Vertical Mounting of Kaleidescape Components
Engineering Bulletin

Most Kaleidescape components can be mounted vertically. However certain restrictions apply.

- Intake air **temperature** must be maintained.

- **Altitude** of 10,000ft (3000m) cannot be exceeded.

- **Airflow** must be maintained.

- The **front panel** of a component must not face in an up or down direction except for Terra (compact), Strato C and Kplayer-M300/300 which can be mounted in any direction except upside-down.

- The 1U Server **cannot** be mounted vertically.

Temperature and Orientation

When a Kaleidescape component is mounted vertically, the intake air temperature must be maintained at a distance of 1 in. (2.5 cm) **across the entire front** of the component.

Table 1 lists Kaleidescape components that can be mounted vertically and maximum intake air temperature depending on orientation.

Table 1 Intake Air Temperature Upper Limits

Component	Temperature with POWER Button to the Top	Temperature with POWER Button to the Bottom
Strato Components		
Terra Movie Server (K0108)	95°F (35°C)	95°F (35°C)
Terra (Compact) Movie Server (K0110)	95°F (35°C) In any orientation	
Strato C Movie Player (K0217)	95°F (35°C)	95°F (35°C)
Strato S Movie Player (K0509-1XXX)	95°F (35°C)	95°F (35°C)
Disc Server (KVAULT-DV700)	**Cannot** be mounted vertically	

Table 1 Intake Air Temperature Upper Limits

Premiere Components		
1U+ Server (KSERVER-1550)	Cannot be mounted vertically	
M500 Player (KPLAYER-M500)	95°F (35°C)	95°F (35°C)
M300 Player (KPLAYER-M300)	95°F (35°C) In any orientation	
Disc Vault (KVAULT-DV700,M700)	**Cannot** be mounted vertically	
Legacy Components		
Strato Movie Player (K0509-0XXX, K0510)	95°F (35°C)	95°F (35°C)
Alto Movie Player (K0507, K0508)	95°F (35°C)	95°F (35°C)
Cinema One 2nd Generation (K0503)	95°F (35°C)	95°F (35°C)
1U Server (KSERVER-1500)	**Cannot** be mounted vertically	
3U Server (KSERVER-5000)	86°F (30°C)	Not recommended
5U Server (KSERVER-2500)	86°F (30°C)	Not recommended
Cinema One (KCINEMA-1, KSYSTEM-120)	95°F (35°C)	95°F (35°C)
1080p Player (KPLAYER-6000)	81°F (27°C)	68°F (20°C)
1080p Mini Player (KPLAYER-300)	86°F (30°C) in any direction	
Movie Player 2 (KPLAYER-5000)	90°F (32°C)	77°F (25°C)
Movie Player (KPLAYER-2000, KPLAYER-2500)	86°F (30°C)	Not recommended
Music Player (KMUSIC-4000)	95°F (35°C)	86°F (30°C)
1. Mini players can be mounted facing up, down, or to either side (front panel facing down provides best cooling). Do not mount upside down on a ceiling or overhang.		

Airflow and Mounting

The following clearance requirements must be maintained for proper airflow and temperature control. See Engineering Bulletin, "Environmental Specifications for Kaleidescape Components."

- 1 in. (2.5 cm) clearance in front of the Kaleidescape component

- 2 in. (5 cm) clearance at the back

- Vents and grilles cannot be blocked. Cables, brackets, clamps must be secured so that vents are exposed.

Strato Components:

Terra Movie Servers

Terra movie servers can be mounted vertically in either orientation (power button at top or bottom of front panel). When mounted in a rack, Terra servers should have the optional rack mount kit installed to allow them to be properly secured. Figure 1 shows how the Terra Servers are mounted vertically.

Terra (Compact) Movie Servers

Terra (compact) movie servers can be mounted vertically in either orientation.

The Terra (compact) has two vertical mounting bracket options. They can be mounted in a vertical rack with the optional rack mount kit in either a single or double configuration per kit as shown in Figure 1.

They can also be wall mounted in any orientation with the optional wall mount kit. Rear vent pointing up is the best orientation for wall mounting. **The server should not be mounted upside down on a ceiling or overhang.**

Strato S Movie Players

Figure 1 shows the Strato S movie player mounted vertically. These units can be mounted in either orientation. When rack mounting, the optional rack mount kit should be installed to ensure they are properly secured.

Strato C Movie Players

Strato C movie players can be mounted vertically in either orientation.

The Strato C Players have two vertical mounting bracket options. They can be mounted in a vertical rack with the optional rack mount kit in either a single or double configuration per kit as shown in Figure 1.

