## Soldering wires onto connector assemblies

**Objective**  
Heat connector assemblies for soldering

**Material**  
Device assembly  
Tin plated brass terminals  
Solder paste

**Temperature**  
500°F (260°C) 5-7 seconds

**Frequency**  
360 kHz

**Equipment**  
Ameritherm 2.4 kW induction heating system equipped with a remote heat station, containing two 0.66 µF capacitor.

An induction heating coil designed and developed specifically for this application.

**Process**  
A single turn helical coil is used to heat the solder paste. The connectors are placed inside the induction heating coil and RF power is applied for 5-7 seconds until the connector heats. Solder paste is applied to the joint in two ways, stick-fed or manually.

**Results/Benefits**
- Compared to using a manual soldering iron, induction heating precisely applies heat to for higher quality solder joints
- This is ideal for integrating with an automated system. By stick-feeding the solder more aesthetically pleasing parts are produced.