

hardware guide pro & gx range



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Welcome

Your new disguise server is just minutes away from being setup and ready to go. Please read the instructions in this hardware guide carefully in order to understand how to work with your machine.

You can also refer to the online guides at help.disguise.one

The pro range (2×4pro, 4×4pro, vx 1, vx 2 and vx 4) is disguise's cutting edge solution for large and complex shows. The pro range set a standard for power and flexibility. They are suited for the most demanding touring productions, massive multi-projector shows, TV, broadcast and high-quality fixed installs. They also give users the option to change the video output signal through Video Format Conversion cards (VFC), so shows can be delivered with fewer machines, no downstream splitters and practically no latency.

The gx range (gx 1, gx 2 and gx 2c) is the natural evolution of the pro range due to the current demand for real-time generative content in the shows of today and the future. Providing the same rugged touring chassis that we have built and developed over the years but with a little extra power to push those generative effects. The industry first, patented Video Format Conversions cards (VFC) are fully compatible across the complete pro and gx series.

We put great care and effort into the development and manufacture of our products. Please contact your Sales team or the Support team if you experience any issues with this product. Contact details can be found at the end of this booklet.

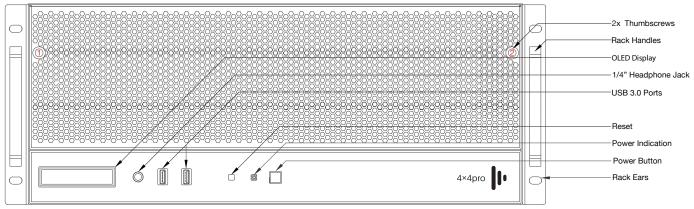
If you have any questions or feedback for us, we'd be happy to hear from you.

The team at disguise

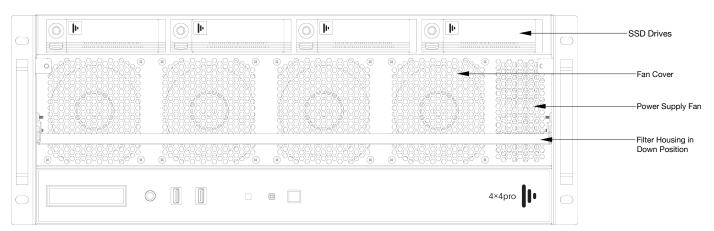


Front panels

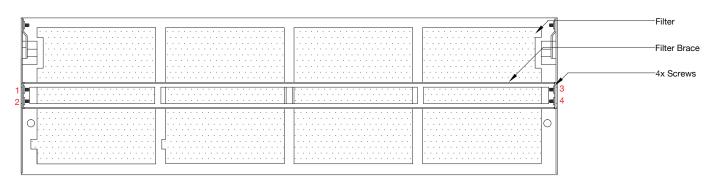
4×4pro front panel



To reveal the drive bay and to inspect the air filter undo the two thumb screws on the front of the unit (1 & 2)



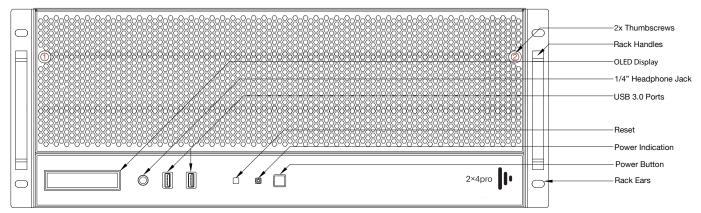
^{*} The 4×4pro comes with 4× SSD drives. For more information on hard drive configuration refer to the online hardware guide.



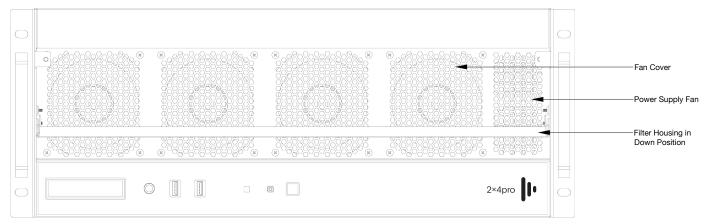
You should regularly inspect the air filter on the front of the unit to prevent loss of cooling efficiency. To remove the air filter material, first remove the screws from the filter housing marked as in the diagram above. Give the filter a clean, replace the filter in the metal frame and reattach the filter brace.



