DUTCH MEDIA TOOLS

USER MANUAL

ENGLISH

V1.0



VT403 - 3G SDI Distributor 1x4

Product code: 101273

Preface

Thank you for purchasing this DMT product.

The purpose of this user manual is to provide instructions for the correct and safe use of this product.

Keep the user manual for future reference as it is an integral part of the product. The user manual shall be stored at an easily accessible location.

This user manual contains information concerning:

- Safety instructions
- Intended and non-intended use of the device
- Installation and operation of the device
- Maintenance procedures
- Troubleshooting
- Transport, storage and disposal of the device

Non-observance of the instructions in this user manual may result in serious injuries and damage of property.

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Design and product specifications are subject to change without prior notice.

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Highlite International B.V. – Vestastraat 2 – 6468 EX Kerkrade – the Netherlands

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1. Introduction

1.1. Before Using the Product

Important
Read and follow the instructions in this user manual before installing, operating or servicing this product.

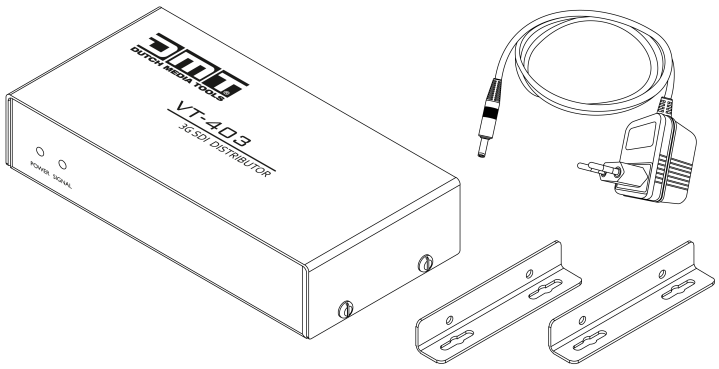
The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual.

After unpacking, check the contents of the box. If any parts are missing or damaged, contact your Highlite International dealer.

Your shipment includes:

- DMT VT403 - 3G SDI Distributor 1x4
- 12 V DC power adapter
- 2 x mounting bracket
- User manual

Figure 1



1.2. Intended Use

This device is intended for professional use as a 3G SDI distributor. It can be installed only indoors. This device is not suitable for households.

Any other use, not mentioned under intended use, is regarded as non-intended and incorrect use.

1.3. Product Lifespan

This device is not designed for permanent operation.

Disconnect the device from the electrical power supply when the device is not in operation. This will reduce the wear and will improve the lifespan of the device.

1.4. Text Conventions

Throughout the user manual the following text conventions are used:

- References: References to parts of the device are in bold lettering, for example: "turn the **adjustment handle (05)**". References to chapters are hyperlinked
- 0–255: Defines a range of values
- Notes: **Note:** (in bold lettering) is followed by useful information or tips

1.5. Symbols and Signal Words

Safety notes and warnings are indicated throughout the user manual by safety signs.

Always follow the instructions provided in this user manual.



DANGER Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.



Attention Indicates important information for the correct operation and use of the product.



Important Read and observe the instructions in this document.



Provides important information about the disposal of this product.

1.6. Symbols on the Information Label

This product is provided with an information label. The information label is located on the base plate of the device.

The information label contains the following symbols:



This device is designed for indoor use.



This device shall not be treated as household waste.



Read and follow the instructions in the user manual before installing, operating or servicing the device.



This device falls under IEC protection class III.

2. Safety



Important
Read and follow the instructions in this user manual before installing, operating or servicing this product.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual.

2.1. Warnings and Safety Instructions



DANGER
Danger for children

For adult use only. The device must be installed beyond the reach of children.

- Do not leave any parts of the packaging (plastic bags, polystyrene foam, nails, etc.) within the reach of children. Packaging material is a potential source of danger for children.



Attention
Power supply

Before connecting the AC power adapter to the power supply, make sure that the current, voltage and frequency match the input voltage, current and frequency specified on the information label on the AC power adapter.



Attention
General safety

- Do not shake the device. Avoid brute force when installing or operating the device.
- If the device is dropped or struck, disconnect the device from the electrical power supply immediately.
- If the device is exposed to extreme temperature variations (e.g. after transportation), do not switch it on immediately. Let the device reach room temperature before switching it on, otherwise it may be damaged by the formed condensation.
- If the device fails to work properly, discontinue use immediately.



