www.jbctools.com

Product website

INSTRUCTION MANUAL

Product videoguide



TCP

Thermocouple Pointer

This manual corresponds to the following reference:

- **TCP-A**

Packing List

The following items are included:



Metal Box ..... 1 unit

Box includes:



Thermocouple Pointer ..... 1 unit
Already assembled: cup with conductive pad.



Anchor ..... 1 unit
Ref. 0036001
Comes with M4 x 10 mm screw DIN 7991



Conductive Pad Set for TCP ..... 1 box
Ref. TCP10
Includes: 10 cups + 3 conductive pads



Thermocouple Extension Cable for TCP ..... 1 unit
Ref. 0036000
Length: 50 cm

Manual ..... 1 unit
Ref. 0035848

Features

TCP Thermocouple Pointer monitors the surface temperature of PCBs and their components with high positioning precision. It works on any material and measures temperatures up to 300 °C / 572 °F with an accuracy of ±10 °C / ±18 °F. Its design allows quick, accurate placement on high-density PCBs, reducing setup time even at high temperatures.

TCP provides a K-type signal output, so the monitoring device must have a K-type compatible connector. For compatibility with JBC devices, see the product page at www.jbctools.com. For external devices, contact JBC Technical Support.

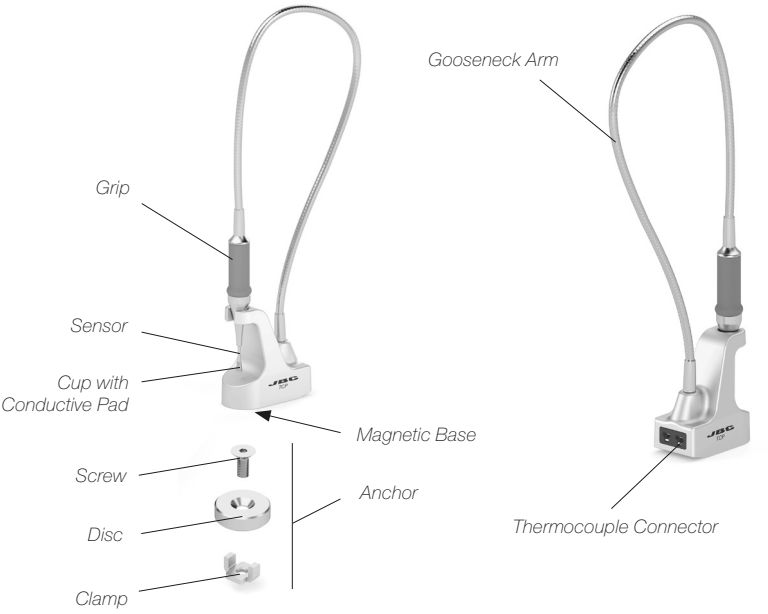
The sensor is electrically isolated from all external parts of the product.

TCP is ESD safe without additional connections when placed on any ESD-safe surface, such as a JBC ESD table mat or a grounded metal surface. It can also be grounded through any of its metal surfaces.

