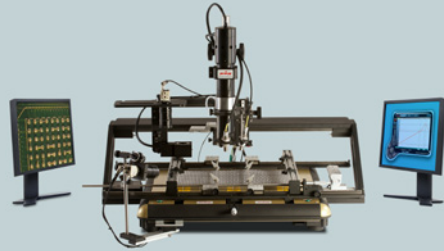


Product Range 2016 BGA Rework Stations



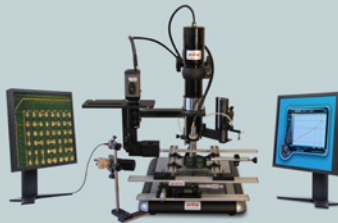
PDR IR-E6 Evolution XL Ultimate Performance, BGA Rework System for Very Large PCBs

- Medium - large sized PCBs - SMDs, BGAs, uBGAs
- Software controlled, Focused IR process
- Highly specified, ultra-accurate system



PDR IR-E3 Evolution Ultimate Performance, BGA Rework Station

- Small -medium sized PCBs - SMDs, BGAs, uBGAs
- Software controlled, Focused IR process
- Highly specified, ultra-accurate system



PDR IR-D3 Discovery Lower Cost, BGA Rework Station

- Small - medium sized PCBs - SMDs, BGAs, uBGAs
- Software controlled, Focused IR process
- Lower cost, good mechanics



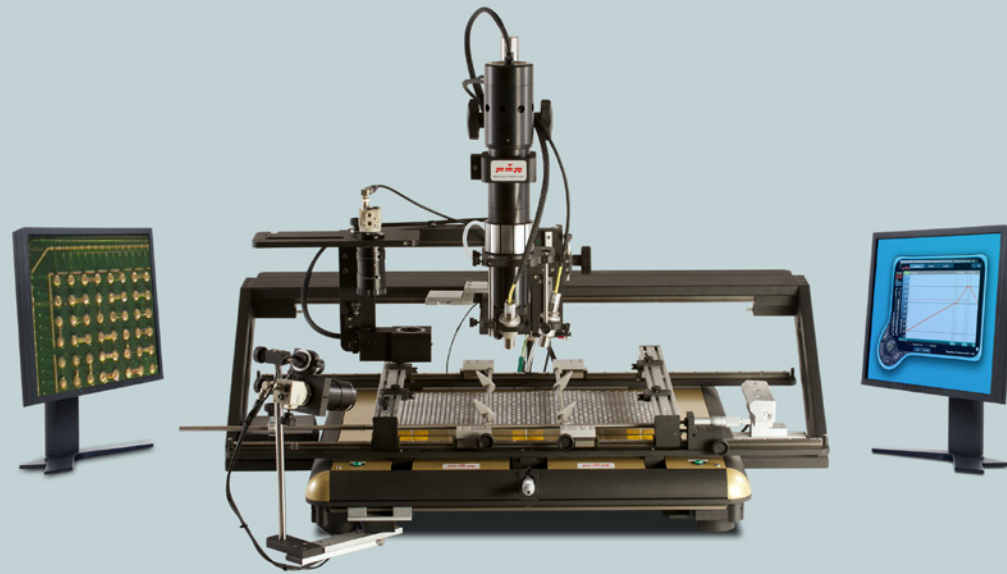
PDR IR-C3 Chipmate Entry-Level SMT/BGA Rework Station

- Mobile phone, PDAs, laptop repair - SMDs, BGAs, CSPs
- Digital controlled, Focused IR process
- Lower cost, simple mechanics

PDR System	IR-C3	IR-D3	IR-E3	IR-E6
Typical Application	Entry-Level SMT/BGA Rework Station - small/medium PCBs	Professional BGA Rework Station - small/medium PCBs	Ultimate Performance, BGA Rework Station for Small-Medium PCBs	Ultimate Performance, BGA Rework Station for Very Large PCBs
PDR System Features				
Advanced Focused IR Component Heating	IR-C3	IR-D3	IR-E3	IR-E6
Focused IR Lens System	●	●	●	●
F150 - Ø 6-18mm - Lens Attachment	○	○	○	○
F200 - Ø10-28mm - Lens Attachment	○	○	○	○
F400 - Ø12-35mm - Lens Attachment	○	○	○	○
F700 - Ø20-70mm - Lens Attachment	●	●	●	●
Focused IR - Hand Tool - Ø14mm IR Spot				
Quartz IR PCB Preheating	IR-C3	IR-D3	IR-E3	IR-E6
750W, single zone (120mm x 120mm heating area)	○	○	○	
2000W, single zone (240mm x 240mm heating area)	●			
2000W, two zone (240mm x 240mm heating area)		●	●	
2800W, three zone (240mm x 360mm heating area)			○	
3200W, two zone (500mm x 270mm heating area)				●
Component Pick and Placement	IR-C3	IR-D3	IR-E3	IR-E6
Handheld vacuum placement system	●			
Standard vacuum placement system (Z-axis and Rotation)	○			
Professional vacuum placement system (Z-axis, Rotation and Soft Landing)		●		
Advanced Professional vacuum placement system (Y/Z-axis, Rotation and Soft Landing)			●	●
Component Nest/Flux Application Facility	IR-C3	IR-D3	IR-E3	IR-E6
Handheld flux dip tray or component print frame	○	●		
Jaw mounted nest with flux dip tray or component print frame		○		
Integrated nest with flux dip tray or component print frame			●	●

