# Voiceware SIP Phone Testing Guidelines

Phone Brand & Model:	Fanvil H5
Test Date:	11/9/2020
Voiceware Version:	4.1.6 20201027
Phone Firmware Version:	2.10.2.6887
Testing Agent:	Aaron Bailey
IP Address Shortcut Key	Hold #
Web UI Username &	admin/admin
Password	
Pass, Limited, Fail	Pass

### **Testing**

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

**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	Pass	
of under 150ms is seen		
Set the phones IP address to a static IP address and ensure the	Pass	
phone remains functional		
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	Pass	
extension		
Transfer a call to another phone using the phones built in transfer button	Pass	
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	Pass	
Blind transfers retain the caller ID of the original caller	Pass	
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	No reject button, you can press mute to stop the ringing but it will not reject the call.
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	EXC	The tone plays but the display does not change. Also the only way I found to answer the second call is to end the first.
Begin dialing a phone number then stop, ensure that after the proper timeout the phone returns to the idle state.	Pass	After about 10 seconds the number entered is dialed.

## 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	Pass	In Line → Dial Plan → Dial Plan Table, tested with "8xx"
range are dialed immediately		
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	Pass	
Dial a number outside the dial plan, ensure the phone waits the correct amount of time then attempts the number	Pass	

## **Multiple Lines**

These tests focus on multi line functionality of the phone.

Test	Result	Comment
While on a call, and a 2 <sup>nd</sup> call rings in, place the first caller on hold and speak with the new caller. Afterwards return to the first caller	EXC	You hear a tone that a call is waiting but the only way to answer it is by ending the first call.
While on a call place the caller on hold and make a new outbound call. Ensure that the first call can be reconnected	Fail	There does not seem to be a way to do this.
Test the ability to place callers on two separate lines into a conference call together	Fail	There does not seem to be a way to do this.
While all lines on the phone are full ensure that a new call to the phone fails over to voicemail	Pass	

### 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	Pass	
dial Voiceware's voicemail		
(normally 8000)		
Call the phone and leave a	Pass	
voicemail. Check to ensure that the		
MWI displays correctly and that the		
MWI will turn off when the		
message has been listened to.		
If testing a guest room phone	EXC	Lamp can be turned on but not back off
ensure that the MWI can be turned		
on and off via the Browser Console		

### **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	
Test forward on busy within the phone and ensure it works	Pass	
Set up forward on no answer within the phone and make sure it works	Pass	
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	Pass	DND is set from Phone Settings → Features page, not on the Line page.

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

## **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	
Reset the phone to factory defaults, check to ensure the phone resets and that all values are cleared.	Pass	

#### Notes:

This phone preformed well. Any users of this phone should be aware that call waiting / multi line features are limited. Beyond that the phone's GUI is easy to use and the phone has many settings that should allow a wide range of customization.