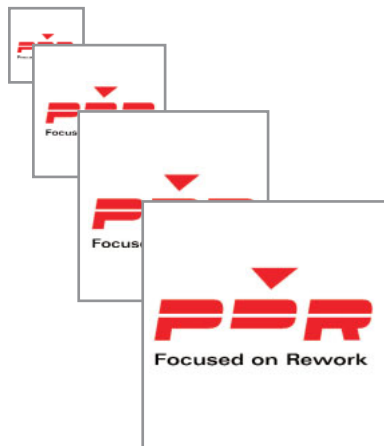
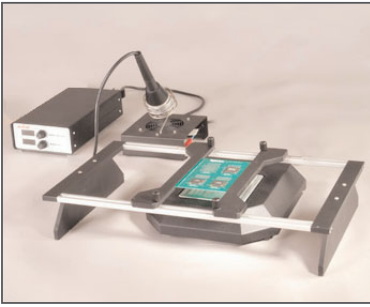


# **X110** | *IR Rework Station*

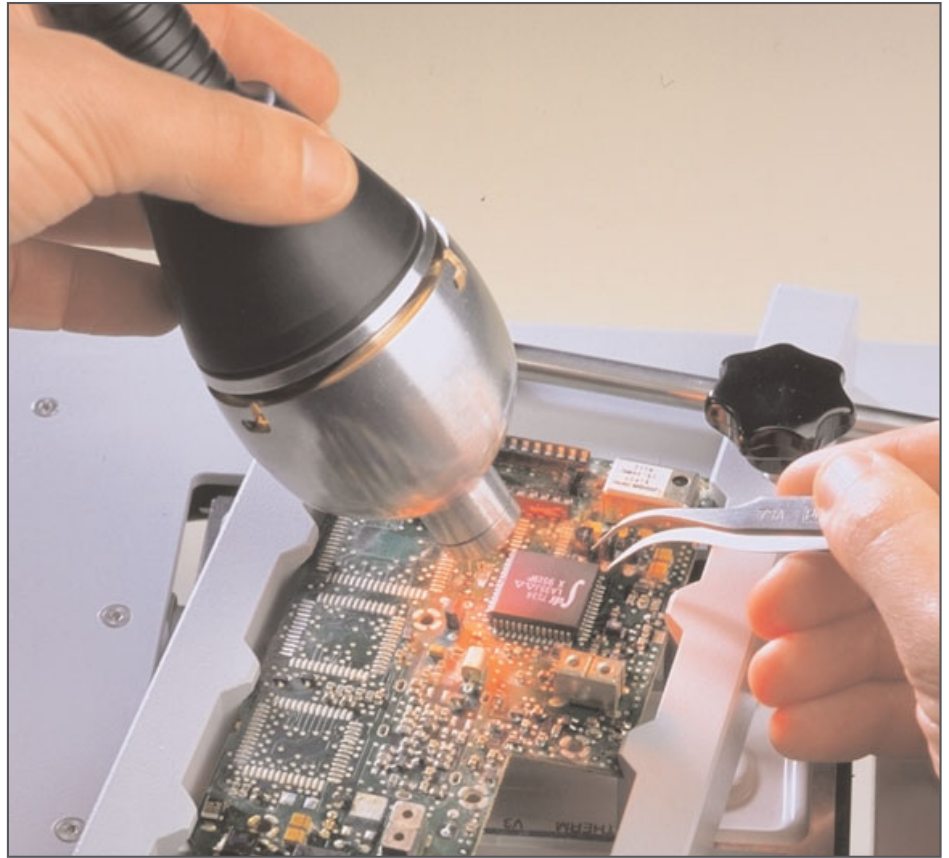


# X110 | IR Rework Station



## Advanced Features

- **Focused IR Component Heating**  
*PDR's patented IR Handtool*
- **IR PCB Preheater**  
*Large area 300w system*
- **Vacuum Component Pick-up**  
*Electric Vacuum Pick-up Handtool*
- **Non-Contact IR Sensor**  
*For Measuring Component Temperature*
- **Process Control Accessories Package**  
*Including Process Timer and IR Sensor*
- **BGA/Micro-BGA Alignment**  
*Magnification-illumination Handtool*

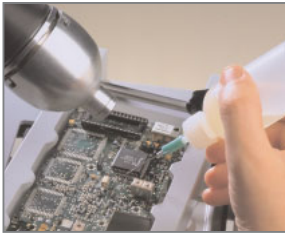


## BGA Rework in a Handtool

PDR introduces the PDR-XI 10 SMT/BGA rework handtool system, using PDR's patented Focused IR Handtool technology. The IR handtool has been specifically designed to cope with the challenges of repairing today's PCB assemblies.

