



Samsung "Wi-Fi Whisper", wall mounted evaporator, split system

Job Name _____
 Purchaser _____
 Submitted to _____
 Unit Designation _____

Location _____
 Engineer _____
 Reference _____ Approval _____ Construction _____
 Schedule # _____

Specifications

Model	System Model Number		AR18HSFSJWK
	Indoor Unit Model Number		AR18HSFSJWKN
	Outdoor Unit Model Number		AR18HSFSJWKX
Performance	Nominal Capacity	Cooling / Heating (Btu/h)	18,000 / 20,600
	Capacity Range	Cooling (Btu/h)	5,459 - 23,884
		Heating (Btu/h)	4,094 - 27,296
	SEER / EER		20.5 / 13.1
	COP		3.84
	HSPF		9.0
Condensate (pints/hour)		4.4	
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)		176 - 254 (max. 3% deviation from each)
	Operating Current (Low/Std./High)	Cooling (A)	1.8 / 6.2 / 9.7
		Heating (A)	1.5 / 7.3 / 10.5
	Maximum Current Cooling/Heating (A)		14.0 / 17.5
	Max. Breaker Amps		20
	Min. Circuit Ampacity (A)		17.7
Dimensions	W X H X D (inches)	Indoor Unit	41 7/8 X 11 9/16 X 12 1/2
		Outdoor Unit	34 5/8 X 31 9/32 X 12 3/16
	Weight (lbs.)	Indoor Unit	31
		Outdoor Unit	117
Condensate Connection		1 1/16" OD	
Heat Exchanger	Indoor & Outdoor Unit	Type	Aluminum Fin - Copper Tube
		FPI	18
		Pipe Diameter	1/4"
	Indoor Unit	Main and Sub coils	2 row / 14 step
		Upper Coil	1 row / 10 step
Outdoor Unit		2 row / 24 step	
Sound Pressure Level	Indoor Unit (dB)	Quiet / High	25 / 41
	Outdoor Unit (dB)	High	51
Operating Temperatures (°F)	Outdoor	Cooling	Standard: 14 ≤ T ≤ 115 0 ≤ T ≤ 115 with wind baffle accessory
		Heating	5 ≤ T ≤ 75
	Indoor	Cooling	61 ≤ T ≤ 90
		Heating	T ≤ 80
Pipe Connections	Indoor & Outdoor	High side (flare)	1/4"
		Low side (flare)	1/2"
	Maximum / Minimum Line Set Length (ft.)		98' / 10'
	Maximum Vertical Separation (ft.)		50'
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
	Factory Charge	oz.	70.5
	Charged for Additional Refrigerant		25' 0.16 oz./ft. over 25 ft.
Compressor	Manufacturer		Samsung
	Type		DC, Inverter Driven, Rotary
	RLA	A	8.3
	Operating Frequency (Hz)	Cooling (low/std./high)	15 / 47 / 73
Heating (low/std./high)		15 / 54 / 72	
Evaporator Fan	Type		BLDC motor with cross-flow fan (1)
	Air Volume	CFM (max.)	640
	Consumption	Watts	27
	Operating Current	Amps	0.12
Condenser Fan	Motor		BLDC motor with axial fan (1)
	Output	Watts	97.5
	FLA	Amps	0.37
Optional Accessories	Condensate pump		ASP-MO-UNIV 110-250
	Wired Controller	Standard	AR-WRS (includes sub-PCB and MWR-WH00 controller)
		Premium	AR-WRP (includes sub-PCB and MWR-WE10 controller with scheduling)
	Line sets - insulated and flared, interconnect cables included		25' - ILS2507 50' - ILS5007
	Wall bracket (for outdoor unit)		CKN-250 or CKN-500
	Wind Baffle / Guard	Front	WBMF-9/12/18
	Back	WBMB-9/12/18/36	
Safety	Certifications		ETL & ETLc
	Devices		PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage protection, crankcase heating, temperature limit protection logic, compressor overload sensing
Warranty	10 Years compressor, 10 Year Parts, 90 Day DOA Allowance		



