

ABIDOT – the clever tool for touchless programming

### Robot programming to the point!

The programming aid ABIDOT is simply screwed onto the robot torch instead of the gas nozzle for the programming process. Instead of taking the wire, four laser beams simulate the stick-out – completely touchless. Known problems like the bending of the wire while touching the workpiece are a thing of the past. This makes the programming process easier in multiple ways.

The process-related wire stick-out can be adjusted with a scale on the ABIDOT. This facilitates in obtaining the correct distance during programming, the optimum wire position and penetration during welding.

The optimum TCP (Tool Center Point) is reached when all four laser LED's combine to only a single focal point on the workpiece – really clever!

### Advantages that speak for themselves:

- ABIDOT shortens programming times considerably
- ABIDOT increases the quality of the welds through optimum positioning and consistent spacing of the torch to the workpiece
- ABIDOT reduces the costs for programming times and offers savings through reduced rework and quality control



# TCP programming aid "ABIDOT"

# System overview and technical data

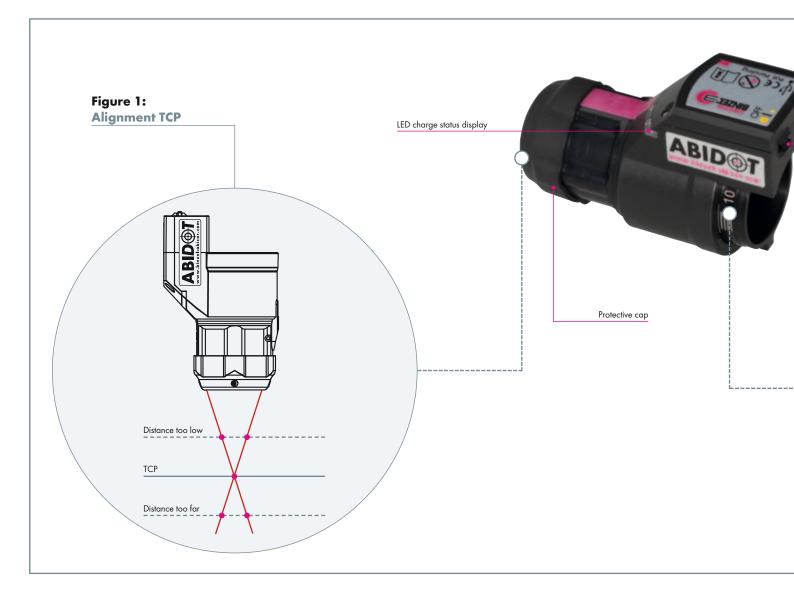
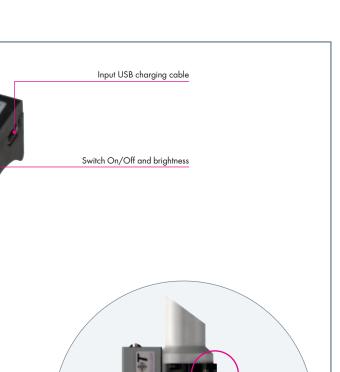


Figure 1:
Alignment TCP

The optimum torch position is reached when all four laser LED beams combine to only a single focal point on the workpiece. If two or more points are visible the torch is either too close to the workpiece or too far away.

Figure 2: Alignment Stick-Out

The process-related wire stick-out - the "free end of the wire" - can be adjusted with a scale on the ABIDOT. This facilitates in obtaining the correct distance during programming, the optimum wire position and penetration during welding.











### **Technical data:**

Laser protection class:  $\;$  EN 60825-1: 2007 / 2M / 670 nm / 2.5 mW

Input: 100-240 V AC / 150 mA / 50-60 Hz

Output: 5 V DC / 500 mA

Protection class: IP3X

Ambient temperature: -10°C up to +40°C approx. 30 minutes
Operating time: approx. 7 hours
Relative air humidity: up to 90% at 20°C
Transport and storage: -10°C up to +55°C

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# TCP programming aid "ABIDOT"

## **Order overview**

Complete unit incl. adapter-sleeve, power supply, charging station, protective cap (1 pc.)



| Туре                       | Part-No.   |
|----------------------------|------------|
| ABIDOT complete for A 500  | 837.0790.1 |
| ABIDOT complete for W 500  | 837.0791.1 |
| ABIDOT complete for 65X TS | 837.0792.1 |
| ABIDOT complete for W 600  | 837.0793.1 |

2 ABIDOT without adapter-sleeve, power supply, charging station (1 pc.)



| Туре                     | Part-No.   |
|--------------------------|------------|
| ABIDOT without equipment | 837.0787.1 |

3 Adapter-sleeve (1 pc.)



| Туре                      | Part-No.   |
|---------------------------|------------|
| Adapter-sleeve for A 500  | 837.0799.1 |
| Adapter-sleeve for W 500  | 837.0800.1 |
| Adapter-sleeve for 65X TS | 837.0801.1 |
| Adapter-sleeve for W 600  | 837.0802.1 |

4 Charging station (1 pc.)



| Туре             | Part-No.   |
|------------------|------------|
| Charging station | 400.1415.1 |

5 Power supply (1 pc.)



| Туре         | Part-No.   |
|--------------|------------|
| Power supply | 184.0393.1 |

6 Protective cap (1 pc.)



| Туре           | Part-No.   |
|----------------|------------|
| Protective cap | 400.1419.1 |



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