PDR System	IR-C3	IR-D3	IR-E3	IR-E6
Typical Application	Entry-Level SMT/BGA Rework Station - small/medium PCBs	Professional BGA Rework Station - small/medium PCBs	Ultimate Performance, BGA Rework Station for Small-Medium PCBs	Ultimate Performance, BGA Rework Station for Very Large PCBs
PDR System Features				
PCB Handling (PCB Capacity)	IR-C3	IR-D3	IR-E3	IR-E6
Portable Benchtop Mounted PCB Workholder (12" x 10"/300mm x 250mm)	●			
Professional PCB table with micro X/Y (18" x 12"/450mm x 300mm)		●		
Advanced Professional PCB table with macro-micro X/Y (18" x 12"/450mm x 300mm)		○	●	
XL Advanced Professional PCB table with macro-micro X/Y (24" x 18"/620mm x 460mm)				●
Component Temperature Sensing	IR-C3	IR-D3	IR-E3	IR-E6
Standard non-contact IR temperature sensor (Pyrometer) - Ø7mm+ Spot	●	●	●	●
PCB Temperature Sensing	IR-C3	IR-D3	IR-E3	IR-E6
K-type wire thermocouple	●	●	●	
Standard non-contact IR temperature sensor (Pyrometer) - Ø7mm+ Spot		○	○	●
Advanced Thermal Process Control	IR-C3	IR-D3	IR-E3	IR-E6
Digital controller based thermal control	●	○		
Software based auto profile thermal control		●	●	●
Camera Based Vision Systems	IR-C3	IR-D3	IR-E3	IR-E6
Camera/Prism Based BGA/CSP/QFN Alignment System		○	●	●
Auxiliary Process Observation Camera		○	○	○
Forced Air PCB Cooling	IR-C3	IR-D3	IR-E3	IR-E6
Simple USB/free standing cooling fan	○	○	○	○
Highly effective, integral PCB cooling with air knife system			○	○

● = Standard Feature ○ = Optional Feature



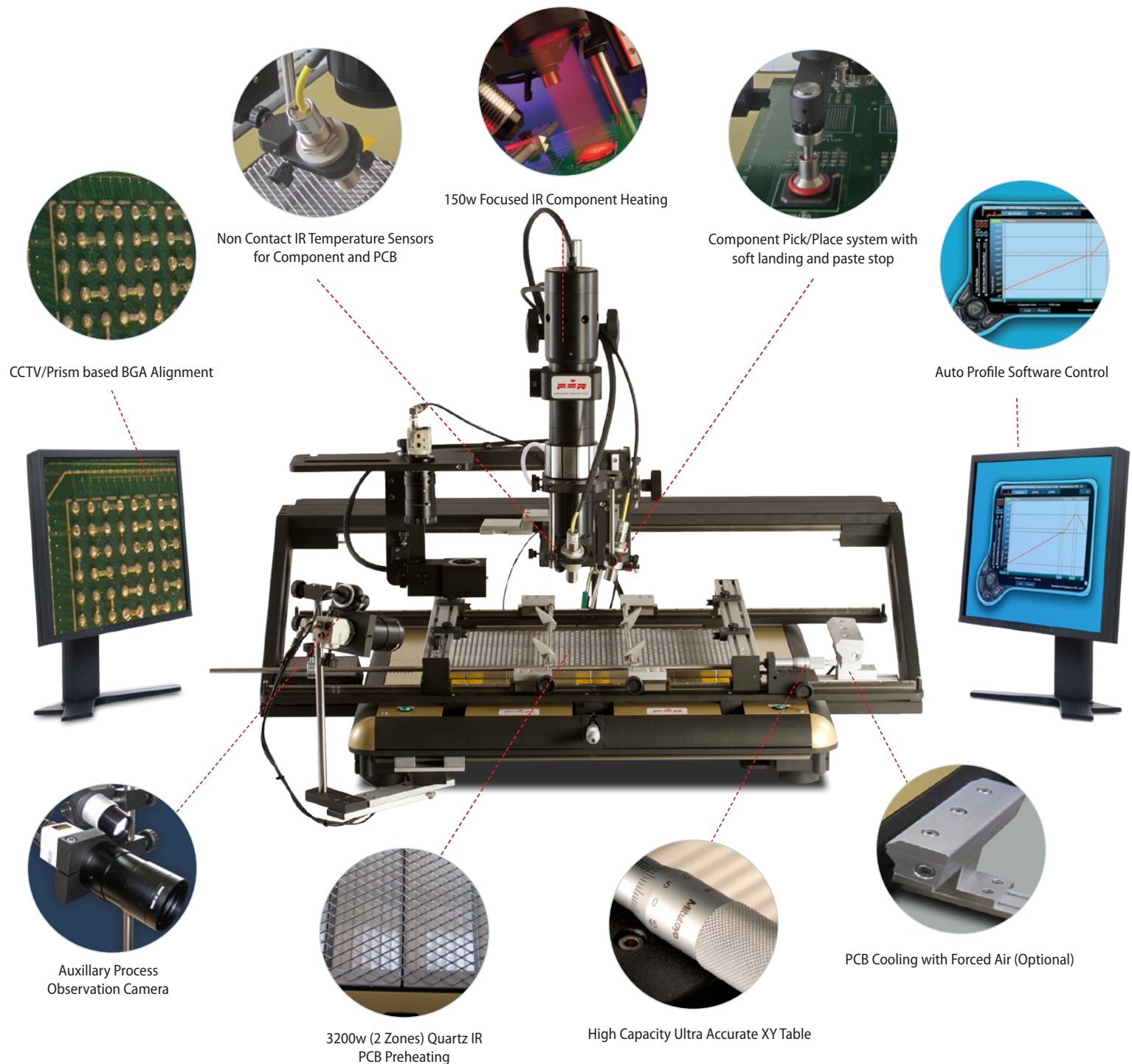
PDR's Focused IR SMT/BGA Rework Station
For Large PCB, BGA Rework



PDR IR-E6 Evolution XL
BGA Rework Station

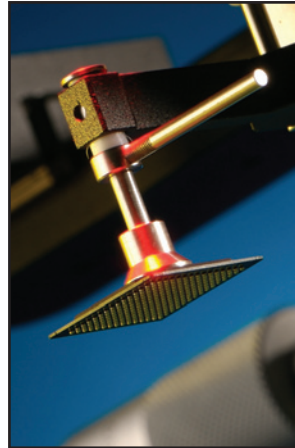
Advanced features:

- **Advanced Focused IR component heating**
150W, lens based Focused IR heating with adjustable image system
- **Quartz IR PCB preheating**
3200W, two zone (500mm x 270mm heating area)
- **Precision Component Pick and Placement**
Advanced Professional vacuum placement system
- **Component Nest/Flux Application Facility**
Integrated nest with flux dip tray or component print frame
- **Precision PCB Handling**
Advanced Professional PCB table with macro-micro X/Y
- **Component Temperature Sensing**
Standard non-contact IR temperature sensor
- **PCB Temperature Sensing**
Standard non-contact IR temperature sensor
- **Advanced Thermal Process Control**
Software based auto profile thermal control
- **Camera/Prism Based BGA/CSP/QFN Alignment System**
Split beam prism system for simultaneous PCB/component viewing
- **Auxiliary Process Camera (Optional)**
Auxiliary process observation camera
- **Forced Air PCB Cooling (Optional)**
Highly effective, integral PCB cooling with air knife system



BGA rework without the complications

The PDR IR-E6 SMT/BGA rework station, using PDR's patented Focused IR technology, has been specifically designed to cope with the challenges of repairing today's Large PCB assemblies.



The station is tool free, gas free, instantly/precisely controllable, clean, modular, upgradeable and produces 100% yield BGA rework without any complications. It provides the extremely high levels of profiling and process control necessary for the effective rework of even the most advanced packages, including SMDs, BGAs, CSPs, QFNs, Flipchips and is ready for 0201 and lead-free applications. The IR-E6 is well specified yet can be easily configured to your exact requirements, with a good range of advanced features to choose from, allowing the operator to quickly and safely rework all types of components 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 4000 customers.

Simple BGA rework procedure

BGA rework poses the problem of accessing hidden interconnects in a high density environment. Consequently, it requires a station that is able to access the hidden joints without affecting neighbouring components. A station that is safe, gentle, adaptable and, above all, simple to operate. The IR-E6 is such a station. 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 stations.

Paste - Place - Reflow

With the aid of excellent mechanics, optics and control, operators can simply pick up the fluxed BGA from the nest, align it, place it onto the PCB's pads and then reflow with the station's accurate PC based, closedloop component and PCB temperature control.

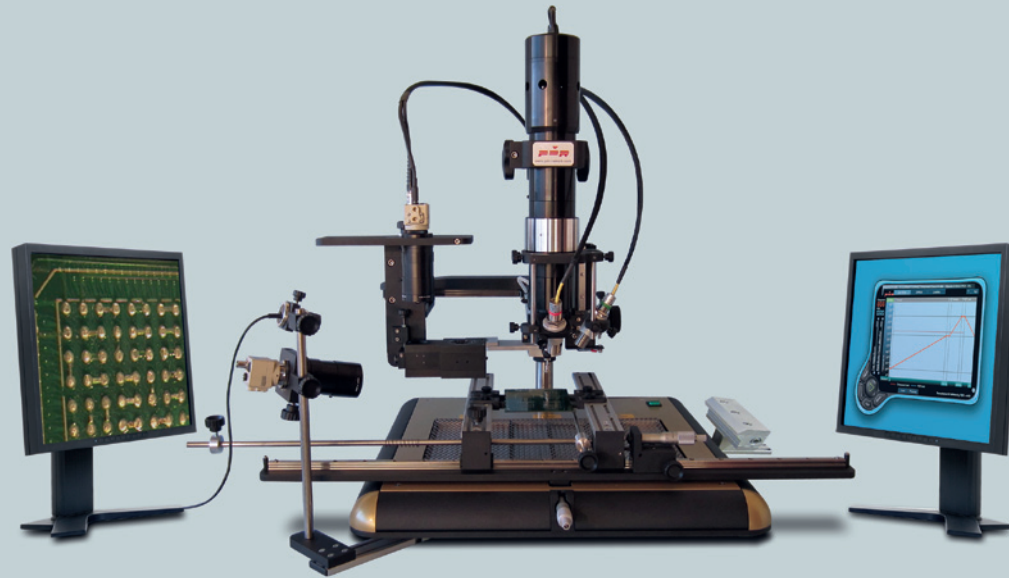
Details and specifications of advanced features available

- Advanced Focused IR component heating**
 150W, lens based Focused IR heating with adjustable image system
 PDR lens attachments with IR image from 4 to 70mm diameter
 Reworks all SMDs/ BGAs/QFNs/CSPs including 0201s + lead free applications
- Quartz IR PCB preheating**
 High power, medium wave quartz IR
 Large area IR PCB preheater system
 3200W, two zone, 2 x 1600W, (500mm x 270mm heating area)
- PDR lens attachments**
 F150 (Ø4 - 18mm spot size) optional
 F200 (Ø10 - 28mm spot size) optional
 F400 (Ø12 - 35mm spot size) optional
 F700 (Ø25 - 70mm spot size) standard
- Advanced Professional Vacuum Placement System**
 With precise 'pick and place' action, Y/Z axis movement and rotation
 Soft component landing, Z-axis stop, LED guidance for paste placement
 Interchangeable pick-up heads for different applications
- Component Nest for Precision Pick-up and Flux Application**
 With integrated nest with 'component print frame', dip tray or mini stencil paste-head facility for flux and solder paste application.
- Advanced Professional Macro-Micro X/Y PCB Table**
 Precision micrometer (micro) X/Y and micro rotation control
 +/- 10 microns (.0004") movement in X/Y directions
 Macro movement in X/Y directions
 Up to 18" x 24" (460mm x 620mm) PCB capacity with lockable X/Y axis
 X/Y Table has 1" x 1" micro- movement plus macro adjustment
 System has a gantry feature. Topside of machine moves in X and Y direction
- Component Temperature Sensing - Non-contact, IR Sensor**
 Manually adjustable, K-type non-contact IR sensor, Ø7-10mm spotsize
 Real time monitoring of component temperature throughout process
- PCB Temperature Sensing - Non-contact, IR Sensor**
 Manually adjustable, K-type non-contact IR sensor, Ø7-10mm spotsize
 Real time monitoring of component temperature throughout process
- Auto Profile Process Control Software**
 PDR ThermoActive software suite
 Digital controller with multi-functional features
 Advanced, Windows 7+ ThermoActive software suite
 Two channel, real time, closed loop component and PCB temperature control
 'Auto-profile' temperature profiling, data logging and reporting
 Multi K-type thermocouple (x4) capacity for temp/time testing
- Camera/Prism Based BGA/CSP/QFN Alignment System**
 Split beam prism system for simultaneous PCB/component viewing
 Integral LED lighting system with illumination level control
 Full colour compact camera and flat screen colour monitor
 High quality zoom lens with up to x50 magnification
 Precise X/Y axis mounting system
- Auxiliary Process Camera (Optional)**
 Auxiliary process observation camera
 Integral LED lighting system with illumination level control
 Full colour compact camera with rotation movement
 High quality zoom lens with up to x50 magnification
- Forced Air PCB Cooling (Optional)**
 Highly effective, integral PCB cooling with air knife system
 Switched compressed air flow, directed under the PCB

