

## Optional Line/Extension Modules

For use on the Lucent Technologies PARTNER Endeavor™ Communications System Release 2.0 or Later

**NOTE:**

This documentation highlights optional line/extension modules you can now use to expand your PARTNER Endeavor system. For information on expanding your system using the 362EC expansion module, consult your *PARTNER Endeavor Communications System Programming and Use* guide.

## System Modules

The following modules can be installed in your PARTNER Endeavor system and are ideal if the capacity of the 362EC expansion module is not needed.

Module	Lines	Extensions	Touch-tone Receivers	Power-failure Transfer
200E	2	0	1	0
206E	2	6	1	1
400E	4	0	2	0

The 206E module can be used to connect telephones and other telecommunication devices (such as Fax machines and modems) to any available extension jacks (either directly or through your building's modular wall jacks). Each extension on the 206E has Tip Ring capabilities.

- **206EC/400EC Modules** provide the same capabilities as the 206E and the 400E modules, respectively, but add support for Caller ID information on system display phones. You must subscribe to the service from your local phone company (if it is available) on a per-line basis, then connect those lines associated with Caller ID to the line jacks of the 206EC and/or 400EC modules.
- When installing optional expansion modules, make sure that all 200 and 400 modules are installed to the right of any 362EC and 206 modules.

# System Configurations

The PARTNER Endeavor release that you have, the Carrier you use, and the combination of 200, 206, and 400 modules installed, determine the number of available lines and extensions. You can combine optional/expansion modules with any existing 362EC expansion modules or PARTNER Mail VS® module. For other configurations using the 362 expansion module or the PARTNER Mail VS module, see your *PARTNER Endeavor Communications System Programming and Use* guide.

## Maximum Line and Extension Configurations for PARTNER Endeavor Using Optional Expansion Modules

Carrier	Maximum Lines	Maximum Extensions	Configuration
2-Slot Carrier	One 362 processor module One 400 module  (Total = 7 lines, 8 extensions)	One 362 processor module One 206 expansion module  (Total = 14 extensions, 5 lines)	362 processor module resides in the <i>leftmost</i> slot.
5-Slot Carrier	One 362 processor module Four 400 modules  (Total = 19 lines, 8 extensions)	One 362 processor module Four 206 modules  (Total = 32 extensions, 11 lines)	362 processor module resides in the <i>center</i> slot

**NOTE:**

If you are using a 5-Slot carrier and combining any of the optional line/extension modules with the 362EC expansion module, make sure the 362EC module is in the first slot followed by any 206 modules.

