

# **EM53 User Manual**

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## 1. Overview

#### **1.1. Introduction**



EM53 is an Expansion Module for SP-R59P, EM53 with large graphic LCD display. 22 programmable keys and 22 dual-color LEDs, and can be programmed to various features include BLF, BLF List, Speed Dial, Hot Desking, Record, XML Browser, Account, Call forward, Pickup, Intercom, DTMF, etc.

#### 1.2. Features

#### > Highlights

- 4.3" 272x480 Graphical LCD with Backlight, 4-bit Graylevel
- Powered by Akuvox IP Phone SP-R59P
- 22 Keys and 22 dual-color LEDs

#### > Features

- Different icons for each function
- Multi-Language Support
- Programmable keys for BLF, BLF List, Speed Dial, Hot Desking, Record, XML Browser, Account, Call forward, Pickup, Intercom, DTMF, etc
- Firmware Upgradable
- Powered by Akuvox IP phone SP-R59P

#### Physical Features

- 22 physical keys each with a dual-color LED
- 4.3" 272x480 Graphical LCD with Backlight, 4-bit Graylevel
- 2 RJ12(6P6C) ports for data in and out
- AC Power Adapter: Input: AC 100-240V; Output: DC 5V/1A

# 2. Installation

## 2.1. Check package contents

Please refer to the package list below to check the completeness of package

Name	Quantity
EM53 unit	1
User Guide	1
RJ-12 Cable	1
Jointbar	1
Stand	1
Screws	4

## 2.2. Connection diagram



# **3.**Configuration

The EM53 expansion module supports 20 DSS Ext keys. The only way to configure the Ext keys is to access to the web interface of the sip phone. To login the web interface, you should obtain the IP address of the IP phone in advance. Press the OK key when the phone is idle after connecting to the network, and the phone will display the IP address and some other status. Enter the IP address in the IE or other web browser on your PC, the default username and password are both admin and admin.

**Note:** Ensure EM53 is connected to SP-R59P successfully via the RJ12 cable.

• Press the OK key when the phone is idle after connecting to the network.

Status(1/3)	
▶ 1.IP: 192.168.10.4 2.MAC: 0c:11:05:00:20:17 3.Firmware: 59. 0.3.41	
	More

 Type the IP address : <u>http://192.168.10.4</u> on IE, input default User Name and Password: admin/admin to login the web interface.

Aku	/ох	
	Login User Name Password	Remember Username/Password

 Go to the path: Phone->Ext Key to see the configuration of each Ext key. Allow user to assign specific feature to the designated Ext key. For Ext key, the available feature list: DND, Menu, MSG, Status, Book, Fwd, PickUp, Group PickUp, Intercom, Speed Dial, History, Favorites, Redial, Account, ACD, BLF, BLFList, Call Return, Hot Desking, Record, XML Browser, DTMF.

F	\ku	νох	P			
► Sta	tus	Ext Kev		_		
► Acc	ount	Upload				浏览
► Net	work			Submit	Cancel	
▼ Pho	one	Firmware Ver Expansion Me	rsion odule	1		~
Π	ime/Lang	Backlight Inte	ensity	3		~
Dr	reference	Backlight Tim	ne	20		~
F1	elefence	Key	Туре	Label	Value	Accour
Ca	all Feature	Key 1	N/A 🗸		]	Account 1
1/	nico	Key 2	N/A 🗸			Account 1
V	lice	Key 3	N/A 💙			Account 1
Ke	ey/Display	Key 4	N/A 🗸		]	Account 1
E	xt Key	Key 5	N/A 💙		]	Account 1
		Key 6	N/A 🗸		]	Account 1
Ri	ingtones	Key 7	N/A 🗸			Account 1
Т	ones	Key 8	N/A 💙		]	Account 1
		Key 9	N/A 💙			Account 1
D	iai Pian	Key 10	N/A 🗸			Account 1
A	ction URL	Key 11	N/A 🗸			Account 1
► Pho	neBook	Key 12	N/A 🗸			Account 1
1115	Inclosed and the second	Key 13	N/A 🗸		1	Account 1
► Upg	jrade	Key 14	N/A 🗸			Account 1
			[	[		

#### **3.1. Expansion module selection**

Several expansion modules can be chained together to connect to a SP-R59P IP phone, so that you can have many more Ext keys to use at the same time. Up to six expansion modules can be daisy-chained to a single SP-R59P IP phone. Before configuring the Ext keys, you should choose the right expansion module first.

