

1. Check that all units & parts are included, and antennas are properly connected:

- ☐ Central unit ☐ Remote unit ☐ 6 connectors (2 each: 2-pin, 8-pin, 10-pin) ☐ Warranty

2. Bench test. (Complete before field installation for easier troubleshooting).

- Set up near control panel. Use spare reader. Place Central & Remote at least 24" apart.
- Connect suitable power supply (8-16 Vdc @ 300 mA) to each unit.
- After short delay, Status LED will pulse green on each unit (power/communication).
- Touch jumper wire from Central's ground pin to Relay 1 input. Remote's Relay 1 activates with audible click. Multimeter/continuity tester shows Remote's Relay 1 "normally open" contacts closing when Central's Relay 1 input is activated.
- Select DIP Switch Settings as needed (see below).
- Connect reader to Remote; connect Central to panel. Scan card to ensure proper read.

DIP Switch Settings

Default settings:

- Standard Wiegand is the default Interface Type.
- By default, units are configured & labeled as one Remote and one Central unit.
- By default, Supervision relay and pullup resistors are disabled.

Configuration Mode: To select alternate interface, temporarily switch to Configuration Mode.

- Power off both Suprex units.
- Turn **on** DIP switch 1 on both units.
- Set DIP switches as described below for appropriate interface:
- Power on both Suprex units. Status LED should be solid green.

Default: Standard Wiegand	Turn on DIP switch 8 on both units
Keypad (Wiegand/No Filter)	Turn on DIP switch 7 on both units
F/2F (Unsupervised)	Turn on DIP switches 6, 7, 8 on both units
Strobed Rising Edge (MR-5)	Turn on DIP switches 7 and 8 on both units
Strobe Rising Edge (Dorado)	Turn on DIP switch 6 on both units
Strobed Rising (MagTek)	Turn on DIP switches 6 and 8 on both units
Strobed Falling Edge	Turn on DIP switches 6 and 7 on both units

- Power off both Suprex units; return DIP switch 1 to **off** position on both units to select Run Mode settings. When switching to Run Mode, always reselect Run Mode settings.

Run Mode: Select Run Mode settings as described below, then power on both Suprex units to begin operating in Run Mode.

Central / Remote Select	Turn DIP switch 3 on for Central Mode / turn off for Remote Mode
Remote Digital/Analog Relay Select	Turn Remote Unit's DIP switch 2 on for digital input / off for analog input
Supervision Relay (Relay 3, Central Unit)	Turn Central Unit's DIP switch 4 on for supervision relay / off for normal relay
Supervision Relay (Relay 1, Remote Unit)	Turn Remote Unit's DIP switch 4 on for supervision relay / off for normal relay
Pullup Resistor Select	Turn on DIP switch 5 to enable pullup resistors / off to disable (applicable units)
EXP Select (for no EXP)	Turn off DIP switches, 6, 7, and 8 on both units
EXP Select (for 1 EXP)	Turn on DIP switch 8 on both units
EXP Select (for 2-7 EXPs)	See manual

Relay locations

Relay 1 & 2 Outputs: Located on the Remote Unit / Triggered from the Central Unit.

Relay 3 & 4 Outputs: Located on the Central Unit / Triggered from the Remote Unit.

3. Field Installation Checklist

- ☐ The Central unit and access control panel need a common ground.
- ☐ The Remote unit and card reader need a common ground.
- ☐ The top of each unit (where antennas are located) should point toward the sky.
- ☐ The Central and Remote units should be installed level relative to each other.
- ☐ There should be a direct line of sight between Central and Remote units (if there is no direct line of sight, a Repeater unit is recommended).
- ☐ Both the Central and Remote units should be mounted high enough to avoid interference from obstacles (vehicles, trains, buildings, trees, etc.).
- ☐ Metal mounting surfaces are not recommended. If use of a metal surface is unavoidable, space unit as far from metal surface as possible using non-metal spacer.

If troubleshooting is necessary, see manual for Test Mode details.

Typical SPX-5521 Central and Remote Connections

