

**WLS-5401KSF**  
**WLS-5401**  
 Wireless access  
 receiver and  
 transmitters

*The WLS Wireless receiver and transmitters*



## Extra long read range of up to 25 meters or more !

The WLS series transmitters and outdoor receiver provide extra long read range using wireless technology in the 303MHz range. Ideal for parking and garage entrance applications. The read range can be extended by installing the power antenna remotely.

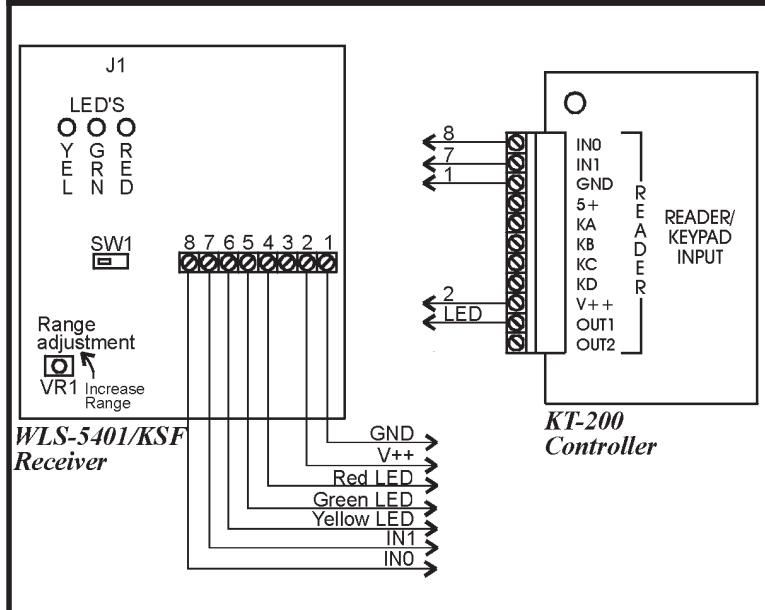
### Ordering Information

- WLS-5401KSF KSF format wireless outdoor receiver
- WLS-3700KSF KSF format wireless full size transmitter
- WLS-3710KSF KSF format wireless keytag transmitter
- WLS-5401 Wiegand 26 bits format wireless outdoor receiver
- WLS-3700 Wiegand 26 bits format wireless full size transmitter
- WLS-3710 Wiegand 26 bits format wireless keytag transmitter
- WLS-A1 Standard whip antenna for wLS-5401
- WLS-A2 Power dipole antenna for wLS-5401

## Features

- Choice of 2 transmitters
- Typical range of up to 25 meters (80 feet)
- Ideal for parking and garage entrance
- Receiver powered directly from KT-200

## Wiring Diagram



## Technical Specifications

### WLS-5401KSF / WLS-5401

Power..... 24 VDC  
 Operating temperature..... -40°C to 65°C (-40°F to 150°F) at 85% humidity  
 Dimensions..... 11.3H x 11.3W x 8.9 cm (4.75" x 4.75" x 3.5")  
 Enclosure material..... ABS  
 Frequency..... 303 MHz  
 Average current..... 30mA  
 Output..... KSF format WLS-5401KSF (Wiegand 26 bits WLS-5401)  
 Cable..... 22 AWG, 7 conductor Belden ref# 9413  
 Distance from controller.... 15 meters max (50') (Receiver should not be closer than 3m (10') to the controller)

### WLS-3700KSF / WLS-3700

Power..... 9 Volt battery, included (1 year average lifetime)  
 Operating temperature..... -40°C to 65°C (-40°F to 150°F) at 85% humidity  
 Dimensions..... 8.9H x 6.35W x 1.9 cm (3.5" x 2.5" x 0.75")

### WLS-3710KSF / WLS3710

Power..... 12 Volt battery, included (1 year average lifetime)  
 Operating temperature..... -40°C to 65°C (-40°F to 150°F) at 85% humidity  
 Dimensions..... 5.7H x 3.8W x 1.28 cm (2.25" x 1.5" x 0.50")

### WLS-A1

Read range ..... Up to 12.2 meters (40 feet)  
 Antenna WLS-A1 may be remotely install using coaxial cable up to 12.2 meters (40').

### WLS-A2

Read range..... Up to 25 meters (80 feet)  
 Antenna WLS-A2 MUST be remotely install using coaxial cable up to 12.2 meters (40').

# WLS-5401KSF / WLS-5401

## *Installation Instructions*

- 1) Do not mount receiver or antenna near any known source of interference (ie. Proximity Card Readers, etc). The greater the distance between the receiver and the source of interference, the better. A minimum 2.5 meters (8 feet) is recommended.
- 2) For proper wire connections refer to wiring diagram.
- 3) Mount all antennas at least 10cm (4 inches) from the wall **for maximum range**.
- 4) Ensure the voltage applied to the reader is 24 Volts.
- 5) Test receiver range with only power applied, by switching SW1 to the ON position and activating a transmitter. If the receiver is functioning, the Yellow LED will illuminate indicating the receiver is operating.
- 6) To increase the range of the receiver turn VR1 the range adjustment counter-clockwise. To decrease the range turn the adjustment clockwise.

## *Troubleshooting*

- 1) Apply power to the receiver.
- 2) Turn range adjustment to maximum.
- 3) Turn TEST switch to ON position.
- 4) Activate a transmitter
- 5) If the Yellow LED on the receiver turns on when a transmitter is activated, the receiver is receiving the signal from the transmitter.
- 6) If the Yellow LED did not turn on, ensure you have the proper power applied to the receiver and the connections are tight. Also check the transmitter battery.
- 7) If the Yellow LED lights but your access system does not receive the code, re-check your wiring from the receiver to your controller.
- 8) The LEDs on the receiver are controlled by your access panel. To activate a particular LED, your panel must be ground the appropriate LED input line.