

**Title:** Open WLAN Workaround for F-Link

**Subject:** F-Link bug workaround to bypass the presence of an open WLAN

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**Classification:** For internal use only

**Doc. Id** ID\_TM\_067\_MAN **Doc. Ver.:** R01.01

**History:**

Date	Version	Who	What
01.04.2015	R01.00	Elhz	Creation and release
16.08.2016	R01.01	Elhz	Simplification + additional illustration (internal reset button)

**Content**

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**1 Situation**

The F-Link firmware as of April 2015 has the following version number: 2-2-10 / 1-0-22. Firmware updates released until August 2016 still show the same behavior as described hereafter.

This firmware exhibits an unwanted behavior when during the configuration of the wireless network unprotected or open WLAN networks are found during the site survey sequence.

The effect is that the F-Link will automatically connect to the first and strongest of such WLANs without allowing the possibility of configuring or of choosing a particular one because it is no longer possible to access to F-Link's web GUI as the 192.168.1.200 address is no longer accessible.

It is also no longer possible to access to the F-Link's web GUI administration interface through LAN because it is switched off after the F-Link has obtained an IP-address from the Hotspot, nor trough WLAN; usually such open Hotspots do not allow connected devices to communicate to each other.

LEDs state after reboot in this situation: PWR, LAN, WI-FI and READY are steadily on, the others off.

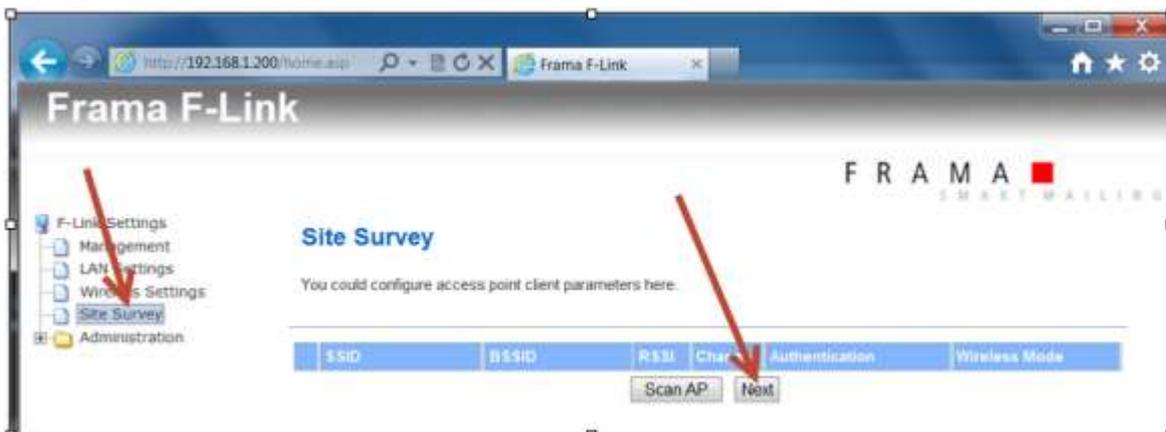
FRAMA AG CH-3438 LAUPERSWIL BERN / SWITZERLAND	TITLE: OPEN WLAN WORKAROUND FOR F-LINK SUBJECT: F-LINK BUG WORKAROUND TO BYPASS THE PRESENCE OF AN OPEN WLAN AUTHOR(S): ZAID EL-HOIYDI FILE: ID_TM_067_MAN_R0101.OPEN WLAN WORKAROUND FOR F-LINK.DOCX	MODIFIED: 16.08.2016 11:50 PRINTED: 16.08.2016 11:50	PAGE 1 OF 4 <b>FOR INTERNAL USE ONLY</b>
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## 2 Workaround

1. Remove antenna mechanically = carefully unscrew it from the F-Link.
2. Factory-reset the F-Link by pressing (with a ball pen point for example) while powered on for at least 5 seconds.

