

Win Access 2000

Key Guard
Installation Manual

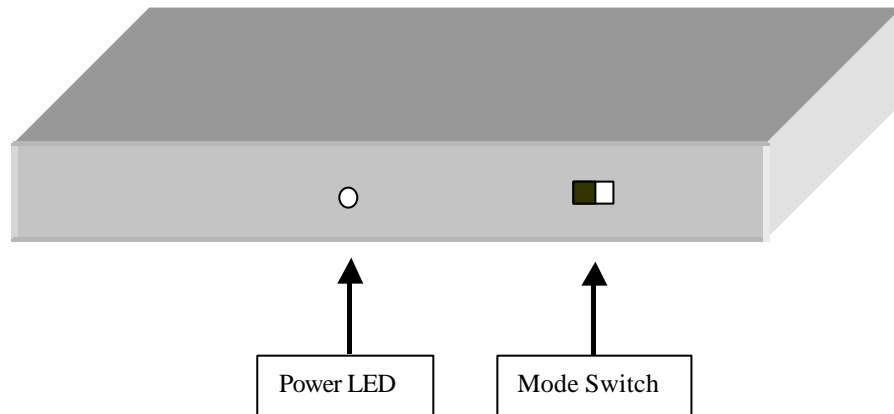
Version 1.1
March, 2001

Win Access 2000 Key Guard Installation

General Information

The Key Guard must be installed first to the personal computer before to setup the Win Access 2000 communication software. Moreover, the Key Guard is also designed to operate as a RS232-RS485 converter so that it can be used to link up with ACS controllers.

Front Panel



Power LED: When power is supplied to the Key Guard, this LED will ON.

Mode Switch: Used to communicate with difference devices.

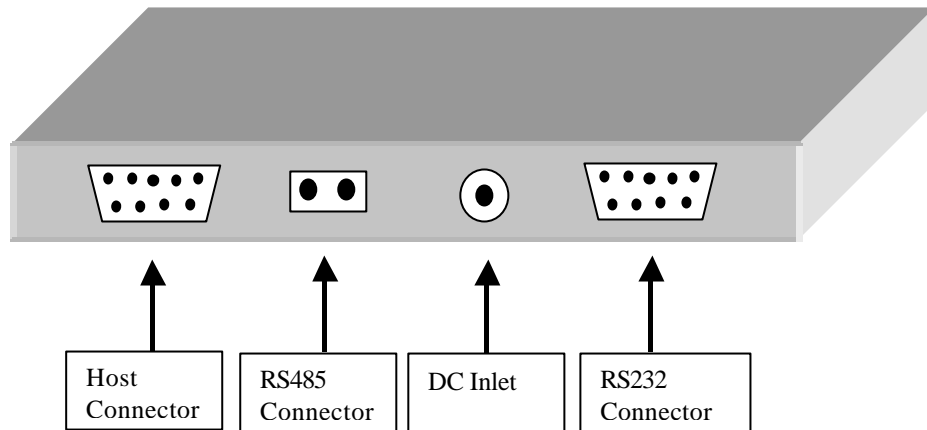
Left Position:

This position will use RS485 converter function to link to ACS controllers. For details of wiring at this mode, please refer to **Installation Options - 2, 3.**

Right Position:

This position will use RS232 function to link to modem / single ACS controller. For details of wiring, please refer to **Installation Options - 1.**

Real Panel



DC Inlet:

9V DC power adapter inlet with positive center pole. When the power is properly supplied, the Power LED will turn ON.

CAUTION: Do NOT use AC power adapter as they may damage the Key Guard device.

Host Connector:

This is a female, D-type, 9-pin RS232C connector. Usually, this connector should be connected to PC. For details of the cable connection, please refer to **Cable Connector Pin Assignments - 1**.

RS485 Connector:

This is a 2 pin, half-duplex RS485 connector. In order to activate this port, the **Mode Switch** should be set to **Left Position**. It is used to link with up to 32 ACS controllers. A two pole terminal block is provided. The left side of the terminal block is named as R+/T+, and the right side of the terminal block is named as R-/T-. A screwdriver should be used to fix the two wires. For details of the cable connection, please refer to **Cable Connector Pin Assignments - 2**.

RS232 Connector:

This is a male, D-type 9 pin RS232C connector. In order to activate this port, the **Mode Switch** should be set to **Right Position**. It can be used to link up with modem or single ACS controller. For connection with modem, a special cable should be made. For details of the cable configuration, please refer to **Cable Connector Pin Assignments - 3**.

For connection with single ACS controller, please refer to **Cable Connector Pin Assignments - 4**.

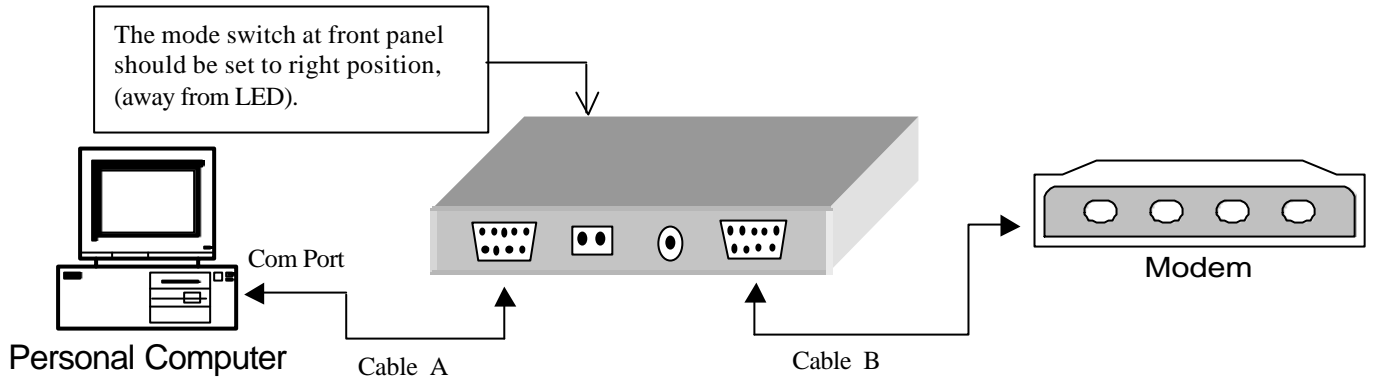
CAUTION: Do NOT connect ACS controllers to both RS485 connector & RS232 Connector at a single Key Guard.

Installation Options

1. Connect to Modem (Remote connection to ACS controllers)

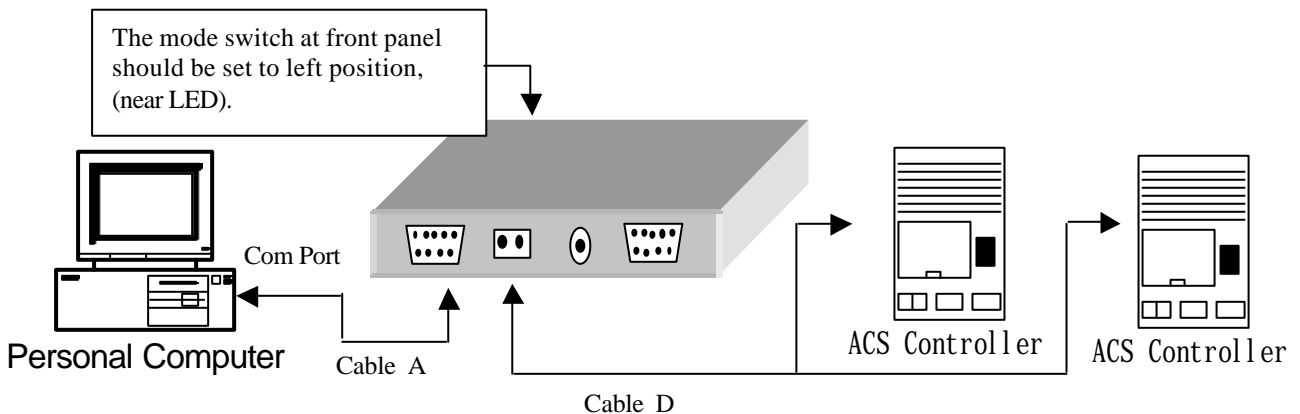
Under this configuration, the usage of modem is engaged as the device to link up with remote ACS controller only. Other modem usage, such as internet dialup, would NOT function properly.

Alternatively, the modem can be connected to the other comm port of the PC in order to access internet dialup.



