Frymaster®

Instruction Sheet

Follow these steps to update the fryer and install FQLink.

NOTE: FQLink <mark>ONLY</mark> functions on fryers with at least ONE (1) Common Controller (see Figure 1) installed in the far-left Vat #1 position.

Subject: FQ4000 General Market FQLink Installation Instructions

Models affected: FilterQuick 4000 (Touch Screen) Fryers

12.10.24

Figure 1

STEP 1: CONFIRM COMMON CONTROLLER IS INSTALLED

1. The fryer **MUST** have at least **ONE (1)** Common Controller (see Figure 1) installed in the battery. It must be located in the far-left Vat #1 position. If a Common Controller is installed in the far-left Vat #1 position, continue to step 2. The Common Controller can be identified by the large silver metal bezel that surrounds the touch screen. If the fryer **<mark>DOES NOT</mark>** have a Common Controller installed, **<mark>DO NOT PROCEED</mark>**. **A controller conversion kit will need to be installed in the far-left vat #1 position prior to continuing to STEP 2 for installation.**

Figure 2

STEP 2: UPDATE THE FRYER SOFTWARE

1. Locate the USB with the **<mark>FRYER SOFTWARE FILES</mark>** and follow the enclosed instructions to update the fryer software using the USB port on the **FAR-LEFT** side of the fryer, just inside the left fryer door (see Figure 2). The software versions after update should be: UIC – 10.89.022: VIB – 01.03.003; FIB – 10.99.109

Figure 3

STEP 3: DISCONNECT KCCM & RELOCATE MODEM (IF INSTALLED)
For 30lb fryers continue to step 1 below. For 60, 80, 100 & 120 fryers skip to step 6 below

1. Disconnect power from the fryer.
2. For 30lb fryers open the **FAR-RIGHT** door of the fryer or door with the oil reservoir (it may be third door from the left in 4 vat fryers or larger) (see Figure 3).
3. Remove the JIB/BIB to access the FIB box (see Figure 3). Note: The appearance of the FIB box may differ depending on date of manufacture.

4. Remove the FIB box cover by removing the two (2) ¼" screws attaching the cover and lifting on the cover to remove (see Figure 5). This box may vary by date of manufacture.
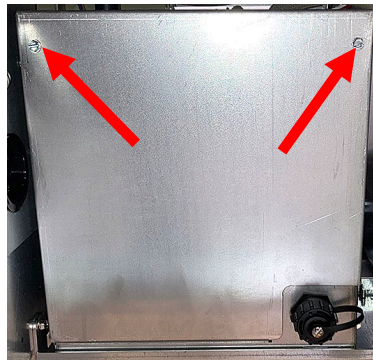
5. The KCCM board is located on the right side or rear of the FIB box (see Figure 6) depending on date of manufacture. Prior to starting, disconnecting the J1 harness may provide easier access to the RJ connectors on the FIB board (see Figure 6 & 6A).
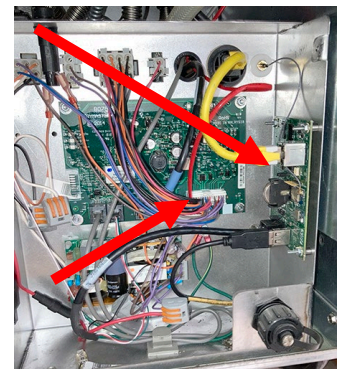
6. In FQ60, FQ80, FQ100 and FQ120 fryers, the KCCM board may be located in the control box, behind a controller.
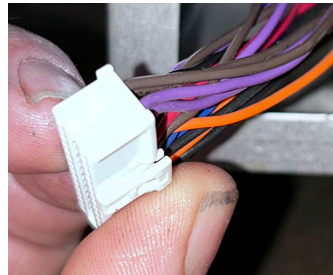
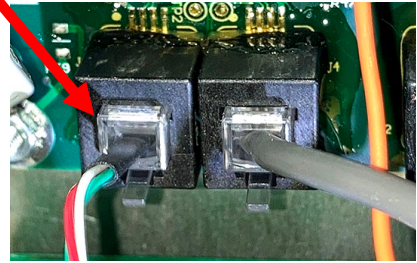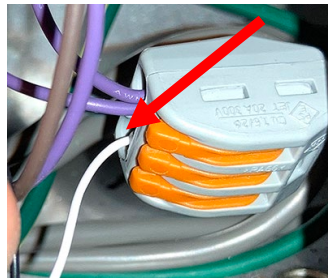7. Disconnect the RJ11 KCCM CAN/power Harness (see Figure 7) from the FIB board.
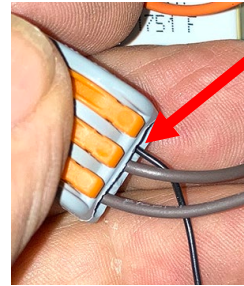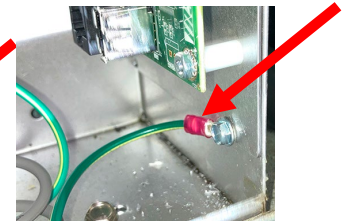
8. Disconnect the white & black wires from the harness in the previous step from the Wago snap connectors (see Figure 8 & 9.
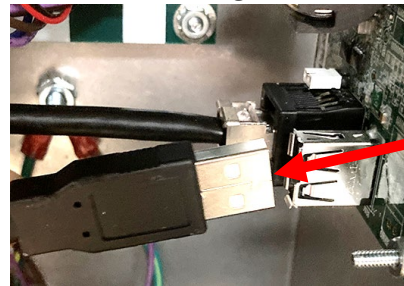
9. Cut or disconnect the green ground wire of the harness from the box (see Figure 10).

