Factory Start-up Checklist

HVAC Contractor: _____ Date: _____
Requested Start-up Date: _____ Project: _____
Qualified Technician _____Model #: _____
Serial #: _____
Project Address: _____
_____

Customer Name: _____
Customer Contact: _____
Phone: _____ Fax: _____ Email: _____
Customer Address: _____
_____

Note: The above start-up date needs to be scheduled with our office immediately. Allow three weeks lead time to schedule start. The items on all pages must be completed, signed-off and faxed or emailed to our office prior to the start-up date. Please fill out completely.

Proper equipment start-up is critical to customer comfort and equipment longevity. Utilize the following form to ensure that all the Pre-start-up procedures have been completed. The technician should initial each step as it has been completed and fill out the required start-up values. This form will provide the technician confidence that the system was thoroughly evaluated and installed properly. A separate checklist must be prepared and signed for all units to be started on the same date. Additional P.O. amount may be necessary for separate start-up dates. Please contact your Sales Engineer.

Note: The installing contractor's start-up technician must be present when iAIRE's start-up technician arrives on site for proper coordination and instructions on unit operation. The installing contractor is responsible for properly operating the unit after iAIRE's start-up technician leaves the job site.

Startup services require the installer to complete the manufacturers' pre-startup checklist on the next page prior to requesting startup.

After completeing this checklist, please scan and email back to iAIRE.
sales@myiaire.com

Factory Startup Checklist

Item	System Testing	Completed
	Inspect unit for damage.	
	Ensure split systems are completely plumbed and wired.	
	Is unit installed with proper clearances?	
	Check terminal screws & wiring for connection & tightness.	
	Ensure filters are installed.	
	If unit is a space temperature device, ensure that wire run is twisted & shielded.	
	Ensure condensate drain is trapped properly and not damaged.	
	Check to ensure all field wiring is complete.	
	Ensure correct voltage is run to the unit.	
	Check supply air fan belt tension is correct.	
	Check blower pulley & wheel are tight on shaft.	
	“Bump” power to ensure correct blower rotation.	
	Make sure outside air damper opens before any testing is started.	
	Test operation of supply fan.	
	Test operation of all compressors.	
	Test operation of condenser fan.	
	Test operation of hot gas reheat.	
	Test operation of heating (if applicable).	
	Verify proper refrigerant charge.	
	Verify proper airflow.	
	Confirm that the unit Space or DAT temperature control is correct.	

Record program version: _____ **Extension board version:** _____

Cooling VFD setting	
Heating VFD setting	

	Entering Air Dry	Entering Air RH%	DX Coil (DAT Only)	Reheat Coil DAT Air Temp
Cooling Stage 1	°F	°F	°F	°F

ultraDRY outside air solutions

Factory Start-up Checklist

Item	Electrical Data		Reading
	Supply Voltage checked.	L1 – L3	volts
	Supply Voltage checked.	L1 – L2	volts
	Supply Voltage checked.	L2 – L3	volts
		Name plate	Measured
	Supply Fan motor amps checked.	amps	amps
	Condenser Fan motor # 1.	amps	amps
	Condenser Fan motor # 2.	amps	amps
	Condenser Fan motor # 3.	amps	amps
	Condenser Fan motor # 4.	amps	amps
	Compressor # 1	amps	amps
	Compressor # 2	amps	amps
	Compressor # 3	amps	amps
	Compressor # 4	amps	amps

Refrigerant			Cooling	Circuits		
Stage	Head Press	Refridgerant Liquid Temp	Cooling Subcool	Circuits Suction Press	Suction Temp	Superheat
1	#	°F	°F	#	°F	°F
2	#	°F	°F	#	°F	°F
3	#	°F	°F	#	°F	°F
4	#	°F	°F	#	°F	°F

Hot Gas			Hot Gas Reheat @ 2% Open		Circuits	
Stage	Head Press	Hot Gas Liquid Temp	Reheat Subcool	Circuits Suction Press	Suction Temp	Superheat
1	#	°F	°F	#	°F	°F

Heating					
Heating Source			Draft Fan Press. (IN. WG)	(Low)	(High)
Inlet Pressure (IN. WG)			Electric Heater Amps (All Stages)	amps	
Manifold Pressure (IN. WG)	(Low)	(High)	Steam Heat Press. (IN. WG)		
CO_2 In Flue Gas (%)	(Low)	(High)	Hot Water Temp.	°F	
CO In Flue Gas (PPM)	(Low)	(High)			