They can also be wall mounted in any orientation with the optional wall mount kit. Rear vent pointing up is the best orientation for wall mounting. **The player should not be mounted upside down on a ceiling or overhang.**
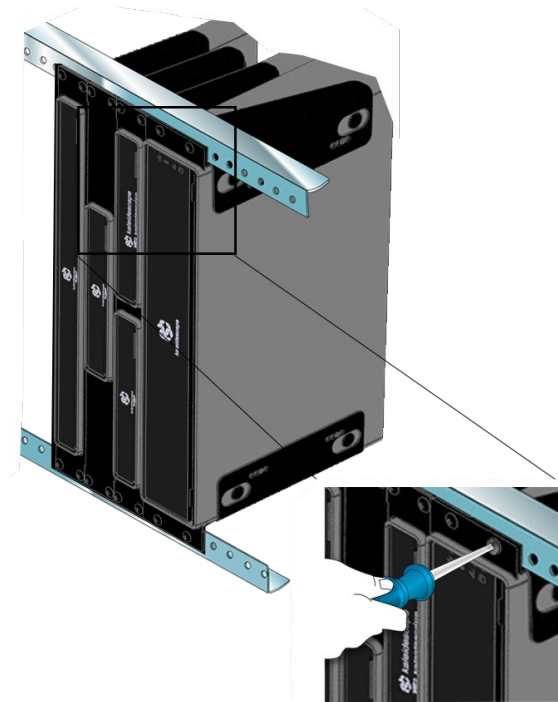

Figure 1 Vertical Mounting of Terra, Terra (Compact), Strato C & Strato S

Premiere Components:

Premiere Servers

1U+ and 1U servers cannot be mounted vertically.

Premiere Players

Figure 2 shows a legacy 3U Server mounted vertically with three Kaleidescape players (one M500 Player, one legacy 1080p Player, and one legacy Music Player). The M500 Player can be mounted in either orientation.

CAUTION: Discs can be imported or played from the tray when players are mounted vertically; however, discs can be easily damaged when inserted and removed. Handle with care.
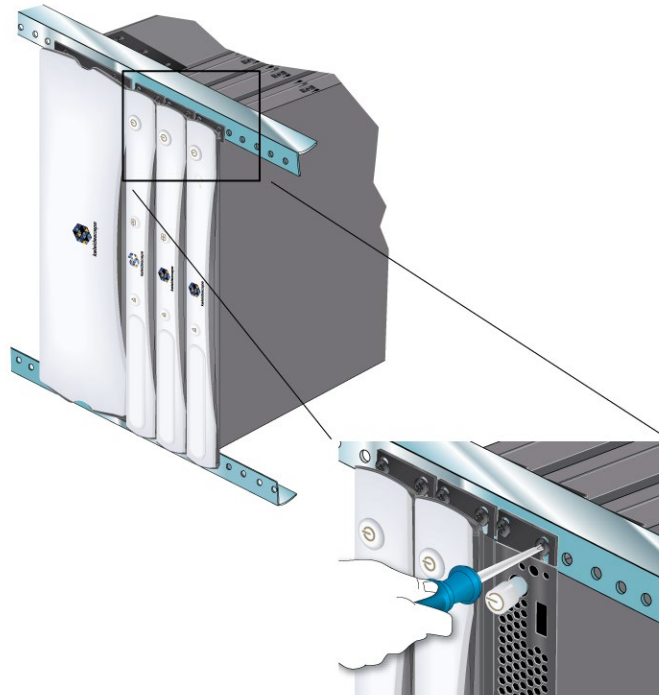

Figure 2 Vertical Mounting of M500 Player, 1080p Player, and Music Player
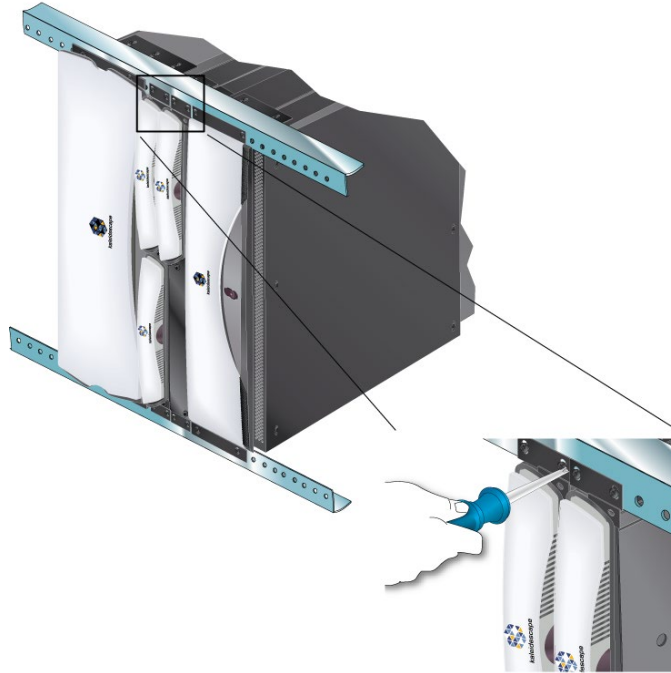
Premiere Mini Players

