also call direct to IPH/IPC units via the internet, by simply dialing those units' phone number.
- **Call Pick-up Function：**
  The IPP can designate any extension for call pick-up.
- **Call Transfer Function：**
  The unit can perform a number of call transfer functions：
  - Forward to any local IPP unit's extension
  - Forward to any remote IPP unit's extension
  - Forward to any IPH/IPC unit's FXS access port
- **Speed Dial Function ：**
  The IPP unit has speed dialing with 100 settings, which are exempted from barring functions.
- **Built in DISA：**
  The IPP accommodates 4 outside lines simultaneously, and has 5 pre-recorded options with prompts.
- **IPP Basic Functions：**
  The IPP offers numerous routing options for in-coming calls：
  - Designate a local extension as operator
  - Forward to another IPP unit extension, or access port
  - Forward to IPH/IPC unit's FXS access port
- **Trunk Group：**
  The IPP provides for two Trunk Groups, and all lines are easily assigned to one of the groups as desired.
- **Barring Class：**
  All extensions can easily be assigned to one of 6 barring classes.
- **SMDR：**
  The IPP has SMDR call display based on an RS-232, which shows the number being called, and length of call in real time. This can be recorded via PC for monitoring purposes.

1-2 ADDITIONAL IPP FEATURES

- **Transit-in Call for Remote Use：**
  When away from home or office, you may call into your IPP unit to connect with the IP network.
- **Call Forward Feature：**
  Provides a follow-me service. You can receive calls via any IPP unit in the local area you are in.
- **Support T.38 Fax Relay：**
  IPP provides fax over IP. Just as with voice communication, the unit can be configured to transit a fax to any designated IPP unit around the world.
- **Support NAT：**
  The unit supports NAT allowing connections regardless of public or private IP being used.
- **Lifeline Support：**
  IPP has a lifeline support feature ensuring users will always be able to place calls if there is a power outage.
- **Remote System Management：**
  In addition to console based management, the system can be configured via internet, telephone, or Telnet from any location.
- **FTP Remote Software Up-grade：**
  With properly coded up-grades, you may use FTP applications to up-grade software.

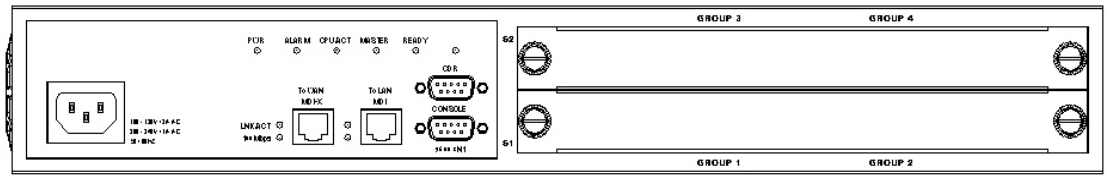
2. PACKAGE CONTENTS

- VoIP Gateway
- AC power adapter with cable
- Mounting rack
- CD-ROM
- 8 IDC connectors
- User's Manual

3. PANEL FEATURES

3-1 FRONT PANEL

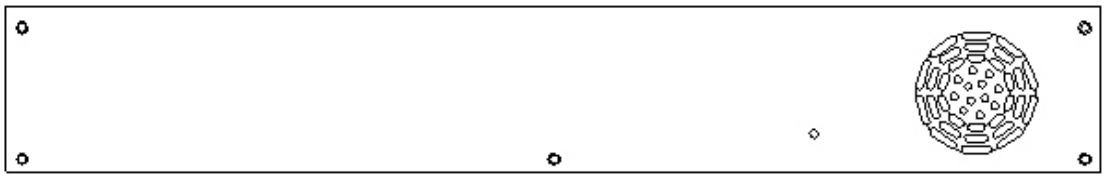
The IPP Series VoIP Gateway is a 19 inch modularized unit.
Each unit has 2 Ethernet ports, 1 console port, LED indicators, and, SMDR call recording port (for comprehensive calling records).



Front Panel- 4FXO + 12 FXS ports

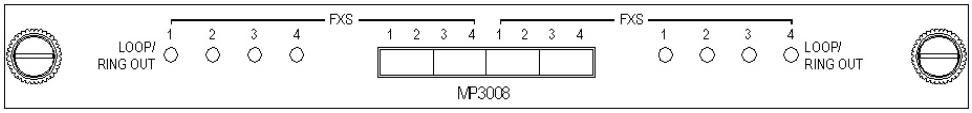
3-2 REAR PANEL

The IPP Series rear panel consists of only a fan vent, and re-set button (for service technician use only)

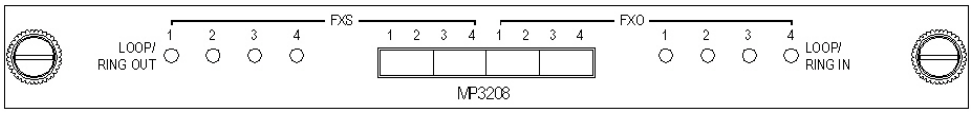


3-3 MODULES

The IPP incorporates two modules：4 FXO + 4 FXS、8 FXS.
The front panels for these modules are shown below.



4 FXO + 4 FXS



8 FXS

3-3.1 INDICATOR DESCRIPTION

LED	Label	Indication	Description
10/100 Ethernet	Link/ACT	On	Link Up
		Flash	Sending/Receiving data Package
	100Mbps	On	100Mbps
		Off	10Mbps
Port Information	LOOP/ RING OUT (FXS)	On	FXS off hook condition
		Flash	Sending
	LOOP/ RING IN (FXO)	On	FXO Receiving
		Flash	Ringing
Device	PWR	On	Power supply normal
	ALARM	On	Self test detects fault or FXO line cut-off
	CPU/ACT	On	CPU normal operation
		Flash	Computer in use
	TIME SRVR	On	TIME SERVER On-line
		Flash	TIME SERVER Connecting
		Off	TIME SERVER Off-line
	A.ANSWER	On	Auto Answer Engaged
		Off	Auto Answer Disengaged

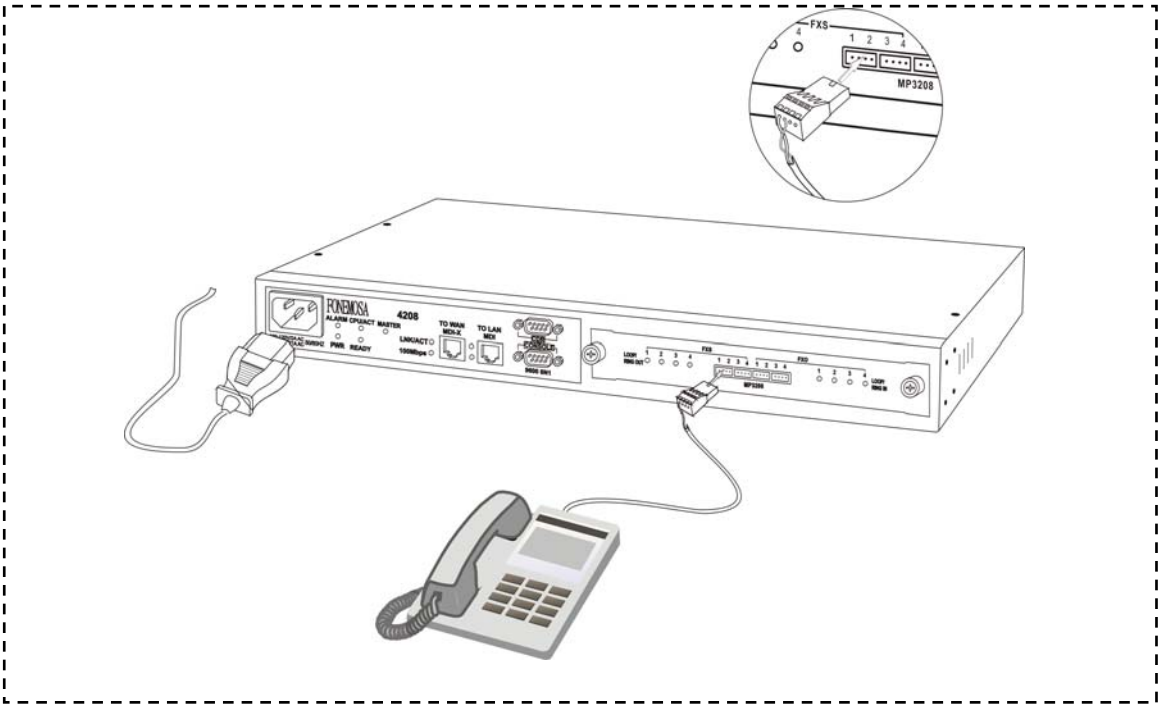
3-3.2 PORT DESCRIPTION

Port	Label	Description
Voice	FXS	Connects to telephone or fax
	FXO	Connects to line
Ethernet	To WAN	RJ-45 Connects to internet
	To LAN	RJ-45 Connects to local LAN
RS-232	CDR	SMDR call recording
	CONSOLE	Console

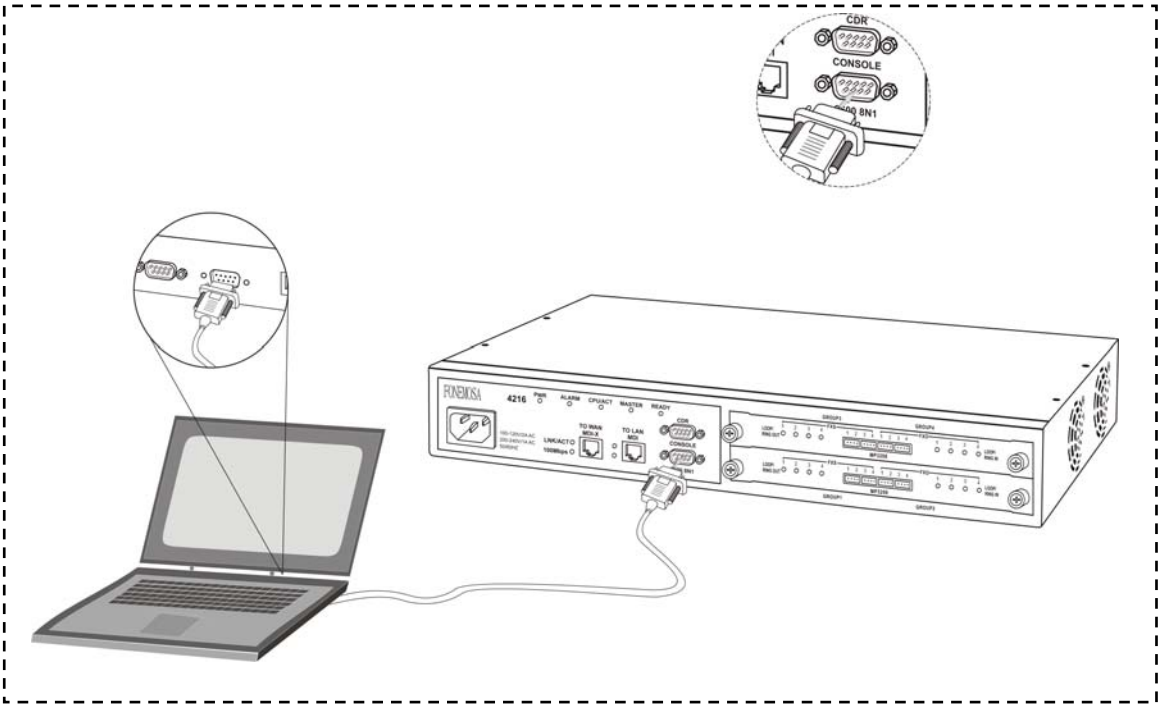
4. BASIC INSTALLATION

4-1 HARDWARE CONNECTIONS

4-1.1 Connect Power and Telephone Lines

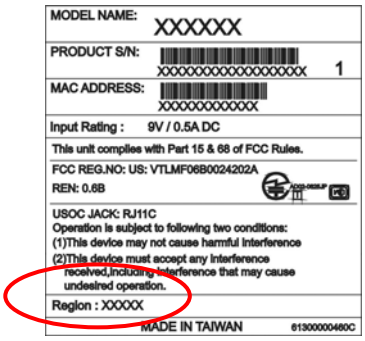


4-1.2 PC Connection



4-2 CONFIRMING and/or CHANGING REGION ID

If you are installing your IPP unit in the default region, you may skip this procedure. The default region is printed on a label on the shipping box (see example below).
If you are installing the unit in any region other than that specified on the label, you will need to re-configure the IPP unit to the correct Region ID.
See the appendix for 12-1 List of Region ID By Country



To use the console, use the following procedure：

IPP>**enable**
IPP #**configure**
Enter configuration commands, one per line. End with CNTL/Z
IPP (config)#**regional_id *07***
IPP (config)#**exit**
IPP #**delete nvram**
This command resets the system with factory defaults.
All system parameters will revert to their default factory settings. All static and dynamic addresses will be removed.
Reset system with factory defaults, [Y]es or [N]o? **Yes**

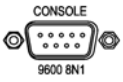
4-2.1 HOW TO OBTAIN AN IP ADDRESS

The IPP unit requires an IP address for operation. Before installation you need to determine how to obtain an IP address from your local ISP. Static IP, DHCP, or PPPoE can all be used. The following table helps you determine what information you will need. If your ISP offers static IP, you may need to obtain an IP from MIS staff to prevent an IP conflict. Otherwise, DHCP (as provided by most broadband cable), and PPPoE (provided by most ADSL broadband providers) will work correctly.

IP Environment		Required Information
Static IP	Public IP address	**IP address** **Subnet mask** **Default Gateway** It is recommended that you obtain an IP address from MIS staff in order to prevent an IP conflict.
	Private IP address	**IP address** **Subnet mask** **Default Gateway** It is recommended that you obtain an IP address from MIS staff in order to prevent an IP conflict. Note：Your private IP requires an IP sharing device, and this device must be configured to treat the IPP unit, and the IP it is using as a 'virtual server'.
Dynamic IP Address (DHCP)		DHCP Mode
PPPoE		**Account Number** **Password** This information is normally provided by your ISP . If you don't have this information, contact your ISP.

4-2.2 SETTING THE IP

The IP address can be set via the console, or the Web Management Page.



To use the console, use the following procedure：

IPP >**enable**
IPP #**configure**
Enter configuration commands, one per line. End with CNTL/Z
IPP (config)#**ip state user**
IPP (config)#**ip address *210.62.149.250 255.255.255.128***
System needs to restart
IPP (config)#**ip default-gateway *210.62.149.254***
IPP (config)#**exit**
IPP #**restart**
This command resets the system. System will restart operation code agent.
Reset system, [Y]es or [N]o? **Yes**

4-2.3 SETTING THE WEB PAGE PASSWORD

Before entering the WEB Management Page first set the password to prevent unauthorized use. The password can be 1-6 letters or digits, for example '123'. The IPP series requires a password otherwise the web management interface cannot be used.

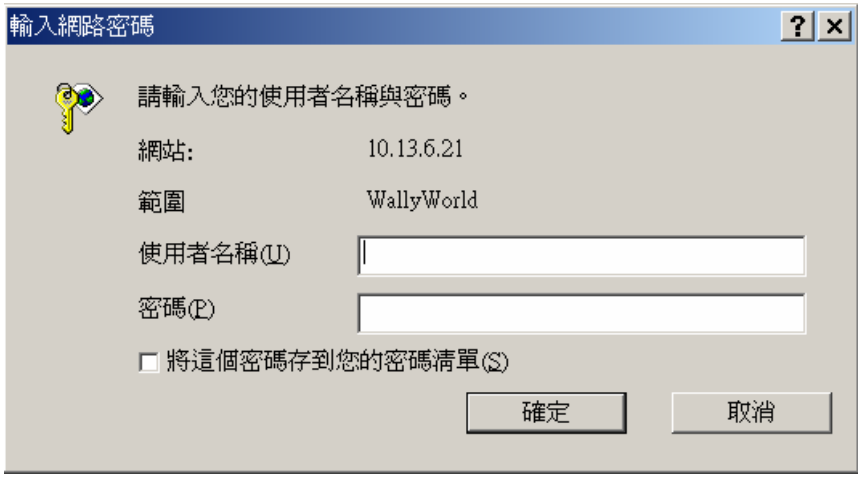
Use the console to set the password：

IPP >**enable**
IPP #**configure**
Enter configuration commands, one per line. End with CNTL/Z
IPP (config)#**password web_write password 123**
IPP (config)#**exit**

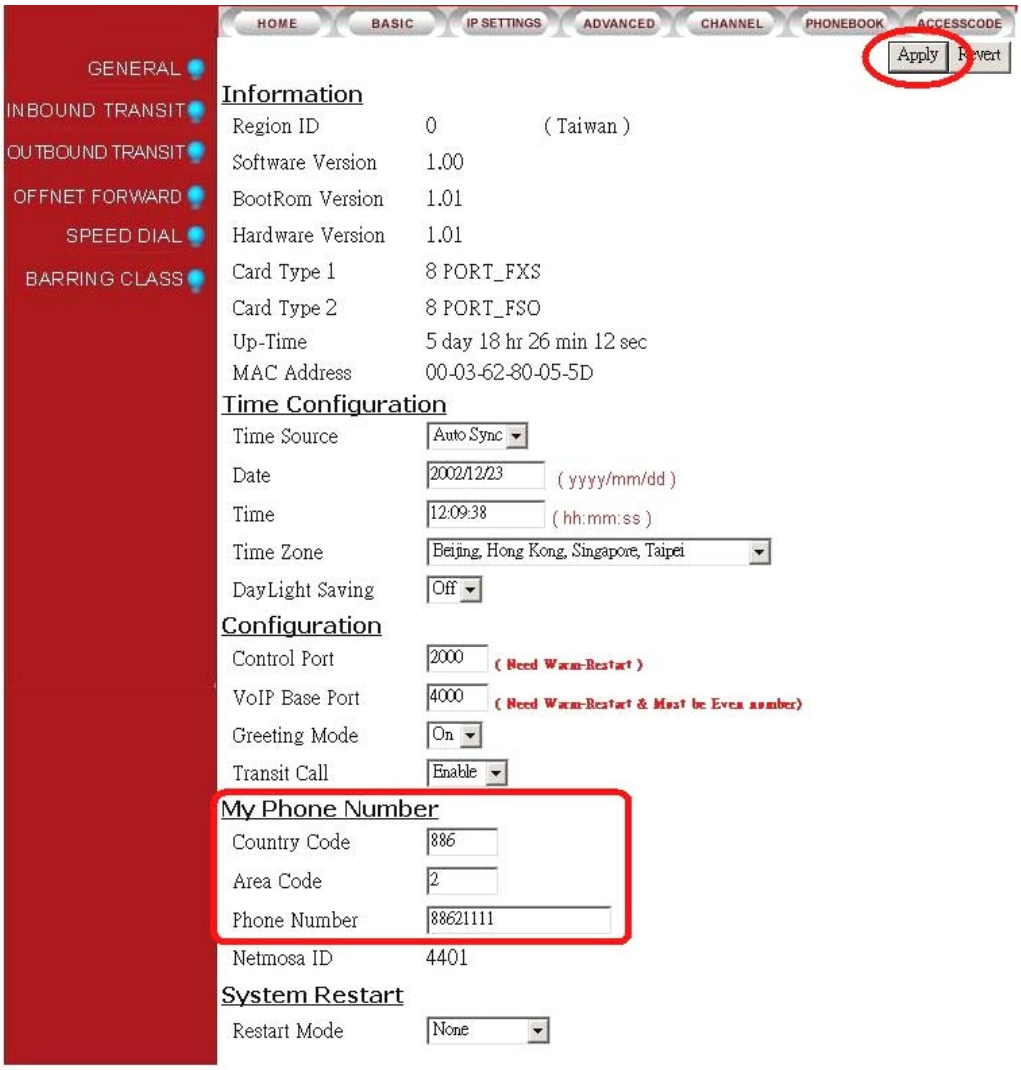
4-2.4 SETTING THE PHONE NUMBER

The IPP can accommodate four in-coming lines, however, when setting the phone number, only one number is required.

Go to the IPP website, by entering the IP address. You will see a page such as the example below. Type in the user ID (default is WEB) and the password previously set, select Enter, and you will access the web management page.



Setting phone number on web page：/ BASIC / My Phone Number



In the field ‘My Phone Number’, will appear the country code corresponding to the entered Region ID.

- Country Code：Enter your country code in the “Country Code”
- Area Code：Enter your area code in the Area Code field
- Phone Number：Enter your local phone number in the Phone Number field

Click ‘Apply’ at the top right of the page.
Select ‘Warm Restart’ in the System Restart field drop-down box.
Click ‘Apply’.

To use the console, use the following procedure：

Does not support the feature.