Bench Top Requirements

Top heat power	150W IR
Back heater power	3200W, 2 Zone, 2 x 16700W
Voltage/frequency	208-240 volts 50/60Hz, up to 3KW
Typical components	CSPs, BGAs, uBGAs, QFNs, QFPs, PLCCs, SOICs, small SMDs
Bench area	2000mm (w) x 1000mm (d)
Weight	100 Kg

The above features are mostly optional and also, PDR reserves the right to improve or change specifications without giving notice.



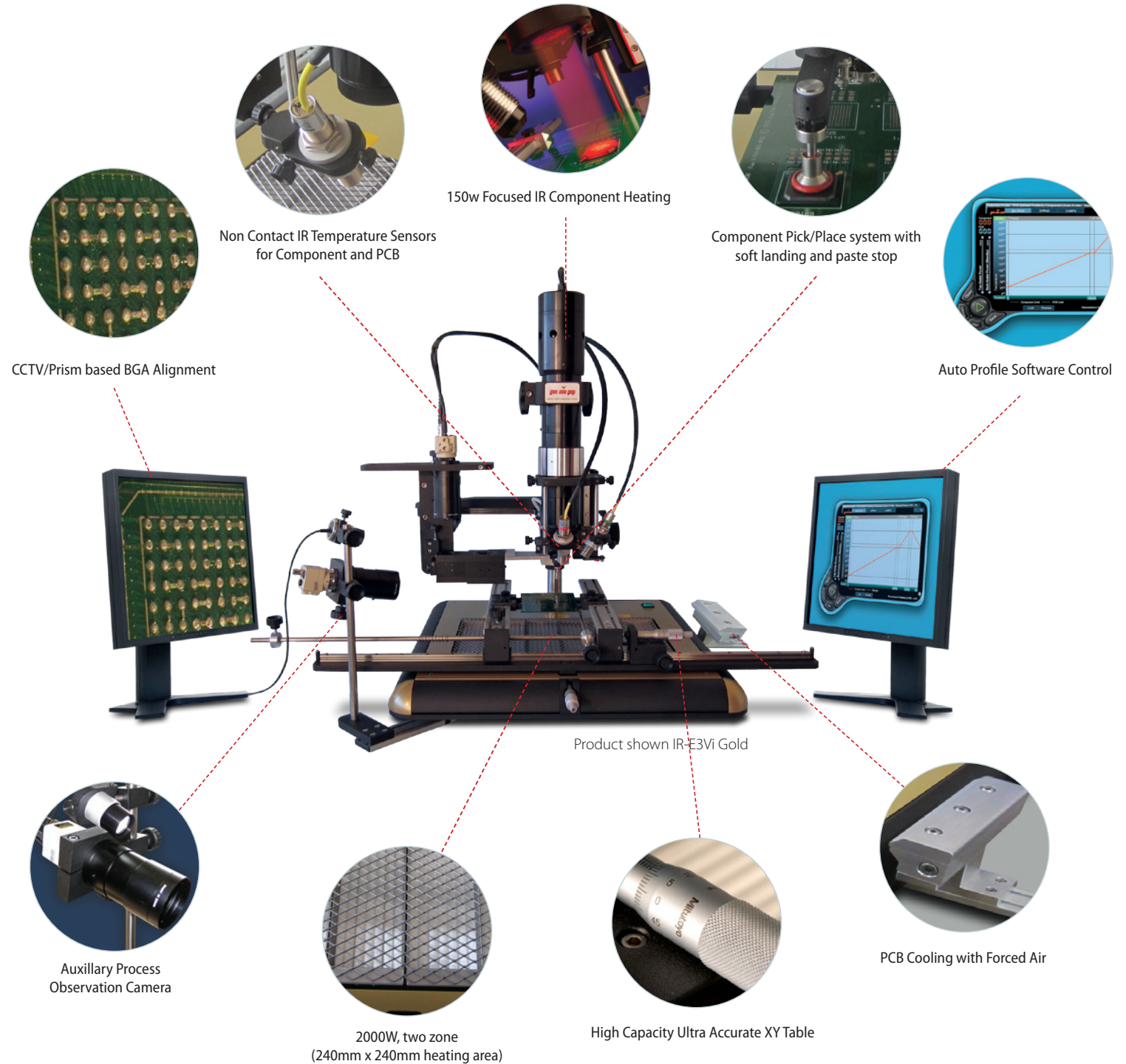
PDR's Focused IR SMT/BGA Rework Station
for Ultimate Performance in BGA Rework



PDR IR-E3 Evolution
BGA Rework Station

Advanced features:

