



## Safety Mat Wiring Information

In a properly wired and installed safety system, the safety interface module or controller will prevent the protected machine from operating if the mat has an internal open or shorted connection. If you suspect there is a problem with a mat, follow the appropriate procedure below to track down a faulty condition.

All testing can be done with a continuity meter. Before testing a mat, disconnect all four wires, so it is completely isolated from the system.

### Mats with a Single 4-Conductor Lead

Test continuity in accordance with the table below. Measure between the wires in each pair and confirm the proper result. Test the mat with and without a person standing on it.

Pairs to Test	Mat State	Proper Result
Black and Yellow	Not applicable	Less than 5 ohms
Red and White	Not applicable	Less than 5 ohms
Red and Black	No weight	Open circuit
Red and Black	Occupied	Less than 5 ohms
Yellow and White	No weight	Open circuit
Yellow and White	Occupied	Less than 5 ohms

**Continuity Table for Mat with Single 4-Conductor Lead**

### Mats with Two 4-Conductor Leads

Test continuity in accordance with the table below. Measure between the wires in each pair and confirm the proper result. Test the mat with and without a person standing on it.

Pairs to Test	Mat State	Proper Result
Black and Black	Not applicable	Less than 5 ohms
Red and Red	Not applicable	Less than 5 ohms
Yellow and Yellow	Not applicable	Less than 5 ohms
White and White	Not applicable	Less than 5 ohms
Red and Black (Either pair)	No weight	Open circuit
Red and Black (Either pair)	Occupied	Less than 5 ohms

**Continuity Table for Mat with Two 4-Conductor Leads**

## Mats with Two 2-Conductor Leads

Test continuity in accordance with the table below. Measure between the wires in each pair and confirm the proper result. Test the mat with and without a person standing on it. Note that the lead pairs may be black and white or ribbed and smooth, depending on the model.

<b>Pairs to Test</b>	<b>Mat State</b>	<b>Proper Result</b>
Black and Black or Ribbed and Ribbed	Not applicable	Less than 5 ohms
White and White or Smooth and Smooth	Not applicable	Less than 5 ohms
Black and White or Ribbed and Smooth (Either pair)	No weight	Open circuit
Black and White or Ribbed and Smooth (Either pair)	Occupied	Less than 5 ohms

**Continuity Table for Mat with Two 2-Conductor Leads**