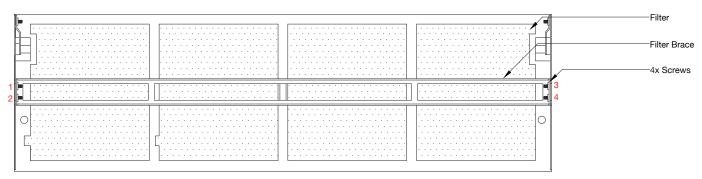
2×4pro/gx 2/gx 2c front panel



To inspect the air filter undo the two thumb screws on the front of the unit (1 & 2)



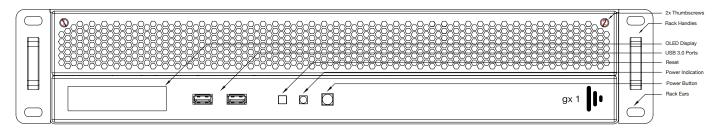
* The 2×4pro/gx 2/gx 2c comes with 1 internal storage drive. For more information on hard drive configuration refer to the online hardware guide.



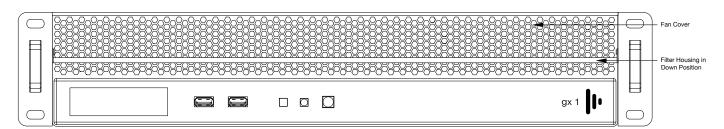
You should regularly inspect the air filter on the front of the unit to prevent loss of cooling efficiency. To remove the air filter material, first remove the screws from the filter housing marked as in the diagram above. Give the filter a clean, replace the filter in the metal frame and reattach the filter brace.



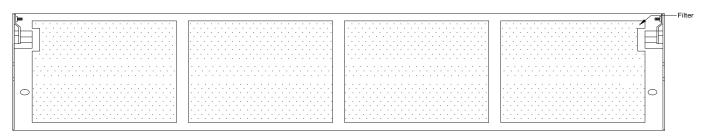
gx 1 front panel



To inspect the air filter undo the two thumb screws on the front of the unit (1 & 2)



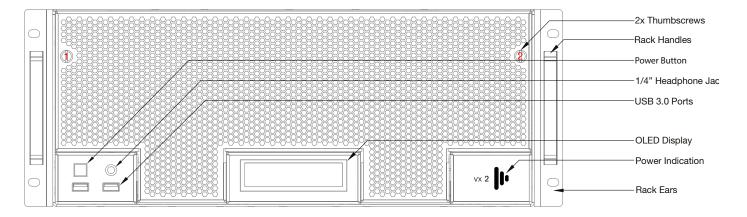
^{*} The gx 1 comes with 1 internal storage drive. For more information on hard drive configuration refer to the online hardware guide.



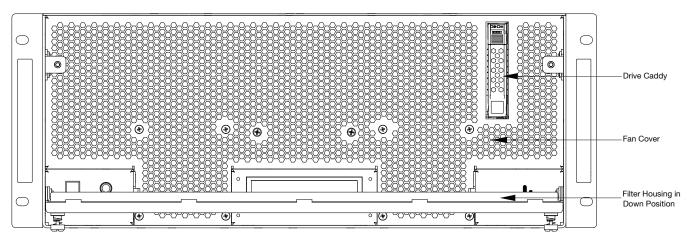
You should regularly inspect the air filter on the front of the unit to prevent loss of cooling efficiency. To remove the air filter material carefully unclip the filter from it's holding tags. Give the filter a clean and replace the filter in the metal frame.



