



# TROUBLESHOOTING GUIDE

## All Reader Types (Smart Card Readers, Key-Pad & Smart Card Readers, All BioX & BioXK Readers)

Problem	Troubleshooting Steps	✓	✖	Action
1. Power reader on - reader does not power on	1. Check connections – the Red wire is power, the black wire is ground			✓Go to Step 2 ✖ Redo wiring connection
	2. Check the voltage at the reader - Check whether it is the same voltage as stated on reader label.			✓Go to Step 3 ✖ Review power supply and wiring
	3. Check the current capability of your power supply - Is it sufficient to supply current to all the readers and other connections?			✓Contact technical support ✖ Replace Power Supply
2. Power on reader - reader keeps beeping	1. Check buzzer line, the yellow wire. Ensure it is not grounded in error.			✓Go to Step 2 ✖ Fix wiring error
	2. Check the current capability of your power supply - Is it sufficient to supply current to all the readers and other connections?			✓Go to Step 3 ✖ Replace power supply
	3. Check the voltage at the reader. Check whether it is the same voltage as stated on reader label.			✓Go to Step 4 ✖ Review power supply and wiring
	4. Replace reader with a known working BQT Solutions reader. Is the problem fixed?			✓Replace Reader ✖ Review power supply and wiring
3. Power on reader - LED does not work	1. Connect LED line to ground, the orange wire. Does the LED turn green?			✓Go to Step 2 ✖ Go to Step 3
	2. Turn off reader, and turn it on after 10 seconds. Does LED work now?			✓Problem Solved ✖ Go to Step 3
	3. Replace reader with a known working BQT reader. Is the problem fixed?			✓Replace reader ✖Contact technical support
4. Power on reader - LED keeps green	1. Check LED line, the orange wire. Is LED line grounded?			✓ Fix wiring error ✖ Go to Step 2
	2. Turn off reader, and turn it on after 10 seconds. Is LED RED now?			✓Problem Solved ✖ Go to Step 3
	3. Replace reader with a known working BQT reader. Is the problem fixed?			✓Replace reader ✖Contact technical support
5. Badge card to reader - a beep is heard but reader does not output any data	1. Test with another card - do you get the same problem?			✓Go to Step 2 ✖ Go to Troubleshooting Section 8
	2. Check the readers you are using - Has it been programmed for Wiegand or RS485 output?			For Wiegand output, Go to Step 3 For RS485 output, Go to Step 6
	3. Check the Wiegand connections on your controller - Green wire = W0 (D0), White wire = W1 (D1). Are these wiring connections correct?			✓Go to Step 4 ✖ Fix wiring error
	4. Check the voltage level on the W0 (D0) (Green) and W1 (D1) (White) data lines - voltage level should be nearly 5V when reader is idle.			✓Go to Step 8 ✖ Go to Step 5
	5. Review the cabling distance between reader and control panel (Wiegand supports up to 150m using Belden 9842 or Equivalent.)			✓Go to Step 7 ✖ Need to review installation.
	6. Check the RS485 connections on your Reader – the reader needs to have an HSM or RS485 to Wiegand Convertor installed (Refer to installation manual for wiring)			✓Go to Step 7 ✖ Review wiring and components
	7. Check the RS485 connections on your controller -Yellow White / Purple wire = RS485+, Green White / Blue Wire = RS485- (Refer installation manual for wiring)			✓Go to Step 8 ✖ Review wiring
	8. Check the Control Panel. Is the format configuration setup correctly?			✓Contact technical support ✖ Review panel setting
6. Badge card to reader – there is no response from reader	1. Test with another card. Is the reader response the same?			✓Go to Step 2 ✖ Go to Troubleshooting Section 8
	2. Check if the BQT reader requires setup with a configuration card? if so, has the reader been configuration been done successfully?			✓Go to Step 3 ✖ Follow the reader configuration setup manual
	3. Check the card you are badging. Has it been encoded correctly (does it work on other BQT readers on the site)?			✓Contact technical support ✖ Please review the card encoding process
7. Badge card to reader - reader only reads card when the card is held very close to reader	1. Test reader again with 2 other encoded cards - Is the problem constant?			✓Go to Step 2 ✖ Replace the card
	2. Is the BQT reader mounted with metal directly surrounding the reader? Metal may affect the RF signal of the reader. Remove metal or move reader, badge cards to reader again - Is read range still small?			✓Contact technical support ✖ Review the mounting position
8. Badge cards to reader - reader doesn't read some cards but reads others	1. Do you have a BQT Card Encoder			✓Go to Step 2 ✖Contact technical support
	2. Ensure the non-working cards are encoded correctly by re-encoding Did that fix the problem?			✓Problem Solved ✖Contact technical support
<b>Biometric Readers: BIOX / BIOXK</b>				
and Yellow LED stays on permanently for BIOX / BIOXK Reader	1. RED and Yellow LED on means the reader is waiting for a response from a fingerprint sensor. Does the Blue LED turn on after 1 minute?			✓Problem Solved ✖Go to Step 2
	2. Turn off reader, and turn it on after 10 seconds. Does the reader work now?			✓Problem Solved ✖Contact technical support