Attention
For professional use only
This device must be used only for the purposes it is designed for.

This device is designed to be used as a 3G SDI distributor. Any incorrect use may lead to hazardous situations and result in injuries and material damage.

- This device is not suitable for households.
- This device does not contain user-serviceable parts. Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage.



Attention
Before each use, examine the device visually for any defects.

Make sure that:

- All screws used for installing the device or parts of the device are tightly fastened and are not corroded.
- There are no deformations on housings, fixings and installation points.
- The power cables are not damaged and do not show any material fatigue.



Attention
Do not expose the device to conditions that exceed the rated IP class conditions.

This device is IP20 rated. IP (Ingress Protection) 20 class provides protection against solid objects greater than 12 mm, such as fingers, and no protection against harmful ingress of water.

2.2. Requirements for the User

This product may be used by ordinary persons. Maintenance may be carried out by ordinary persons. Installation and service shall be carried out only by instructed or skilled persons. Contact your Highlite International dealer for more information.

Instructed persons have been instructed and trained by a skilled person, or are supervised by a skilled person, for specific tasks and work activities associated with the installation, service and maintenance of this product, so that they can identify risks and take precautions to avoid them.

Skilled persons have training or experience, which enables them to recognize risks and avoid hazards associated with the installation, service and maintenance of this product.

Ordinary persons are all persons other than instructed persons and skilled persons. Ordinary persons include not only users of the product but also any other persons that may have access to the device or who may be in the vicinity of the device.

2.3. Personal Protective Equipment

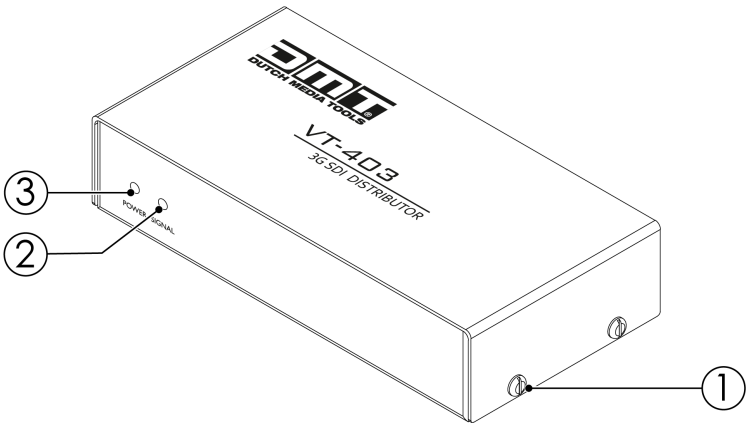
During installation, deinstallation and rigging wear personal protective equipment in compliance with the national and site-specific regulations.

3. Description of the Device

The DMT VT403 - 3G SDI Distributor 1x4 is a 3G SDI distributor that supports up to 1920x1080p @60 Hz. Its housing is equipped with 1 input and 4 outputs. The 2 LEDs on the front indicate the power and signal status. The included power adapter has a lockable DC connector. There are 2 mounting brackets included.

3.1. Front View

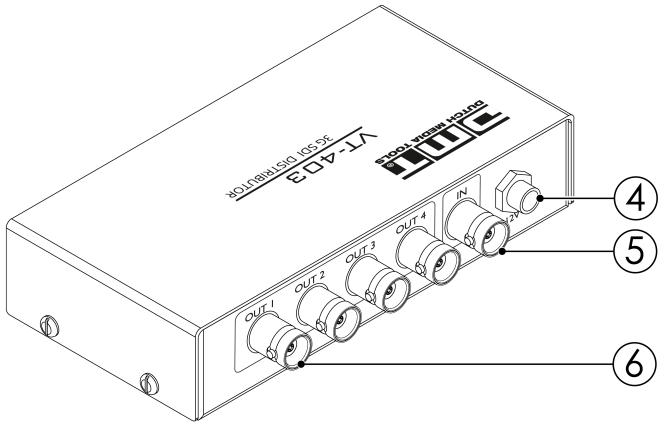
Figure 2



01) 4 x screw for mounting bracket
02) Signal LED indicator (green)
03) Power LED indicator (red)

3.2. Back View

Figure 3



04) DC power connector IN
05) BNC SDI video signal connector IN
06) 4 x BNC SDI video signal connector OUT

