



SP-11N SIP Module



Browser Guide and Help Files

TOA SP-11N SIP Module: HOME

HOME

CONFIGURATION

DEFAULTS

UPDATE

REBOOT

MAC: 00:08:E1:03:90:74 FW V1.01 Feb.24, 2014

SP-11N

SIP Paging Module

APPLICATION STATUS

Application Mode

SIP PBX

SIP ID

Time till next Registration

Call State

Remote Party

SIP Mode

2 seconds

Idle

AUDIO STATUS

Current Set Volume

Output Peak Level

Input Peak Level

50 %

-99 dBFS

-99 dBFS

Help

Home page

APPLICATION STATUS

Application Mode

Time till next Registration

Call Status

AUDIO STATUS

Help

Home page
Gives an overview of the most important settings of the unit.

APPLICATION STATUS

Application Mode
Shows the current mode of the application, and may take the following values:

- *Device is still booting ...*
The Boot process has not finished yet.
- *SIP mode*
The device is in SIP mode. The SIP server name, and the SIP ID are also shown in this case
- *Peer to peer mode*
The device is in P2P mode, and configured to call to only one remote peer. Incoming calls will be accepted only from this peer.

Time till next Registration
Shows the remaining time till the next registration attempt. The current registration status is shown with different colours of the text:

- Device not registered
- Registration in progress
- Device registered

Call Status
Shows the current call state, and may take one of the following values: - *idle*:
No audio stream is received, and the SIP client is accepting calls

- *Getting incoming call*:
The SIP client has received an INVITE message and is ringing. The ID of the remote party is also displayed
- *Outgoing call*:
The SIP client has initiated an outgoing call, and the remote party ID is displayed as well.
- *In active call*:
The SIP client is in a call session with the displayed remote party

AUDIO STATUS
Shows the status of the following audio parameters:

- Volume:
Displays the current volume in %
- Output Peak Level
Displays the current output peak level in dBFS (dB full scale)
- Input Peak Level
Displays the current input peak level in dBFS (dB full scale)

TOA SP-11N SIP Module: CONFIGURATION- Basic

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SIP Paging Module

Basic Settings

Advanced Settings

Apply

Cancel

BASIC SETTINGS

SIP PROTOCOL SETTINGS

Peer to Peer

SIP Server (PBX)

SIP ID (username)

SIP Password (secret)

INBOUND CALL SETTINGS

Phone pickup mode

Hang up time

CONTACT OUTPUT CONTROL

No call (idle)

Start call

KEY 1 during call

KEY 2 during call

KEY 3 during call

KEY 4 during call

KEY 5 during call

KEY 6 during call

KEY 7 during call

KEY 8 during call

KEY 9 during call

KEY 0 during call

OUTBOUND CALL SETTINGS

Call on Device Inputs

Input 0 Call ID

Help

BASIC SETTINGS

SIP PROTOCOL

Peer to Peer

SIP Server (PBX)

SIP ID

SIP Password

INBOUND CALL SETTINGS

Phone Pickup Mode

Hang-up Time

Contact Output Control

Call on Device Input 0

TOA SP-11N SIP Module: CONFIGURATION- Advanced Network

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SIP Paging Module

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Cancel

NETWORK SETTINGS

☒ Yes ☐ No

Use SonicIP®

IP Address

255

255

255

0

Netmask

Gateway IP Address

Primary DNS

0

0

0

0

Alternative DNS

0

0

0

0

Syslog Address

DHCP Host Name

80

Web Server Port

0

QoS/DSCP

SNMP System Name

SNMP System Location

SNMP System Contact

Help

NETWORK SETTINGS

Use SonicIP

If set to "yes", the device will announce its IP address over the audio output during device startup.
Default: "yes"

IP Address

Enter the 4 values of the desired device IP address e.g.:
"0.0.0.0" for automatic discovery (DHCP/BOOTP, IPzator, AutoIP)
"192.168.0.12" for an internal LAN
Default: "0.0.0.0"