5. SETTING FUNCTIONS

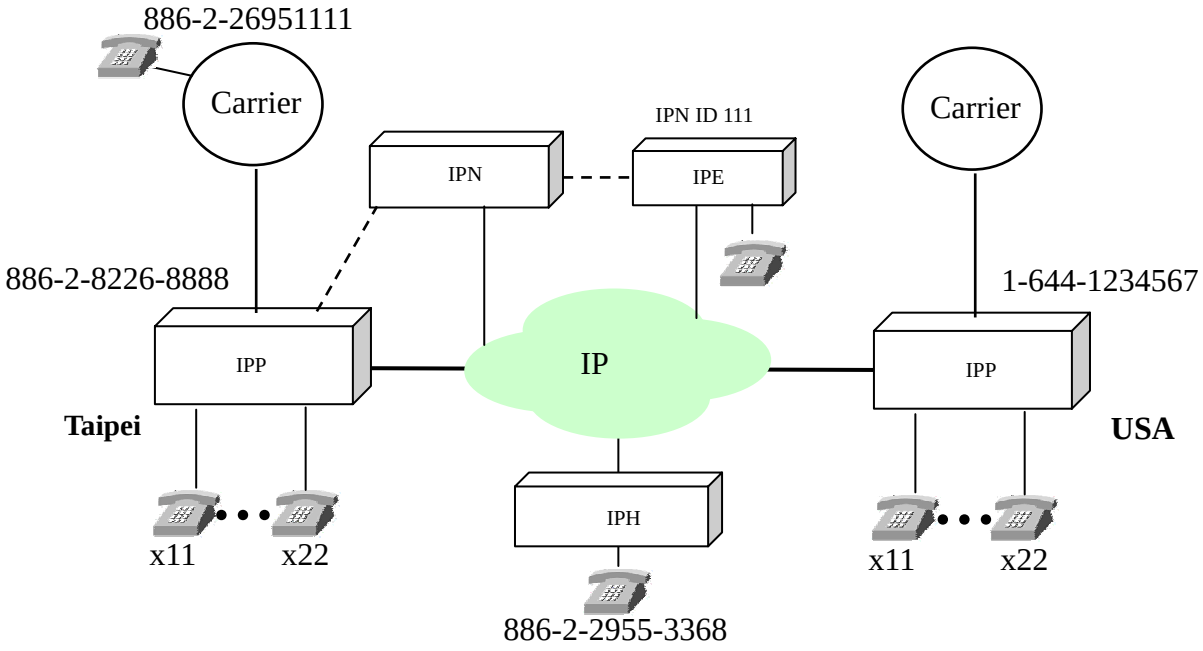
5-1 Inter-System Calls

With the IPP Series, you can call other IPP units, and connect to the IPE system. To call an extension on the same IPP unit simply dial the desired extension number (11-22)
See the table below for the dialing procedure to call to：

- Another IPP unit
- A IPH/IPC access port
- A IPE access port via IPN

Dialing Method：

Receiver	Dialing Procedure
Another IPP unit	**<IP Calls Access Code>** + IPP + Phone + Ext. + “#”
IPH/IPC unit FXS port	**<IP Calls Access Code>** + IPH/IPC + Phone + “#”
IPE FXS via IPN	**<IP Calls Access Code> +** IPN ID + “#”



Parameters for example above

Setting	Place: Taipei IPP	Place: USA IPP
Telephone Number	886-2-8226-8888	1-644-1234567
Extension Number	11-22	11-22
IP Calls Access Code	#	#

Dialing Example (from Taipei IPP unit)：

Taipei extension 11 calling Taipei extension 22：Extension 11 pick-up the receiver, dial 22

Taipei extension 11 calling USA extension 22：Extension 11 pick-up the receiver, dial #1644123456722#

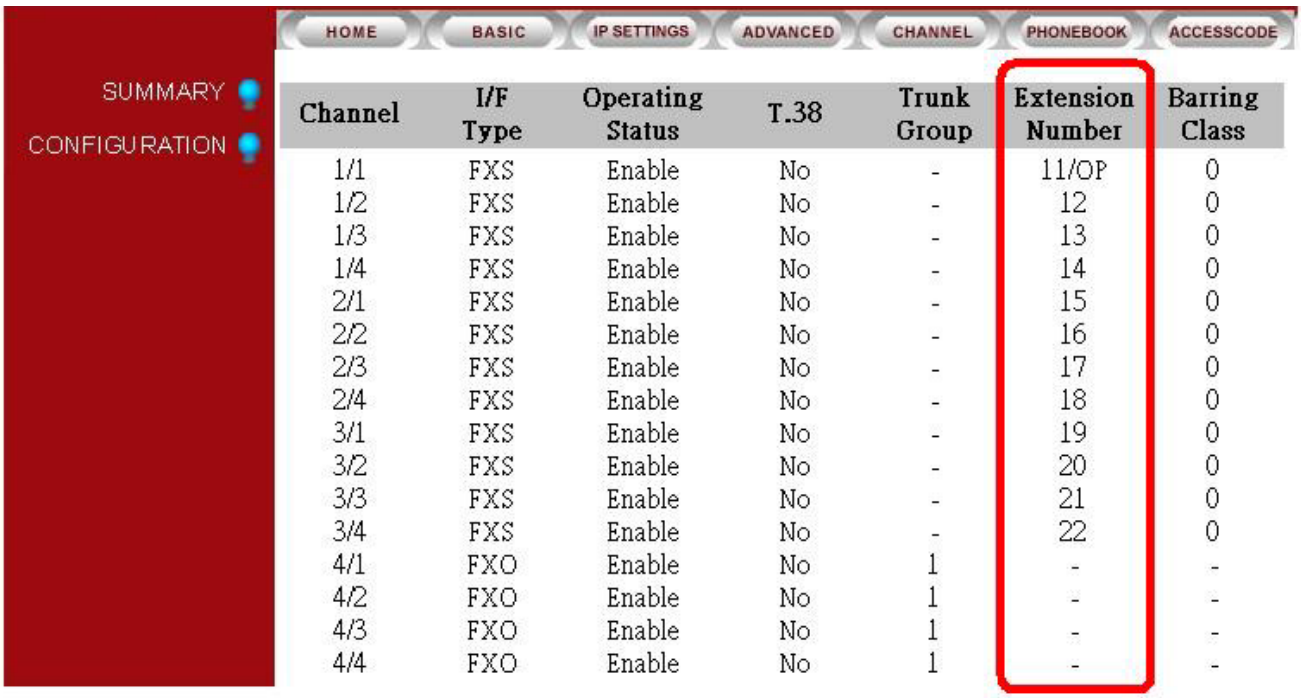
Dialing Example (from USA IPP unit)：

U.S. extension 11 calling U.S. extension 22：Extension 11 pick-up the receiver, dial 22

U.S. extension 11 calling Taipei extension 22：Extension 11 pick-up the receiver, dial #886282268888822#

5-1.1 SETTING EXTENSION NUMBERS

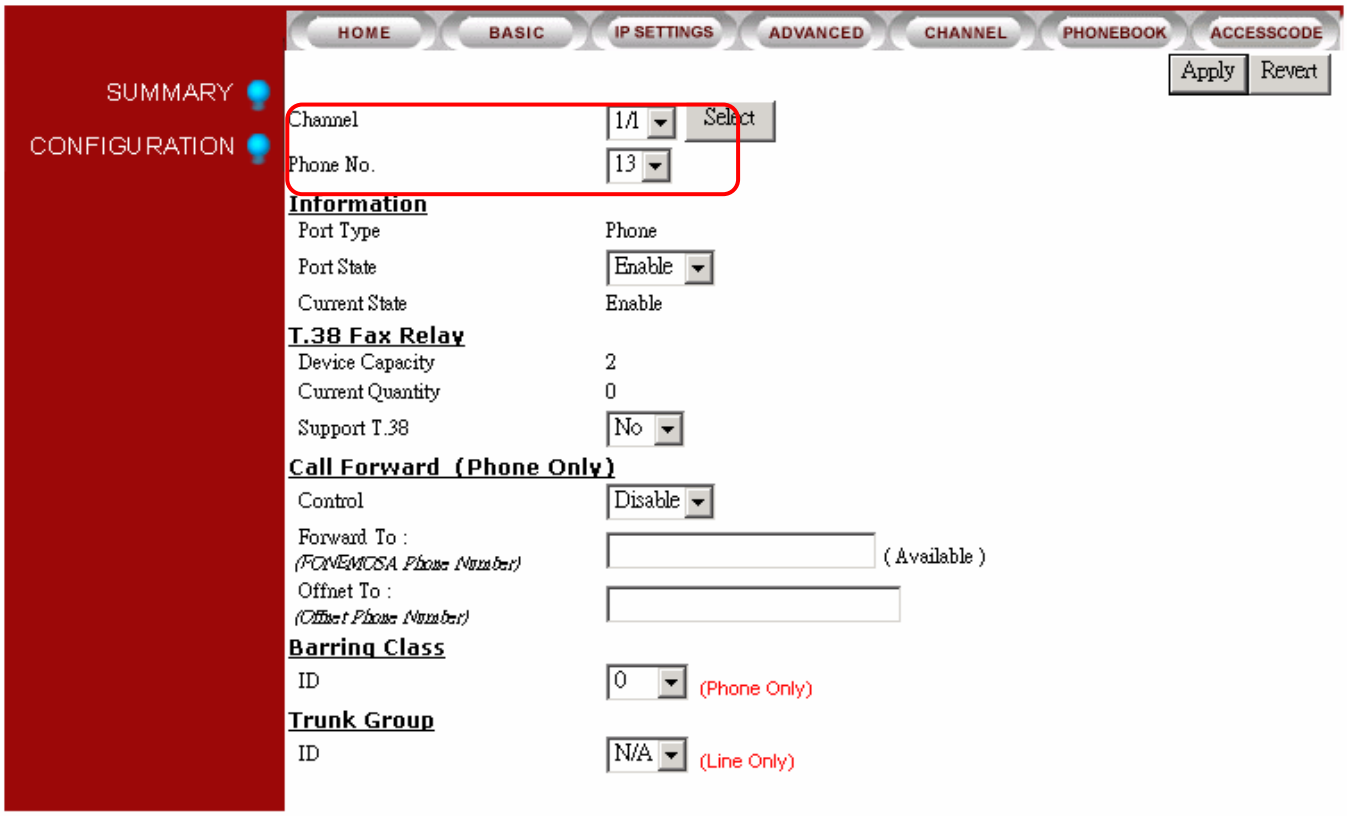
To set extension numbers, select ‘CHANNEL’ on the Web Management Page. You will see a summary of the current configuration.



Channel	I/F Type	Operating Status	T.38	Trunk Group	Extension Number	Barring Class
1/1	FXS	Enable	No	-	11/OP	0
1/2	FXS	Enable	No	-	12	0
1/3	FXS	Enable	No	-	13	0
1/4	FXS	Enable	No	-	14	0
2/1	FXS	Enable	No	-	15	0
2/2	FXS	Enable	No	-	16	0
2/3	FXS	Enable	No	-	17	0
2/4	FXS	Enable	No	-	18	0
3/1	FXS	Enable	No	-	19	0
3/2	FXS	Enable	No	-	20	0
3/3	FXS	Enable	No	-	21	0
3/4	FXS	Enable	No	-	22	0
4/1	FXO	Enable	No	1	-	-
4/2	FXO	Enable	No	1	-	-
4/3	FXO	Enable	No	1	-	-
4/4	FXO	Enable	No	1	-	-

Select CHANNEL\CONFIGURATION to bring up the following page：

1. Select Channel in the ‘Channel’ field drop-down box
2. Select extension number (11-22) in the ‘Phone Number’ field drop-down box
3. Click ‘Apply’

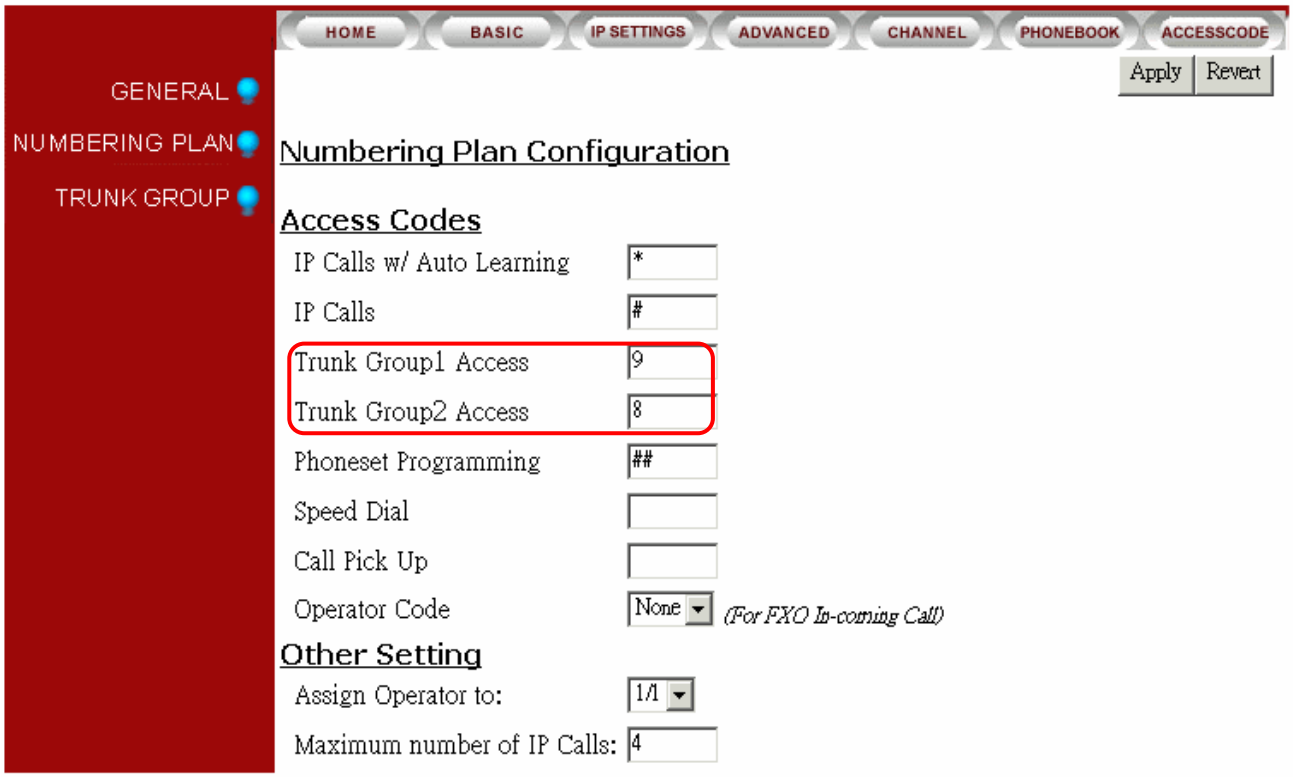


5-2 CALLING OUTSIDE LINES

Each FXO can be assigned to one of two trunk groups. All in-coming lines can be assigned to one trunk, the other trunk being inactive. Any extension can work off either trunk group by dialing the appropriate ‘Trunk Group Access Code’.

5-2.1 Assigning Trunk Group Access Code

Select the 'ADVANCED / NUMBERING PLAN' icons on the Web Management page.



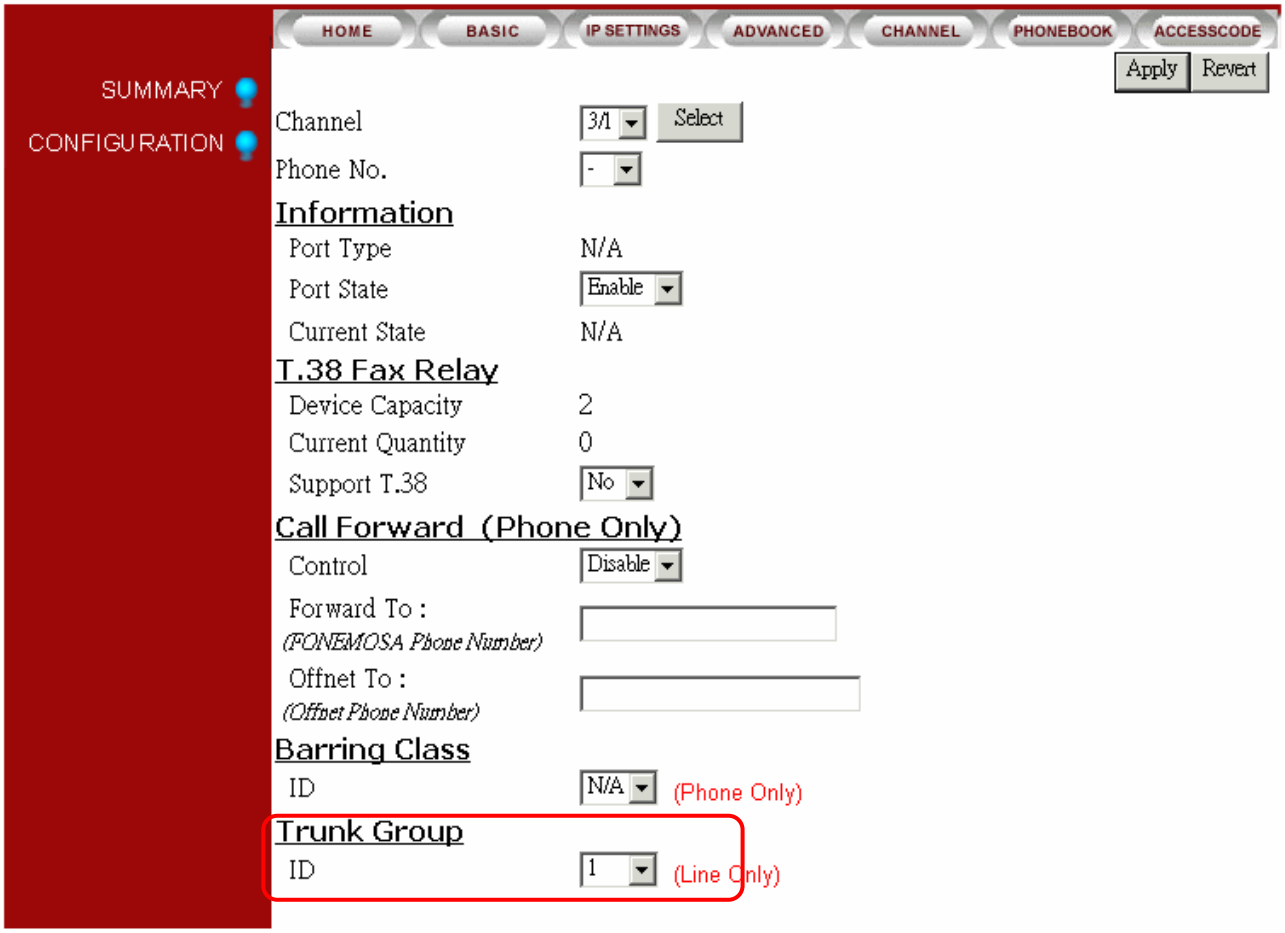
Assign the trunk group access codes in the fields：

- Trunk Group1 Access
- Trunk Group2 Access

In the example above the Access Code for Trunk Group 1 is '9', and the Access Code for Trunk Group 2 is '8', for any extension.

5-2.2 Assigning In-Coming FXO line to a Trunk Group

Select ‘CHANNEL \ CONFIGURATION ‘ on the Web Management Page



Select Group 1 or 2 in the ‘Trunk Group ID’ field at the bottom of the page, Click ‘Apply’.
In the example below, Channel 3/1 has been assigning to Trunk Group 1.

5-3 Call Transfer

Any extension can transfer a call to：

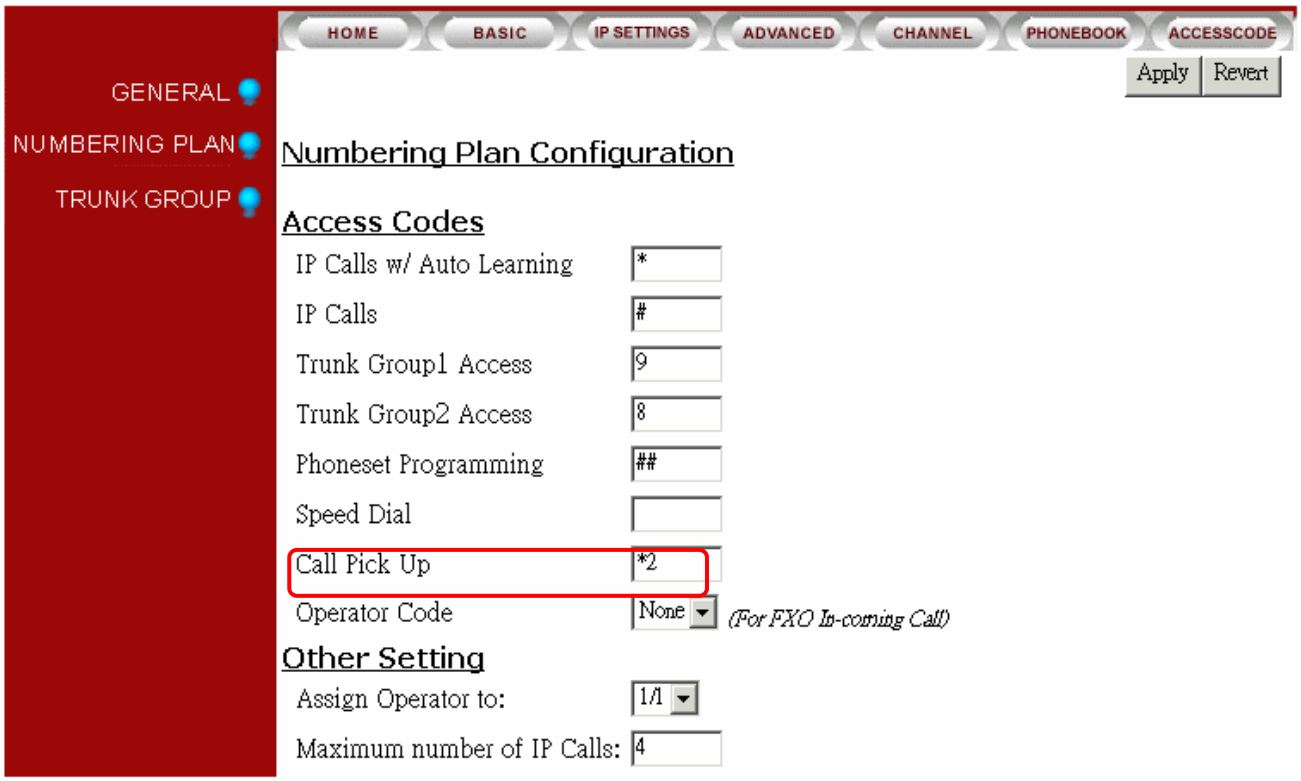
- Any extension on the local IPP unit
- Any other IPP unit extension
- Any IPH/IPC unit FXS access port
- Any IPE FXS access port via IPN

Destination	Transfer Procedure	Example
Internal Extension	Flash button + extension	14
Another IPP Extension	'*' + IPP unit tel. number + Extension + '#'	*8226336814# (82263368 is IPP unit tel. number，14 is Extension)
Any IPH/IPC unit	'*' + IPP unit tel. number + '#'	*82263368# (82263368 is IPP unit tel. number)
Any IPE unit	'*' + IPE, IPN ID + '#'	*9823# (9823 is IPN ID)

5-4 Call Pickup

Any extension can answer the ring of any other extension by dialing the 'Call Pick Up' access code, which must be assigned.

Select 'ADVANCED / NUMBERING PLAN' on the Web Management Page



In the example above the 'Call Pick Up' access code is *2.

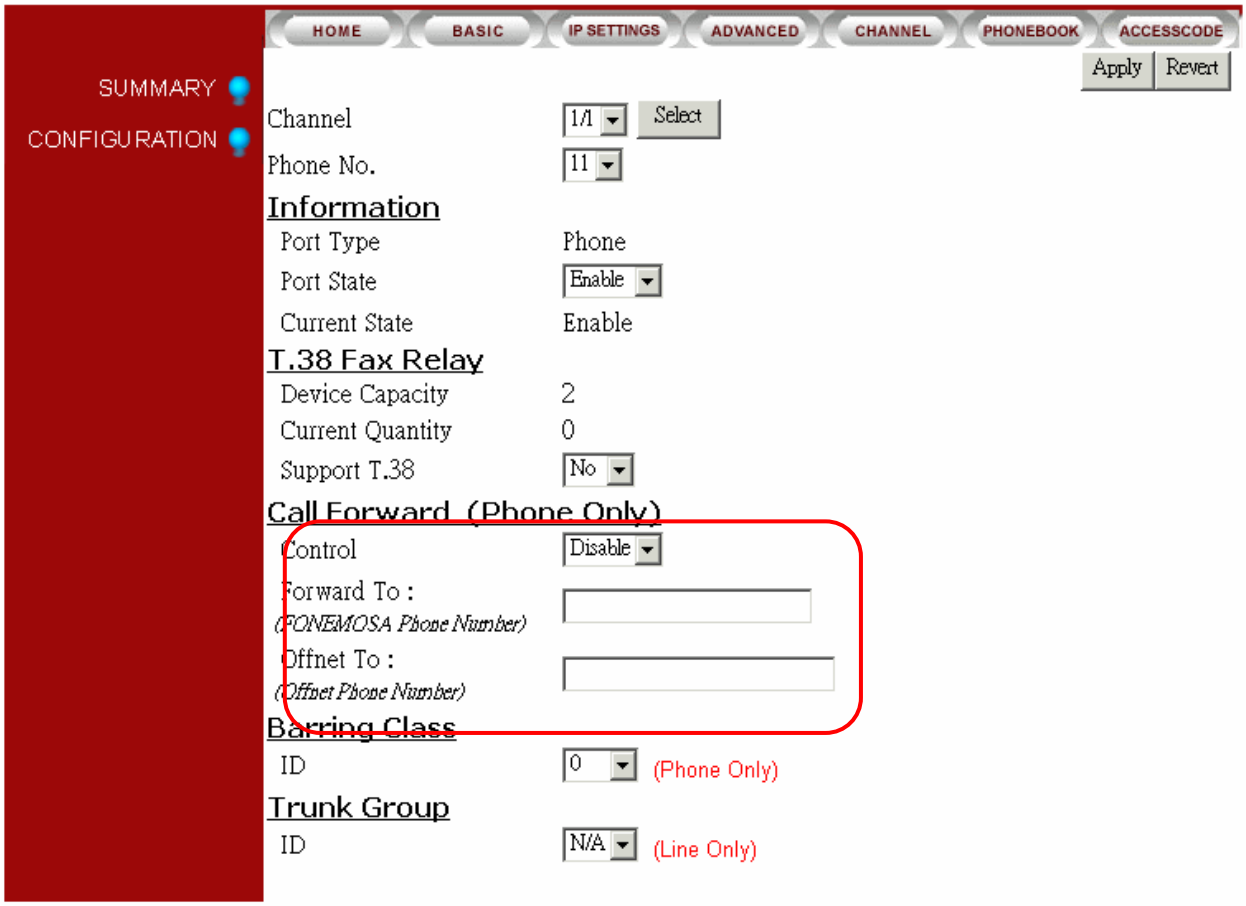
5-5 Call Forward

Any IPP extension can forward a call to：

- Any extension on the local IPP unit
- Any other IPP extension
- Any IPH/IPC unit FXS port
- Any IPE FXS access port via IPN
- Any Off-net Forward phone number

Setting Call Forwarding Destination.