10. If a cellular modem is **NOT CONNECTED** to the KCCM board, skip to step 10. If a modem is connected, disconnect the cellular modem USB cable from the KCCM board (see Figure 11).

11. Disconnect the RJ45 connector from the KCCM board (see Figure 12). Discard the complete harness, it will no longer be used. The KCCM board will remain in the box.

12. Connect the supplied RJ11 CAN terminator to the connector on the FIB board from step 7 above (see Figure 13).

Figure 5

Figure 6

Figure 6A

Figure 7

Figure 8

Figure 9

Figure 10

Figure 11

Figure 12

Figure 13

WELBILT

Frymaster

13. If a cellular modem is installed continue to the next step. If not skip to step 17.
14. If applicable, relocate the cellular modem underneath or Relocate the cellular modem between the controllers on the rear of the bezel using double sided tape (see Figures 14 and 14a).

Figure 14

Figure 14a

15. If antenna extensions were used, disconnect the extensions and connect antennas directly to the modem (see Figure 15). Ensure the antennas are parallel to each another (see Figure 16).
16. Using the supplied USB cable, route the USB cable from the modem to the rear of the vat #1 controller.
17. Connect to the USB plug on the rear of the Vat #1 controller. If a cooling housing is installed, connect a splitter between the USB cable modem and the cooling fan cable (see Figure 17).
18. If connecting using ethernet, route the ethernet cable to the rear of the Vat #1 controller ethernet connection and connect to the controller (see Figure 18).
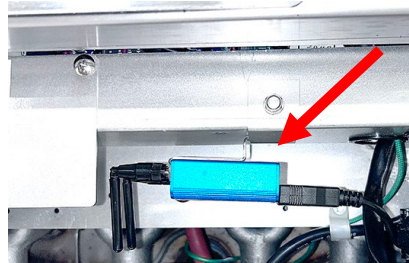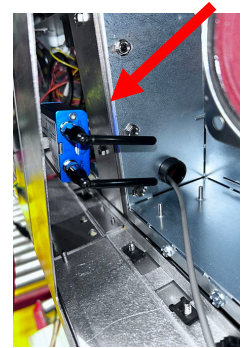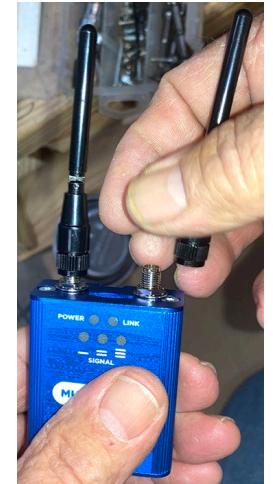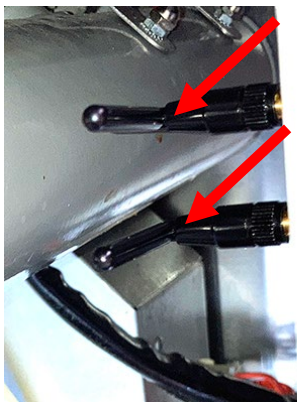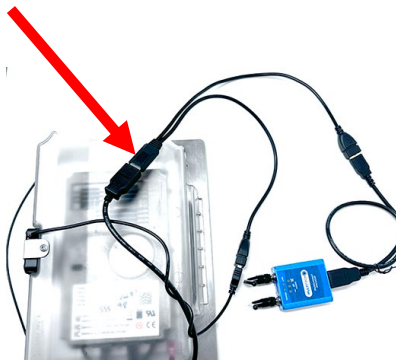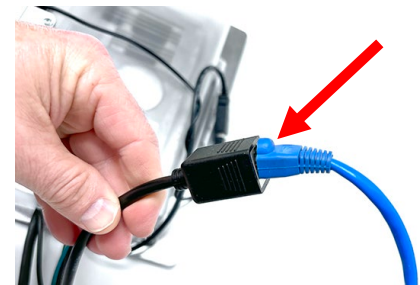
Figure 15

