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## W-AIR Small Business Admin Guide

 This guide leads you through installation and provisioning of W-AIR Small Business solution.

Useful links:

- [W-AIR Network Admin Guide - Sync over the air](#)
- [W-AIR Network Admin Guide - Sync over LAN](#)
- [W-AIR System Datasheet](#)

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## Description

### System architecture

W-AIR is a Wildix cordless solution. The system supports auto-provisioning enabling instant connection to the Wildix PBX. Due to high scalability, new components are quickly and easily integrated to guarantee the better performance.

Wildix W-AIR system uses the wireless technology CAT-iq (Cordless Advanced Technology – Internet quality).

The architecture consists of three components:

1. **Base station** - an essential component of a DECT system. Wildix W-AIR base stations:

- Multicell base stations: W-AIR Base (End Of Life), W-AIR Base Outdoor, W-AIR Base Sync Plus. Documentation: [W-AIR Network Admin Guide - Sync over the air](#), [W-AIR Network Admin Guide - Sync over LAN](#)
- Single Cell base station: W-AIR Base Small Business

2. **Repeater** - extends the signal coverage of the base station.

3. **Cordless endpoints:**

Wildix W-AIR handsets: W-AIR Basic (ex W-AIR 70), W-AIR 100 (End Of Life), W-AIR LifeSaver (ex W-AIR 150), W-AIR Med, W-AIR Office and W-AIR Headset. Follow the online Guides to get detailed information: [W-AIR DECT Handsets Guide](#), [W-AIR Headset Guide](#).

### W-AIR Small Business solution

- Supports of PoE 802.3af thanks to PoE Splitter
- Up to 8 users per system
- Up to 4 concurrent calls
- Up to 3 repeaters per base
- No multicell
- Base station indoor range: 50 m; outdoor range: 300m



## Base station and repeaters connection and overview

### Packing lists

#### W-AIR Base Small Business

- Mounting screws x 2 and anchors x 2
- Cat. 5 Ethernet cable x 1
- PoE splitter x 1
- Base station unit x 1

#### W-AIR Repeater:

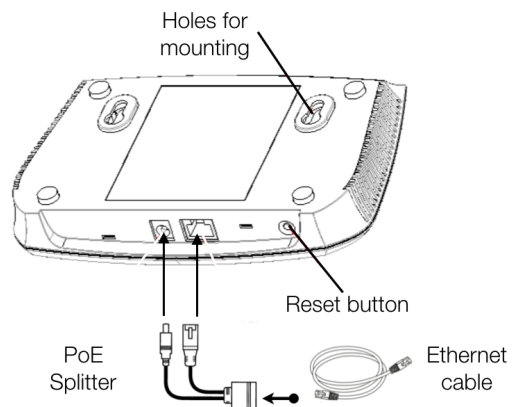
- Power adapter x 1
- Repeater unit x 1

### Base station connection and reset

View from the top:



View from the bottom:



**Reset a base station:** press the **Reset** button for more than 2 seconds.

#### LEDs of the Base Station

LED STATE	STATE
UNLIT	No power in unit
UNLIT/SOLID RED	Error condition
BLINKING GREEN	Initialization
SOLID RED	Factory reset warning or long press in BS reset button
BLINKING RED	Factory setting in progress
SOLID GREEN	Ethernet connection available (Normal operation)
BLINKING RED	Ethernet connect not available OR handset de/registration failed
SOLID RED	Critical error
ORANGE	Press reset button of base station
BLINKING ORANGE	No IP address received

### Mounting instructions

It is recommended to mount base station at an angle other than vertical on both concrete/ wood/ plaster pillars and walls for optimal radio coverage. Avoid mounting the base unit's upside down as it significantly reduces radio coverage.

Mount the base unit as high as possible to clear all nearby objects (e.g. office cubicles and cabinets, etc.).

Make sure that when you fix the base stations with screws, the screws do not touch the PCB on the unit. Avoid all contacts with any high voltage lines.

