



Operation Manual

BoxWriter Automated Disc Publisher

Model #: BW7160 (LightScribe, PC-Connected)

Serial Number: _____

(The serial number is labeled on the rear panel of the device.)

PREFACE

Important Safety Instructions

For your safety, basic precautions should always be followed to reduce risk of damage, electric shock, fire, and personal injury. This includes the followings:

- Read this manual carefully and follow all warnings and instructions.
- Operate the unit with only the proper electrical specifications as labeled on the device. Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole grounding receptacles that accept your device's plug. Make sure the device is connected to a known ground.
- Do not expose this unit to direct sunlight, rain, moisture, water, flammable material, gas, dust, dirt, smoke, pollution or abrupt humidity changes.
- Place this device on a steady level surface in an air-conditioned environment with sufficient ventilation. Do not move this device while the power is on. Handle with care.
- This device generates heat during the duplication process. Out-of-specification or unstable power supply may cause overheating, low productivity, increased failure rate, and damage the device.
- Use a reliable power source with a correct voltage and ample current supply. Give this device a dedicated power outlet. Do not share the outlet with other devices.
- Please make it a habit to always unplug the power cord before troubleshooting or performing maintenance. Always turn the power switch to the Off position when connecting the power cord.
- Do not attempt to disassemble this device or touch any of the moving parts. Refer servicing to qualified service personnel. Unauthorized disassembly or repair will void all warranty.

Acknowledgments

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and trademarks are the property of their respective owners.

FCC Compliance: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician.

Use of shielded cables is required to comply with the Class A limits of Part 15 of the FCC Rules. You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate and/or obtain warranty service for this equipment.

Limited Warranty (North America): The information contained in this document is subject to change without notice. Datatronics Technology Inc. makes no warranty of any kind with respect to this information.

Datatronics Technology Inc. guarantees this device for a period of one year from the date of delivery, free from defects in material and workmanship. In case of malfunction or fault, Datatronics Technology Inc. will, at its option, repair or replace the product.

You must return the defective product, protected in the original packaging, with a valid RMA number, to an authorized dealer or reseller within the warranty period accompanied with the proof of purchase.

This warranty only covers parts made by Datatronics Technology Inc. For parts made by other manufacturers, such as hard disks, and disc recorders, the original manufacturer's warranty applies.

This warranty will not cover abuse, misuse, alteration, modification, tampering, negligence, faulty installation, accidents, lack of reasonable care, unauthorized repairs or service, or if installed to any device not provided with the product, or if the serial number label provided with this product has been broken or removed.

This warranty does not cover damages that occur in shipment, due to acts of God. All repairs and replacement services shall only be handled by Datatronics Technology Inc, and by authorized service centers. Parts used for replacement are covered only for the remainder of the warranty period.

Datatronics Technology Inc. disclaims all implied warranties on this product, including without limitation warranties of merchantability, performance, and fitness for a particular purpose.

In no event will Datatronics Technology Inc. be liable for direct, indirect, special, incidental, tort, economic, contingent or consequential damages resulting from any defect in this product or its documentation, including, without, limitation, damages or costs relating to the loss of data, profits, business or goodwill, even if Datatronics Technology Inc., its authorized dealers or resellers have advertised the possibilities of such damages. In no case shall Datatronics Technology Inc.'s liability exceed the amount paid by the user of this product out of which such claim arose.

Any written or oral information or advice given by the dealer, reseller, agent, sales representative, or employee of Datatronics Technology Inc. will in no way increase the scope of this warranty nor should you rely on such oral or written communication.

Technical Support: For technical support and assistance, please contact your local dealer.

For additional information regarding optical disc duplication, printing, and management please visit our website. We value your comments and suggestions and thank you for your purchase.

Datatronics Technology, Inc.
<http://www.datatronics.com.tw>

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UNPACKING YOUR BOXWRITER

Congratulations on purchasing the BoxWriter BW7160 (LightScribe, PC-Connected) Automated Disc Publisher. BoxWriter is a state-of-the-art, automated, optical disc publisher, which requires a PC and software to operate. It is an integrated system with built-in dual optical disc recorders, USB 2.0 interface and auto-loaders. The first recorder is dedicated to disc writing and the second recorder is reserved for LightScribe Labeling.

BoxWriter has an 80 disc capacity and a lockable cabinet that protects discs from dust and unauthorized access. The reject disc handling mechanism allows software to separate faulty discs from a duplication session. BoxWriter, using LightScribe enabled discs, can write, flip, and laser-etch a disc in a single pass, resulting in high resolution, smudge-free, professional-looking discs. It helps the environment by eliminating the need for ink cartridges, and creates customized digital content on an on-demand basis.

