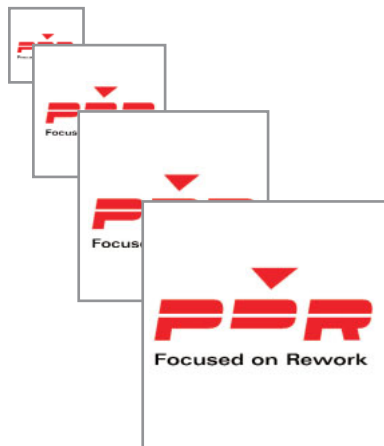
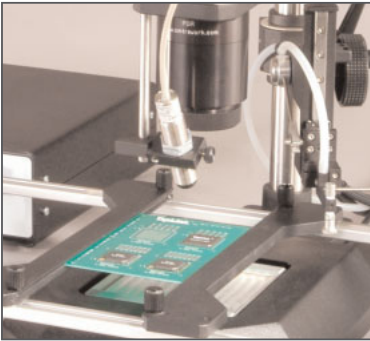


# **X310** | *IR Rework Station*



# X310 | IR Rework Station



## Advanced Features

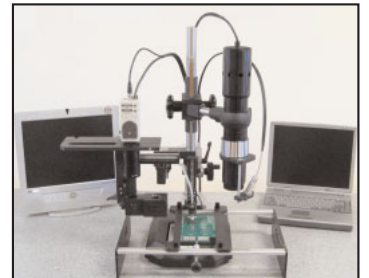
- **Focused IR Component Heating**  
*PDR's patented technology*
- **IR PCB Preheater**  
*120mm x 120mm, 500w system*
- **Precision Component Placement**  
*Low Force Landing and Rotation*
- **Non-Contact IR Sensor**  
*For Measuring Component Temperature*
- **Optional - PC Control Package**  
*With PDR ThermoActive Software Suite*
- **Optional - BGA/Micro-BGA Alignment**  
*CCTV/Prism Based System*
- **Optional - Component Nest and Paste Application Facility**  
*Print Frame*
- **Optional - X/Y Workholder**  
*X-Y Micro Movement with Micrometer Adjustment*



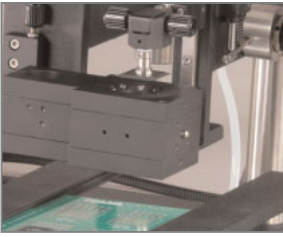
## Low Cost, Upgradeable BGA Rework System

Today there is a need for lower cost and upgradeable equipment without a loss in soldering quality. The PDR-X310 SMT/BGA rework system, using PDR's patented Focused IR technology, has been specifically designed to meet this challenge.

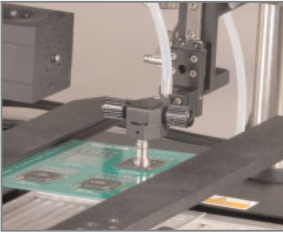
The IR-X310 comes with a good range of standard features allowing the operator to quickly, safely rework all types of components and can be upgraded from a basic system to a fully 'loaded' BGA rework system (right).



The system is tool free, gas free, instantly/precisely controllable, clean, modular, upgradeable and produces 100% yield BGA rework without any complications. The X310 uses all the proven attributes of PDR's Focused IR technology, first introduced in 1987 and now used worldwide by over 3000 customers.



BGA Alignment (optional)



Placement (optional micro rotation)



Reflow

## Simple BGA Rework Procedure

BGA rework poses the problem of accessing hidden interconnects in a high density environment. Consequently, it requires a system that is able to access the hidden joints without affecting neighbouring components. A system that is safe, gentle, adaptable and, above all, simple to operate.

The IR-X310 is such a system. It 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.

With the aid of excellent standard/optional mechanics, optics and control, operators can simply pick up the BGA, align it, place it into fluxed pads and reflow with the system's accurate closed-loop component temperature control.

## Major Advantages

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



PDR ThermoActive Software (optional)

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Authorised Distributor

For full detailed features and specifications on the PDR IR-X310 visit  
[www.pdr-smt.com/x310](http://www.pdr-smt.com/x310)

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).



# X310 | Technical Specifications

## Detailed Features and Specifications

- **Advanced Focused IR 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*
- **500W IR PCB Preheater System**  
*medium wave IR PCB preheating*  
*500W power*  
*Single zone (120mm x 120mm area)*
- **PDR Lens Attachments**  
*F150 (4 -18mm spotsizes) optional*  
*F200 (10 -28mm " ) optional*  
*F400 (12 -35mm " ) optional*  
*F700 (25 -70mm " ) standard*
- **Precision Pick-up System**  
*Vacuum operated pick and place with precise macro-micro Z axis movement*  
*360° component rotation*  
*Optional Micrometer control for soft component landing*  
*Optional component micro rotation*  
*Optional Component nest and 'print frame' facility for paste application*
- **450mm Portable benchtop mounted PCB Workholder**  
*Up to 12" X 10" (300mm X 250mm) capacity*  
*Optional pcb 'pallet' providing macro-micro X-Y adjustments*
- **Non-contact, IR Sensor for measuring component temperature**  
*Manually adjustable, K-type non-contact IR sensor*  
*Realtime monitoring of component temperature throughout process*
- **Digital, Closed-loop Electronic Control**  
*Type 2, digital controller*  
*Simple dial setting power controls*  
*CAL digital temperature controller - controls component temperature.*
- **Optional - PC Control Package with PDR ThermoActive V3 Software Suite**  
*Type 5, Digital controller with multi functional features*  
*Multi K-type thermocouple (x4) capacity for temp/time testing*  
*Advanced, Windows 98/me/XP/NT ThermoActive V3 software suite*  
*Realtime, closed loop component/PCB temperature control*  
*Drag and drop profile setting*  
*Temperature profiling and data logging*
- **Optional - Prism based BGA/micro-BGA alignment system**  
*Split beam prism system for simultaneous PCB/component viewing*  
*BGA, CSP and leadless component alignment*  
*Integral LED lighting system with illumination level control*  
*Full colour 1/2" CCTV camera and 15" TFT/LCD Flatscreen colour monitor*  
*Computar zoom lens with up to X50 magnification*  
*Precise X/Y axis mounting system*

## Benchtop Requirements

Topheat power	- 150 watts IR
Backheater power	- 500 watts IR
Voltage/frequency	- 110/240 volts 50/60Hz
Typical components	- CSPs, BGAs, micro-BGAs, QFPs, PLCCs, SOICs, small SMDs
Bench area required	- 1400mm x 600mm
Weight	- 65 Kg

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