

ELECTRICAL CONNECTIONS

Electrical Rating 60 Hz 120 / 240 Volts AC, single phase

⚠ CAUTION

This heater is designed to operate at 120 or 240 VAC. It is not recommended to be connected to OR operate on a 208 VAC.

NOTE

- The MiniMax NT heater is prewired for 240-volt AC connection using the “RED” connector and the “BEIGE” common connector; see **Figure 1** below. For 120-volt AC supply, remove the “BEIGE” common connector and plug it into the “BLUE” common connector.
- When connecting the power supply to the “Line Terminal Block” inside the junction box, follow the polarity as shown below. Connecting to 120 VAC, make sure that you connect the wire to the terminal (L), the neutral wire is connected to the neutral terminal (N) and the ground is connected to the ground terminal (GND); see below, **Figure 2**.
- If any of the original wiring supplied with this heater must be replaced, installer must supply (No. 18 AWG, 600V, 105° C. U.L. approved AWM low energy stranded) copper wire or it's equivalent. Thermal fuse wiring must be replaced with 18 AWG, 600V, 150° C. temp. rating.

⚠ CAUTION

The installation must conform with local codes or, in the absence of local codes, with the *National Fuel Gas Code, ANSI Z223.1/ NFPA 54* and/or *CSA B149.1, Natural Gas and Propane Installation Codes*. If an external electrical source is utilized, the heater, when installed, must be electrically grounded and bonded in accordance with local codes or, in the absence of local codes, in the USA, with the *National Electrical Code, ANSI/NFPA 7*; in Canada, with *Canadian Electric Code, CSA C22.1*.

Always use crimp type connectors when connecting two wires.

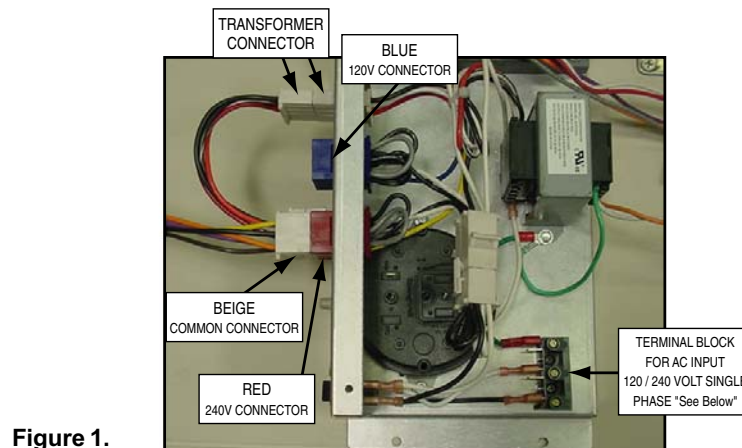


Figure 1.

You need to open the right door then remove the control panel cover for servicing the Line Terminal Block as shown in Figures 1 & 2.

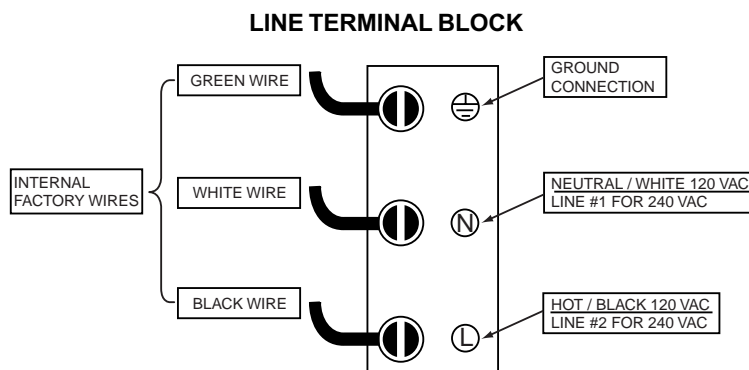


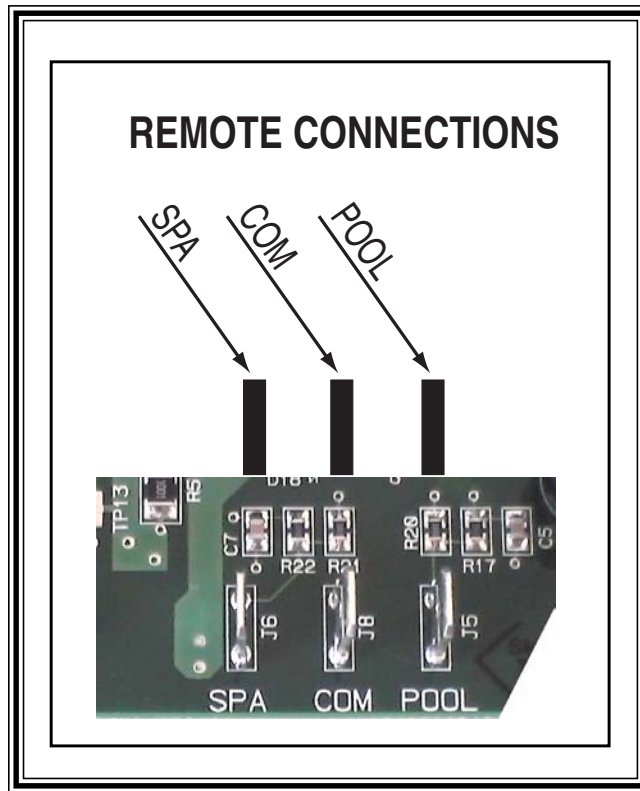
Figure 2.

Pentair Pool Products

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DDTC REMOTE HOOK UP



The MiniMax NT Series heaters with the DDTC, “Digital Display Temperature Controller”, is capable of operating with all remote systems, including two or three wire controllers.

To use with a “THREE WIRE REMOTE SYSTEM”, observe the three connections in the above photo, install the common wire to the center “COM” terminal, then install the pool wire “POOL” and spa wire “SPA” to the appropriate terminals.

To use with a “TWO WIRE REMOTE SYSTEM”, connect one wire to the center “COM” terminal, and connect the second wire to the appropriate terminal, “POOL” for heating a pool only, or to the spa “SPA” connection for a spa only. If the system and the heater are used for heating both a pool and spa on demand, then connect one wire to the center “COM” terminal and the second wire to either terminal “POOL” or “SPA”.

Once you have made these connections and have electrical power to the heater and your circulation pump is on, you are ready to turn the heating over to the demand of the remote system. With the “POWER” and “PRESSURE” light’s lit on the front panel, depress the remote button on the front display panel of the DDTC, the “REMOTE” light will come on and the remote system now has control of the heater.

Note: When using a three wire remote system that does not include it’s own thermostat for controlling the water temperature, you must set the DDTC to your desired temperature using the up or down arrows on the front panel. When using a two wire system that has it’s own thermostats for controlling the pool or spa and a pool and spa combination, use the up arrows on the front panel of the DDTC and set to the maximum temperature setting of 104° F.