American Hakko Products, Inc.

# PRODUCT BULLETIN

***Bulletin No:*** **PB350a**

***Issue Date:*** 8-27-2014

***Available:*** 9-2-2014

***Product Description:***
HAKKO FR-810 Hot Air Rework Station

***Part No:***
FR810-05

***Specification:***

| Station Specifications | |
|---|---|
| Model | FR-810 |
| Part No. | FR810-05 |
| Input Voltage | 120VAC 60Hz |
| Power Consumption | ~~800W~~ 820W |
| Heater Power Consumption | 790W |
| Airflow Source | Turbine |
| Airflow Capacity[1] | 5 – 115 L/min |
| Temperature Range[2] | 50 – 600°C (120 – 1120°F) |
| Handpiece Length (w/o cord) | ~~220mm (8.7 in.)~~ 250mm (9.8 in.) |
| Handpiece Weight (w/o cord) | 180g (0.40 lb.) |
| Station Dimensions (W x H x D) | 160 x 145 x 220 mm (6.3 x 5.7 x 8.7 in.) |
| Station Weight | ~~1.3 kg (2.9 lb.)~~ 1.5 kg (3.3 lb.) |
| Safety Approval | MET c us |

| Contents | |
|---|---|
| Part Number | Description |
| FR810-05 | FR-810 Hot Air Rework Station |
| ~~TBD~~ B5054 | Power Cord |
| B2300 | Heat Resistant Pad |
| ~~TBD~~ B5056 | SMD Pickup Tool + Wire |
| B5048 | Handpiece Holder |
| -- | Instruction Manual |

1 – Airflow capacity is rated as free flowing. Restrictions created by various nozzles may reduce the maximum airflow capacity.
2 – Under certain airflow and temperature setting conditions, the station may not attain the maximum allowable temperature selection.

***Comments:***
The new HAKKO FR-810 Hot Air Rework Station is a significant improvement over the former HAKKO FR-801 and HAKKO FR-802 stations. When you first use the HAKKO FR-810, you'll be amazed at the convective heating power coming from the slender and light weight handpiece. Unlike hot air stations in the past, this new station uses a powerful turbine as the air source, which provides up to 115 L/min of airflow across the heater and onto your assembly for heating, and thereby reduces the overall weight of the station. The heating element in the HAKKO FR-810 has also been redesigned to eliminate the quartz glass insulator tube found in older hot air stations, which could break if the handpiece was dropped or hit in any way.



28920 Avenue Williams • Valencia • California 91355
Tel 661.294.0090 • Fax 661.294.0096 • www.HakkoUSA.com

## American Hakko Products, Inc.

Another change to the design of the HAKKO FR-810 is the incorporation of digital airflow control. The old ball flow meters are now a thing of the past. The digital controls allow for selection of airflow settings of 1 to 9, and the more precise control of the turbine allows for a more repeatable and consistent airflow setting between like stations.

Safety was an important design consideration for the new HAKKO FR-810. The handpiece and holder have been designed to allow the station to enter a safe cool down mode whenever the handpiece is placed in the holder, and the system will not allow itself to be turned on while the handpiece is in the holder. This helps mitigate any risk to a station that is continuously running while the handpiece is pointed somewhere it should not be.

The end of the heater pipe on the HAKKO FR-810 has also been changed to accommodate the new quick-change tool free nozzles. There is no need to keep a screwdriver handy when changing the nozzles on the HAKKO FR-810. No looking for replacement screws and nuts, or concern about over tightening the nozzle and possibly cracking the quartz glass tube inside the heater. These new nozzles simply twist to lock in place. And these new nozzles include two new single nozzle diameters – 5.5mm and 7mm. And if you have existing nozzles for older hot air stations, an adapter is available for the HAKKO FR-810 so you don't have to re-purchase nozzles.

The digital operation of the HAKKO FR-810 provides greater flexibility and security. The settings of the station can be locked out by password providing process control of the station, and you can now store up to 5 presets for temperature, airflow, and new to the hot air stations – Time! The built-in timer function is very useful in providing a more repeatable process while using the station. This also allows us to add a new Chain Preset feature where you can link together up to 5 presets to run in sequence, simulating a 5-heating zone reflow profile for SMD components.

For more information please visit us at www.HakkoUSA.com



28920 Avenue Williams • Valencia • California 91355
Tel 661.294.0090 • Fax 661.294.0096 • www.HakkoUSA.com