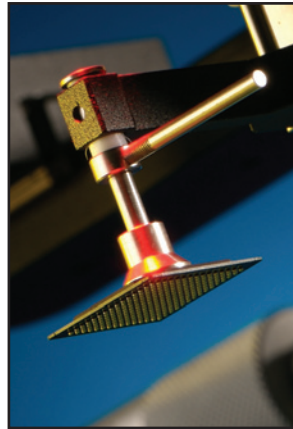
- Advanced Focused IR component heating**
 150W, lens based Focused IR heating with adjustable image system
- Quartz IR PCB preheating**
 2000W, two zone (240mm x 240mm heating area)
 Optional 2800W, 3 zone (240mm x 360mm heating area)
- Precision Component Pick and Placement**
 Advanced Professional vacuum placement system
- Component Nest/Flux Application Facility**
 Integrated nest with flux dip tray or component print frame
- Precision PCB Handling**
 Advanced Professional PCB table with macro-micro X/Y
- Component Temperature Sensing**
 Standard non-contact IR temperature sensor
- PCB Temperature Sensing**
 K-type wire thermocouple
 Optional non-contact IR temperature sensor
- Advanced Thermal Process Control**
 Software based auto profile thermal control
- Camera/Prism Based BGA/CSP/QFN Alignment System**
 Split beam prism system for simultaneous PCB/component viewing
- Auxiliary Process Camera (Optional)**
 Auxiliary process observation camera
- Forced Air PCB Cooling (Optional)**
 Highly effective, integral PCB cooling with air knife system



BGA rework without the complications

The PDR IR-E3 SMT/BGA rework station, using PDR's patented Focused IR technology, has been specifically designed to cope with the challenges of repairing today's PCB assemblies.

The station is tool free, gas free, instantly/precisely controllable, clean, modular, upgradeable and produces 100% yield BGA rework without any complications. It provides the extremely high levels of profiling and process control necessary for the effective rework of even the most advanced packages, including SMDs, BGAs, CSPs, QFNs, Flipchips and is ready for 0201 and lead-free applications.



The IR-E3 can be easily configured to your requirements, with a good range of advanced features to choose from, allowing the operator to quickly and safely rework all types of components 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 4000 customers.

Simple BGA rework procedure

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

The IR-E3 is such a station. 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 stations.

Paste - Place - Reflow

With the aid of excellent mechanics, optics and control, operators can simply pick up the fluxed BGA from the nest, align it, place it onto the PCB's pads and then reflow with the station's accurate PC based, closed loop component and PCB temperature control.

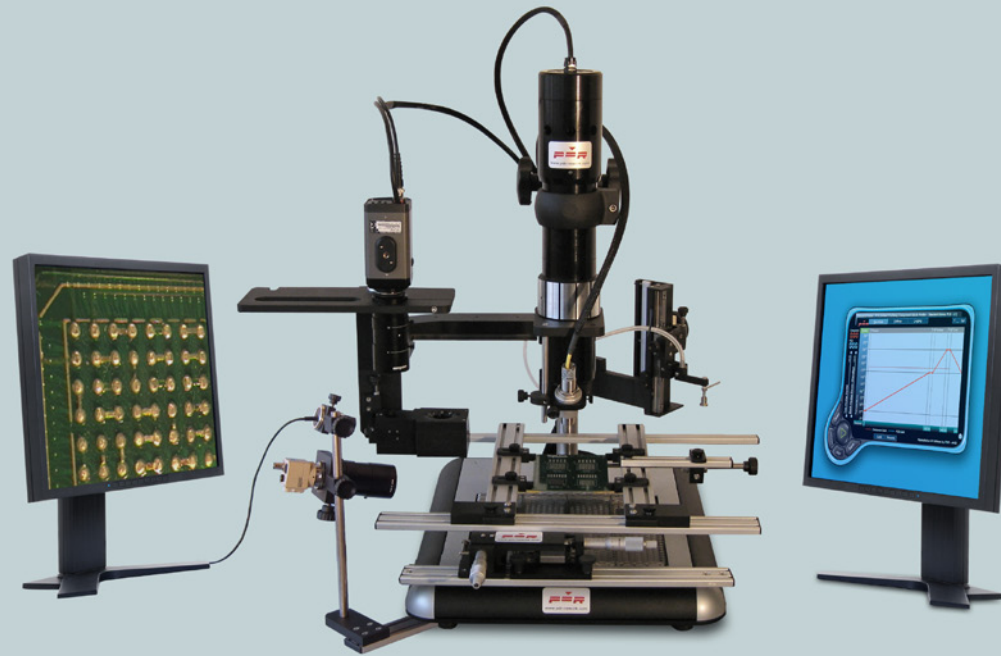
Details and specifications of advanced features available

- Advanced Focused IR component heating**
 150W, lens based Focused IR heating with adjustable image system
 PDR lens attachments with IR image from 4 to 70mm diameter
 Reworks all SMDs/ BGAs/QFNs/CSPs including 0201s + lead free applications
- PDR Lens Attachments**
 F150 (Ø4 - 18mm spot size) optional
 F200 (Ø10 - 28mm spot size) optional
 F400 (Ø12 - 35mm spot size) optional
 F700 (Ø25 - 70mm spot size) standard
- Quartz IR PCB preheating**
 High power, medium wave quartz IR
 Large area IR PCB preheater system
 Standard 2000W, 2 x 1000W zones (240mm x 240mm heating area)
 Optional 750W, single zone (120mm x 120mm heating area)
 Optional 2800W, 3 zones, 1000w + 1000W + 800W (240mm x 360mm heating area)
- Advanced Professional Vacuum Placement System**
 With precise 'pick and place' action, Y/Z axis movement and rotation
 Soft component landing, Z-axis stop, LED guidance for paste placement
 Interchangeable pick-up heads for different applications
- Component Nest for Precision Pick-up and Flux Application**
 With integrated nest with 'component print frame', dip tray or mini stencil paste-head facility for flux and solder paste application
- Advanced Professional Macro-Micro X/Y PCB Table**
 Precision micrometer (micro) X/Y and micro rotation control
 +/- 10 microns (.0004") movement in X/Y directions
 Macro movement in X/Y directions
 Up to 12" x 18" (300mm x 450mm) PCB capacity with lockable X/Y axis
- Component Temperature Sensing - Non-contact, IR Sensor**
 Manually adjustable, K-type non-contact IR sensor, Ø7-10mm spotsize
 Real time monitoring of component temperature throughout process
- PCB Temperature Sensing**
 Manually attached K-type wire thermocouple
 Optional non-contact IR sensor with real time temperature sensing
- PCB Temperature Sensing - Non-contact, IR Sensor (Optional)**
 Manually adjustable, K-type non-contact IR sensor, Ø7-10mm spotsize
 Real time monitoring of component temperature throughout process
- Auto Profile Process Control Software**
 PDR ThermoActive software suite
 Digital controller with multi-functional features
 Advanced, Windows 7+ ThermoActive software suite
 Two channel, real time, closed loop component and PCB temperature control
 'Auto-profile' temperature profiling, data logging and reporting
 Multi K-type thermocouple (x4) capacity for temp/time testing
- Camera/Prism Based BGA/CSP/QFN Alignment System**
 Split beam prism system for simultaneous PCB/component viewing
 Integral LED lighting system with illumination level control
 Full colour compact camera and flat screen colour monitor
 High quality zoom lens with up to x50 magnification
 Precise X/Y axis mounting system
- Auxiliary Process Camera (Optional)**
 Auxiliary process observation camera
 Integral LED lighting system with illumination level control
 Full colour compact camera with rotation movement
 High quality zoom lens with up to x50 magnification
- Forced Air PCB Cooling (Optional)**
 Highly effective, integral PCB cooling with air knife system
 Switched compressed air flow, directed under the PCB