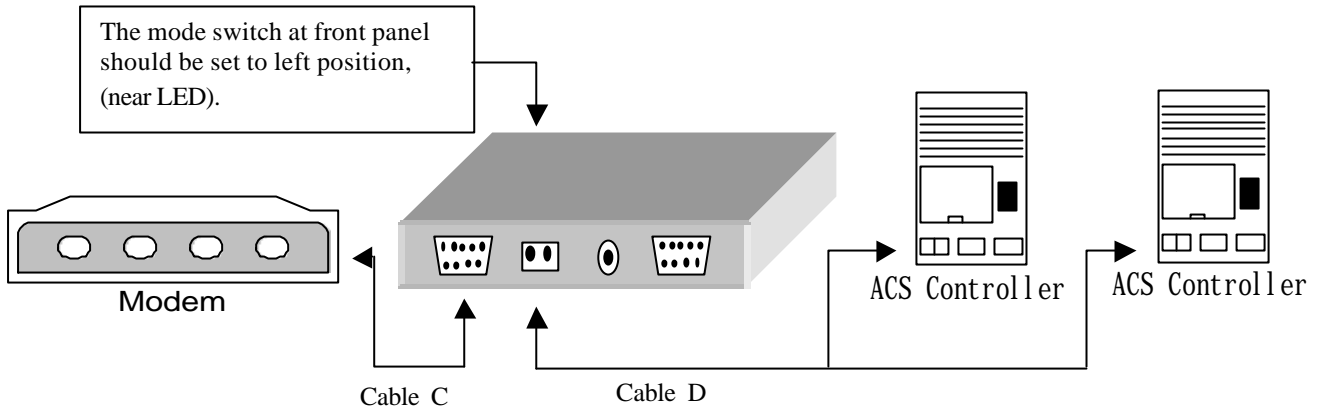
2. Connect to RS485 port (local connection to ACS controllers)

This is standard configuration of the Key Guard. The RS485 port can be connected to nothing for simple Key Guard usage only. The Key Guard is designed to connect up to 32 ACS controllers. It is highly recommended to use RS485 repeater for more than 32 ACS controllers connection at single link.



3. Remote connect with ACS controllers (Converter Type Only)

For this configuration, the Key Guard is used as RS485 converter only. Under this mode, the modem is used to link up with remote host computer dialup, such as multi-site configuration.



Cable Connectors Pin Assignments

1. Cable A: PC connected to Key Guard

DB9 – DB9

PC	Key Guard
2	2
3	3
4	4
5	5

DB25 – DB9

PC	Key Guard
3	2
2	3
20	4
7	5

2. Cable B: Key Guard connected to Modem at Host

DB9 – DB9

Key Guard	Modem
2	2
3	3
4	4
5	5

DB9 – DB25

Key Guard	Modem
2	3
3	2
4	20
5	7

3. Cable C: Modem connected to Converter at Remote Site

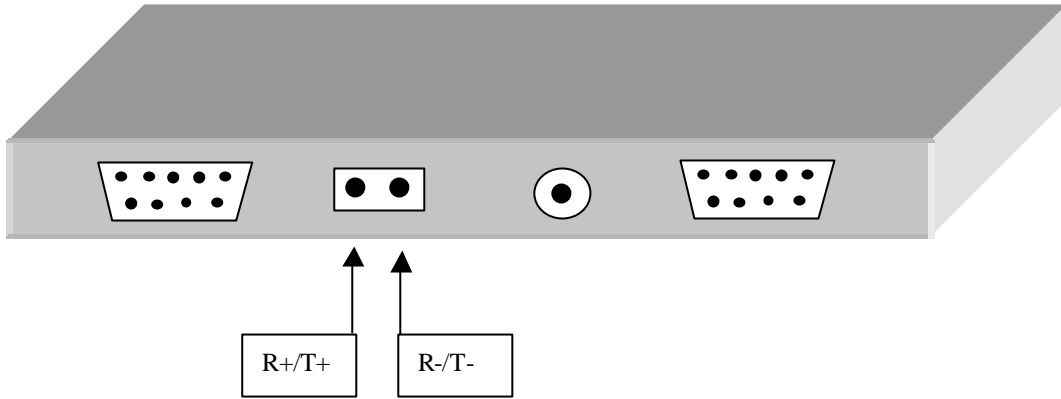
DB9 – DB9

Modem	Key Guard
2	3
3	2
4 (to modem 6)	
5	5
6 (to modem 4)	
7 (to modem 8)	
8 (to modem 7)	

DB25 – DB9

Modem	Key Guard
2	2
3	3
4 (to modem 5)	
5 (to modem 4)	
6 (to modem 20)	
7	5
20 (to modem 6)	

4. Cable D: RS485 Connection



The R+/T+ at Key Guard should be connected to all the R+/T+ of ACS controllers. For the Pin assignment of each model of the ACS controller, please refer to the ACS controller installation manual.

5. DB9 to DB25 conversion

For some devices which has only DB25 COM port, please refer to the following table for DB9 to DB25 conversion.

DB9 Pin No.	Mnemonic	DB25 Pin No.
1	DCD	8
2	RXD	3
3	TXD	2
4	DTR	20
5	GND	7
6	DSR	6
7	RTS	4
8	CTS	5
9	RI	22

Specifications subjects to change without notice.