Netmask

Enter the 4 values of the desired Static IP e.g.:
"0.0.0.0" for a default Netmask depending on the used IP Address.
"255.255.255.0" for a C class network
Default: "0.0.0.0"

Gateway IP Address

Enter the 4 values of the desired Gateway IP address e.g.:
"0.0.0.0" for no Gateway
"192.168.0.1" for a Gateway in a LAN
Note: The Gateway has to be set only when connecting to other devices over the WAN (through a router).
Default: "0.0.0.0"

Primary DNS

In this field you can give the Exstreamer the desired primary DNS IP address to be able to connect to URLs (e.g. www.radio.com).
Example: "195.186.1.111"
Default: "0.0.0.0"

Alternative DNS

In this field you can give the Exstreamer the desired alternative DNS IP address in case the primary DNS is not reachable.
Example: "195.186.4.111"
Default: "0.0.0.0"

Syslog Address

Destination address for syslog messages sent by the BCL program via the SYSLOG command. Set this to your syslog logging machine, if your syslog messages are recorded centrally.
If set to 0.0.0.0, syslog messages are broadcast.
Default: "0.0.0.0"

DHCP Host Name

Name of the device sent in DHCP request. If left empty, a name based on the device's MAC address is generated automatically. Enter up to 15 Characters.

Web Server Port

Defines the port where the webserver of the Barix Exstreamer can be reached. If set to "0" the default HTTP port (80) is used.

QoS/DSCP

Quality of Service/Differentiated Service Code Point (DSCP). If this field is set, QoS in IP header will set to this value while forwarding packets to destination hosts or routers. This supersedes the IP4 Type of Service (ToS) value and uses the same byte. Valid values are 0-63.
Default value: 0.

SNMP System Name

SNMP MIB entry for system name (system.sysName.0)

SNMP System Location

SNMP MIB entry for system location (system.sysLocation.0)

SNMP System Contact

SNMP MIB entry for system contact (system.sysContact.0)
This parameter can be queried using any SNMP browser but can not be updated.

TOA SP-11N SIP Module: CONFIGURATION- Advanced SIP Protocol

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SIP PROTOCOL SETTINGS

Peer to Peer

☒ No ☐ Yes

SIP Server (PBX)

SIP ID (username)

SIP Password (secret)

SIP Display ID

Listen SIP Port

5060

Listen RTP Port

5004

Default REGISTER Time

1800

Send NAT-keepalives

☒ No ☐ Yes

Periodically Renew DNS

☒ No ☐ Yes

Debug Mode

☒ Off ☐ On

Help

SIP PROTOCOL SETTINGS

Peer to Peer

Choose whether peer to peer calls should be allowed.
NOTE:When using P2P, the device uses always the default SIP (port 5060) and RTP (port 5004) ports. Make sure the remote peer is configured to listen on the default ports as well.

SIP Server (PBX)

Enter either the hostname/IP address of a SIP server.

SIP ID

Enter the SIP ID (username) that has been created for this device.

SIP Password

Leave this field empty if the PBX doesn't require authentication.

SIP Display ID

Enter the description that you like to have displayed on the remote peer when ringing.

Listen SIP Port

Listening port for the SIP protocol messages. A value of 0 mean a default value of 5060.

Listen RTP Port

Listening port for the RTP audio blocks. A value of 0 mean a default value of 5004.

Default REGISTER Time

The value that the SIP client suggests to the SIP server when sending the REGISTER request. If this value is accepted by the SIP server, the SIP client has to register after this amount of time. Allowed values in the range of 60-3600 seconds.
NOTE: The SIP server may overwrite this value in its reply to the REGISTER request.
Default: 1800 seconds

Send NAT-Keepalives

Enable this function if the device resides behind a NAT.

Periodically Renew DNS

If enabled, it will force the SIP client to renew the DNS of the SIP server every time the registration to the server fails. Use this feature if you have a backup SIP server with the same DNS name and you wish to enable the SIP client to switch to it if the main server fails.