Bench Top Requirements

Top heat power	150W IR
Back heater power	750W, 1600W, 2000W or 2800W IR
Voltage/frequency	208-240 volts 50/60Hz, up to 3KW
Typical components	CSPs, BGAs, uBGAs, QFNs, QFPs, PLCCs, SOICs, small SMDs
Bench area	1400mm (w) x 600mm (d)
Weight	65 Kg

The above features are mostly optional and also, PDR reserves the right to improve or change specifications without giving notice.



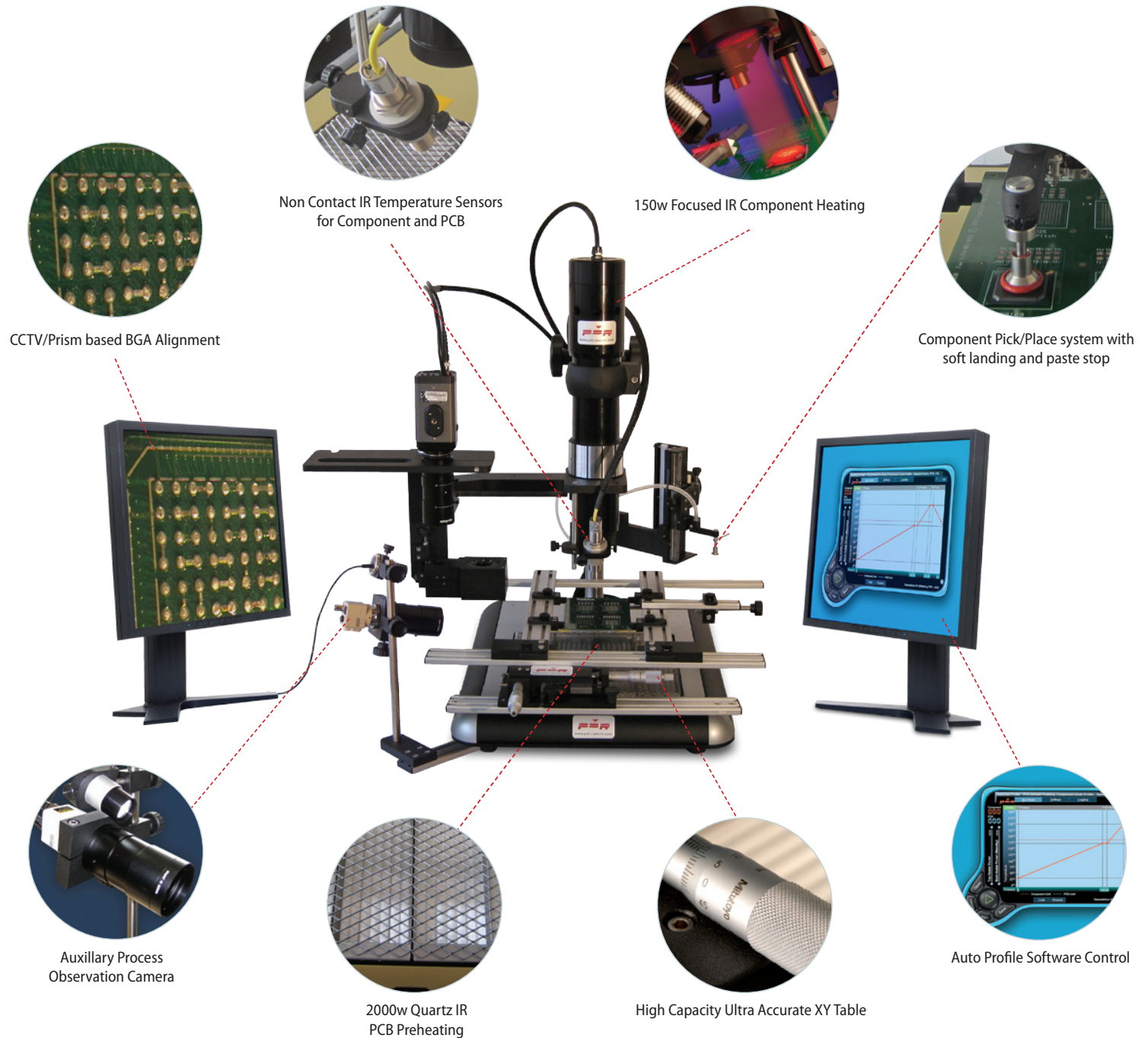
PDR's Focused IR SMT/BGA Rework Station
for Professional Performance in BGA Rework



PDR IR-D3 Discovery
BGA Rework Station

Advanced features:

- **Advanced Focused IR component heating**
150W, lens based Focused IR heating with adjustable image system
- **Quartz IR PCB preheating**
2000W, two zone (240mm x 240mm heating area)
- **Precision Component Pick and Placement**
Professional vacuum placement system
- **Component Nest/Flux Application Facility**
Optional Jaw mounted nest with flux dip tray or component print frame
- **Precision PCB Handling**
Professional PCB table with micro X/Y
- **Component Temperature Sensing**
Standard non-contact IR temperature sensor
- **PCB Temperature Sensing**
K-type wire thermocouple
Optional non-contact IR temperature sensor
- **Advanced Thermal Process Control**
Software based auto profile thermal control
- **Camera/Prism Based BGA/CSP/QFN Alignment System (Optional)**
Auxiliary process observation camera
- **Auxiliary Process Camera (Optional)**
Auxiliary process observation camera



BGA rework without the complications

The PDR IR-D3 Discovery rework station, using PDR's patented Focused IR technology, has been specifically designed to cope with the challenges of repairing today's PCB assemblies.