The system is tip/nozzle free, gas free, instantly/precisely controllable, clean and produces high quality BGA rework without any complications. The operator is able to rework BGAs/uBGAs/CSPs using the accurate process control necessary for the effective rework of even the most advanced packages, including SMDs, BGAs, CSPs, Flipchips and is ready for 0201 and lead-free applications.

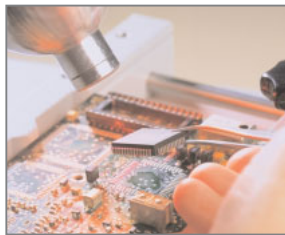
The XI 10 comes with a good range of standard features allowing the operator to quickly and safely rework all types of SMDs without overheating the component, adjacents or the PCB. It uses all the proven attributes of PDR's Focused IR technology, first introduced in 1987 and now used worldwide by over 3000 customers.



Apply Flux and Preheat PCB



Heat Component with IR Handtool



Remove Component

## Simple BGA Rework Procedure

BGA rework requires a system that is able to heat the hidden joints without displacing adjacent components. A system that is safe, gentle, adaptable and, above all, simple to operate.

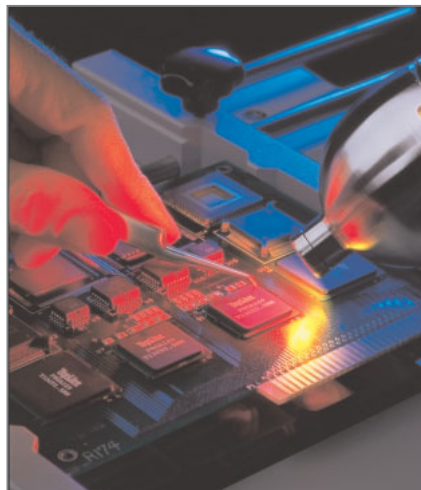
The X110 is so easy to operate that technicians are able to instantly achieve excellent process control for BGA/SMT rework without the complexities and frustrations normally associated with 'high end' rework systems.

To desolder a BGA, simply apply some flux, preheat the PCB, then use the hand tool to heat the component to reflow and remove it. To replace new BGA, apply flux, place and align component, preheat then reflow.

With the aid of excellent accessories, process control is easy. Operators who prefer handtools can now simply repair assemblies with BGAs. **Perfect quality BGA rework in a simple to use handtool !**

## Major Advantages

- **No nozzles, focus hoods or shields**  
Any shape or size component covered
- **Low cost of ownership**  
Nearly zero follow-on costs
- **Precise, focused component heating**  
IR, with no effect on adjacent components
- **Excellent process control**  
With non-contact, component temperature sensing
- **Easy to set up and use**  
Clean, simple, 100% yield process



X110 reworking a BGA



X110 Process Control Accessories

## PDR Offices

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Authorised Distributor

For full detailed features and specifications on the PDR IR-X110 visit  
[www.pdr-smt.com/x110](http://www.pdr-smt.com/x110)

A full list of PDR distributors offering professional sales and support can be found at [www.pdr-smt.com/contacts](http://www.pdr-smt.com/contacts).

**PDR**  
Focused on Rework

# X110 | Technical Specifications

## Detailed Features and Specifications

- **Advanced Focused IR Handtool Component Heating**  
*Lens Based Focused IR heating with adjustable image system*  
*PDR lens attachments with IR image from 4 to 70mm diameter*  
*Reworks all SMDs/ BGAs including 0201s + lead free applications*
- **Large Area IR PCB Preheater System**  
*Medium wave IR PCB preheating*  
*300W, single zone (120mm x 120mm area)*
- **Portable PCB Workholder**  
*Up to 12" x 10" (300mm x 250mm) capacity*
- **PDR Analogue/Digital Control System**  
*PDR Type 1B Controller*  
*PCB preheat and IR handtool control*
- **Non-contact, IR Sensor for measuring PCB/component temperature**  
*Handheld, non-contact IR sensor with digital readout*  
*Realtime monitoring of component temperature throughout process*
- **Vacuum Pick-up Tool**  
*Handheld, electric powered, vacuum pick-up tool with silicon cups*
- **Process Control Accessories Package**  
*Handheld, non-contact IR sensor with digital readout (mentioned above)*  
*Process countdown timer for preheat and reflow control*  
*X3 magnification, illuminated magnifier to assist BGA alignment*  
*Advanced process control instructions*

## Benchtop Requirements

<i>Topheat power</i>	- 150 watts IR
<i>Backheater power</i>	- 300 watts IR
<i>Voltage/frequency</i>	- 110/240 volts 50/60Hz
<i>Typical components</i>	- CSPs, BGAs, micro-BGAs, QFPs, PLCCs, SOICs, small SMDs
<i>Bench area required</i>	- 600mm x 600mm
<i>Weight</i>	- 10 Kg

**PDR reserves the right to improve or change specifications without giving notice.**