Registration Fail Timeout

The SIP client will automatically resolve the DNS of the SIP server if the REGISTER request fails. However, if the SIP server is down, or the REGISTER message gets lost, the SIP client will not get reply from the server. So configure here the timeout after sending a REGISTER request on the expiry of which the registration will be considered as "failed" in case of no reply from the SIP server.
NOTE: Use this feature with caution. Setting this value too low may result in registration malfunctioning. If unsure, leave it to the default value.
Default: 10 seconds

Debug Mode

Sends received or sent SIP messages through Syslog.

TOA SP-11N SIP Module: CONFIGURATION- Advanced Outbound

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OUTBOUND CALL SETTINGS

Auto Hangup Time

disabled

Beep on Call Answer

☒ Off ☐ On

Call on Device Inputs

Input 0 Call ID

Help

OUTBOUND CALL SETTINGS

Auto Hangup Time

If enabled, the device will automatically hang-up after the configured amount of time if no one answers the call. This option is suitable for door station panels that have only one ring button, and no button to cancel the initiated call.
Values: 5 to 30 seconds.
Default: 0 (disabled)

Beep On Call Answer

If enabled, the SIP client will play a short beep sound when the remote party answers the call.
Default: Off

Call on Device Inputs

Extensions to be called when the correspondent input is closed. The available number of inputs depends from the Barix hardware model.
In case of using "Peer to Peer" mode, enter here the ID and the IP address of the remote peers, for example:
1234@192.168.0.123

TOA SP-11N SIP Module: CONFIGURATION- Advanced Inbound

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INBOUND CALLS

Input Buffer Level

30ms

Phone Pickup Mode

autoanswer

Hang up time

Unlimitedseconds

Stream Timeout

0minutes

Beep on Call Answer

☒ Off ☐ On

Apply

Cancel

Help

INBOUND CALLS

Input Buffer Level

Maximum delay of the input audio buffer in milliseconds. Decrease this value to minimize delay, increase this value to prevent audio dropouts.
Default setting is "30" ms.

Phone Pickup Mode

autoanswer : the call is auto-answered.

Hang-up Time

Set hang up time after answer if it is necessary to have a time-limit of pagings.

Stream Timeout

In some scenarios the remote party may go offline without explicitly closing the active call. In this case the SIP client may stay in active call state for unlimited amount of time. Set here the time in minutes after which the SIP client will close the active call if there is no audio stream received. You can change between 0 and 600 minutes.
NOTE: Please have in mind that this setting is ignored and reset to "disabled" if you select SIP Monitoring Point profile. Default setting is "0 min (disabled)"

Beep On Call Answer

If enabled, the SIP client will play a short beep sound when the incoming call is answered.
Default: Off

TOA SP-11N SIP Module: CONFIGURATION- Advanced Audio

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AUDIO SETTINGS

Encoding

Volume

A/D Amplifier Gain

uLaw / 8 kHz (G.711)

50 %

0 dB

Apply

Cancel

TOA

Help

AUDIO SETTINGS

Encoding

Volume

A/D Amplifier Gain

Help

AUDIO SETTINGS

Encoding

Volume

A/D Amplifier Gain

Encoding

Choose between "uLaw", "aLaw", or G.722.

Note: The G.722 selection option is visible only if supported by the HW.

Default setting is "uLaw".

Volume

Choose between "0%" and "100%" in 5% steps.

