2016 Samsung Refrigeration Update SAMSUNG



2016 Family Hub- Intro



- The Kitchen is the central living and entertaining room in the home
- It is where we meet, talk, and share what's most important throughout the day



2016 Family Hub- Intro



- Remember when your Fridge was covered with Magnets, Pictures, Notes, Reminders, Grocery Lists, Kid's Artwork?
- With the increased popularity of Stainless Steel in kitchens, the front of th e Refrigerator is no longer the place to hold magnets, display art work, an d communicate with your family.
- The traditional family "bulletin board" moved somewhere else-another roo m or on your phone, tablet or computer or went away entirely.
- What was once there for all to see and share, now resided privately on m ultiple devices.



Family Hub Connect Family, Home and Services Launching : Feb. 2016, Regions : Korea, US, EU and China



ood Management

View Inside cameras **Online Grocery Shopping** Recipes **Shopping List**

Entertainment

Pandora /Tune-in Radio **TV** Mirroring + BT Speaker connection

amily Comm.

Schedule (Google/Outlook) Photo Sharing Memo



Samsung Smart Home SmartThings connectivity

SAMSUNG

Coming Soon!









2016 Family Hub – Features Learning Demo videos





2016 Family Hub – Features Compartment View

SAMSUNG

Cameras in the Refrigerator capture images every time the door is closed



"Do I have enough peppers for the salad I want to make tonight?"

Of Lineye smart fridge shopping assistant

"Hmm.. I should check what's in my fridge."



"Oh, I have more than enough. I don't need to buy more today."

Door cameras takes a picture every time the door closes







Customers can tag expiration date by dragging and dropping badge, manually add items. It will notify expiration on the screen and their mobile.

2016 Family Hub – Features Groceries App / Club Chef **SAMSUNG**



Consumers can search item by using search item menu.



Club des Chef has more 500+ high quality cuisines. It has a plan to support voice service (TTS).

2016 Family Hub – What is Smart Home?

SAMSUNG

□ Connected and Control Your Home using Wi-Fi feature



2016 Family Hub – Features Smart Home

SAMSUNG

0. Download app from google play or Apple App Store.

- 1. Use the Add Device button(+) to proceed with the registration.
- 2. Select the refrigerator.
- 3. Provide the configuration information for your router or modem.
- 4. Follow the onscreen instructions to configure the settings of the refrigerator.
- 5. Go to Easy connection in Settings and click the connect button.
- 6. When the registration is completes, the refrigerator icon appears on the app.

Devices	Add device	Add device	Add device	< Easy connection	Devices
+ Add new	Select an appliance you want to register. Image: Air Conditioner Image: Room AC Image: System AC Image: System AC Image: Washer Image: Dryer Image: Refrigerator	Please input AP password to connect Refrigerator to the wireless router. AP Name: Signal Status: Excellent	 My device authentication If your refrigerator has an LCD screen, go to Settings and Press the Easy Connector' button. If your refrigerator has an LED panel, press the Fridge Temperature Control key for 5 seconds and wat unti you can see 'AP' on the display. Network Settings In progress of authentication 	Eusy connection	Add new Reirigerator
	Oven	Cancel Next	Cancel		

2016 Family Hub – Features TV Mirror



2016 Family Hub – Features Pair Bluetooth Speakers **SAMSUNG**

Stream Pandora and TuneIn Radio on the Family Hub Refrigerator

Play music through the built in speakers or pair with Bluetooth speakers









2016 Family Hub – Fridge Manager

SAMSUNG



Consumer can check and change temperature and settings of refrigerator with easy-to-understand GUI

SAMSUNG

Engineer Mode and Troubleshooting



SAMSUNG



14

Entering Engineer Mode







SAMSUNG

Load Status (Load Mode)

Load Status will show what components are currently running or activated on the Samsung Fridge

This mode is useful when troubleshooting communication signals



System Information Model Option Energy Information	Load Status Force Run	Self Diagnosis Refrigerator Option	Error History
Engineer Mo	ode ARTED ===	Prc 26 se	cessing





Engineer Mode – Self Diagnosis

SAMSUNG

1. When Self Diagnosis is pressed the unit will automatically check all internal components that will be listed.

				LIST - Self Diagnosis
System Information	Load Status	Self Diagnosis	Error History	1: Freezer sensor error
Model Option	Force Run	Refrigerator Option		2. Fridge sensor error
				4: Freezer defrost sensor error
				5: Fridge defrost sensor error
Energy Information			6: Ambient sensor error	
_				9. Convertible zone sensor error

2. When Self Diagnosis is pressed the unit will automatically check internal components.

Engineer Mode 57 sec

3. If an error is detected, you can click on the error to view possible check points

13: Humidity sensor error

14: Fridge Ice maker sensor error

15: Ice room sensor error

16: Fridge humidity sensor error

21: Freezer fan error

Information

The voltage between the Main PCB CN30 pins 7 and 9 should be within the 4.1V^{*0.8V} range.

Engineer Mode – Error History

SAMSUNG







2. To clear the recorded errors click the button labeled "Clear Error list"







TDM – 4 Way Valve



Engineer Mode – Force Run (Force Mode)

LIST - Force Tes			
TEST CANCEL			
FORCE RUN 1(FF)			
Force RUN 2(FF r)			
FORCE RUN 3(FF F)			
Force RUN 4(FF C)			
FORCE DEFROST (Fd)			
	1		
System Information Load Status	Self Diagnosis	Error History	
Model Option Force Run	Refrigerator Option		
Energy Information			

- FF: Comp Run and Valve in "Swing" mode (valve moves based on compartment sensor)
- FFr: Comp Run and Fridge Valve (Yellow) on
- FFf: Comp Run and Freezer Valve (No Color) on
- FFc: Comp Run and Convertible Zone Valve (Red) on
- FD: Forced Defrost (Compressor OFF)





SAMSUNG



<u>Step 1:</u> Turn off the Family Hub. The switch is under the cover at the top of the right door. Its important to Always shut off power to avoid damage





SAMSUNG



<u>Step 2:</u> Remove the screw and cover at the top of the door



Step 3: Using a long magnetic screwdriver, carefully remove two screws



SAMSUNG



<u>Step 4:</u> Attach a suction cup to the Family Hub near the top. Carefully pull out the assembly (LCD Panel).







Avoid stretching the wiring too far, the harness or connector may become damaged if stretched too far.



SAMSUNG



<u>Step 5:</u> Remove the back cover from the assembly (LCD panel) and move the WI-FI module from the old assembly to the new assembly.









SAMSUNG



Step 6: Install the back cover onto the new assembly



Re-Install the Family Hub

SAMSUNG



Re-Installing

<u>Step 7:</u> Attach all wiring to the main board connectors and reinstall the assembly into the door. Reinstall the 2 screws



Turn the family hub switch on and reinstall the Switch cover and top cover



Replacing and Testing WI-FI Module





Replacing and Testing WI-FI Module

SAMSUNG



2.

Have the customer enter their Wireless password



3.

Check the Wi-Fi Icon and check apps are loaded

If not loaded check MAC address and Wi-Fi signals



No Power to the Family Hub (blank screen)





No Power to the Family Hub (blank screen)

SAMSUNG



If No Power to the display, first shut off the power to the Display at the top of the door





At the top of the door wire harness - Check each Black wire to each Blue wire for approx. 12V



3.

If 12V is not detected at the top of the door, check for 12V at the Power board (SMPS). If no voltage replace (SMPS)













4.