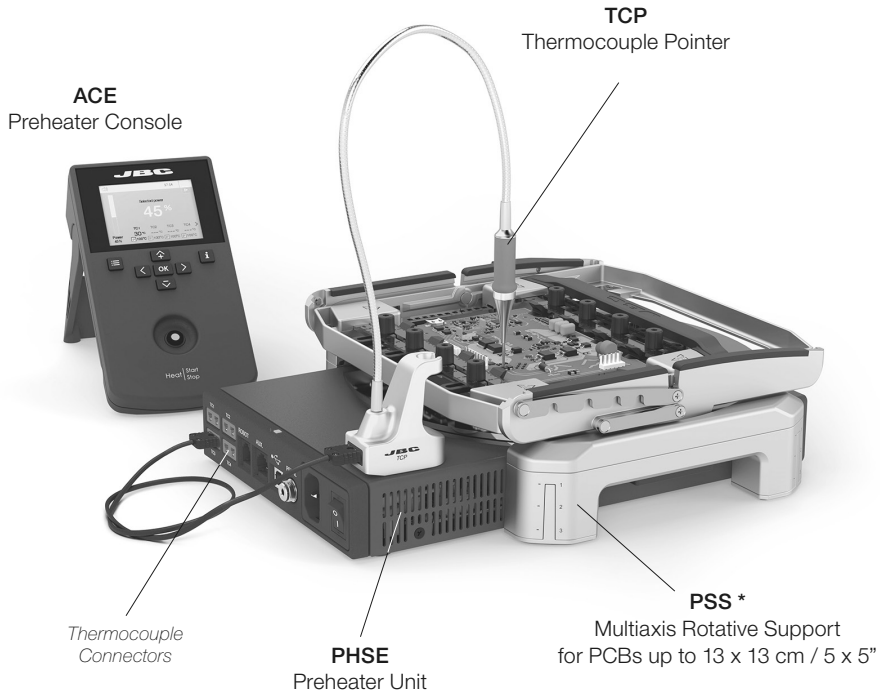
Do not use the TCP in fluids such as flux or molten solder, or to measure hot air temperature.

When connecting TCP to a monitoring device (K-type compatible connector required), always use the thermocouple extension cable supplied with this product.

Air currents can affect the measurement. Take this into account when using hot air tools (JTT, NH) or fume extractors (FAE1, FAE2).



Workplace Example



** TCP also works with other JBC preheater supports and preheater sets.*

How To Use

1. Check that the cup and a piece of conductive pad are attached to the sensor tip. If they have come loose, see *Replacing the Conductive Pad Set*.

2. Connect the thermocouple pointer to a monitoring device with a K-type connector, using the supplied extension cable.

3. Place TCP on a magnetic surface; its magnetic base keeps it stable. If no magnetic surface is available, see *Anchor Assembly*.

⚠ Do not place the TCP base in direct contact with a heat source.

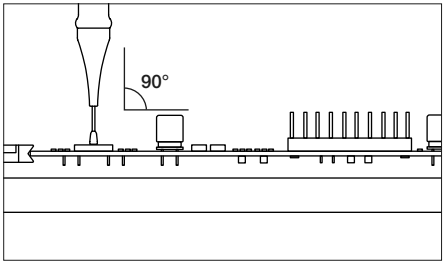
Do not place the TCP base on the heating surface or on the frame around it, as heat from the heating area may affect the readings.



Place TCP on the area of the preheater farthest from the heating surface, considered as the cold area.

4. Take the pointer from its base and place it completely vertical on the exact spot you want to measure.

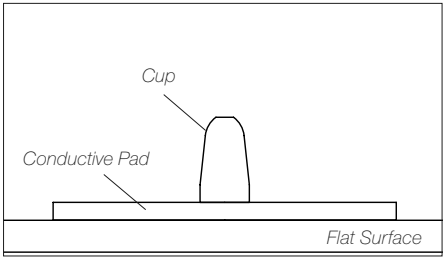
5. Important: Press the pointer lightly against the measurement spot to ensure that the conductive pad makes contact around the entire perimeter.



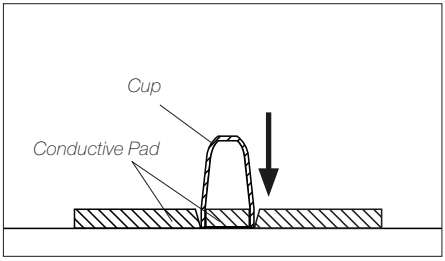
Replacing the Conductive Pad Set

1. Hold the assembled cup in one hand and gently move the pointer inside it to remove any remaining pad residue. Detach the cup from the sensor and replace it if necessary.

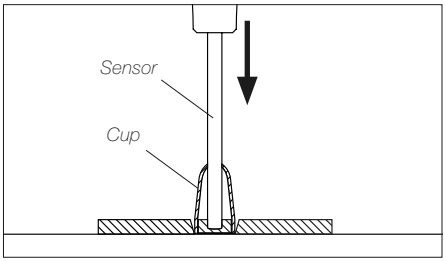
2. Remove the protective film from both sides of the conductive pad. Place the pad on a flat surface and set the cup on top of it.



