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 is designed to monitor the surface temperature of the PCB or its components with high precision positioning. It works on any type of material and can measure temperatures up to 300 °C / 572 °F with an accuracy of ±10 °C / 19 °F. Its design allows for quick and accurate placement on high-density printed circuit boards, reducing setup time, even at high temperatures.

TCP features a K-type signal output, so the monitoring device to which it is connected must have a K-type compatible connector. For compatibility information with JBC devices, visit the product's page at www.jbctools.com. For more information on compatibility with external devices, contact JBC Technical Support.

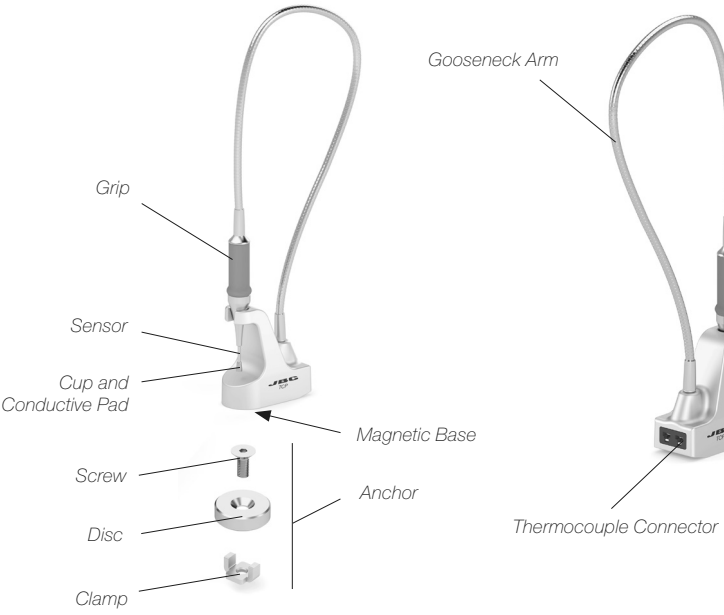
The sensor is completely isolated (electrically) from the external parts of the product.

TCP is ESD safe with no extra connections, as long as it sits on any kind of ESD safe surface, e.g. JBC ESD safe table mats, a ground-wired metal surface, etc. It is also possible to ground the product from any of its metal surfaces.

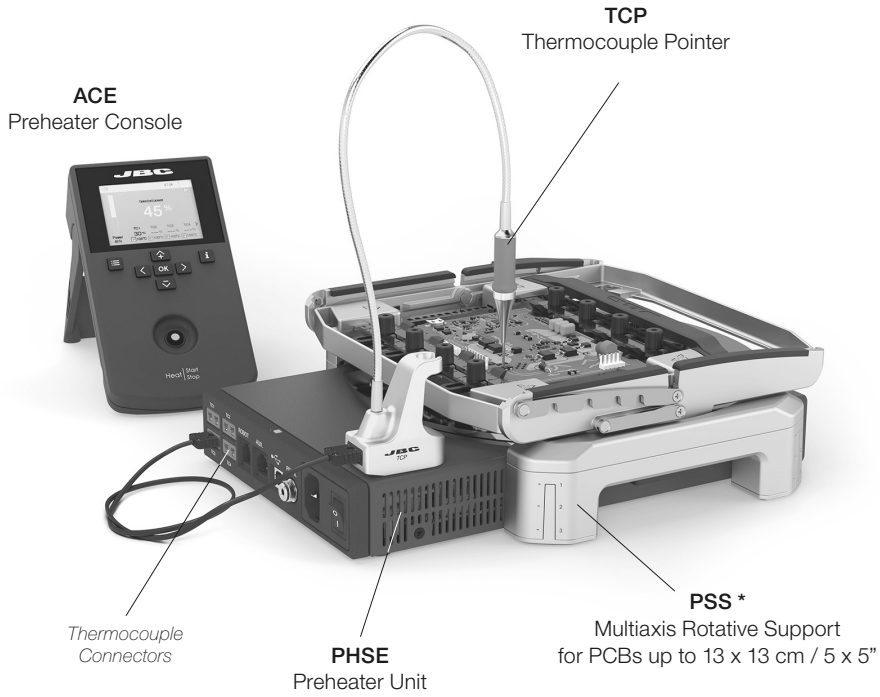
TCP is not intended for use in fluids such as flux or molten tin, nor is it designed for measurement of hot air.

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

The temperature measurement can be affected by air currents. Keep this in mind when using hot air tools (JTT or 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 sensor has the cup and a portion of conductive pad attached to the tip. If it has come loose, see the next section *Replacing the Conductive Pad Set*.

