

Instruction Sheet

Subject: Frymaster Wireless Kitchen Connect Configuration Setup Instructions

Models affected: FQ4000 Fryers

Follow these instructions to configure the Kitchen Connect remote communication board for wireless communications.

- Frymaster manufacturing ships FQ4000 fryers with a wiring harness that provides:
 - Power to Kitchen Connect (KC) remote communication board
 - Access to FQ4000 CAN bus
 - Connectivity to External Kitchen Management System
- Separately, Frymaster manufacturing ships the FilterQuick Touch Fryer with KC remote communication board installed in the fryer. Access is provided to a USB port for KC remote communication board software upgrade. A Wi-Fi antenna is installed for Wi-Fi access.

1. On the initial installation, the service tech will have to configure the parameters listed in the config_settings.ini file on the USB drive by opening the file with Notepad++ utility available in Microsoft PC based machine. Right click on the file and Open with Notepad to edit the file (see Figure 1).
2. Enter the parameters listed below. The model number and serial number of the fryer can be located on the inside of the far-left door of the fryer on the rating plate.
3. Below are the parameters listed in this file. Some of the parameters are **case sensitive**; enter these parameters **exactly** as they are displayed.

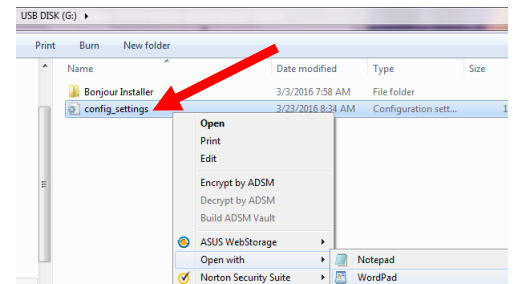


Figure 1

[Network]

STOREID: maximum 10 characters.ID of the store or unit number of the store

EQUIPID: Serial number of the Fryer

TCPPORTNO=20001 (No change all ways 20001)

UDPPORTNO=20002 (No change all ways 20002)

DHCP=YES

NUMBER OF UI=2(Allowed 1-6. Based on number of UI's configured we need to provide each UI type)

UI1TYPE=FULL (it should be FULL or SPLIT)

UI2TYPE=FULL (it should be FULL or SPLIT)

SSID=SSID (SSID of the store network)

SSIDTYPE=HIDDEN (it should be hidden or blank based on the store Wi-Fi configuration)

TYPE=WPA-PSK (SSID type it can be NONE/WPA-PSK/WPA2-PSK)

PASSWORD=PASSWORD (this parameter should be removed if the TYPE=NONE)

4. Click on File and Save or Save the modified file on a blank USB stick that is formatted with FAT32 (see Figure 2).
5. Click on Eject USB Flash Disk (see Figure 3).
6. Remove USB drive from computer.
7. Ensure the fryer has completely power cycled.
8. Check that the gateway board has completely booted by checking the software in the information screen. Proceed to next step to check the gateway version.

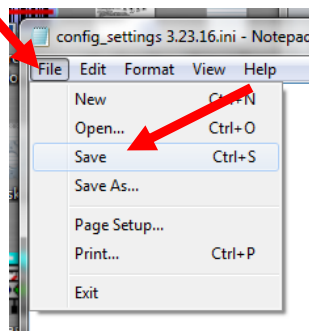


Figure 2

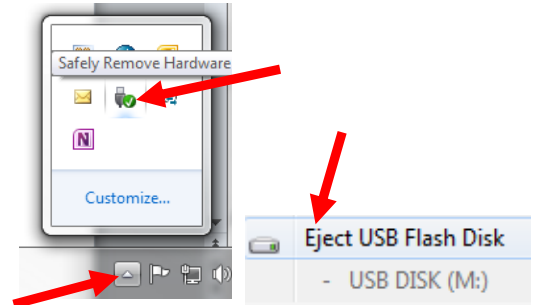


Figure 3

9. Press the HOME button (see Figure 7).
10. Press the ? button (see Figure 8).
11. Press the down arrow button (see Figure 9).
12. Press the software version button (see Figure 10).

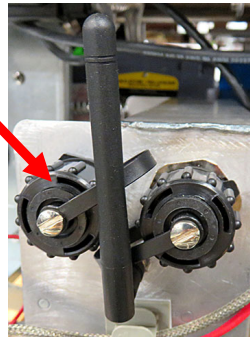


Figure 4



Figure 5

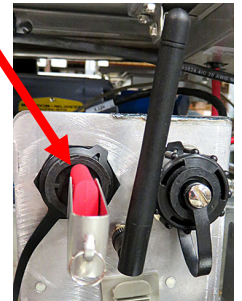


Figure 6

13. Press the down arrow button two (2) times (see Figure 11).
14. The gateway software version and other information is shown (see Figure 12).

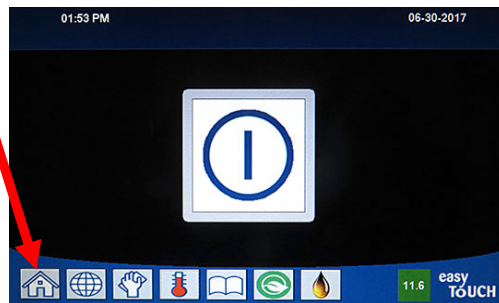


Figure 7

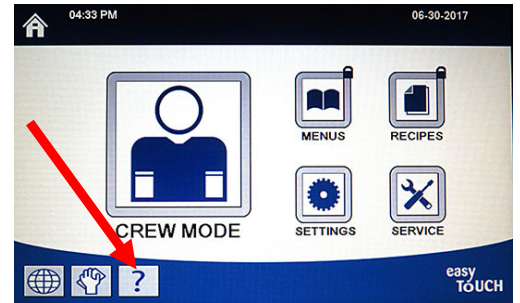


Figure 8

15. Remove the JIB if applicable and locate the USB port closest towards the front side of the fryer (see Figure 4).
16. Unscrew the USB port cover (see Figure 5).
17. Insert the USB drive into the USB port (see Figure 6) for two (2) minutes.
18. After two (2) minutes, remove the USB drive; reattach the USB cover and power cycle the fryer.
19. After the fryer has completely power cycled, proceed to the next step to confirm the Kitchen Connect Gateway software version.
20. Press the "HOME" button (see Figure 7).
21. At the home startup screen press the "?" button (see Figure 8).