The station is tool free, gas free, instantly/precisely controllable, clean, modular, upgradeable and produces 100% yield BGA rework without any complications. It provides the extremely high levels of profiling and process control necessary for the effective rework of even the most advanced packages, including SMDs, BGAs, CSPs, QFNs, Flipchips and is ready for 0201 and lead-free applications.

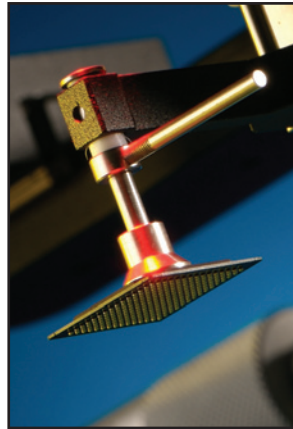
The IR-D3 Discovery is keenly priced and can be easily configured to your requirements, with a good range of advanced features to choose from, allowing the operator to quickly and safely rework all types of components without overheating the component, adjacents or the PCB. It uses all the proven attributes of PDR's Focused IR technology, first introduced in 1987 and now used worldwide by over 3500 customers.

Simple BGA rework procedure

BGA rework poses the problem of accessing hidden interconnects in a high density environment. Consequently, it requires a station that is able to access the hidden joints without affecting neighbouring components, a station that is safe, gentle, adaptable and, above all, simple to operate. The IR-D3 Discovery is such a station. 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 stations.

Align - Place - Reflow

With the aid of excellent mechanics, optics and control, operators can simply pick up the fluxed BGA from the nest plate, align it, place it onto the PCB's pads and then reflow with the station's accurate PC based, closed loop component and PCB temperature control.



Details and specifications of advanced features available

- **Advanced Focused IR component heating**
150W, lens based Focused IR heating with adjustable image system
PDR lens attachments with IR image from 4 to 70mm diameter
Reworks all SMDs/ BGAs/QFNs/CSPs including 0201s + lead free applications
- **PDR Lens Attachments**
F150 (Ø4 - 18mm spot size) optional
F200 (Ø10 - 28mm spot size) optional
F400 (Ø12 - 35mm spot size) optional
F700 (Ø25 - 70mm spot size) standard
- **Quartz IR PCB preheating**
High power, medium wave quartz IR
Large area IR PCB preheater system
Standard 2000W, 2 x 1000W zones (240mm x 240mm heating area)
Optional 750W, single zone (120mm x 120mm heating area)
- **Professional Vacuum Placement System**
With precise placement action, Z axis movement and rotation
Soft component landing and Z-axis stop for paste placement
Interchangeable pick-up heads for different application
- **Component Nest for Precision Pick-up and Flux Application (Optional)**
With jaw mounted nest with 'component print frame', dip tray or mini stencil paste-head facility for flux and solder paste application
- **Handheld Component Nest and Flux Application Tool (Optional)**
Handheld nest plate with 'component print frame' or dip tray for flux and solder paste application
- **Professional Micro X/Y PCB Table**
Precision micrometer (micro) X/Y control
+/- 20 microns (.0008") movement in X/Y directions
Macro movement in X direction
Up to 12" x 12" (300mm x 300mm) PCB capacity with lockable X/Y axis
- **Advanced Professional Macro-Micro X/Y PCB Table (Optional)**
Precision micrometer (micro) X/Y and micro rotation control
+/- 10 microns (.0004") movement in X/Y directions
Macro movement in X/Y directions
Up to 12" x 18" (300mm x 450mm) PCB capacity with lockable X/Y axis
- **Component Temperature Sensing - Non-contact, IR Sensor**
Manually adjustable, K-type non-contact IR sensor,
Ø7-10mm spotsize
Real time monitoring of component temperature throughout process
- **PCB Temperature Sensing**
Manually attached K-type wire thermocouple
Optional non-contact IR sensor with real time temperature sensing
- **PCB Temperature Sensing - Non-contact, IR Sensor (Optional)**
Manually adjustable, K-type non-contact IR sensor,
Ø7-10mm spotsize
Real time monitoring of component temperature throughout process

Bench Top Requirements

Top heat power	150W IR
Back heater power	1600W or 2000W IR
Voltage/frequency	208-240 volts 50/60Hz, up to 3KW
Typical components	CSPs, BGAs, uBGAs, QFNs, QFPs, PLCCs, SOICs, small SMDs
Bench area	1400mm (w) x 600mm (d)
Weight	65 Kg

The above features are mostly optional and also, PDR reserves the right to improve or change specifications without giving notice.



