Voiceware SIP Phone Testing Guidelines

Phone Brand & Model:	Fanvil H2
Test Date:	11/9/2020
Voiceware Version:	4.1.6 20201027
Phone Firmware Version:	1.4.1
Testing Agent:	Aaron Bailey
IP Address Shortcut Key	Hold #
Web UI Username & Password	admin/admin
Pass, Limited, Fail	Pass (see notes)

Testing

Testing is broken down into three different sections: the test, the result, and any comments about the success or failure of the test. Note that testing should always be performed using the latest firmware version available.

Test: describes what function or feature is to be tested. Some tests have the possibility for partial success (for example incoming but not outgoing audio), in this case comments should be left detailing what worked and what failed the test.

Result: Possible results include PASS (indicating the phone passed the test), NT (not tested, indicate why in the comment section), N/A (feature not available on the phone, again indicate why in the comments), FAIL (meaning the phone did not pass the test), and EXC (stands for Exception, the phone partially passed but there are issues with how it works or to the extent to which it works).

Comment: It is important that for any test that the phone does not pass detailed comments are left explaining why the phone did not pass or why the test was not preformed.

Test	Result	Comment
Test A	Pass	
Test B	NT	Not supported by Voiceware
Test C	N/A	No screen on this model
Test D	FAIL	MWI does not ever light
Test E	EXC	Ringdown works but only with 4 digit extensions

Basic Functionality

These tests focus on phone registration, incoming and outgoing calling, and basic network features.

Test	Result	Comment
Register the phone to Voiceware, ensure it registers and that a status of under 150ms is seen	Pass	
Set the phones IP address to a static IP address and ensure the phone remains functional	Pass	
Test ULAW codec	Pass	
Test ALAW codec	Pass	
Test G729 codec	Pass	
Enable NAT in the phones Devices entry and ensure that it will function on a different public IP	Pass	

Speed Dial and Related Functions

Tests in this section are designed to test speed dial, transferring calls, and the parking extension.

Test	Result	Comment
Test a simple speed dial to another extension	Pass	
Transfer a call to another phone using the phones built in transfer button	N/N	Phone does not have a transfer key
Transfer a call to another phone using the # key to use the Voiceware transfer	Pass	
Attended transfers retain the caller ID of the transferring phone	N/A	Phone does not have a transfer key
Blind transfers retain the caller ID of the original caller	N/A	Phone does not have a transfer key
Place a call in parking and then retrieve the call	Pass	

Basic Call Features

Tests in this section are designed to test the phones ability to handle calls in all normal situations.

Test	Result	Comment
Make a call from and to the device, ensure good audio quality	Pass	
End an incoming call to the device before it is answered, ensure that the phone stops ringing and returns to idle state	Pass	
Reject an incoming call, ensure the calling phone is sent to voicemail and that the phone returns to the idle state	N/A	Guest room phone with no reject key
End an ongoing call from the phone and ensure that the phone returns to the idle state	Pass	
End a call in progress from the other end and ensure the phone returns to the idle state	Pass	
Call waiting, while on a call the phone receives another incoming call. Ensure that the call waiting tone or ring is played and the phone display shows the new caller	N/A	Single line guest room phone
Begin dialing a phone number then stop, ensure that after the proper timeout the phone returns to the idle state.	Pass	Phone has no display and attempts to dial the number entered after about 5 seconds.

Digit Map

Testing here is intended to ensure that the phones digit map functions as expected and will timeout correctly.

Test	Result	Comment
Enter a digit map (such as 2XX) and ensure that extensions in the 200 range are dialed immediately	N/T	Phone does not seem to have a traditional digit map.
Attempt to dial a number beyond the digit map (i.e. 20055, using the above digit map) and ensure that the phone takes 200 and dials it without regard to the extra digits	N/T	Phone does not seem to have a traditional digit map.
Dial a number outside the dial plan, ensure the phone waits the correct amount of time then attempts the number	N/T	Phone does not seem to have a traditional digit map.