Select ‘CHANNEL / CONFIGURATION’ on the Web Management Page



In the ‘Call Forward (Phone Only)’ section：

- Enter a IPP phone number in the ‘Forward to：*(IPP Phone Number)*’ field
- Enter a phone number in the ‘Offnet To：*(Offnet Phone Number)*’ field
- Click ‘Apply’

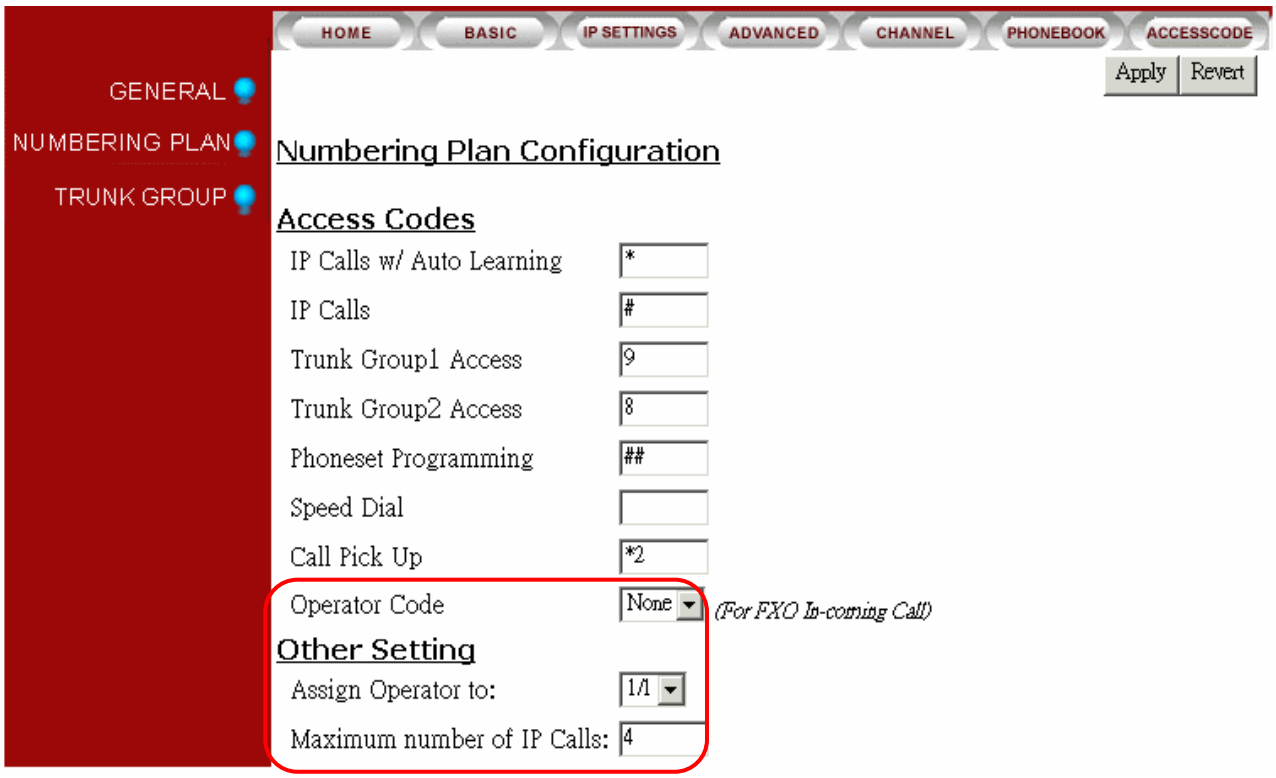
Dialing Procedures

Parameter		Command
Control		Select “Enable”
Forward To：	Inter Office	Extension #
	Local IPP Ext.	Local IPP phone number + Ext.
	Any IPP unit	Any IPP unit phone number + Ext.
	Any IPP unit	Any IPP phone number
	Any IPE unit via IPN	Any IPE unit access code number
Offnet To：	Any phone number in the Call Forward, ‘Offnet To’ field	Enter the desired phone number in the field

5-6 Operator

Setting the operator code

- Select ‘ADVANCED \ NUMBERING PLAN’ on the Web Management Page
- See the code in the ‘Operator Code’ field of the Access Codes section
- Alternately in the ‘Other Setting’ section, enter an extension in the ‘Assign Operator to’ field
- Click ‘Apply’



Operator Call Forward

The ‘OPERATOR’ function of the IPP will forward calls to：

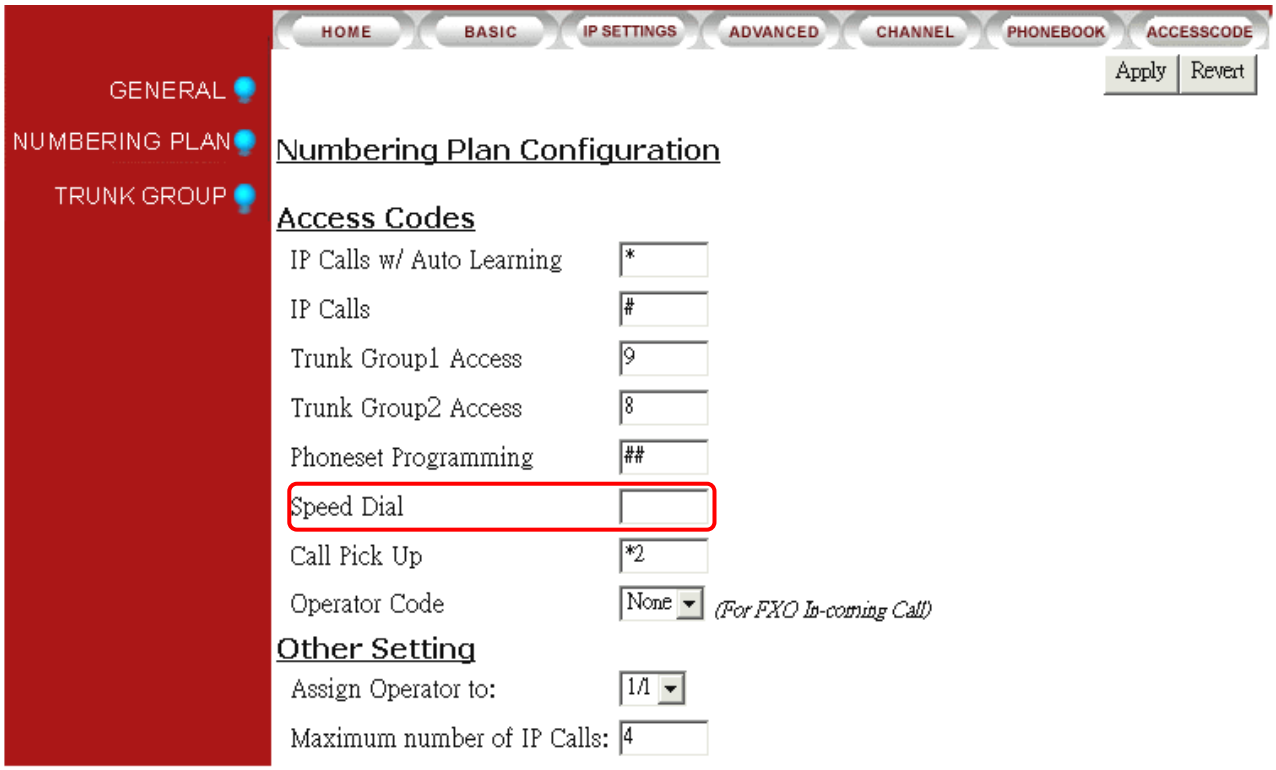
- Any internal extension
- Any IPP unit extension
- Any IPE unit via IPN
- Any phone number

5-7 Speed Dial

The IPP series has a speed dial memory capacity of 100 phone numbers. The phone number can be set from any extension.

Setting the speed dial access code：

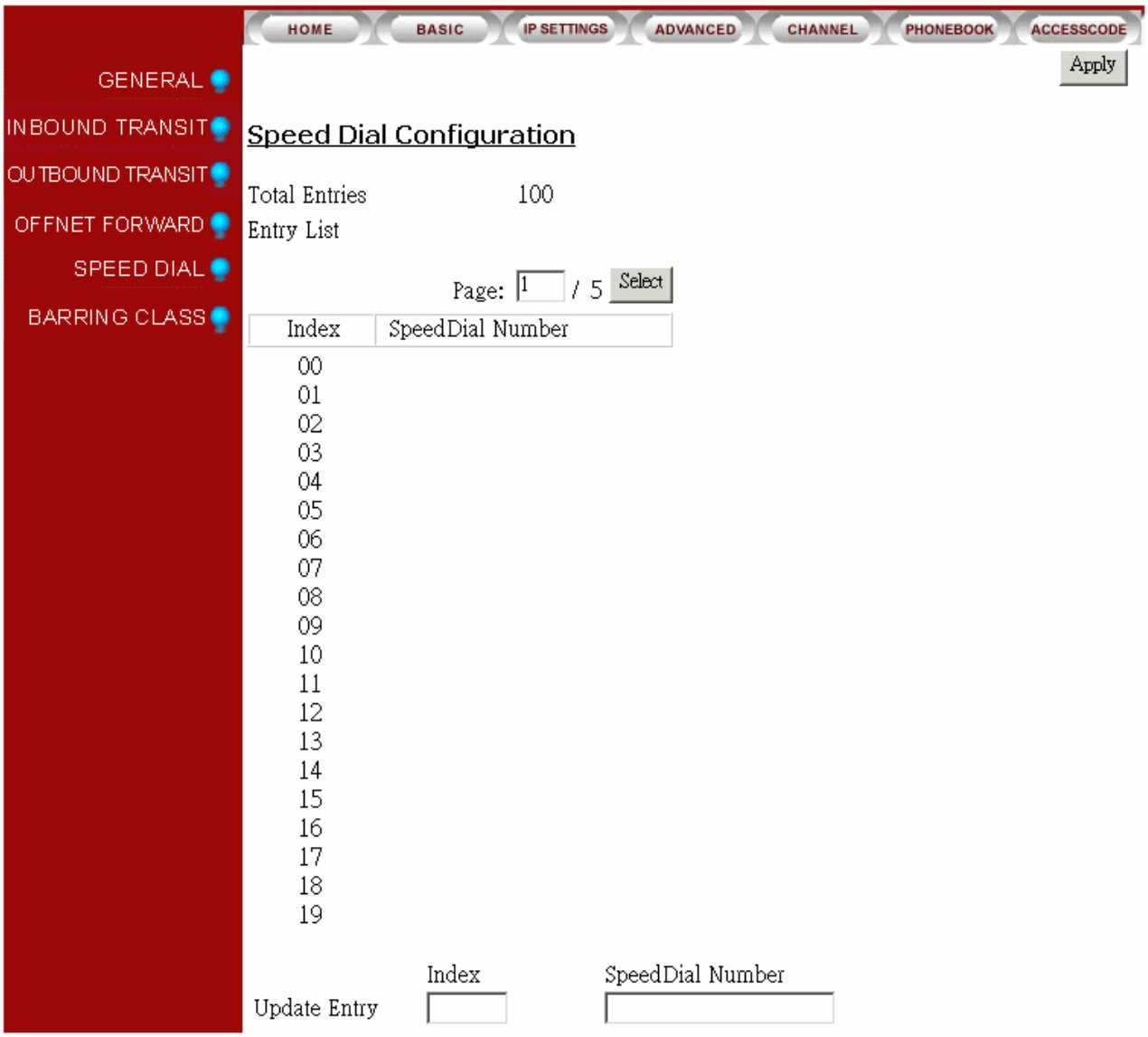
Select ‘ADVANCED \ NUMBERING PLAN’ on the Web Management Page.



In the access code section enter a speed dial access code (0-99) in the ‘Speed Dial’ field. Click ‘Apply’

Setting the speed dial phone number：

Select ‘BASIC \ SPEED DIAL’ on the Web Management Page



Enter the desired number(s) in the ‘Index’ field

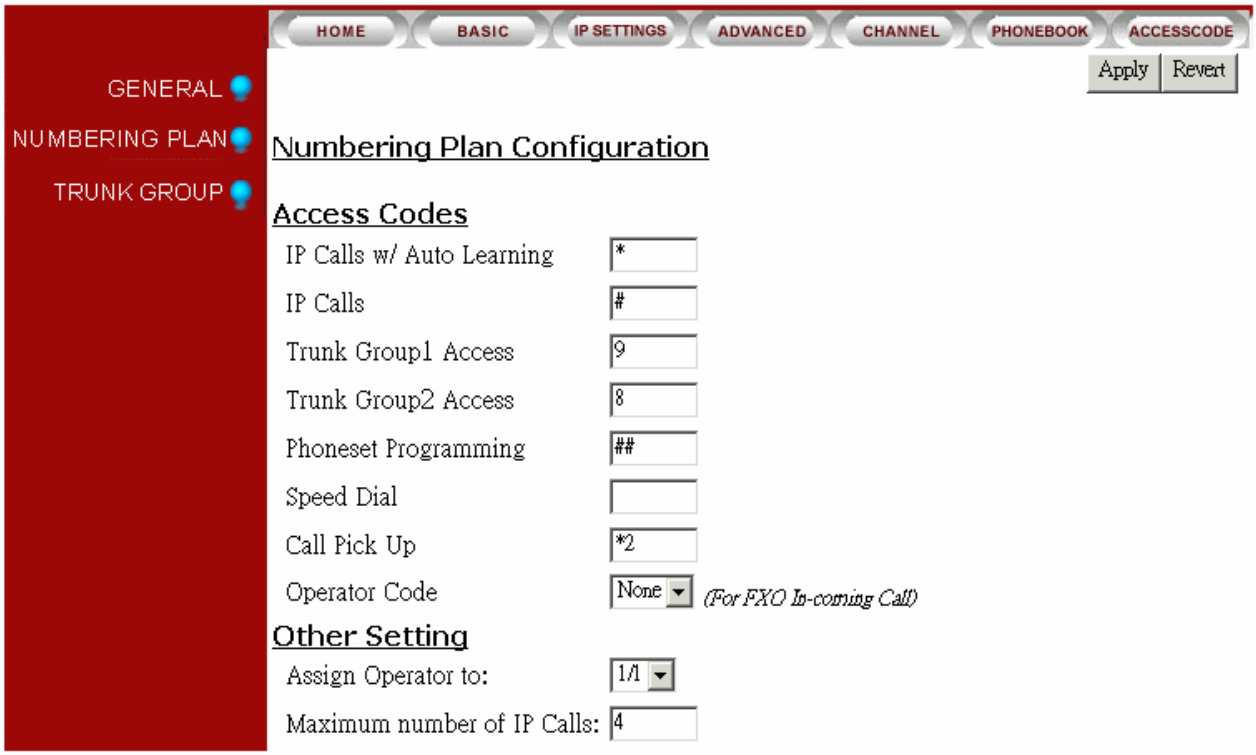
- Click ‘Apply’

5-8 VoIP Calls Budget Control

IPP series units operate under the G.729AB protocol with voice packets of 40ms with each voice line using a bandwidth of 12K bps. Thus with the full capacity of IPP series' 12 lines, the requirement would be 144 bps (for voice only, not including any other data flow). Therefore the VoIP volume must be limited to accommodate your system's bandwidth.

Setting the VoIP Calls Limit：

Select 'ADVANCED \ NUMBERING PLAN' on the Web Management Page

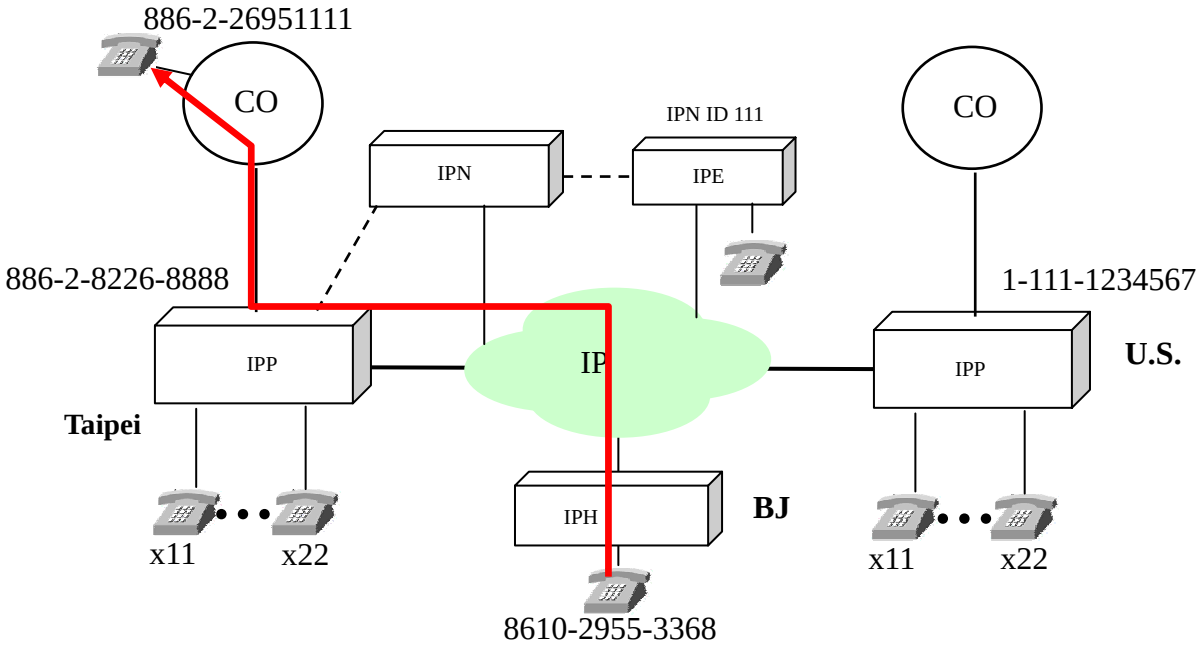


- In the Access Codes section, enter the IP call limit in the 'IP Calls' field.
- Click 'Apply'

5-9 Outbound Transit Calls

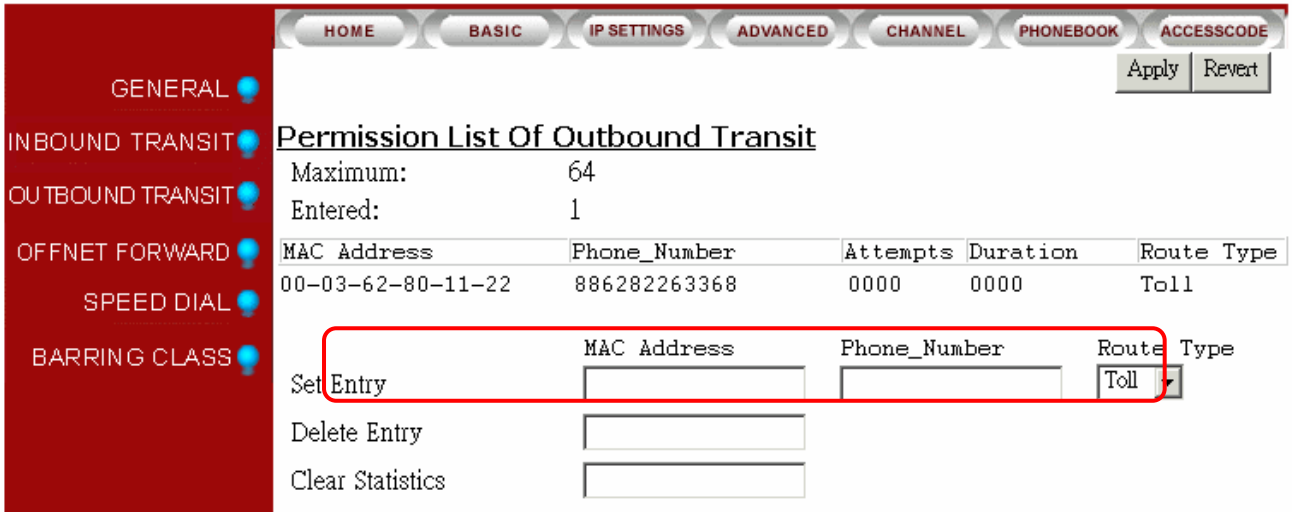
The IPP series is capable of forwarding calls from IPH/IPC/IPE series units to local PSTN. As the transferring unit must pay for all local charges, the sending unit must be listed in the 'Permission List Of Outbound Transit'.

