

## 12U Rack Enclosure



*Actual product may vary from photos*

## User Manual

**SKU#: RK1233BKM**

For the latest information and specifications visit  
[www.startech.com/RK1233BKM](http://www.startech.com/RK1233BKM)

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# Safety Statements

## Safety Measures

- Wiring terminations should not be made with the product and/or electric lines under power.
- Product installation and/or mounting should be completed by a certified professional as per the local safety and building code guidelines.
- Cables (including power and charging cables) should be placed and routed to avoid creating electric, tripping or safety hazards.

## Mesures de sécurité

- Les terminaisons de câblage ne doivent pas être effectuées lorsque le produit et/ou les câbles électriques sont sous tension.
- L'installation et/ou le montage du produit doit être réalisé par un professionnel certifié et dans le respect des normes locales et du code de construction local.
- Les câbles (y compris les câbles d'alimentation et de chargement) doivent être placés et acheminés de façon à éviter tout risque électrique, de chute ou de sécurité

## 安全対策

- 電源が入っている状態の製品または電線の終端処理を行わないでください。
- 製品の設置やマウントは、使用地域の安全ガイドラインおよび建築基準に従い、有資格の専門業者が行うようにしてください。
- ケーブル(電源ケーブルと充電ケーブルを含む)は、適切な配置と引き回しを行い、電気障害やつまづきの危険性など、安全上のリスクを回避するようにしてください。

## Misure di sicurezza

- I terminali dei fili elettrici non devono essere realizzate con il prodotto e/o le linee elettriche sotto tensione.
- L'installazione e/o il montaggio dei prodotti devono essere eseguiti da un tecnico professionale certificato che conosca le linee guida locali sulle norme edilizie e sulla sicurezza.
- I cavi (inclusi i cavi di alimentazione e di ricarica) devono essere posizionati e stesi in modo da evitare pericoli di inciampo, rischi di scosse elettriche o pericoli per la sicurezza.

## Säkerhetsåtgärder

- Montering av kabelavslutningar får inte göras när produkten och/eller elledningarna är strömförda.

- Installation och/eller montering får endast göras av behöriga yrkespersoner och enligt gällande lokala förordningar för säkerhet och byggnormer.
- Kablar (inklusive elkablar och laddningskablar) ska dras och placeras på så sätt att risk för snubblingsolyckor och andra olyckor kan undvikas.

## Warning Statements

- Make sure that you assemble this product according to the instructions.
- Do not exceed the weight capacity of this product. Overloading this product might result in injury or property damage. This product can support the following weight: Stationary = 9920.08 lb. (450 kg) Rolling = 694.46 lb. (315 kg).
- This product is intended for indoor use only and should not be used outdoors.
- This enclosure is extremely heavy. Never attempt to move or lift this enclosure without assistance.
- Tipping hazard! Extending multiple components from this enclosure increases the chance that the enclosure will tip over. To avoid this risk, do not extend more than one component from the enclosure.
- Do not place any items on this enclosure and do not stack the enclosure on top of another enclosure.
- Keep liquid away from this enclosure.
- Make sure that you install the enclosure in an area that can handle the combined weight of the enclosure and the equipment that you intend to place inside of the enclosure.
- This product requires an earth ground connection. Do not use this product without an earth ground connection.

## Varningar

- Se till att du monterar produkten i enlighet med instruktionerna.
- Överskrid inte produktens vikt kapacitet. Överbelastning av denna produkt kan leda till skador eller skador på egendom. Denna produkt kan stödja följande vikt: stationär: 450 kg rullande: 315 kg.
- Produkten är endast avsedd för användning inomhus och ska inte användas utomhus.
- Detta skåp är extremt tungt. Försök aldrig flytta på skåpet eller lyfta det utan hjälp.
- Risk för vältnings! Att förlänga flera komponenter från detta skåp ökar risken för att det välter. Förläng inte fler än en komponent från skåpet för att undvika risk.
- Placera inte saker ovanpå skåpet och ställ inte skåpet ovanpå ett annat skåp.

- Håll vätskor borta från skåpet.
- Se till att du installerar skåpet på en plats som kan hantera den kombinerade vikten av skåpet och utrustningen som du tänker placera inuti.
- Produkten behöver en jordad anslutning. Använd inte produkten utan en jordad anslutning.