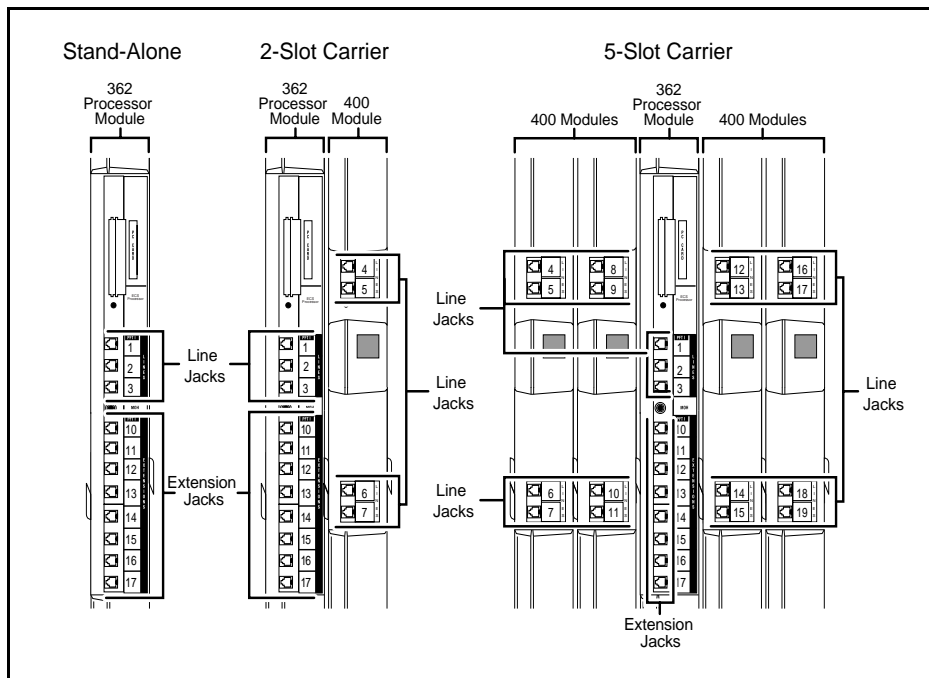


Figure 1. Endeavor Stand-Alone, 2-Slot, and 5-Slot Systems Configured for Maximum Lines (3, 7, or 19)

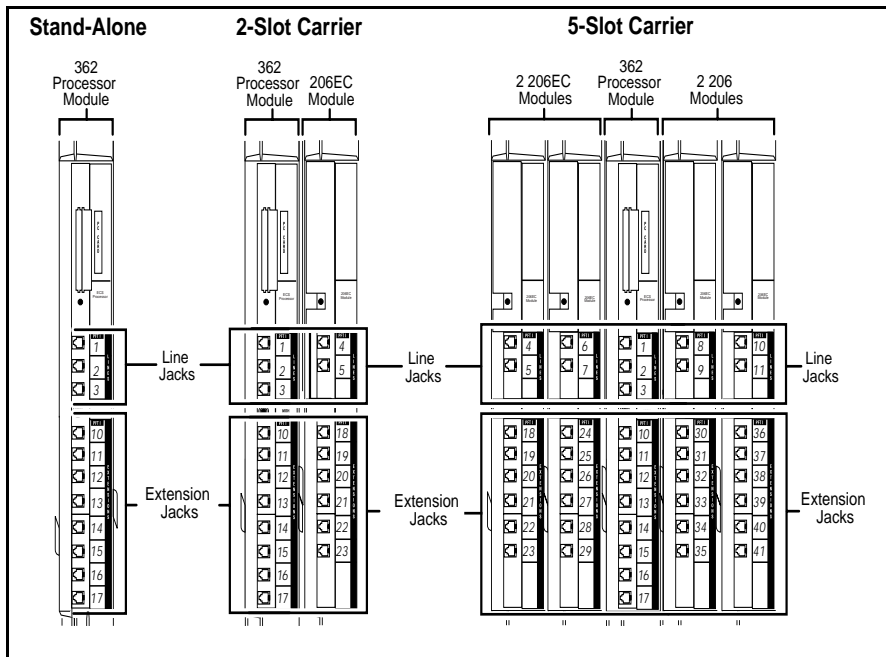


Figure 2. Endeavor Stand-Alone, 2-Slot, and 5-Slot Systems Configured for Maximum Extensions (8, 14, or 32)

## Adding New Modules

These instructions assume you are familiar with your PARTNER Endeavor System. If you are uncertain about the location of any system components, consult your *PARTNER Endeavor Communications System Installation* guide.

### Safety Instructions for Installation Personnel

1. Install the equipment to meet all the environmental and electrical requirements listed in the *PARTNER Endeavor Communications System Installation* guide.
2. DO NOT install equipment during a lightning storm.
3. DO NOT install telephone jacks in a wet location unless the jack is specifically designed for wet locations.
4. Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
5. Use caution when installing or modifying telephone lines.
6. The control unit must be wall mounted securely.

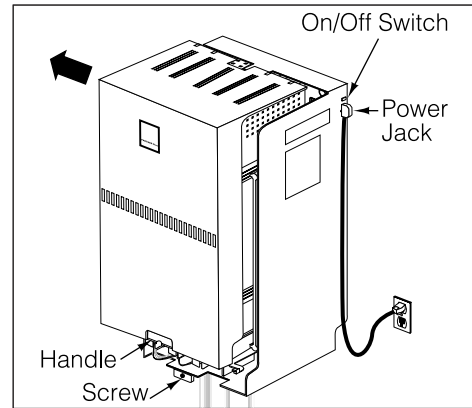
#### ⇒ NOTE:

Use these instructions if you are adding modules to an existing 5-Slot Carrier. If you are upgrading from a stand-alone PARTNER Endeavor 362EC processor module to a 2-Slot Carrier, see “**Wall-Mounting a 2-Slot Carrier and Modules**” in the *PARTNER Endeavor Communications System Installation* guide.

