Troubleshooting LKS25 counter intercom

1. **System does not switch on.**
   a. Check if the power supply is plugged in.
   b. Check the patch cable between the junction box and the desk unit.
   c. Check if the supply voltage of 15 VDC is present on the junction box.
   d. Check if the mains voltage is present.

2. **No sound from the customer side (window unit).**
   a. Check the connections in the window unit (loudspeaker & microphone).
   b. Measure the voltage at the microphone connection in the window unit. It shall be 9,5 VDC (+/- 0,5 VDC). Note: verify correct polarity of the microphone connections. Reversed polarity may result in very low microphone signal level and reduced speaker volume.
   c. Measure the voltage at the microphone connection in the junction box. It shall be 9,5 VDC (+/- 0,5 VDC). Note: verify correct polarity.
   d. Verify that there is no short circuit in the cable between the junction box and the window unit.

3. **Sound volume from the customer side is low.**
   a. Check the volume setting. Use the volume up and down keys.
   b. Verify that the microphone is correctly connected. Note: pay attention to the polarity of the microphone connections. Reversed polarity may result in very low microphone signal level and reduced speaker volume.
   c. Inspect the cable between the junction box and the window unit.

4. **Sound from the customer side exhibits audible hum, buzz, or abnormal noise.**
   a. In case of hum: check whether the cable shielding is properly connected. Verify that the cable supplied by HAGO Electronics has been used. It is essential to use a cable in which each individual conductor is shielded, with the speaker and microphone cables separated.
   b. In case of noise: the speaker volume at the operator side (desk unit) may be set to the maximum level. Reduce the volume setting at the desk unit.

5. **No sound at the customer side.**
   a. Check the connections in the window unit.
   b. Check the connections in the junction box.
   c. Measure the impedance of the speaker in the window unit. The impedance shall be 8 Ohm (+/- 1 Ohm).
   d. Measure the impedance of the speaker at the junction box. The impedance shall be the speaker impedance plus the cable resistance, e.g. approx. 11 Ohm (+/- 1 Ohm) with a 20 m cable.

6. **Sound volume at the customer side is low.**
   a. Check the connections in the window unit.
   b. Inspect the cable between the junction box and the window unit.
   c. Verify the volume control is not blocked. If the power LED does not blink while pressing the TALK and UP/DOWN buttons, press the UP and DOWN buttons simultaneously for 6 seconds to unlock the volume control.

7. **General**
   a. If the intercom does not operate correctly, restore the device to the default settings by pressing the TALK, VOLUME UP, and VOLUME DOWN buttons simultaneously and holding them for 8 seconds.