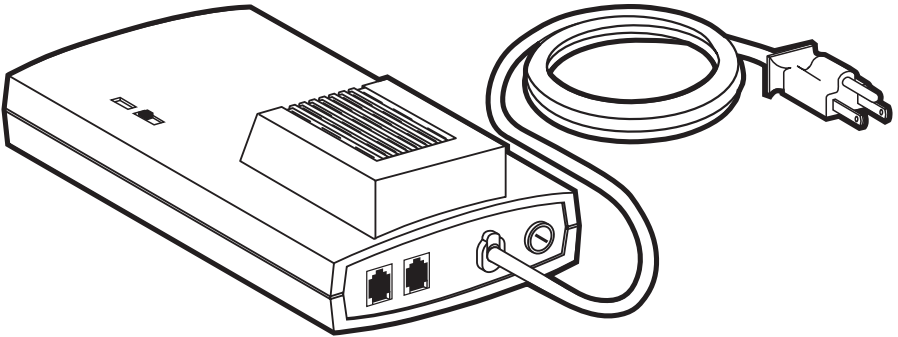




Power Mate



**CUSTOMER
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INFORMATION**

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**FEDERAL COMMUNICATIONS COMMISSION
AND INDUSTRY CANADA
RADIO FREQUENCY INTERFERENCE STATEMENT**

Class B Digital Device. This equipment has been tested and found to comply with the limits for a Class B computing device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. If this equipment does cause harmful interference to radio or telephone reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an experienced radio/TV technician for help.

Caution:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

To meet FCC requirements, shielded cables and power cords are required to connect this device to a personal computer or other Class B certified device.

This digital apparatus does not exceed the Class B limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de classe B prescrites dans le Règlement sur le brouillage radioélectrique publié par Industrie Canada.

UL and cUL Compliance

The Power Mate is UL 1459 and cUL listed. File No. E174117.

**FCC PART 68 REQUIREMENTS FOR
TELEPHONE-LINE EQUIPMENT**

FCC registration number: DNMUSA23923-OT-N

REN: 0.4B

1. The Federal Communications Commission (FCC) has established rules which permit this device to be directly connected to the telephone network with standardized jacks. This equipment should not be used on party lines or coin lines.
2. If this device is malfunctioning, it may also be causing harm to the telephone network; this device should be disconnected until the source of the problem can be determined and until the repair has been made. If this is not done, the telephone company may temporarily disconnect service.
3. If you have problems with your telephone equipment after installing this device, disconnect this device from the line to see if it is causing the problem. If it is, contact your supplier or an authorized agent.
4. The telephone company may make changes in its technical operations and procedures. If any such changes affect the compatibility or use of this device, the telephone company is required to give adequate notice of the changes.
5. If the telephone company requests information on what equipment is connected to their lines, inform them of:
 - a. The telephone number that this unit is connected to.
 - b. The ringer equivalence number.
 - c. The USOC jack required: RJ-11C.
 - d. The FCC registration number.

Items (b) and (d) can be found on the unit's FCC label. The ringer equivalence number (REN) is used to determine how many devices can be connected to your telephone line. In most areas, the sum of the RENs of all devices on any one line should not exceed five (5.0). If too many devices are attached, they may not ring properly.
6. In the event of an equipment malfunction, all repairs should be performed by your supplier or an authorized agent. It is the responsibility of users requiring service to report the need for service to the supplier or to an authorized agent.

CERTIFICATION NOTICE FOR EQUIPMENT USED IN CANADA

Certification Number: 1794 7467 A

Load Number: 6

The Canadian Department of Communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications-network protective, operation, and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single-line individual service may be extended by means of a certified connector assembly (extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility—in this case, your supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

CAUTION:

Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

The LOAD NUMBER (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop which is used by the device, to prevent overloading. The termination on a loop may consist of any combination of devices, subject only to the requirement that the total of the load numbers of all the devices does not exceed 100.

IMPORTANT SAFETY INSTRUCTIONS

When using this product, follow basic safety precautions to reduce the risk of fire, electric shock, and injury to persons, including the following:

1. Read and understand all instructions.
2. Follow all warnings marked on the product.
3. Unplug this product from the wall before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this product in an outdoor environment or near water—for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage.
6. Slots and openings in this product on the back or bottom are provided for ventilation to protect it from overheating. Do not block or cover these openings, by placing the product on the bed, sofa, rug, or other similar surface. Never place this product near or over a radiator or heat register. Do not place this product in a built-in installation unless proper ventilation is provided.
7. This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your dealer or local power company.
8. This product is equipped with a three-wire grounding-type plug, which is a plug that has a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug. Do not use a 3-prong-to-2-prong adapter at the receptacle; using this type of adapter may result in risk of electric shock and/or damage to this product.
9. Do not allow anything to rest on the power cord. Do not locate this product where the cord will be abused by persons walking on it.
10. Do not overload wall outlets and extension cords, as this can result in the risk of fire or electric shock.

11. Never push objects of any kind into this product through slots, as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electrical shock. Never spill liquid of any kind on the product.
12. To reduce the risk of electrical shock, do not disassemble this product, but take it to qualified service personnel when some service or repair work is required. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect re-assembly can cause electric shock when the appliance is subsequently used.
13. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a. When the power supply cord or plug is damaged or frayed.
 - b. If liquid has been spilled into the product.
 - c. If the product has been exposed to rain or water.
 - d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions because improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
 - e. If the product has been dropped or has been damaged.
 - f. If the product exhibits a distinct change in performance.
14. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
15. Do not use the telephone to report a gas leak in the vicinity of the leak.
16. Do not exceed the maximum output rating of the auxiliary power receptacle.

NORMAS OFICIALES MEXICANAS (NOM)

ELECTRICAL SAFETY STATEMENT

INSTRUCCIONES DE SEGURIDAD

1. Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.
2. Las instrucciones de seguridad y operación deberán ser guardadas para referencia futura.
3. Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.
4. Todas las instrucciones de operación y uso deben ser seguidas.
5. El aparato eléctrico no deberá ser usado cerca del agua—por ejemplo, cerca de la tina de baño, lavabo, sótano mojado o cerca de una alberca, etc..
6. El aparato eléctrico debe ser usado únicamente con carritos o pedestales que sean recomendados por el fabricante.
7. El aparato eléctrico debe ser montado a la pared o al techo sólo como sea recomendado por el fabricante.
8. Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá a lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.
9. El aparato eléctrico debe ser situado de tal manera que su posición no interfiera su uso. La colocación del aparato eléctrico sobre una cama, sofá, alfombra o superficie similar puede bloquea la ventilación, no se debe colocar en libreros o gabinetes que impidan el flujo de aire por los orificios de ventilación.
10. El equipo eléctrico deber ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u otros aparatos (incluyendo amplificadores) que producen calor.

11. El aparato eléctrico deberá ser conectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.
12. Precaución debe ser tomada de tal manera que la tierra física y la polarización del equipo no sea eliminada.
13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.
14. El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.
15. En caso de existir, una antena externa deberá ser localizada lejos de las líneas de energía.
16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.
17. Cuidado debe ser tomado de tal manera que objetos líquidos no sean derramados sobre la cubierta u orificios de ventilación.
18. Servicio por personal calificado deberá ser provisto cuando:
 - A: El cable de poder o el contacto ha sido dañado; u
 - B: Objetos han caído o líquido ha sido derramado dentro del aparato; o
 - C: El aparato ha sido expuesto a la lluvia; o
 - D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o
 - E: El aparato ha sido tirado o su cubierta ha sido dañada.

TRADEMARKS

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1. Specifications

Power Switching — 120 VAC, 10 Amps

Receptacle — Simplex

Connectors — (2) RJ-11

Size — 2"H x 4.5"W x 8.5"D (5.1 x 11.4 x 21.6 cm)

Weight — 2 lb. (0.9 kg)

2. Introduction

2.1 General

The Power Mate uses a dial telephone line to remotely control AC power. You can turn power on or off, or power cycle (reboot) by entering DTMF digits using an ordinary tone-dial phone. The phone line connected to the Power Mate can also be used by other equipment in a normal manner after control of power. With one phone call, you can power up, power down, or reboot equipment, then ring the telephone device connected to the Power Mate's extension port.

The Power Mate works by listening for dialing (DTMF) tones after it answers a call. If it hears these tones, the Power Mate will respond with the current power status and allow additional tones to control the power. Once power control is completed, the device on the Power Mate's extension may (or may not) ring.

Four call-answering modes, security features, and power control options make the Power Mate both easy to use and very flexible. You can control the Power Mate locally via an On/Off/Auto switch.

2.2 Typical Application

Figure 2-1 shows a typical application of the Power Mate.

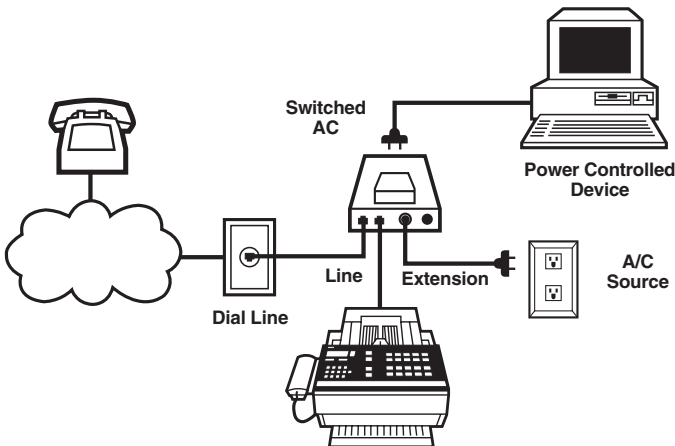


Figure 2-1. Typical Application.

3. Installation

3.1 Connecting the Power Mate to the Power Source

Connect the Power Mate's line cord to a suitable 120-VAC, 60-Hz power source. When power is applied to the Power Mate, the AC power receptacle on the Power Mate will be ON, if set to ON, OFF if set to OFF and if set for auto, the Power Mate will remain in the state it was before power loss, or before switching to Auto.

3.2 Power-Controlled Device

Connect the device to be power controlled to Power Mate's AC outlet. Make sure that the total current of the devices connected does not exceed 10 Amps.

3.3 Extension Device

Connect any device that would normally be used on the telephone line to the Power Mate's modular jack marked EXT. (Pulse phones will not work.)

3.4 Phone Line

Connect the RJ-11 Jack marked LINE to the telephone line.

3.5 Replacing the Fuse

If the device connected to the Power Mate fails to power up when commanded, inspect the fuse located at the rear of Power Mate. Before removing the fuse, disconnect the Power Mate from its AC source. Then remove the fuse by rotating the top of the fuse holder with a screwdriver.

If the fuse is visibly damaged, replace it with the same type and rating 250V 10 Amp fuse (5 x 20 mm).

The LED indicator displays the current status of the A/C power on the receptacle.

4. Operation

4.1 Power Command Sequence

A call placed to the Power Mate is answered in one of four ways. In all cases, the Power Mate answers the call and listens for a power-control code. If the command control code is received, the Power Mate will respond with the current status of the AC power and allow power control commands. Once power control is complete, the Power Mate will disconnect the call. If the Extension is rung, by pressing 0 no additional control codes are accepted. The call sequence is:

Answer→Power Control Code→Power Control→Call Complete

4.2 Call Answer Modes

The Power Mate has four ways it can answer an incoming call. The mode you select will depend on who is usually calling the Power Mate and how secure you want the power control to be. In all cases, the number of rings before the Power Mate answers the call, additional security codes, and how the call is passed on to the Extension Port are selectable.

4.2.1 NORMAL ANSWER MODE

In this mode, the Power Mate will answer the call and generate a “Ringback” signal. This signal is like the one you hear when the phone company is ringing the Power Mate. During the quiet times of the ringback, the Power Mate listens for the command control code. If, after two ringbacks, no tones are heard, the Power Mate will check the security level. With security level 0 and 1, the Power Mate will ring the Extension Port. With security level 2, the call is disconnected.

Use the Normal Answer Mode if: voice or fax calls are being made to the device on the Power Mate’s Extension Port and you don’t want the caller to know that the Power Mate is there.

4.2.2 ANSWER AND PROMPT MODE

The Power Mate answers the call and issues three short beeps to signal the caller. If no command control code is received in 4 seconds, the Power Mate will check the security level. With security level 0 and 1, the Power Mate will ring the Extension Port. With security level 2 the call is disconnected.

Use the Answer and Prompt Mode if you want a more secure line or you want to know exactly when to put in the power control codes.

4.2.3 ANSWER AND QUIET MODE

The Power Mate will answer the call and be quiet for 4 seconds, waiting for the command control code. If it is not received within 4 seconds, the Power Mate will check the security level. With security level 0 and 1, the Power Mate will ring the Extension Port. With security level 2 the call is disconnected.

Use the Answer and Quiet Mode if you want secure control of power and the shortest time before the extension is rung, or if you want to use the wait for quiet answer command (@ for most modems).

4.2.4 ANSWER AND DIAL TONE MODE

The Power Mate will answer the call and send 4 seconds of dial tone, then it waits 6 seconds for the command control code. If it is not sent within the 6 seconds, the Power Mate will check the security level. With security level 0 and 1, the Power Mate will ring the Extension Port. With security level 2 the call is disconnected.

Use the Answer and Dial Tone Mode if you are using automated access and wish to use your modem's wait for second dial tone command (W for most modems).

4.3 Power Control

The AC power is controlled by a few simple codes sent to the Power Mate. In all cases, the Power Mate responds with tones to confirm commands and to report the current status of the power. If invalid codes are sent, the Power Mate responds with a low "Error" tone. Power can only be controlled on calls placed to the Power Mate. During outgoing calls, the Power Mate is totally transparent, allowing any phone numbers to be dialed without risk of accidentally switching power.

4.3.1 STATUS

Once the Power Mate answers the call, you send a command control code to the Power Mate. This code must be sent during the quiet portion of the Power Mate's answering sequence.

When the Power Mate is answering a call:

- With security level 0, enter 1.
- With security level 1 or 2, enter the security code (see **Section 4.8**).

The Power Mate will respond with the current power status:

One Beep = Power OFF

Two Beeps = Power ON

Once the current status is reported, you can turn the power off, turn it on, or reset it.

4.3.2 CHANGE POWER

To change power, enter: #

This toggles power from on to off or off to on. The Power Mate will respond with the new status: power on (two beeps) or power off (one beep). You can enter the Power Change command as many times as necessary.

4.3.3 RESET POWER

To reset power, enter: *

Resetting the power will pulse the power for a set time. The length of the pulse is user-programmable from 5 to 45 seconds (see **Section 4.8**). When you reset the power, the Power Mate first reports status at the start of the pulse, then again after the preset time. (During reset all commands are ignored until completion.)

4.3.4 STATUS REQUEST

To find out the current status of the outlet without changing it, enter 1. The Power Mate will respond with one beep for OFF or two beeps for ON.

4.4 Extension Ring

You can access the Extension Port at any time after the command control/security code is entered by simply pressing the 0 key. This will cause the Power Mate to ring the Extension Port. If the device on the extension does not answer, the Power Mate will terminate the call. The number of rings the Power Mate allows to the extension is user-programmable from 1 to 6 rings (see **Section 4.8**). Once the extension has been rung, no more power-control codes are accepted.

4.5 Call Completion

Once the Power Mate rings the Extension Port, it continues to monitor the call. When the call is completed, the Power Mate will hang up the phone line and wait for the next call. The Power Mate's Power setting will remain in its last position.

Optionally, the Power Mate can be set to automatically turn power off after a preset time (5 to 90 seconds). Use this setting to automatically shut down equipment when the call is complete. A typical application would be to turn off a PC when the modem call to that PC is finished. If the power is off when the call is terminated, this setting is ignored.

4.6 Security

You can add additional security to the Power Mate's power control and extension ringing features. With security enabled, a security code is required before gaining access to the power control. Once it receives the security code, the Power Mate will respond with the status: ON = 2 beeps, OFF = 1 beep. The security code can be from one to six digits long.

The security feature can be set for just power control, or both the power control and extension ringing functions.

When set for Power Only, all callers have unrestricted access to the extension, while a code is required for power control. When set for Both Power and Extension, a security code is required for all Power Mate functions.

If you enter an incorrect security code, the Power Mate will send a low Error tone and wait for a second attempt. If the second attempt is incorrect or if no security code is entered at all, the Power Mate will check the security level. With security level 0 and 1, the Power Mate will ring the Extension Port. With security level 2, the call is disconnected.