In the following example we see the routing of an Outbound Transit call originating in U.S., and being transited through s IPH unit in Taipei. (EX：#00886226951111#)

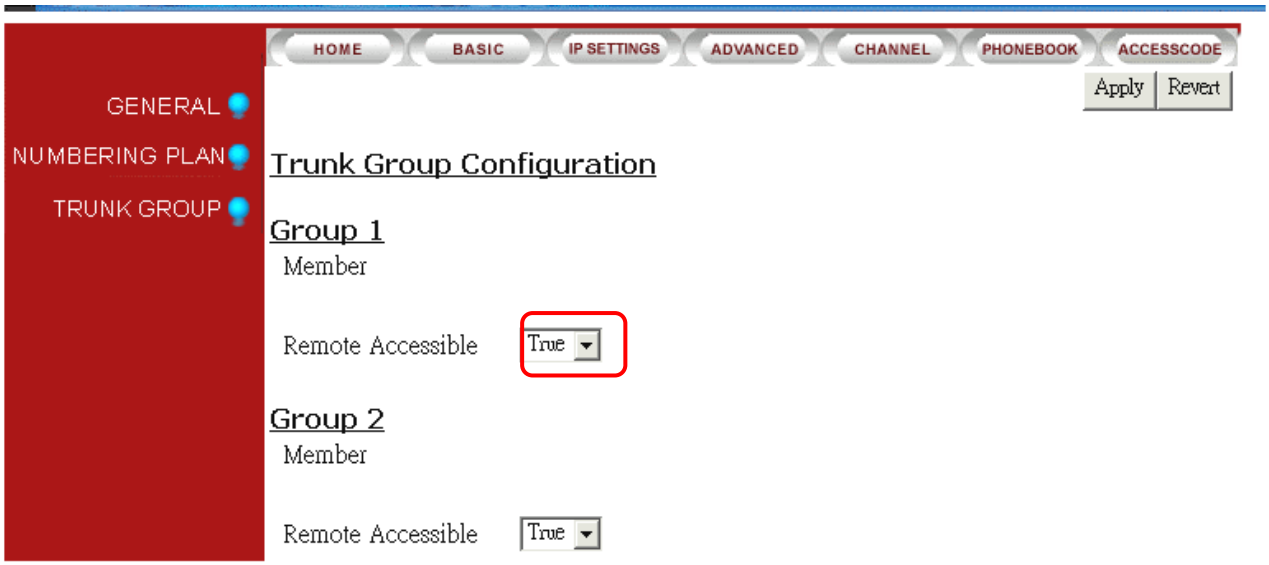


Setting the 'Permission List Of Outbound Transit'

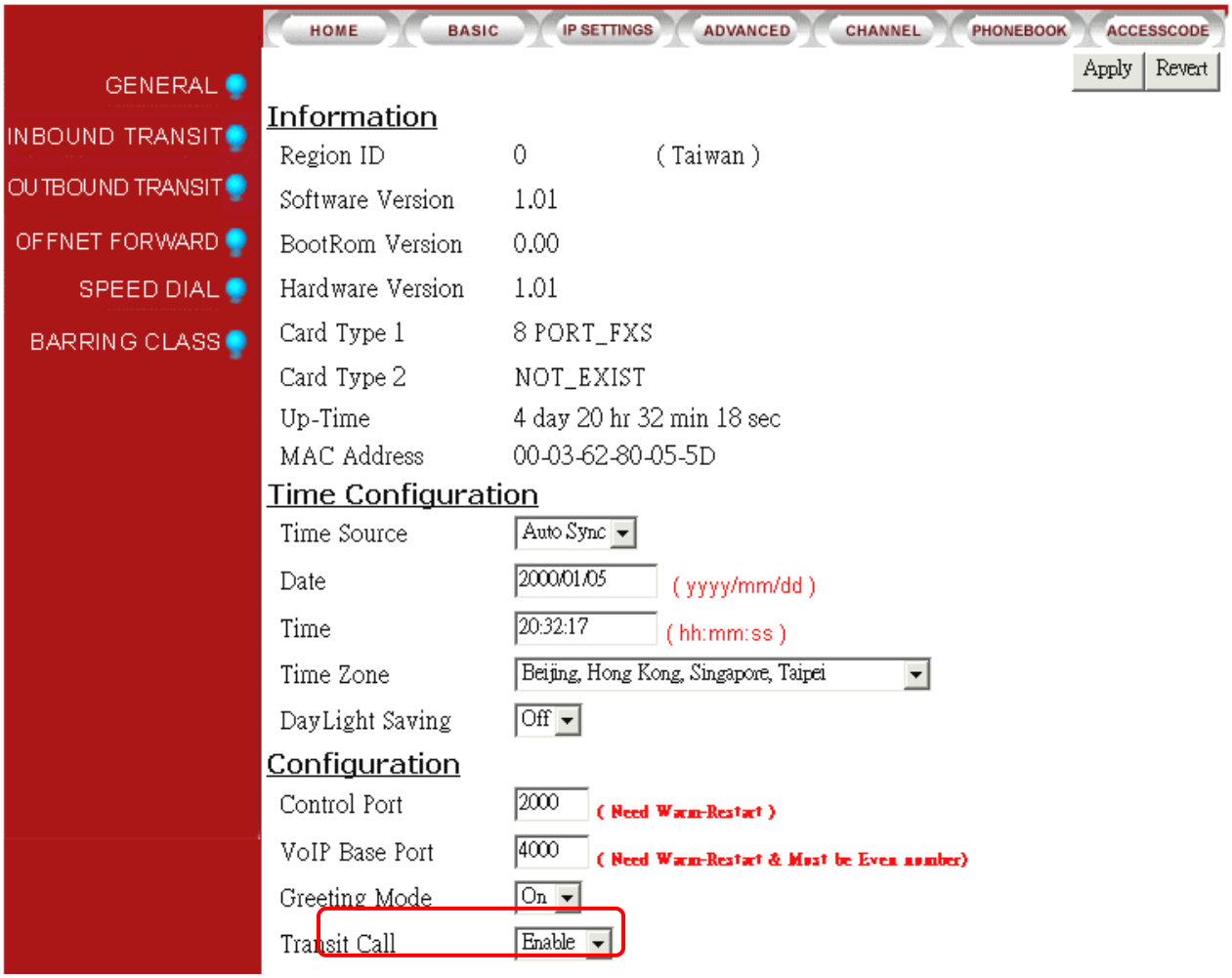
1) Select 'BASIC \ OUTBOUND TRANSIT' on the Web Management Page
2) In the MAC Address field set the remote unit(s) 'MAC Address' and 'Phone Number'
3) In the Route Type field drop-down box select either 'Toll' or 'Local'
4) Click 'Apply'



5) Select ‘ ADVANCED \ TRUNK GROUP’ on the Web Management Page
6) In the ‘Remote Access’ field drop-down box select ‘True’
7) Click ‘Apply’
8) Select ‘BASIC \ GENERAL’ on the Web Management Page



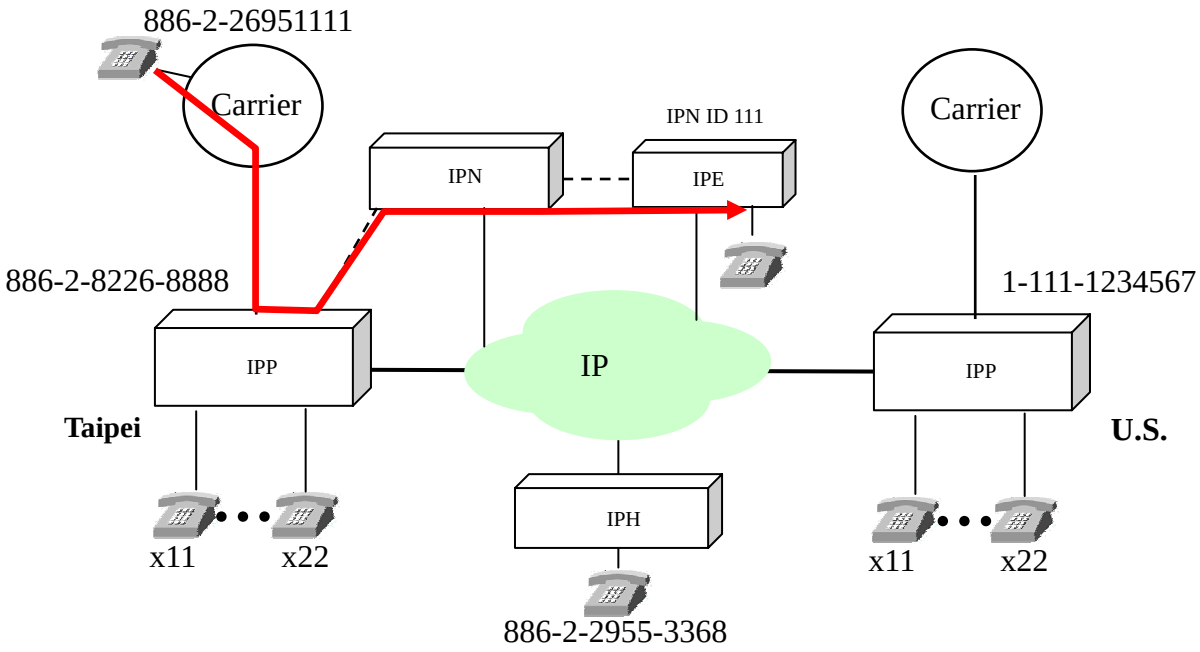
9) In the ‘Configuration’ section select ‘Enable’ in the ‘Transit Call’ field drop-down box



10) Click 'Apply'

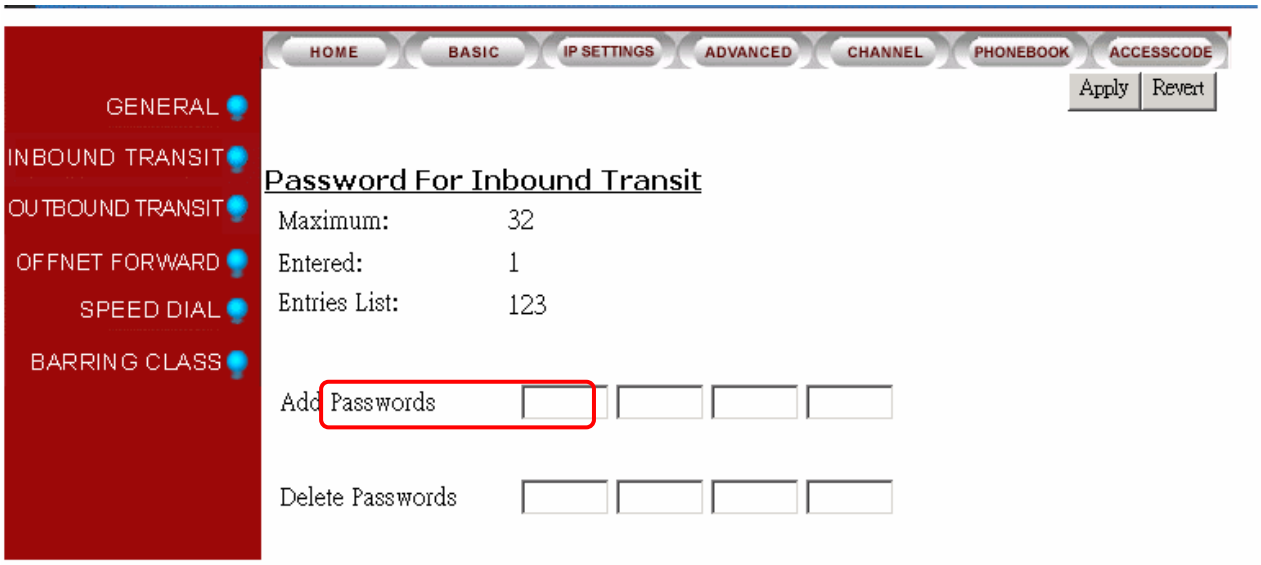
5-10 Inbound Transit Calls

Incoming calls to IPP unit can be transferred to IPH/IPC/IPE, and IPP unit FXS ports. In the following diagram, a IPP receives, and transfers an in-coming call to IPE. The outside caller dials the IPP unit's phone number, and when he hears the greeting dial, # + inbound transit password + #111# (111 being the IPN ID for IPE).



Setting the Inbound Transit Password：

1) Select ‘BASIC \ INBOUND TRANSIT’ on the Web Management Page
2) Enter password (up to 8 digits) in the ‘Add Password’ field
3) Click ‘Apply’



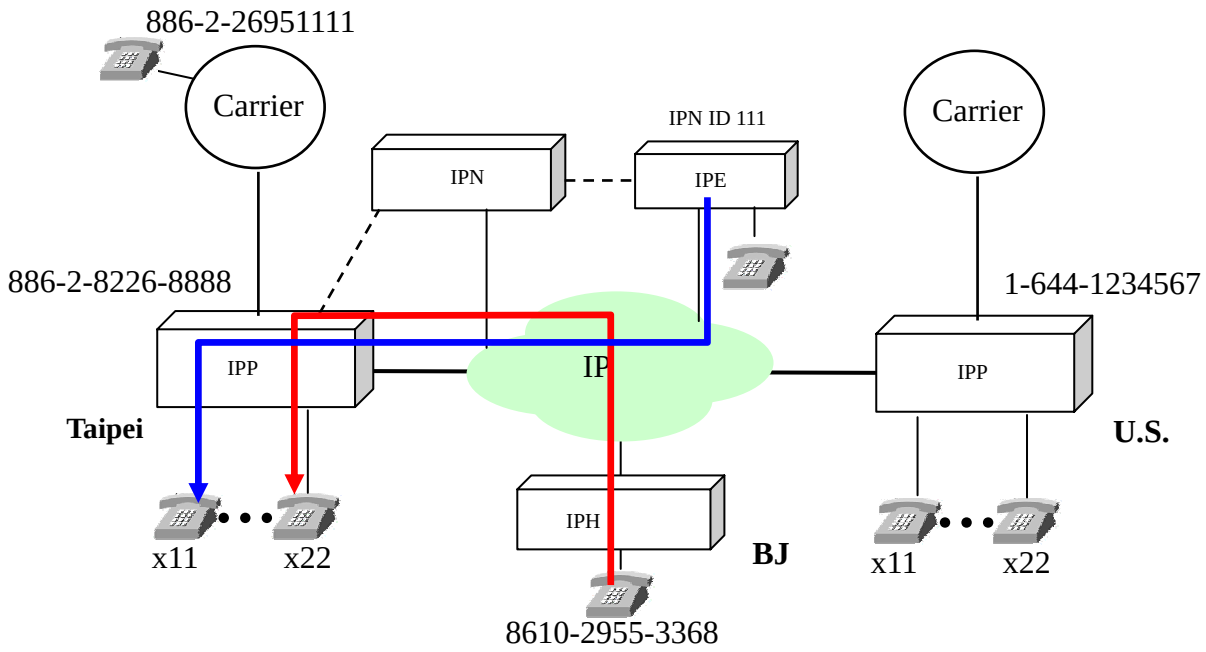
5-11 INTER-CONNECTING WITH OTHER IPH/ IPE UNITS

IPH / IPC series and IPE units can transfer calls directly to any extension of IPP units.

The example diagram below illustrates：

1、A IPH in BJ calls Ext. 22 of a IPP in Taipei, by dialing：#00 886 2 8226 8888 22#

2、A IPE unit calls Ext. 11 of a IPP unit in Taipei, by dialing：**#1** 00 886 2 8226 8888 11#。(#1 is the IPE access code to IPP units).



5-12 SYSTEM FUNCTION

5-12.1 Auto Attendant (Built-in DISA)

The IPP series has an auto-attendant function to receive in-coming FXO calls. This function does not engage in-coming IPP and IPE IP calls.

Programming the Auto- Attendant：
The unit is programmed for 5 different greetings of up to 1 minute each. No special tools are required.
The recordings can be made from any extension, and the greeting file can be up-dated with FTP.

Greeting	Function	Content
Greeting (1)	During office hours	Welcome to ABC Co, please dial an extension number, or 9 for operator assistance
Greeting (2)	Extension is busy	The extension you have dialed is engaged. Please dial another extension, or 9 for operator assistance
Greeting (3)	Incorrectly dialed number	We are not able to connect you with that extension. Please re-dial.
Greeting (4)	All extensions are busy	All extensions are busy, please wait for your connection. Thank you.
Greeting (5)	After office hours	It is after office hours. Please dial an extension, or call again during office hours.

Enable the greeting for during or after office hours.

1) Enable the greeting for during office hours: Pick up the phone and dial ##9999 then dial 931#

2) Enable the greeting for during after office hours: Pick up the phone and dial ##9999 then dial 930#

Auto-Attendant Recording Commands

1. Pick up the phone, listen for dial tone, dial ##9999 after hearing confirmation response of two beeps:
2. Record greeting 1, dial 991* → begin recording, dial # → when recording is finished
3. Save greeting 1 recording, dial 9# → dial # after hearing confirmation response of two beeps
4. Record greeting 2, dial 992* → begin recording, dial # → when recording is finished
5. Save greeting 2 recording, dial 9# → dial # after hearing confirmation response of two beeps
6. Record greeting 3, dial 993* → begin recording, dial # → when recording is finished
7. Save greeting 3 recording, dial 9# → dial # after hearing confirmation response of two beeps
8. Record greeting 4, dial 994* → begin recording, dial # → when recording is finished
9. Save greeting 4 recording, dial 9# → dial # after hearing confirmation response of two beeps
10. Record greeting 5, dial 995* → begin recording, dial # → when recording is finished
11. Save greeting 5 recording, dial 9# → dial # after hearing confirmation response of two beeps

5-13 Numbering Plan

NO TWO ACCESS CODES CAN HAVE IDENTICAL DIGITS! Please regard this requirement when setting access codes. It is recommended to review set access codes when setting or re-setting a code to avoid a conflict or malfunction.

5-14 Barring Classes

A barring class is used to specify which numbers can or cannot be dialed. Every barring class element includes the following information: There are six barring classes on the device and all extensions can be assigned to any class. Initially they are all unassigned and have no association with any gateways in the group.

Class Name

The name of class

Class Attribute

The class attribute can be set to either “Deny” or “Accept”. Both attributes have a barring table and an exception table. Each class contains only one attribute.

Attribute	Meaning
DENY Barring table: Exception table:	Denies <u>all</u> numbers except those specified in the exception table. The barring table does not need to have elements because “Deny” in general is used to bar all numbers except those found in the exception table.
ACCEPT Barring table: Exception table:	Accepts <u>all</u> numbers except the numbers listed in the barring table. However the numbers specified in the exception table should not be barred.

5-14.1 Create a Barring Class

1. Select a barring class in the Class Entry in the ‘Class Information’ field and click the “Select” button.
2. Assign a name for the class: enter the name in the ‘Class Name’ field and click the ‘Add Name’ button.
3. Add an attribute to the class. You can select either Deny or Accept and click the ‘Add Attr’ button.
4. At this point, you have successfully selected a barring class and have assigned it an attribute. You can now assign barring numbers or exception numbers to this attribute using the ‘Add Barr’ control or ‘Add Excp’ control.
5. After the barring class has been created, you must define which gateways this particular barring class, applies to.

Examples

Example 1：
Assuming the device is located in Shanghai, the setting shown below only allow calls to Beijing and cell phones. It denies all except 010 and 013 numbers.
Attribute **DENY**：
Barring Table：
Exception Table：
010
013
Example 2：
Assuming the device is located in Shanghai, the setting shown below only allows local calls. Long distance (0) or international (00) calls would not be allowed.
However, Beijing (10) and Shenzhen (755) are allowed as they are included in the exception table.
Attribute **ACCEPT**：
Barring Table：
00
0
Exception Table：
010

0755

Example 3：
Assuming the device is located in San Jose (USA), the setting shown below only allows local calls. Long distance (1) or international (001) calls would not be allowed.
However, Beijing (0018610) is allowed as it is included in the exception table.
Attribute **ACCEPT**：
Barring Table：
001
1
Exception Table：
0018610

Example 4：
Assuming the device is located in Tokyo (Japan), the setting shown below only allows local calls. Long distance (0) or international (001) calls would not be allowed..
However, Shanghai (China) is allowed as it is included in the exception table.
Attribute **ACCEPT**:

Barring Table:

001

0

Exception Table:

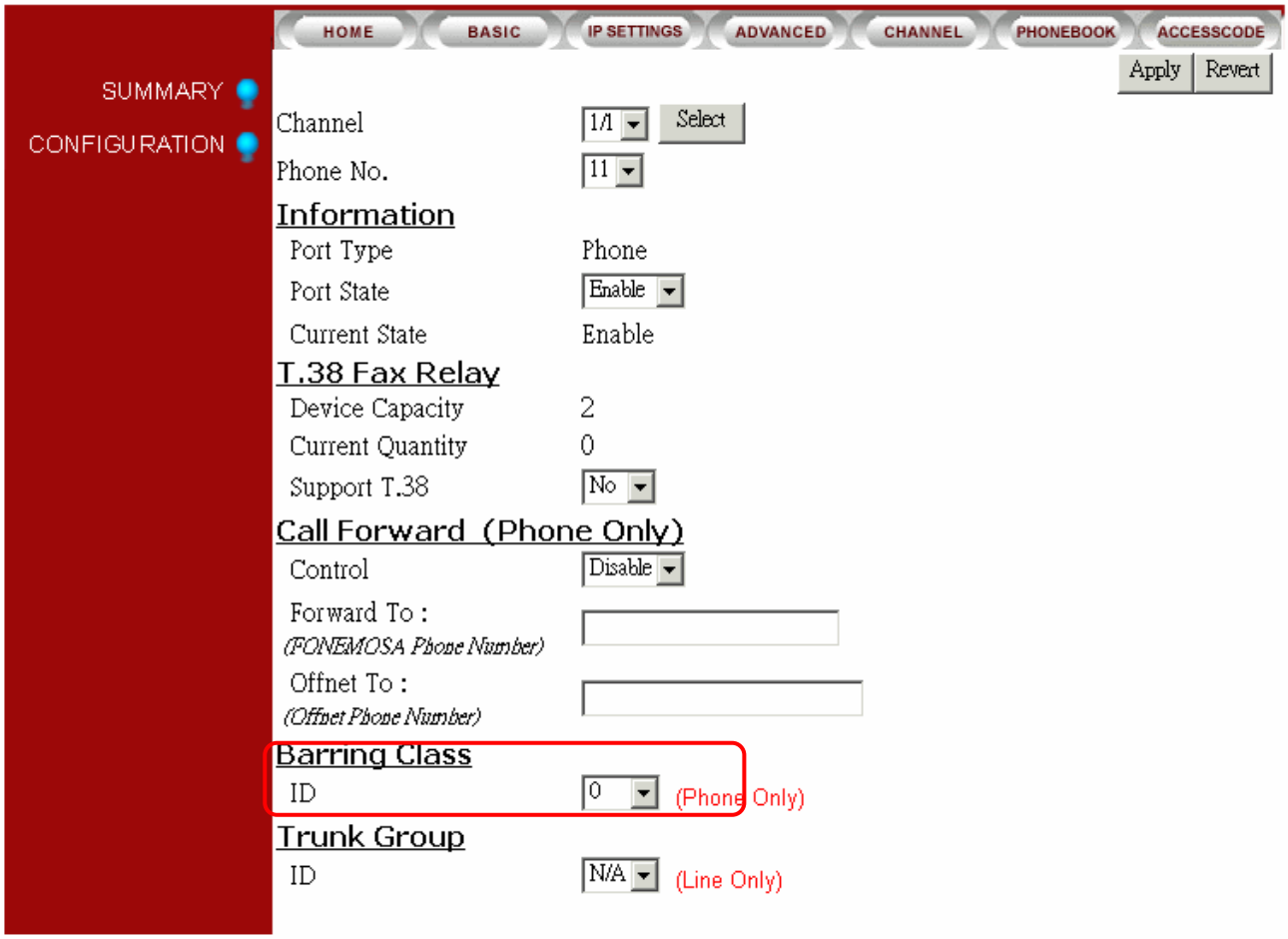
0018621

5-14.2 Changing a Barring Class Attribute

Once an attribute has been assigned to a selected barring class, you will not be able to assign a new attribute (New Attr) to that particular barring class. You must delete the old attribute (Delete Attr) from the selected barring class before assigning a new attribute.

5-14.3 Assign Barring to a Extension

Select ‘CHANNEL\CONFIGURATION’ on the Web Management Page.
Select Class in the ‘Barring Class ID’ field at the bottom of the page, Click ‘Apply’.

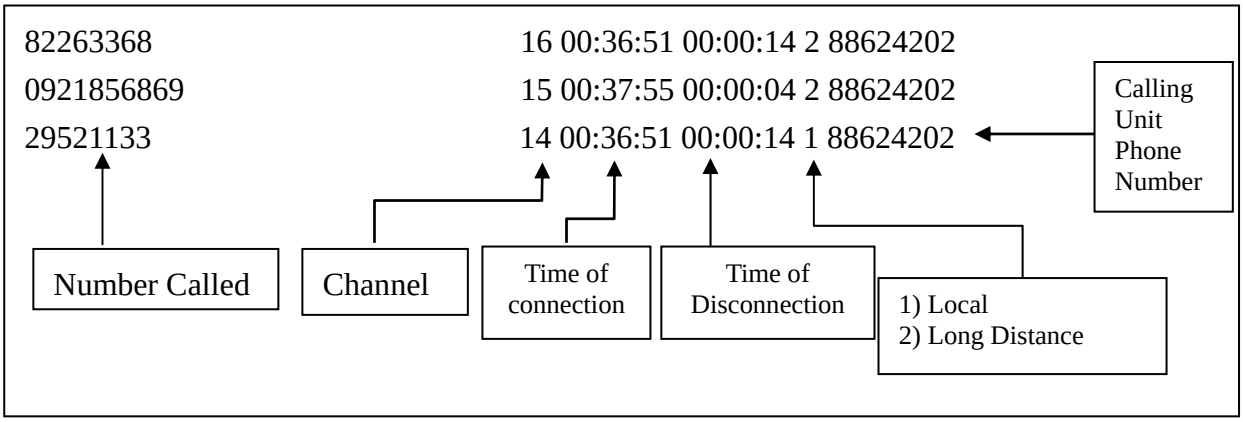


5-15 CALLING RECORD SMDR

All calls through the IPP series units via FXO ports will automatically generate a call detail record, as seen in the example above. With additional software this record can be saved for purposes such as billing as it details the number called, and the time of connection. The function can also be used in real time to check if an incorrect number has been dialed.

NOTE：The SMDR function within the IPP unit is in real time, therefore if the additional required software is not installed on the PC, no record will be saved, and the display will be terminated when the call is disconnected.

