Pioneer Quantum WYS Mini Split Error Codes

Display codes for Pioneer Quantum Inverter+ and Inverter++ wall-mount systems (WYS-20 and WYS-22: YN...20RPD and YN...22RPE outdoor units with WS indoor units): what each code means, what to check first, and where to find the part. Some units show the four-character code instead, e.g. EL 01 for E1.

Pioneer mini split parts: hvacexpressparts.com/brands/pioneer
Parts listed for 20RPD models: hvacexpressparts.com/search?q=20RPD
Not sure which part? Match the number printed on your old part, or call (786) 223-7655, Mon–Fri 9 AM–5 PM ET.

CODE	WHAT IT MEANS	WHAT TO CHECK FIRST	PARTS
Indoor unit			
E0 / EH00 / EH0A	Indoor unit EEPROM parameter error.	Turn the unit off at the breaker for a few minutes and restart once. If the code returns, the indoor control board (the EEPROM chip is on the board).	control boards
E2	Zero-crossing signal detection error (some models).	Restart once at the breaker. If the code returns, a technician checks the supply voltage, then the indoor control board (the zero-crossing circuit is on the board).	control boards
E3	Indoor fan speed outside the normal range.	With the power off: the filter is clean and the blower wheel turns freely and is clean. Then the fan motor plug and the motor, then the indoor control board.	fan motors, blower wheels & fan blades, control boards
E4 / EH60	Indoor room temperature sensor (T1) open or short circuit.	The sensor (thermistor) and its plug on the indoor board, with the power off. If the sensor reads correctly on its resistance chart, the indoor control board.	control boards
E5 / EH61	Evaporator coil temperature sensor (T2) open or short circuit.	The sensor (thermistor) and its plug on the indoor board, with the power off. If the sensor reads correctly on its resistance chart, the indoor control board.	control boards
E7 / EH0b	Communication error between the indoor board and the display board (some models).	The cable between the indoor main board and the display panel, with the power off; then the display board or the indoor board.	control boards
Communication			
E1 / EL01	Communication error between the indoor and outdoor units.	Restart once at the breaker. If the code returns, a technician checks the communication wiring and terminals between the units (correct order, tight, dry), then the indoor or outdoor control board.	control boards

CODE	WHAT IT MEANS	WHAT TO CHECK FIRST	PARTS
Outdoor unit			
F1 / EC53	Outdoor ambient temperature sensor (T4) open or short circuit.	The outdoor sensor (thermistor) and its plug, with the power off: compare its resistance with the temperature chart. If it reads correctly, the outdoor control board.	control boards
F2 / EC52	Condenser coil temperature sensor (T3) open or short circuit.	The outdoor sensor (thermistor) and its plug, with the power off: compare its resistance with the temperature chart. If it reads correctly, the outdoor control board.	control boards
F3 / EC54	Compressor discharge temperature sensor (TP) open or short circuit.	The discharge temperature sensor (TP) and its plug, with the power off; then the outdoor control board.	discharge temperature sensor, control boards
F4 / EC51	Outdoor unit EEPROM parameter error.	Turn the unit off at the breaker for a few minutes and restart once. If the code returns, the outdoor control board (the EEPROM chip is on the board).	control boards
F5 / EC07	Outdoor fan speed outside the normal range (some models).	With the power off: the outdoor fan blade turns freely and nothing blocks it (ice, snow, debris). Then the motor plug and windings, then the fan drive on the outdoor control board.	fan motors, blower wheels & fan blades, control boards
F6 / EC56	Evaporator coil outlet temperature sensor (T2B) open or short circuit (free-match indoor units).	The coil outlet sensor (T2B) and its plug, with the power off; then the control board.	control boards
Protection			
F0 / PC08	Current overload protection.	Airflow first: the filters and coils are clean and the outdoor fan runs. If the code returns, a technician checks the supply voltage and the compressor current, then the outdoor control board.	control boards
P0 / PC00	IPM malfunction or IGBT over-current protection.	Outdoor airflow first: the coil is clean and nothing blocks the unit. If the code returns, a technician checks the supply voltage, then the inverter module / outdoor control board.	control boards
P1 / PC01	Over-voltage or under-voltage protection.	The breaker and the outdoor disconnect first; restart once. If the code returns, a technician checks the supply voltage; if it is correct, the outdoor control board.	control boards
P2 / PC02	IPM module high-temperature or high-pressure protection.	Airflow first: the filters and both coils are clean and both fans run. Then a technician checks the module's heatsink, the refrigerant pressures and the outdoor control board.	fan motors, control boards
P4 / PC04	Inverter compressor drive error.	A technician checks the compressor wires (U-V-W) and terminals, then the inverter module / outdoor board, then the compressor windings. Rule out the wiring and the module before replacing the compressor.	control boards, compressors