### Find Base station IP

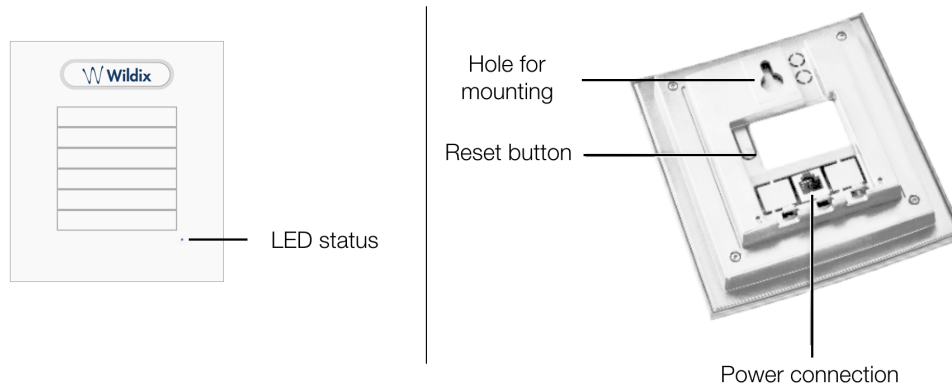
On the handset press **Menu** key followed by the keys: \*47\* to get the handset into find bases menu. Depending on the amount of powered on bases with active radios and the distance to the base it can take up to minutes to find a base.

- Use the cursor down/up to select the base MAC address for the base
- The base IP address will be shown in the display

The feature is also used for deployment.

### Repeaters connection and overview

#### Repeater connection and reset



**Reset a repeater:** press and hold the **Reset** button on the back side for more than 2 seconds (LED turns solid RED and then GREEN with a double pulsation).

#### LEDs of the Repeaters

- LED blinks green with a double pulse during the first registration process
- LED blinks green during the connection process
- LED remains solid green when it is registered to a base station
- LED blinks green with a fast pulse when a phone connected to the Repeater starts a new call, during the conversation it blinks red
- LED becomes solid red if the Repeater fails to connect to the base station
- Double color flashing (red/ green): Repeater is in recovery mode for one of the following reasons (try to re-assign Repeater to Base station):
  - Repeater is locked to base/ repeater without repeater mode activated
  - Sync source base/ repeater not found (Manual mode)
  - Timeout during RPN allocation due to busy base/repeater

## Set up W-AIR Small Business Solution

### Step 1. Provision base stations

For detailed instruction, refer to [Provisioning of Wildix devices - Admin Guide](#).

Go to menu *Devices* of the WMS, click **+Add** and provision the gateway. Provisioned base stations appear in the table of Devices.

For Base Station SB the W-AIR Network is created automatically with the default Pin Code 0000" (the Pin is used to register handsets).

You can change the default PIN code via Custom Provision parameters. Consult the document [Provisioning Custom Settings](#).

### Step 2. Register a W-AIR Handset

**To register the handset:**

1. Verify that there is only one active W-AIR Network
2. Go to the handset's main menu
3. Select **Connectivity**
4. Select **Deregister**, enter 0000 as PIN, then press Yes

5. Select **Register**, enter 0000 as Access code, then press OK
6. The cordless phone is ready for a new login procedure

### To assign the handset:

1. Switch on your phone and wait till the system assigns you an “unknown account” and the coverage indicator turns active
2. Dial the Login Feature Code (“99” by default)
3. Enter an extension number and PIN (= the first five symbols of the user WEB password)

How to enter the PIN:

- The keys are alpha-numeric, they allow you to enter both letters and digits, to enter letters: press only once the key corresponding to the letter you need to enter (there is no difference between lowercase and uppercase letters)
- Press \* (the star key) to enter any special characters present in the user password, including the symbol “#”

Example: PIN is *4Ag7\$ZI@*, you have to dial *4247\**



Follow [W-AIR DECT Handset - User Guide](#) to get more details.

 Admin password is also accepted.