## **Avvertissements**

- Assemblez ce produit conformément aux instructions.
- Ne dépassez pas la capacité pondérale de ce produit. Une surcharge de ce produit peut entraîner des dommages corporels ou matériels. Ce produit peut supporter le poids suivant, stationnaire = 450 kg, roulant = 315 kg.
- Ce produit est uniquement destiné à une utilisation en intérieur et ne doit pas être utilisé à l'extérieur.
- Ce rack de serveur est extrêmement lourd. Ne tentez jamais de le déplacer ou de le soulever sans aide.
- Risque de basculement ! L'extension de plusieurs composants à partir du rack de serveur augmente le risque de basculement. Pour éviter ce risque, n'étendez pas plus d'un composant à partir du rack de serveur.
- Ne placez aucun objet sur ce rack de serveur et n'empilez pas le rack sur un autre rack.
- N'approchez aucun liquide du rack de serveur.
- Veillez à installer le rack de serveur dans un endroit pouvant supporter le poids combiné du rack et des équipements que vous comptez placer à l'intérieur.
- Ce produit nécessite un raccordement à la terre. N'utilisez pas ce produit sans raccordement à la terre.

## **Warnhinweise**

- Beachten Sie bei der Montage dieses Produkts die Montageanweisungen.
- Überschreiten Sie nicht die Tragfähigkeit dieses Produkts. Das Überladen dieses Produkts kann zu Verletzungen oder Sachschäden führen. Dieses Produkt kann das folgende Gewicht tragen: Stationär = 450 kg, rollend = 315 kg.
- Dieses Produkt ist nur zum Gebrauch in Innenräumen vorgesehen und sollte nicht im Freien verwendet werden.
- Dieses Gehäuse ist extrem schwer. Versuchen Sie niemals, dieses Gehäuse ohne Hilfe zu bewegen oder anzuheben.
- Kippgefahr! Das Ausziehen mehrerer Komponenten aus diesem Gehäuse erhöht die Chance, dass das Gehäuse umkippt. Um dies zu vermeiden, ziehen Sie niemals mehr als eine Komponente aus diesem Gehäuse aus.
- Platzieren Sie keine Gegenstände auf dem Gehäuse und stapeln Sie das Gehäuse nicht auf einem anderen Gehäuse.

- Halten Sie Flüssigkeiten von diesem Gehäuse fern.
- Vergewissern Sie sich, dass der Untergrund, auf dem das Gehäuse aufgestellt wird, in der Lage ist, das Gesamtgewicht des Gehäuses und der Geräte, die Sie darin platzieren möchten, zu tragen.
- Dieses Produkt erfordert einen Schutzleiteranschluss. Verwenden Sie das Produkt nicht ohne einen Schutzleiteranschluss.

## Dichiarazioni di avvertenza

- Assicurarsi di Assemblare il prodotto secondo le istruzioni.
- Non superare la capacità di carico massimo di questo prodotto onde evitare danni o lesioni alla proprietà. Questo prodotto e' in grado di supportare il peso riportato, Statico = 450 kg, Dinamico = 315 kg.
- Il prodotto è destinato all'uso in ambienti interni. Se ne sconsiglia l'impiego in ambienti esterni.
- Il box esterno è molto pesante. Non tentare di spostarlo o sollevarlo senza assistenza.
- Pericolo di ribaltamento! L'estensione di più componenti dal box esterno aumenta il rischio di ribaltamento del box esterno. Per evitare questo rischio, non estendere più di un componente dal box esterno.
- Non collocare oggetti sul box esterno e non impilare un box esterno sopra un altro.
- Tenere il box esterno lontano dai liquidi.
- Assicurarsi di installarlo in un punto che possa sorreggere il peso combinato del box esterno e dell'apparecchiatura che si intende collocare al suo interno.
- Il prodotto richiede una messa a terra. Non utilizzare il prodotto in assenza di una messa a terra.

## Mensagens de aviso

- Certifique-se de que monta este produto de acordo com as instruções.
- Não exceda a capacidade de peso deste produto. Sobrecarregar este produto pode resultar em ferimentos ou danos à propriedade. Este produto pode suportar o seguinte peso: estacionário: 450 kg. Rolando: 315 kg.
- Este produto destina-se apenas a uma utilização no interior e não deve ser utilizado no exterior.
- Esta caixa é extremamente resistente. Nunca tente mover ou levantar esta caixa sem assistência.
- Perigo de queda! Estender vários componentes desta caixa aumenta a probabilidade desta caixa cair. Para evitar este risco, não expandir mais de um componente desta caixa.
- Não colocar nenhum artigo nesta caixa e não empilhar a caixa em cima de outra caixa.

