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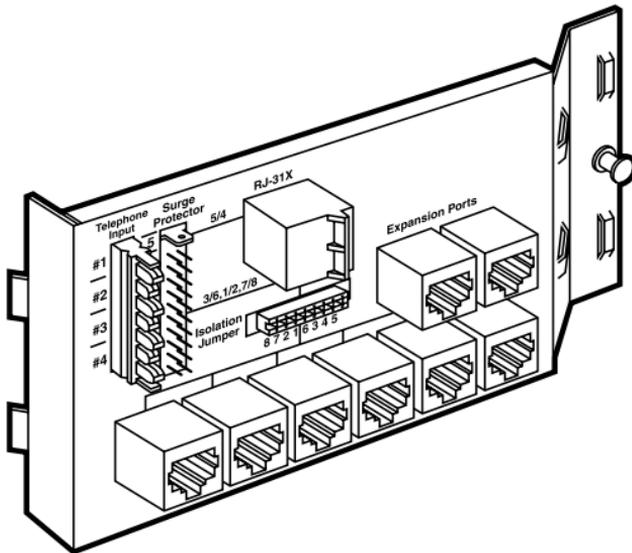
SEPTEMBER 2003

JPM1102A

JPM1103A

JPM1104A

SOHO CAT5e Data/Voice and CAT3 Telephone Modules



CUSTOMER SUPPORT INFORMATION

Order **toll-free** in the U.S.: Call **877-877-BBOX** (outside U.S. call **724-746-5500**)

FREE technical support 24 hours a day, 7 days a week: Call **724-746-5500** or fax **724-746-0746**

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

This equipment generates, uses, and can radiate radio-frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be necessary to correct the interference.

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

This digital apparatus does not exceed the Class A 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 A prescrites dans le Règlement sur le brouillage radioélectrique publié par Industrie Canada.

TRADEMARKS USED IN THIS MANUAL

Any trademarks mentioned in this manual are acknowledged to be the property of the trademark owners.

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1. Specifications

Connectors: JPM1102A: (6) 4-pair 110-type termination blocks, (6) RJ-45 ports for phone or data;

JPM1103A: (1) 4-pair 110-type termination block, (1) RJ-31X connector for security, (1) surge protector interface, (1) isolation jumper, (2) RJ-45 expansion ports, (6) RJ-45 telephone ports;

JPM1104A: (1) 4-pair 110-type termination block, (1) RJ-31X connector for security, (1) surge protector interface, (1) isolation jumper, (2) RJ-45 expansion ports, (12) RJ-45 telephone ports

Size: 3"H x 6.3"W (7.6 x 16 cm)

Weight: JPM1102A: 0.5 lb. (0.2 kg);

JPM1103A: 0.7 lb. (0.3 kg);

JPM1104A: 0.6 lb. (0.3 kg)

2. Introduction

The SOHO 6-Port and 12-Port CAT3 Telephone Modules, and the SOHO 6-Port CAT5e Data/Voice Module should be installed in one of the SOHO Network Boxes (JPM1110A, JPM1111A, or JPM1112A).

The SOHO 6-Port CAT5e Data/Voice Module (JPM1102A) supports up to six T568A RJ-45 data and/or voice connections; it also has front 110-type punchdown termination. It interfaces with the SOHO 6-Port CAT3 Telephone Module (described on the next page). See Figure 2-1.

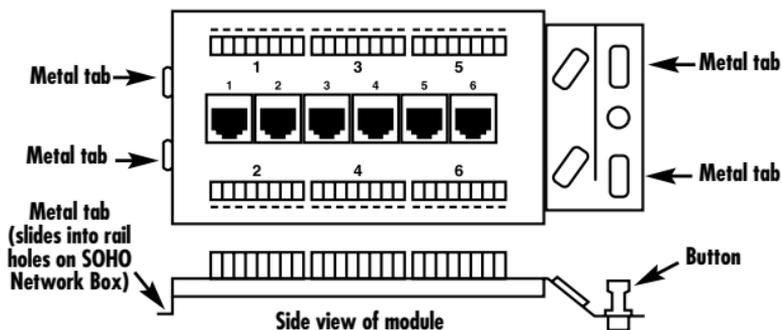


Figure 2-1. 6-Port CAT5e Data/Voice Module (JPM1102A).

SOHO CAT5E DATA/VOICE AND CAT3 TELEPHONE MODULES

The SOHO 6-Port CAT3 Telephone Module (JPM1103A) supports six T568A RJ-45 telephone connections from four phone lines via 110-type termination or an RJ-45 input port. It includes an expansion port and an RJ-31X security system port, as well as six 1-ft. (0.3-m) patch cables. The module interfaces with the 6-Port CAT5e Data/Voice Module (described on the previous page).

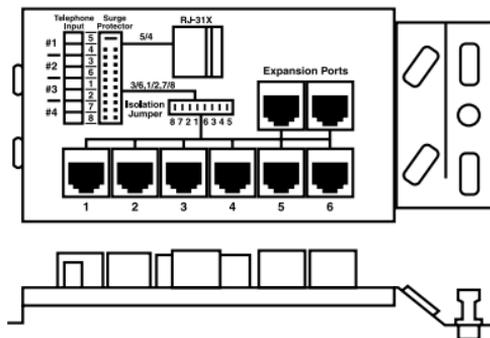


Figure 2-2. 6-Port CAT3 Telephone Module (JPM1103A).

The SOHO 12-Port CAT3 Telephone Module (JPM1104A) functions in the same way as the 6-port version (described on the previous page), but it supports twelve T568A RJ-45 telephone connections instead of six.

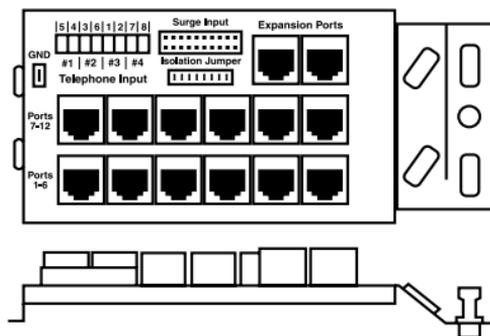


Figure 2-3. 12-Port CAT3 Telephone Module (JPM1104A).

3. Installation

3.1 Cable Handling Guidelines

- Do not route data cables through the same cable holes as the AC power cables.
- For safety, separate all data cables from parallel AC power lines by at least 6 inches (15.2 cm) whenever possible.
- Avoid kinking the cable.
- Do not attach cable tie-downs too tightly. The cable-fastening hardware should not compress the cable sheath.
- Do not bend the cable sharply. Be especially careful to place the cables properly in the cable management after passing them through a hole since the edges of the hole can compress or even damage the cable sheath.
- When installing an individual module in the SOHO Network Box, place it above or below the interfacing module (if possible). This will eliminate excessive cable crossing.

- Follow all warnings on the products.
- For your safety, do not use this or any electrical product near water (unless specifically designed for wet areas).
- Do not install wiring during thunder and lightning storms.
- Use caution when handling or installing any computer, telephone, video, or electrical devices.

3.2 Installing a Module in the SOHO Network Box

1. Determine the area for installation.
2. Position the metal tabs on the left side of the module at a 45-degree angle and slide them into the rail holes on the SOHO Network Box (see Figure 2-1).
3. Insert the metal tabs on the right side of the module into the rail.
4. Press the button to fasten the module to the SOHO Network Box.

NOTE

When mounting an individual module in the SOHO Network Box, install it above or below the interfacing module (when possible). This will eliminate excessive cable crossing.