### To unregister the handset:

1. Log out (register to “unknown” account) by calling the Feature Code “Login” (“99” by default)
2. Select **“Deregister”** in the **“Connectivity”** menu of the handset
3. Enter the Pin Code “0000”, then press **“Yes”**

### How to delete a handset and reuse the slot?

To delete a handset and reuse the slot, proceed as follows:

1. Open W-AIR SB web interface -> *Extensions* menu and select the handset you want to remove (click on the IPEI value):

Extensions / Handset							
	Idx	Extension	Display Name	Server	Server Alias	State	IPEI
<input type="checkbox"/>	1	<a href="#">31793</a>	User_31793	10.100.3.179:5061		SIP Registered	<a href="#">02555B0C67</a>
<input type="checkbox"/>	2	<a href="#">unknown_2</a>	login_2	10.100.3.179:5061			<a href="#">0276FDD2E7</a>
<input type="checkbox"/>	3	<a href="#">unknown_3</a>	login_3	10.100.3.179:5061			<a href="#">0276FDD2E1</a>
<input type="checkbox"/>	4	<a href="#">unknown_4</a>	login_4	10.100.3.179:5061			<a href="#">0276FDD2E2</a>
<input type="checkbox"/>	5	<a href="#">unknown_5</a>	login_5	10.100.3.179:5061			<a href="#">0276FDD2E3</a>
<input checked="" type="checkbox"/>	6	<a href="#">31793</a>	User_31793	10.100.3.179:5061			<a href="#">0278873964</a>

2. The *Handset* menu opens; enter the value “FFFFFFFFF” into the field “IPEI” and click **Save**:

### Handset

IPEI:

AC:

Alarm Line:

Alarm Number:

**Alarm Profiles:**

Profile	Alarm Type	
Profile 0	Not configured	<input type="checkbox"/>
Profile 1	Not configured	<input type="checkbox"/>
Profile 2	Not configured	<input type="checkbox"/>
Profile 3	Not configured	<input type="checkbox"/>
Profile 4	Not configured	<input type="checkbox"/>
Profile 5	Not configured	<input type="checkbox"/>
Profile 6	Not configured	<input type="checkbox"/>
Profile 7	Not configured	<input type="checkbox"/>

3. Register a new handset to the W-AIR base station: on the handset open the menu *Connectivity* -> **Register**; after the new handset is registered, it appears on the W-AIR SB web interface -> *Extensions* menu
4. Access the PBX via SSH and add PBX parameter "ResetHandset=yes" to the [wildixair] section of the /rw2/etc/provision.conf. Documentation: [Provisioning Custom Settings](#)
5. Perform logout procedure: dial 99 from the handset and follow the prompts
6. Remove PBX parameter "ResetHandset=yes" from the [wildixair] section of the /rw2/etc/provision.conf[wildixair]

### Step 3. Set up Repeaters

Proceed as follows:


1. Find the IP of the base station that you want to repeat (on the WMS devices list)
2. Access the base station's web interface, enter a username "admin" and a password that you can find in the WMS Devices menu in the "Password" field of the given base station
3. Select **Repeaters** in the menu and click on **Add Repeater**
4. Select Manually from the drop-down menu if it is present, then choose the Station ID (*DECT sync source*) where you want to connect the Repeater and confirm by pressing the **Save** button
5. Reboot the Base station (go to **Management** menu and click **Save and reboot**). After the system reboots, go back to the base station's interface
6. Select **Repeaters** in the menu
7. Select a Repeater(s) you want to add to the chain and click on **Register Repeater(s)**
8. Now you have 5 minutes to turn on the Repeater(s)
9. LED of the Repeater should turn solid green in several seconds, if it fails (solid RED) please repeat the steps after the reboot of the base station

DECT sync mode:

RPN	DECT sync source
<input type="text" value="RPN01"/>	<input type="text" value="RPN00 (-∞dBm) W-AIR Base Station"/>

DECT sync mode:

RPN	DECT sync source
<input type="text" value="RPN02"/>	<input type="text" value="RPN01 (-∞dBm) Repeater"/>

 Notes:

- If you have any problems with registering Repeater(s), reset it by pressing the **Reset** button on the back side for more than 2 seconds (LED turns solid RED and then GREEN with a double pulsation). Start the registration procedure again by following the last three points above
- Repeater should be placed on a distance not less than 10 meters from its Base station
- For a good conversation and a correct handover between Bases and Repeaters the dBm value should be between -75 and 0.

## Call Features

### **DND, Call forwarding, Paging, Call intrusion, Intercom**

All the Call Features can be set up in WMS or Wildix Collaborations in User Settings, or otherwise, directly from the handset, by dialing the Feature Codes of the system.

Consult the guide [Feature Codes and Pre answer Services - Admin Guide](#).

### **Ring tones**

Ring tones set in Collaboration are not applied to W-AIR handsets. You can set ring tones via Dialplan "Set" application.

Consult [Dialplan applications Admin Guide](#).

### **Call transfer, hold, call swap, conference call**

These operations can be performed directly from W-AIR handset, consult the guide [W-AIR DECT Handset](#) for details.

W-AIR Handsets support only 2 calls/ channels, this means, when you have one active call and one call on hold, you can only perform a transfer of the active call to the party which is on hold, or vice versa. You cannot transfer a call to some third party, because no more channel can be opened.

If you need to transfer a call to some third party when you have one active call and one call on hold, you can use in-call Feature codes (since it doesn't require opening a new channel): #8 for attended transfer and #9 for blind transfer. Consult [Feature Codes and Pre answer Services Guide](#) for detailed information.

## Upgrade Procedure of W-AIR system

### **FW upgrade of Base Stations**

When there is the new FW available, the notification "Firmware available" appears in WMS Device



To upgrade the FW, select one or multiple base stations, and click **Configure/Sync**. Wait for several minutes, during the FW upgrade, devices are rebooted. As soon as the upgrade procedure is finished, the new FW version appears in the Devices menu of the WMS, the base stations are no longer marked with the blue color.

### FW upgrade of Repeaters and Handsets

After the upgrade of the base stations, Repeaters and Handsets connected to the system download the new FW automatically. You can monitor the process of the FW upgrade from the base station's web interface.

#### Repeaters



- Repeaters must be connected to be able to perform the upgrade procedure
- Do not turn off or reboot repeaters manually during the upgrade: they restart automatically

Go to the Base Station interface, menu *Repeaters*: during the reboot you can see the progress of the upgrade of the repeaters in the field "FWU Progress". As soon as it's finished, the "FWU Progress" displays "Complete".

#### Handsets



New FW is downloaded automatically after the Base Stations have been upgraded. To complete the FW upgrade procedure of the handsets, the handsets must be placed into the charger.

During the procedure you can see the status of the upgrade of the phones, the procedure takes about 30 minutes. Go to the Base Station interface, menu *Extensions* -> Handset: during the reboot you can see the progress of the upgrade in the field "FWU Progress". As soon as it's finished, the "FWU Progress" displays "Complete".

## Alarms setting

### Types of alarms

#### Alarm Button

This alarm is triggered by long-pressing (3 seconds) the red button on top of the handset.

#### Pull Cord Alarm

The Pull Cord alarm can be triggered by pulling a cord containing a magnet from the pull cord hole on the right side of the handset.

#### Running Alarm

To trigger the Running Alarm the handset needs to be shaken up and down for several seconds.

#### Man Down Alarm

The Man Down alarm is triggered if the handset remains in the position with an angle over 60 degrees with respect to the horizontal. The time for the handset to be still before the alarm is triggered can be set on base station web interface (read the next chapter 7.3. Set up emergency profiles)


### No Movement Alarm

To trigger the No Movement alarm the handset needs to be in no movement. The timeout after which No Movement alarm is triggered is set on the base station web interface.