- Manter líquidos afastados desta caixa.
- Certifique-se de que instala a caixa numa área que pode suportar o peso combinado da caixa e o equipamento que pretende colocar dentro da caixa.
- Este produto requer uma ligação à terra. Não utilize este produto sem uma ligação à terra.

## Advertencias de uso

- Asegúrese de ensamblar este producto según las instrucciones.
- No exceda la capacidad de carga de este producto. El sobrecargarlo puede ocasionar lesiones y daños en propiedad. Este producto puede soportar el siguiente peso, Estacionario = 450 kg Rodante = 315 kg.
- El uso de este producto es solo para interiores y no debe utilizarse en exteriores.
- La caja es extremadamente pesada. Nunca intente mover o alzar esta caja sin la debida asistencia de otra persona.
- ¡Peligro de vuelco! Añadir a esta caja varios componentes aumenta las posibilidades de peligro de vuelco de la caja. Para evitar dicho riesgo, no añada más que un solo componente.
- No coloque ningún elemento encima de la caja y no apile la caja encima de otra caja.
- Mantenga cualquier líquido lejos de la caja.
- Asegúrese de instalar la caja en un área que tenga capacidad para soportar el peso combinado de la caja y el equipo que va a instalar dentro de la misma.
- Este producto requiere conexión a tierra. No utilice este producto sin conexión a tierra.

## Waarschuwingen

- Zorg dat u dit product volgens de instructies in elkaar zet.
- Overschrijd de maximale capaciteit van dit product niet. Overbelasting De maximale gewichtscapaciteit mag niet overschreden worden. Overbelasting kan kan letsel of schade tot gevolg hebben. Dit product kan het volgende gewicht ondersteunen, stationair = 450 kg. rollend = 315 kg.
- Dit product is alleen bedoeld voor binnengebruik en mag niet buiten worden gebruikt.
- Deze behuizing is enorm zwaar. Probeer nooit deze behuizing te verplaatsen of op te tillen zonder hulp.
- Kantelgevaar! Wanneer meerdere componenten uit deze behuizing steken, bestaat de kans dat deze zal kantelen. Om dit risico te voorkomen, mag niet meer dan één component uit de behuizing steken.
- Plaats geen voorwerpen op deze behuizing en stapel de behuizing niet op een andere behuizing.

- Houd vloeistof uit de buurt van deze behuizing.
- Zorg dat u de behuizing installeert op een plaats die geschikt is voor het gecombineerde gewicht van de behuizing en de apparatuur die u in de behuizing wilt plaatsen.
- Dit product vereist een gearde verbinding. Gebruik dit product niet zonder een gearde verbinding.

## 注意

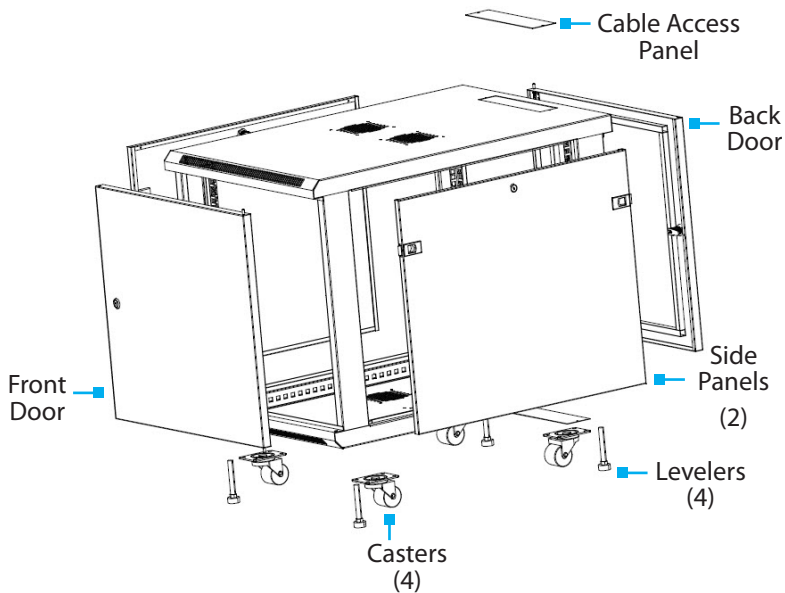
- 必ず取扱説明書に従って本製品の組み立てを行って下さい。
- 本製品で定められた可搬重量を超えないようにして下さい。規定された重量を超えた場合、怪我や物的損害が発生することがあります。本製品は次の可搬重量に対応しています。[キASTER静止時] = 450 kg、[キASTER動作時] = 315 kg
- 本製品は、室内での使用を想定しています。戸外では使用しないで下さい。
- 本製品は、非常に重いエンクロージャです。絶対に一人で持ち上げたり動かしたりしないで下さい。
- 転倒注意!本製品から複数のコンポーネントが突き出した状態にしておくくとエンクロージャが転倒する恐れがあります。転倒リスクを回避するために、エンクロージャからはコンポーネントが突き出ないようにして下さい。
- 本製品の上に何も載せないで下さい。複数のエンクロージャを重ねて設置しないで下さい。
- 液体物をエンクロージャに近づけないようにして下さい。
- エンクロージャ自身と中に積載する装置の総重量に耐えられるエリアに設置して下さい。
- この製品にはアースが必要です。アース接続をしていない状態で本製品を使用しないでください。



