

Basic Technical Information For Samsung Mini splits



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Due to Samsung's ongoing development policy specifications and information are subject to change without notice

Purpose of the Manual

The purpose of the manual is to provide answers to the frequently asked questions which occur when selling Samsung Air Conditioners.

The manual is divided by model numbers so that each model can be referenced quickly and easily.

The topics covered are line sizes, electrical requirements, interconnecting wiring and refrigerant piping, simple installation tips

Other sections provided are :	Installation Tips - Refrigeration Installation Tips - Electrical	
Simple Product Guide		
AS = Single Zone Cooling O AQ = Single Zone Heat Pum	nly Unit p Unit	7,000 to 30,000 Btu/h 9,000 to 30,000 Btu/h
AM = Multi Dual or Triple (2 Cooling Only units	or 3) Zone	2 x 9,000, 2 x 13,000 or 2 x 7,000 & 1 x 13,000 Btu/h
AD = Multi Dual (2) Zone He	at Pump Unit	2 x 9,000, 2 x 13,000
ACC = Cooling only Cassette ACH = Heat Pump Cassette	e unit unit	18,000 to 44,000 Btu/h 24,000 & 28,000 Btu/h
AP = Cooling Only Floor Sta	nding Unit	30,000 & 50,000 Btu/h

Serial Number & Unit Age

The following is a quick guide to how old the unit is :

Serial Number : P1BW6XXXXX

The 4th Digit is the year of manufacture : X = 2004, W = 2003, T= 2002, R= 2001, N= 2000, K= 1999, J= 1998, H= 1997

The 5th Digit is the month of manufacture : 1= Jan, 2= Feb, 3= March, 4= April, 5= May, 6= June, 7= July, 8= August, 9= Sept, A= Oct, B= Nov, C= Dec



AS07A6MA Cooling Only Mini Split

Indoor Unit : AS07A6MA

Outdoor Unit : US07A6MA

Power

Power Voltage :	115V – 1 Ph – 60 Hz
Control Voltage :	115V – 1 Ph – 60 Hz
Main Breaker Size :	15 A

Line Sizes :

"Liquid" (expanded gas) line	1/4"
Suction	3/8"

BOTH LINES MUST BE INSULATED SEPARATELY

Interconnect Length

Maximum Length	49 feet
Vertical lift	23 feet

Note condenser can be above or below evaporator)

Charging

Unit is charged for	16.4 ft
Additional Charge	Add 0.2oz/ft over 16.4ft

Charge for Line Run lengths

Length	25	30	35	40	45	49
Added Charge (oz)	1.8	2.8	3.8	4.8	5.8	6.6

Gauge	14 AWG
Number of Interconnecting Wires	3 + Ground = 4 Total





AS09A6MAF Cooling Only Mini Split

Indoor Unit : AS09A6MAF

Outdoor Unit : US09A6MAF

Power

Power Voltage :	115V – 1 Ph – 60 Hz
Control Voltage :	115V – 1 Ph – 60 Hz
Main Breaker Size :	15 A

Line Sizes :

"Liquid" (expanded gas) line	1/4"
Suction	3/8"

BOTH LINES MUST BE INSULATED SEPARATELY

Interconnect Length

Maximum Length	49 feet
Vertical lift	23 feet

Note condenser can be above or below evaporator)

Charging

Unit is charged for	25 ft
Additional Charge	Add 0.2oz/ft over 25 ft

Charge for Line Run lengths

Length	25	30	35	40	45	49
Added Charge (oz)	0	1.0	2.0	3.0	4.0	4.8

Gauge	14 AWG
Number of Interconnecting Wires	3 + Ground = 4 Total





AQ09A6MAF Heat Pump Mini Split

Indoor Unit : AQ09A6MAF

Outdoor Unit : UQ09A6MAF

Power

Power Voltage :	115V – 1 Ph – 60 Hz
Control Voltage :	115V – 1 Ph – 60 Hz
Main Breaker Size :	15 A

Line Sizes :

"Liquid" (expanded gas) line	1/4"
Suction	3/8"

