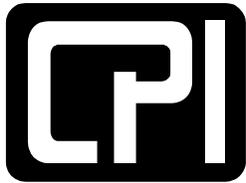

TeraFrame[™]

***TeraFrame*[™] Cabinet System
User's Manual**



**CHATSWORTH
PRODUCTS, INC.**

800-834-4969

**techsupport@chatsworth.com
www.chatsworth.com**

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Preface

OVERVIEW

To easily navigate within this PDF document, use the bookmarks located to the left of the screen, or click on the section titles located on the contents page. Additionally, Adobe Acrobat features a search tool for searching by keyword or part number.

This manual provides the information necessary to receive, unpack, and assemble the TeraFrame™ cabinet and some TeraFrame accessories and options. The information in this document is subject to change without notice. CPI is not liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

Because of the dynamic nature and continued enhancement of CPI products, the illustrations and descriptions in this manual may differ from the various products you receive.

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ORGANIZATION OF THIS MANUAL

This manual is organized as follows:

Chapter 1 includes pre-equipment-installation information such as:

- Introductory information
- Tools needed for assembly
- Moving the cabinet
- Handling and unpacking
- Standard cabinet parts
- Adjusting leveling feet
- Anchoring the cabinet
- Connecting the ground terminal block
- Accessories and options

Chapter 2 includes additional installation information such as:

- Installing on slab and access floors
- Removing the cabinet door
- Reversing the door swing
- Operating the door latches
- Removing side panels
- Bonding and grounding system
- Installing the top panel
- Baying cabinets
- Aligning radius drops, underfloor cable pathways, floor pass-throughs

Chapter 3 includes equipment installation information such as:

- Equipment mounting rails
- Cable management
- Vertical power managers
- Thermal management accessories
- Securing equipment to mounting rails
- Cable management: bundling, dressing, radius bend
- Environmental monitoring

CONVENTIONS USED IN THIS MANUAL

This manual provides general safety guidelines to be observed when planning for, installing, and operating your TeraFrame cabinet.

Special messages used throughout this manual are explained below:



WARNING: Text highlighted in this manner indicates that failure to follow directions in the warning could result in bodily harm or loss of life. Obey all safety messages that follow this symbol to avoid possible injury or death.



CAUTION: Text highlighted in this manner indicates that failure to follow instructions could result in damage to equipment or data.

IMPORTANT: Text set off in this manner presents clarifying information or specific instructions.

NOTE: Text set off in this manner presents commentary, sidelights, or interesting points of information.

SAFETY INFORMATION

Keep a printed copy of the Preface of this User's Manual, especially the following safety information, in or near the cabinet.



WARNINGS

- Improper use of this product may lead to serious injury or death. Read and understand all instructions for proper installation and use of this product.
- Be sure to use sufficient personnel to safely remove the cabinet from the pallet.
- Do not attempt to move large cabinets by yourself. Obtain adequate assistance to stabilize the cabinet during movement or hire professional equipment riggers.
- Move cabinets on installed casters with extreme care. Sudden stops, excessive force, and uneven surfaces may cause the cabinet to overturn. It is easier to move the cabinet with the back as the leading edge. Never push on the sides.
- Unload equipment from the cabinet before moving it.
- A standalone cabinet should be level, stable, and anchored to the floor. Two or more cabinets can be bayed together (coupled) to enhance their stability. Each cabinet should be anchored to the floor.
- Before loading equipment in the cabinet, be sure to adjust and lock the leveling feet to level the cabinet. Do not use casters to stabilize the cabinet; always anchor the leveling feet or the cabinet frame to the floor.
- Always load heavy equipment, such as a UPS, at the bottom of the cabinet first, and add lighter equipment on higher levels.
- There is a safety risk when equipment is mounted on a shelf installed more than 30 inches above the floor in a cabinet without doors and/or side panels. The equipment may accidentally slide or be accidentally pushed off the shelf and fall on personnel. When equipment is mounted on a shelf in this condition, securely fasten the equipment to the shelf or cabinet frame. The following accessories may be used to secure certain equipment on shelves: monitor tie-down kit (P/N 11725-X01), seismic equipment tie-down bracket (P/N 14061-X19), or equipment tie-down bracket (P/N 16356-X19).