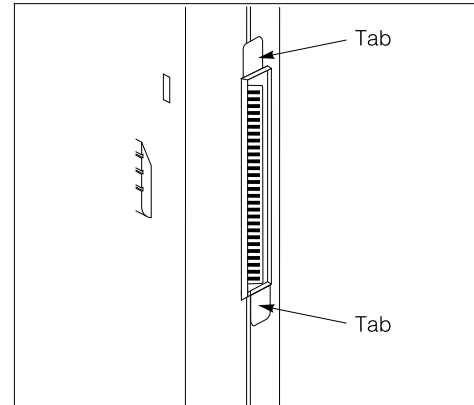
#### ▲ WARNING:

*Before starting, verify that you have batteries installed in the PARTNER Endeavor 362 processor module.*

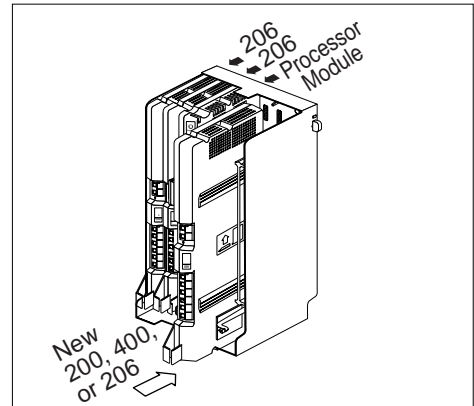
- 1
  - a. Move the On/Off switch to the “Off” position (“O”), then disconnect the power cord from the wall.
  - b. Loosen the screw on the lower front of the carrier’s cover. Then place one hand on the handle on the lower front and the other hand on the top of the cover.
  - c. Gently pull the cover up and away from the carrier. Be careful not to break the tabs that attach the cover to the carrier.



- 2 Before installing a module, make sure the clear plastic protector has been removed from the connector area on the rear of the module. To remove the protector, grasp the tabs on the ends of the protector and lift.

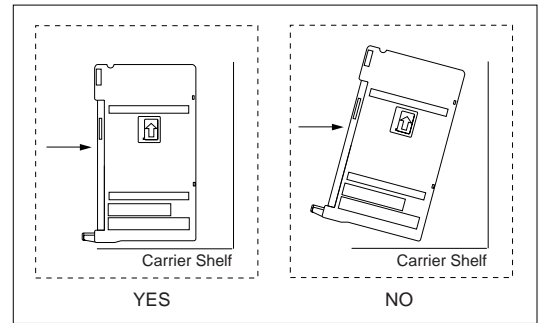


- 3
  - a. Before you insert the new module, make sure that all 200 or 400 modules are installed to the right of all 362EC or 206 modules. If you need to move a module to accommodate the new one, see “**Replacing System Modules**” in the *PARTNER Endeavor Communications System Installation* guide.
  - b. Push slowly but firmly in the center of the module until the module locks into place and is attached to the rear of the carrier. Do not force the module. If the module does not insert easily, remove it, clear any obstruction, and reinsert it.