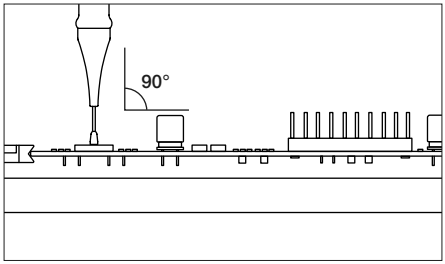
2. Connect the thermocouple pointer to a monitoring device (K-type compatible connector required) using the supplied thermocouple extension cable.

3. Thanks to its magnetic base, TCP can be placed and stabilized onto magnetic surfaces. If there is no magnetic surface available, see the “Anchor Assembly” section.

⚠ Avoid placing the base of TCP in direct contact with a heat source.

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

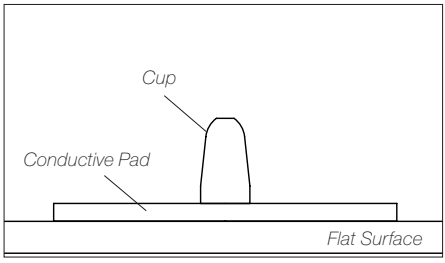
5. Important: Press the pointer lightly against the measurement spot to ensure that the conductive pad makes contact around the entire perimeter.



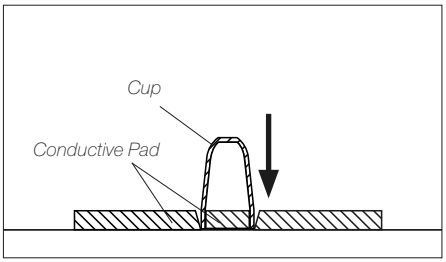
Replacing the Conductive Pad

1. Hold the assembled cup with one hand and remove any residue of the conductive pad by gently moving the pointer inside it. Then, detach the cup from the sensor. If necessary, replace the cup with a new one.

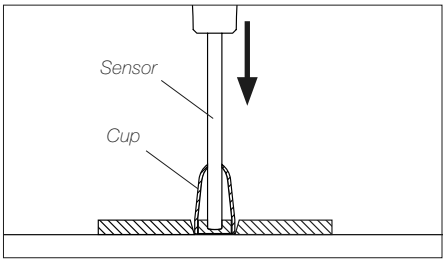
2. Unwrap both sides of the conductive pad. Place it on a flat surface and place the cup on top of the conductive pad.



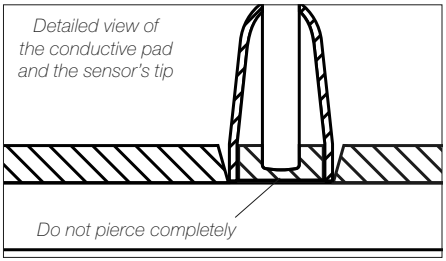
3. Then, exert pressure down to crop off a portion of the conductive pad, which remains embedded in the cup.



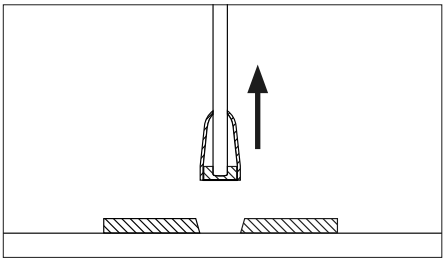
4. Insert the sensor through the top opening of the cup until it reaches the pad. Lightly press down the sensor a couple of times so that it is inserted into the pad, but without piercing it completely.



⚠ **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 with the cup and the pad embedded inside.



Anchor Assembly

If there is no magnetic surface available to place the base onto, the supplied anchor (magnetic) can be placed on a JBC support, allowing TCP to be fixed onto it. After its use, the base can be more easily separated from the anchor/magnetic surface by tilting it apart.

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

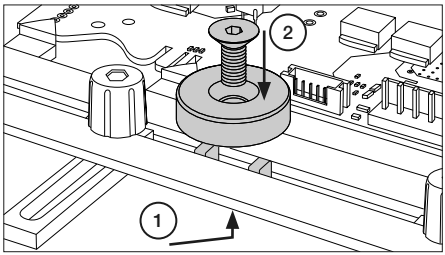
1. Unscrew the anchor using a 2.5 Allen key (DIN911).

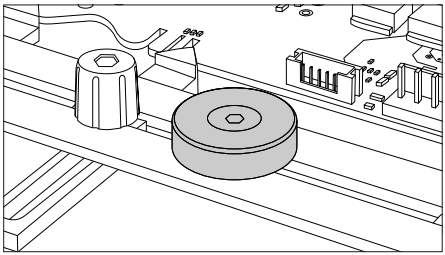
2. Fit the clamp of the anchor into one of the guides on the support from below (1).

3. Position the disc on the guide, aligning its center with that of the lower piece.

4. Fix the anchor by screwing the two pieces together from the top (2).

5. Place the base of the thermocouple pointer 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.

Specifications

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

- Output:	Type K
- 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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