Figure 16

Figure 17

Figure 18

STEP 4: INSTALL THE IoT AGENT SOFTWARE

1. Ensure all controllers are OFF and in the standby mode (see Figure 19).
2. Locate the USB with the **IoT AGENT SOFTWARE FILES** and insert the USB drive into the USB port on the **FAR-LEFT** side of the fryer, just inside the left fryer door (see Figure 20). The USB port may differ in appearance based on date of manufacture.
3. Wait for the controller to reboot.
   a. The process should take about three & a half (3½) minutes.
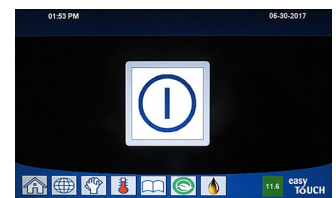   b. The controller will be unresponsive to touch after two & a half (2½) minutes.
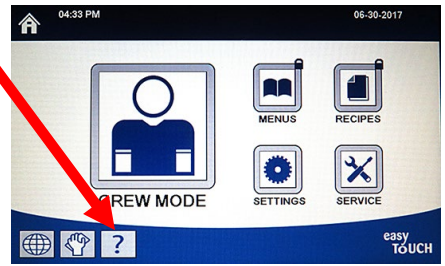
Figure 19

Figure 20

WELBILT

c. If the controller **DOES NOT** reboot after five (5) minutes, leave the USB drive inserted and reboot the entire fryer. Once it's finished rebooting, go back to 3.a. on the previous page.

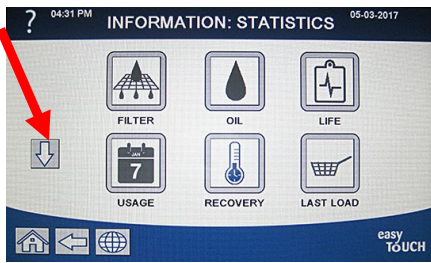4. Wait two (2) minutes and press the "**HOME**" button on the (see Figure 21).

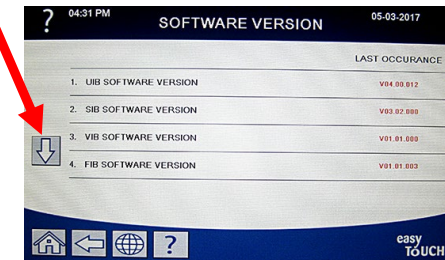5. Press the **?** button (see Figure 22).

6. Press the down arrow button (see Figure 23).

7. Press the software version button (see Figure 24).

8. Press the down arrow button **TWO** (2) times (see Figure 25).

9. The **GATEWAY SOFTWARE VERSION** should be **60.99.018 for AWS or 61.99.032 Generic** (see Figure 26). If not, repeat steps 1-8 of this section. If after two tries of loading the software and the version below is **NOT** displayed, go to STEP 4 (Troubleshooting) on the last page.