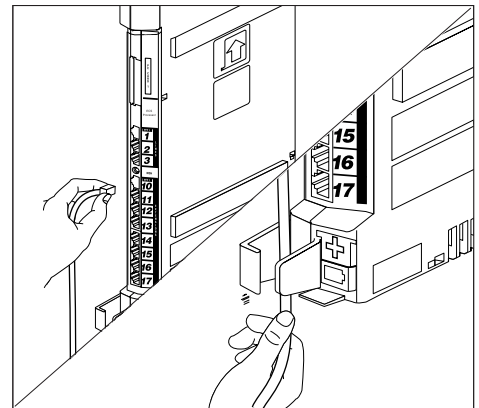


**⚠ CAUTION:**

*Do not force the module. Use the carrier shelf as a reference and do not tilt, slant or rotate the module. If the module does not insert easily, remove it, clear any obstruction, and reinsert it.*



- 4**
- Connect modular telephone cords to the extension jacks, starting at the top extension jack on the PARTNER Endeavor 362 processor module. When that module is full, move to the leftmost 362EC or 206 module. Fill each module before moving on to the next module to the right.
  - Route each cord through the hook on the front of the module.
  - Connect the free end of each modular telephone cord to the modular wall jacks for system extensions.
  - Dress the wires. Gather the line and extension cords hanging below the hooks of the first two modules and twist tie or wire wrap them. Repeat for the remaining cords. For the 5-Slot Carrier, place each bundle of wires in the indentations cut out of the bottom edge of the carrier. Connect the line and extension cords one at a time, making sure to place the correct cords into their corresponding jacks on the new module.
  - Reconnect the power cord.

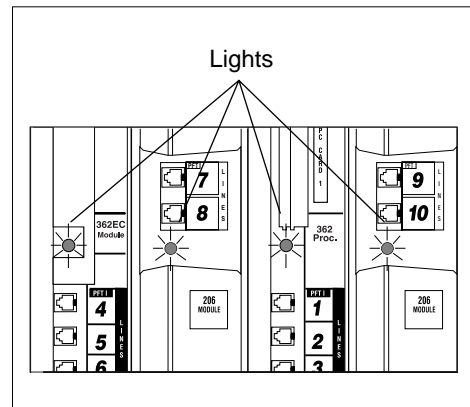


**⚠ CAUTION:**

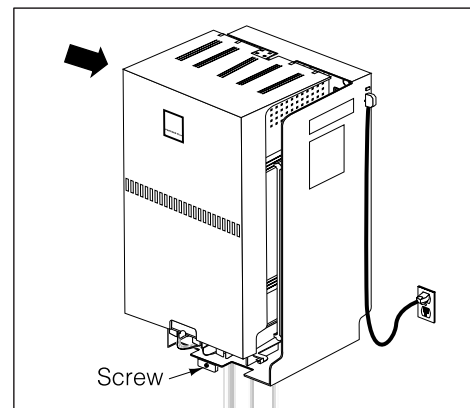
*The power cord should hang straight down from the connector, flush against the plastic case for the entire length of the board. Do not install the power cord at an angle to the case or with a loop in it.*

- Move the carrier's On/Off switch to the "On" position ("—").

- 5** Check that all green lights on the fronts of the modules are lit:
- If a single light is out*, power down the control unit, reseal the module, then power up the control unit.
  - If multiple lights are out*, power down the control unit, reseal the leftmost module that has a light out, then power up the control unit.
  - If the lights are still out*, call for support as instructed on the inside front cover of the *PARTNER Endeavor Communications System Installation* guide.



- 6**
- Make sure all modules are seated properly. The cover will not fit if the modules are not seated properly.
  - To replace the cover, grasp it by its upper edges and hold it squarely over the control unit.
  - Place the cover over the modules and make sure it fits firmly in place.
  - Tighten the screw on the lower front of the cover.



## Considerations

- If you want message-waiting capabilities on standard phones that are equipped with LED-compatible message-waiting lights, you must connect those phones to the bottom two extensions on a 362 processor module, 362EC expansion module, or to any extension on a 206 module.
- Do not connect doorphones to extension 10, 11 or the first two extensions of any 362EC or 206 module. Connect doorphones to Tip Ring ports, which are the bottom two extensions of the 362 processor module, or any of the six extensions on the 206 module.
- Do not assign an external hotline to extension 10 or 11, or the first two extensions of any 362 or 206 modules, these extensions are reserved for power failure extensions.
- You can use standard phones as power failure backups. Use the first extension of any 362 module and/or the first extension of any 206 module as power failure backup extensions. You may combine a system phone with a standard phone at any power failure backup extension; however, only the standard phone can be used to place and answer outside calls during power failure.
- You can combine system phones with standard phones, answering machines, Fax machines, a headset and, an external alert (such as bell or chime). Such combinations must be on the bottom two extensions of any 362 board or any of the six extensions on the 206 module.