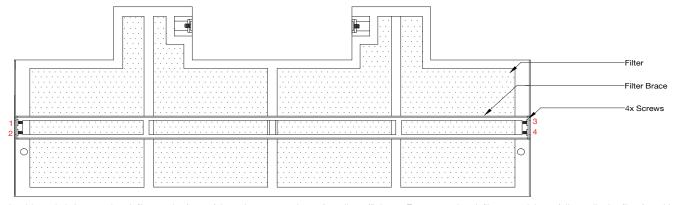
vx 1/vx 2 front panel



To inspect the air filter undo the two thumb screws on the front of the unit (1 & 2)



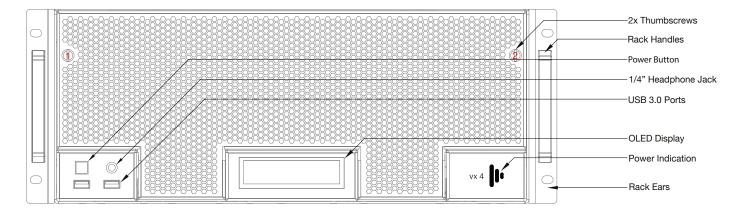
* The vx 1/vx 2 comes with 1× NVMe drive. For more information on hard drive configuration refer to the online hardware guide.



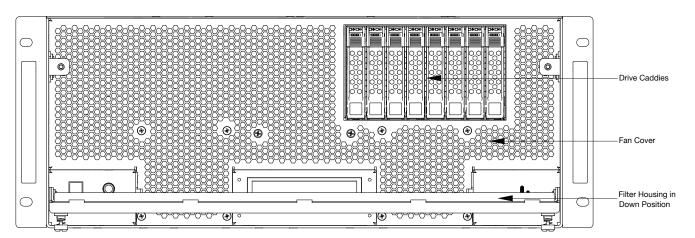
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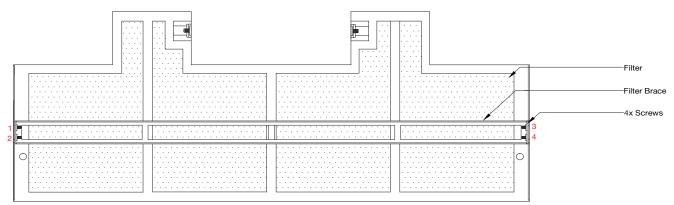
vx 4 front panel



To inspect the air filter undo the two thumb screws on the front of the unit (1 & 2)



* The vx 4 comes with 4× NVMe drives. For more information on hard drive configuration refer to the online hardware guide.

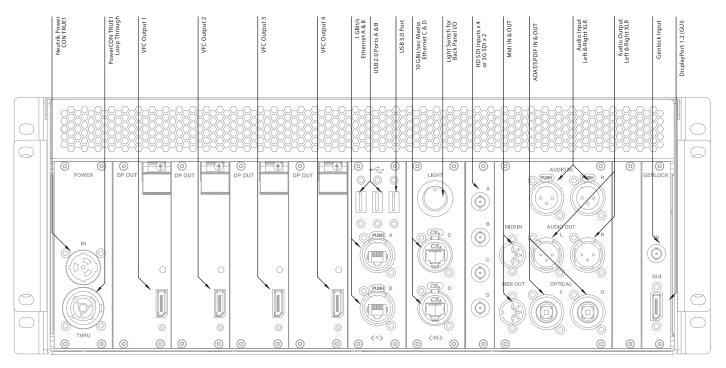


You should regularly inspect the air filter on the front of the unit to prevent loss of cooling efficiency. To remove the air filter material carefully unclip the filter from it's holding tags. Give the filter a clean and replace the filter in the metal frame.