BOTH LINES MUST BE INSULATED SEPARATELY

Interconnect Length

Maximum Length	49 feet
Vertical lift	23 feet

Note condenser can be above or below evaporator)

Charging

Unit is charged for	25 ft
Additional Charge	Add 0.2oz/ft over 25 ft

Charge for Line Run lengths

Length	25	30	35	40	45	49
Added Charge (oz)	0	1.0	2.0	3.0	4.0	4.8

Gauge	14 AWG
Number of Interconnecting Wires	5 + Ground = 6 Total





AS12ABMCF Cooling Only Mini Split

Indoor Unit : AS12ABMCF

Outdoor Unit : US12ABMCF

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	208/230V – 1 Ph – 60 Hz
Main Breaker Size :	15 A

Line Sizes :

"Liquid" (expanded gas) line	1/4"
Suction	1/2"

BOTH LINES MUST BE INSULATED SEPARATELY

Interconnect Length

Maximum Length	49 feet
Vertical lift	23 feet

Note condenser can be above or below evaporator)

Charging

Unit is charged for	25 ft
Additional Charge	Add 0.3oz/ft over 25 ft

Charge for Line Run lengths

Length	25	30	35	40	45	49
Added Charge (oz)	0	1.5	3.0	4.5	6.0	7.2

Gauge	14 AWG
Number of Interconnecting Wires	3 + Ground = 4 Total





AQ12ABMCF Heat Pump Mini Split

Indoor Unit : AQ12ABMCF

Outdoor Unit : UQ12ABMCF

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	208/230V – 1 Ph – 60 Hz
Main Breaker Size :	15 A

Line Sizes :

"Liquid" (expanded gas) line	1/4"	
Suction	1/2"	
BOTH LINES MUST BE INSULATED SEPARATELY		

Interconnect Length

Maximum Length	49 feet
Vertical lift	23 feet

Note condenser can be above or below evaporator)

Charging

Unit is charged for	25 ft
Additional Charge	Add 0.3oz/ft over 25 ft

Charge for Line Run lengths

Length	25	30	35	40	45	49
Added Charge (oz)	0	1.5	3.0	4.5	6.0	7.2

Gauge	14 AWG
Number of Interconnecting Wire	s 5 + Ground = 6 Total





AS18A0RCF Cooling Only Mini Split

Indoor Unit : AS18A0RCF

Outdoor Unit : US18A0RCF

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	208/230V – 1 Ph – 60 Hz
Main Breaker Size :	20 A

Line Sizes :

"Liquid" (expanded gas) line	1/4"	
Suction	1/2"	
BOTH LINES MUST BE INSULATED SEPARATELY		

Interconnect Length

Maximum Length	49 feet
Vertical lift	23 feet

Note condenser can be above or below evaporator)

Charging

Unit is charged for	25 ft
Additional Charge	Add 0.3oz/ft over 25 ft

Charge for Line Run lengths

		20	25	40	45	40
Length	25	30	30	40	45	49
Added Charge (oz)	0	1.5	3.0	4.5	6.0	7.2

Gauge	14 AWG
Number of Interconnecting Wires	5 + Ground = 6 Total





AQ18A0RCF Heat Pump Mini Split

Indoor Unit : AQ18A0RCF

Outdoor Unit : UQ18A0RCF

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	208/230V – 1 Ph – 60 Hz
Main Breaker Size :	20 A

Line Sizes :

"Liquid" (expanded gas) line	1/4"
Suction	1/2"

BOTH LINES MUST BE INSULATED SEPARATELY

Interconnect Length

Maximum Length	49 feet
Vertical lift	23 feet

Note condenser can be above or below evaporator)

Charging

Unit is charged for	25 ft
Additional Charge	Add 0.3oz/ft over 25 ft

Charge for Line Run lengths

Length	25	30	35	40	45	49
Added Charge (oz)	0	1.5	3.0	4.5	6.0	7.2

Gauge	14 AWG
Number of Interconnecting Wires	6 + Ground = 7 Total





AS24A2RC Cooling Only Mini Split

Indoor Unit : **AS24A2RC**

Outdoor Unit : **US24A2RC**

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	208/230V – 1 Ph – 60 Hz
Main Breaker Size :	25 A

