

Wiring Information

BQT Solutions Smart Readers are designed to be installed by suitably qualified Access Control Technicians. Wiring connections are normally professionally completed to maintain IP65 rating by removing the PIN connector (used by factory for testing) and soldering and heat shrink wrapping the connections and isolating and heat shrink wrapping any unused connections.

Wiring from the Smart Reader connections to the access control panel should comply with minimum wire gauge and distance requirements stated in the installation guide. As a general rule, Belden 9842 or equivalent should be used.

Please also refer to your Smart Reader installation guide for specific instructions on the installation of your BQT Solutions Smart Reader before attempting to install the Smart Reader as it contains important information and instructions, that if not followed may lead to your warranty being voided.

Wiring Table

Wire Colour	Function	Wire Colour	Function
Red	+7-+18v DC	Grey	Relay B
Black	Ground	Orange	LED In
Purple	RS485A	Yellow	Buzzer In
Blue	RS485B	Green	Wiegand 0 (Data 0)
Brown	Relay A	White	Wiegand 1 (Data 1)

Wiegand Output

Green D0, White D1

BQT Solutions Readers are generally configured by default for Wiegand Data output (SIA standard interface) unless ordered to be configured for RS485 with BQT Solutions AES encrypted output or OSDP output or other custom output (eg. Clock & Data). Please refer to your installation manual for instructions.

RS485 Output

Purple RS485 A, Blue RS485 B

BQT Solutions Readers may be ordered for RS485 Output using BQT AES encrypted format or OSDP format. Please refer to your installation manual for instructions.

BQT Solutions Biometric Readers may also be configured to use the RS485 communication to provide output to another system for networking, template management and time and attendance. Please refer to your installation manual for instructions.

Relay Control

Brown Relay A, Grey Relay B

BQT Solutions Readers are fitted with an 80mA rated relay output. Please refer to your installation instructions for proper connection and use.

LED Control

Orange

During general operation, the BQT Solutions Smart Readers are set by default to show RED LED whilst waiting or at invalid credential and GREEN LED when a valid credential is presented. BQT Smart Readers feature an LED control line which is Low activated. It changes from the default waiting/invalid credential LED to valid credential LED.

Where a tri-colour LED is fitted in BQT Solutions Smart Readers, orange is used in programming or error notifications by default.

Buzzer Control

Yellow

BQT Solutions Smart Readers also feature a Buzzer Control line which is which is Low activated.. A low activation will sound the buzzer on the Smart Reader.