Default: "50%"

A/D Amplifier Gain

A/D converter preamplification in dB. Increase if the audio signal too faint, decrease if it's too loud or overdriven. Default: "0dB"

TOA SP-11N SIP Module: CONFIGURATION- Advanced Security

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SECURITY SETTINGS

Reset Function

Factory Defaults

Update Function

Set Password

☒ Enabled ☐ Disabled

☒ Enabled ☐ Disabled

☒ Enabled ☐ Disabled

Help

SECURITY SETTINGS

Reset Function

Factory Defaults

Update Function

Set Password

Old Password / New Password

Reset Function

Enable or disable the "Reset" function on the Reset button and on the WEB UI. In order to restart the device press the Reset button once.
Default: "enabled"

Factory Defaults

Enable or disable the "Factory Defaults" function on the Reset button. In order to revert all settings to factory defaults keep the Reset button pressed until the red LED starts blinking (approx. 10 seconds).
Default: "enabled"

Update Function

Enable or disable the WEB Update function of the device. If the Update function is disabled, the only way to update the firmware is to use the serial rescue.
Default: "enabled"

Set Password

This is visible as long as no password is set.
Enter a password (up to 25 characters) and hit the "Apply" button. After the restart you should close the browser window and open a new browser window. You will be asked to supply user name and password. The user name can be omitted but the password has to be supplied in order to see the web configuration.

Old Password / New Password

These fields are visible as long as a password is set.

To allow free access (clearing the password) enter the old password and leave the field "New Password" empty, then hit the "Apply" button.
After the restart you will not be asked for user name and password anymore.

To change the password enter the old password and enter the new password in the field "New Password", then hit the "Apply" button.
After the restart you will be asked for user name and password. The user name can be omitted but the new password has to be supplied in order to see the web configuration.

TOA SP-11N SIP Module: DEFAULTS

HOME

CONFIGURATION

DEFAULTS

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REBOOT

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TOA

FACTORY DEFAULTS

[Revert to defaults](#)

Reverts all settings except "Network configuration" to factory defaults.

Help

Factory defaults

Click on "Factory defaults" to revert all settings except "Network configuration" to factory defaults.

While restarting the device a screen appears showing a number counting down.

Upon start up a screen appears stating the successful reverting to factory defaults.

Hard default settings

To revert all settings (including the "Network configuration") to factory defaults the Reset button has to be pressed for about 10 seconds while the device is powered.

TOA SP-11N SIP Module: UPDATE

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UPDATE

Please read the instructions before applying the update.
[Please click here to start the update](#)

Currently Loaded Version

Firmware

VB1.13 (10/23/2013)

Web UI

V02.06

Bootloader

V99.26

Setup

V01.01

Song

V10.01 (Oct 23 2013)

Filesystem

V10.01 (10/23/2013)

Help

Updating files

Click on "Please click here to continue" to launch the update process.
Before you click the link note that the update process can only be cancelled by power cycling the device.

The device will restart in a special mode called Bootloader and a screen appears showing a number counting down.
Please note that in this mode the standard http port 80 is **always** used.

To upload a resource click on "Browse..." to locate the file you want to update.
Once selected, click on "Upload".
This process can take a few minutes.

After a successful upload the following text appears:

"Resource" successfully loaded.

Click on update before updating the next component or unplug the power supply to reboot the device.

If you choose "update" you may upload another resource or click the "reboot" button.
If you choose to reboot the following text appears:

rebooting...

Click here to reload the main page.

The device takes a few seconds to reboot. If you have a fixed IP address or DHCP resolves to the IP address used before, the main page will appear.

Version display

Versions are displayed on the right hand side of the Barix logo.

Application Type shows the active application.
MAC shows the MAC address of the device.
Firmware version shows the current version of the Firmware.
Web application version shows the current version of the Web application.
Bootloader version shows the current version of the Bootloader.
Setup version shows the current version of the Setup.
Song and xt versions shows the current versions of the 2 FW Extension modules.

TOA SP-11N SIP Module: REBOOT

HOME

CONFIGURATION


DEFAULTS

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REBOOT

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REBOOT

[Reboot the device](#)

This forces the device to restart.

ADVANCED OPTIONS

Reboot as :

SIP Client (sip)

Reboot

Help

Reboot the device

Click "Reboot the device" to restart the device. While restarting the device a screen appears showing a countdown.

Upon start up a screen appears showing the successful restart.