Depending on the configuration of your device during purchase, it may come with a LightScribe enabled CD/DVD (BW7160, BW7161) or Blu-ray recorder with the option of a removable Finish Disc Bin or Output Ramp (BW7160-BR, BW7161-BR). In addition to burning CD and DVD discs, the Blu-ray version will also burn Blu-ray discs. The software will determine the disc processing speed and performance.

In addition to burning discs, BoxWriter can also automatically rip or read a stack of discs by running compatible software. Refer to the operation manual that came with the software for further details.

Please read this manual carefully before using BoxWriter. This user guide contains all the information on its operation and maintenance. For additional information regarding optical disc duplication, printing, and management please visit our website. We value your comments and suggestions and thank you for your purchase.

Package Contents

Before opening the package, carefully inspect for any damage. If there is any sign of damage, contact the shipping company and your local dealer immediately.

Save the packing materials in case you need to ship or return your product. The original packaging will ensure the product is protected during transportation. Returning goods without the original packaging may not protect the product during transportation, and will void your

warranty.

Once you have removed all the parts included with your package please check to see if any pieces are missing or damaged. If any part is missing or damaged, contact your local dealer immediately.

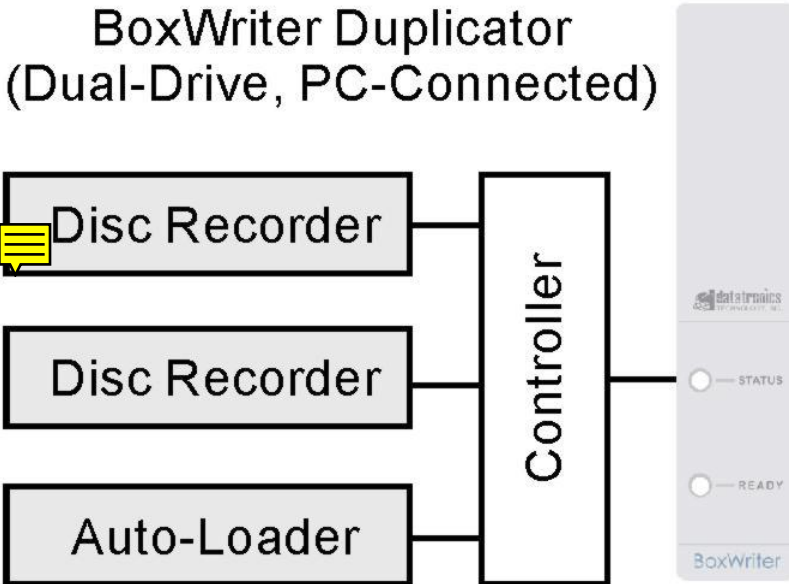
The items listed below should be included in the package:

- One BoxWriter BW7160 Automatic Disc Publisher
- One power cord
- One power adapter
- One USB cord
- One installation CD (includes device driver and software)
- One operation manual

GETTING FAMILIAR WITH BOXWRITER

Block Diagram

BoxWriter BW7160 is an integrated system with two built-in optical disc drives, and auto-loaders. See the illustration below.



Depending on the configuration of your purchase, your BoxWriter may come with one of the following optical disc recorders and features:

- BoxWriter BW7160: LightScribe enabled CD/DVD recorder with removable, lockable bin
- BoxWriter BW7161: LightScribe enabled CD/DVD recorder with open ramp
- BoxWriter BW7160-BR: LightScribe enabled Blu-ray/CD/DVD recorder with removable, lockable bin
- BoxWriter BW7161-BR: LightScribe enabled Blu-ray/CD/DVD recorder with open ramp

Look at BoxWriter

- **LED Indicators**

Located on the top right of BoxWriter, the LED indicators display the device status.

- **Disc Storage**

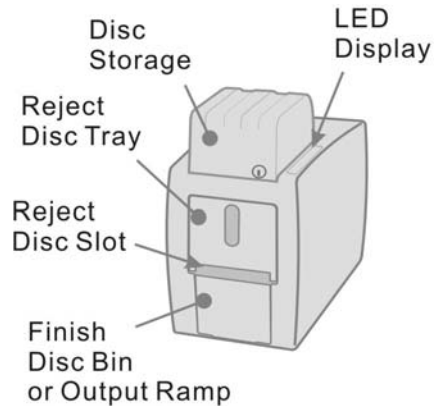
This lockable cabinet secures blank discs. Turn the key to unlock and lift to open. The lock also secures the Finish Disc Bin.

- **Reject Disc Tray**

The Reject Disc Tray, with a 3 disc capacity, receives the rejected discs. Pull down to open.

- **Reject Disc Slot**

The slot where rejected discs will be discarded when the reject tray is in its closed position.