3.3. Product Specifications

Model:	VT403 - 3G SDI Distributor 1x4

Inputs:	
3G-SDI (IN)	1

Outputs:	
3G-SDI (OUT)	4

Control and Programming:	
Maximum input resolution	1920 x 1080
Maximum output resolution	1920 x 1080

Electrical Specifications and Connections:	
Power supply	100–240 V AC 50/60 Hz
Output voltage	12 V DC
Power consumption	2,5 W
Power connector IN	Low voltage DC plug
Data connector IN	BNC
Data connector OUT	BNC

Power Adapter:	
Adapter type	AC-DC adapter
Input voltage	100–240 V AC, 50/60 Hz
Output voltage DC	12 V DC

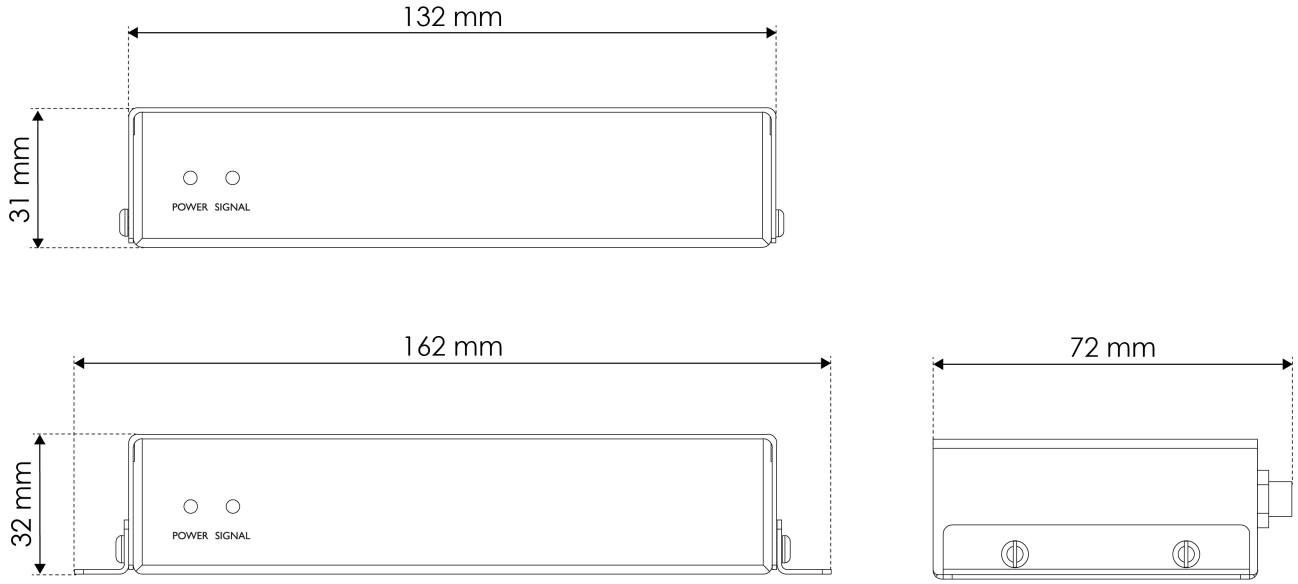
Mechanical Specifications:	
Width (including handles)	162 mm
Width (without handles)	132 mm
Height (including handles)	32 mm
Height (without handles)	31 mm
Depth (including handles)	72 mm
Weight	0,32 kg
IP rating	IP20 (indoor use only)
Housing	Metal
Color	Black

Thermal Specifications:	
Maximum ambient temperature	40 °C
Minimum ambient temperature	0 °C

Included Items:	
Included accessories	Adapter / mounting brackets

3.4. Dimensions

Figure 4



3.5. Optional Accessories

You can additionally purchase the following accessories:

- 101271 VT401 - HDMI to 3G-SDI converter
- 101272 VT402 - 3G-SDI to HDMI converter
- FV05150 BNC to BNC Ø 6 mm (1.5 m)
- FV503 3G SDI cable (3 m)
- FV506 3G SDI cable (6 m)
- FV5010 SDI Cable with Neutrik BNC to BNC (10 m)
- FV5015 SDI Cable with Neutrik BNC to BNC (15 m)
- FV5020 SDI Cable with Neutrik BNC to BNC (20 m)
- FV5050 SDI Cable with Neutrik BNC to BNC (50 m)

4. Installation and Setup

4.1. Warnings and Precautions

Attention
Connect all data cables before supplying power.
Disconnect power supply before connecting or disconnecting data cables.

4.2. Installation Site Requirements

- The device can be used only indoors.
- The maximum ambient temperature t_a = 40 °C must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 40 °C.

4.3. Mounting

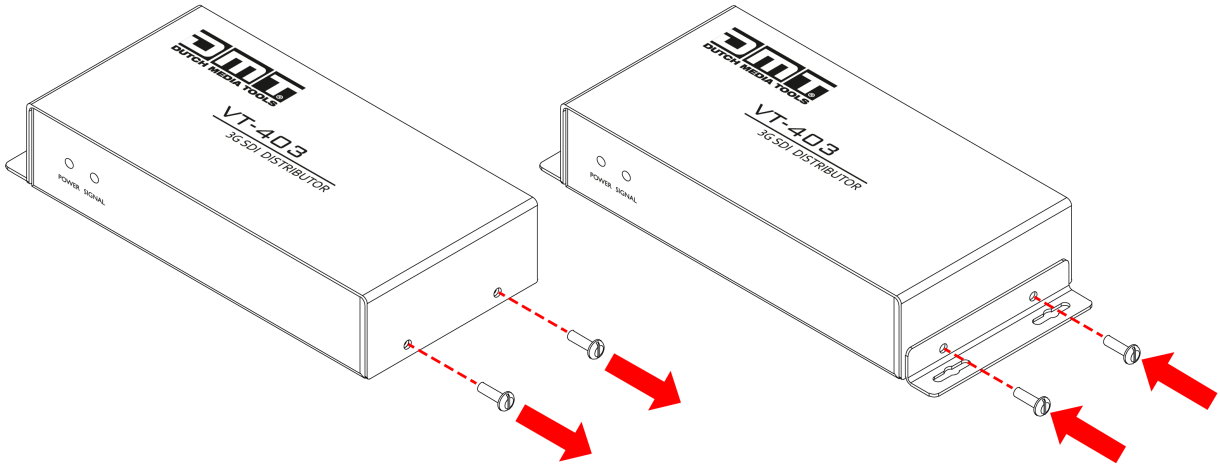
The device can be placed on a flat surface or mounted to a surface or wall. The device is supplied with a set of 2 mounting brackets.

You need a Phillips screwdriver.

To mount the device, follow the steps below:

01) Remove the 4 **screws for mounting brackets (01)**.
02) Insert 2 **screws for mounting brackets (01)** into each mounting bracket and tighten them to attach the mounting brackets to the device.