3.3 Removing a Module from the SOHO Network Box

1. Press the button and hold it in while pulling the module from the SOHO Network Box.
2. Swing the module out.

3.4 Connecting the Cables to the Telephone Modules

3.4.1 6-PORT AND 12-PORT CATEGORY 3 TELEPHONE MODULES

Connect the incoming telephone line from your service provider by terminating it to the designated 110-type termination block.

1. The punchdown block is labeled to indicate where you may terminate each line (up to 4 lines).
2. Using the appropriate cable stripping tool, strip approximately 2" (5.1 cm) from the cable jacket.
3. Separate the pairs according to color (blue-white/blue, green-white/green, orange-white/orange, and brown-white/brown). See Figure 3-1.

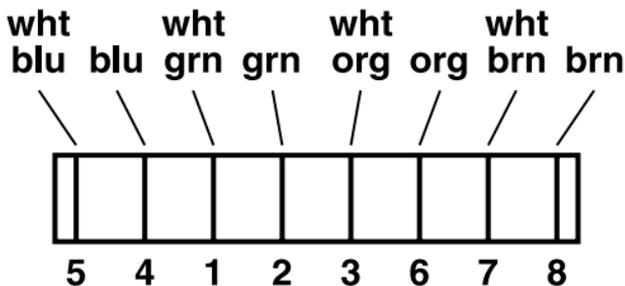


Figure 3-1. T568A wire colors.

- To terminate the connection, place each wire into the insulation displacement contacts (IDC) by matching the wire color with the applicable colors on the jack (568A).

NOTE

We recommend untwisting the pairs no more than 0.5" (1.3 cm) from the termination point.

- If you are using a 110-type punchdown tool, position the tool over each wire with the cutting blade facing outside of the IDC and punch down firmly.
- Repeat this process with each pair.

We recommend that you use a surge protector (part number SP080A, sold separately), to protect your module and phone system from lightning strikes and line surges. Attach the grounding wire to the ground jumper on the module. Attach the other end of the wire directly to the SOHO Network Box.

3.4.2 DATA/VOICE MODULE INSTALLATION

Connect the telephone lines from each room by terminating them to the designated 110-type termination block.

1. Follow steps 1 through 6 in **Section 3.4.1**.
2. Repeat these steps for each room in your installation.

After termination is complete, use 1-ft. (0.3-m) patch cords to connect the RJ-45 ports from the 6-Port or 12-Port Category 3 Telephone Modules to the 6-Port Category 5e Data/Voice Module(s).

Typical applications are shown in Figures 3-2 and 3-3.

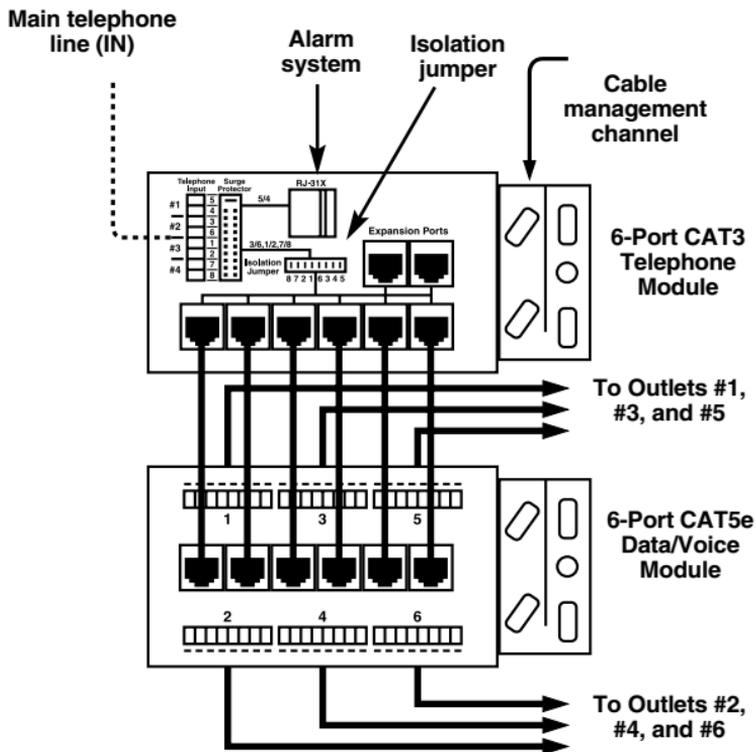


Figure 3-2. Typical setup using two modules.