- Go to the path: Phone->Ext Key->Expansion Module;
- Choose the designated expansion module;
- Press Submit to accept the change.

Ext Key					Holn
Linkad			-	读题	Theip
opioud		Submit	Cancel	(A3)C+++	Note :
					Max length of characters for input
Firmware Ve	rsion	1			255: Broadsoft Phonebook serve
Expansion M	odule	1	2	~	address
Backlight Int	ensity	3		~	AUTOP Manual Update Server UF
Kev	Type	Label	Value	Account Extens	63: The rest of input boxes
Key 1	N/A 💙			Account 1 🖌	Warping -
Key 2	N/A 🗸		]	Account 1 V	
Key 3	N/A 🗸			Account 1 🗸	Field Description :
Key 4	N/A 🗸			Account 1 🖌	Submit Shortcut
Key 5	N/A 🗸			Account 1 🖌	Submit Cancel
Key 6	N/A 🗸			Account 1 🗸	
Key 7	N/A 🗸			Account 1 🗸	
Key 8	N/A 🗸			Account 1 🖌	
Key 9	N/A 💙			Account 1 🖌	
Key 10	N/A 🗸			Account 1 💙	
Key 11	N/A 🗸			Account 1 🗸	
Key 12	N/A 🗸			Account 1 🗸	
Key 13	N/A 🗸			Account 1 🗸	
Key 14	N/A 💙			Account 1 🗸	
Key 15	N/A 🗸			Account 1 🗸	
Key 16	N/A 🗸			Account 1 🗸	
Key 17	N/A 🗸			Account 1 🗸	
Key 18	N/A 🗸			Account 1 🖌	
Key 19	N/A 🗸			Account 1 🗸	
1000 20	N/A 🗸			Account 1 🗸	

## 3.2. Backlight Setting

#### **Backlight level**

Set the screen backlight level of the expansion module. There are five levels of the backlight intensity, default is level 3.

- Go to the path: Phone->Ext Key->Backlight Intensity;
- Choose the backlight level;
- Press Submit to accept the change.

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ork	1.0000				治際		Theip
ork 			Submit	Cancel	0,00m		Note :
	_						box:
	Expansion M	irsion Iodule	1		~		255: Broadsoft Phonebook server
lang	Backlight Int	tensity	3		$\overline{}$		127: Remote Phonebook URL &
cong	Backlight Tir	ne	20		~		AUTOP Manual Update Server URI
rence	Key	Туре	Label	Value	Account	Extension	63: The rest of input boxes
eature	Key 1	N/A 💙			Account 1 💙		Warning :
	Key 2	N/A 🗸			Account 1 🗸		Field Description :
	Key 3	N/A 🗸			Account 1 🗸		Field Description :
isplay	Key 4	N/A 💙			Account 1 🗸		Submit Shortcut
ey	Key 5	N/A 💙			Account 1 💙		Submit Cancel
	Key 6	N/A 💙			Account 1 🗸		
ones	Key 7	N/A 🗸			Account 1 🗸		
	Key 8	N/A 💙			Account 1 🗸		
lan	Key 9	N/A 🗸			Account 1 💙		
	Key 10	N/A 💙			Account 1 🗸		
URL	Key 11	N/A 🗸			Account 1 🗸	j.	
Book	Key 12	N/A 🗸			Account 1 🗸		
	Key 13	N/A 🗸			Account 1 💙		
le	Key 14	N/A 🗸			Account 1 💙		
y	Key 15	N/A 🗸			Account 1 🗸		
	Key 16	N/A 🗸			Account 1 🗸		
	Key 17	N/A 🗸			Account 1 🗸		
	Key 18	N/A 💙			Account 1 💙	а 2	
					Account 1 🗸		
	Key 19	N/A 💙					

#### **Backlight Duration**

Set the duration of backlight of the expansion module. Default value is 20s.

- Go to the path: Phone->Ext Key->Backlight Time;
- Choose the backlight time;
- Press Submit to accept the change.