- The TeraFrame cabinet can support many system configurations. The amount of force required to tip or make the cabinet unstable differs with each configuration. Be sure to read and follow your equipment manufacturer's specific assembly, installation, and safety instructions.
- When servicing slide-mounted equipment such as servers:
 - Secure all equipment, other than the unit being serviced, in position to prevent it from sliding out and destabilizing the cabinet.
 - Extend only one unit at a time. Extending multiple units may cause the cabinet to tip over.
 - Extend the unit slowly. Rapid deployment of the unit could cause the cabinet to tip over.
- For protection of the equipment and personnel, ground each cabinet individually to the Telecommunications Equipment Bonding Conductor (TEBC) or Signal Reference Structure (SRS).



CAUTIONS

- Doors must remain supported during repositioning so that the hinge components are not damaged. Use blocks or have an assistant support the edge of the door opposite the hinges. Do not allow the top hinge to support the entire weight of the door during repositioning.
- Before swinging the front door, confirm that both top and bottom hinge pins are in the correct cavities of the door frame member. Swinging the door while the hinges are positioned in the wrong cavity may damage the door and/or the hinge.
- Keep the rear door closed while removing the hinge pins. An open door will fall off the cabinet when the pins are removed. When remounting the door, be sure to reinsert the hinge pins. If the hinge pins are not reinserted, the door could fall off the next time it is opened.
- For optimal load bearing capacity, move the mounting rails back no more than 10 inches (250 mm) from the front or rear of the cabinet.

WARRANTY

Chatsworth Products, Inc. (CPI) guarantees manufactured products and each part or component thereof against all defects in material and/or workmanship. CPI agrees to remedy any manufacturing defect either through replacement or repair at no charge, provided that the defective unit is returned, transportation prepaid, to the CPI factory. The warranty extends for a period of one year from the date of installation or initial use, provided that this period shall not exceed 18 months from the original date of shipment from the factory.

Any product that has been repaired or replaced shall be similarly warranted on its repair or replacement for the remaining product warranty period or 90 days from the date of repair or replacement, whichever expires last.

This warranty does not extend to products that have been subjected to neglect, accident or improper use, nor to units that have been altered by non-CPI personnel.

No warranties other than those set forth in this section are given or implied with respect to the products furnished. CPI shall, in no event, be liable for consequential damages, for loss, damage or expense directly or indirectly arising from the use of the products, for any inability to use materials or from any other cause.

SERVICE AND SUPPORT

For answers to your questions, please email Technical Support at **techsupport@chatsworth.com**, or call toll-free at **800-834-4969** (US. & Canada) Monday to Friday, 5 a.m. to 5 p.m., Pacific Time.

INTENDED USE

Keep a printed copy of the Preface of this User's Manual in or near the cabinet.

- Install the cabinet only in a restricted service environment, such as a data center. Use indoors only, in environmentally controlled areas; do not use outdoors, in harsh environments, or in air-handling spaces.
- Use the cabinet for information technology and telecommunications equipment, including servers and peripherals.
- Allow only qualified service personnel to use the cabinet.
- Use casters only for moving empty cabinets to their final location. The cabinets must be anchored to the floor to ensure stability.
- The load-bearing capacity of the TeraFrame cabinet is:
 - 600 mm wide cabinet supports 2,500 lb (1134 kg)
 - 700 mm wide cabinet supports 2,000 lb (907.2 kg)
 - 800 mm wide cabinet supports 2,000 lb (907.2 kg)
- The ambient temperature operating range for the TeraFrame cabinet and installed cabinet accessories is 0° to 60°C (32° to 140°F).

FREQUENTLY ASKED QUESTIONS (FAQ)

Q: What cabinet sizes are available?

A: TeraFrame is customizable to include 12 heights (24U, 36U, and 42U to 51U); 17 depths (800 mm to 1200 mm); and 3 widths (600 mm, 700 mm, and 800 mm).