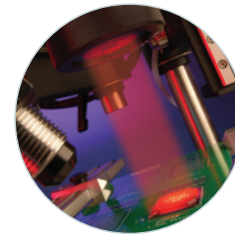
PDR's Entry-Level SMT/BGA Rework Station



PDR IR-C3 Chipmate
BGA Rework Station

Advanced features:

- **Advanced Focused IR component heating**
150W, lens based Focused IR heating with adjustable image system
- **Quartz IR PCB preheating**
2000W, single zone (240mm x 240mm heating area)
- **Precision Component Pick and Placement**
Handheld vacuum placement system
- **Precision PCB Handling**
Portable Benchtop PCB workholder
- **Component Temperature Sensing**
Standard non-contact IR temperature sensor
- **PCB Temperature Sensing**
K-type wire thermocouple
- **Advanced Thermal Process Control**
Digital controller based thermal control



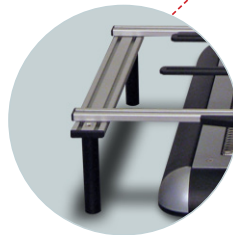
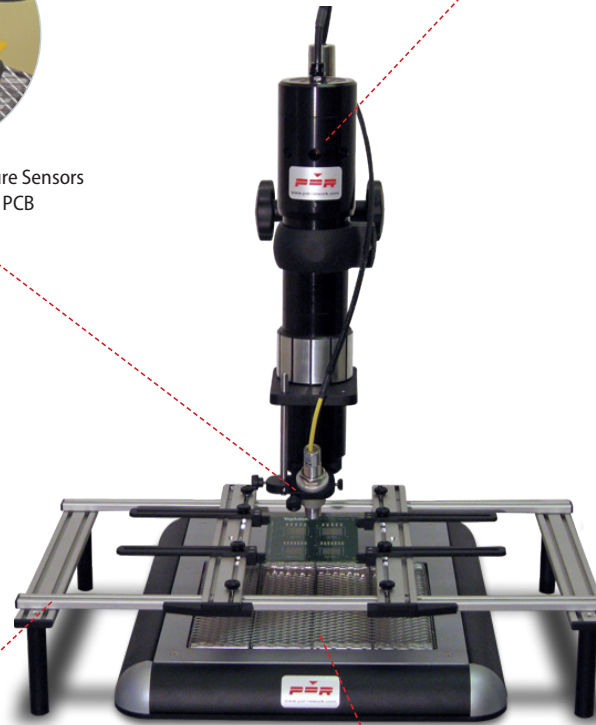
150w Focused IR Component Heating



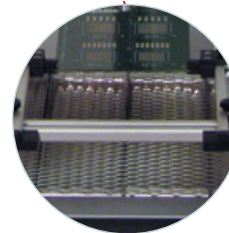
Non Contact IR Temperature Sensors
for Component and PCB



Digital controller based thermal control



Portable Benchtop PCB workholder



2000W, single zone
(240mm x 240mm heating area)



Handheld vacuum placement system

Low Cost, Upgradeable BGA Rework Station

Today there is a need for lower cost and upgradeable equipment without a loss in soldering quality. The PDR IR-C3 Chipmate SMT/BGA rework station, using PDR's patented Focused IR technology, has been specifically designed to meet this challenge.

The IR-C3 Chipmate comes with a good range of standard features allowing the operator to quickly, safely rework all types of components.

The station is tool free, gas free, instantly/precisely controllable, clean, modular and produces 100% yield BGA rework without any complications. The IR-C3 uses all the proven attributes of PDR's Focused IR technology, first introduced in 1987 and now used worldwide by over 4000 customers.

Simple BGA rework procedure

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

The IR-C3 Chipmate is such a station. 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 stations.

The IR-C3's standard features, with the use of simple aids, operators can simply pick up the BGA, align it, place it into fluxed pads and reflow with the station's accurate closed-loop component temperature control.

Details and specifications of advanced features available

- **Advanced Focused IR component heating**
150W, lens based Focused IR heating with adjustable image system
PDR lens attachments with IR image from 4 to 70mm diameter
Reworks SMDs/ BGAs/QFNs/CSFs + lead free applications
- **PDR lens attachments**
F150 (Ø4 - 18mm spot size) optional
F200 (Ø10 - 28mm spot size) optional
F400 (Ø12 - 35mm spot size) optional
F700 (Ø25 - 70mm spot size) standard
- **Quartz IR PCB preheating**
High power, medium wave quartz IR
Large area IR PCB preheater system
2000W, single zone (240mm x 240mm heating area)
Optional 750W, single zone (120mm x 120mm heating area)
- **Handheld Vacuum Placement System**
Vacuum operated pick up tool, hand held with silicon cups
- **Standard Vacuum Placement System (Optional)**
With precise placement action, Z axis movement and rotation
Interchangeable pick-up heads for different application
- **Handheld Component Nest and Flux Application Tool (Optional)**
Handheld nest plate with 'component print frame' or dip tray for flux and solder paste application
- **Portable Benchtop PCB Workholder**
650mm, up to 12" x 10" (300mm x 250mm) PCB capacity
- **Component Temperature Sensing - Non-contact, IR Sensor**
Manually adjustable, K-type non-contact IR sensor, Ø7-10mm spotsize
Real time monitoring of component temperature throughout process.
- **PCB Temperature Sensing - Non-contact, IR Sensor (Optional)**
Manually adjustable, K-type non-contact IR sensor, Ø7-10mm spotsize
Real time monitoring of component temperature throughout process
- **Digital, Closed-loop Electronic Control**
Digital programmable controller (20 internal profile storage)
Simple key pad setting power/time/temperature controls
2 Channel component and PCB temperature control

Bench Top Requirements

Top heat power	150W IR
Back heater power	750 - 2000W IR
Voltage/frequency	750W, 110-240 volts 50/60Hz 2000W, 208-240 volts 50/60Hz
Typical components	CSFs, BGAs, uBGAs, QFNs, QFPs, PLCCs, SOICs, small SMDs
Bench area	1200mm (w) x 600mm (d)
Weight	45 Kg

The above features are mostly optional and also, PDR reserves the right to improve or change specifications without giving notice.

PDR

PDR - Design and Manufacturing
Crawley, West Sussex, RH10 9SE, England
T: +44 (0)1293 614 000 E: sales@pdr.co.uk

PDR Europe

83300 Draguignan, France
T: +33 (0)9 77 19 56 36 E: sales-eu@pdr.co.uk

PDR America

Shingle Springs, CA 95682, USA
T: (530) 676 6262 E: sales@pdrxy.com

PDR India

Chennai – 600 092. Tamilnadu, India.
T: (+) 91 (0) 44 23762227 / 23762298 E: sales-in@pdr.co.uk

PDR's products are available worldwide via our international distributors, all offering professional sales and support.

For contact, product and company details please visit www.pdr-rework.com



www.pdr-rework.com