(actual equipment appearance may vary)

General Information

- Outdoor unit shall provide 208/230V power to indoor unit via 14 AWG X 3 interconnect power cable (separate communication wire required)
- Electro-static, washable, main filter as standard accessible from the front/top of unit

Construction

- Indoor unit chassis shall be UL94 V0 with a galvanized steel mounting bracket
- The outdoor unit shall be galvanized steel with a baked on powder coated finish for durability
- The indoor unit shall have easy-access pipe and drain connections via access panel on front of unit for easier installation and service

Heat Exchanger

- The heat exchanger shall be mechanically bonded fin to copper tube

Refrigerant System

- The compressor shall be hermetically sealed, inverter controlled, Twin BLDC Rotary
- Refrigerant flow shall be controlled by electronic expansion valve at outdoor unit

Indoor Fan

- The indoor fan shall be a single, antibacterial cross-flow type
- Three fan speed settings and auto setting
- Automatic (motorized) vertical swing (up/down) louver

General Control

- Control signal shall be DDC type signal
- Unit shall have a built-in Wi-Fi adapter as standard to allow control with mobile devices (details on page 4)
- Interconnect control wiring shall be 16 AWG X 2 shielded wire between outdoor and indoor units
- The indoor unit shall ship with a wireless controller and batteries as standard
- Optional wired control available

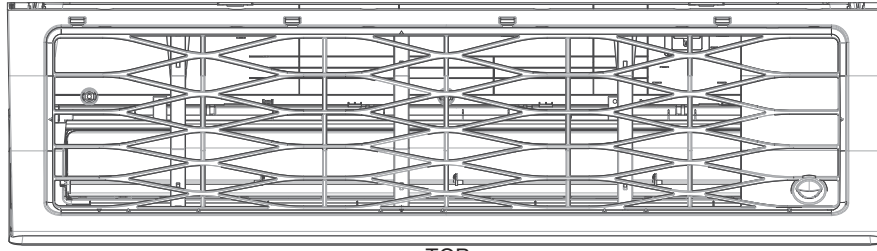
Convenience

- Auto restart
- Digital display on the front of indoor unit (hidden behind louver when off) to display temperature and service codes
- "Fast Comfort" mode to quickly reach set temperature
- Auto changeover
- 24 hour, single event timer
- Good'sleep mode
- Quiet mode
- Dry mode
- Single event, ON/OFF timer
- Single User Mode to reduce energy consumption during low demand operation
- Air filter cleaning can be done easily without opening the indoor unit
- Filter cleaning reminder indicator
- Display ON/OFF and beep ON/OFF with wireless controller
- Smart install mode - startup system diagnostics operation to ensure system readiness during initial operation

IMPORTANT - This product has been designed and manufactured to meet ENERGY STAR criteria for energy efficiency when matched with appropriate coil components. However, proper refrigerant charge and proper air flow are critical to achieve rated capacity and efficiency. Installation of this product should follow the manufacturer's refrigerant charging and air flow instructions. **Failure to confirm proper charge and airflow may reduce energy efficiency and shorten equipment life.**

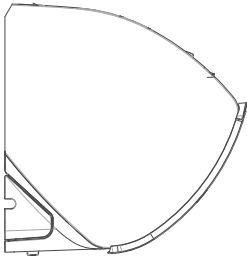
* Nominal cooling capacities are based on: Indoor temperature: 80°F DB, 67°F WB. Outdoor temperature: 95°F DB, 75°F WB.
 * Nominal heating capacities are based on: Indoor temperature: 70°F DB, 60°F WB. Outdoor temperature: 47°F DB, 43°F WB.

QuietSide maintains a policy of ongoing development, specifications are subject to change without notice.
 Refer to www.AHRIdirectory.org for current reference numbers.