Q: What is the load-bearing capacity?

A: The load-bearing capacity (without casters) of the TeraFrame cabinet is:

- The 600mm wide cabinet supports 2,500 lb (1134 kg).
- The 700mm wide cabinet supports 2,000 lb (907.2 kg).
- The 800mm wide cabinet supports 2,000 lb (907.2 kg).

Q: Does the cabinet come with leveling feet?

A: Yes. They are factory-installed..

Q: Can the cabinet be bayed with other cabinets?

A: Yes. A baying kit is required. Each cabinet should be anchored to the floor.

Q: What accessories can be used with the TeraFrame?

A:

- Casters
- Combination lock
- Electronic door lock
- Top panel
- Baying kit
- Doors
- Power management options
- Cable management options
- Thermal management options
- Side panels
- Filler panels
- Shelves and trays

Q: What accessories cannot be used with the TeraFrame?

A:

- Non-TeraFrame vertical cable managers
- Non-TeraFrame casters
- Non-TeraFrame equipment mounting rails
- Half-height equipment mounting rails

Q: How much height do casters add to the TeraFrame cabinet?

A: Casters add 2.8 inches (71 mm) of height.

Q: What finishes are available for the TeraFrame cabinet?

A: Epoxy-polyester hybrid powder coat in Basic Black, Signature Blue, Glacier White, and Steel Gray.

Q: Does the TeraFrame cabinet come partially assembled like other Chatsworth cabinets?

A: No. The TeraFrame comes fully assembled with the exception of vertical exhaust ducts.

Q: Are there RMU marks on the equipment mounting rails?

A: Yes. There are RMU marks on all the TeraFrame equipment mounting rails: the punched square hole rails and the drilled and tapped rails.

Q: How do you attach equipment to the cabinet?

A: TeraFrame cabinet includes two pairs of adjustable depth equipment mounting rails. Equipment or shelves attach to the equipment mounting rails. Equipment mounting rails have 1-3/4 inch (44.45 mm) high rack-mount spaces (RMS, RMU, U). Mounting spaces are marked and numbered for easy placement of equipment. Mounting rails have square-punched or tapped mounting holes spaced according to the EIA-310D universal hole pattern. Square-punched rails accept cage nuts allowing you to quickly change the mounting hardware. Tapped rails are threaded for #12-24 screws. Use square-punched rails for server applications. Use tapped rails for network and cabling applications.

Q: How do you attach accessories (such as cable pathway products) to the top of the cabinet frame?

A: Use M8 drop-in nuts in the two upward-facing slide tracks at the top of the frame along with washers and M8 bolts to attach accessories to the top of the cabinet.

Q: Is the bottom of the cabinet open or closed?

A: The bottom of the cabinet is open.

Q: Is there a true “front” or “rear” to the TeraFrame cabinet?

A: No. Because the frame is symmetrical, the front of the cabinet is designated by the style of door and/or the location of the swivel casters (swivel casters are mounted in front).

Q: Can an external cable manager be attached to a standard TeraFrame cabinet?

A: No, the external cable manager is a T-Series SteelFrame cabinet accessory.

Q: When an air dam is installed, how can cables pass from the front to the rear of the cabinet?

A: Use a horizontal cable tray (rack-mount cable shelf, P/N 13517-701). See section 3.2.2.

Q: Are the doors reversible?

A: Yes, they are easily reversible. See section 2.3 for instructions. Before you load equipment into the cabinet, it is a good idea to decide which way you want the door to open. Reversing the doors requires access to the inside of the vertical rails of the frame.

Q: Can combination locks be reset?

A: Yes, as long as you know the existing combination. If unknown, you must use a key to gain access to the cabinet, or order a new lock.

Q: I did not find the answer to my question. Who do I contact for assistance?

A: Please email Technical Support at techsupport@chatsworth.com, or call toll-free at **800-834-4969** (US. & Canada) Monday to Friday, 5 a.m. to 5 p.m., Pacific Time.