QUICK START GUIDE
CONEKT™ MOBILE-READY
CONTACTLESS SMARTCARD READER

This Quick Start Guide is intended for experienced installing technicians. It is a basic reference to ensure all connections are properly made. Models include Conekt CSR-35P presentation and CSR-35L long-range readers. For additional information please reference Farpointe Data's website www.farpointedata.com.

1.0 Introduction
A key component of a physical security electronic access control system, a mobile-ready reader combining BLE and contactless smart card technologies is based on RFID technology. In operation it is capable of reading data stored on a contactless smartcard credential via high frequency—or reading data from mobile credential stored in a smartphone's wallet app via BLE technology—and without physical contact, and then passing the data obtained to the physical access control system. Access control systems typically manage and record the movement of individuals through a protected area, such as a locked door.

2.0 Mounting Provisions
Each reader may be installed either indoors or outdoors. Mounting options shown in the table below. Use supplied #6 mounting screws, or equivalent security screws, for installation.

	CSR-35P	CSR-35L
Mullion Mount	●	●
Single-gang Wall Mount*	●	●

*Plastic or metal.

3.0 Reader Wiring

Wiegand		Magstripe	
Conductor	*Function*	*Conductor*	*Function*
Red	DC (8-14 VDC)	Red	DC (8-14 VDC)
Black	Ground	Black	Ground
Green	Data 0	Green	Data
White	Data 1	White	Clock
Brown	Red LED[a]	Brown	Red LED
Orange	Green LED[b]	Orange	Green LED
Yellow	Card Present	Yellow	Card Present
Blue	Beeper	Blue	Beeper
Violet	Read Mode	Violet	Read Mode
Drain	Shield Ground	Drain	Shield Ground

NOTES:

[a]**Single Line LED:** This is the standard operating mode and does not make use of the Orange conductor. The LED is Red when the reader is idle and flashes when a card is presented. The LED turns Green when the Brown Conductor is pulled low by the access control panel.

[b]**Dual Line LED:** This mode makes use of both the Brown and Orange conductors. The Brown conductor controls the Red LED and the Orange conductor controls the Green LED. LED states are determined by the access control system option and capability.

4.0 Cable Requirements
24 AWG minimum, multi-conductor stranded with an overall foil shield, for example Belden 9535 or similar. Per the SIA's Wiegand specification, maximum cable length is 500 feet (152 m).

5.0 Output Formats
Wiegand (industry standard 26-bit Wiegand and custom Wiegand formats)
Magnetic Stripe (ABA Track II, clock and data, with card present)

6.0 Grounding
Shield (drain) continuity must run from the reader to the access panel. Shield (drain) and reader ground must be tied together at the access panel and connect to an earth ground at one point.

7.0 Power
Reader may be powered by the access panel. A linear power supply is recommended for best operation.

8.0 Voltage
8 to 14 VDC. 12 VDC at the reader is recommended for best operation.

9.0 Read Mode
For sector (access control) reads, pull the purple conductor low.

10.0 Connection
Connection must be done in accordance with NFPA 70. Do not connect to a receptacle controlled by a switch. Connect to a power limited DC voltage source.

11.0 Troubleshooting
1. When the reader is first powered on it will beep 4-times, and the LED will shine red.
2. Presenting a supported access credential will result in the reader beeping and the LED flashing once.
3. Mobile operation is optimized for smartphones supporting Bluetooth LE version 4.2. Further, for the downloading of mobile access credentials, a stable, high-quality internet connection is recommended.

NOTE: The access panel controls LED functionality, such as switching the LED to green.

If the reader does not recognize the mobile credential or card or tag (no beep, no LED flash) or exhibits short read range, please see the table below for possible causes and solutions.

Possible Cause	Corrective Action
Incorrect cabling	Verify gauge, connections and cabling length
Not enough power	12 VDC recommended
Incorrect credential used	Verify if credential technology is supported
Reader/access panel not properly grounded	Earth ground needed—verify shield and reader ground are tied at access panel and connect to ground at one point
Supply generating interference	Linear power supply recommended, verify switching power supply before use

Should any of the corrective actions mentioned above not improve performance, disconnect the reader from the access panel and power it with a separate power supply or 9VDC battery, and re-test card functionality. By powering the readers separately, most variables that may lead to reduced performance can be eliminated. Should the problem persist, please contact Farpointe directly. Many Farpointe Data Readers carry the following certifications:

FCC Compliance Statement: This device complies with part 15 of the FCC rules.
Operation is subject to the following two conditions:
(1) this device may not cause harmful interfer-ence, and
(2) this device must accept any interference received, including interference that may cause undesired operation.
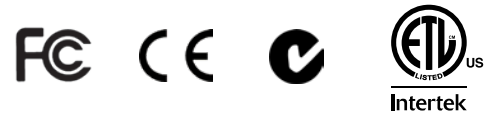
NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequen-cy energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be re-quired to correct the interference at his own expense.

IMPORTANT! Changes or modifications not expressly approved by Farpointe Data, Inc. could void the user's authority to operate the equipment.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause unde-sired operation of the device.

Cet appareil est conforme à Industrie Canada exempts de licence standard RSS (s) . Le fonctionnement est soumis aux deux conditions suivantes : (1) ce dispositif ne peut pas provoquer d'interférences et (2) ce dispositif doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement du dispositif.

Product can be used without license conditions or restrictions in all European Union coun-tries, including Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxem-bourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Spain, Sweden, United Kingdom, as well as other non-EU countries, including Iceland, Norway, and Switzerland.

Farpointe Data reserves the right to change specifications without notice.

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