4.7 Operation Summary

Command	Code	Remarks
Status Command	1	The Power Mate responds with power status. 1 beep = off, 2 beeps = on. Power does not change.
Power Toggle Command	#	Power Changes and new status is reported.
Pulse Power	*	Power is pulsed for preset time (programmable from 5 to 45 seconds).
Ring Extension	0	Rings through to extension and discontinues power control.

4.8 Programming

WARNING

Disconnect all equipment from the Power Mate's AC receptacle when programming the unit.

All user programmable settings are set using a touch-tone telephone connected to the Power Mate's Extension Port (EXT). Settings are stored in non-volatile memory and will not be lost when power is removed from the Power Mate.

To enter the Programming Mode: Disconnect the telephone dial line connected to the Power Mate, pick up the phone handset (go off-hook) and enter ##. The Power Mate responds with two beeps to confirm programming mode.

PROGRAMMING THE POWER MATE

Each setting for the Power Mate has a number code. Once in the programming mode, each feature is set by entering the feature number, then the setting for that feature, followed by a * to confirm entry and set the new value.

Feature Number→New Value→*

This can be repeated as many times as necessary. It is not necessary to program the features in order. If an incorrect entry is made, the Power Mate will send the low Error tone. Reenter the number, value, and star to continue.

To end the programming mode, hang up the phone and reconnect the dial line to the Power Mate.

ANSWER MODE

6 1 * Normal Answer Mode (Factory Setting)

6 2 * Answer and Prompt

6 3 * Answer and Quiet

6 4 * Answer and Dial Tone

NO. OF RINGS BEFORE THE POWER MATE ANSWERS THE CALL

2 n * n = Number of rings (1-6) Factory Setting = 1

POWER MATE

NO. OF RINGS TO THE EXTENSION BEFORE POWER MATE TERMINATES THE CALL

7 n * n = Number of rings (1-6) Factory setting = 6

POWER RESET TIME

9 n * Set in 5-second increments Factory setting = 10 sec.

(n = 1-9 for 5 to 45 seconds)

CALL COMPLETION

4 0 * Power is turned off after call completion (see 8 n *)

4 1 * Power remains in current state on call completion (factory setting)

8 n * Delay time for off after call completion (40 *)

Delay is set in 10-second increments

(n = 1-9 for 10 to 90 seconds)

SECURITY

c * Security set to code "c" (1 to 6 digits)

5 0 * Security off (factory setting)

5 1 * Power only secure

5 2 * Power and extension secure

4.9 Programming Summary

Feature	Code	Options
Enter Programming Mode	# #	Responds with two Beeps
Answer Mode	6 n *	1= Normal Answer (ring back) 2= Answer & Prompt 3= Answer & Quiet 4= Answer & Dial Tone
Power Mate Answers Call	2 n *	n = Number of Rings (1 - 6)
Power Mate Rings Extension	7 n *	n = Number of Rings (1 - 6)
Power Reset Time	9 n *	n = 1 - 9 in five-second increments
Call Completion	4 0 *	Power turns off after call completion (8 n *)
	4 1 *	Power remains in last state
	8 n *	Auto Shutdown n = 1 - 9 in ten-second increments
Security	# c *	Security set to code "c" (1 to 6 digits)
	5 0 *	Security Off
	5 1 *	Power Only Secure
	5 2 *	Power and Extension Secure

4.10 Local Control and Display

MANUAL CONTROL

The Power Mate uses a three-position slide switch to allow local control of the power. In the AUTO position, the Power Mate is controlled from the phone line as described above. In the ON or OFF position, power is locally selected. All power control from the phone line is disabled. All calls will pass directly to the extension, as if the Power Mate were not installed. Disconnecting the Power Mate from its AC source will have the same results. When the switch is moved from ON or OFF to the AUTO position, the power status will not change, and remote control will be restored.

LED INDICATOR

The LED indicator displays the current status of the AC power on the receptacle.

- Solid ON — Power to the receptacle is ON.
- Blinking — Power to the receptacle is OFF, but the unit is powered.
- OFF — Power to the unit is OFF.



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