SMDR as shown on PC screen



5-16 FAX OPERATION

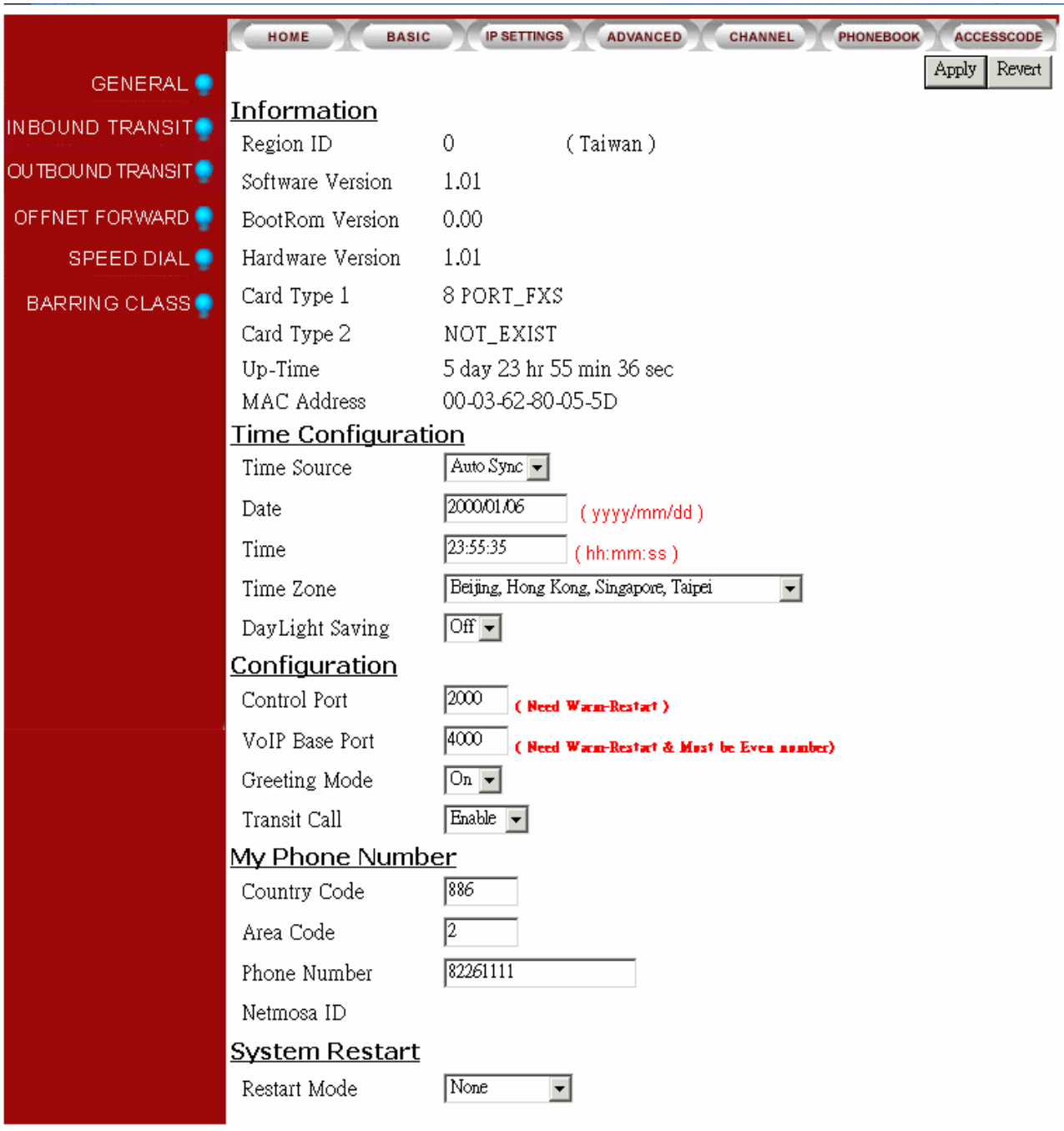
All IPP series units utilize T.38 protocol compatible with fax machines. It should be noted, however that only two fax machines functioning simultaneously, can be accommodated.

FAX Configuration

1) Select ‘CHANNEL \ CONFIGURATION’ on the Web Management Page
2) In the T.38 FAX Relay section, select ‘Yes’ in the ‘Support T.38’ field drop-down box
3) Click ‘Apply’

6. WEBPAGE EXPLANATION

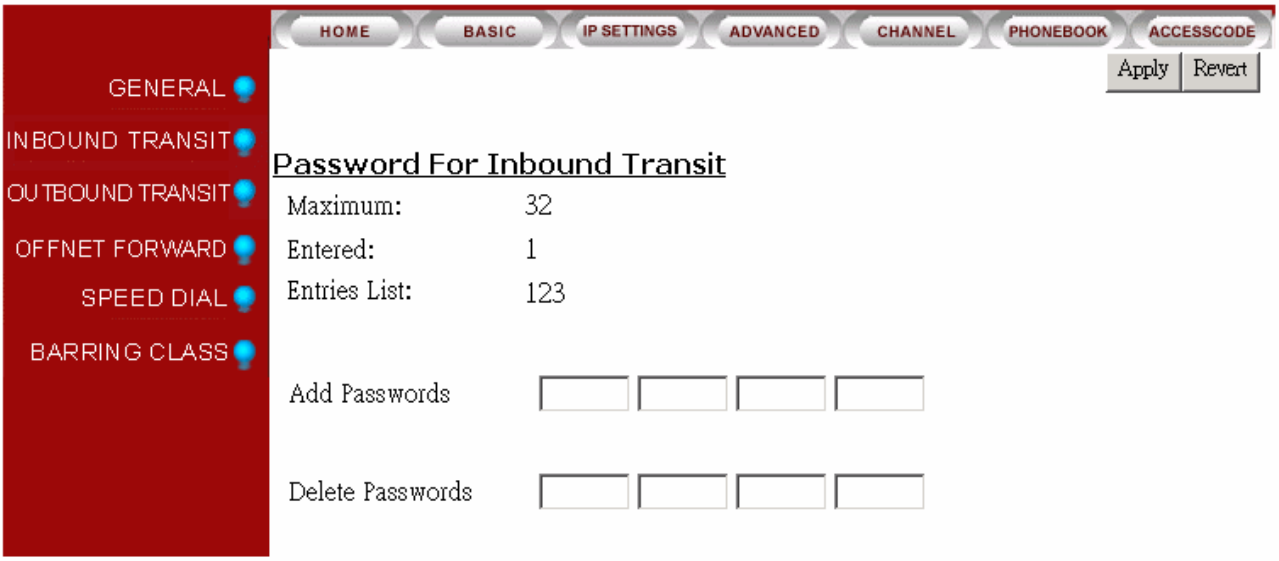
6-1 Basic



6-1.1 General

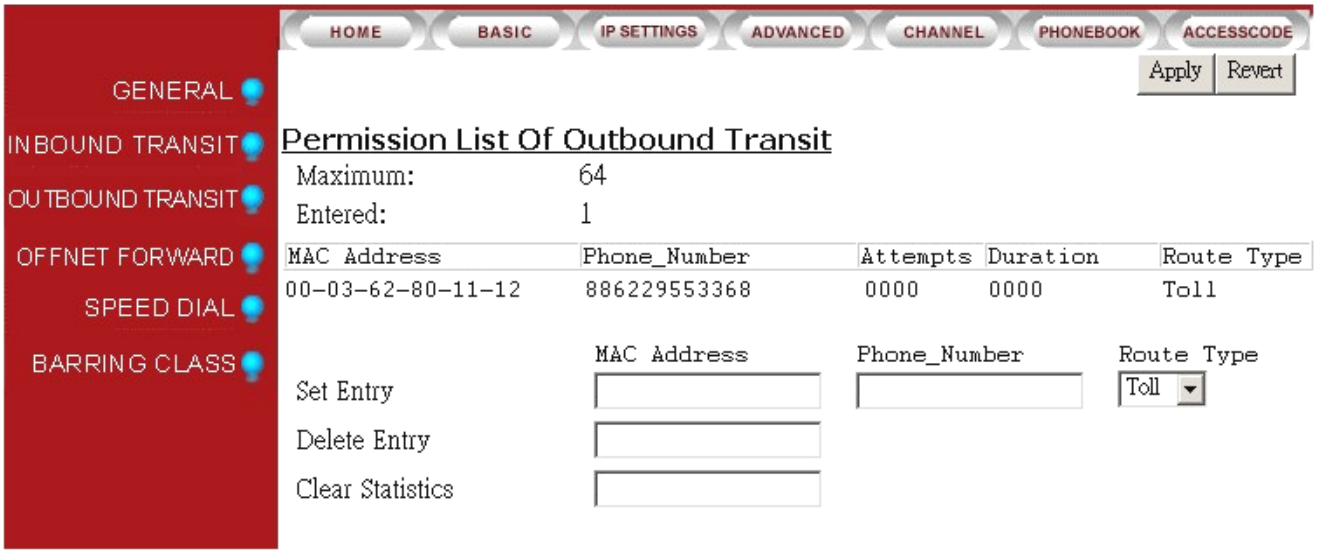
Section	Item Field	Description	Default
Information	Region ID	Refers to the country in which the unit is operating (Read Only)	
	Software Version	Displays the software version (Read Only)	
	BootRom Version	Displays the BootRom version (Read Only)	
	Hardware Version	Displays the Hardware version (Read Only)	
	Card Type 1	Displays the type of card 1 (Read Only)	
	Card Type 2	Displays the type of card 2 (Read Only)	
	Up-Time	Indicates time the unit has been running since connection (Read Only)	
	MAC Address	Indicates the MAC address (Read Only)	
Time Configuration	Time Source	Select 'AutoSync' or Manual	'AutoSync'
	Date	With the time source field set to 'Manual', set the date：yyyy/mm/dd.	None
	Time	With the time source field set to 'Manual', set the time：hh/mm/ss.	None
	Time Zone	Select the city the unit is in from the 'Time Zone' field drop-down box.	
	Day Light Saving	Select 'On' or 'Off' in the 'Day Light Saving' field drop-down box.	OFF
Configuration	Control Port	Control the IP connection signal, set the code in the field (0 – 65535). (Requires Warm-Restart)	2000
	VoIP Base Port	Control the VoIP connection signal, set the code in the field (0 – 65534). Note： 1) all numbers must be even 2) the warm-restart must be engaged to change the code	4000
	Greeting Mode	Select 'On' or 'Off' in the 'Greeting Mode' field drop-down box.	ON
	Transit Call	Select 'Enable' or 'Disable' in the ' Transit Call' field drop-down box	Enable
My Phone Number	Country Code	Set the country code of the country the unit is operating in.	The Region ID will set the code
	Area Code	Enter the local area code.	None
	Phone Number	Enter the Phone Number of IPP unit	None
	IPN ID	IPN ID (Read Only)	None
System Restart	Restart Mode	Select the system restart mode 'None' /' Cold Restart' / 'Warm Restart'.	None

6-1.2 Inbound Transit



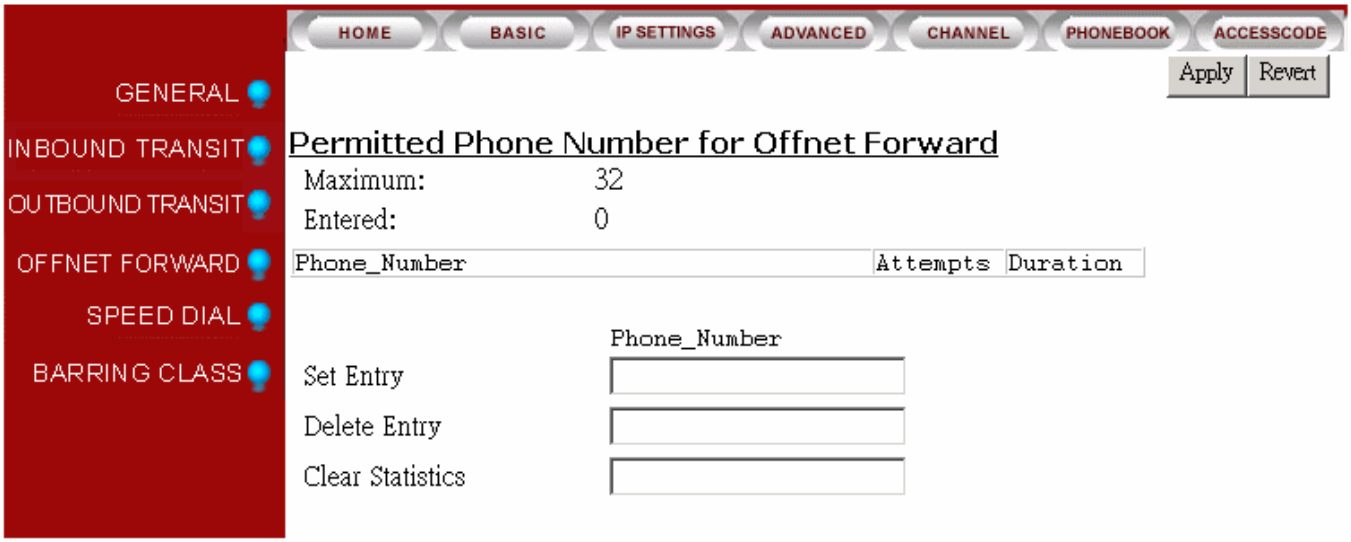
Section	Item Field	Description	Default
Password For Inbound Transit	Maximum	Maximum number of entries allowed. (Read Only)	32
	Entered	Number of entries of password entered. (Read Only)	0
	Entries List	List of entries. (Read Only)	None
	Add Passwords	Add passwords. A maximum of four sets of passwords can be entered at the same time. Passwords must be 1-8 digits.	None
	Delete Passwords	Delete password. Maximum four sets of password can be deleted at the same time.	None

6-1.3 Outbound Transit



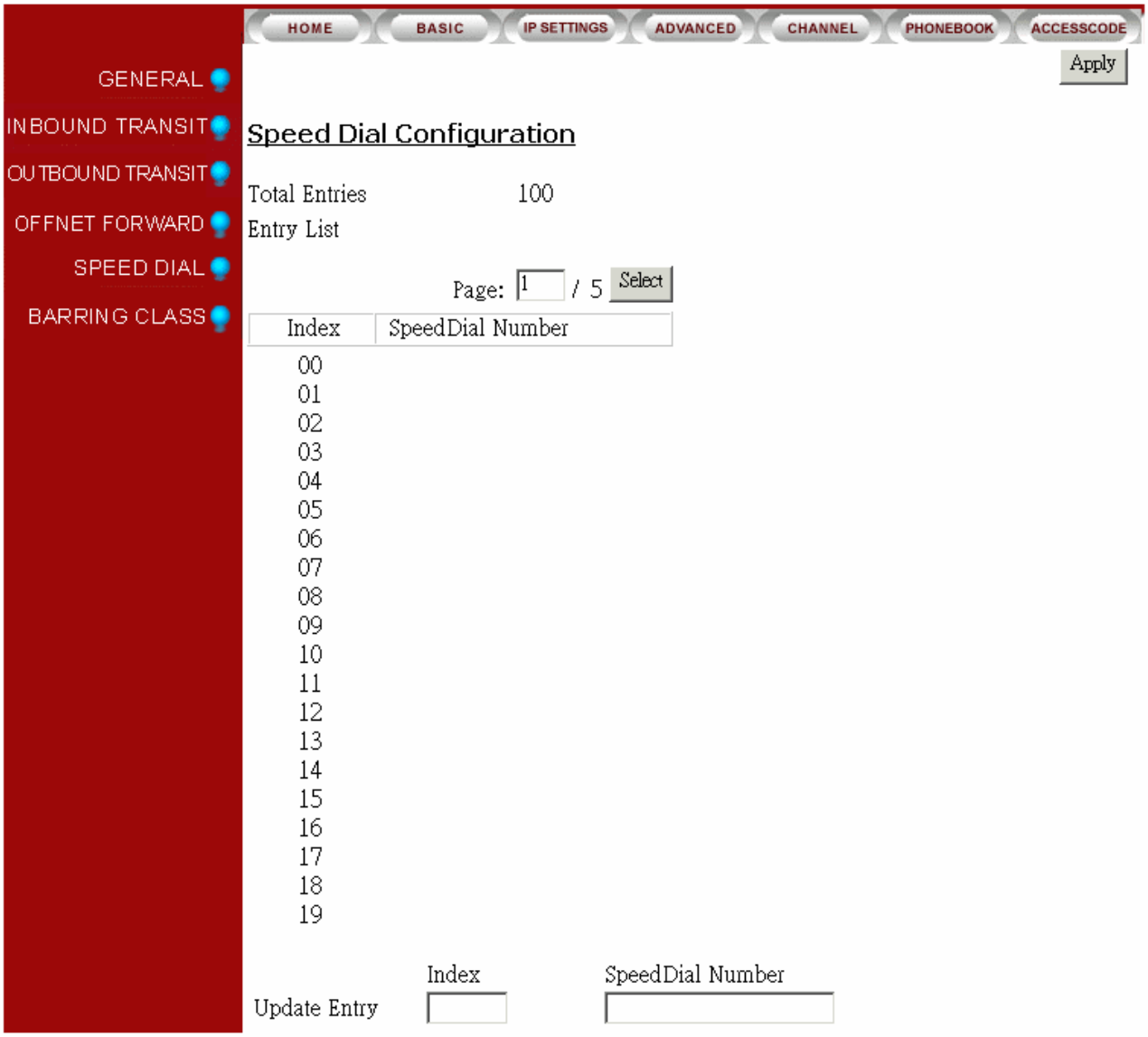
Section	Item Field	Description	Default
Permission List Of Outbound Transit	Maximum	Maximum number of entries allowed (Read Only)	64
	Entered	Displays the number of phone numbers that have been entered. (Read Only)	0
	Entries List	Displays all phone numbers permitted to transit. (Read only) 1) MAC Address: MAC address of permitted device. 2) Phone Number of permitted device. 3) Attempts: Call attempts 4) Duration: Call duration in the unit of seconds.	None
	Set Entry	Enter the MAC address, phone number, and select Route Type for devices permitted to transit. 1) MAC Address: Enter the complete MAC address, for example, 00-03-62-80-13-49. 2) Phone Number: Enter phone number including country and area code, for example, 886282263368345. 3) Route Type： Local or Toll	None
	Delete Entry	Remove the device from permission list. 1. MAC Address: Enter MAC address of the device to be removed. For example, 00-03-62-80-13-49.	None
	Clear Statistics	Clear attempts and duration of MAC address device entered. Enter ‘MAC address’ and click ‘Apply’.	None

6-1.4 Off-net Forward



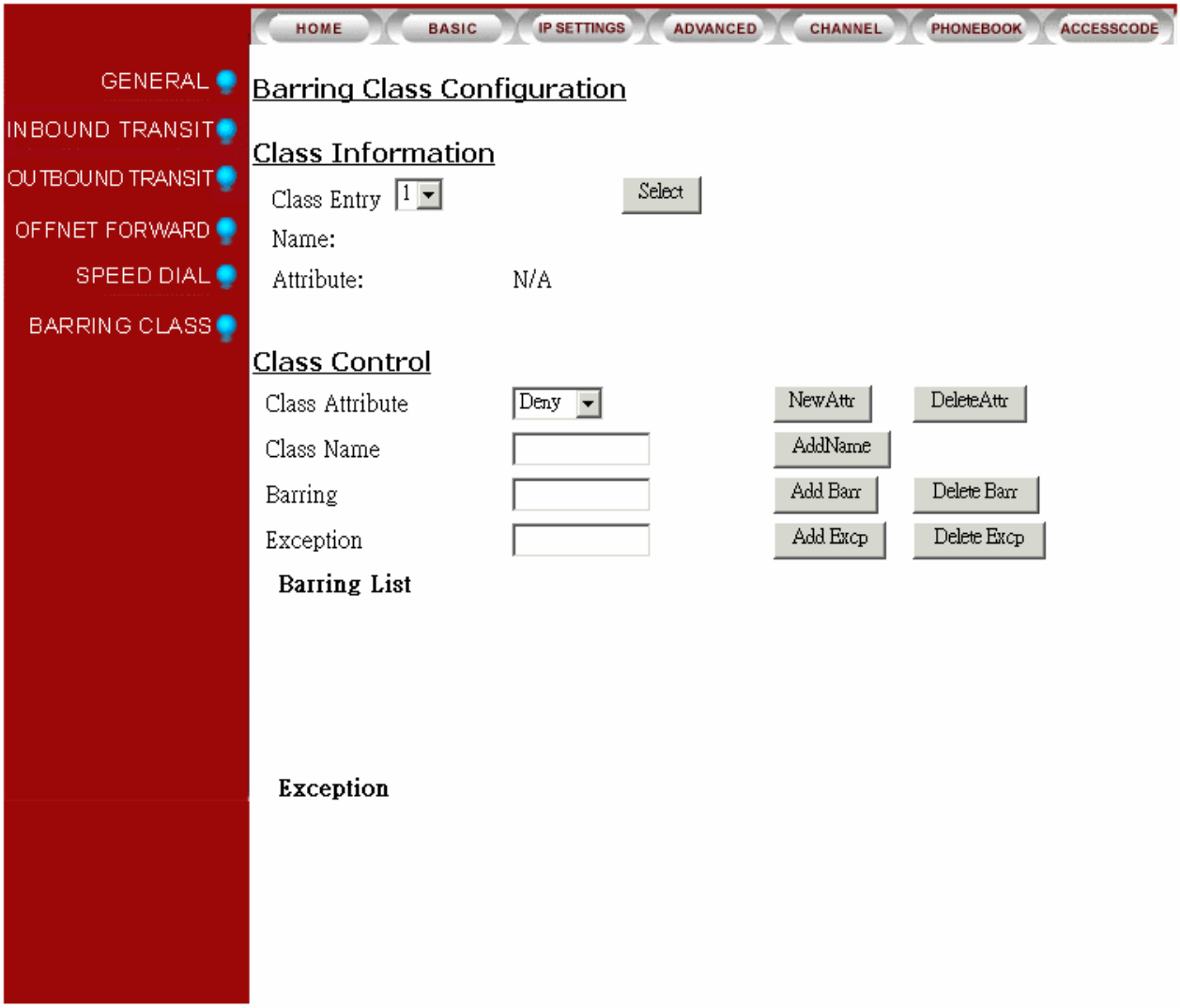
Section	Item Field	Description	Default
Permitted Phone Numbers for Offnet Forward	Maximum	Maximum number of entries allowed for off-net forward calls. (Read Only)	32
	Entered	Lists all devices permitted off-net transit, and their call attempts/duration (Read Only)	0
	Set Entry	Set permitted phone numbers for off-net forward calls.	
	Delete Entry	Delete phone numbers from off-net forward calls.	
	Clear Statistics	Clears attempts and duration of phone number entered. Enter phone number and click ‘Apply’.	