SOHO CAT5E DATA/VOICE AND CAT3 TELEPHONE MODULES

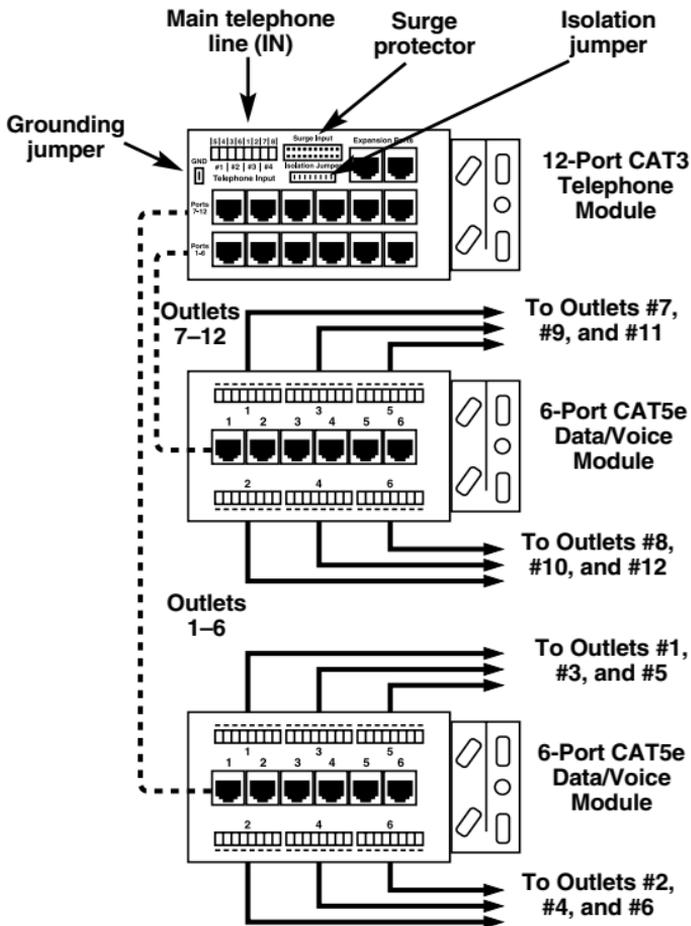


Figure 3-3. Typical setup using three modules.

3.5 Integrating a Security System

The RJ-31X connector on the 6-Port CAT5e Data/Voice Module is the connection point for your security system. This port allows your security system to override and take control of your telephone line when needed. Please refer to the security product manufacturer's instructions for proper installation.

4. Troubleshooting

4.1 Calling Black Box

If you determine that your SOHO 6-Port CAT5e 568A Data/Voice Module, SOHO 6-Port CAT3 Telephone Module, or SOHO 12-Port CAT3 Telephone Module is malfunctioning, do not attempt to alter or repair the unit. It contains no user-serviceable parts. Contact Black Box at 724-746-5500.

Before you do, make a record of the history of the problem. We will be able to provide more efficient and accurate assistance if you have a complete description, including:

- the nature and duration of the problem.
- when the problem occurs.
- the components involved in the problem.
- any particular application that, when used, appears to create the problem or make it worse.

4.2 Shipping and Packaging

If you need to transport or ship your module:

- Package it carefully. We recommend that you use the original container.
- If you are shipping the module for repair, make sure you include everything that came in the original package. Before you ship, contact Black Box to get a Return Authorization (RA) number.