Finish Disc Bin or Output Ramp

Depending on the configuration of your device during purchase it may come with a Finish Disc Bin or Output Ramp. The Finish Disc Bin is where completed discs are stored. Be sure to unlock the Disc Storage cabinet before removing the Finish Disc Bin. The Finish Disc Bin must be in position during operation. Completed Discs will be stacked in the Finish Disc Bin with the labeled side facing down.



The Output Ramp configuration can receive up to five discs when in position. Once the Output Ramp is full, any overflow discs will be pushed off the ramp. The use of a container is suggested to collect any overflow discs. The Output Ramp must be in the pulled down position during operation. Closing the Output Ramp during a session will stop the operation immediately after the current disc being written to has completed. Completed Discs will be placed in the Output Ramp with the labeled side facing up.



Rear View

-
- **USB Port**
Connects BoxWriter to the host PC.
- **Power Socket**
Use the provided power cord to connect BoxWriter to a wall outlet.
- **Power Switch**
Turn BoxWriter on and off.
- **Ventilation**
This allows heat to escape. Do not block this otherwise the unit may overheat.

LED Indicators

BoxWriter’s status is reflected by the LED indicators. When turned on, it will enter initialization indicated by a flashing green light. When initialization is complete, the light will change to steady green. The table below describes the meanings of the LED indicators.



S	R	Description
●	●	The power switch is in the Off position
●	⇒	Device Initialization
●	○	Ready
⦿	○	Busy
○	●	Error

○: Lit ●: Off ⦿: Flash ⇒: Running

HARDWARE INSTALLATION

Finding a Place for BoxWriter

BoxWriter should be placed on a fairly level surface, firm enough to support the unit and discs. Always allow ample workspace for your operation, with easy access to the blank and finished discs.

Do not expose the unit to direct sunlight or high humidity, as it may cause the unit to malfunction.

BoxWriter Installation

Follow the steps below to complete BoxWriter's hardware installation:

- 1) Place BoxWriter on a level surface so that it stands firmly on its legs.
- 2) Use the power cord that came with the unit to connect BoxWriter to a wall outlet with a reliable power supply.
- 3) Use the USB cable that came with the unit to connect BoxWriter to a host computer.

You have now successfully completed BoxWriter's hardware installation.

SOFTWARE INSTALLATION


BoxWriter requires a device driver to be installed before it can work properly with the application software. Before starting the application software installation, the device driver must be installed.

System Requirements

- Microsoft® Windows XP, Vista
- Pentium III 700Mhz (Pentium IV 1.6Ghz Recommended)
- 512MB RAM (1GB RAM Recommended)
- 1024x768 display with 16-bit video card
- Optical disc drive (to install the device driver and software from the installation disc)
- USB 2.0 interface

Device Driver Installation

Follow the steps below to complete BoxWriter's device driver installation:

- 1) Turn BoxWriter on. Wait patiently until the installation is complete and the Ready LED is steady green.
- 2) Turn on the host computer, which is connected to BoxWriter via USB cable.
- 3) Insert the provided installation CD into your CD/DVD drive.
-  4) Connect the power cord to BoxWriter and a wall outlet.
- 5) Connect the USB cable to both BoxWriter and your PC.
- 6) Turn the power switch to the On position.
- 7) Windows will inform you that it has found new hardware. Browse to the installation CD and choose DTALJB.inf as the device driver.

You may now proceed to install the application software. Refer to the user's manual that came with the software for installation instructions.

Note:

Go to the Device Manager in Windows Operating System to verify that the device driver has been successfully installed.



BEFORE GETTING STARTED

Tips for Handling Optical Discs

Never touch the printable or data surface of the disc, as it may decrease quality and disc lifespan. Refer to the arrows on the illustration to the right, Always handle discs from the outer edge or the center hole.

What You Need to Start a Disc Publishing Session

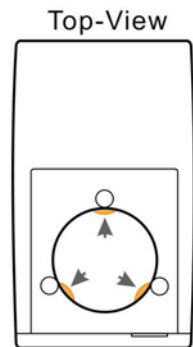
The BoxWriter BW7160 is a PC-connected publisher, which requires a USB connection to a host computer. You will need a computer with the minimum system requirements and compatible software to start a disc publishing session.

Important Tips for Loading Discs to BoxWriter

When the disc loader is empty, do not attempt to load many discs at once.

First, carefully load only one disc into the disc loader and assure it is firmly resting on the three wheels seen in the illustration to the right. You may then gradually load additional discs on top of the first disc, until the loader is full.

BoxWriter processes discs in a First In, First Out (FIFO) sequence. During a duplication session, if a disc refill is required, before the loader becomes empty, gently load additional discs.



