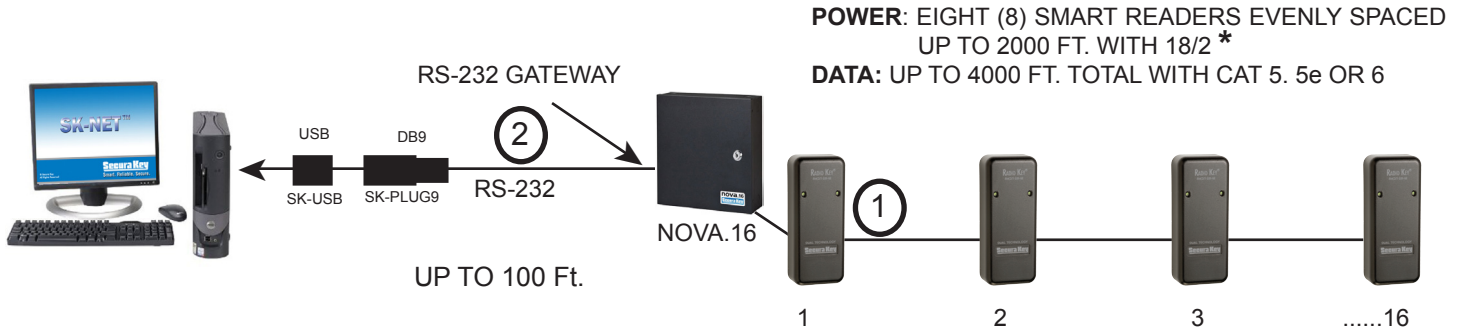


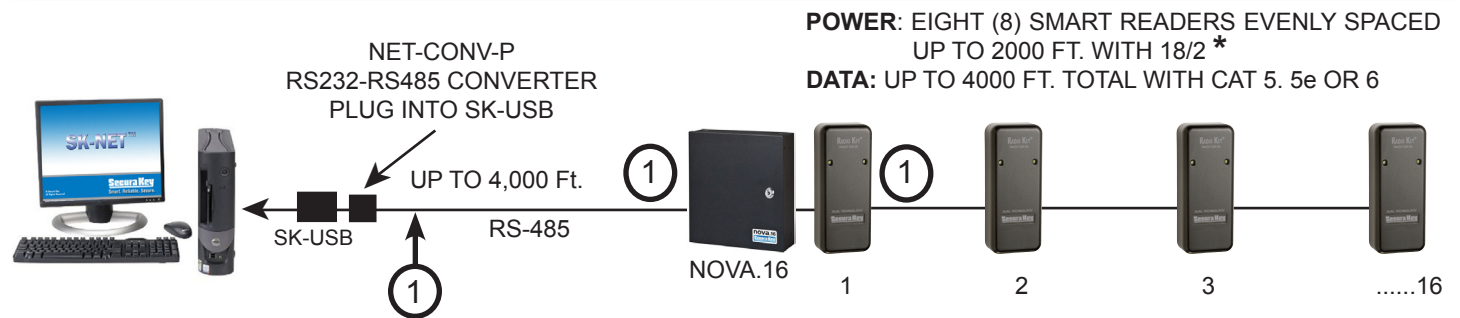
SECURA KEY CARD ACCESS CONFIGURATION GUIDE

Multi-Reader Systems with NOVA.16 (SK-MRCP) 16-Door Panel

NOVA.16 (SK-MRCP) SYSTEM USING SK-NET™ SOFTWARE WITH RS-232 GATEWAY CONNECTED DIRECTLY TO A PC

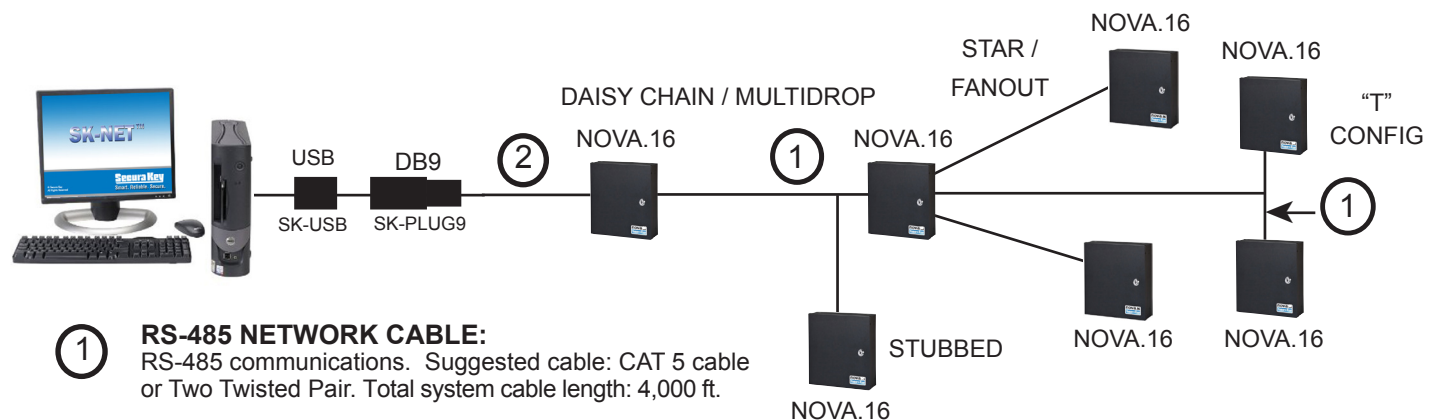


NOVA.16 (SK-MRCP) SYSTEM USING SK-NET™ SOFTWARE WITH RS-232 TO RS-485 CONVERTER (NET-CONV-P)



* NOVA.16 HAS TWO SEPARATELY FUSED 14VDC POWER OUTPUTS - EACH HANDLES MULTIPLE READERS

NOVA.16 (SK-MRCP) SYSTEM USING SK-NET™ SOFTWARE WITH SINGLE LOCATION RS-232 CONNECTION

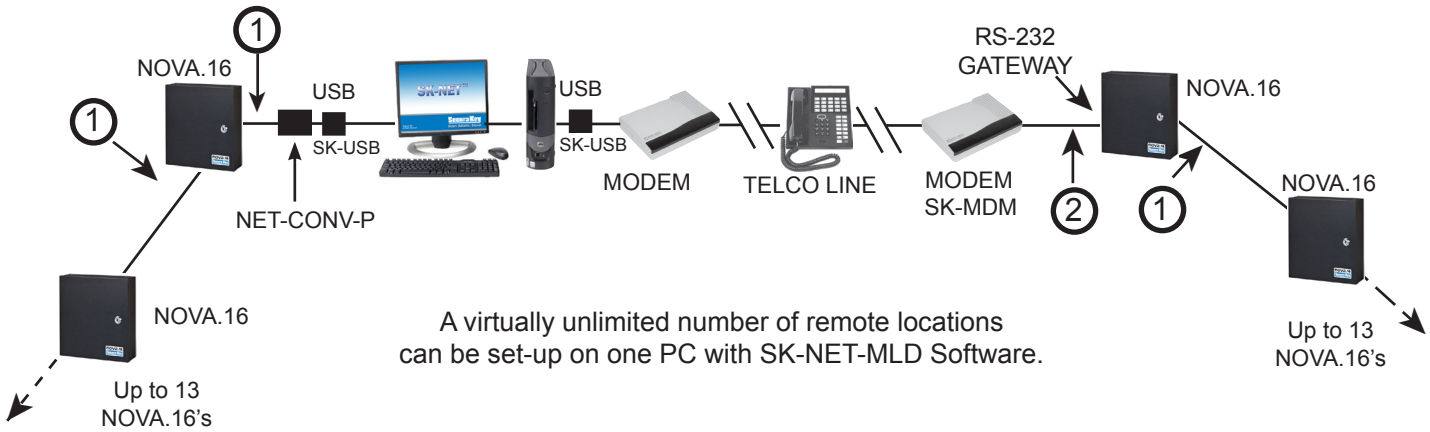


1 RS-485 NETWORK CABLE:
RS-485 communications. Suggested cable: CAT 5 cable or Two Twisted Pair. Total system cable length: 4,000 ft.

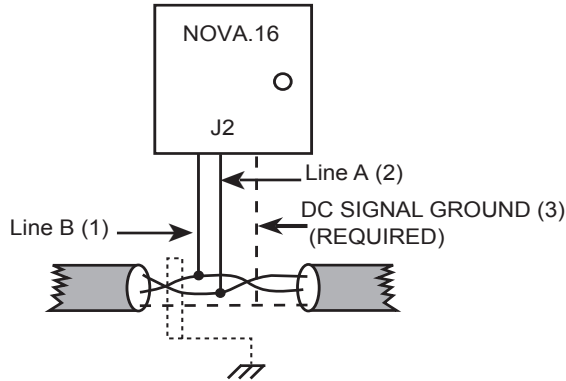
2 SERIAL CABLE:
RS-232 communications. Suggested cable: 6-Conductor, Shielded, with no twisted pairs. PC or serial printer. Total cable length 100 feet. SK-USB may be required if your PC does not have a COM port.

NOTE:
Each SK-MRCP above can support 16 Smart readers.

NOVA.16 (SK-MRCP) MULTI LOCATION SYSTEM WITH SK-NET-MLD SOFTWARE

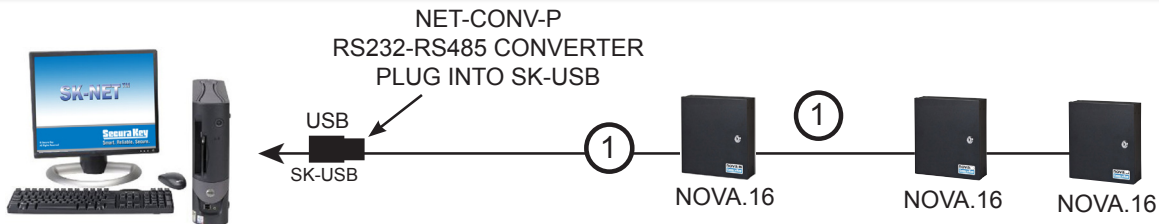


NETWORK WIRING CONNECTIONS



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.

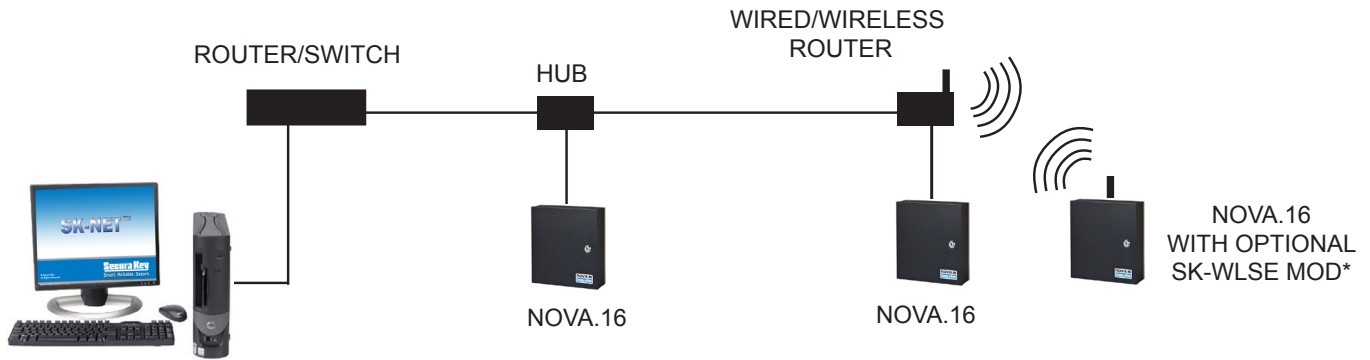
NOVA.16 (SK-MRCP) SYSTEM USING SK-NET™ SOFTWARE SINGLE LOCATION RS-485 with CONVERTER



- ① **RS-485 NETWORK CABLE:**
RS-485 communications. Suggested cable: CAT 5 cable or Two Twisted Pair. Total system cable length: 4,000 ft.
- ② **SERIAL CABLE:**
RS-232 communications. Suggested cable: 6-Conductor, Shielded, with no twisted pairs. PC or serial printer. Total cable length 100 feet. SK-USB may be required if your PC does not have a COM port.

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-MRCP to the next SK-MRCP must be in parallel with each other. The J2 connector, Pins 1 and 2 must be a twisted pair. Pin 3 (Ground) uses a conductor from another pair, if you are using CAT 5 or CAT 6 cable .

NOVA.16 (SK-MRCP) SYSTEM USING SK-NET-MLD SOFTWARE WITH MULTIPLE LAN CONNECTIONS



③ ETHERNET CABLE: (Required cables CAT 5e or CAT 6).

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

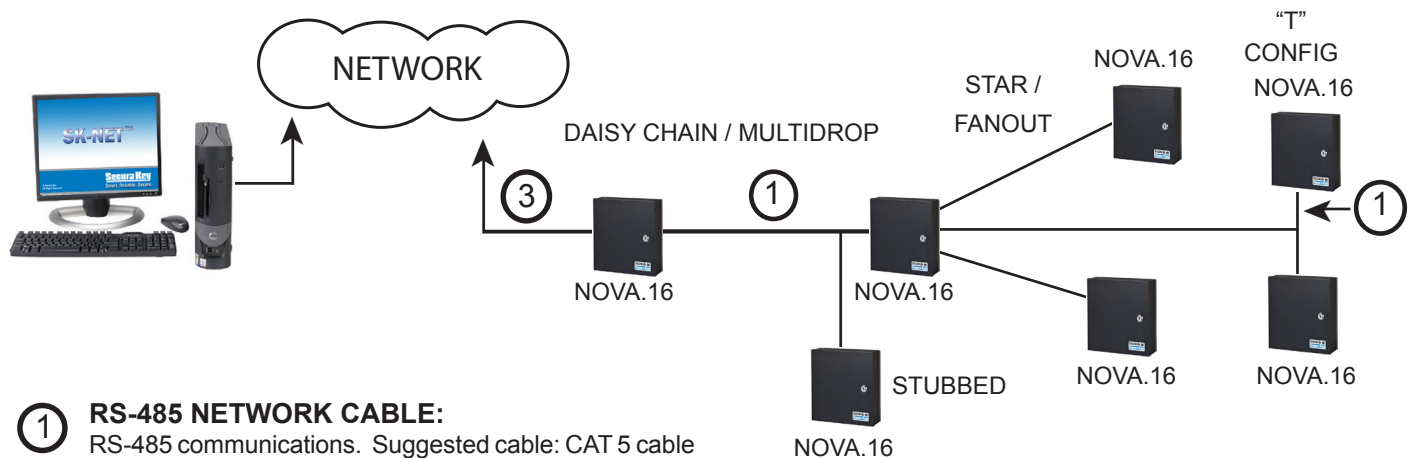
Wireless: Typically 100-200' (30-60m) depending on interference, building structure and metal objects.

NOTE: Each SK-MRCP above can support 16 Smart Readers.

* Call Factory for availability.

NOVA.16 (SK-MRCP) SYSTEM USING SK-NET™ SOFTWARE SINGLE LOCATION WITH LAN CONNECTION

NOTE: SK-NET-MLD software must be used when connecting more than one SK-MRCP to the LAN. This can also be a remote location connected over a WAN, if a static IP address is used at each remote site.



① RS-485 NETWORK CABLE:
RS-485 communications. Suggested cable: CAT 5 cable or Two Twisted Pair. Total system cable length: 4,000 ft.

② SERIAL CABLE:
RS-232 communications. Suggested cable: 6-Conductor, Shielded, with no twisted pairs. PC or serial printer. Total cable length 100 feet.

③ ETHERNET CABLE:
Standard Ethernet cable connector connected to existing LAN.

NOTE: Each SK-MRCP above can support 16 smart readers.

SYSTEM EQUIPMENT COMPONENTS

ACCESS CONTROL UNIT:

NOVA.16 (SK-MRCP): 16-Door Access Control Unit with Ethernet connector

Radio Key® Low Frequency Proximity

READERS - Proximity Smart Reader (16 per SK-MRCP)

RKDT-SR-M (Mullion Style Reader)

RKDT-SR-S (Switchplate Style Reader)

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 -Contactless Smart Readers (16 per SK-MRCP)

ET8-SR-X-M (Mullion Style Reader)

ET8-SR-X-D-W, or ET8-SR-X-D-I (Switchplate/ Decora Style Reader, white or ivory)

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

SOFTWARE:

SK-NET™-DM - Basic Software - USB Flash Drive & 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 and Manual with Client Server License

PC REQUIREMENTS: See Table

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

ACCESSORIES:

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

RELAY BOARDS — ELK-924 Sensitive Relay, Altronix RBSN or RBSNTTL Relay Modules (Contact your dist.)

RS-232E - Connects J11 MTA connector to DB9

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

SK-SR1 - SecuRelay™ Intelligent Relay Module

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

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

SK-BAT - 4.0 AH standby battery for SK-MRCP.

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

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

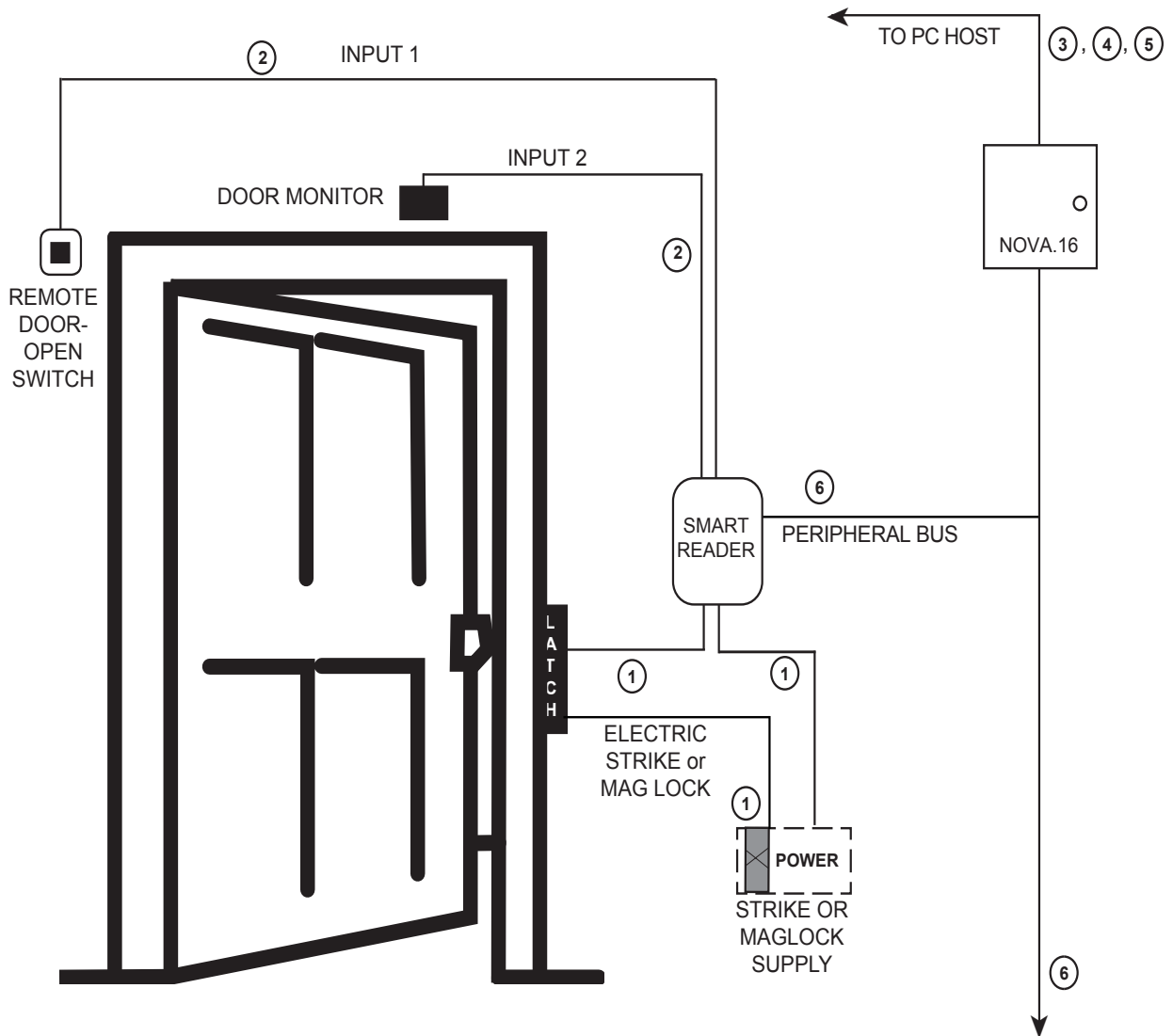
SK-WIO-1 - One-door Wiegand Reader Interface, Connects to RS-485 Peripheral Bus

SK-WLSE-MOD* - Wireless LAN adapter, 802.11 b/g. Powered by SK-MRCP. Connect at J6 and set jumpers.

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

* Contact Factory for Availability.

SECURA KEY SK-MRCP Typical Door Installation



CABLE TYPES:

- ① 2 COND, 16-18 AWG
- ② 2 COND, SHIELDED 18-24 AWG
- ③ RS-485 - CAT 5 NETWORK CABLE OR TWO TWISTED PAIR
- ④ TCP/IP - CAT 5e OR CAT6 ETHERNET CABLE
- ⑤ RS232-5 or 6 CONDUCTOR, SHIELDED, NON-TWISTED
- ⑥ DATA & READER POWER CABLE:
 - CAT 5 (RS-485) + 18/2 (reader Power)
 - Coleman 97395-06-23 CAT5 + 18/2 siamese cable

**RS485 PERIPHERAL BUS
(TO ADDITIONAL SMART
READERS)**