

SURGE GATE AC Product INSTRUCTIONS



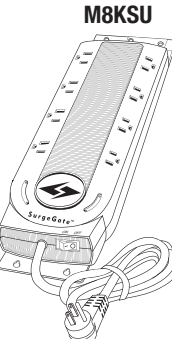

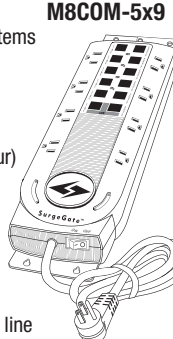
Surge Protection Solutions



ITW Linx offers a Lifetime Product and Connected Equipment Warranty on all SurgeGate products. Please visit us at www.itwlinx.com for up-to-date warranty information.

Make sure you have the right ITW Linx product to protect your electronic equipment. ITW Linx makes protectors for virtually all types of electronic equipment. Protectors that may look identical from the outside can be very different on the inside. It is very important that you use the surge protector designed for your application.

Models: • M4KSU • M4L • M8KSU • M8COM-60 • M8COM-5X9

 <p>M4KSU</p>	<p>Features:</p> <ul style="list-style-type: none"> • AC protection for telecom systems • SurgeGate Plus Circuitry • Expandable protection using SurgeGate Modules • Four switched AC power outlets • Diagnostic indicator lights (four) • Eight foot power cord with right angle plug • EMI/RFI noise filtration • Mounting brackets included • AVAYA approved product 	 <p>M4L</p>	<p>Features:</p> <ul style="list-style-type: none"> • AC protection for telecom systems • SurgeGate Plus Circuitry • Expandable protection using SurgeGate Modules • Four switched AC power outlets • Diagnostic indicator lights (four) • Eight foot power cord with right angle plug • EMI/RFI noise filtration • Mounting brackets included • LAN protection for one 10/100BASE-T Ethernet line • RJ-45 Jacks
 <p>M8KSU</p>	<p>Features:</p> <ul style="list-style-type: none"> • AC protection for telecom systems • SurgeGate Plus Circuitry • Expandable protection using SurgeGate Modules • Eight AC power outlets • Diagnostic indicator lights (four) • Eight foot power cord with right angle plug • EMI/RFI noise filtration • Mounting brackets included • AVAYA approved product 	 <p>M8COM-60</p>	<p>Features:</p> <ul style="list-style-type: none"> • AC protection for telecom systems • SurgeGate Plus Circuitry • Expandable protection using SurgeGate Modules • Eight AC power outlets • Diagnostic indicator lights (four) • Eight foot power cord with right angle plug • EMI/RFI noise filtration • Mounting brackets included • Telephone protection for four voice or DSL lines • T1 protection for one T1 or LL line • AVAYA approved product • Protection for 1 LAN line
		 <p>M8COM-5x9</p>	<p>Features:</p> <ul style="list-style-type: none"> • AC protection for telecom systems • SurgeGate Plus Circuitry • Expandable protection using SurgeGate Modules • Eight AC power outlets • Diagnostic indicator lights (four) • Eight foot power cord with right angle plug • EMI/RFI noise filtration • Mounting brackets included • Telephone protection for five voice or DSL lines • T1 protection for one T1 or LL line • Ideal for Avaya Partner ACS 5x9 module

CAUTION

- Do not install this device if there is not at least 10 meters (30 feet) or more of wire between the electrical outlet and the electrical service panel.
- Risk of Electric Shock. Do not plug into another relocatable power tap.
- Do not use any other "power-strips".
- Do not use 2-prong adapters with this product.

IMPORTANT SAFETY POINTS

ITW Linx surge protectors and the connected equipment must be indoors and in a dry location and in the same building. Although your ITW Linx protector is very durable, its internal components are not isolated from the environment. Do not install any ITW Linx product near any heat emitting appliances such as a radiator or heat register. Do not install this product where excessive moisture is present; for example near a bathtub, sink, pool, basement floor, fish tank, etc.

It is not unusual for a building to be improperly grounded. In order to protect your equipment, ITW Linx products must be plugged into a properly grounded 3-wire outlet. Additionally, building wiring and grounding must conform to applicable NEC (USA) or CEC (Canada) codes.

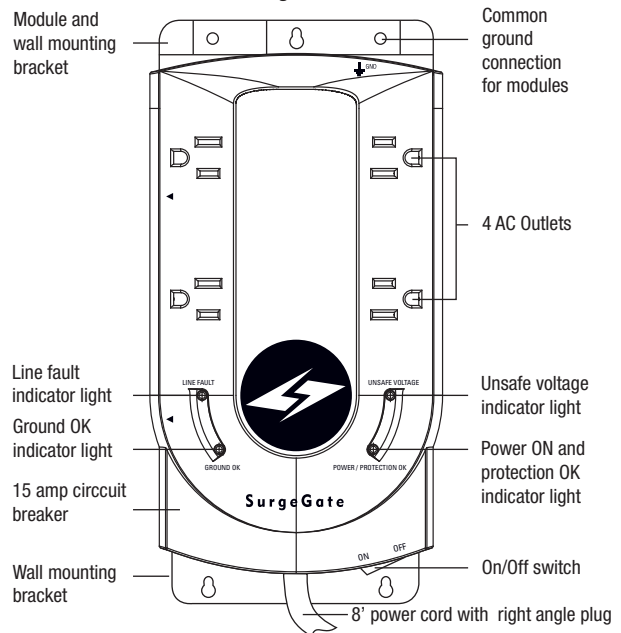
This Device features an internal protection that will disconnect the surge protective component at the end of its useful life but will maintain power to the load- now unprotected. If this situation is undesirable for the application, follow the manufacturer's instructions for replacing the device.

IMPORTANT SAFETY POINTS

STEP 1: MOUNTING THE SURGE GATE AC BASE UNIT (optional)

1. Install the SurgeGate protector near the connected equipment and within 7 feet of a properly grounded 3-wire outlet. The protector should be mounted in a dry, indoor location as close to the floor as possible. Leave room above the protector to add additional modules for future expansion.
2. If possible, mount the protector between the incoming wall phone jacks and KSU/PBX when protecting a phone system—this will simplify wiring later.
3. The protector must be attached to a solid surface, such as 3/4" plywood. If the protector will be mounted on sheet rock, you must provide appropriate fasteners.

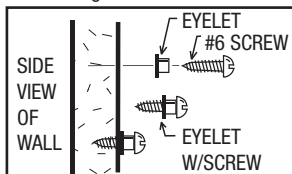
Figure 1



The length of any SurgeGate 4 is 9.5 inches; The length of any SurgeGate 8 is 13.5 inches. Dimensions include the mounting clips.

Hold the protector up to the wall where you want it mounted (the unit should be mounted vertically).

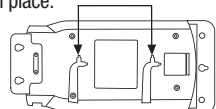
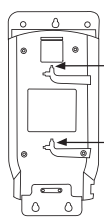
1. Locate the two screw holes on the attached mounting plate (bottom of unit) and single screw hole on the module connection plate.



2. Using the three screw holes as a guide, drive three screws into the wall as shown in diagram above.
3. Slide the protector onto the screws to rest in place.

Figure 2 Wall Mounting Instructions:

Hold wall mounting template (provided) up to the wall where you want the protector mounted. The protector can be mounted vertically or horizontally. Using the appropriate screw center points as a guide, drive two screws into the wall. Be sure to leave a 1/8 inch gap between the screw head and the wall for the protector to hang on. Slide the protector down onto the screws to rest in place.



The SurgeGate series has been designed with flexibility and expansion in mind. Additional signal line protection can easily be added with SurgeGate protection modules.

All SurgeGate 4 units are equipped with 4 AC outlets (SurgeGate 8 KSU has 8 AC outlets) controlled by a master switch. These models also feature SurgeGate Plus™ circuitry for over and under-voltage protection. This circuitry protects against brownouts (under-voltages) and/or prolonged over-voltages by automatically disconnecting the power to your equipment, then reconnecting it when the power has returned to a safe level. This special circuitry acts as a gate to prevent unsafe voltages from damaging your equipment:

voltage OK = power connected;

voltage unsafe = power disconnected.