Finish Disc Bin is Full or Out of Position

When the Finish Disc Bin or the Output Ram is out of position, the LED indicator will show an error. At the same time, BoxWriter will signal the software to pause the disc session immediately after the active disc has completed writing. Depending on how the software is programmed, it may also alert the user of an error.

Once the Finish Disc Bin is full, BoxWriter will immediately pause the duplication session including any disc in the process of unloading. The LED indicator status will show an error. To resume the session, clear the Finish Disc Bin, return it to position and return to the software to continue operation.

Turning BoxWriter On

Follow the steps below to get your BoxWriter ready:

- 1) Connect the power cord to BoxWriter and a wall outlet.
- 2) Turn the power switch to the On position.

Connect the USB cable to both BoxWriter and your PC.



BoxWriter will enter the initialization process and will remove any discs inside the optical recorders. Please be patient until the initialization process has completed.

When initialization is complete, you will see the “ready” indicator light up signaling that BoxWriter is ready to start a disc operation.

Important:

The Finish Disc Bin or Output Ramp must be in position during operation. Removing the Finish Disc Bin or closing the Output Ramp will stop BoxWriter from operating immediately after the active disc has completed writing.



Turning BoxWriter Off

To turn BoxWriter off, turn the power switch to the Off position. In case there is a session underway, abort or wait until it has completed.



Although it is fine to leave the power cord plugged in, it is recommended that you unplug the cord for increased safety when BoxWriter is not used for extended periods of time.

SPECIFICATIONS

Disc Recorder	Two CD/DVD recorders (BW7160, BW7161); One Blu-ray/DVD/CD recorder and One CD/DVD recorder (BW7160-BR, BW7161-BR) (The first recorder is dedicated to disc writing and the second recorder is reserved for LightScribe Labeling.)
Input Capacity:	80 discs (more discs with non-stop refill)
Output Capacity:	80 discs (BW7160, BW7160-BR); 5 discs with Output Ramp (BW7161, BW7161-BR)
Reject Disc Capacity:	3 discs (unlimited discs using Reject Disc Slot)
Write Speed:	CD-R: 40X; CD-RW: 32X; DVD±R: 18X; DVD±R Dual: 10X; DVD-RW: 6X; DVD+RW: 8X. Blu-ray: 4X (BW7160-BR, BW7161-BR)
Operation Method:	PC-Connected; software is required to operate
Interface:	USB 2.0
Control Panel:	High-Speed, Safe-Speed, Function, Test/Abort; LED Status Indicators
Disc Size:	120 mm in diameter
Operation Temperature:	42°F to 86°F (6°C to 30°C)
Humidity:	5% to 85%, no condensation.
Certification:	CE and FCC; power adaptor is UL approved
Dimensions:	9-1/2" x 17" x 17-1/2"; 23.9 x 44.9 x 47.4 cm
Weight:	22 lb; 10 kg
Power:	100 to 240VAC; 50 or 60 Hz

*Specifications are subject to change without notice.

APPENDIX

BoxWriter Maintenance

Periodically cleaning the device will ensure proper performance. Follow the steps below to maintain BoxWriter:

- 3) Turn the power switch to the Off position.
- 4) Remove the master and blank discs.
- 5) Unplug the power cord from the wall outlet.
- 6) Clean the BoxWriter unit using a lint-free cloth moistened with warm water.
- 7) Dry the unit immediately with a dry lint-free cloth.

Choosing Reliable Blank Discs

The quality of a recordable disc depends on its chemical coating technology. There are a variety of discs with various degrees of disc quality available on the market. If you encounter a high failure rate, please try a different type, speed, or brand of disc.

There are many different brands, speeds and CD/DVD recordable media formats on the market. We do our best to test certain media types. It is impossible for us to guarantee that all discs will be compatible.

Please choose a blank disc that is most suitable for your application. You may contact your local dealer for advice on the best suitable blank disc for your system. In addition, we suggest users to test blank discs by using disc simulation before actually writing to discs.

Disc Separation

Certain blank discs may tend to stick to each other or may be difficult to separate. Avoid these types of discs. BoxWriter is equipped with a patent pending disc separator, which handles discs that adhere to each other better than traditional auto-loaders. However, it is strongly recommended that you separate or loosen blank discs from each other before use.

Important:

As with blank discs, the quality and the data format of the master disc play a critical role in the duplication process

Writing Speed

The recorder will automatically adjust the writing speed according to the disc quality. The system will monitor and automatically adjust the writing speed as the optical laser moves from the inner ring to the outer ring, up to the selected speed. The recorder's maximum speed may never be reached if a lower grade disc is used.

At the maximum speed, for a single recorder, duplicating a 4.7 GB DVD should not take more than 8 minutes. Please check both the quality of the blank and the master disc if the duplication process takes more than 8 minutes for a single disc. