# **Recovery Mode for Yealink Dect Phones**

This document shows how to use recovery mode to update the base.

## Recovery mode update

#### Summary:

You may need to follow a recovery mode update when the phone cannot well boot up (only the power light can be turned on). Briefly, the procedure is to prepare a TFTP server (tftpd.32.exe), put the wanted firmware to the TFTP server and **rename** the firmware as W52P.rom and then enable the phone to update the firmware via the TFTP server.

### **Preparations:**

- 1. One PC, One base, One hub
- 2. TFTP Server
- 3. Materials of DECT: W52P.rom; W5X.bin; W5X.rfs

#### **Operation Procedure:**

 Firstly, you can download the tftpd32 application and files from below link: <u>ftp://yealinkftp:yealinkftp@ftp.yealink.com/Recovery Mode Upgrade/W52P/tftpd32.450.zip</u> The contents of it can be seen as below:

😰 tftpd32.chm	2013/11/28 22:21	编译的 HTML 帮	330 KB
🏘 tftpd32.exe	2013/11/28 22:18	应用程序	211 KB
🗎 tftpd32.ini	2014/2/20 9:44	Configuration Se	2 KB

2. Then download the materials: W52P.rom; W5X.bin; W5X.rfs from below link:

ftp://yealinkftp:yealinkftp@ftp.yealink.com/Recovery	Mode
Upgrade/W52P/Materials DECT Commercial.zip	

For the W52P.rom, it's the base version(25.x.x.x). In the link, I place the version 25.50.0.20.rom for an example. You can also use other base version as W52P.rom.

W5X.bin	2013/12/11 9:07	BIN 文件	1,479 KB
W5X.rfs	2013/12/11 9:07	RFS 文件	8,192 KB
W52P.rom	2014/7/29 14:29	ROM 文件	7,564 KB

- 3. To prepare a firmware of base for update, you must rename the file name of the base version as W52P.rom.
- 4. Configure the local IP address in PC. The PC IP address must be configured the value as below. Then the base will get the DECT IP (192.168.0.100).

Parameter	Default Value
Gate Way IP	192.168.0.1
Net Mask	255 255 0 0
	192 168 0 100
	102,100,0,100
TETP Server IP	192.168.0.23

Internet Protocol Version 4 (TCP/IPv4) Properties									
General									
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.									
Obtain an IP address automatica	ally								
• Use the following IP address:									
IP address:	192.168.0.23								
Subnet mask:	255.255.0.0								
Default gateway:	192.168.0.1								
Obtain DNS server address auto	omatically								
• Use the following DNS server ad	dresses:								
Preferred DNS server:									
<u>A</u> lternate DNS server:	• • •								
Validate settings upon exit Advanced									
	OK Cancel								

- 5. Double click the 'tftpd32.exe' to start the application as the TFTP server.
- 6. Click the button 'Browse' to locate the TFTP Root Directory where you place the unzipped materials. For example, the files are unzipped in local disk (F:\tftp\w52p).

🏘 Tftpd32 by	Ph. Jour	nin						×
Current Director	Current Directory F:\tftp\w52p							
Server interface	<sup>ss</sup> 192.1	68.0.23	Re	ealtek PC	le FE Family	Controll 🔻	Show <u>D</u> ir	
Tftp Server T	ftp Client	DHCP server	Syslog	3 server 🛛	Log viewer			
peer		file	s	tart time	progress	bytes	total	tir
								Þ
About				<u>S</u> ettings			<u>H</u> elp	

4	🔖 Tftpd32 by	y Ph. Jou	nin						×
	Current Directo	ry F:\tftp	o\w52p				•	<u>B</u> rowse	
	Server interfac	es 10.2.	5.124	Realtek	PCle	e FE Family	Controll 💌	Show <u>D</u> ir	
	Tftp Server	Tftp Client	DHCP server	Syslog serv	er   l	_og viewer			
	peer		file	start ti	me	progress	bytes	total	tir
	•								4
	About			<u>S</u> ett	ings			<u>H</u> elp	

To verify this step, choose the '127.0.0.1' firstly, then Click the button 'Show Dir', then the materials will be shown.