Figure 21

Figure 22

Figure 23

Figure 24

Figure 25

Figure 26

V60.99.018 AWS or 61.99.032 Generic

10. Press the "HOME" button (see Figure 21) when finished.

11. This concludes installing hardware and updating software. The instructions on the following pages are for techs that are connecting the fryer to the cloud.

STOP!!!!   THE NEXT SECTION SHOULD ONLY BE COMPLETED BY PERSONNEL THAT HAVE THE PASSWORDS, SSID, ETC. TO CONNECT THE FRYER TO THE CLOUD.

Appendix A

<mark>This section should ONLY be completed by IT departments or other personnel with the passwords, SSID, etc. to connect the fryer to the cloud.</mark>

STEP 1: EDIT THE CONFIG SETTINGS

1. Press 🏠 **SETTINGS** → ⚙️ → 👷 **SERVICE** → **9000** → ✓ → ⬇️ **6X** → **CONNECTIVITY**

2. Select **SERIAL NUMBER**.
3. Enter the serial number that is located inside the door of the far-left fryer and press √.
4. Select **CONNECTION TYPE**.
5. Select **DISABLE** to disable FQLink; **ETHERNET** if connecting via Ethernet; **WIFI** if connecting via WiFi; **CELLULAR** if connecting via Cellular and press √.
6. Controller displays **SETUP COMPLETE RESTART THE SYSTEM**.
7. Press √.
8. Select **KEY TYPE**.
9. Select the security type **NONE; EWPA-PSK/WPA2-PSK; WPA-NONE; WPA-EPA** and press √.
10. Controller displays **SETUP COMPLETE RESTART THE SYSTEM**.
11. Press √.
12. Select **SSID**.
13. Enter the SSID address of the store network to connect the fryer to and press √.
14. Controller displays **SETUP COMPLETE RESTART THE SYSTEM**.
15. Press √.
16. Press ⬇️
    Select **PASSWORD**. This parameter can be blank if it is open or unlocked network.
17. Enter the network password and press √.
18. Controller displays **SETUP COMPLETE RESTART THE SYSTEM**.
19. Press √.
    Settings below apply <mark>ONLY</mark> to cellular modem configurations. If using WIFI or Ethernet skip to step 32.
20. Select **APN**.
21. Enter the APN settings provided by the network provider and press √.
22. Controller displays **SETUP COMPLETE RESTART THE SYSTEM**.
23. Press √.
24. Select **PROVIDER**.
25. Enter the provider settings provided by the network provider and press √.
26. Controller displays **SETUP COMPLETE RESTART THE SYSTEM**.
27. Press √.
28. Select **DIALIN**.
29. Enter the modem dial up number provided by the network provider and press √.

30. Controller displays **SETUP COMPLETE RESTART THE SYSTEM**.
31. Press √.
32. Press 🏠
33. Power cycle the entire fryer by **PRESSING** and **HOLDING** the black toggle reset switch for **60 SECONDS**. The reset switch is located either under the USB port, near the USB port or under the control box (see Figures 26 and 27).
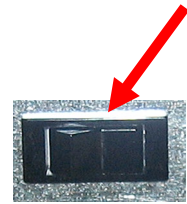