LAUNEY						Help
Upload				浏覽		Troip
		Submit	Cancel	1000 m		Note :
						box:
Firmware Ve	rsion	1		×		255: Broadsoft Phonebook server
Backlight Int	rensity	3		~		address 127: Remote Phonebook URL &
Backlight Tir	ne	20		~		AUTOP Manual Update Server UF
Key	Туре	Label	Value	Account	Extension	63: The rest of input boxes
Key 1	N/A 💙			Account 1 💙		Warning :
Key 2	N/A 🗸			Account 1 💙		5 H B
Key 3	N/A 🗸			Account 1 🗸		Field Description :
Key 4	N/A 🗸			Account 1 🗸		Submit Shortcut
Key 5	N/A 💙			Account 1 🗸		Submit Cancel
Key 6	N/A 💙			Account 1 💙		
Key 7	N/A 🗸			Account 1 🗸		
Key 8	N/A 💙			Account 1 💙		
Key 9	N/A 💙			Account 1 💙		
Key 10	N/A 🗸			Account 1 🗸		
Key 11	N/A 🗸			Account 1 🗸		
Key 12	N/A 🗸			Account 1 🗸		
Key 13	N/A 💙			Account 1 💙		
Key 14	N/A 🗸			Account 1 💙		
Key 15	N/A 🗸			Account 1 🗸		
Key 16	N/A 🗸			Account 1 🗸		
Key 17	N/A 💙			Account 1 💙		
Key 18	N/A 💙			Account 1 💙		
Key 19	N/A 💙			Account 1 💙		
Key 20	N/A 🗸			Account 1 🗸		

### 3.3. Ext Key Configuration

- Go to the path: Phone->Ext Key->key;
- Choose the function of each Ext key in the drop-down menu;
- Fill in the value of each item: "Label", "Value", "Account", "Extension" (Not all of items are necessary for each function);
- Press Submit to accept the change.

	Ext Key						Help
nt	Upload				浏览		
vrk			Submit	Cancel	]		Note : Max length of characters for inpu
	Firmware Ve	ersion					box:
	Expansion M	Iodule	1		~		255: Broadsoft Phonebook serve address
/Lang	Backlight Int	tensity	3		~		127: Remote Phonebook URL &
	Backlight Tir	ne	20		~		AUTOP Manual Update Server UF
ence	Key	Туре	Label	Value	Account	Extension	-
eature	Key 1	N/A Y		]	Account 1 V		Warning :
	Key 2	N/A Y		_   ]	Account 1 V		Field Description :
Vienlav	Key 3	N/A V		_   	Account 1 V		
ларіау	Key 4	N/A V		]	Account 1 V		Submit Shortcut
(ey	Key 5	N/A V		]  ][	Account 1		- Cancer
ones	Key 0			 ][	Account 1 ¥		
	Key 8	N/A V		]			-
	Key 9	N/A V			Account 1		-
lan	Key 10	N/A ¥			Account 1 ¥		-
URL	Key 11	N/A V			Account 1 V		
Book	Key 12	N/A 🗸			Account 1 🗸		-
JUUK	Key 13	N/A 💙			Account 1 🗸		-
de	Key 14	N/A 💙			Account 1 🗸		
ty	Key 15	N/A 🗸			Account 1 🗸		
	Key 16	N/A 🗸			Account 1 🗸		
	Key 17	N/A 🗸			Account 1 💙		
	Key 18	N/A 🗸			Account 1 🗸		
	Key 19	N/A 💙			Account 1 🗸		
	Key 20	N/A 🗸			Account 1 🗸		
		Subm	it		Cancel		_

#### For Example:

#### DND

- Go to the path: Phone->Ext Key->key;
- Choose DND function of each Ext key in the drop-down menu;
- Fill in the value of Label, such as: Do not disturb;
- Press Submit to accept the change.

Aku	VOX						
Status	Ext Key						
► Account	Upload					浏	览
Network				Submit	Cancel	]	
▼ Phone	Firmware Ve Expansion M	rsion odule		1		~	
Time/Lang	Backlight Int	ensity		3		~	
Preference	Backlight Tin	ne Turno	_	20	Value	~	Account
Call Feature	Key 1	DND	<b>~</b> [	Do not disburb	Value	_	Account 1
Maina	Key 2	N/A	~				Account 1
voice	Key 3	N/A	~				Account 1
Key/Display	Key 4	N/A	~				Account 1
Ext Key	Key 5	N/A	~				Account 1
Pingtones	Key 6	N/A	~				Account 1
Ringtones	Key 7	N/A	~				Account 1
Tones	Key 8	N/A	~				Account 1
Dial Plan	Key 9	N/A	~				Account 1
Darran	Key 10	N/A	~				Account 1
Action URL	Key 11	N/A	~				Account 1
▶ PhoneBook	Key 12	N/A	~				Account 1
	Key 13	N/A	~				Account 1
Upgrade	Key 14	N/A	~				Account 1
St	Ver 15	81/A		1			A second 4