Refrigerant Suction		Heat Pump Pressures	Refrigerant Discharge	
Curcuit A	PSIG		Curcuit A	PSIG
Curcuit B	PSIG		Curcuit B	PSIG

Programmer Checklist

Configuration Menu - Readings (V5.02)

Configure Cool & Heat Offset - Cool		Configure Cool & Heat Offset - Heat	
Stage 1 On -	Stage 1 Off -	Stage 1 On -	Stage 1 Off -
Stage 2 On -	Stage 2 Off -	Stage 2 On -	Stage 2 Off -
Stage 3 On -	Stage 3 Off -	Stage 3 On -	Stage 3 Off -
Stage 4 On -	Stage 4 Off -	Stage 4 On -	Stage 4 Off -

Cool Heat & Cool Timers - Cool		Cool Heat & Cool Timers - HEAT	
Delay 1 On -	Delay 1 Off -	Delay 1 On -	Delay 1 Off -
Delay 2 On -	Delay 2 Off -	Delay 2 On -	Delay 2 Off -
Delay 3 On -	Delay 3 Off -	Delay 3 On -	Delay 3 Off -
Delay 4 On -	Delay 4 Off -	Delay 4 On -	Delay 4 Off -

Configure Misc.	
Controller Mode Config:	Humidity Mode:
# of Control Boards:	Humidity Low SP:
# of Heat Stages:	Humidity High SP:
Max Reheat Requirement:	Supplemental Heat:
Configure Heat Pump:	Hum. Override Delay: On: Off:
LAT Override:	Allow Hum. Override Delay:
Reheat Min:	Freeze Protection:
Reheat Max:	Freeze Timer:
Reheat Multiplier:	Water Guard:
Reheat Gain:	Mod Heat:
Reheat Offset:	# of Cool Stages:
BAS:	Heat Type:
Fan Input:	Modulated Heat Min:
Room Temp Type:	Modulated Heat Max:
Room Setpoint Low:	Modulated Heat Gain:
Room Setpoint High:	Mod Heat Offset:
Room Setpoint Source:	Mod Heat Multiplier:
Comm Setup:	

Configuration Menu - Readings (V5.02)		
Configure VAV		**Configure ERV**
Mode Configuration:	Adjust Slow Rate:	Reheat Multiplier:
Min Fan Speed:	Slow Point:	OA Speed:
Max Fan Speed:	Transducer Type:	EA Speed:
Adjust Fast Rate:	Damper/Fan Control:	Damper Position:
Setpoints Menu — Readings		
VFD Speed Cool %:	Humidity Stage 1%:	Room Temp:
VFD Speed Heat %:	Humidity Stage 2%:	LAT:
EAT Cool Lockout:	EAT Cool Lockout:	Duct Pressure:
Lockout Deadband:	DAT:	Building Pressure:
Diagnostic Menu — Readings		
Menu 1:	Menu 4:	Menu 7:
Menu 2:	Menu 5:	Menu 8:
Menu 3:	Menu 6:	Menu 9:
VAV Status Menu — Readings		
Duct Pressure:	Building Pressure:	
Status Menu — Readings		
Fan:	Room SP and Temp:	Heat Mode:
Startup:	DAT/LAT:	Hot Gas:
Entering Air:	Coil LAT/DAT Status:	Heating Stages:
Leaving Air Humidity:		Cooling Stages:
Room Air Humidity:	Cool Mode:	Modulating Heat:

Notes:

Post Start-up Maintenance Requirements to Maintain Manufacturer's Warranty

The Manufacturer's warranty covers PARTS ONLY. Fault diagnosis, labor costs, consequential costs, and maintenance costs are NOT covered. Warranties are those of the Manufacturer Only. Proper mainte-nance is crucial to maintaining the useful life of equipment and preventing premature component failures resulting in unnecessary warranty parts costs to the Manufacturer, and Labor costs to you, the Mechanical Contractor. Immediately upon start-up, a routine maintenance program must be initiated ensuring compliance with the manufacturer's Weekly, Monthly, Quarterly, Semi-Annual, and Annual Operation & Maintenance Instructions and Requirements/records to maintain warranty.

Pre-Start-Up Checklist Signatures

Installing Contractor Signature : _____

Printed Name : _____

General Contractor Signature : _____

Printed Name : _____

iAire Startup Mechanic Signature : _____

Printed Name : _____

Email:_____

Phone:_____ Date:_____

After completeing this checklist, please scan and email back to iAIRE.
sales@myiaire.com