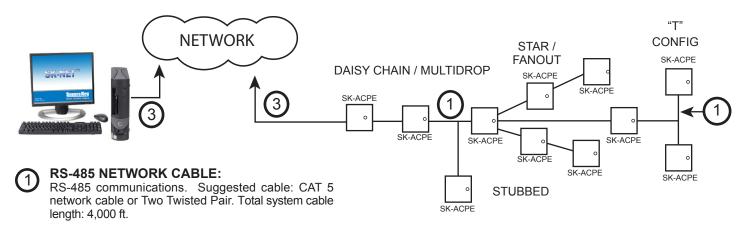
# SECURA KEY CARD ACCESS CONFIGURATION GUIDE Single/Multi-Reader Systems with SK-ACPE Two-Door Panel

#### MULTI-PANEL SYSTEM USING SK-NET™ SOFTWARE- SINGLE LOCATION WITH LAN CONNECTION

**NOTE**: In this example, only the first panel is connected to the LAN. Additional panels are daisy-chained from the first panel using RS-485 over twisted pair. SK-NET-MLD software must be used when connecting more than one SK-ACPE to the LAN. This diagram can also be a remote location connected over a WAN, if a static IP address is used at each remote site.

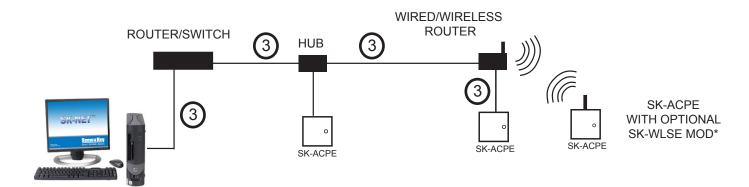


3 ETHERNET CABLE:

Standard Ethernet cable connector connected to existing LAN.

NOTE: Each SK-ACPE above can support 2 Wiegand output card readers.

#### SK-ACPE SYSTEM USING SK-NET-MLD SOFTWARE WITH MULTIPLE LAN CONNECTIONS



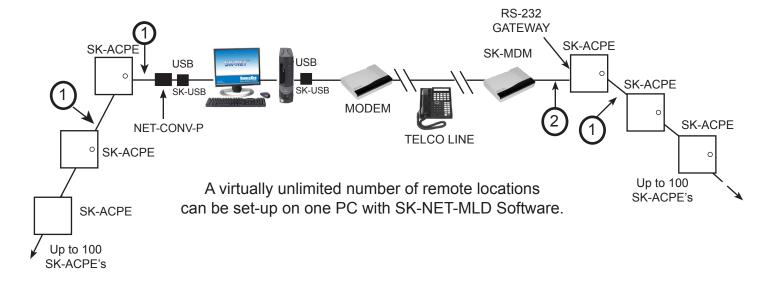
THERNET CABLE: (Required cables CAT 5e or CAT 6).

Wired: max distance 300' (100m) between devices.

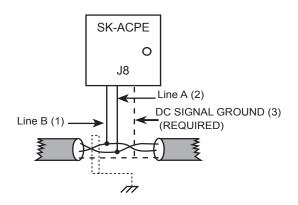
Wireless: Typically 100-200' (30-60m) depending on interference, building structure and metal objects.

NOTE: Each SK-ACPE above can support 2 Wiegand Output Card Readers.

#### MULTI LOCATION SYSTEM WITH SK-NET-MLD SOFTWARE



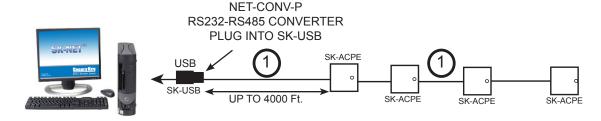
#### **RS-485 NETWORK WIRING CONNECTIONS**



Earth Grounded Shield is highly recommended in environments subject to high voltage electrical discharge (i.e. lightning). Shield should be connected to earth ground only at one end of the cable. DC Signal ground is required. DC Ground wire is NOT to be connected to earth ground.

#### MULTI-PANEL SYSTEM USING SK-NET™ SOFTWARE- SINGLE LOCATION with RS-485 CONVERTER

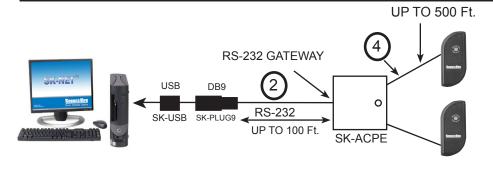
NOTE: Use this configuration when the PC is located more than 100' from the first SK-ACPE, and a LAN connection is not available.