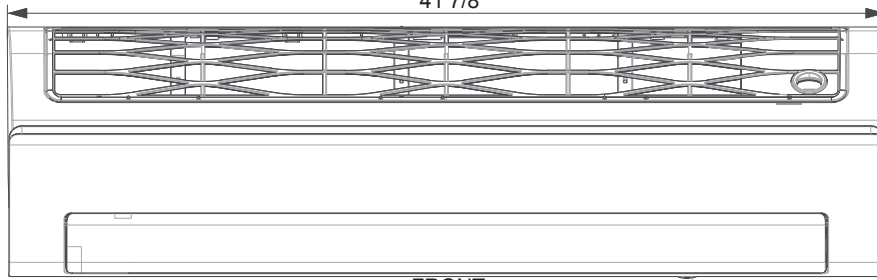


TOP

41 7/8

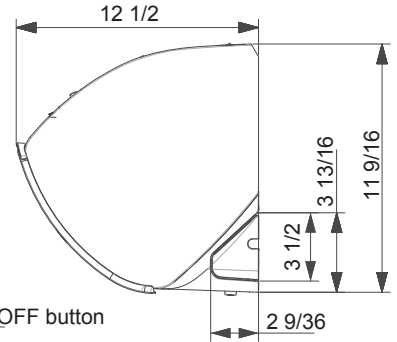


LEFT

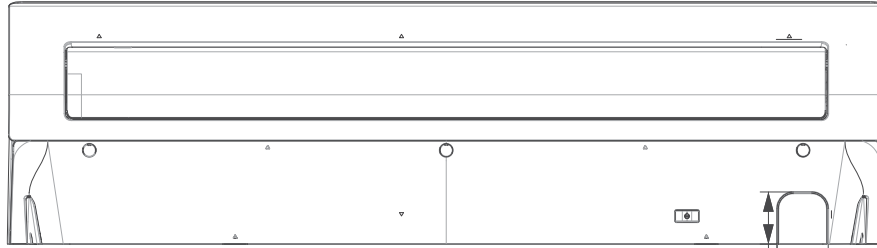


FRONT

IR receiver / ON/OFF button



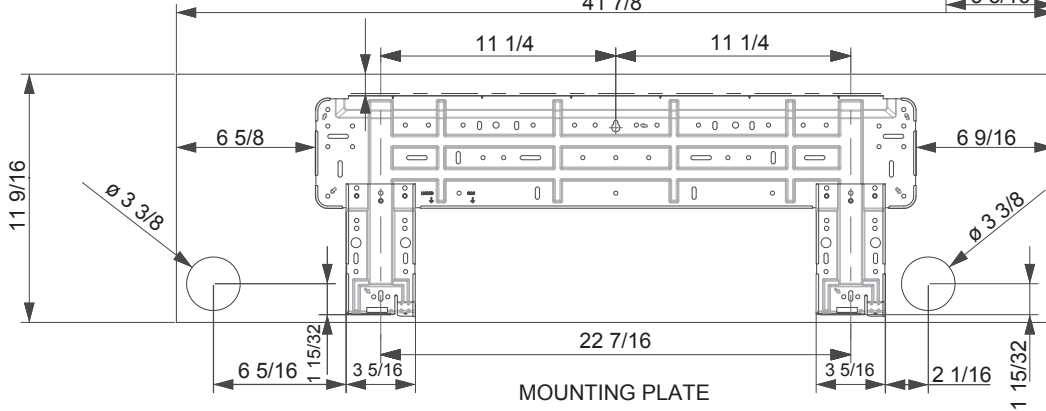
RIGHT



BOTTOM

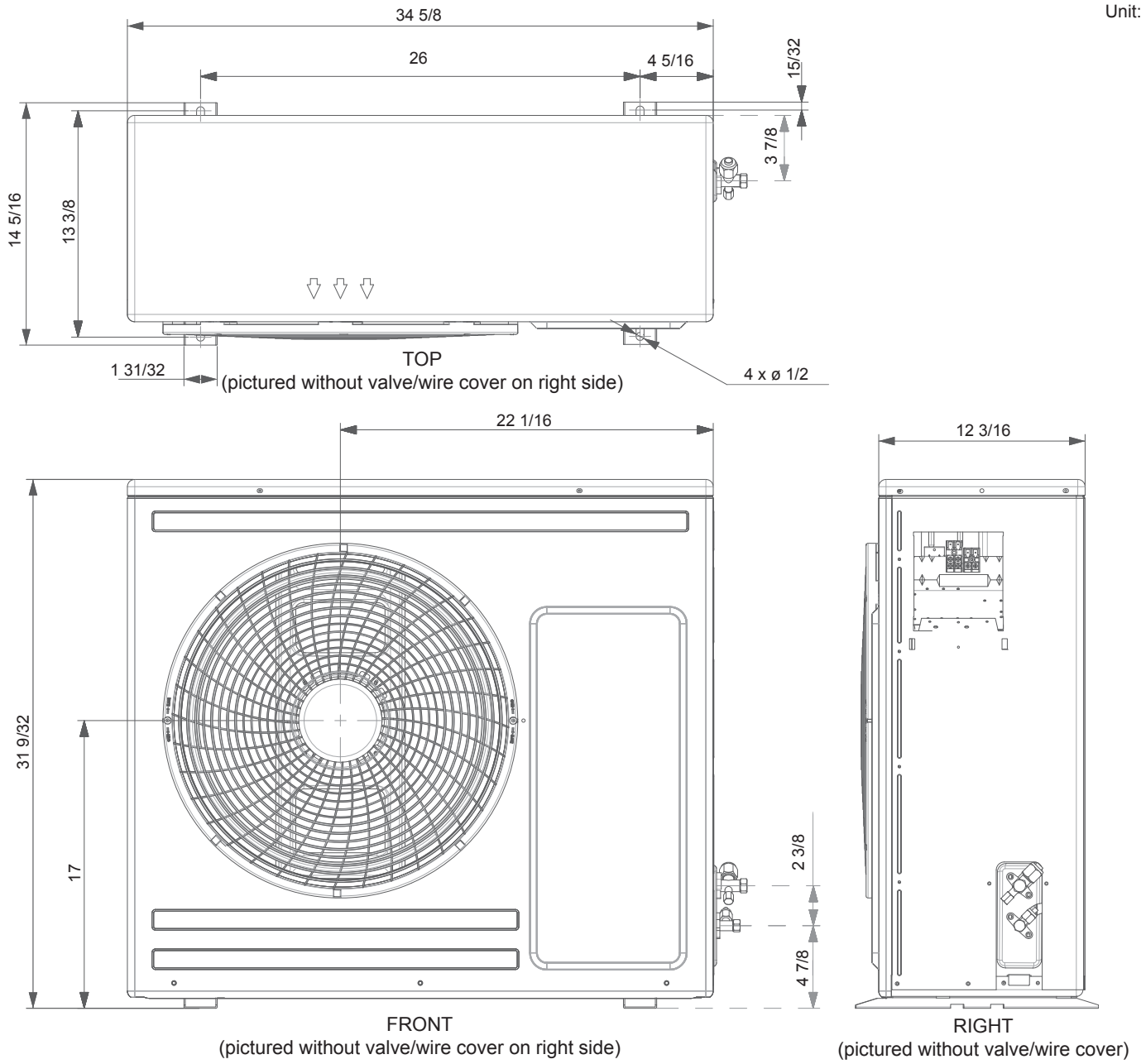
2 1/2
2 7/16
5 3/16

41 7/8

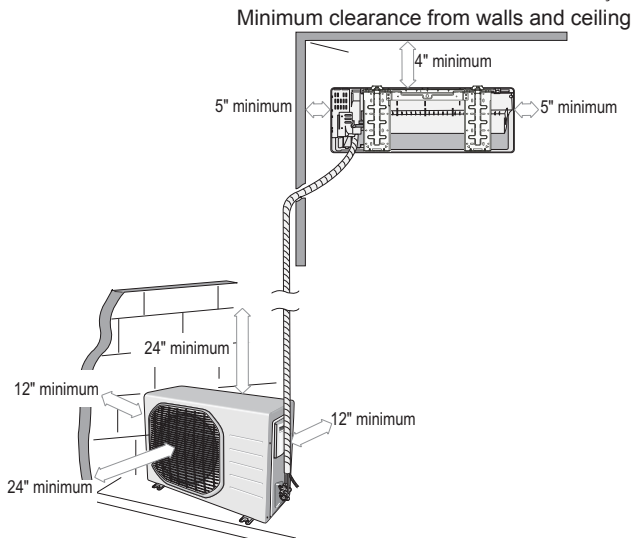


MOUNTING PLATE

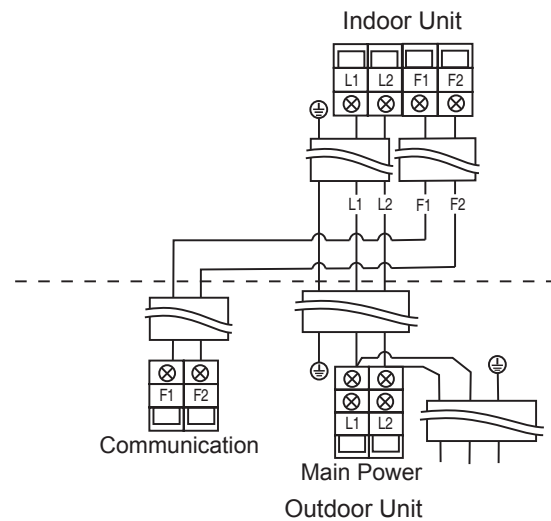
Unit: inches



For reference only. Always refer to installation manual for complete details.



Basic power and communication wiring between indoor and outdoor units

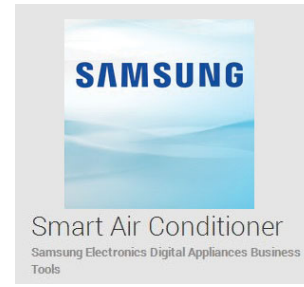


General Wi-Fi Control Information

