

Preliminary Procedures for electrical hook-up of the CDC.

Electrical hook-up involves connecting the individual chamber wires to preamplifier channels which are mounted on the end of the CDC. The mapping of channel in the chamber to preamplifier has been provided as part of the Jefferson lab assembly drawings and is based on space available on the swiss-cheese plate. The electrical hook-up is carried out with the chamber rotated to its horizontal position.

Install Swiss Cheese Plate:

1. Supports for the Swiss-chees plate are installed on the up-stream end of the CDC.
2. The Swiss-cheese plate is attached to the connectors.
3. The plate is tightened to the end of the chamber.

Hook-up wires:

1. The hook-up wires are 15cm long pieces of connecting wire.
2. One end has been stripped.
3. A small solder ball is put on the stripped end.
4. The rubber booty made of conducting rubber is slid over the end.
5. Heat shrink tube is appled to hold the booty in place.
6. Numbered (1-24) labels are put on the wires.
7. Wires are stored in boxes based on their number (1-14)

Electrical Hookup of the Chamber:

1. Insert hook-up wires through plate in groups appropriate for a connectors.
2. Plastic screw inserts are slid over the wires and tightened down.
3. The connector stand is mounted on the Swiss-cheese plate for the current group of wires.
4. Strip wires at appropriate length and connect to the connector.
5. Check electrical connection from down stream end of the chamber to the preamplifier connector.

Training:

Training procedures will be developed based on the final procedure. Appropriate documentation will be provided as part of the training.

Testing:

Checking of electrical connections at this point is done to make sure that each wire is connected to the preamplifier connector. It is also very important the wire number in the chamber (layer/wire count) and the preamplifier number and channel are recorded and double checked for each wire.

Safety Issues:

This step involves soldering of wires. Normal care associated with soldering needs to be exercised.