Line Sizes :

"Liquid" (expanded gas) line	1/4"
Suction	5/8"
DOTULINEO MUOT DE INOULAT	

BOTH LINES MUST BE INSULATED SEPARATELY

Interconnect Length

Maximum Length	64 feet
Vertical lift	23 feet

Note condenser can be above or below evaporator)

Charging

Unit is charged for	16.4 ft
Additional Charge	Add 0.4oz/ft over 16.4 ft

Charge for Line Run lengths

Length	25	30	35	40	45	50	55	60	64
Added Charge (oz)	3.4	5.4	7.4	9.4	11.4	13.4	15.4	17.4	19.0

Gauge	14 AWG
Number of Interconnecting Wires	5 + Ground = 6 Total





AQ24A2RC Heat Pump Mini Split

Indoor Unit : AQ24A2RC

Outdoor Unit : **UQ24A2RC**

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	208/230V – 1 Ph – 60 Hz
Main Breaker Size :	25 A

Line Sizes :

"Liquid" (expanded gas) line	1/4"		
Suction	5/8"		

BOTH LINES MUST BE INSULATED SEPARATELY

Interconnect Length

Maximum Length	64 feet
Vertical lift	23 feet

Note condenser can be above or below evaporator)

Charging

Unit is charged for	16.4 ft
Additional Charge	Add 0.4oz/ft over 16.4 ft

Charge for Line Run lengths

Length	25	30	35	40	45	50	55	60	64
Added Charge (oz)	3.4	5.4	7.4	9.4	11.4	13.4	15.4	17.4	19.0

Gauge	14 AWG
Number of Interconnecting Wires	6 + Ground = 7 Total





AS30C2BC Cooling Only Mini Split

Indoor Unit : **AS30C2BC**

Outdoor Unit : **US30C2BC**

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	208/230V – 1 Ph – 60 Hz
Main Breaker Size :	30 A

Line Sizes :

"Liquid" (expanded gas) line	1/4"		
Suction	5/8"		

BOTH LINES MUST BE INSULATED SEPARATELY

Interconnect Length

Maximum Length	64 feet
Vertical lift	23 feet

Note condenser can be above or below evaporator)

Charging

Unit is charged for	25 ft
Additional Charge	Add 0.4oz/ft over 25 ft

Charge for Line Run lengths

Length	25	30	35	40	45	50	55	60	64
Added Charge (oz)	0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	15.6

Gauge	14 AWG
Number of Interconnecting Wires	5 + Ground = 6 Total





AQ30C2BC Heat Pump Mini Split

Indoor Unit : AQ30C2BC

Outdoor Unit : **UQ30C2BC**

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	208/230V – 1 Ph – 60 Hz
Main Breaker Size :	30 A

Line Sizes :

"Liquid" (expanded gas) line	1/4"		
Suction	5/8"		

BOTH LINES MUST BE INSULATED SEPARATELY

Interconnect Length

Maximum Length	64 feet
Vertical lift	23 feet

Note condenser can be above or below evaporator)

Charging

Unit is charged for	25 ft
Additional Charge	Add 0.4oz/ft over 25 ft

Charge for Line Run lengths

Length	25	30	35	40	45	50	55	60	64
Added Charge (oz)	0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	15.6

Gauge	14 AWG
Number of Interconnecting Wires	6 + Ground = 7 Total





AM18B1C2 Cooling Only Multi Split

Indoor Units : 2 x AM18B1C09

Outdoor Unit : **UM18B1C2**

Combination : 2 x 9,000 Btu/h for 18,000 Btu/h total

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	208/230V – 1 Ph – 60 Hz
Main Breaker Size :	20 A

Line Sizes : Both Indoor Units

"Liquid" (expanded gas) line	1/4" for each Indoor Unit			
Suction	3/8" for each Indoor Unit			

