SIP-T4X Defective Phones Checking List and Repairing Instruction

Yealink EASY VoIP

Defective Sort	Applicable Models	Category	Checking List	Possible Defective Reason	Suggested Fix Manner
Audio	All T4X IP phone models	□A1、No audio	□A11、The system can finish the bootup □A12、Has voice in handset □A13、Speaker once worked well □A14、Once connected with a non-original AC adapter □A15、Speaker has voice in play, while no voice in send □A16、Handset once worked well □A17、Handset has voice in play, while no voice in send □A18、Works well with a new handset	1、Fit A11, A12, 95% generally the audio amplifier break down. 2、Fit A11, A12, A13, A14, 99.9% must be audio amplifier burnout. 3、Fit A15, handfree microphone defect. 4、Fit A16, A17, A18, handset defect.	1、Replace audio amplifier U13, model: TPA6205A1, packing: SSOP-8. 2、Replace a handset if the handset has problem but the speaker works well. 3、Upgrade firmware if no audio both in handset and speaker, if still the same problem, replace the mainboard.
		□A2、Noise in conversation	□A21、Noise in local speaker □A22、Noise in local handset □A23、Noise in local headset □A24、When using speaker in handfree mode, the other party hears noise □A25、When using handset in handset mode, the other party hears noise □A26、When using headset in headset mode, the other party hears noise	1、Headset has noise in send generally because of the former shielded speakers. It uses a power supply with Y capacitance and when you hold the helix cable with a hand, there is acoustoelectric current in send, new headsets have fixed the problem. 2、Speaker & handset noise (electricity or background noise) generally because of electroacoustical component defect, or insufficient solder in devices. 3、Noise heard on the other party generally is handfree microphone defect. 4、Radio-frequency interference (mobile phone) because of short distance to the microphone.	1、Handset noise: replace a new handset. 2、Speaker noise: check if there is insufficient solder or short in the speaker circuit, otherwise, try to replace a new speaker. 3、Replace a new microphone. 4、Replace the mainboard if still the same problem.
		□A3、The volume heard on the other party is low.	□A31、The sending volume of local handset is low	1、Line sequence of handset is wrong welded. 2、Mistake the positive and negative of microphone cables.	1、Re-weld the cable. 2、Replace the handset.
Peripheral	T46	□B1、Bluetooth can not work	□B11、Bluetooth adapter cannot be identified by the system after being inserted	1、Bluetooth adapter is damaged. 2、USB protection chip is damaged.	1、Unplug and plug the bluetooth adapter again, check whether the power indicator of bluetooth and adapter flashes. If not, replace the USB protection chip U1(T46) on KB2 board, model: MP62551, packing: TSOT23-6. 2、Replace a new bluetooth adapter.

Display	T46	□D1、Display black screen	□D11、Power indicator is on □D12、Has voice in handset □D13、Once displayed correctly	1、Fit D11, D12, D13, posibility: LCD defect, productoin problem, backlight chip U4 defect. 2、Fit D11, don't fit D12, D13, generally the phone cannot start up normally. 3、Fit D11, D13, don't fit D12, generally the phone cannot start up normally.	1、Power off the phone and re-insert the LCD flat cable or replace the LCD, if LCD defect, the problem will be fixed. 2、If still the same problem, press FPC connector (for T46, press the left side of CON3; for T48, press the right side of CON6), check whether the problem is fixed, if so, maybe the FPC connector is defective, replace the FPC connector (we recommend to replace the mainboard directly). 3、If the problem still, replace U4, model: MP1488DJ-LF-Z, packing: TSOT23-6. 4、Power off the phone for at least 10 seconds, then power it on again. If still doesn't work, replace the mainboard.
		□D2、Display error	□D21、No display of certain horizontal line or vertical line □D22、Display black patches □D23、Screen flickers or interference stripes roll cycling	Fit certain items of D21, D22, D23, generally LCD defect.	Replace a new LCD.
		□D3、Display white screen after startup	□D31、Power indicator is on □D32、Has voice in handset □D33、Once worked well, display white screen after upgrading failed	1、Fit D31, generally U14 defect. 2、Fit D31, D32, generally insufficient solder in LCD resistance array or FPC connector, or LCD driving chip U3 defect (only for T48). 3、Fit D31, D33, generally flash software loss.	1、Replace DDR2 U14 , if problem still, replace the mainboard. 2、Re-weld RP1, RP3, RP5, RP7, RP8, RP9, RP10 , if problem still, check if there is insufficient solder in FPC connector(CON3), if still the same problem, generally LCD backlight circuit defect, replace U13, model: MP1540, packing: SOT23-5 (for T48). 3、Re-burn Flash U15.
	T41/T42	□D4、Display white screen	□D41、Power indicator is on □D42、Has voice in handset □D43、Once worked well, display white screen after upgrading failed	1、Fit D41, D42, D43, posibility: LCD defect, productoin problem, FPC cable broken. 2、Fit D41, D43, don't fit D42, generally SDRAM damage or flash software loss.	1、Replace a new LCD, if problem fixed, LCD defect. 2、If problem still, check if there is insufficient solder in RP3, RP8, RP1 and insufficient solder or short in FPC; if so, fix the problem and replace to the original LCD. 3、Replace the DDR2 U14. 4、Re-burn the flash U16.
		□D5、Display error	□D51、No display of certain horizontal line or vertical line □D52、No display of certain icons □D53、Display messy code	Fit certain items of D51, D52, D53, generally LCD defect.	Replace a new LCD.