🏘 Tftpd32 by	Ph. Jounin	
Current Directory	F:\\ftp\w52p	<u>B</u> rowse
Server interface:	Software Loopback Interface 1	Show <u>D</u> ir
Tftp Server T	to Client DHCP server Suslag server Lag viewer	
peer	Tftpd32: directory	total tir
	W52P.ron 2014/5/227744960 W5X.bin 2014/5/221514044 W5X.rfs 2014/5/228388608	
About	Close Copy Explorer	

- 7. Important: Configure some settings on TFTP Server.
  - Choose the 'Server Interface' as 127.0.0.1;
  - Click the button 'Settings', configure the 'GLOBAL' tab as below:

🏘 Tftpd32: Setting	IS			×
GLOBAL TFTP	DHCP   SYSL	06		
<ul> <li>✓ TFTP Server</li> <li>✓ TFTP Client</li> <li>✓ SNTP server</li> <li>✓ Syslog Server</li> <li>✓ DHCP Server</li> </ul>				
DNS Server     Enable IPv6				
			•	
	<u>D</u> efault	<u>H</u> elp	Cance	əl

• Then configure the 'TFTP' tab as below:

🏘 Tftpd32: Settings	X
GLOBAL TFTP DHCF	> SYSLOG
Base Directory	
F:\tftp\w52p	Browse
■ TFTP Security ● None	TFTP configuration Timeout (seconds) 3
C Standard	Max Retransmit 6
	Tftp port 69
C Read Unly	local ports pool
<ul> <li>Advanced TFTP Options</li> <li>Option negotiation</li> <li>PXE Compatibility</li> <li>Show Progress bar</li> <li>Translate Unix file national</li> </ul>	imes
Bind TFTP to this ad	dress 192.168.0.23 💌
Use anticipation wind	ot dow of 0 Bytes
Create "dir txt" files	up
Create md5 files	
Beep for long transfe	ſ
OK Defa	ault Help Cancel

• Go ahead to configure the 'DHCP' tab.

Tftpd32: Settings
GLOBAL     TFTP     DHCP     SYSLOG       DHCP Pool definition     IP     IP       IP pool start address     192.168.0.100       Size of pool     1       Lease (minutes)     3600       Boot File     Image: Start address
DHCP Options         Def. router (Opt 3)         Mask (Opt 1)         255.255.0.0         DNS Servers (Opt 6)         WINS server (Opt 44)         NTP server (Opt 42)         SIP server (Opt 120)         Domain Name (15)         Additional Option
DHCP Settings Ping address before assignation Persistant leases Double answer if relay detected Bind DHCP to this address 192.168.0.23
OK Default Help Cancel

8. Then use the hub to connect with base and PC in a local Area Network.(PS: Just only the base to connect on the hub!) Of course, the base is on with power now.

After connecting, Now we can seen the following pic. (Be patient to wait for the server to dect device and then show it at the tab of DHCP server. If failed, you can try to reconnect the base with network cable.)

🏘 Tftpd32 by Pl	n. Jounin				
Current Directory	F:\tftp\w52p			•	Browse
Server interfaces	127.0.0.1	Software Loop	back Interface 1	-	Show Dir
Tftp Server Tftp	Client DHCP server	Şyslog server Lo	og viewer		
allocated at	IP	MAC	renew at		
07/29 15:30:59	192.168.0.100	00:15:65:44:B4:	07/29 15:30:59		
About			Gettings		Help

9. Long press the 'paging' key on the base and reconnect the power adapter to trigger the recovery mode. In the meantime, you will see the lights on base LEDs turn by turn (power led-> network led-> handset led). When these LEDs are lighting, release the paging key and the base will automatically enter the status of recovery mode update.

Let's take the W52.rfs for an example. Then we can see downloading process on the TFTP server.



