

# Yealink W90 Datasheet

## Cordless DECT IP Multi-Cell System

The Yealink W90 DECT IP Multi-Cell System, consisting of three elements - a Virtual Integrator Manager (optional), a DECT Manager W90DM, and a base station W90B, is designed to provide organizations that require wireless coverage with the full ease of deployment. This DECT multi-cell system intends to create an extremely scalable and reliable solution for organizations of any size and shape. The VIM system supports up to 10 DM, 600 base stations, 2500 handsets, and 2500 simultaneous calls. The W90 multi-cell system supports up to 1 DM, 60 base stations, 250 handsets, and 250 simultaneous calls, which ensures one call in each handset. It eliminates the limited wireless signal coverage of only one base station. Meanwhile, the system can work with Yealink W56H, W59R, W57R, W71H, W73H, W74H, W78H, WH62, WH63, CP930W, CP935W, and DD Phone (T54W DD Phone does not apply to the VIM system) with seamless roaming and handover of the calls, making freely mobile communication in and between each zone achievable. W90B and W90DM join the modern, compact design with Yealink HD voice quality that frees your ears and gives you an elaborate audio experience.



Up to 600 Base Stations



Compatible with Multiple Devices



DECT / SRTP / TLS



Auto-P



Cloud Contact / LDAP / XML / XSI



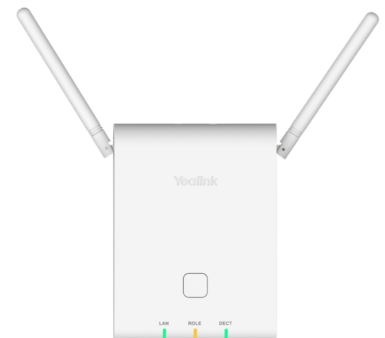
HD Audio



Wall Mountable



External Antenna



## Key Features and Benefits

- Support Air and LAN synchronization
- Seamless handover and roaming
- Up to 10 DM
- Up to 600 base stations
- Up to 2500 handsets
- Up to 2500 SIP accounts
- Up to 2500 parallel calls
- Support XML/LDAP/Remote Phonebook
- Support XSI Directory/XSI Call Log

- External antenna, DECT radio coverage up to 50 m indoors and 300 m outdoors
- Support IPv6
- Support PoE
- Support SRTP/SIPS/TLS, LDAP(s), and HTTPS
- Compatible with W57R/W59R/W56H/W71H/W73H/W74H/W78H, CP930W, CP935W and DD Phone
- DECT Technology: Yealink DECT technology focuses on high-quality Audio VoIP (wideband) and low-bit-rate data applications. However, we are incompatible with third-party DECT devices (base station, handset, etc.).

### **No Perception Upgrade**

You can upgrade the W73H, W78H, W57R, and W59R handsets with no perception. The upgrade of the handsets will be completed within two minutes. The channel will not be occupied during the firmware transmission, and the handsets can be used normally.

### **Sync Level1 Base Backup**

Yealink W90 DECT IP Multi-Cell System supports sync Level 1 base backup. When the Level 1 base goes offline, other bases in the system can be used as the backup Level 1 base, and the backup can be completed within one minute to replace the Level 1 Base so that the system can quickly maintain normal use.

### **Headsets Registration**

The Yealink W90 DECT IP Multi-Cell System supports the WH62/WH63 headset registration. It can be registered separately and used on W90B alone or paired with other handsets. After pairing, you can switch the handset and the headset to process the calls freely.

### **Seamless Stability**

The Yealink W90 DECT IP Multi-Cell System brings seamless stability. The rotatable external antennas ensure further signal range, industry-leading coverage, and flexible steering for complex areas, which truly saves the amount and cost of bases in deployment with industry-leading coverage. Moreover, the Lan Sync guarantees stable roaming even in poor signal transmission environments or strong signal interference, like warehouses with overcrowded cargo or several iron gates.

### **Easy Deployment**

The Yealink W90 DECT IP Multi-Cell System provides users with an easier and faster setup: the DECT Deployment Toolkit for quick base location, an IP discovery tool for quickly getting the IP of DM, and an auto-sync level for a self-organizing network without manual operation. Instead of complex steps, it takes less time from deployment to daily management for a large system.

### **Wide Coverage**

Available for 10 DM, 600 bases, 2500 handsets, and 2500 parallel calls, the Yealink W90 DECT IP multi-

cell system is tailored for large spaces and multi-locations & bases, delivering unified communication solutions, especially for warehouses, hospitals, hotels, supermarket chains, cruises, authorized car dealerships, offices, retail formats, etc. Virtual machines and more bases will be supported in the future, broadening the coverage once more.

### Full Scenarios

The Yealink W90 DECT IP Multi-Cell System supports various devices: W56H, W57R, W59R, W71H, W73H, W74H, W78H, CP930W, CP935W, DD Phone, which matches different employee roles and full scenes communicating demand from mobile, desk, to conference with flexible scalability.

### Multiple Phone Books

The Yealink W90 DECT IP multi-cell system offers easy access to multiple phone books, including Local Directory, Remote Phonebook, LDAP, and XML Phonebook. Additionally, it is broadly compatible with PBX contacts.