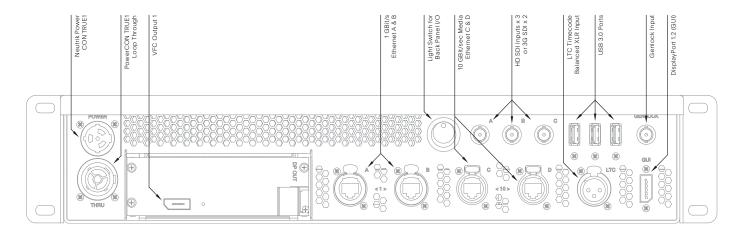


Rear panels

4×4pro back plane

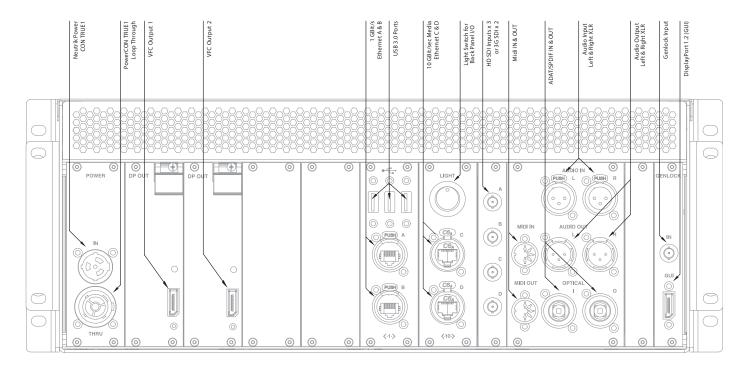


gx 1

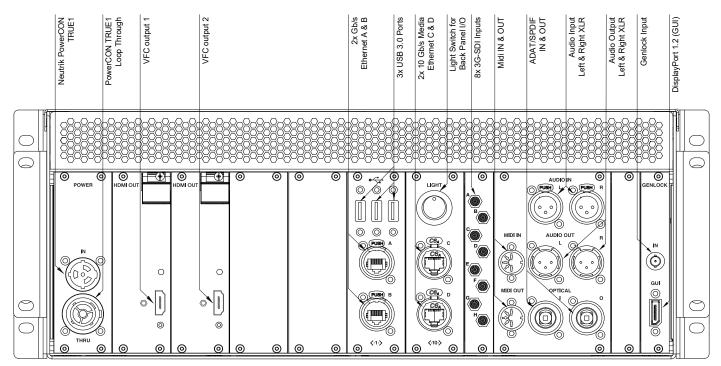




2×4pro/gx 2



gx 2c

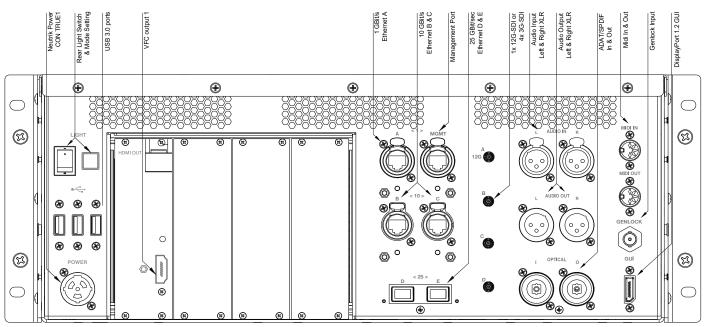


^{*} The gx 2c comes as standard with 2× HDMI VFC as default.

^{**} For capture, please use only 75ohm HD-BNC Cables or adapters.

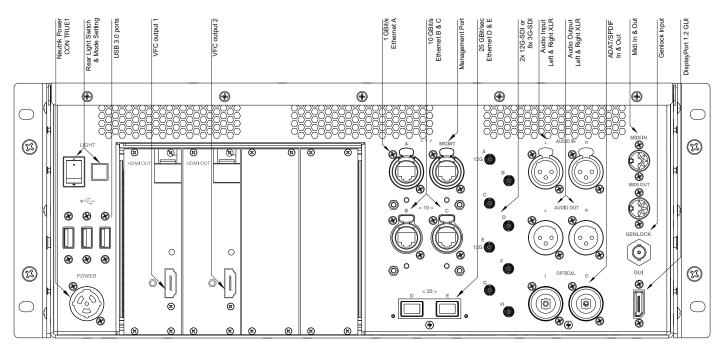


vx 1



- * The vx 1 comes as standard with 1× HDMI VFC as default.
- ** For capture, please use only 75ohm HD-BNC Cables or adapters.

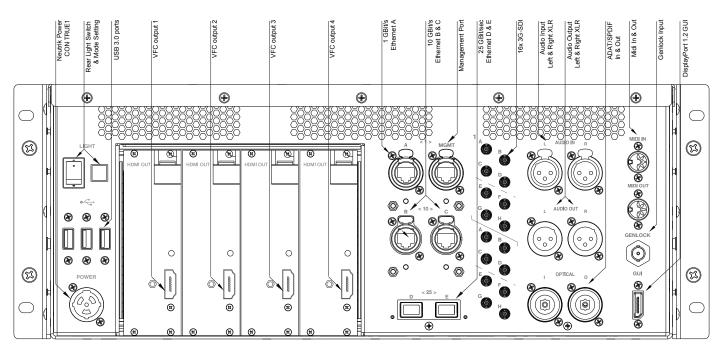
vx 2



- * The vx 2 comes as standard with 2× HDMI VFC as default.
- ** For capture, please use only 75ohm HD-BNC Cables or adapters.



vx 4



 $^{^{\}star}$ The vx 4 comes as standard with 4× HDMI VFC as default.

^{**} For capture, please use only 75ohm HD-BNC Cables or adapters.



Powering your server

The pro and gx range utilises the Neutrik powerCON TRUE1 as its power input. This mains connector is:

- · Lockable
- Live-Mating (safely)
- Extendable
- · Dust and water resistant

To power the server you should use a cable with the following attributes:

- SJT flexible cord, min. 12AWG, min. 300V, min. 60°C, max 4.5 m long
- One end terminated with NEMA 5-15P/BS 1363/CEE 7/7 plug
- Other end terminated with appliance coupler type Neutrik NAC3FX

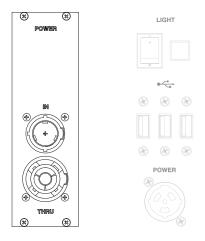
Powering a Multi Server System

The pro and gx range servers (apart from the vx 1/vx 2/vx 4) feature a power pass-through, making it possible to connect multiple systems.

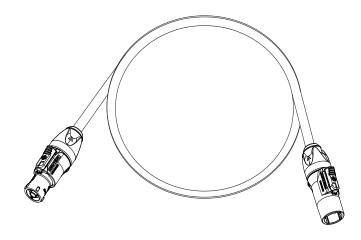
The power input to the machine is rated at 12Amps RMS per connection in Europe and USA.

Loop through cables should have the following attributes:

- SJT flexible cord, min. 12AWG, min. 300V, min. 60°C, max 4.5m long
- One end terminated with appliance coupler type Neutrik NAC3MX-W
- Other end terminated with appliance coupler type Neutrik NAC3FX



Left - True1 Powercon and Loop Through connections on rear of unit. Right - vx 1/vx 2/vx 4 Power panel with Tue1 Input.



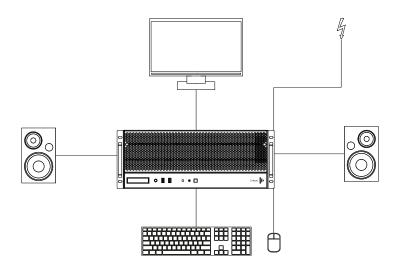
Power cable daisy chain





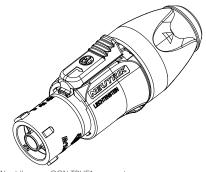
Quick start

1. Make sure you have connected a keyboard, mouse, monitor and speakers as shown below.

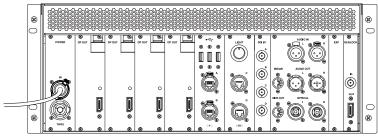


disguise unit connected to peripherals

- 2. Units in the pro and gx range are fitted with Neutrik powerCON TRUE1 connectors as standard.
- 3. Use the included power cable with the Neutrik powerCON TRUE1 connector to connect the unit to a power source.

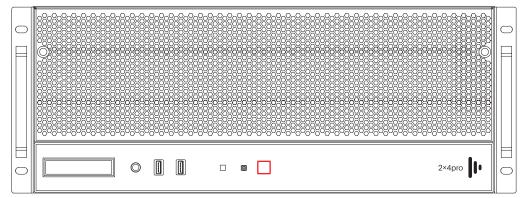


Neutrik powerCON TRUE1 connector



Unit connected to power source

4. Press the power button on the front panel of the unit and wait for the system to boot.

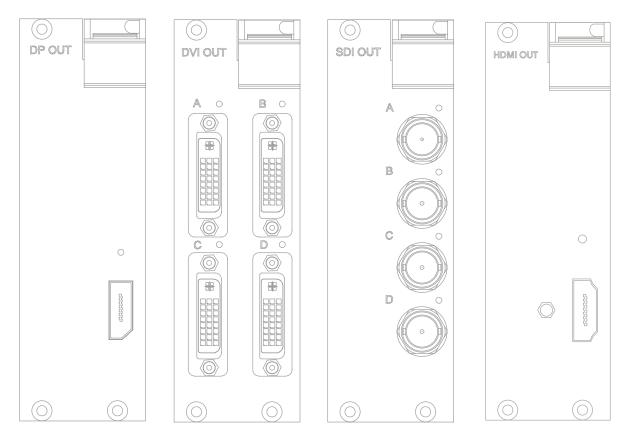


Location of Power on/off button on front of unit



VFC cards

The 4×4pro, 2×4pro, gx 1 and gx 2 ship standard with DisplayPort 1.2 outputs, the gx 2c, vx 1, vx 2 and vx 4 with HDMI 2.0 outputs, giving you 4K outputs plus an extra output for your control GUI. Quad-DVI and Quad-SDI cards (plus DP1.2 or HDMI 2.0 depending on default configuration) are available as accessories, allowing you to change cards as your production demands it.



Shown from left to right: DP 1.2, Quad-DVI, Quad-SDI, HDMI 2.0

VFC Card combinations:

The pro and gx range can combine the above cards in a range of combinations as shown below.

2×4pro - Combination of any two cards at one time.
4×4pro - Combination of any four cards at one time.

vx 1 - Single card at one time.

vx 2 - Combination of any two cards at one time. vx 4 - Combination of any four cards at one time.

gx 1 - Single card at one time.

gx 2 - Combination of any two cards at one time. gx 2c - Combination of any two cards at one time.



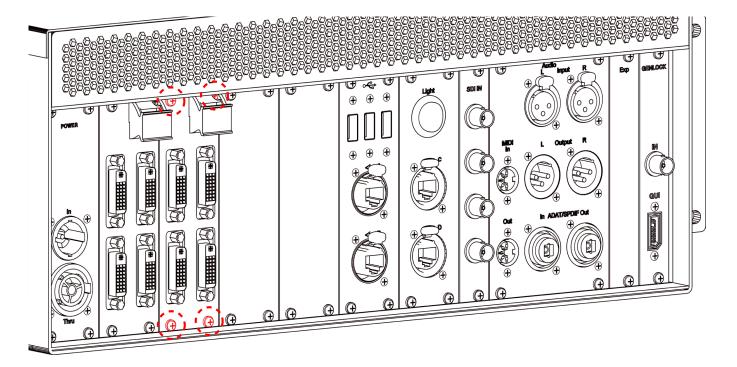
Changing VFC cards

Please note: Take steps to ensure you are free of static electricity before starting the procedure and ground yourself appropriately. We recommend the use of an anti-static wrist strap as well as an anti-static mat if one is available. It is easiest to change the cards starting on the right hand side, and it is advised to do so regardless of the amount of cards you need to change.

Users can change VFC cards as they require. You can replace one or multiple cards. The following steps are a guide to help users change over VFC cards. Please read carefully to ensure best practice. If the system does not work after following these instructions, do not force the VFC cards but call our Support team as per the contact details on the last page of this document.

Step 1: Disconnect the system from all sources of power: remove the power cord from input and output, before changing the VFC cards.

Step 2: Using a Phillips #1 screwdriver loosen the 4× retaining screws on the VFC card you want to replace. The screws are indicated with a red line in the image below.