Figure 5

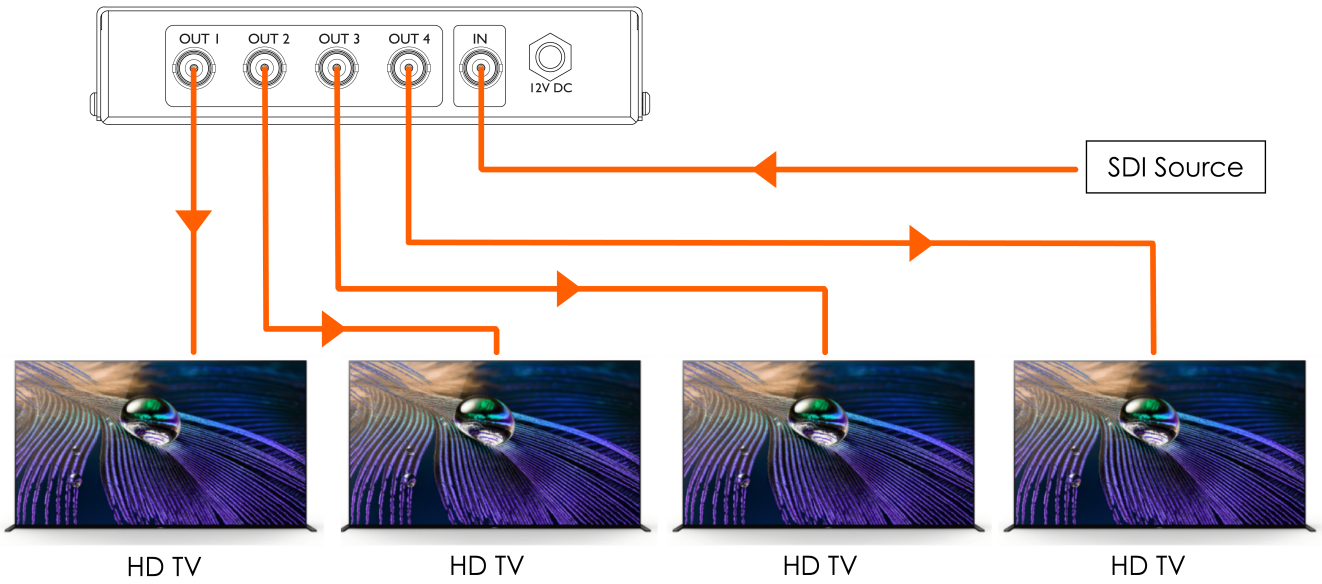


4.4. Setup Example

To connect the device to other devices, follow the steps below:

01) Connect an SDI source device to the **BNC SDI video signal connector IN (05)**.
02) Set the SDI source device to SDI output mode (if necessary).
03) Connect display devices (such as a TV or an SDI device) to the 4 **BNC SDI video signal connectors OUT (06)**.

Figure 6



04) Connect the device to the power supply (see 4.5. Connecting to Power Supply on page 11). The **power LED indicator (red) (03)** will turn on.
05) See if the device works correctly (see 4.6. LED Statuses on page 11).

4.5. Connecting to Power Supply

Attention
Incorrect handling of the AC power adapter may result in hazardous situations.

This device is delivered with an AC power adapter. Incorrect handling of the AC power adapter may result in hazardous situations.

- Make sure that the current, voltage and frequency match the input voltage, current and frequency specified on the information label on the AC power adapter.
- Connect the device to the socket-outlet with the delivered AC power adapter. Use only the AC power adapter delivered with the device.
- Make sure that the socket-outlet is easily accessible.
- Disconnect the AC power adapter from the socket-outlet when the device is not in use.

4.6. LED Statuses

There are 2 LED indicators: a **signal LED indicator (green) (02)** and **power LED indicator (red) (03)**. The LED indicators have the following functions:

- SIGNAL: If the light is on, the device is receiving a correct SDI signal.
- POWER: If the light is on, the device is powered.

5. Troubleshooting

This troubleshooting guide contains solutions to problems which can be carried out by an ordinary person. The device does not contain user-serviceable parts.

Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage.

Refer servicing to instructed or skilled persons. Contact your Highlite International dealer in case the solution is not described in the table.

Problem	Probable cause(s)	Solution
The device does not power up	No power to the device	• Check if the power cable is correctly connected
The device does not function	The device is not correctly connected	• Check if the cables are correctly connected • Replace the cables
	The device cannot convert the received signal	• Check if the output devices work correctly • Check if the resolution settings are correct • Check if the input and output devices are compatible
The output device does not show the expected output	The signal source is disconnected	• Check if the signal source is correctly connected

6. Maintenance

6.1. Preventive Maintenance



Attention
Before use, examine the device visually for any defects.

Make sure that:

- All screws used for installing the device or parts of the device are tightly fastened and are not corroded.
- The safety devices are not damaged.
- There are no deformations on housings, fixings and installation points.
- The power cables are not damaged and do not show any material fatigue.

6.1.1. Basic Cleaning Instructions

To clean the device, follow the steps below:

01) Disconnect the device from the electrical power supply.
02) Allow the device to cool down for at least 5 minutes.
03) Clean the device with a soft, lint-free cloth.



Attention

- Do not immerse the device in liquid.
- Do not use alcohol or solvents.

6.2. Corrective Maintenance

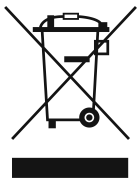
The device does not contain user-serviceable parts. Do not open the device and do not modify the device.

Refer repairs and servicing to instructed or skilled persons. Contact your Highlite International dealer for more information.

7. Deinstallation, Transportation and Storage

- Use the original packaging to transport the device, if possible.
- Clean the device before storing (see 6.1.1. Basic Cleaning Instructions on page 13).
- Store the device in the original packaging, if possible.

8. Disposal



Correct disposal of this product

Waste Electrical and Electronic Equipment

This symbol on the product, its packaging or documents indicates that the product shall not be treated as household waste. Dispose of this product by handing it to the respective collection point for recycling of electrical and electronic equipment. This is to avoid environmental damage or personal injury due to uncontrolled waste disposal. For more detailed information about recycling of this product contact the local authorities or the authorized dealer.

9. Approval

Check the respective product page on the website of Highlite International (www.highlite.com) for an available declaration of conformity.