• Allows control of system on a local network via Wi-Fi or through the internet when outside of home/office with Samsung's "Smart Air Conditioner" app (available in Android and Apple app stores).

Wi-Fi Control Features

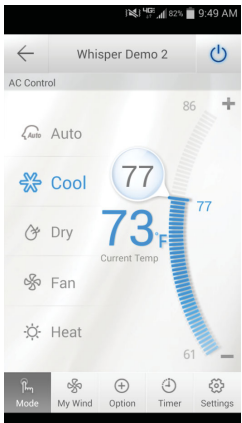
- Basic control and monitoring of: power, mode, set temperature, room temperature, fan speed, and louver swing.
- Timer ON and OFF feature allows scheduling of power ON and power OFF events on specific days at specific times.
- "My Wind" functions allows the user to save common air conditioner control configurations for quick and easy system operation (mode, set temperature, fan speed, and louver swing).
- Air filter reminder option will display hours of fan operation since last filter reminder reset.
- Optional filter reminder with four reminder intervals (180, 300, 500, and 700 hours of fan operation).
- Error notification
- System energy consumption history and adjustable threshold notification viewable with mobile app



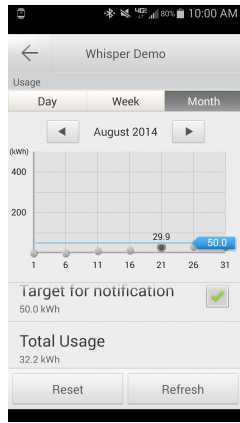
Wi-Fi Control Specifications

- Samsung's "Smart Air Conditioner" app can monitor and control an unlimited quantity indoor units.
- A network with Wi-Fi connectivity is required to use the Wi-Fi adapter. Wi-Fi-direct control is not possible.
- Users must register each indoor unit at <http://www.samsungsmartappliance.com> to setup control.
- Use is based on acceptance of Samsung's Smart Appliance terms and conditions when creating user profile and registering devices.