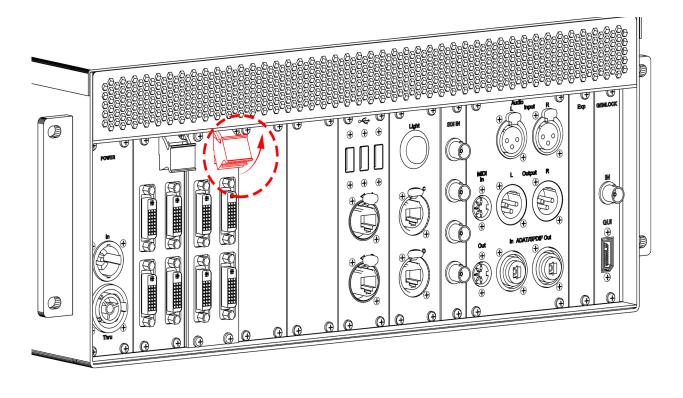


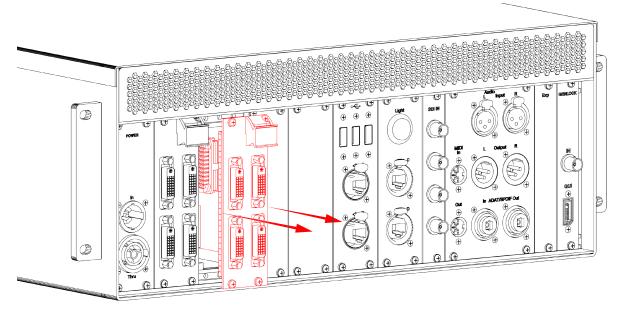
Red lines indicate screw location. Example shows Quad DVI VFC cards



Step 3: Lift the latch on the top right corner of the card and gentlly remove the card from the rear of the unit by pulling gently as shown in the images below.

Please note: The VFC cards are fragile, be sure to pull straight not flexing the card and if under any resistance do not use excessive force. Avoid touching the exposed electronics.

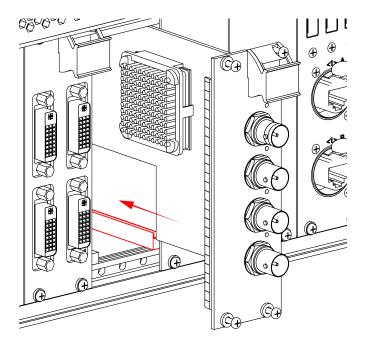






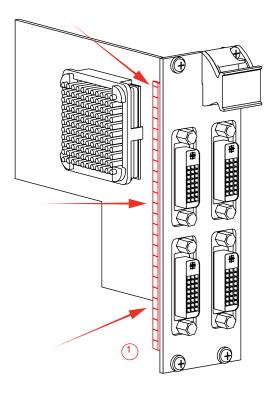
Step 4: Gently place the removed card into the anti static box provided with your purchase.

Step 5: Gently insert the new VFC card into the vacant slot, being careful to line the card up with the guides both at the top and the bottom of the system, as indicated for the bottom with red lines in the image below.

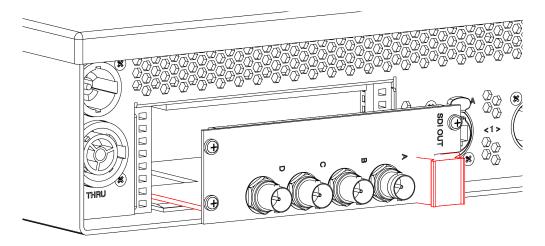


1 - EMC Gasket

Please note: The top and bottom of the card needs to slide into the guides. Be sure that the grounding spring maintains its fixed position to avoid jamming when re-inserting.

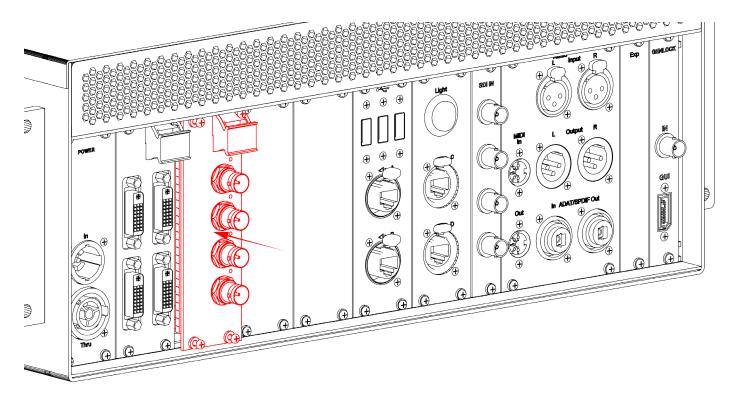


gx 1: With the gx 1, ensure that the latch is on the right when inserting a card. The plastic guides are located near the base of the server and help align the card with the connector.