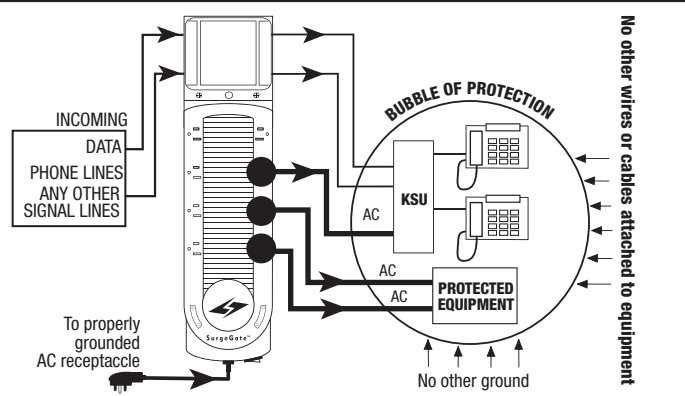
In addition, all units have four diagnostic lights for maximum safety. They are designed as follows:

1. **Ground OK**— (green) normally ON — indicates that the wall outlet is properly grounded.
2. **Line Fault**— (red) normally OFF — when lit, indicates that the wall outlet is improperly wired.
3. **Power ON and Protection OK**— (green) normally ON — indicates that the surge protector is functioning properly, power is on, and it is protecting all connected equipment.
4. **Unsafe Voltage**— (red) normally OFF — when lit, indicates that incoming voltages are unsafe and the surge protector has disconnected the power to protect your equipment.

If you have any questions about which product is best for your applications, please check our web site www.itwlinx.com or contact ITW Linx Customer Service Department at **1-800-336-LINX(5469)**.

BUBBLE OF PROTECTION—THE BASIC CONCEPT

Surges can get into your system from any metallic pathway (wire) and from any direction. AC power lines, analog (voice) lines, digital lines, data lines and even grounding wires can carry a surge into your system and damage or destroy system components. Make sure all pathways including AC, digital, analog and data lines connected to your system pass through the appropriate SurgeGate unit. This establishes a common ground reference for the entire system per IEEE recommendations. Failure to protect all lines/wires will weaken the protection.



Properly Connecting Your Surge Protector.

To completely protect your equipment from power surges, every wire leading into or out of the equipment you want to protect must be connected to the appropriate surge protector. Damaging lightning and power surges can enter your system through any AC power or signal line (phone lines, grounding wires, coaxial cables, modem cables, etc.) connected to your electrical equipment. The surge protector must also be plugged into a properly wired and grounded outlet.

SURGEGATE M4KSU & SURGEGATE M8KSU

1. Turn **OFF** the power to all equipment that will be plugged into the unit.
2. Make sure the **on/off** switch is in the off position (see figure 1), plug the unit into the wall outlet, and then turn it on.
3. Once proper AC wiring and grounding has been established via a green "**Ground OK**" light, unplug the unit, and plug the equipment to be protected into the AC outlets on the unit.
4. Plug the protector in and turn it on.
5. One at a time, turn each piece of connected equipment **ON** and check for power and correct operation.
6. Turn **OFF** the unit before installing any SurgeGate modules.

SURGEGATE 4LAN, 8COM-60 & 8COM-5X9

1. For AC connection, follow the steps in the SurgeGate 4KSU section.
2. Note the position of the LINE and EQUIP jack on the unit. LINE jack is for the connection that comes from the wall or floor jack. EQUIP jack is for the line connection to your connected equipment.
3. **For 8COM-60 / 8COM-5x9:** Plug the incoming telephone line into the "TEL" LINE jack (up to 5 "TEL" LINE jack included).

For 8COM-60 / 8COM-5x9:

Plug the incoming T1/LL line into the "T1/LL" LINE jack.

For 8COM-60 / 4LAN:

Plug the incoming LAN line into the "LAN" LINE jack.

4. After connect the line between the wall and the unit, now plug...
 - A Phone into the "TEL" EQUIP jack or
 - A LAN cord into the "LAN" EQUIP jack or
 - A T1/LL cord into the "T1/LL" EQUIP jack.
 Plug the other end into the equipment to be protected.
5. Turn **ON** the unit and all equipment. Verify that each piece of equipment is receiving power and signal.
6. Turn **OFF** the unit before installing any SurgeGate modules.

FREQUENTLY ASKED QUESTIONS

The Power Protection indicator light is not lit, there is no AC power to my equipment, or my equipment doesn't turn on. What could be the problem?

- Make sure that the protector is plugged into a working AC outlet.
- Check all AC power connections.
- Make sure both the surge protector and connected equipment is turned on.
- Check to see if the circuit breaker on the surge protector needs to be reset (press in).

The circuit breaker disconnects AC power from the connected equipment. What could be the problem?

- You have exceeded the ampere rating for your surge protector. As a temporary fix, disconnect one or more pieces of equipment. Call ITW Linx Customer Service Department at 800-336-LINX for more information.