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## Product Diagram (RK1233BKM)



## Product Information

### Package Contents

- Enclosed Rack Cabinet x 1
- 1U Fixed Shelf x 1
- M6 Mounting Screws x 50
- Cage Nuts x 50
- Door Keys x 2
- Side Panel Keys x 2
- 10 ft (3 m) Hook-and-Loop Tape x 1
- User Manual x 1

### Requirements

For the latest requirements, please visit [www.startech.com/RK1833BKM](http://www.startech.com/RK1833BKM)

#### **Installation:**

The following Items required for installation are sold separately.

- Open-ended Wrenches x 3
  - 10 mm
  - 13 mm
  - 14 mm
- Wrench x 1
- Sockets x 3
  - 10 mm
  - 13 mm
  - 14 mm

- Level x 1
- Grounding Wire x 1
- Phillips Head Screwdriver x 1

## Unpacking the Rack

**Warnings:** *The Rack is heavy and you should exercise caution when you remove it from the Pallet.*

*At least three people are required to unpack the Rack. Do not attempt to unpack the Rack by yourself.*

1. Carefully move the shipping **Pallet** to a level surface.
2. Remove the **Tie Straps** from the **Shipping Carton**.
3. Remove the **Shipping Carton** being careful not to tip the **Rack**.
4. The **1U Cabinet Shelf** box will be shipped in the **Rack's** interior.
5. Remove the **Tie Straps** from **1U Cabinet Shelf** box and carefully lift the **1U Cabinet Shelf** box out of the **Rack** through either the front or rear door.

- Using a **13 mm Socket** and **Wrench**, remove the **Bolts** from the **Pallet Brackets**.



*Removing the Bolts*

**Note:** Make sure that at least one person is holding the **Rack** in place while removing the **Pallet Brackets**.

- Carefully remove the **Rack** off of the **Pallet** and place it on a firm surface.

## Installation

### Leveling the Rack

The **Rack** will need to be properly level prior to the installation of any **Rack Equipment** to ensure stability. The surface the **Rack** is located must also be a flat level surface to support the weight of the **Rack** and **Rack Equipment** installed.

1. Determine the location of the **Rack**. Once this location is determined, use the level to ensure that the surface is a flat level surface.
2. Using an **14 mm Open-Ended Wrench**, lower the leveler (4 located next to the **Casters**) by turning it clockwise until the base of the **Leveler** is tightly pressed against the surface, supporting the weight of the **Rack**.
3. Place the **Level** on the top of the **Rack** to ensure that the **Levelers** are adjusted correctly. If the **Rack** is not level make the required adjustments to the **Levelers** until the **Rack** is level.

### Securing the Rack to the Floor

You can use the **Pallet Brackets** and **Bolts** used to secure the **Rack** to the shipping **Pallet** to securely fasten the **Rack** to the floor.

1. Align the two **Pallet Brackets** with the **Bracket Holes** on the bottom of the **Rack's Door Frame**. The **Pallet Brackets** can be mounted on the exterior or interior of the **Rack**.
2. Using a **13 mm Socket and Wrench**, insert two of the **Bolts** through the **Pallet Bracket** and into the **Rack**.

3. Insert the other two **Bolts** through the **Pallet Bracket** and into the surface you are securing the **Rack** to.

**Note:** Pilot holes may need to be drilled in the surface you are securing the **Rack** to prior to installing the **Pallet Bracket**.