- RS-485 NETWORK CABLE:
  RS-485 communications. Suggested cable: CAT 5
  - network cable or Two Twisted Pair. Total system cable length: 4,000 ft.
- SERIAL CABLE:
  RS-232 communications. Suggested cable:
  6-Conductor, Shielded, with no twisted pairs. Total cable length 100 feet.

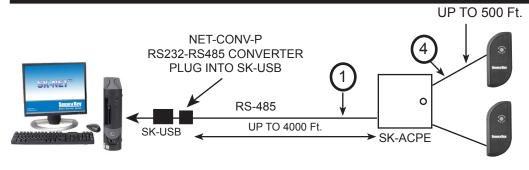
**NOTE:** When using the RS-232 to RS-485 converter, you cannot use the stubbed, star fanout or "T" configuration. All network connections from SK-ACPE to the next SK-ACPE must be in parallel with each other. The J8 connector, Pins 1 and 2 must be a twisted pair. Pin 3 (Ground) can use 1 conductor of a second pair.

### SK-ACPE PANEL SYSTEM USING SK-NET™ SOFTWARE WITH RS-232 GATEWAY CONNECTED DIRECTLY TO A PC



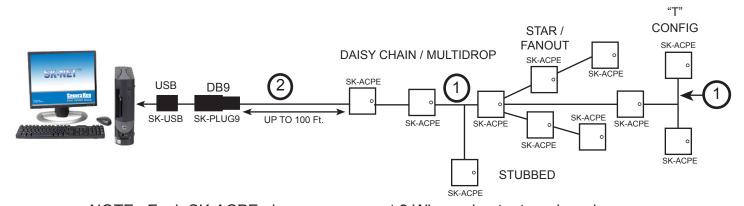
CARD READER WITH ANY CARD TECHNOLOGY, WIEGAND OUTPUT, 26 BITS

## SK-ACPE PANEL SYSTEM USING SK-NET™ SOFTWARE WITH RS-232 TO RS-485 CONVERTER (NET-CONV-P)



CARD READER WITH ANY CARD TECHNOLOGY, WIEGAND OUTPUT, 26 BITS

#### MULTI-PANEL SYSTEM USING SK-NET™ SOFTWARE- SINGLE LOCATION RS-232 CONNECTION



NOTE: Each SK-ACPE above can support 2 Wiegand output card readers.

RS-45 NETWORK CABLE:

RS-485 communications. Suggested cable: CAT 5 network cable or Two Twisted Pair. Total system cable length: 4,000 ft.

SERIAL CABLE:
For RS-232 communications interfa

For RS-232 communications interface. Suggested cable: 6-Conductor, Shielded, with no twisted pairs. Total cable length 100 feet. SK-USB required if your PC does not have a COM port

WIEGAND CABLE:
Suggested cable: 6-Conductor, Shielded, with no twisted pairs. Total cable length 500 feet.

### SYSTEM EQUIPMENT COMPONENTS

#### **ACCESS CONTROL UNIT:**

SK-ACPE: Two Door Access Control Unit

#### Radio Key® Low Frequency Proximity

#### **READERS:**

RK-WM: Proximity Reader (2 readers per SK-ACPE), Mullion RK-WS: Proximity Reader (2 readers per SK-ACPE), Switchplate RK-WL: Proximity Reader (2 readers per SK-ACPE), Long Range

#### CARDS/TAGS:

RKCM-02-2 Molded Proximity Cards - 26/32 bit encoding

RKKT-02-2 Key Tags - 26/32 bit encoding

RKCI-02-2 ISO Proximity Cards - 26/32 bit encoding

#### E\*Tag® High Frequency Proximity:

#### **READERS:**

ET4-WXM: 13.56 MHz ISO 15693, Mullion ET4-WXS: 13.56 MHz ISO 15693, Switchplate ET8-RO-W-D: 13.56 MHz ISO 15693, Switchplate ET8-RO-W-M: 13.56 MHz ISO 15693, Mullion

#### **CARDS/TAGS:**

ETCI04-1- ISO Card- 26/32 bit encoding

ETCI04-4- ISO Card- 26/32 bit encoding, Mag-Stripe ETST03-1-Key Tag Trapezoidal - 26/32 bit encoding ETKT03-1 Key Tag, Rounded End, 26/32 bit encoding

#### PC REQUIREMENTS: See Table

#### SOFTWARE:

SK-NET™- DM - Basic Software - USB Flash Drive and manual

SK-NET™ -MLD - Multi-Location Software with USB Flash Drive and manual

SK-NET-MLD - CSXX (XX= 2,5,10 or 15 workstations), USB Flash Drive & Manual with Client Server License