Network	All series of T4X	□N1、 Internet port can't obtain an IP address	□N11、 MAC address displayed on the LCD is different from that displayed on the back label □N12、 Switch or router indicates connection (indicator LED is on) after Ethernet cable being plugged into the Internet port of the phone □N13、 LCD screen prompts "network unavailable" □N14、 LCD screen prompts "Cable Disconnected" □N15、 LCD screen prompts "updating network" □N16、 LCD screen prompts "obtaining IP address" □N17、 Can ping through with 'Static IP'	1、 Failed in burning MAC address. 2、 Fit N12, N13, N14, N15, N16, generally Internet port has soldering problem. 3、 Fit N12, N13, N14, N15, N16, N17, maybe software problem, Internet port has problem with initialization or failed in initializing. 4、 Fit N12, N13, N14, N15, N16, N17, maybe Internet port PHY fail.	1、 Re-burn the MAC address if it's incorrect. 2、 Check if there is insufficient solder, if so, fix the solder. 3、 Upgrade the software to the latest version. 4、 Replace the mainboard if all failed in above solutions.
		□N2、 PC port can't acquire IP	□N21、 PC indicates connection (indicator LED of network card is on) after Ethernet cable being plugged into the PC port of the phone		
Keys			□K11、 All keys can not work □K12、 Some keys can not work □K13、 Only one key can not work □K14、 Input a wrong key value □K15、 The phone reboots once by pressing a certain key	1、 Bad pin contacts of mainboard and KB1 board. 2、 Contaminated of golden pad or rubber. 3、 Key stuck results in all keys can't work.	1、 Check the connection of mainboard and KB1 board. 2、 Check if contaminated of golden pad or rubber, wipe and clean if less contaminated, replace KB1 board & rubber if heavy polluted. 3、 Reassemble the rubber & keys, fix the stuck key.
Power			□P11、 Can't power on with AC adapter □P12、 Can't power on with PoE □P13、 Can't power on with certain PoE switch	1、 Defective AC adapter. 2、 Abnormal PoE circuit.	1、 Replace a new AC adapter. 2、 Replace a new mainboard.
Software			□S11、 LCD screen stops at 'initializing' interface □S12、 LCD screen enters safety mode □S13、 Can't access to web user interface		1. Upgrade software through web user interface if it can be accessed to. 2. Upgrade software through recovery mode, refer to the specific documentation for operation guidance.

Touch Screen	T48	□T1、 Abnormal touch screen	□T11、 Touch screen can not work □T12、 Touch screen shifts	1、 Defective touch screen. 2、 Production problem. 3、 Damaged touch screen driving chip.	1、 Unplug and plug touch screen cable again, and check whether there is any response; if still the same problem, try to replace a new touch screen. If still the problem after doing above operations, replace the touch screen driving chip U22, model: TSC2046I, packing: QFN-16. 2. Re-adjust the touch screen, if still the same problem, replace a new touch screen.