6-1.5 Speed Dial



Section	Item Field	Description	Default
Speed Dial Configuration	Total Entries	The maximum entries that can be set	100
	Entry List	Page： 1-5 Index：speed dial index Speed Dial Number：Phone number	None
	Update Entry	Index：speed dial index Enter index number to be changed. Enter new phone number and click ‘Apply’.	None

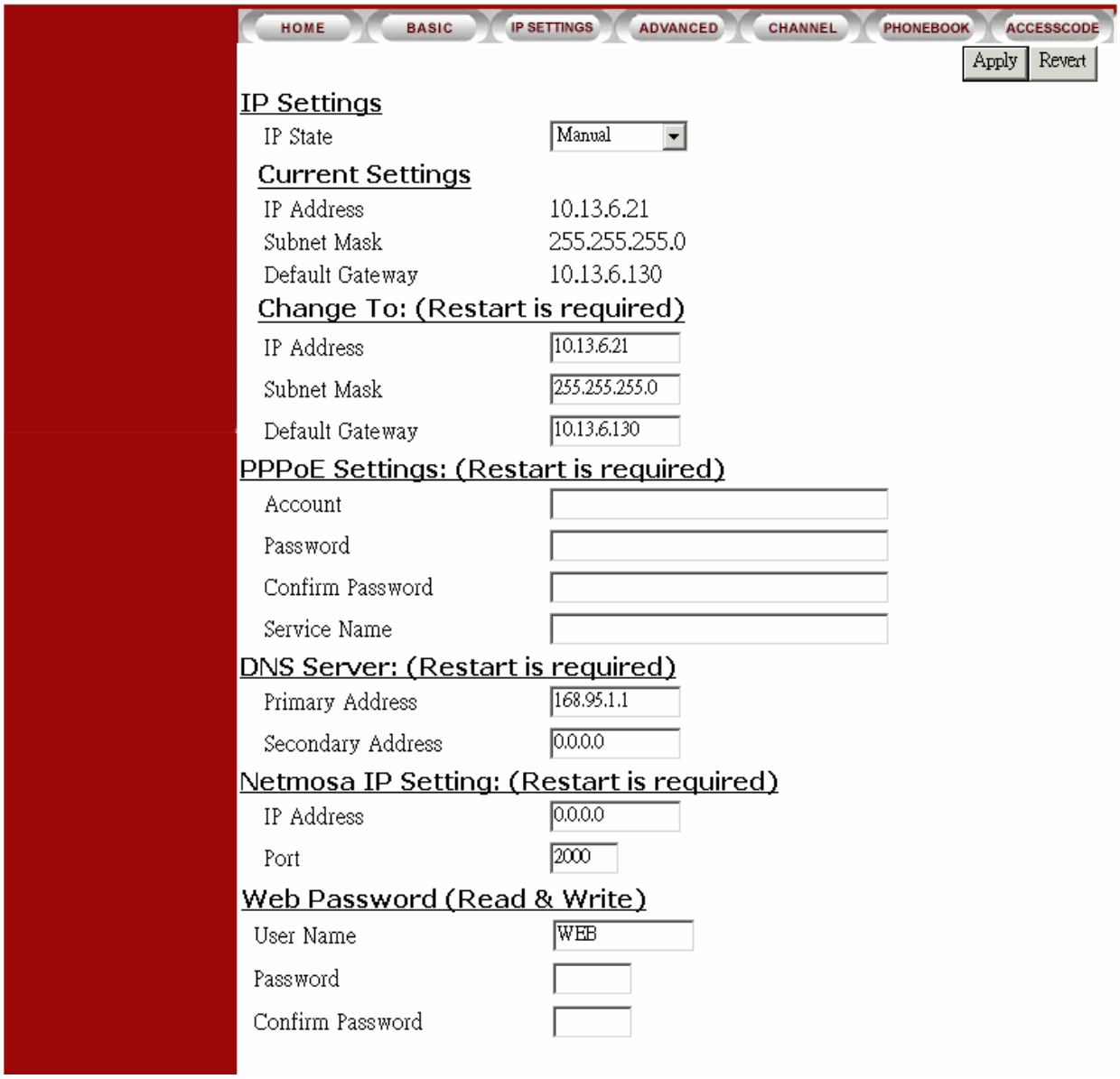
6-1.6 Barring Class



Section	Item Field	Description	Default
Class Information	Class Entry	Select barring class from 'Class Entry' field drop down box. Click 'Select'.	
	Name	The name of the class (Read Only)	None
	Attribute	Display the attribute (Read Only)	N/A

Section	Item Field	Description	Default
Class Control	Class Attribute	The class attribute can be set to either “Deny” or “Accept”. Both attributes have a barring table and an exception table. Each class contains only one attribute. DENY: Denies all numbers except those specified in the exception table. The barring table does not need to have elements because “Deny” in general is used to bar all numbers except those found in the exception table. ACCEPT: Accepts all numbers except the numbers listed in the barring table. However the numbers specified in the exception table will not be barred. New Attr: Assigns an attribute to the selected barring class Delete Attr: Deletes an attribute from the selected barring class	
	Class Name	The name of the class Add Name: Assigns a name to the barring class. The name can be any text up to 15 digits.	
	Barring	Add Barr: Adds a barring number to an attribute that has been assigned to a selected barring class. The maximum length is 19 digits. Delete Barr: Deletes a barring number from an attribute that has been assigned to a selected barring class. The maximum length is 19 digits.	
	Exception	Add Excp：Adds an exception number to an attribute that has been assigned to a selected barring class. The maximum length is 19 digits. Delete Excp: Deletes an exception number from an attribute that has been assigned to a selected barring class. The maximum length is 19 digits.	
	Barring List	The barring list shows all the barring numbers which have been assigned to each attribute that has been assigned to a selected barring class. (Read Only)	
	Exception	The exception list shows all the exception numbers which have been assigned to each attribute that has been assigned to the selected barring class. (Read Only)	

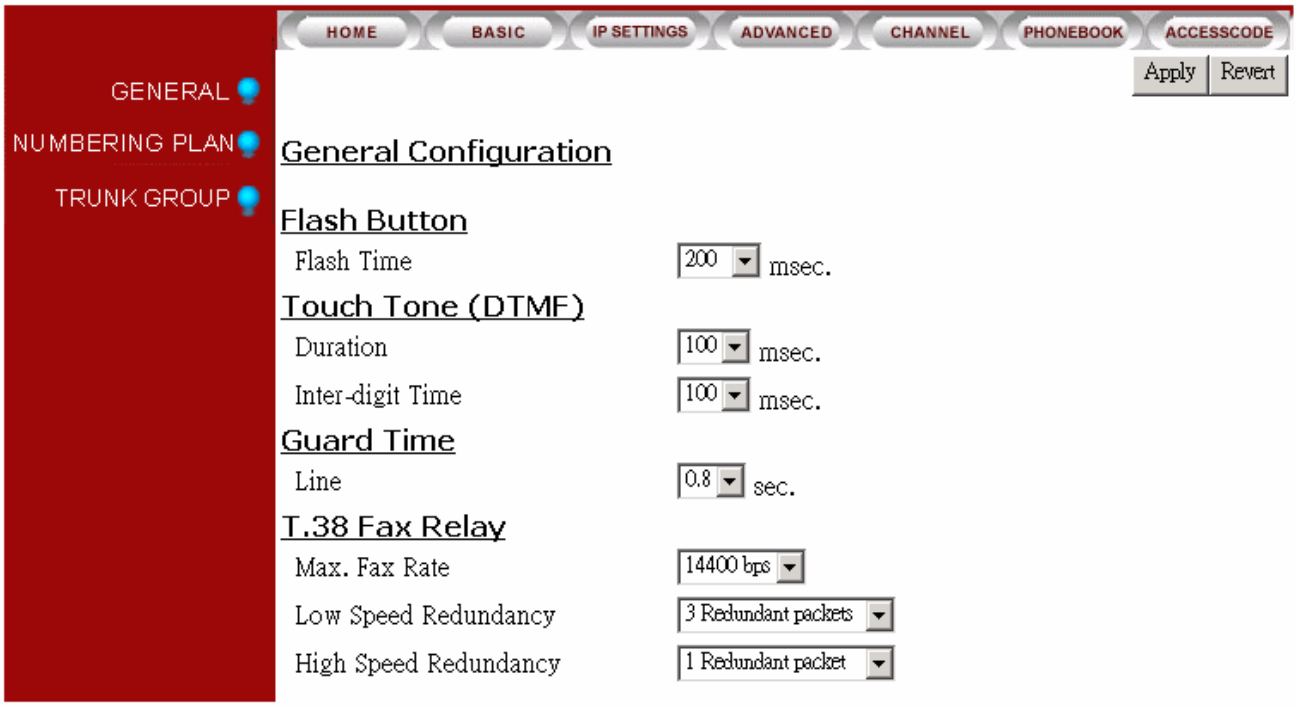
6-2 IP Settings



Section	Item Field	Description	Default
IP Settings	IP State	Method of obtaining: **Manual:** Entered by user (Static IP) **Auto(DHCP):** Assigned by DHCP server **PPPoE:** Assigned by PPPoE of ISP	Manual
	Current Setting	Displays the configured IP address, subnet mask address, and default gateway. (Read only)	192.168.0.2 255.255.255.0 192.168.0.1
	Change To	Enter the IP address that will be used after next restart, Including: 1. IP Address 2. Subnet Mask Address 3. Default Gateway (This item is used only in Manual mode of IP Setting.)	
PPPoE Settings	Account	Supplied by the ISP	None
	Password	Supplied by the ISP	None
	Confirm Password	Confirm the password	None
	Service Name	To be supplied by the ISP in lieu of account, and password	None
DNS Server	Primary Address	Enter the DNS Server address e.g. 168.95.1.1(Taiwan)	168.95.1.1
	Secondary Address	Enter an alternate DNS Server address	None
IPN IP Setting	IP Address	Enter IPN IP address	None
	Port	Enter IPN Control Port	None
Web Password	User Name	Enter User name	WEB
	Password	Enter Password	None
	Password Confirm	Confirm the password	None

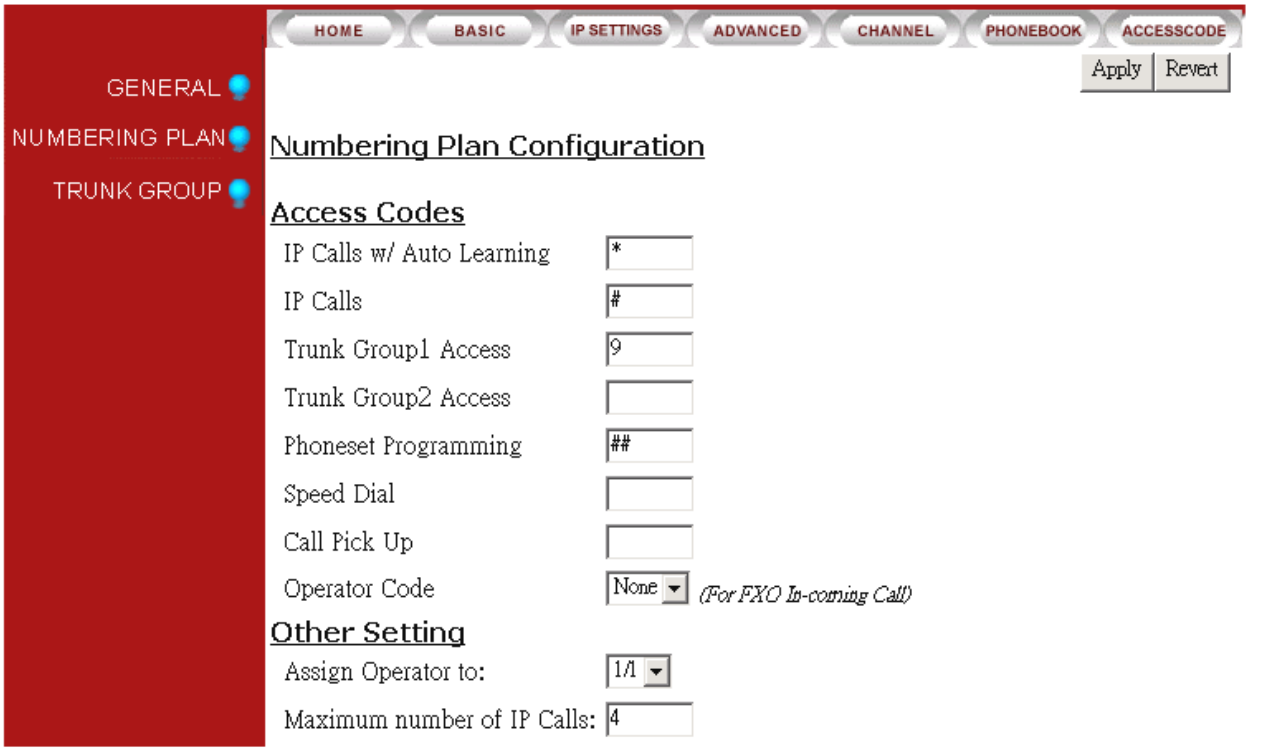
6-3 Advanced

6-3.1 General



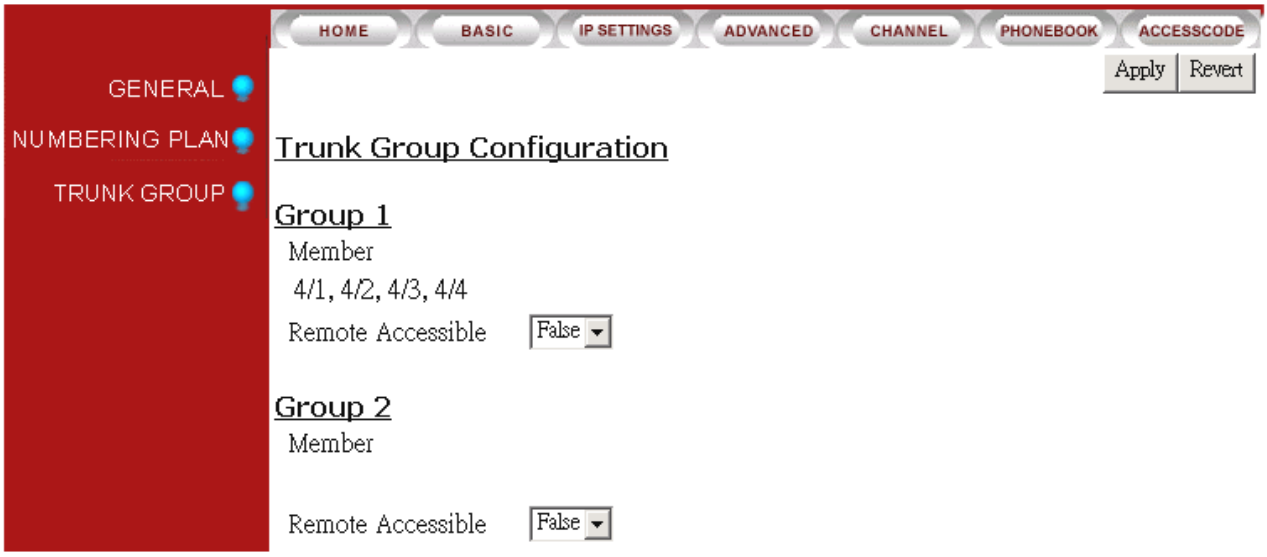
Section	Item Field	Description	Default
Flash Button	Flash Time	Set the flash time duration in seconds. Select an entry from the 'Flash Time' field drop-down box.	200 msec
Touch Tone (DTMF)	Duration	Sets the DTMF duration. Select an entry from the 'Duration' field drop-down box.	100 msec
	Inter-digit Time	Select an entry from 'Inter-digit time' drop down box.	100 msec
Guard Time	Line	Sets minimum time between in-coming calls. Select an entry from the 'Line' field drop-down box.	0.8 sec
T.38 Fax Relay	Max. Fax Rate	The system will accommodate 2400 / 4800 / 7200 / 9600 / 12000 / 14400 bps. Select an entry from the 'Max. Fax Rate' field drop-down box.	14400 bps
	Low Speed Redundancy	Set the number of redundant packets in low speed. No Redundant Packets 1 Redundant Packets 2 Redundant Packets 3 Redundant Packets 4 Redundant Packets 5 Redundant Packets	3 Redundant Packets
	High Speed Redundancy	Set the number of redundant packets in high speed. No Redundant Packets 1 Redundant Packet 2 Redundant Packets	1 Redundant Packet

6-3.2 Numbering Plan



Section	Item Field	Description	Default
Access Code	IP Call Auto Learning	Will automatically learn IP calls. Enter an access code in the 'IP Calls w/Auto-learning' field, Click Apply.	*
	IP Call	Enter an access code in the field, Click Apply.	#
	Trunk Group1 Access	Sets the trunk group 1 access code	9
	Trunk Group2 Access	Sets the trunk group 2 access code	None
	Phoneset Programming	Sets phoneset access code	##
	Speed Dial	Sets speed dial access code	None
	Call Pick Up	Sets call pick up access code	None
	Operator Code	Select an operator code from the 'Operator Code' field drop-down box	None
Other Setting	Assign Operator to：	Select an extension number from the 'Assign Operator To: ' field drop-down box	1/1
	Maximum number of IP Calls：	Enter a maximum number for IP calls in the field drop-down box	4

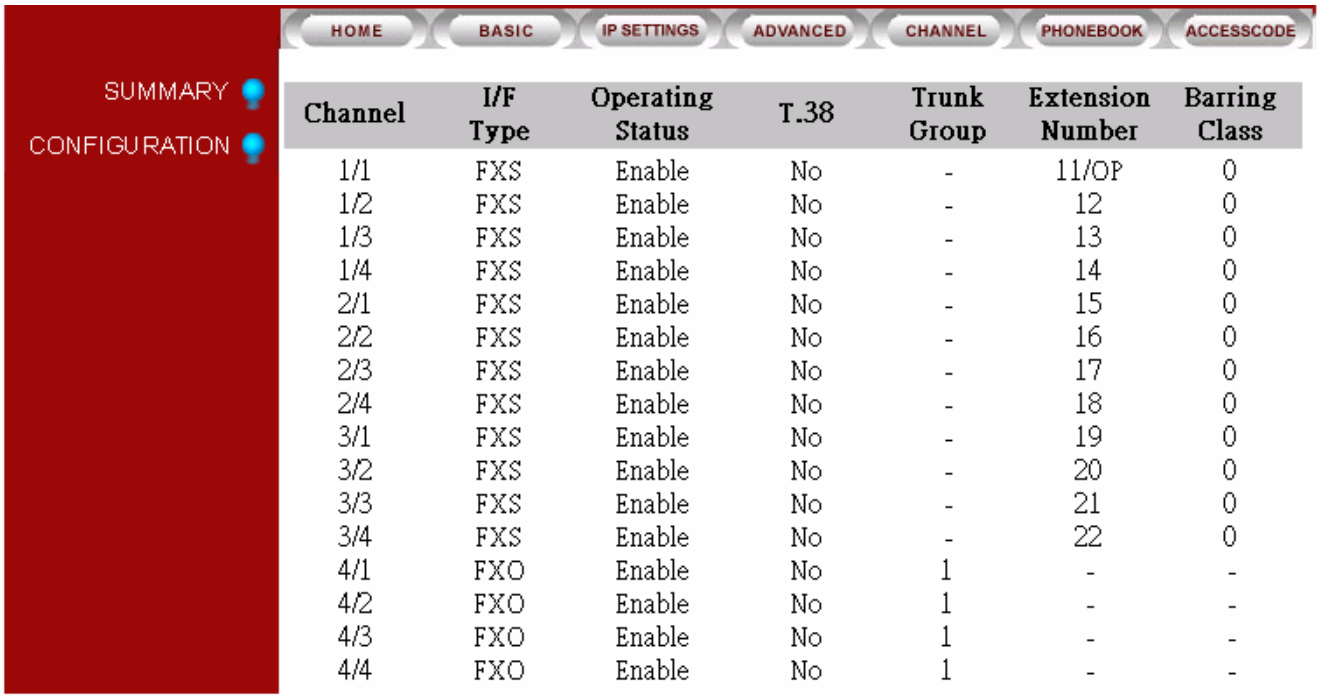
6-3.3 Trunk Group



Section	Item Field	Description	Default
Group1	Member	Assignment of in-coming line to trunk group 1	4/1，4/2，4/3，4/4
	Remote Accessible	Permits Transit Call for group. In the ‘Remote Accessible; field drop-down box, select ‘True’, or ‘False’ , Click Apply.	False
Group2	Member	Assignment of in-coming line to trunk group 2	None
	Remote Accessible	Permits Transit Call for group. In the ‘Remote Accessible; field drop-down box, select ‘True’, or ‘False’ , Click Apply.	False

6-4 Channel

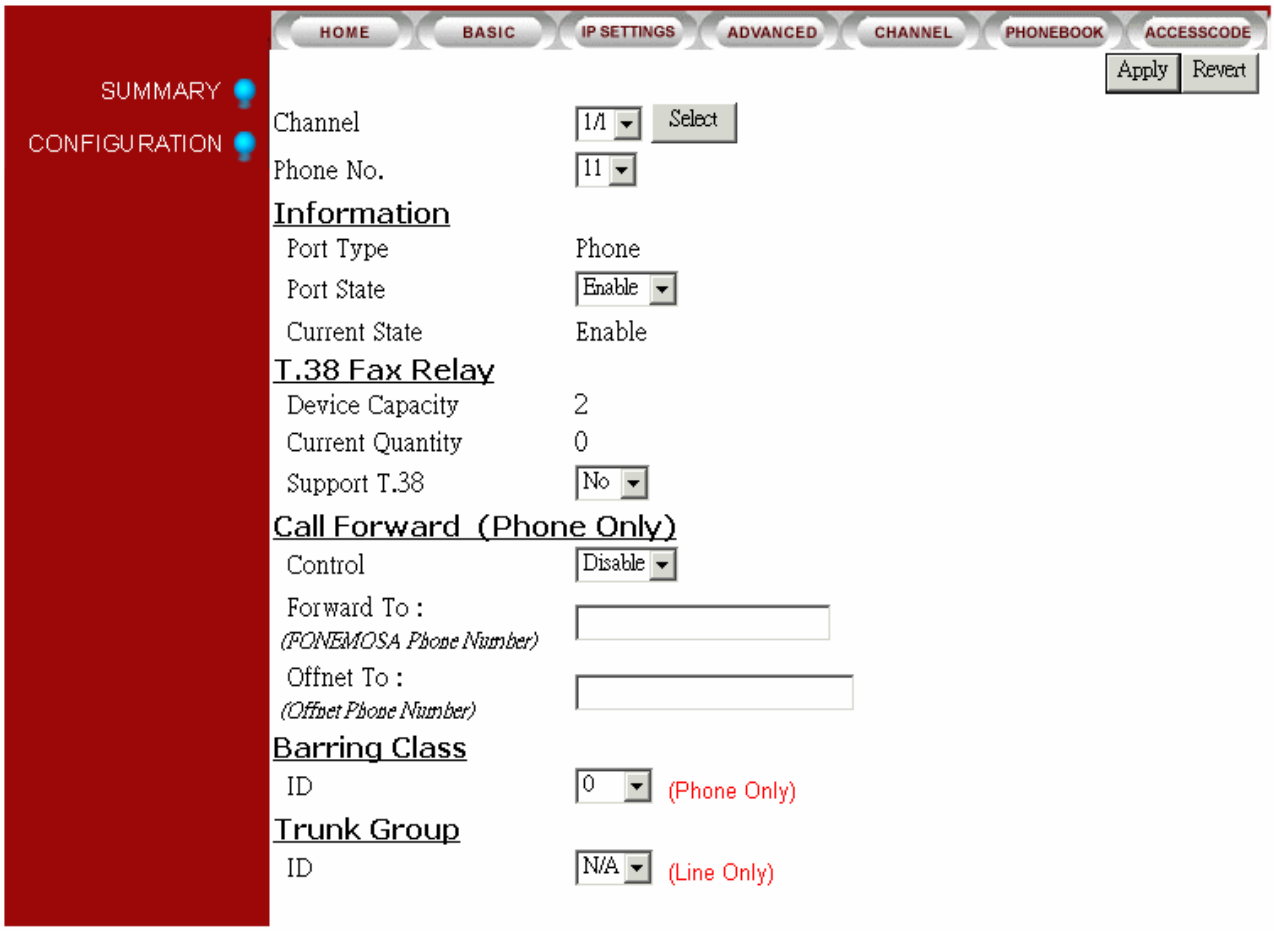
6-4.1 Summary



Channel	I/F Type	Operating Status	T.38	Trunk Group	Extension Number	Barring Class
1/1	FXS	Enable	No	-	11/OP	0
1/2	FXS	Enable	No	-	12	0
1/3	FXS	Enable	No	-	13	0
1/4	FXS	Enable	No	-	14	0
2/1	FXS	Enable	No	-	15	0
2/2	FXS	Enable	No	-	16	0
2/3	FXS	Enable	No	-	17	0
2/4	FXS	Enable	No	-	18	0
3/1	FXS	Enable	No	-	19	0
3/2	FXS	Enable	No	-	20	0
3/3	FXS	Enable	No	-	21	0
3/4	FXS	Enable	No	-	22	0
4/1	FXO	Enable	No	1	-	-
4/2	FXO	Enable	No	1	-	-
4/3	FXO	Enable	No	1	-	-
4/4	FXO	Enable	No	1	-	-