CODE	WHAT IT MEANS	WHAT TO CHECK FIRST	PARTS
P6 / PC03	High-pressure or low-pressure protection (some models).	Airflow first: the filters and both coils are clean and both fans run. Then a licensed (EPA 608) technician checks the refrigerant pressures and leaks, then the pressure switches and their wiring.	pressure switch
Alarms and status			
EC / EL0C	Refrigerant leak detected.	Ventilate the room, switch the unit off and call a licensed (EPA 608) technician to find the leak. Not a parts swap.	—
P5 / --	Indoor units mode conflict (multi-zone outdoor unit).	Multi-zone: indoor units are set to heating and cooling at the same time — set one mode. Not a part fault.	—
dF	Defrost.	Normal in Heat mode, not an error code. The indoor fan can pause while the outdoor coil defrosts; check only that the outdoor unit is clear of ice and snow.	—
cF / SC / FP	cF: warming up in Heat mode. SC: self clean (select units). FP: heating with the room below 46°F (8°C).	Normal display, not an error code.	—
88 / other	Garbled or undefined display, e.g. 88 with the Wi-Fi symbol lit.	Make sure it is not a temperature reading. Test with the remote: if the unit does not respond (wiring correct), the indoor control board; if it responds, the display board.	control boards

Parts listed for Pioneer Quantum WYS-20 / WYS-22 models

Each part page lists the unit models the part is matched to. Match the number printed on your old part before you order.

PART NUMBER	PART
11002015018558	Brushless DC motor
11002015012128	Outdoor brushless DC motor
11103020A00576	DC inverter rotary compressor
11103020006759	DC inverter rotary compressor
11002015A00096	Brushless DC motor
11103020000559	DC inverter rotary compressor
11103020A00756	DC inverter rotary compressor
11002015000247	Outdoor brushless DC motor
11103020A00116	DC inverter rotary compressor
11103020000034	DC inverter rotary compressor
11103020A00557	DC inverter rotary compressor
11103020003919	DC inverter rotary compressor

PART NUMBER	PART
11103020A00736	DC inverter rotary compressor
11103020006879	DC inverter rotary compressor
11002015A01198	Brushless DC motor
11002015000366	Outdoor brushless DC motor
11103020004360	DC inverter rotary compressor
17400516000851	Pressure switch

Safety. Power checks and board work are for a qualified technician; refrigerant work requires EPA Section 608 certification.

Returns. Parts that were not installed, connected or used can be returned within 30 days: hvacexpressparts.com/refund-policy.

Source. Code meanings summarized in our own words from: Parker Davis HVAC (Pioneer), Quantum Inverter Series (WYS-20, WYS-22, Single-Zone) Service & Troubleshooting Manual, revision 07-2023: Troubleshooting §2.1 Error Display (Indoor Unit) and Product Features §1 Display Function. The same code can mean something else on other models; confirm it in your unit's documentation.

Other brands and models. Our mini split error codes guide: hvacexpressparts.com/blog/mini-split-error-codes-guide.

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