BOTH LINES ON EACH INDOOR UNIT MUST BE INSULATED SEPARATELY

Interconnect Length

Maximum Length	49 feet for each Indoor Unit
Vertical lift	23 feet for each Indoor Unit

Note condenser can be above or below evaporator)

Charging

Unit is charged for	49 ft
Additional Charge	None

Charge for Line Run lengths

Length	25	30	35	40	45	49
Added Charge (oz)	0	0	0	0	0	0

Gauge	14 AWG
Number of Interconnecting Wires per Indoor unit	3 + Ground = 4 Total





AD18B1C2 Heat Pump Multi Split

Indoor Units : 2 x AD18B1C09

Outdoor Unit : **UD18B1C2**

Combination : 2 x 9,000 Btu/h for 18,000 Btu/h total

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	208/230V – 1 Ph – 60 Hz
Main Breaker Size :	20 A

Line Sizes : Both Indoor Units

"Liquid" (expanded gas) line	1/4" for each Indoor Unit	
Suction	3/8" for each Indoor Unit	
BOTH LINES ON EACH INDOOR	UNIT MUST BE INSULATE	D SEPARATELY

Interconnect Length

Maximum Length		49 feet for each Indoor Unit
Vertical lift		23 feet for each Indoor Unit

Note condenser can be above or below evaporator)

Charging

Unit is charged for	33 ft for each Indoor Unit
Additional Charge	Add 0.2oz/ft over 33 ft for each Indoor Unit

Charge for Line Run lengths

Length	25	30	35	40	45	49
Added Charge (oz) per unit	0	0	0.4	1.6	2.5	3.2

Gauge	14 AWG
Number of Interconnecting Wires per Indoor unit	3 + Ground = 4 Total





AM26B1C2 Cooling Only Multi Split

Indoor Units : 2 x AM26B1C13

Outdoor Unit : **UM26B1C2**

Combination : 2 x 13,000 Btu/h for 26,000 Btu/h total

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	208/230V – 1 Ph – 60 Hz
Main Breaker Size :	20 A

Line Sizes : Both Indoor Units

Liquid (expanded gas) line	¹ / ₄ IOI each Indoor Unit	
		_

BOTH LINES ON EACH INDOOR UNIT MUST BE INSULATED SEPARATELY

Interconnect Length

Maximum Length	49 feet for each Indoor Unit
Vertical lift	23 feet for each Indoor Unit

Note condenser can be above or below evaporator)

Charging

Unit is charged for	49 ft
Additional Charge	None

Charge for Line Run lengths

Length	25	30	35	40	45	49
Added Charge (oz)	0	0	0	0	0	0

Gauge	14 AWG
Number of Interconnecting Wires per Indoor unit	3 + Ground = 4 Total





AD26B1C2 Heat Pump Multi Split

Indoor Units : 2 x AD26B1C13

Outdoor Unit : **UD26B1C2**

Combination : 2 x 13,000 Btu/h for 26,000 Btu/h total

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	208/230V – 1 Ph – 60 Hz
Main Breaker Size :	20 A

Line Sizes : Both Indoor Units

Suction	¹ / ₂ " for each Indoor Unit	

BOTH LINES ON EACH INDOOR UNIT MUST BE INSULATED SEPARATELY

Interconnect Length

Maximum Length	49 feet for each Indoor Unit
Vertical lift	23 feet for each Indoor Unit

Note condenser can be above or below evaporator)

Charging

Unit is charged for	33 ft for each Indoor Unit
Additional Charge	Add 0.2oz/ft over 33 ft for each Indoor Unit

Charge for Line Run lengths

Length	25	30	35	40	45	49
Added Charge (oz) per unit	0	0	0.4	1.6	2.5	3.2

Gauge	14 AWG
Number of Interconnecting Wires per Indoor unit	3 + Ground = 4 Total





AM27B1C3 Cooling Only Multi Split

Indoor Units : 2 x AM27B1C07, 1 x AM27B1C13 Outdoor Unit : UM27B1C3 Combination : 2 x 7,000 Btu/h AND 1 x 13,000 for 27,000 Btu/h total