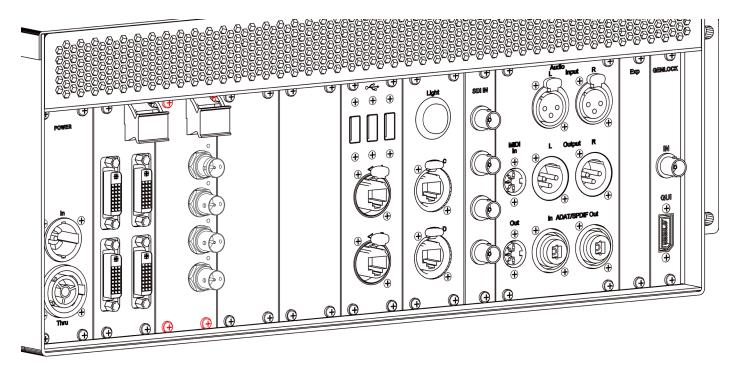




Step 6: Once inserted into the guides, make sure the card is fully flush with the rear of the server by gently and firmly pressing in the centre of the VFC card, as indicated in the image below.



Step 7: Fasten the four retaining screws before repeating all of the steps for the next card. To reduce the risk of damaging the threads, do not apply excessive torque to the screws.





General Information

Should you have questions or experience issues with this product, contact disguise Technologies Support team for assistance. Only certified technicians should attempt to repair or configure components, please contact your sales manager to arrange this or contact one of our support team through the contact page in this booklet.

For replacement parts or possible changes to the configuration, please contact your sales manager to arrange this or contact one of our support team through the contact page in this booklet.

Ultimate disposal of this product should be handled according to all regional and national laws and regulations.

Power consumption:

AC-INPUT 100-240V 50/60Hz

Technical details and specifications can be found at: disguise.one/products

This product contains components compliant with various International standards of manufacture, for full information please contact one of our support team through the contact page in this booklet.



Compliance

The manual and compliance are in reference to disguise products: 2×4pro (d-240000), 4×4pro (MB-4U-SYS-E52600-4076), gx 1 (d-140000), gx 2 (d-240001), gx 2c (d-240003), vx 1 (d-140003), vx 2 (d-240004) and vx 4 (d-440001).

WARNING - To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

Apparatus with Class I construction shall be connected to a mains socket outlet with a protective earthing connection.

CAUTION - The servicing instructions found within this guide are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained within this manual unless you are qualified to do so.

This manual contains contains symbols to remind the user to ensure a safe working practice and environment. To ensure the safe operation/maintenance of this product, the instructions within the guide should be strictly adhered to.



Caution, risk of electric shock



Warning, refer to accompanying documents

Important Safety Instructions:

- 1. Read these Instructions.
- 2. Keep these Instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with a dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with manufacturers guidelines.
- 8. Do not install near heat sources such as radiators, heat registers, stoves, or other apparatus (inc. amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarised or grounding-type plug. A polarised plug has two blades, with one wider than the other. A grounding-type plug has two blades and a grounding prong. The wider blade/prong are included for your safety.
- 10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacle and the point of exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with the card, stand, tripod, bracket or table specified by the manufacturer with the apparatus. When a cart is used, use caution during movement to avoid injury in case of the cart/apparatus falling.



- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified personnel, Servicing is required when the apparatus has been damaged in any way, such as (but not limited to) the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



Support

Helpful contacts

Support Team support@disguise.one
Training Team training@disguise.one
Sales Team sales@disguise.one

Helpful links

User Guide help.disguise.one

Trial disguise.one/en/get-disguise/get-trial Software Updates disguise.one/download-disguise

Additional Designer licenses store.disguise.one