Figure 26

Figure 27

STEP 2: CONFIRM THE IP ADDRESS

1. **WAIT FIVE (5) MINUTES** before proceeding to the next step.
2. Press the "**HOME**" button on the (see Figure 28).
3. Press the **?** button (see Figure 29).
4. Press the down arrow button (see Figure 30).
5. Press the software version button (see Figure 31).
6. Press the down arrow button **TWO** (2) times (see Figure 32).
7. The **GATEWAY IP ADDRESS** is shown. The **GATEWAY SOFTWARE IP ADDRESS** should have some numbers that are **NOT ALL ZEROS** (see Figure 33). **NOTE: The IP address may be different than shown below (see Figure 34 on the following page).** If only zeros are shown, power cycle the entire fryer battery and wait 5-10 minutes before checking the software version and IP address again. **NOTE: An IP address should NOT start with 4 or 82**. If so, then it is
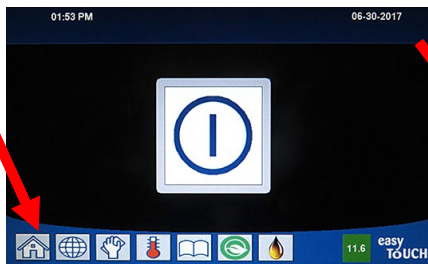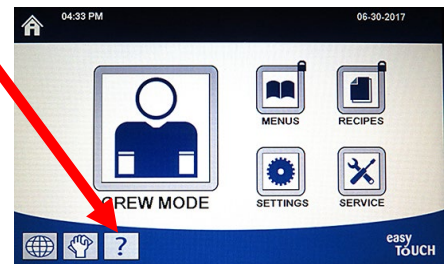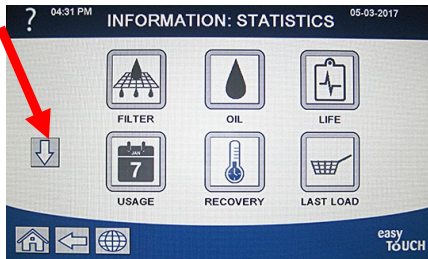

Figure 28

Figure 29

Figure 30

Figure 31

Figure 32

| 10. GATEWAY IP ADDRESS | 192.168.10.122 |

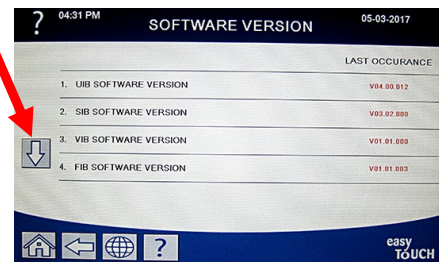**Figure 33**

not connected. If is not connected, repeat steps 1-7 of this section. If after two tries of loading the software and the version above is **NOT** displayed, go to STEP 5 (Troubleshooting) below.

Figure 34

8. Confirm the IO address matches with what the router displays.
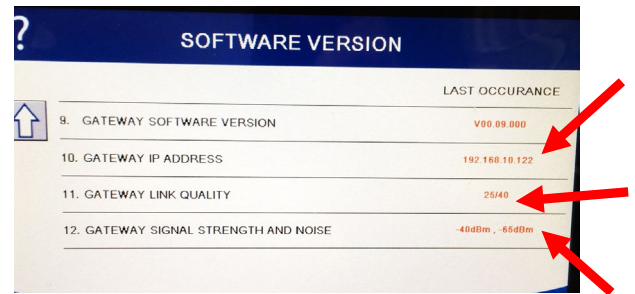9. Press the "HOME" button (see Figure 28) when finished.

STEP 3: CONFIRM THE UNIT APPEARS IN THE CLOUD

1. Confirm that the unit appears online in the cloud.

STEP 4: VERIFY DATA IN THE CLOUD

1. Perform a cook on the fryer.
2. Perform a filter on the fryer.
3. Confirm that the cloud displays the proper cooks and filters performed on the fryer.

STEP 5: TROUBLESHOOTING

1. If the software version is all zeros (0), **WAIT AN ADDITIONAL FIVE (5) MINUTES and recheck using steps 1-7 in STEP 2 (Confirm the IP address).**
2. The first number on gateway link quality (refer to Figure 34) in #11 (Gateway Link Quality) which is shown at 0/40) is the difference between received signal strength and background noise level. This number is called SNR (Signal-to-noise ratio).

    Below is breakdown of first number:
    a. 40dB = Excellent signal; always associated; lightning fast.
    b. 25dB to 40dB = Very good signal; always associated; very fast.
    c. 15dB to 25dB = Low signal; always associated; usually fast.
    d. 10dB to 15dB = Very low signal; mostly associated; mostly slow.
    e. 5dB to 10dB = No signal; not associated; no go.
3. Gateway signal strength and noise (refer to Figure 34 #12). Signal strength from -20 dbm to -65 dbm is good connection. Noise level should be below -70 dbm to -95dbm
4. If the IP address is not being displayed but the link quality and signal strength are good, then the modem or KitchenConnect has some issues and/or configuration file needs to be confirmed for accuracy and updated again.