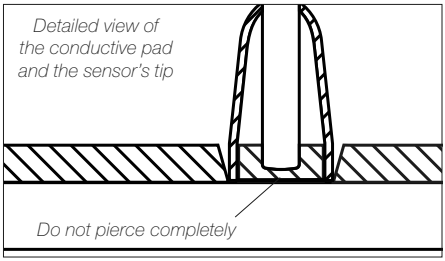
3. Press the cup down firmly to cut out a piece of the conductive pad, which stays embedded in the cup.



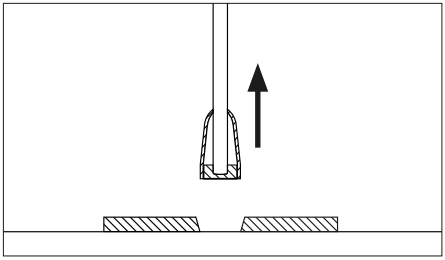
4. Insert the sensor through the top opening of the cup until it touches the pad. Press down lightly two or three times to seat the sensor in the pad without piercing it.



⚠ **Important:** Do not pierce the conductive pad completely. Leave a thin layer of conductive material between the tip of the sensor and the bottom surface of the pad.



5. Carefully lift the sensor together with the cup and the embedded pad.



Anchor Assembly

If no magnetic surface is available for the base, use the supplied magnetic anchor. When mounted on a JBC support, it holds the thermocouple pointer (TCP) in place. After use, tilt the base to detach it easily from the anchor or magnetic surface.

To assemble the magnetic anchor onto the guides of the support:

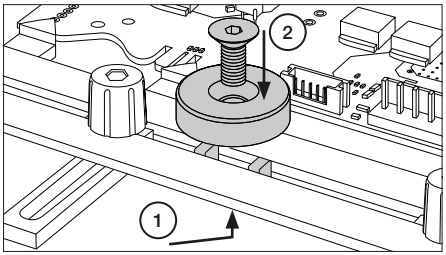
1. Unscrew the anchor using a 2.5 Allen key (DIN 911).

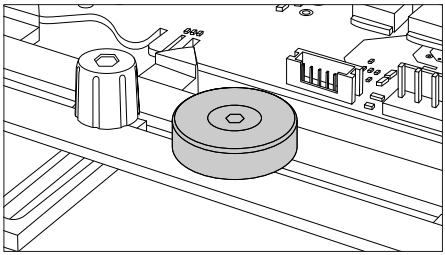
2. From below, insert the anchor clamp into one of the support guides (1).

3. Place the disc on the guide, centred over the lower piece.

4. From above, screw the two pieces together to secure the anchor (2).

5. Place the TCP base on the anchor.





Maintenance

- Before carrying out maintenance or storage, always allow the equipment to cool down.

- Check periodically that the sensor is clean.

- Use a damp cloth when cleaning. Alcohol can only be used to clean the metal parts.

- Replace any defective or damaged parts. Use original JBC spare parts only.

- Repairs should only be performed by a JBC authorized technical service.

Notes

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Specifications

TCP
Thermocouple Pointer
Ref.: **TCP-A**

- Output:	K-Type
- Measurable Temperature Range:	25-300 °C / 77-572 °F
- Total Net Weight:	470 g / 1.04 lb
- Package Dimensions / Weight: (L x W x H)	280 x 280 x 164 mm / 730 g 11.02 x 11.02 x 6.46 in / 1.61 lb

Complies with CE standards.
ESD safe.

JBC

Warranty
JBC's 2 year warranty covers this equipment against all manufacturing defects, including the replacement of defective parts and labor.
Warranty does not cover product wear or misuse.
In order for the warranty to be valid, equipment must be returned, postage paid, to the dealer where it was purchased.

This product should not be thrown in the garbage.
In accordance with the European directive 2012/19/EU, electronic equipment at the end of its life must be collected and returned to an authorized recycling facility.

CE EAC

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