Multiple Lines

These tests focus on multi line functionality of the phone.

Test	Result	Comment
While on a call, and a 2nd call rings in, place the first caller on hold and speak with the new caller. Afterwards return to the first caller	N/A	Single line phone
While on a call place the caller on hold and make a new outbound call. Ensure that the first call can be reconnected	N/A	Single line phone
Test the ability to place callers on two separate lines into a conference call together	N/A	Single line phone
While all lines on the phone are full ensure that a new call to the phone fails over to voicemail	N/A	Single line phone

Voicemail

This set of tests will ensure that the phone can properly use the voicemail system within Voiceware.

Test	Result	Comment
Program the voicemail button to dial Voiceware's voicemail (normally 8000)	EXC	There is no voicemail button but a speed dial key can be programmed to 8000
Call the phone and leave a voicemail. Check to ensure that the MWI displays correctly and that the MWI will turn off when the message has been listened to.	Pass	Pass, the MWI lamp must be enabled in Phone Settings → Power LED
If testing a guest room phone ensure that the MWI can be turned on and off via the Browser Console	Pass	

Additional Features

These tests comprise miscellaneous features and functions that a phone might possess. Two additional spaces have been provided for special functions the phone might have.

Test	Result	Comment
Set up always on forwarding within the phone and ensure it works	Pass	Must be done via the GUI
Test forward on busy within the phone and ensure it works	Pass	Must be done via the GUI
Set up forward on no answer within the phone and make sure it works	Pass	Must be done via the GUI
Place a inbound caller on hold and check to make sure that the caller hears hold music and that the call can be resumed	Pass	
While on a call press the mute button and ensure that the caller cannot hear anything	Pass	
DND, place the phone in do not disturb mode and check to make sure that calls to the device go straight to voicemail	Fail	Checking the DND box in the GUI does not prevent calls from ringing in.

Test	Result	Comment
Set the phone to ringdown, pick up the handset and make sure it calls the appropriate number	Pass	
Phone display timeout, test that the phones menu timeout and return to the idle state	N/A	Phone has no display.

Cordless Functionality

These few tests check to ensure that a cordless handset will work correctly in all situations and that the phone itself is not useless without the handset.

Test	Result	Comment
While on a call take the handset out of range. Check to make sure the call ends and that the phone returns to an idle state	N/A	Not a cordless phone
With the handset out of range place an incoming call to the phone. Make sure that the phone rings and that it can be answered in hands free mode	N/A	Not a cordless phone
Test an outbound call using the hands free mode while the handset is out of range	N/A	Not a cordless phone
Test the locate handset feature while the handset is within range. Make sure that the handset beeps	N/A	Not a cordless phone
With the base unit unplugged turn on the handset, ensure that it does not present a dial tone and that it returns to idle after a timeout	N/A	Not a cordless phone
After a few minutes with no power to the base unit restore power and ensure the handset can again make calls	N/A	Not a cordless phone

Web UI and Firmware

This last set of tests checks for proper firmware and web UI functionality. Note that phone testing should always be done with the latest version of firmware whenever possible to give the phone the best chance of success. If updated firmware is unavailable make note of that in the appropriate section below.

Test	Result	Comment
Ensure that the phone updates to the correct time and date using NTP servers	Pass	
Log into the web UI from Internet Explorer, Firefox, and Chrome. Ensure that it is functional and its timeout works correctly	Pass	
Update the phone to the latest version of firmware using the web UI	Pass	Updated to 1.4.1 from 1.4
Reset the phone to factory defaults, check to ensure the phone resets and that all values are cleared.	Pass	

Notes:

This phone worked well. The only feature that did not work was DND but is not critical as normally phones will be put in DND from the Browser Console. Beyond that the only drawback to the phone is a lack of a transfer button but again this is a single line common area phone so a transfer button is not likely needed.