### Set up emergency profiles

Go to the menu “Alarms”. In this menu eight different alarm profiles can be configured. The parameters that can be configured are:

- **Profile Alias:** A user friendly name to help identify the different profiles when selecting which one to enable for individual handsets
- **Alarm Type:** The type of event that triggers an alarm. The options are: Disabled, Man Down, No Movement, Running, Pull Cord, Emergency Button
- **Alarm Signal:** Call. The alarm is made as an outgoing call to the emergency number preconfigured for the extension
- **Stop Alarm from Handset:** Enable/Disable. The possibility to cancel an alarm from the handset
- **Trigger Delay:** The timeout before the phone starts showing pre-alarm warning. If set to 0, the alarm is sent immediately (max. value is 255 sec.).

 For Man Down alarm, add the default delay of 6 seconds which is the time needed for the alarm detection (e.g. if set to “0”, alarm is triggered after 6 sec, if set to “30”, alarm is triggered after 36 sec.)

- **Stop Pre-Alarm from Handset:** Enable/Disable the possibility to cancel the pre-alarm from the handset
- **Pre-Alarm Delay:** The timeout during which the pre-alarm warning is displayed until the actual alarm is sent (max. value is 255 sec.)
- **Howling:** Enable/Disable the howling of the handset when the alarm is triggered

Alarm								
Idx	Profile Alias	Alarm Type	Alarm Signal	Stop Alarm from Handset	Trigger Delay	Stop Pre-Alarm from Handset	Pre-Alarm Delay	Howling
0	Man Down	Man Down	Call	Enabled	30	Enabled	30	Enabled
1	No movement	No Movement	Call	Enabled	180	Enabled	30	Enabled
2	Running	Running	Call	Enabled	30	Enabled	10	Enabled
3	Pull cord	Pull Cord	Call	Enabled	30	Enabled	10	Disabled
4	Alarm Button	Alarm Button	Call	Disabled	0	Disabled	0	Disabled
5		Disabled	Call	Enabled	0	Enabled	0	Disabled
6		Disabled	Call	Enabled	0	Enabled	0	Disabled
7		Disabled	Call	Enabled	0	Enabled	0	Disabled

Save      Cancel

After you have defined the Emergency profiles, click **Save** to apply.

### Assign emergency profile to handsets

1. Go to the menu *Extensions*
2. Click on the “IPEI” of the handset:

### Extensions / Handset

	Idx	Extension	Display Name	Server	Server Alias	State	IPEI
<input type="checkbox"/>	1	350	u_350	192.168.1.226		SIP Registered	0255580C67
<input type="checkbox"/>	2	unknown_2	login_2	192.168.1.226			FFFFFFFFFF
<input type="checkbox"/>	3	unknown_3	login_3	192.168.1.226			FFFFFFFFFF
<input type="checkbox"/>	4	unknown_4	login_4	192.168.1.226			FFFFFFFFFF
<input type="checkbox"/>	5	unknown_5	login_5	192.168.1.226			FFFFFFFFFF

3. The following window is displayed, allowing you to set up emergency settings:

### Handset

IPEI:

AC:

Alarm Line:


Alarm Number:

#### Alarm Profiles:

Profile	Alarm Type	
Profile 0 (Alarm 1)	Man Down	<input type="checkbox"/>
Profile 1 (a2)	Man Down	<input checked="" type="checkbox"/>
Profile 2	Not configured	<input type="checkbox"/>
Profile 3	Not configured	<input type="checkbox"/>
Profile 4	Not configured	<input type="checkbox"/>
Profile 5	Not configured	<input type="checkbox"/>
Profile 6	Not configured	<input type="checkbox"/>
Profile 7	Not configured	<input type="checkbox"/>

4. Modify the parameters:

- “Alarm Line”: select the handset’s extension number
- “Alarm Number”: Enter the number to be called when the alarm is triggered from the handset

 You can enter an extension number that must be called or customize the service by modifying the Dialplan in the WMS and to add the “Alarm Number” as a Called number into a Dialplan procedure.

5. Tick off the Profiles that you wish to enable for this handset
6. Click **Save** on the bottom of the page
7. Go to *Management* menu and click **Save and reboot** to reboot the base station and apply the new parameters