Figure 3 Vertical Mounting of Mini Players and Cinema One 1st Generation

Mini players are first mounted on the Mini Player Rack-Mount Shelf, then attached to the rack rail. If only one mini player is mounted on the shelf, the mini player can be at the top or bottom of the shelf. When mounting only one player, the blanking plate must be installed on the Mini Player Rack-Mount Shelf in the empty slot.

Mini players can also be mounted vertically on the wall-mounting bracket supplied with the player.

Note: Mini players can be mounted in any direction. Mini players can be mounted with the front panel facing up or down, for example when mounting the player with the wall-mounting bracket.

Vaults

Vaults cannot be vertically mounted.

Legacy Components:

Alto and Cinema One (2nd Generation)

Alto and Cinema One (2nd Generation) The 2nd Generation Cinema One can be operated with the POWER button up or down as shown in Figure 4.

Figure 4 Vertical Operation of Alto and Cinema One (2nd Generation)

Cinema One 1st Generation

The 1st Generation Cinema One is mounted with the POWER button up as shown in Figure 3.

3U and 5U Servers

3U and 5U Servers mounted vertically must be mounted with the POWER button up to allow the exhaust fans to provide proper ventilation. Figure 5 shows how 3U and 5U servers are mounted vertically.

3U Servers are shipped with disk cartridges installed. Carefully remove disk cartridges before mounting, then reinstall.

WARNING: Disk cartridges can be damaged by even a light bump. Extreme care must be taken at all times when handling the disk cartridges.

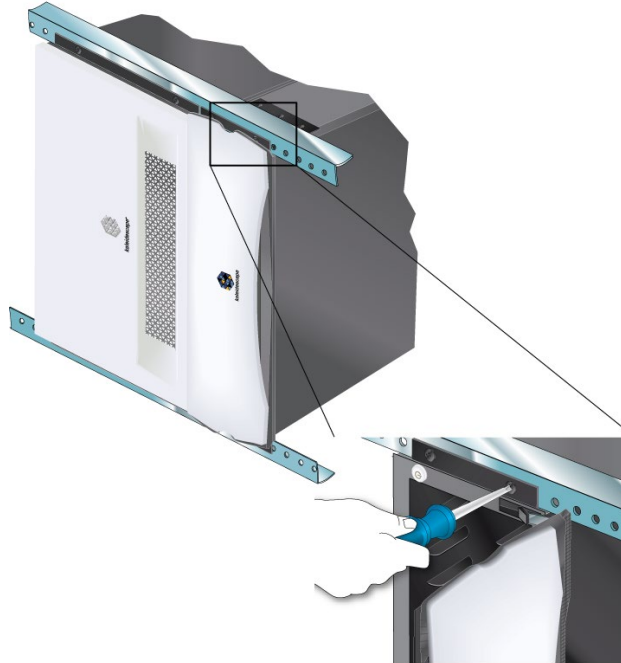**Note:** The 1U and 1U+ Server cannot be mounted vertically.

Figure 5 Vertical Mounting of 3U Server and 5U Server

WARNING: The hinges on the 3U Server front panel must be opened with equal pull on each side to avoid damage.

Legacy Players

Legacy players can be vertically mounted as shown in Figure 2.

Figure 3 shows a 3U Server mounted vertically with three Kaleidescape players (one M500 Player, one 1080p Player, and one Music Player). The players can be mounted in either orientation.

CAUTION: Discs can be imported or played from the tray when players are mounted vertically; however, discs can be easily damaged when inserted and removed. Handle with care.

Kaleidescape Support

For additional information, contact Kaleidescape Support.
- Send an email message to support@kaleidescape.com.
- Call the support line at:
  +1 877-352-5343 Toll Free (US Only)
  +1 650-625-6160

Be prepared to provide the serial number of the Kaleidescape server. Serial numbers are printed on labels located on the backs or bottoms of all components and inside the front panels of the Terra, 3U and 5U Servers.

The Kaleidescape website always has the latest support updates.

www.kaleidescape.com