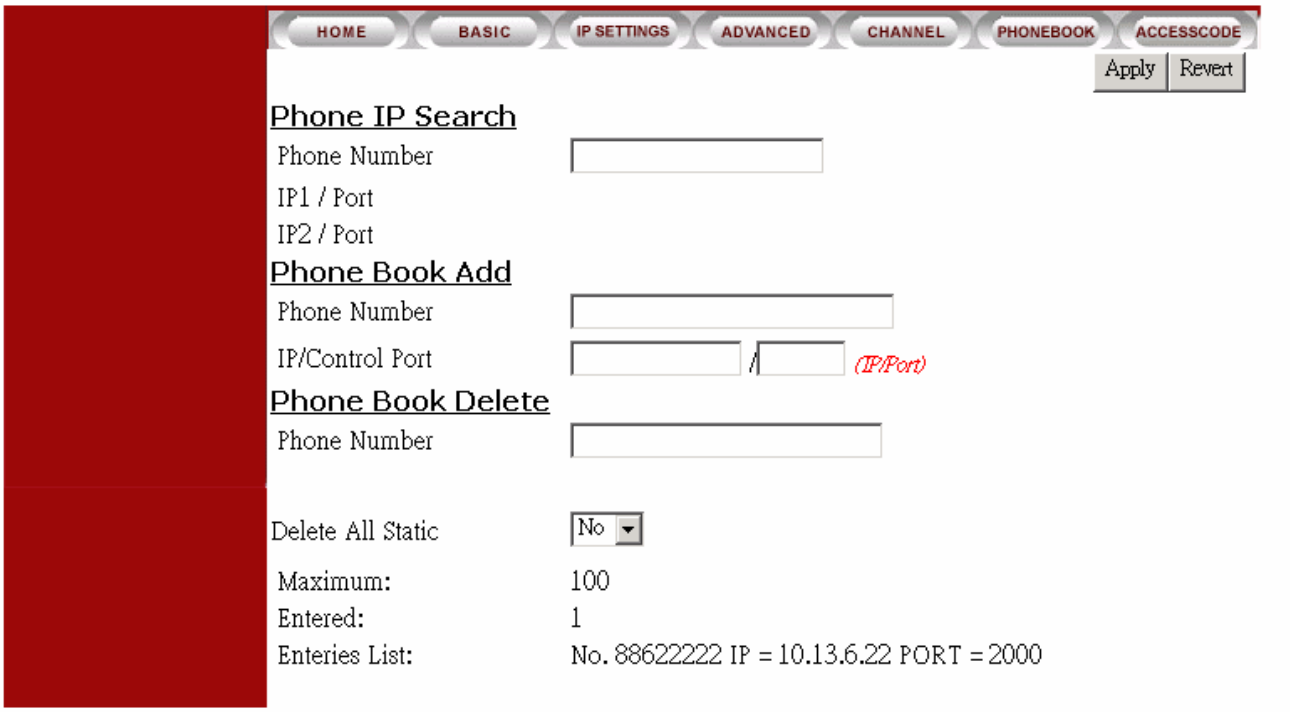
Section	Item Field	Description	Default
SUMMARY	Channel	Lists the channels, and extension (Read Only)	4 groupings of 4 ports each
	I/F Type	Displays extension I/F type (Read Only)	FXS / FXO
	Operating Status	Displays extension operating status (Read Only)	Enable
	T,38	Displays extension fax enablement (Read Only)	NO
	Trunk Group	Displays trunk group assignment	None
	Extension Number	Displays local extension assignment	None
	Barring Class	Displays extension barring group assignment	None

6-4.2 Configuration



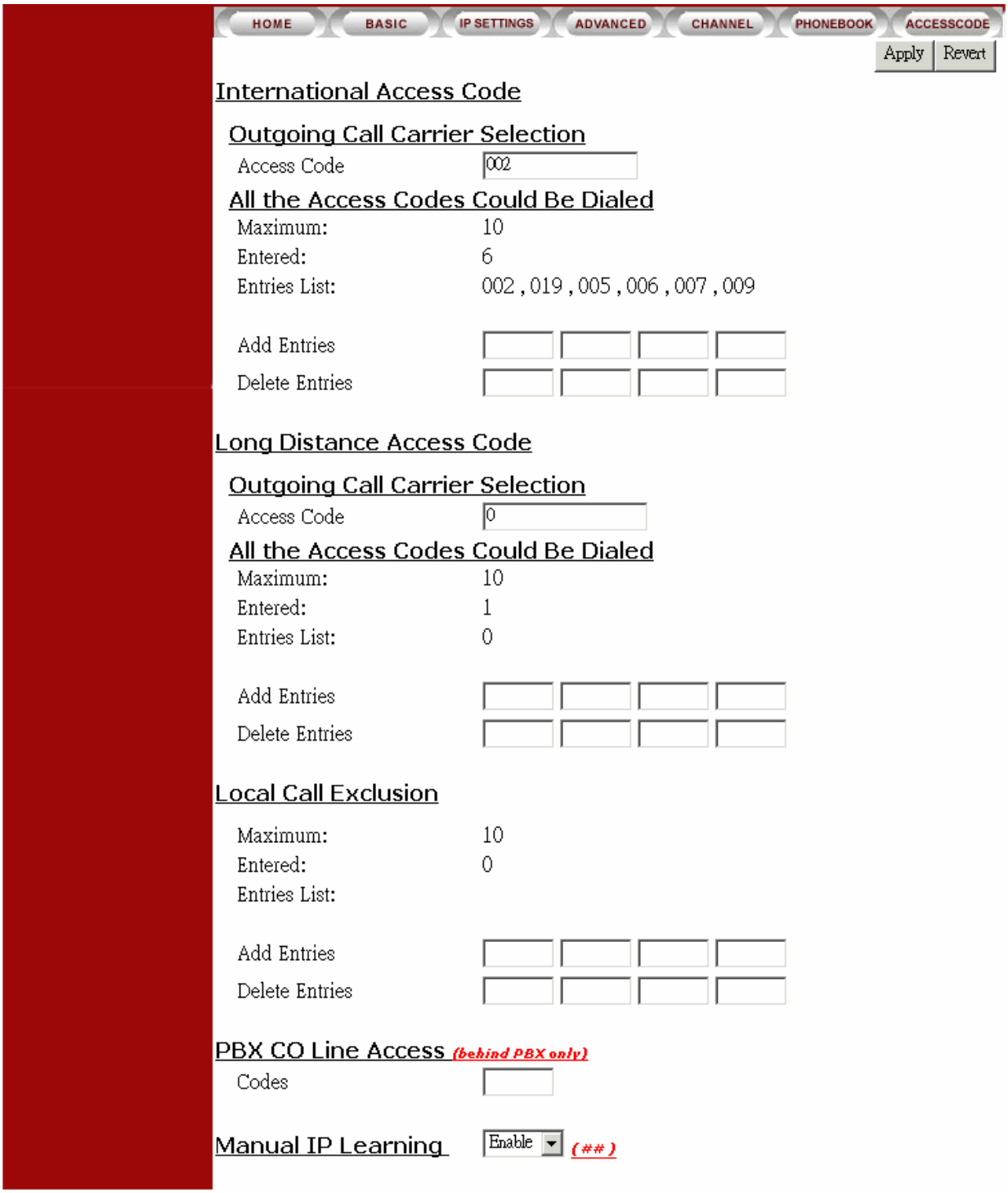
Section	Item Field	Description	Default
	Channel	Select channel/extension to be configured	1/1
	Phone NO.	Select local extension in the 'Channel' field drop down box, click 'select'.	
Information	Port Type	Displays extension's FXO or FXS designation (Read Only)	
	Port State	Select port state, 'Enable' or 'Disable'	Enable
	Current State	Displays extension's state 'Enable' or 'Disable'	
T.38 Fax Relay	Device Capacity	Displays the maximum number of devices the T.38 protocol can support.	2
	Current Quantity	Displays the number of devices the T.38 protocol is supporting.	0
	Support T.38	Select 'Yes' or 'No' to assign the T.38 protocol to support the extension	NO
Call Forward	Control	Select 'Enable' or 'Disable' to assign the extension's call forwarding capability	Disable
	Forward to *(IPP Phone Number)*	Enter the IPP phone number to receive calls forwarded from the extension. Click 'Apply'	None
	Offnet to *(Offnet Phone number)*	Enter offnet phone number to receive calls forwarded from the extension. Click 'Apply'	None
Barring Class	ID	Select the extension's Barring Class ID	0
Trunk Group	ID	Select the extension's Trunk Group ID	N/A

6-5 Phone Book



Section	Item Field	Description	Default
Phone IP Search	Phone Number	Enter the phone number to find the IP address Click 'Apply'	None
	IP1/Port	Indicates the IP address is Public. (Read Only)	
	IP2/Port	Indicates the IP address is Private. (Read Only)	
Phone Book Add	Phone Number	Enter the phone number for Phone Number listing. Click 'Apply'	None
	IP/Control Port	Enter the IP address, and UDP port. Click 'Apply'	None
Phone Book Delete	Phone Number	Enter the phone number to be deleted from the phone book. Click 'Apply'	None
	Delete All Static	Select 'Yes' or 'No'	No
	Maximum	Display the maximum phone book entries (Read Only)	100
	Entered	Display the number of phone book entries (Read Only)	0
	Entries List	List all phone number that are in the database (Read only)	

6-6 Access Code

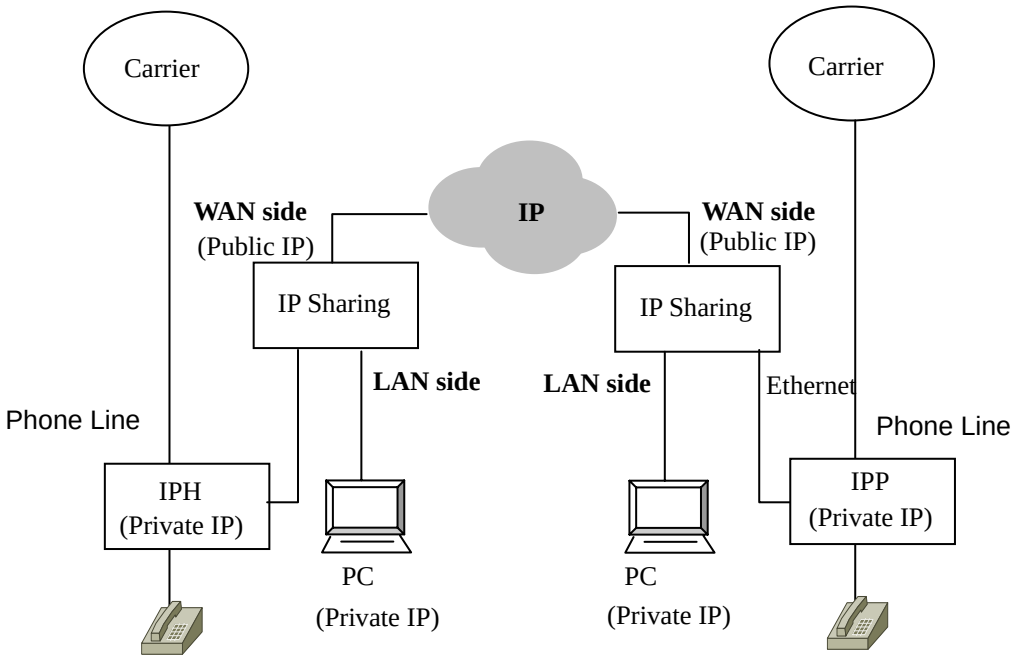


Section	Item Field	Description	Default
Outgoing Call Carrier Selection (International)	Access Code	Enter the international access code to be used for outgoing international calls.	Depends on the region ID configured
All the access codes could be dialed (International)	Maximum	The maximum entries of all international access codes that could be dialed. (Read only)	10
	Entered	Display all codes that have been entered. (Read only)	Depends on the region ID configured
	Entries List	List of all international access codes that could be dialed. (Read only)	Depends on the region ID configured
	Add Entries	Add entries of all international access codes allowed to be dialed. Four entries can be entered at a time.	None
	Delete Entries	Delete entries of all international access codes allowed to be dialed. Four entries can be entered at a time.	None
Outgoing Call Carrier Selection (Long Distance)	Access Code	The long distance access code to be inserted on outgoing long distance calls.	Depends on the region ID configured
All the access codes could be dialed (Long Distance)	Maximum	The maximum entries of all long distance access codes allowed to be dialed. (Read only)	10
	Entered	Lists the codes that have been entered. (Read only)	Depends on the region ID configured
	Entries List	Lists all long distance access codes allowed to be dialed.	0
	Add Entries	Add entries of all long distance access codes allowed to be dialed. Four entries can be entered at a time.	None
	Delete Entries	Delete entries of all long distance access codes allowed to be dialed. Four entries can be entered at a time.	None
Local Call Exclusion	Maximum	The maximum entries of all local calls that can be dialed. (Read only)	10
	Entered	The local calls that have been entered. (Read only)	0
	Entries List	Lists all local codes that can be dialed. (Read only)	
	Add Entries	Add the leading digits of phone number that are not local call. For an outbound transit call, if the first digits of phone number are matched with the phone number, it will not be treated as local call. It will be treated as a long distance call.	None
	Delete Entries	Delete an entry of local call exclusion.	None
PBX CO Line Access	Codes	PBX CO line access code, the code to access an external phone line. If pause is required for 1-5 seconds, a character P can be added to the access code. Each addition character P adds one second to the pause. For example dialing 9PP, would allow a 2 second pause.	None
Manual IP Learning		Controls the function of Manual IP Learning. Select ‘Enable’ or ‘Disable’ Click ‘Apply’	Enable

7. Special Applications

7-1 Using NAT Via Private IP

IPP can be configured as a private IP address and inter-connected with other IPH/IPE units.



Architecture with IP sharing device

7-1.1 Virtual Servers on the IP sharing device

For the most part, IP sharing devices act as clients, not as servers. However, if you want to install servers such as web, mail or devices like the IPP unit on the LAN side, you must configure such devices as virtual servers with the IP sharing device. The IPP unit behaves as a server, so you must configure the IP sharing device to treat it as a virtual server.

Every server uses a particular port (e.g. TCP port 80 for Web servers and TCP port 21 for FTP servers). The IPP unit uses UDP port 2000. The method used to configure a virtual server is to map the server port to the private IP that the virtual server is assigned. Thus is so that incoming packets that are meant to reach a particular server port are correctly forwarded to the server's assigned private IP address on the LAN side of your network. For example, if you want to install a web server on the LAN side of your network using a private IP address (e.g.192.168.1.1), you must configure the correct port mapping on the IP sharing device so that it is able to forward all packets that are intended for destination port TCP 80 on the server's assigned private IP address (e.g.192.168.1.1:80). The mapping should be as follows: TCP port 80 <-> 192.168.1.1.

7-1.2 Tested IP Sharing Devices

Although the IPP unit works with most commonly used IP sharing devices, there are still some devices that have compatibility issues and will not work with the IPP unit. The Following table lists the IP Sharing devices that have been tested and are known to work with the IPP unit.

Type	Brand	Model	Software Version	Test Result
Stand Alone	D-Link	DI-704	2.50 build9	Special configurations are not required.
	SMC	7004BR	R1.86	Special configurations are not required.
	SOHOmate	HIP-120E	1.93S	Special configurations are not required.
	Corega	BAR SW-4P	R1.10 Apr. 16, 2002	Special configurations are not required.
	Cisco	1600	IOS 12.0	You will be required to map UDP port 2000 to the IPP unit's private IP address.
		1750	IOS 12.0	You will be required to map UDP port 2000 to the IPP unit's private IP address.
		2600	IOS 12.0	You will be required to map UDP port 2000 to the IPP unit's private IP address.
	Linksys	BEFN2PS4	1.36p7 Mar.02, 2001	Works only if it configures as a server (server mode).
	SOHOware	NBG600	1.16 Sep. 28 2000	The IPP unit's IP address must be configured on the 'game zone' of the IP sharing device.
	GemTek	AirPass WX-2211	4.62	UDP port 2000 must be configured as a virtual server.
	TREND	GateLock	1.01.1230	UDP port 2000 must be configured as a virtual server.
	Surecom			DMZ must be configured. Only one IPP is allowed.
	NetExcell		ver 1.02	DMZ must be configured. Only one IPP is allowed.

Type	Brand	Model	Software Version	Test Result
Software Based	Tiny Software	WinRoute	**4.1.25**	UDP port 2000 must be configured as a Virtual Server.
	Microsoft	Windows 98 SE2		Special configurations are not required.
	Microsoft	Windows ME		Special configurations are not required.

7-1.3 IP Sharing Devices Not Recommended

The following IP Sharing devices have been tested and have been found not to work with the IPP unit.

Type	Brand	Model	Software Version	Test Result
Stand Alone	3Com	3CRWE50194 HomeConnect		Incompatible
	Accton	WildFire	Linux 2.2	Incompatible
Software Based	Ositis Software	WinProxy	4.0	Incompatible
	Microsoft	Windows 2000		Incompatible
	Microsoft	Windows XP		Incompatible
	Microsoft	Windows NT4.0		Incompatible

7-2 Firewall

Lists the port numbers of IPP.

Packet Type	Port Type
Control Port	UDP 2000
Voice Port	UDP 4000 – 4031
FAX Port	UDP 4032 – 4047
FTP Port	TCP 21
WEB Port	TCP 80
Telnet Port	TCP 23

8. FILE MANAMEMENT

8-1 File Type

File	File Type	Description
HFIPPX.CFG	System Configuration	System Configuration
HFIPPX.GT1	Greeting #1	Greeting
HFIPPX.GT2	Greeting #2	Greeting
HFIPPX.GT3	Greeting #3	Greeting
HFIPPX.GT4	Greeting #4	Greeting
HFIPPX.GT5	Greeting #5	Greeting
HFIPPX.RUN	RUN File	Software

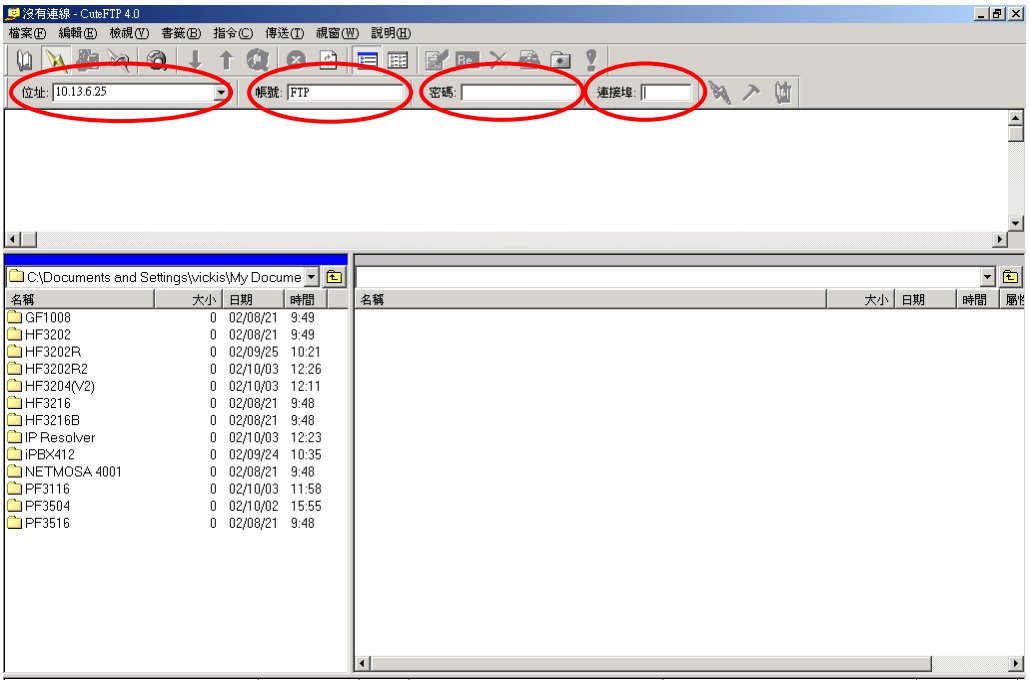
8-1.1 File Update Using FTP

Preparing the update firmware

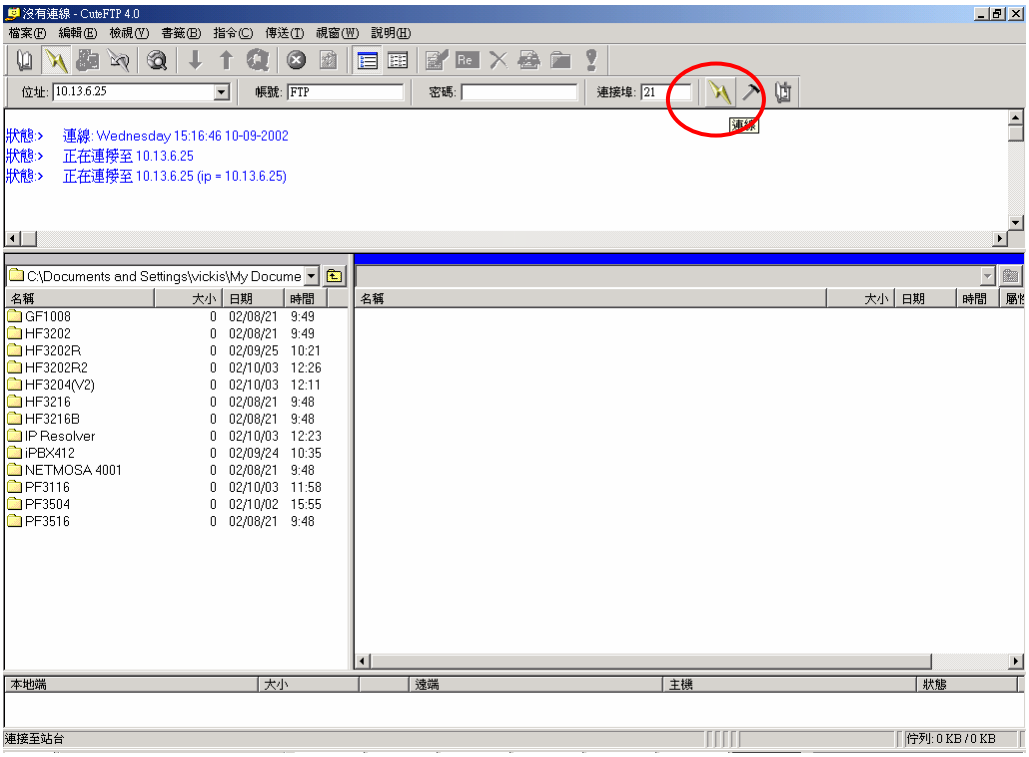
1. Gateway power on
2. PC power on
3. Connect to the IP (The FTP must be accessed via the IP)
4. The Gateway, and PC have previously been set for IP, subnet, Gateway
5. Connect the NULL MODEM CABLE to the console
6. The system is configured to update files

FILE Update Using FTP (The example web page is Chinese version)

