

## Guidelines for Assembling and Maintaining the Control Panel

We wish to bring to your attention the critical importance of proper assembly and maintenance procedures for the control panel. It is essential that assembly is carried out by qualified and experienced personnel.

Improperly assembled panels may result in poor connections, leading to overheating and the generation of high wattage concentrated in a confined space over an extended period. This could potentially lead to system failure or electric fire.

### **Tips for Assembling the Panel:**

1. Wires:
  - Wires thicker than 14 AWG require careful bending into proper shape first before installing and screw tightening. Do NOT “install the wires first and bend them later” as this process may break SSR’s internal structure or increasing the gap at the contact point. Refer to the photos provided for guidance and ensure proper installation.
2. Solid State Relays (SSR):
  - Apply appropriate force when installing wires to SSRs, Keep the torque within the range of 0.9 Nm ~ 1.3 Nm if you have a torque wrench. Too much force will cause damage to the internal structure of the SSR.
3. Screws:
  - Ensure that all other screws are tightened for terminal blocks, contactors, circuit breakers, and etc. After tightening the screws, you can gently move the wire with your hand and check if the wires remain secure. If not, you have to fasten screw with more power.

### **Tips for Maintaining the Panel:**

1. Regular Inspection:
  - Conduct regular inspections of the control panel's interior to identify any potential issues such as burned, discolored, melted, or oxidized parts.
  - If you have used multistrand wires without wire connectors, check the screws and tighten them regularly since multistrand wires may relax and get loose over time.
2. Replacement of Overheated or Oxidized Parts:
  - Upon discovering components that have been overheated or oxidized such as wires, jumpers, terminal blocks, etc., it is imperative to replace them to prevent further risks.

Following these guidelines is crucial for ensuring the safety and optimal performance of the control panel. Should you encounter any concerns or require further clarification, please take photos of the control panel’s interior and contact us directly.

For any questions, please contact Auber Instruments via email: [info@aubersins.com](mailto:info@aubersins.com)