## Specifications

| Specifications        | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| <b>Phone Features</b> | <ul style="list-style-type: none"> <li>• Sync over the air and LAN (Seamless handover and roaming)</li> <li>• Each VIM System:               <ul style="list-style-type: none"> <li>- Up to 10 DM</li> <li>- Up to 600 base stations</li> <li>- Up to 2500 handsets</li> <li>- Up to 2500 VoIP accounts</li> <li>- Up to 2500 simultaneous calls</li> <li>- Up to 8 WB (4 active handsets) calls per base</li> <li>- Up to 8 NB calls per base</li> </ul> </li> <li>• Each W90 Multi-Cell System:               <ul style="list-style-type: none"> <li>- Up to 60 base stations</li> <li>- Up to 250 handsets</li> <li>- Up to 250 VoIP accounts</li> <li>- Up to 250 simultaneous calls</li> <li>- Up to 8 WB (4 active handsets) calls per base</li> <li>- Up to 8 NB calls per base</li> </ul> </li> <li>• Up to 2 simultaneous calls per handset</li> <li>• Call hold, call transfer, 3-way conference</li> </ul> |

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|                       | <ul style="list-style-type: none"> <li>• Switching between calls</li> <li>• Call waiting, mute, silence, DND</li> <li>• Caller ID with name and number</li> <li>• Anonymous call, Anonymous call rejection</li> <li>• Call forward (always/busy/no answer)</li> <li>• Speed dial, voice mail, redial</li> <li>• Message Waiting Indication (MWI)</li> <li>• Music on hold (server-based)</li> <li>• Local phonebook for up to 100 entries per handset</li> <li>• Remote phonebook/LDAP/XML phonebook</li> <li>• Phonebook search/import/export</li> <li>• Call history (all/missed/placed/received)</li> <li>• Reset to factory, reboot</li> <li>• Keypad lock, emergency call</li> <li>• BroadSoft directory, BroadSoft call log</li> <li>• Broadworks feature key synchronization</li> <li>• Shared Call Appearance (SCA)</li> <li>• XML browser</li> <li>• IPUI registration</li> <li>• User access level</li> <li>• DM backup (W90 multi-cell system)</li> </ul> |
| <b>Management</b>     | <ul style="list-style-type: none"> <li>• Auto-provision via TFTP/FTP/HTTP/HTTPS/RPS</li> <li>• Auto-provision with PnP</li> <li>• Handset upgrade: OTA (Over-The-Air)</li> <li>• Configuration: browser/phone/auto-provision</li> <li>• Trace package and system log export</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Audio Features</b> | <ul style="list-style-type: none"> <li>• Full-duplex speakerphone</li> <li>• Hearing Aid Compatibility (HAC) compliant</li> <li>• DTMF</li> <li>• Wideband codec: AMR-WB (optional), G.722</li> <li>• Narrowband codec: AMR-NB (optional), PCMU(G.711μ), PCMA(G.711A), G.726, G.729, G.729A, iLBC</li> <li>• VAD, CNG, AGC, PLC, AJB</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

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| <b>Network Features</b>  | <ul style="list-style-type: none"> <li>• SIP v1 (RFC2543), v2 (RFC3261)</li> <li>• SNTP/NTP</li> <li>• VLAN (802.1Q and 802.1P)</li> <li>• 802.1x, LLDP</li> <li>• STUN Client (NAT Traversal)</li> <li>• UDP/TCP/TLS</li> <li>• IP assignment: static/DHCP</li> <li>• Support outbound proxy server backup</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Security</b>          | <ul style="list-style-type: none"> <li>• Open VPN</li> <li>• Transport Layer Security (TLS1.0/TLS1.2)</li> <li>• HTTPS (server/client), SRTP</li> <li>• Digest authentication</li> <li>• Secure configuration file via AES encryption</li> <li>• Support SHA256/SHA512/SHA384</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>DECT</b>              | <ul style="list-style-type: none"> <li>• Frequency bands: 1880 – 1900 MHz (Europe), 1920 – 1930 MHz (US)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Interface</b>         | <ul style="list-style-type: none"> <li>• 1 x RJ45 10/100M Ethernet port</li> <li>• Power over Ethernet (IEEE 802.3af), Class 1</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Physical Features</b> | <ul style="list-style-type: none"> <li>• Indoor range: 30 m - 50 m (The ideal distance is 50 m)</li> <li>• Outdoor range: 300 m (in ideal conditions)</li> <li>• Wall mountable</li> <li>• Three LED indicators on W90DM/W90B: <ul style="list-style-type: none"> <li>- 1 x DECT LED</li> <li>- 1 x Role LED</li> <li>- 1 x LAN (Power Indicator &amp; Network Status) LED</li> </ul> </li> <li>• External Yealink AC adapter: AC 100-240 V Input and DC 5 V/1.2 A Output</li> <li>• Color: Pearl White</li> <li>• Dimension: 130 mm x 100 mm x 25.1 mm</li> <li>• Operating humidity: 10-95%</li> <li>• Operating temperature: -10°C to +45°C (+14-113°F)</li> <li>• Storage temperature: - 30 to +70°C (-22 to +158 °F)</li> </ul> |
| <b>Package Features</b>  | <ul style="list-style-type: none"> <li>• Package contents: <ul style="list-style-type: none"> <li>- W90DM/W90B</li> <li>- Expansion Screws</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

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|            | <ul style="list-style-type: none"><li>- Quick Start Guide</li><li>- Power Adapter (optional)</li><li>• Qty/CTN: 10 PCS</li><li>• Giftbox size: 158 mm x 203 mm x 63 mm</li><li>• Carton meas: 420 mm x 338 mm x 167 mm</li><li>• N.W: 2.8 kg</li><li>• G.W: 3.4 kg</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Compliance |           |

[Click here](#) to go to the product introduction on the Yealink official website.