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	208/230V – 1 Ph – 60 Hz
Main Breaker Size :	20 A

Line Sizes : Both Indoor Units

"Liquid" (expanded gas) line	1/4" on All Indoor Units
Suction	¹ / ₂ " on the 13,000 Unit & 3/8" for the 7,000 Btu/h Units
BOTH LINES ON EACH INDOOR U	NIT MUST BE INSULATED SEPARATELY

Interconnect Length

Maximum Length	49 feet for each Indoor Unit
Vertical lift	23 feet for each Indoor Unit

Note condenser can be above or below evaporator)

Charging

Unit is charged for	49 ft for each Indoor Unit
Additional Charge	None

Charge for Line Run lengths

Length	25	30	35	40	45	49
Added Charge (oz)	0	0	0	0	0	0





Ceiling Cassette Model ACC1800C

Indoor Unit : ACC1800C

Outdoor Unit : UCC1800C

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	Communication
Main Breaker Size :	20 A

Line Sizes :

"Liquid" (expanded gas) line	1/4"
Suction	5/8"

BOTH LINES MUST BE INSULATED SEPARATELY

Interconnect Length

Vertical lift 49 f	eet

Note condenser can be above or below evaporator)

Charging

Unit is charged for	16.4 ft
Additional Charge	Add 0.2oz/ft over 16 ft

Charge for Line Run lengths

Length	25	35	45	55	65	75	85	95	98
Added Charge (oz)	1.8	3.8	5.8	7.8	9.8	11.8	13.8	15.8	16.4

Gauge	14 AWG POWER & 18AWG SHIELDED COMMS
Number of Interconnecting Wires	4 + Ground = 5 Total (Separate Comms from Power)





Ceiling Cassette Model ACC2400C

Indoor Unit : ACC2400C

Outdoor Unit : UCC2400C

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	Communication
Main Breaker Size :	25 A

Line Sizes :

"Liquid" (expanded gas) line	1/4"
Suction	5/8"
	-

ONLY THE SUCTION LINE MUST BE INSULATED

Interconnect Length

Maximum Length	98 feet
Vertical lift	49 feet

Note condenser can be above or below evaporator)

Charging

Unit is charged for	16.4 ft
Additional Charge	Add 0.4oz/ft over 16 ft

Charge for Line Run lengths

Length	25	35	45	55	65	75	85	95	98
Added Charge (oz)	3.6	7.6	11.6	15.6	19.6	23.6	27.6	31.6	32.8

Gauge	14 AWG POWER & 14AWG COMMUNICATION
Number of Interconnecting Wires	3 + Ground = 4 Total (Separate Comms from Power)





Ceiling Cassette Model ACH2400C

Indoor Unit : ACH2400C

Outdoor Unit : UCH2400C

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	Communication
Main Breaker Size :	25 A

Line Sizes :

"Liquid" (expanded gas) line	3/8"
Suction	5/8"

ONLY THE SUCTION LINE MUST BE INSULATED

Interconnect Length

Maximum Length	98 feet
Vertical lift	49 feet

Note condenser can be above or below evaporator)

Charging

Unit is charged for	16.4 ft
Additional Charge	Add 0.4oz/ft over 16 ft

Charge for Line Run lengths

	<u> </u>								
Length	25	35	45	55	65	75	85	95	98
Added Charge (oz)	3.6	7.6	11.6	15.6	19.6	23.6	27.6	31.6	32.8

Gauge	14 AWG POWER & 14AWG COMMUNICATION
Number of Interconnecting Wires	3 + Ground = 4 Total (Separate Comms from Power)





Ceiling Cassette Model ACC2800C

Indoor Unit : ACC2800C

Outdoor Unit : UCC2800C

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	Communication
Main Breaker Size :	30 A

Line Sizes :

"Liquid" (expanded gas) line	1/4"
Suction	5/8"
ONLY THE SUCTION LINE MUST	BE INSULATED