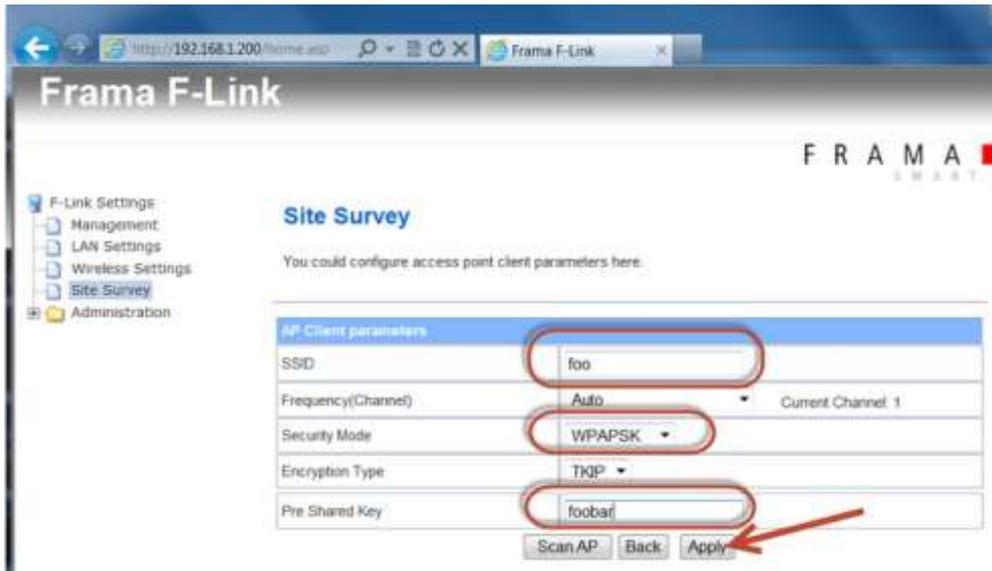


3. Start configuration for WLAN as usual. Make sure you access to the F-Link through a direct LAN-cable from your PC.
4. Go to F-Link's Wireless-Settings page and switch Wireless to **On**. F-Links will reboot itself and you will have to wait until the F-Link is up again, that is, until the "READY" LED reaches a steady green.
5. Navigate to the "**Site Survey**" page, where you should not see any WLAN (of course because the antenna is not yet connected). Click **Next**.



6. Enter a dummy **SSID** (here for example "foo"), switch to **WPAPSK** and also enter a dummy password. Push the "**Apply**" Button. Afterwards your F-Link device will reboot. Wi-Fi is on, but it cannot connect to any WLAN, therefore the LAN port on 192.168.1.200 remains open.

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7. Mount the antenna again
8. Navigate to the **“Site Survey”** page and select the WLAN where you want the F-Link to connect to. Now you can continue according to configuration manual<sup>1</sup>:
9. Select the wireless network which shall be used. Press button **“Next”**. If your wireless network uses Hidden-SSID then press button **“Next”** without selecting a wireless network.
10. Select the channel, security mode and encryption type for your wireless network. Insert the passphrase / security keys for your wireless network. Insert also the SSID of your wireless network even if it uses Hidden-SSID.

### Site Survey

You could configure access point client parameters here.

AP Client parameters	
SSID	FLINK-TEST
Frequency(Channel)	2437MHz (Channel 5) Current Channel: 1
Security Mode	WPA2PSK
Encryption Type	AES
Pre Shared Key	123456

11. Press button **“Apply”**. → Please wait. The wireless network will be connected (the execution of the command may need to be confirmed in your web browser).
12. Wait until the ready LED of the F-Link is switched on and remains steady

<sup>1</sup> Page 10 of [F\\_Link\\_Configuration\\_Manual\\_EN\\_R0114\\_18272.pdf](#)

13. When F-Link is able to build-up a wireless connection to your access point, the connection over the LAN port will be closed. The F-Link configuration page can therefore not be opened again by default IP 192.168.1.200 and a direct LAN cable connection.

If the configuration page was reloaded in your internet web browser with the default IP 192.168.1.200 the F-Link has no access to your wireless network. Check the wireless signal strength at the F-Link position and the wireless settings of F-Link (SSID, pass phrase, key, channel, ...)

14. Disconnect direct LAN network cable between F-Link and the PC.
15. Set the LAN network settings of the PC back to the previous values.

As an option you can preconfigure an F-Link according to steps 1 to 6 and send it to the customer to configure the remaining parts himself (steps 7 to 17).

If you know the credentials to connect to the desired WLAN (SSID, Security Mode, Encryption Type and Key phrase) then it's also possible to configure the WLAN in step 6 to the appropriate values and skip steps 8 and 9.

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