## Installing the Cage Nuts

**Note:** *When installing equipment in the Rack. Start at the bottom of the Rack with the heaviest equipment and work your way to the top.*

1. Determine the U-space of your equipment and where in the Rack you want to install the **Devices**.
2. Apply pressure to both sides of the **Cage Nut** and insert the **Cage Nut Clamps** into the **Cage Nut Hole** and release the **Cage Nut**.

- or -

Use the included **Cage Nut Wrench** to install the **Cage Nuts** into the **Rack**.

3. Use the **M6 Screws** to secure the **Devices** in place.
4. If your **Device** has mounting brackets with hooks, just hook the bracket in the desired location.

## Removing the Front and/or Rear Door

**Note:** *At least two people are required when removing or reinstalling a **Rack Door**.*

- With the door open at a 90 degree angle to the **Rack Frame**, lift the **Door** from out of its hinges and pull outward to remove it from the **Rack's Door Frame**.

**Note:** *To reinstall the door reverse the steps above.*

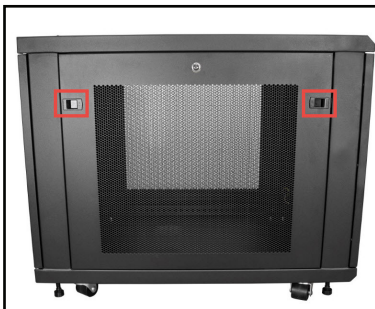
## Removing the Side Panels

**Notes:** *At least two people are required when removing or reinstalling the **Side Panel** from the **Rack**.*

*You may have to unlock the **Side Panel** prior to removal.*



1. While supporting the top portion of the **Side Panel**, pull both of the **Locking Latches** on the side panel toward the center of the **Rack**, to release the side panel from the **Rack Frame**.



*Locking Latches*

2. Slowly tilt the top portion of the **Side Panel** away from the **Rack Frame**.

3. While supporting the weight of the **Side Panel**, pull the bottom of the **Side Panel** away from the **Rack Frame**.

**Note:** *The bottom of the **Side Panel** is hooked onto a lip on the **Rack Frame**.*



*Side Panel Removed*

## Installing the Side Panels

**Note:** *At least two people are required when removing or reinstalling the **Side Panel**.*

1. While supporting the weight of the **Side Panel** align the bottom lip of the **Side Panel** with the lip on the **Rack's Frame**.
2. Slide the lip of the **Side Panel** into the lip on the **Rack's Frame**.
3. Push the top of the **Side Panel** into the **Rack's Frame** until you hear it click (lock) into place.

## Grounding the Rack

1. Insert an **M6 Screw** through the grounding point on the **Grounding Wire** (sold separately) and into the **Ground Hole**, located on the bottom of the **Rack** just inside of either the front or rear **Door Frame**.
2. Run the **Grounding Wire** under the **Rack's Frame** to prevent obstructing the **Rack Door** from closing.
3. Connect the **Grounding Wire** to an earth ground connection.

## Adjusting the Vertical Mounting Rails or Cable Management Rails

The **Mounting Rail Depth** can be adjusted from 2.76" (70 mm) to 30.51" (775 mm).

**Note:** Follow the steps below to adjust the depth of the **Mounting Rails**.

1. Each **Mounting Rail** has two **M6 Screws** and two **Cage Nuts** securing the **Mounting Rail** to two **Depth Adjustment Rails**. One **M6 Screw** and **Cage Nut** is located at the top and one **M6 Screw** and **Cage Nut** is located at the bottom of the **Mounting Rail**.
2. Using a **Phillips Head Screwdriver**, remove the two **M6 Screws** from the **Cage Nuts** on the **Mounting Rail**.



*Removing the M6 Screw*

3. Slide the **Mounting Rail** to access the **Cage Nuts**.

4. Remove the **Cage Nuts** from the **Depth Adjustment Rails** by applying pressure to both sides of the **Cage Nut**.

- or -

Use a **Cage Nut Wrench** to remove the **Cage Nuts** from the **Depth Adjustment Rails**.

5. Once you have determined the mounting depth reinstall the **Cage Nuts** into the **Depth Adjustment Rails**.
6. Slide the **Mounting Rail** along the **Depth Adjustment Rail** aligning it with the **Cage Nuts** inserted in step 5.

**Notes:** *The distance between each of the **Mounting Rail Adjustment Holes** is .827" (21 mm).*

7. Insert the **M6 Screws** through the **Mounting Rail** and into the **Cage Nuts**.
8. Use a **Phillips Head Screwdriver** to tighten the **M6 Screws**.

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