22. Press the down arrow button (see Figure 9).
23. Press the software version button (see Figure 10).
24. Press the down arrow two (2) times (see Figure 11).
25. The gateway software version and other information is shown (see Figure 12).

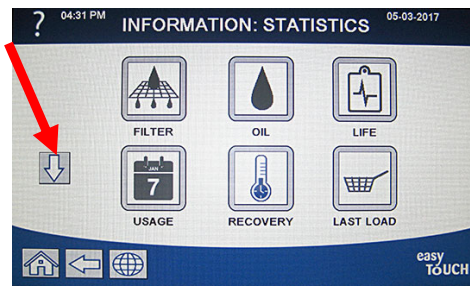


Figure 9



Figure 10

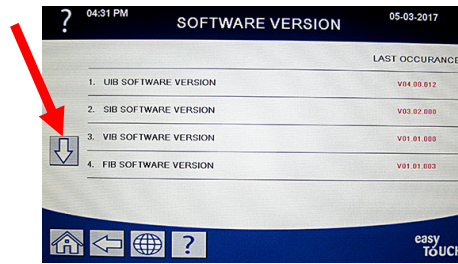


Figure 11

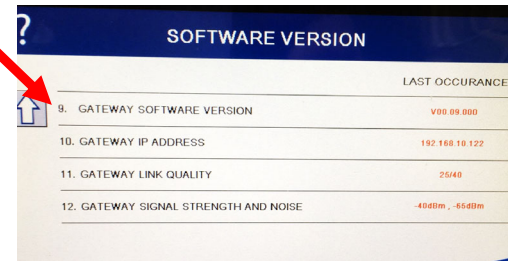


Figure 12

KCCM board BSP software upgrade process

Note – This process will erase/wipe out stored events and connectivity parameters. After this upgrade process, you will have to configure KCCM for connectivity parameters.

- Format a USB stick in FAT32 format.
- Place KCCM software (Rootfs.ubi*, u-boot.scr and ulmage-3.10-ts-armv7l) on the USB stick.
- Remove the JIB if applicable and locate the USB port. Refer to Figure 4 for locating the USB port.
- Unscrew the USB port cover (see Figure 5)
- Insert the USB drive into the USB port (see Figure 6)
- Completely power cycle the fryer and wait for 4 minutes
- After four (4) minutes, remove the USB drive; reattach the USB cover, proceed to the next step to confirm the Kitchen Connect Gateway software version.
- Press the “HOME” button (see Figure 7).
- At the home startup screen press the “?” button (see Figure 8).
- Press the down arrow button (see Figure 9).
- Press the software version button (see Figure 10).
- Press the down arrow two (2) times (see Figure 11)
- Latest gateway software version should be displayed, and other information is shown (see Figure 12)

KCCM board tar file upgrade process

Note – This process will upgrade application software, it will retain stored events and connectivity parameters.

- Format a USB stick in FAT32 format.
- Place KCCM tar file on the USB stick.
- Make sure that Fryer is powered up.

- If the Gateway board is booted completely it will display the software version in information screen.
- How to check Gateway board software version:
 - Press the “HOME” button (see Figure 7)
 - At the home startup screen press the “?” button (see Figure 8)
 - Press the down arrow button (see Figure 9)
 - Press the software version button (see Figure 10)
 - Press the down arrow two (2) times (see Figure 11)
 - The gateway software version and other information is shown (see Figure 12)
- Unscrew the USB port cover (see Figure 5)
- Insert the USB drive into the USB port (see Figure 6) for two (2) minutes
- After four (2) minutes, remove the USB drive; reattach the USB cover, power cycle the fryer.
- After the fryer has completely power cycled, proceed to the next step to confirm the Kitchen Connect Gateway software version
- Press the “HOME” button (see Figure 7).
- At the home startup screen press the “?” button (see Figure 8).
- Press the down arrow button (see Figure 9).
- Press the software version button (see Figure 10).
- Press the down arrow two (2) times (see Figure 11)
- Latest gateway software version should be displayed, and other information is shown (see Figure 12)

Debugging steps

- If the UI displays the software version then CAN bus cable is connected and working. If the software version is all zeros (0), the Gateway is not connected or terminated. Otherwise, service person will have to check CAN bus wiring and ensure that wiring is OK and there is CAN bus termination.
- The first number on gateway link quality (refer to Figure 12 and item #11(Gateway Link Quality) which is shown at 25/40) is the difference between received signal strength and background noise level. This number is called SNR.
Below is breakdown of first number:
 - 40dB = Excellent signal; always associated; lightning fast.
 - 25dB to 40dB = Very good signal; always associated; very fast.
 - 15dB to 25dB = Low signal; always associated; usually fast.
 - 10dB - 15dB = Very low signal; mostly associated; mostly slow.
 - 5dB to 10dB = No signal; not associated; no go.
- Gateway signal strength and noise (refer to Figure 12 and item #12). Signal strength from -20 dbm to -65 dbm is good connection. Noise level should be below -70 dbm to -95dbm
- If the IP address is not being displayed but the link quality and signal strength are good, then the Wifi access point has some issues or configuration file needs to be checked and update again.