# Specifications

---

## Class A Compliance

This equipment, in the 5-Slot configuration and in the 2-slot configuration with a 362EC module or PARTNER MAIL VS, has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC rules.

## Class B Compliance

The Stand-alone 362 processor module configuration and the 2-slot configuration using a 200, a 206, or a 400 module have been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC rules.

## Dimensions and Weights (approx.)

Module	Dimensions	Weights
200	11"(D) x 17"(H) x 1.5 (W) or 27.9 x 43.2 x 3.8 cm	4.5 lbs or 2 kgs
206	11"(D) x 17"(H) x 1.5 (W) or 27.9 x 43.2 x 3.8 cm	4.5 lbs or 2 kgs
362EC	11"(D) x 17"(H) x 1.5 (W) or 27.9 x 43.2 x 3.8 cm	4.5 lbs or 2 kgs
400	11"(D) x 17"(H) x 1.5 (W) or 27.9 x 43.2 x 3.8 cm	4.5 lbs or 2 kgs

## Other Specifications

For additional specifications consult your *PARTNER Endeavor Communications System Programming and Use* guide.

Switch Fabric	<ul style="list-style-type: none"> <li>● Full digital, nonblocking</li> </ul>
Electrical Specifications	<ul style="list-style-type: none"> <li>● 10 Watts (35 BTUs/hr.) per 400 module, normal and maximum power consumption</li> <li>● 25 Watts (90 BTUs/hr.) per 206 module during normal power consumption</li> <li>● 35 Watts (120 BTUs/hr.) per 206 module during maximum power consumption</li> <li>● 30 Watts (105 BTUs/hr.) per 362EC module during normal power consumption</li> <li>● 40 Watts (140 BTUs/hr.) per 362EC module during maximum power consumption</li> </ul>
Extension Jack Specifications (206 module)	<ul style="list-style-type: none"> <li>● Ringing voltage: +5VDC, -140 VDC peak to peak; trapezoidal wave shaping</li> <li>● 35- to 38-Volt talk battery</li> <li>● Ringing frequency: 20 Hz</li> </ul>
Extension Jack Specifications (ACS Processor and 362EC module)	<ul style="list-style-type: none"> <li>● Ringing voltage: +55VRMS Balanced ringing within a trapezoidal wave shaping</li> <li>● 38- to 42-Volt talk battery</li> <li>● Ringing frequency: 20 Hz</li> </ul>
PAGE Jack Specifications	<ul style="list-style-type: none"> <li>● Draws current on inner wire pair</li> <li>● Provides paging contact closure on outer wire pair</li> <li>● 600 Ohm impedance</li> </ul>

<p>Music-on-Hold Jack Specifications</p>	<ul style="list-style-type: none"> <li>● Accepts 2 Volts at 50 Kohms maximum input</li> <li>● 0 - 18 dB attenuation</li> </ul>
<p>Government Approvals and Local Phone Company Information</p>	<ul style="list-style-type: none"> <li>● U.S.: <ul style="list-style-type: none"> <li>FCC Part 68 Key System registration: FCC #AS5USA-61630-KF-E</li> <li>FCC Part 68 Pooling and Hybrid System registration: FCC #AS5USA-21312-MF-E</li> <li>— Class A: <ul style="list-style-type: none"> <li>5-Slot Configuration</li> <li>2-Slot Configuration with 362EC or PARTNER MAIL VS</li> </ul> </li> <li>— Class B: <ul style="list-style-type: none"> <li>PARTNER Endeavor Communications System Stand-alone Configuration</li> <li>2-Slot Configuration with 200, 206, or 400 module plus 362 processor module</li> </ul> </li> </ul> </li> </ul> <p>REN (outside line jack): 0.9A per line jack</p> <p>Jack type: RJ11C</p> <p>Loop start lines</p>