Introduction

The SEB-700 TCP/IP Expansion Board is an expansion device that attaches onto the SDC-550 Multiple Door Controller. This device serves as both an Ethernet connection interface for the controller and a memory expansion module. The memory expansion allows the controller the capability of storing 25000 tag holders in an offline access control environment.
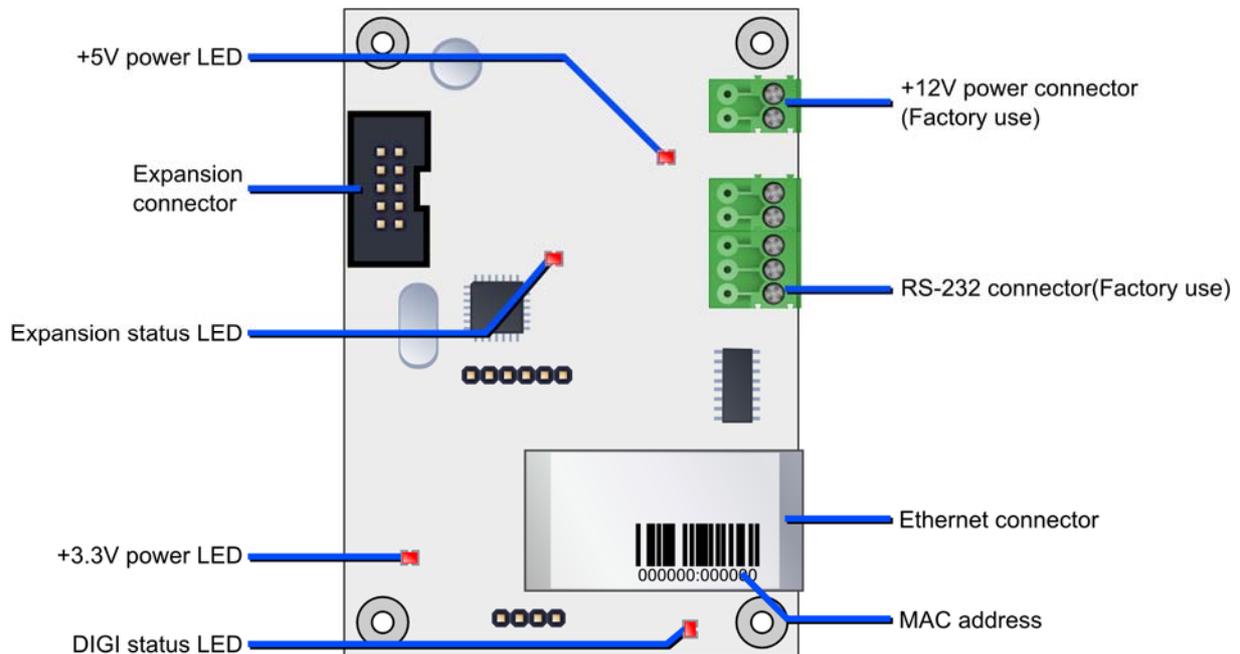
Figure.1
SEB-700 TCP-IP expansion board with feature labels

Two connectors will be used when installing the SEB-700 TCP/IP Expansion board (see Figure.1). The expansion connector is used to connect the expansion board to the SDC-550 Multiple Door Controller. This connection supplies the required power and is also the communication path between the expansion board and the SDC-550 Multiple Door Controller. The Ethernet connector is used to connect the device to a LAN/WAN by using an RJ-45 patch cable.

> **Note:** The 12Vdc connector and RS-232 connector is used for factory testing and programming and is reserved for manufacturer use only.

Step by step procedure to install the SEB-700 TCP/IP Expansion Board

Follow these steps to install the SEB-700 TCP/IP Expansion Board:
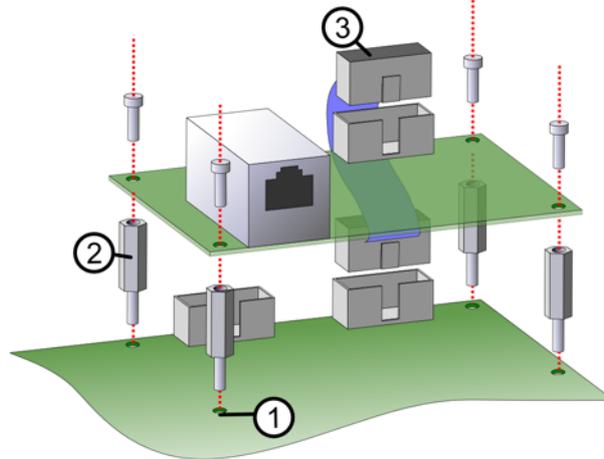
Figure.2
Installing the SEB-700 TCP-IP expansion board

1. Turn off the power on the SDC-550 Multiple Door Controller (refer to the SDC-550 Multiple Door Controller Quick Start Guide for instructions on turning off the power).

2. Remove fastening screws (1) from the SDC-500 Multiple Door Controller board.

3. Insert the standoffs (2) into the standoffs supporting the SDC-500 Multiple Door Controller board.

4. Insert one side of the ribbon cable into the SEB-700 TCP/IP Expansion Board and the other side into the expansion connector on the SDC-550 Multiple Door Controller (3).
   > **Note:** Make sure that the insert in the ribbon cable connector fits in the cutout in the expansion connector on both the expansion board and the door controller.

5. Fasten the SEB-700 TCP/IP Expansion Board using the fastening screws removed in step 1.

6. Set the dipswitch on the SDC-550 Multiple Door Controller to the desired setting.

   i. To set the SDC-550 Multiple Door Controller to use the memory on the SEB-700 TCP/IP Expansion Board, set Switch 3 on dipswitch 1 to the ON position.

   ii. To set the SDC-550 Multiple Door Controller to use its own onboard memory, set Switch 3 on dipswitch 1 to the OFF position.
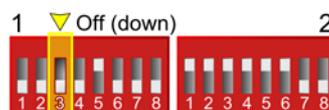
7. Once you have ensured that all the connections are done correctly, turn on the power on the SDC-550 Multiple Door Controller.

Configuring the SEB-700 TCP/IP Expansion Board

For the device to communicate to the SACS Communication Manager as a new device network, its IP address must be configured to the desired IP address that allows communication to the SACS Server PC where the Communications Manager is located.

The default IP Address for the SEB-700 TCP/IP Expansion Board is **192.168.8.52**.

> **Note:** The following IP ports are used by the expansion board: TCP/IP Ports **10000/10001** and UPD Port **12345.** Ensure that these ports can be accessed on the network and is not restricted in any way. (e.g. firewalls restricting or blocking these ports)

Use the SEB-700 Configuration Tool (SSEConfig.exe) installed in the Tools folder under the SACS installation folder on the SACS Corporate/Standard Server PC. Normally this is located at 'C:\Program Files\SaflecSystems\SACS\Tools\SSEConfig.exe'.

To configure the SEB-700 TCP/IP Expansion Board's IP address, follow the steps below:

1. Start the SSE Config Utility application (SSEConfig.exe) on the SACS Server PC.

2. The SEB-700 expansion board will appear in the list. If there are existing expansion boards on the network, they would also appear in the list.
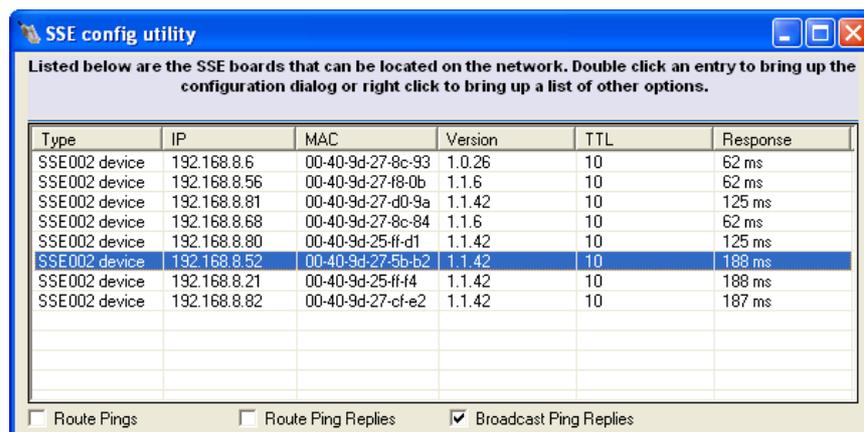
> **Note:** If the device does not appear in the list, check with your IT personnel for the correct port and firewall settings. If the communication path to the SACS Server PC is via ROUTERS and different SUBNETS are used, then the SSE Config Utilty will most likely NOT detect the SEB-700 TCP/IP Expansion Board. In this case use a cross-over cable with a PC/Laptop configured to use the same IP Address range (192.168.8.???) and subnet (255.255.255.0) as that of the expansion board to configure the expansion with the new desired IP Address, Subnet Mask and Gateway.

3. To change the IP Address, double-click on the device with the default IP address.
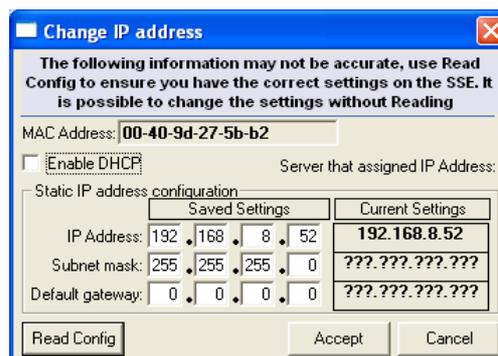
Note: If there is more than one device with the default IP address (192.168.8.54), then you can use the MAC Address to determine which device is the one you want to configure. The MAC is located on the label attached to the Ethernet connector on the SEB-700 TCP/IP Expansion Board. (See Figure.1)

4. Type in the new IP Address, Subnet Mask (if required) and Gateway (if required).

   Note: You can also choose to enable DHCP. This will allow the device to use a dynamically assigned IP Address determined by the network domain server.

   Warning: Using DHCP can cause the device not to function until it has acquired an IP Address from the domain server. This may cause the controller attached to the device to stop functioning causing access control functions to stop!

5. Once configured, click on the Accept button and close the SSE Config Utility.

6. Reboot the controller, ensuring that the SEB-700 TCP/IP Expansion Board reboots in the process.

7. The expansion board is now configured and ready for use.

PRODUCT SPECIFICATIONS	
Power requirements	
Operating Voltage (DC)	12Vdc (supplied through the expansion connector on the SDC-550 Multiple Door Controller)
Environmental characteristics	
Operating Temperature	0°C to +70°C
Storage Temperature	-10°C to +80°C
Ethernet specifications	
Connection type	RJ-45 using CAT 4/5 cable
Network Speed	10/100 base T