Interconnect Length

Maximum Length		98 feet	
Vertical lift		49 feet	

Note condenser can be above or below evaporator)

Charging

Unit is charged for	16.4 ft
Additional Charge	Add 0.4oz/ft over 16 ft

Charge for Line Run lengths

Length	25	35	45	55	65	75	85	95	98
Added Charge (oz)	3.6	7.6	11.6	15.6	19.6	23.6	27.6	31.6	32.8

Gauge	14 AWG POWER & 14AWG COMMUNICATION
Number of Interconnecting Wires	3 + Ground = 4 Total (Separate Comms from Power)





Ceiling Cassette Model ACH2800C

Indoor Unit : ACH2800C

Outdoor Unit : UCH2800C

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	Communication
Main Breaker Size :	30 A

Line Sizes :

"Liquid" (expanded gas) line	3/8"						
Suction	5/8"						
ONLY THE SUCTION LINE MUST BE INSULATED							

Interconnect Length

Maximum Length		98 feet	
Vertical lift		49 feet	

Note condenser can be above or below evaporator)

Charging

Unit is charged for	16.4 ft
Additional Charge	Add 0.4oz/ft over 16 ft

Charge for Line Run lengths

Length	25	35	45	55	65	75	85	95	98
Added Charge (oz)	3.6	7.6	11.6	15.6	19.6	23.6	27.6	31.6	32.8

Gauge	14 AWG POWER & 14AWG COMMUNICATION
Number of Interconnecting Wires	3 + Ground = 4 Total (Separate Comms from Power)





Ceiling Cassette Model ACC4400C

Indoor Units : ACC4400C

Outdoor Unit : UCC4400C

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	Communication
Main Breaker Size :	30 A

Line Sizes :

8"
4"
4

ONLY THE SUCTION LINE MUST BE INSULATED

Interconnect Length

inasaniani Eorigan	
Vertical lift	82 feet

Note condenser can be above or below evaporator)

Charging

Unit is charged for	16.4 ft
Additional Charge	Add 0.6oz/ft over 16 ft

Charge for Line Run lengths

	<u> </u>								
Length	25	40	60	80	100	120	140	160	164
Added Charge (oz)	5.4	14.4	26.4	38.4	50.4	62.4	74.4	86.4	88.8

Gauge	14 AWG POWER & 14AWG COMMUNICATION
Number of Interconnecting Wires	3 + Ground = 4 Total (Separate Comms from Power)





Floor Standing Units APC3240C

Indoor Units : **APC3240C**

Outdoor Unit : UPC3240C

Power

Power Voltage :	208/230V – 1 Ph – 60 Hz
Control Voltage :	208/230V – 1 Ph – 60 Hz
Main Breaker Size :	30 A

Line Sizes :

"Liquid" (expanded gas) line	3/8"				
Suction	5/8"				

ONLY THE SUCTION LINE MUST BE INSULATED

Interconnect Length

	02 1001
Vertical lift	49 feet

Note condenser can be above or below evaporator)

Charging

Unit is charged for	16.4 ft
Additional Charge	Add 0.4oz/ft over 16 ft

Charge for Line Run lengths

Length	25	35	45	55	65	75	80	82
Added Charge (oz)	3.6	7.6	11.6	15.6	19.6	23.6	25.6	26.4

Gauge	14 AWG
Number of Interconnecting Wires	3 + Ground = 4 Total





Floor Standing Model AP500PF

Indoor Unit : **AP500PF**

Outdoor Unit : **AX500PF**

Power

Power Voltage :	208/230V – 3 Ph – 60 Hz
Control Voltage :	208/230V – 1 Ph – 60 Hz
Main Breaker Size :	30 A

Line Sizes :

"Liquid" (expanded gas) line	3/8"				
Suction	3/4"				
ONLY THE SUCTION LINE MUST BE INSULATED					

Interconnect Length

Maximum Length	82 feet
Vertical lift	49 feet

Note condenser can be above or below evaporator)