If the file is downloaded successfully, then we can see the display on the 'Tftp Server' tab.

	by Ph. Jo	unin	1.000	the part			
Current Direct	ory F:M	ftp\w52p	<u>B</u> rowse				
Server interfa	Server interfaces 127.		.0.0.1 Software Loopback Interface 1 💌			Show <u>D</u> ir	
Tftp Server	Tftp Clier	nt   DHCP server	Syslog server	Log viewer			
peer		file	start time	progress	bytes	total tir	
192.168.0.1	00:3326	.w5x.rfs<	21:00:31	100%	8388608	8388608	
(	. I		III Cattings			→ →	
ADOL	at a		<u>s</u> ettings			<u>H</u> eib	

You can also pay attention to the log of TFTP server as shown in the below figures. Make sure that Base has sent request for the files.

	Tftpd32 by Ph. Jounin	- 0 X						
	Current Directory F:\tftp\w52p	<u>B</u> rowse						
	Server interfaces 127.0.0.1 Software Loopback Interface 1	Show <u>D</u> ir						
	Tftp Server Tftp Client DHCP server Syslog server Log viewer							
	DHCP: proposed address 192,168,0.100 [01/08 21:00:15,283] Connection received from 192,168,0.100 on port 1142 [01/08 21:00:29,533]	*						
	Read request for file							
	UALK: <timeout=5,blksize=1468> [01708/21:00:29,543] Using local port 63961 [01708/21:00:29,543]</timeout=5,blksize=1468>							
	<<							
	Read request for file 25x.rfs . Mode octet [01/08 21:00:31.723]							
l	Using local part 52110 [01/00 21:00:01 / 23]	<b>-</b>						
	<ul> <li><w5x.rfs>: sent 5/15 blks, 8388608 bytes in 12 s. 0 blk resent [01/08 21:00:43.293]</w5x.rfs></li> <li>Connection received from 192.160.0.108 on port 35704 [01/08 21:08.50.183]</li> </ul>							
	Read request for file 32. rom . Mode octet [01/08 21:00:50.183]							
l	Warning : received duplicated request from : [01/08 21:00:50.183]							
Warning : received duplicated request from : [01/08 21:00:50.433]								
Read request for file <w52p.rom>. Mode octet [01/08 21:00:50.433] Using local port 58573 [01/08 21:00:50.433]</w52p.rom>								
	Connection received from 192.168.0.100 on port 35704 [01/08 21:00:50.685] Bead request for file <w52p.rom>. Mode octet [01/08 21:00:50.685]</w52p.rom>							
	Using local port 58574 [01/08 21:00:50.685]							
	TIMEOUT waiting for Ack block #1 [01/08 21:01:05.447]							
T <mark>IMEOUT waiting for Ack block #1 [01/08 21:01:05.687]</mark> ↓W52P.rom>: sent 15127 blks, 7744960 bytes in 19 s. 0 blk resent [01/08 21:01:09.417]								
	Clear Copy							
	About <u>S</u> ettings	<u>H</u> elp						

10. To verify, Try to open the WEB UI with the IP address **192.168.0.100** via PC. Check the firmware version in Status. For example, I have set the version: 25.50.0.20 on the TFTP server. Then it's successfully upgrading to this version.

ECT Phone +				00
192.168.0.100 servlet?p=status&q=load		👿 🔡 🔻 C 🕻 🕈 FindWide <ctrl+k></ctrl+k>	▶ ☆ 自 合 ち - ヰ -	● † Ø T 💈 - ≡
Yealink	Status Account	Network Phone Contacts	Logout	
Status	Version 💡		NOTE	
Handset&VoIP	Firmware Version Hardware Version	25.50.0.20	Version: It shows the version of	
	Network ? Internet Port Type IP Address	DHCP 192.168.0.100	nmware. Network: It shows the information of WAN port.	
	Gateway Primary DNS Secondary DNS	192.168.0.1 192.168.0.1 192.168.0.1		
	Subnet Mask MAC Address	255.255.0.0 00156544b47d		
	Link Status Uptime	Connected 0 days 0:6		
	Copyright @	1998-2011 **Inc. All Rights Reserved		