#### BLF(Busy Field Lamp)

- Go to the path: Phone->Ext Key->key;
- Choose BLF function of each Ext key in the drop-down menu;
- Fill in the value of each item, such as: Label->Pick up; Value->1005;
   Extension->\*\*; Account->Account1;
- Press Submit to accept the change.

# Akuvox

r Status	Ext Key						
Account	Upload					浏	汽
Network				Submit	Cancel	]	
▼ Phone	Firmware Ver Expansion M	rsion odule		1		~	
Time/Lang	Backlight Inte	ensity		3		~	
Droforanco	Backlight Tim	ne		20		~	
Preference	Key	Туре		Label	Value		Accour
Call Feature	Key 1	BLF	~	pick up	1005		Account 1
1/-:	Key 2	N/A	~				Account 1
voice	Key 3	N/A	~				Account 1
Key/Display	Key 4	N/A	~				Account 1
Ext Key	Key 5	N/A	~				Account 1
	Key 6	N/A	~				Account 1
Ringtones	Key 7	N/A	~				Account 1
Tones	Key 8	N/A	~				Account 1
Dial Plan	Key 9	N/A	~				Account 1
	Key 10	N/A	~				Account 1
Action URL	Key 11	N/A	~				Account 1
PhoneBook	Key 12	N/A	~				Account 1
	Key 13	N/A	~				Account 1
Upgrade	Key 14	N/A	~				Account 1
<ul> <li>Committee</li> </ul>	Key 15	N/A	V				Account 1

## 4. Software update

To select an upgrade rom file from local side, then press Submit to access the upgrading.

**Note**: Please make sure it's in right file format for right model.

Upload						riep
				浏览		
122		Submit	Cancel			Note : Max length of characters for inpu
Firmware V	ersion					box: 255: Broadsoft Phonebook serve
Expansion M	Module	1		~		address
Backlight In	itensity	3		$\sim$		127: Remote Phonebook URL &
Backlight Ti	me	20		~		AUTOP Manual Update Server UF 63: The rest of input boxes
Key	Туре	Label	Value	Account	Extension	
Key 1	N/A 🗸		]	Account 1 V		Warning :
Key 2	N/A V		]	Account 1 V		Field Description :
Key 3	N/A V		]	Account 1 V		
Key 4	N/A V		]	Account 1 V		Submit Shortcut
Key 5	N/A V		]	Account 1 V		Gancer
Key 6	N/A V		]	Account 1 V		
Key 7	N/A V		]	Account 1 V		
Key 8	N/A V		]	Account 1 V		
Key 9	N/A 💙		]	Account 1 V		
Key 10	N/A V		]	Account 1 🗸		-
Key 11	N/A 🗸		]	Account 1 🗸		
Key 12	N/A 🗸			Account 1 🗸		
Key 13	N/A 🗸			Account 1 🗸		
Key 14	N/A 🗸			Account 1 💙		-
Key 15	N/A V		]	Account 1 🗸		
Key 16	N/A 🗸		]	Account 1 🗸		
Key 17	N/A 🗸		]	Account 1 🗸		
Key 18	N/A V		]	Account 1 🗸		
Key 19	N/A Y		]	Account 1 🗸		-
Key 20	N/A 🗸		]]	Account 1 🗸		

## 5. Troubleshooting

#### Issue 1: The EM53 LCD is blank

• If more than two expansion modules are connected to a SP-R59P IP phone, ensure that at least one expansion module is plugged into a functional adapter.

#### Issue 2: The EM53 LCD is back

• Check the backlight level of expansion module on the web interface, choose a comfortable backlight level for usage.

#### Issue 3: Cannot access the web interface

- Check the connection between the PC port of the device and the network port of the computer. Make sure it is fine.
- Check whether the IP address of the device is correct.
- If it is LAN, please make sure there is no IP address collision with other devices on the network.

For more information about the configuration, please refer to SP-R59P IP Phone User Guide.