#### **ACCESSORIES:**

NET-CONV-P - RS-232 to RS-485 Converter with Power Supply (plug into SK-USB)

RS-232E - Connects J11 MTA connector to DB9

**SK-24VDC** - DC power supply, provides 1A@24VDC.

SK-MDM - Modem - 56K Baud External Modem for dial-up connection to any SK-ACPE with MLD software

**SK-ACP-PS** - 1A, 24VDC 4.0 AH supply and stand by battery for SK-ACPE.

**SK-BAT** - 4.0 AH standby battery for SK-ACPE.

**SK-PLUG9** - Computer connector (DB9) with wire pigtail.

SK-USB - Converts USB Port at PC to serial COM Port with DB9 connector

SK-WLSE-MOD\* - Wireless LAN adapter, 802.11 b/g. Powered by SK-ACPE. Connect at J12 and set jumpers.

SK-XFRMR - 16.5VAC 40VA Transformer for SK-ACPE.

\* Contact Factory for Availability.

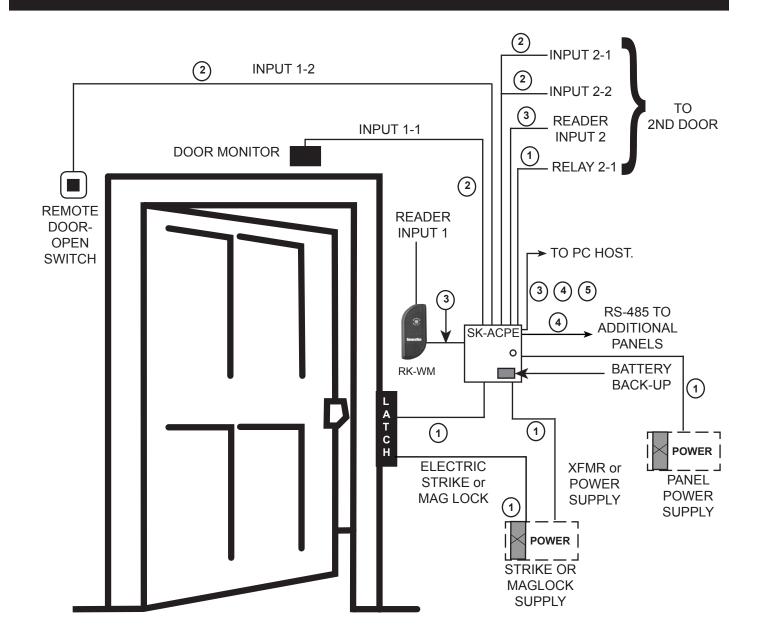
| MINIMUM REQUIREMENTS*                                      |                    |      |                            |
|--|--------------------|------|----------------------------|
| OPERATING SYSTEM   | PROCESSOR<br>SPEED | RAM  | AVAILABLE<br>DISK<br>SPACE |
| WINDOWS® XP OR<br>NEWER                                    | 1 GHz              | 1 GB | 1 GB                       |
| * For larger installation more disk space may be required. |                    |      |                            |
| RECOMMENDED SYSTEM   |                    |      |                            |
| WINDOWS® XP OR<br>NEWER                                    | 2 GHz              | 2 GB | 10 GB                      |
| * For larger installation more disk space may be required. |                    |      |                            |
| SERVER REQUIREMENT (FOR CLIENT/SERVER VERSIONS)**          |                    |      |                            |
| WINDOWS® 2003<br>OR NEWER                                  | 2 GHz              | 1 GB | 1 GB                       |
| ** F OK NET MID  | 0.10               |      |                            |

<sup>\*\*</sup> For SK-NET-MLD-C/S version, a server is required to install ADS and the database. SK-NET™ must be installed on a workstation only.

#### **REQUIRED PERIPHERALS:**

RS-232 COM Port, USB Port or TCP/IP, a modem if you use dial-up and a printer for reports.

# **SECURA KEY SK-ACPE Typical Door Installation**



**CABLE TYPES:** 

- 1 2 COND, UNSHIELDED 16-18 AWG
- 2 COND, SHIELDED 18-24 AWG
- 3 6 COND, SHIELDED, NO TWISTED PAIRS 18-24 AWG WIEGAND OR RS-232
- (4) RS-485 CAT 5 NETWORK CABLE OR TWO TWISTED PAIR
- 5) TCP/IP CAT 5e or CAT 6 ETHERNET CABLE



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