Charging

I	Unit is charged for	16 / ft
	Unit is charged for	10.4 1
	Additional Charge	Add 0.5oz/ft over 16 ft

Charge for Line Run lengths

Length	25	35	45	55	65	75	80	82
Added Charge (oz)	4.5	9.5	14.5	19.5	24.5	29.5	32.0	33.0

Gauge	14 AWG
Number of Interconnecting Wires	3 + Ground = 4 Total





Installation Tips - Refrigeration

LOW AMBIENT

If the system (except ACC and ACH units) is to be operated in Outdoor Ambient temperatures below 60 DegF, Samsung requires the installation of an ICM326H fan speed controller. This will provide operation down to 32 DegF. **ALL** Computer room installations and/or operation below an ambient of 32 DegF require Wind Baffles to be installed on both the coil and fan side of the Outdoor unit. Wind Baffle diagrams are available from Samsung. Also install a Crankcase Heater on all units that do not have a CCH as standard.

Do not use the AD18 or AD26 units in low ambient cooling applications

INDOOR UNIT POSITIONING

The High Wall units are designed to be at a minimum of 4 feet off the floor, 6 to 8 feet high is optimum. They can be installed up to 2" minimum below the ceiling. Ensure that a minimum distance, for air throw of 10 -15 feet for AS/AQ7-12, and 20 - 25 feet for AS/AQ 18-30 is kept free from all obstructions to prevent any recirculation of the supply air back into the unit, this will prevent compressor short cycling and premature failure of the compressor.

OUTDOOR UNIT POSITIONING

The Outdoor units are designed to be much quieter than the normal US style condensing units; therefore they can be mounted closer to the building. **Do not exceed** maximum line run lengths; doing so will cause reliability problems.

LINE SETS

On ALL High Wall units and the ACC1800C both the Suction and "Liquid" (Expanded Gas) lines must be insulated. Ensure that the stated line sizes are adhered to, do not over size line sets at anytime.

SERVICE VALVES

Line set flare connections are below the **BLACK** plastic caps; the brass caps cover the valve stem.

Open the Suction line service valve first, this will prevent the refrigerant inside the outdoor unit being forced through the capillary tube, which can cause oil logging of the cap tube and prevent the unit from operating normally on start up.

UNIT CHARGING

Do not charge the unit with the optional filters installed Weigh the additional charge required into the unit per the charts provided On initial installation no filter driers are required on the High Wall units or the ACC1800C unit.



Installation Tips - Electrical

POWER

Always power the Indoor unit **from** the Outdoor unit, do not supply separate power feeds to the Indoor and Outdoor unit. A service disconnect at the Indoor unit is not required, nor is it recommended.

ELECTRICAL POLARITY

Samsung Mini Splits are polarity sensitive, even with 208/230V AC power, therefore the installer must ensure that the Interconnecting Wiring diagrams provided are followed exactly. Do not wire A to B, or L1 to L2. Doing so will allow the Indoor unit to operate, but the Compressor or Condenser fan will not run.

INTERCONNECT VOLTAGE

The interconnect voltage is the same as the supply voltage to the units – hence the use of 14 AWG wires to connect the outdoor and indoor unit.

AD Multi Split Heat Pumps use line voltage communication.

The ACC1800C uses a communication bus which has no voltage, but must be shielded and separated from any high voltage wiring. All other ACC/ACH units use a high voltage communication which we require to be separated from the power wiring to the Indoor unit

FUSES

The units have a 3.15A fuse on the PCB (or micom). This fuse is designed to protect the PCB from voltage spikes and mis-wiring. If you have power to the indoor unit terminals, but no operating lights it is probable that the fuse is blown. Replacement fuses can be obtained at Radio Shack or any automotive store for mere cents

UNIT ADDRESSING

The AD Multi Split Heat Pumps require the Indoor units to be addressed so that the Outdoor unit can locate them on the system. The A unit must be set with the address switch in L/H, and the B unit must be set in H/H.

ACC/ACH Cassette units all require to be addressed as unit 0, except when using multiple units in a group control format.