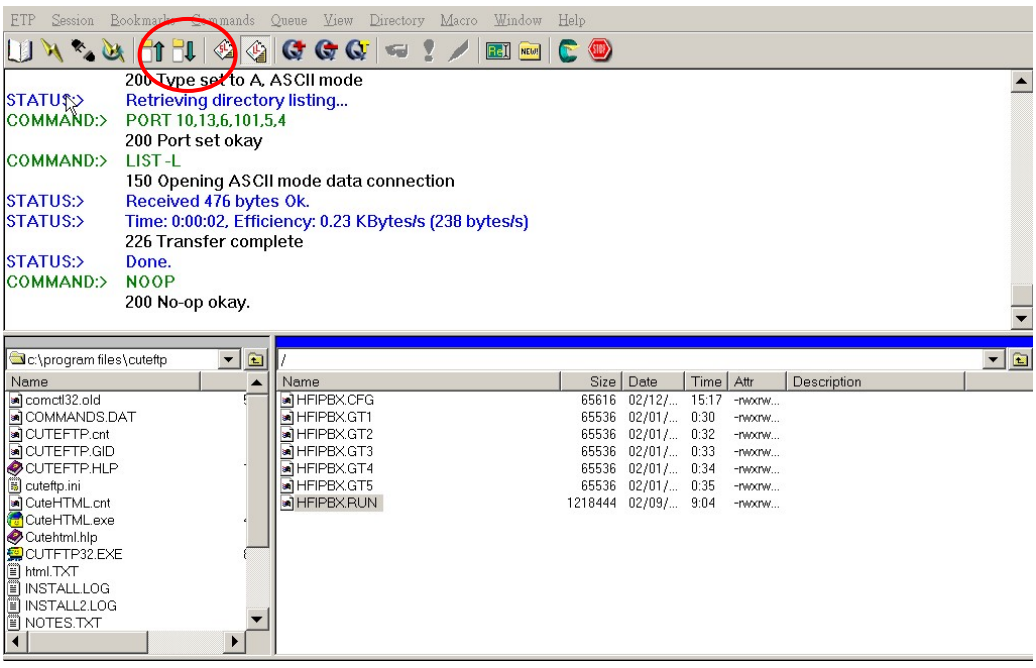
1. Run the FTP Client software (such as CuteFTP)
   Enter the IP address, User Name, (default：FTP), Password (the FTP Password is the same as the console's, and default is empty), and Port Number：21



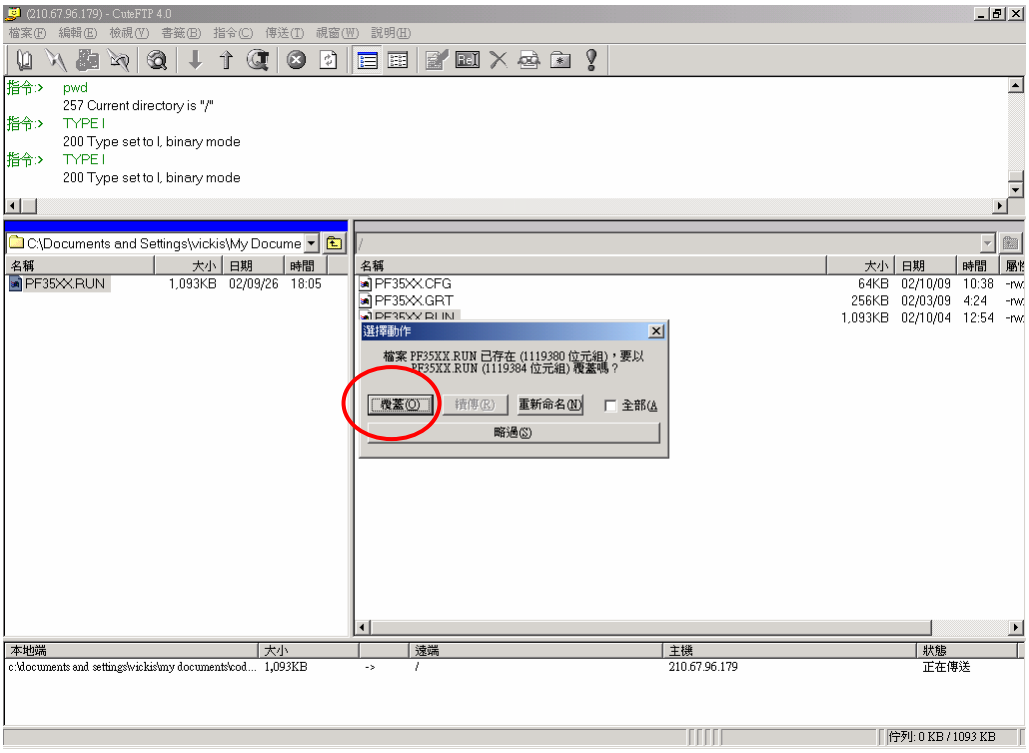
2. Selecting ‘Connect’ will synchronize the PC and IPP systems. A successful connection will call up the Gateway File.



3. Download software to PC hard disc, Select ‘RUN’ click ‘Upload’ at the top of the page. Note：The updated file must be the same name as the original gateway file, for example: hfIPPx.run).

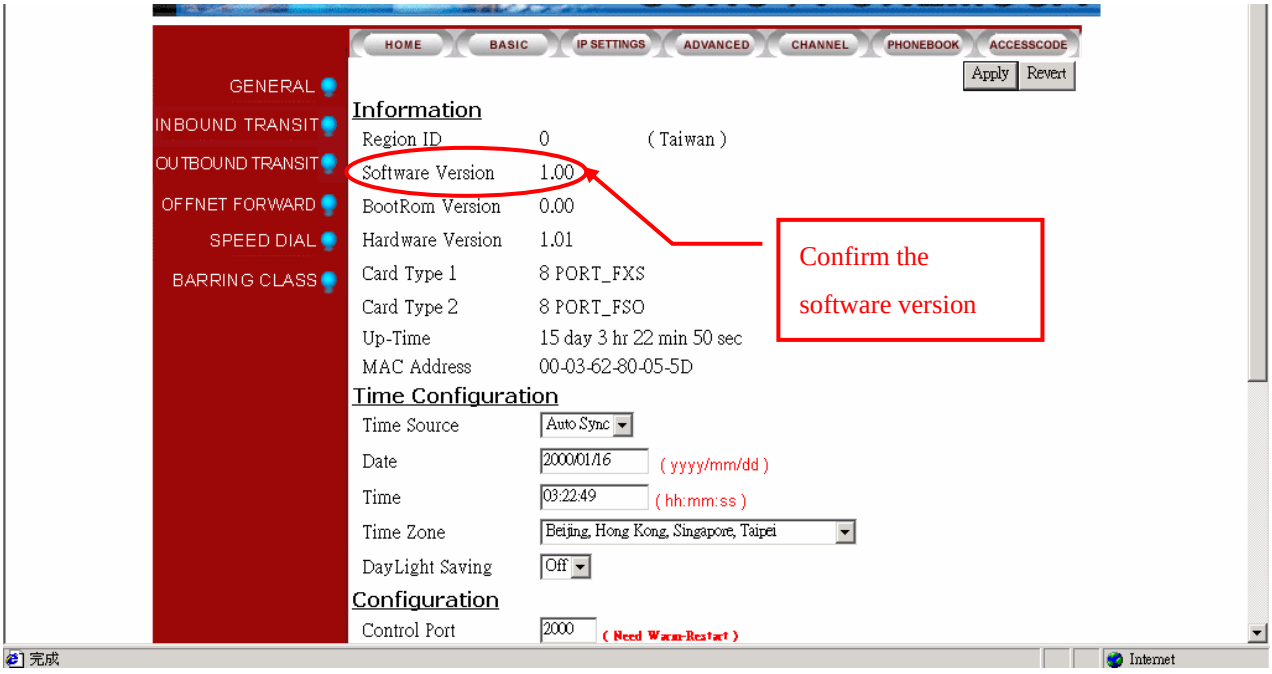


4. Select ‘Overwrite’



5. After selecting ‘Overwrite’, check to insure the time and date are the same. Return to the Web Management Page, select ‘Cold Re-start’ in the ‘Re-start’ field drop-down box. The update is complete.

Note：To confirm the update has been successful go to Web Management Page, ‘BASIC’, and see that the ‘Software Version’ field has changed.



9. NETWORK MANAGEMENT

9-1 Use Of The System Console

9-1.1 System Command Summary

User Exec commands：	**Description**
Enable	Turn on privileged commands
Exit	Exit from the Exec
Help	Description of the interactive help system
Show	Show running system information

show：

Dns	Show the IP address of domain name server
ethernet	FastEthernet port status and configuration
history	Display the session command history
IP	Display IP configuration
running-config	Show current operating configuration
version	System hardware and software status

Privileged Mode：

Configure	Enter configuration mode
Delete	Reset configuration
Disable	Turn off privileged commands
Exit	Exit from the EXEC
Help	Description of the interactive help system
Ping	Send echo request to destination
Reload	Halt and perform cold start
Restart	Halt and perform warm start
Show	Show running system information

Global Mode：

Dbflush	DataBase flush
Dns	Set the IP address of domain name server
End	Exit from configure mode to privileged mode
Exit	Exit from configure mode
Help	Description of the interactive help system
IP	Global IP configuration subcommands
Manager	Enable/Disable the specific management function
No	Negate a command or set its defaults
Password	Modify password of enable command
pppoe	PPPoE configuration subcommands
regional_id	Set regional id
service_port	Set service port number

9-2 Use Of The Web Management Page

Use console to configure IP information and open the web page using the configured IP.

9-3 Management Via telephone

Pick-up the phone, and listen for the dial tone. Dial ＃9999. When the three beeping tone signal is heard, then the item numbers can be dialed.

9-3.1 Command Summary

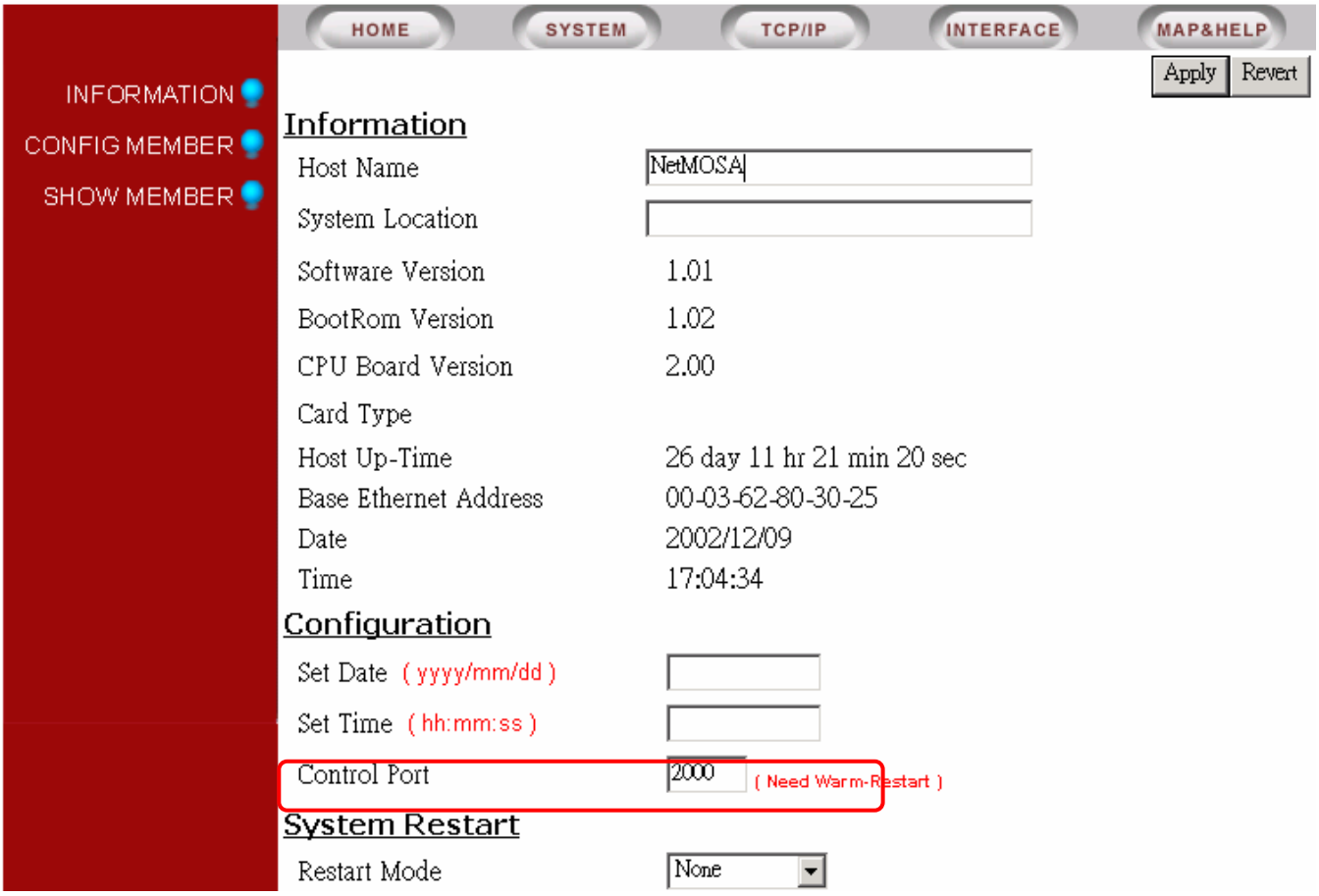
Item	DESCRIPTION	Parameter
For Specific FXS Port		
01	Call Forward	0/1；0：Disable；1：Enable
02	Forwarding In-coming Calls	1~19 (Digits)
03	Off-net Forward Number	1 ~ 22 (Digits)
04	Alarm Set	hh*mm*x *hh: 00~23; mm: 00~59;* *x: 1 : one only 2 : periodic*
05	Gain Control	0：*Factory Default* 1：*+2 db* 2/22/222：*-2/-4/-6 db*
06	Password	4 Digits
07	After office hours greeting operation	0/1:0:Disable, 1:Enable

Item	DESCRIPTION	Parameter	
For All Interface			
91	Call Barring Bypass		
92	Reset Password (Per-Port)	11~22 (2digits) *Reset the selected channel's password to "0000"*	
93	After Work Operation	0 : Disable ; 1: Enable	
96	Play Greeting	1~5 (1digit) *Record Greeting File (1~5)*	
98	System Restart	1: Enable	
99	Record Greeting	1~5 (1digit) *select Greeting File(1~5)*	
		＊	Start record
		＃	End record
		0	Start Play back
		＃	Stop play back
		9	Start save
		＃	Stop save
		＃	Leave record state

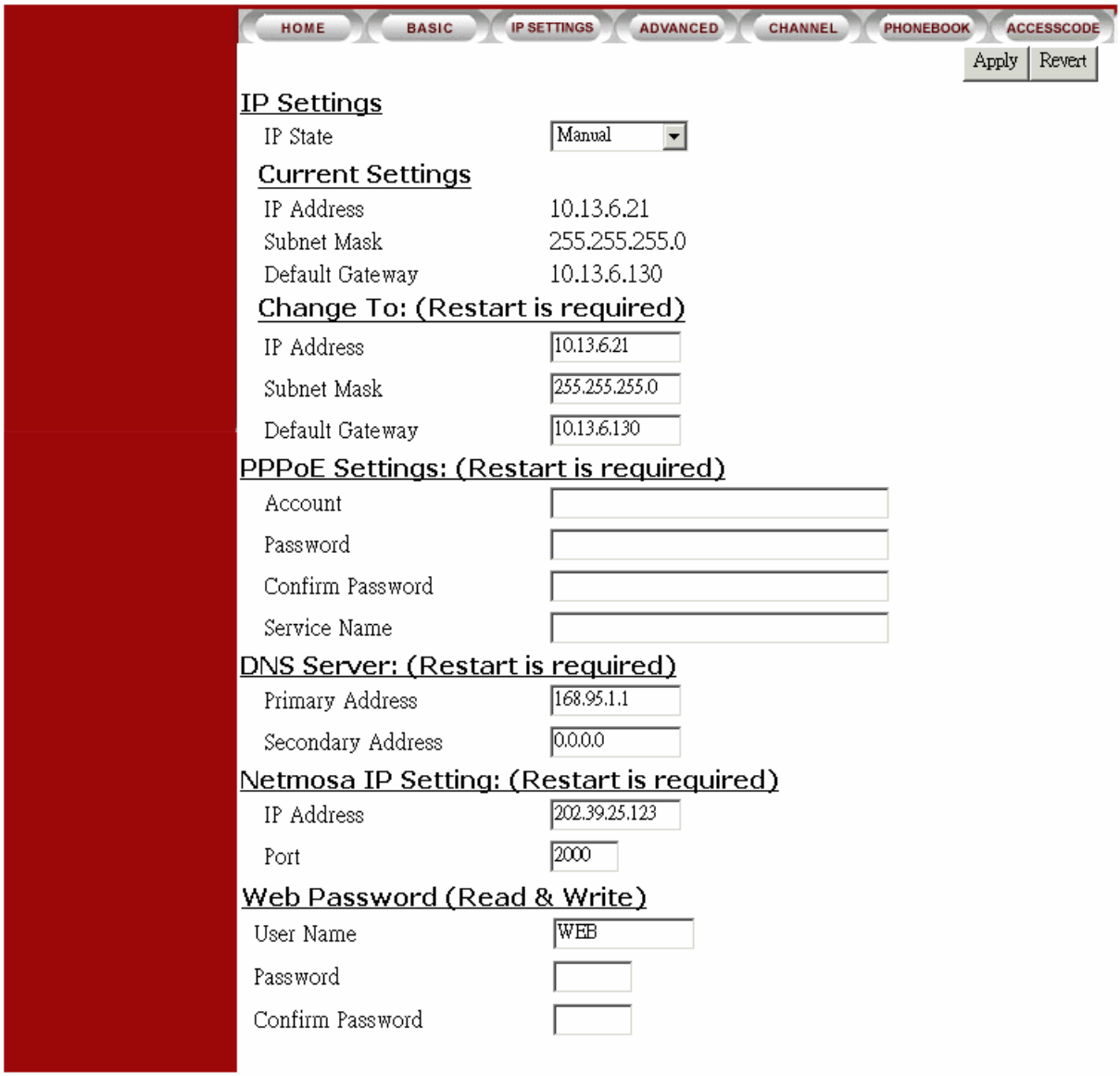
10. INTER-CONNECTION VIA IPN

When IPP is configured as a IPN IP and port number, the IPP will join the IPN group. IPN must be configured as the MAC and phone number of IPP.

10-1 IPN Control Port

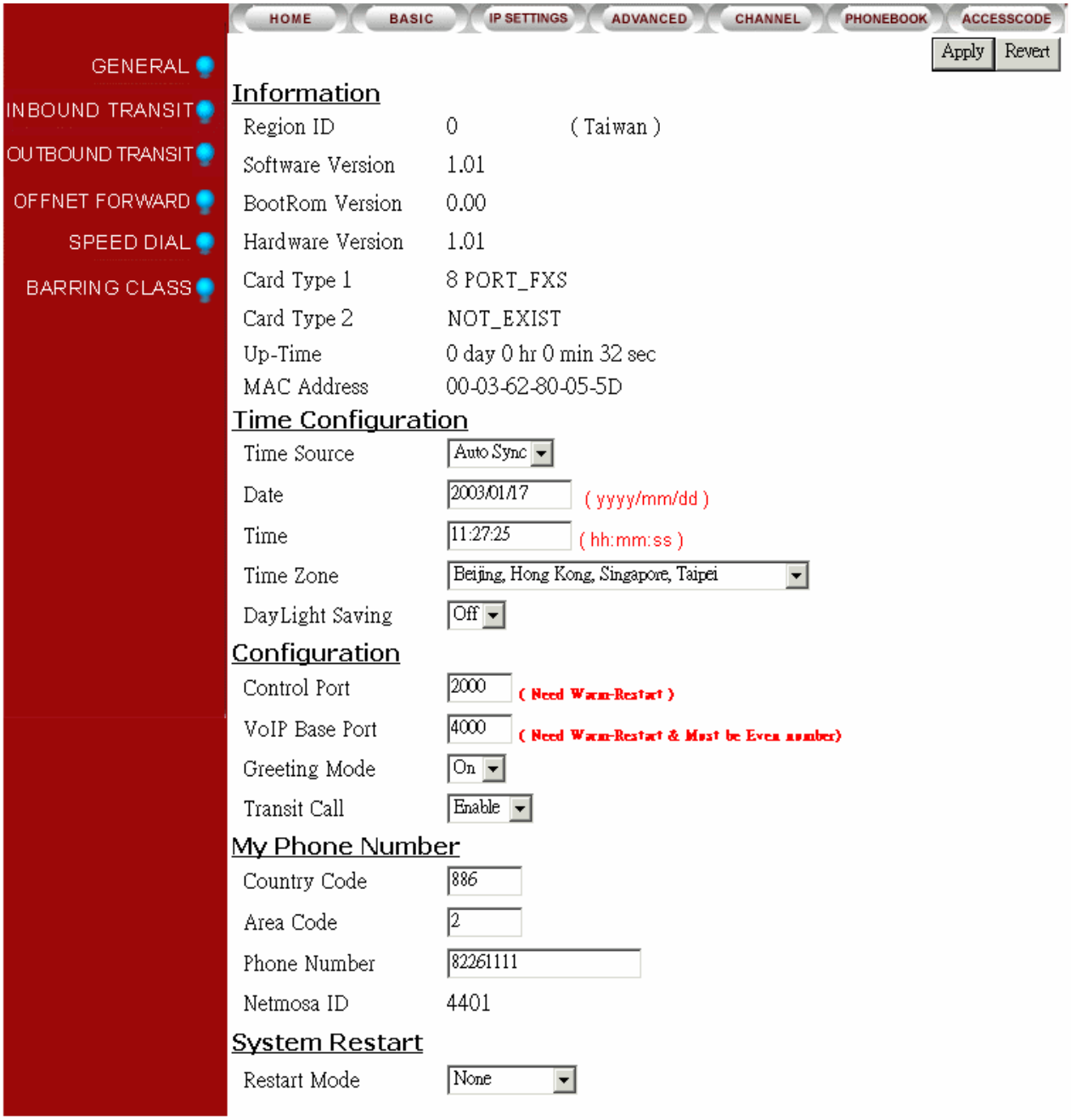


10-2 IPP Setting IPN IP



10-3 IPP WEB PAGE

Open the web page to confirm the setting is working. Select BASIC/GENERAL



11. Specifications

Number of ports	4 FXO + 12FXS
FAX relay	T.30/T.38
FXS interface	Transport protocols
FXO interface	Loop start, 2 wire
Connectors	IDC connectors
Voice compression	G.711/G.729AB
Silence suppression	VAD, CNG
Echo cancellation	G.165/G.168 16ms
Jitter buffer	Adaptive jitter buffer management
Gain control	In/Out +/-6db
Packet time	40 ms
Transport protocols	RTP, RTCP
Call control protocol	Proprietary MGCP
Phone book	Auto-learning, manual configuration
LAN Ports	
Number of ports	Two Ethernet Ports
Interfaces	10Base-T/100BASE-TX auto-negotiation
Connectors	RJ-45 connectors
Management	Web browser, Telephone set, Telnet, Console
IP address	Static, Private, PPPoE, NAT, DHCP
Software Up-grade	FTP
General Information	
Power	External power adapter
	Voltage:100VAC 240VAC Frequency: 50/60Hz .
Power consumption	70 W
Dimension	440mm x 66mm x 254 mm
Working environment	Operating temperature: 0 to 50℃
	Storage temperature: -10 to 70℃
EMI certification	FCC part 15 , CE Mark , VCCI
PTT regulations	FCC part 68 , , iDA , JATE
Safety	UL , CCIB , CB

12. Appendix

12-1 List of Region ID By Country

ID NO.	Country	ID NO.	Country	ID NO.	Country	ID NO.	Country
01	Argentina	02	Australia	03	Philippines	04	Portugal
05	Brazil	06	Canada	07	China	08	Russia
09	Sweden	10	Vietnam	12	France	13	Germany
15	Hong Kong	18	India	22	Italy	23	Japan
24	Korea	26	Malaysia	27	Mexico	28	Netherlands
29	New Zealand	36	Singapore	38	Slovenia	39	South Africa
40	Spain	42	Switzerland	43	Taiwan	44	Thailand
46	British	47	USA	60	Iran	61	Dubai