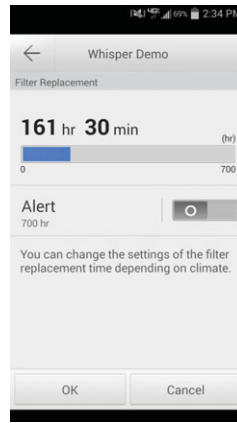
Samsung "Smart Air Conditioner" App Examples



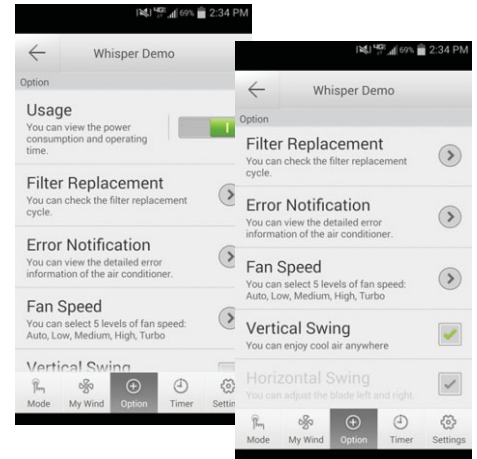
Main control page



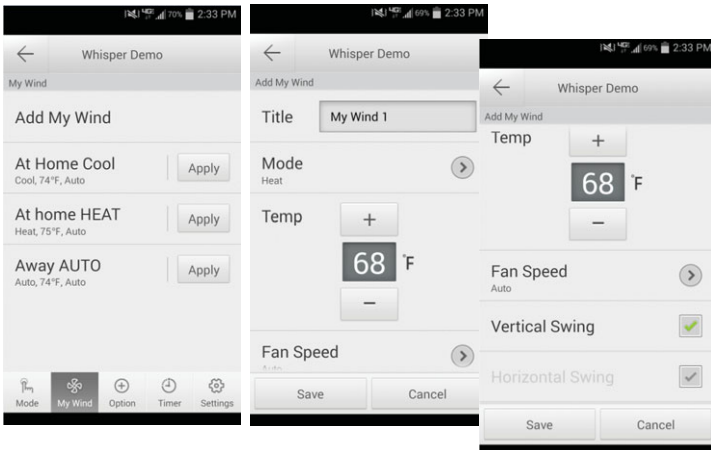
Energy usage page



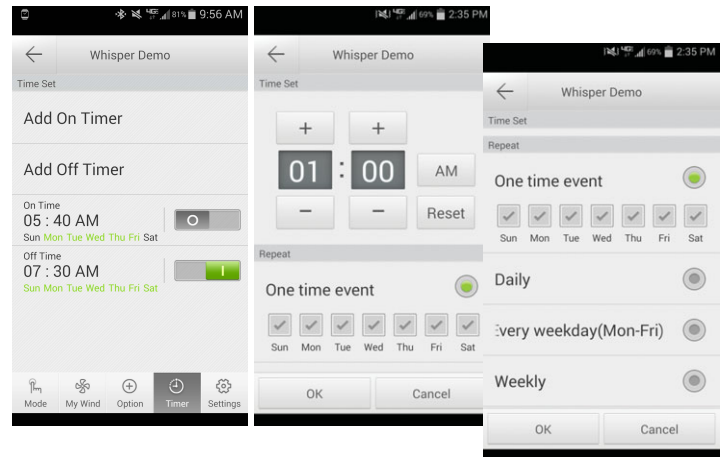
Filter reminder setting page



Options page



"My Wind" settings page



Timer setting page example