DEGREE FARENHEIT

ACC/ACH Cassette units have the standard Wired Remote Controllers set in DegC as the default. Dip Switch #3 on the controller must be switched to allow the unit to display in DegF

WARRANTY CLAIM FORM

SAMSUNG	WANNAN I	I CLAIM FU	N IVI		
2865 Pellissier Place	Submitted:				
Whittier, CA 90601				Date	
Ph: 562/463-0880			FAX # 562/463-5665		
(Must be filled out COMPLETELY	and LEGIBLY)				
	PLEASE CI	HECK APPLICATION		LACEMENT	
PROOF OF PURCHASE ORDER # ()		() KEP	LACEMENT	
CLAIM MUST BE FILED WITHIN 30 DAYS FROM DATE OF SERVICE					
	DIST	RIBUTOR			
Company		Phone #:			
Street		Fax:			
City		Date:	~		
State, Zıp		Claim Revie	w By:		
Ship Replacement Parts to:		Dhana #:			
Company Street		Finite #.			
City		T ux.			
State, Zip					
End User Unformation		*Servicer*			
Customer's name:		Company's n	name:		
Address		Address			
City		City			
State, Z1p		State, Zip			
		r none.			
IMPORTANT NOTICE*	TAING AN (V) INCLUDE ALL	CHADACTERS IF	νοτινοί μρε 11 σιμαρά στε	DC ONLY	
Example : A97ZP21 X	TAINS AN (A) INCLUDE ALL I	5 CHARACIERS, IF	NOT INCLUDE IT CHARACTE	KS UNLI	
Equipment	**Serial Number**				
*INDOOR	Serial # (Indoor Unit)				
MODEL:#					
*OUTDOOR	Serial # (Outdoor Unit)				
MODEL #					
*Installation Data:					
"Instanation Date:		ervice Completed.			
Explanation of Failure					
Use other side if necessary		*Did you file a fraight	alaim?		
I certify I have properly services this system	n.	Did you me a meight	ciann.		
			Servicer Signature		
Parts Information Part Number	Description		Qtv		
1.	*		*		
2.	*		*		
3.	*		*		
Handling Request for Returned Part					
If purchased through a distributor, return claim	form & part to distributor.				
Approved By:		Date:			

Samsung Air Conditioning

WARRANTY CLAIM FORM

This is a quick guide on how to fill out the claim form. Please fill out completely and legibly.

What do you want to do? : Credit for a part or do you require a replacement part For credit Samsung requires the original purchase order information

Distributor Information : This must be filled out – this allows tracking of the unit and of the warranty, so that quick service can be provided

Ship to Info : Where does the part need to be shipped?, we can ship to either the Servicer or the Distributor, but not to the End User

End User : This is the customer who has the unit installed – this is useful for our records

Servicer : This is the contractor who installed the unit, we require this information should our Warranty processing team have questions regarding the warranty or the nature of the failure. Therefore a phone number is very important, as is a name of the technician involved in this repair

Model Number : The complete model number is also very important, so that the correct part can be identified and provided, also if you require a part for the Outdoor unit, please provide the Outdoor unit model, and vice versa if the part is for an Indoor unit.

Serial Number : This is the most important piece of information, without a Serial number the unit cannot be correctly identified or the correct part selected, therefore no serial number = no action on the warranty claim form.

In 2004, the Serial number on the Samsung units changed to add 5 extra digits, 4 in front of the number and one at the end of the Serial number

Installation Date : A very important date – must be provided, this will allow us to calculate (together with the Serial Number) the period of warranty remaining on the unit, or if the unit is still in warranty

Explanation of Failure : What went wrong with the unit, this helps to provide the correct parts. "It doesn't work" is not a valid explanation

Freight Claim : Did the warranty occur due to a freight claim, if so fill out this section

Part Numbers : All Part Numbers are available in the Service Manuals supplied with the units – please provide if possible. Room for 3 parts is provided. Also Part numbers, photos and descriptions are available on our website at www.quietside.com

Approvals : For Samsung use only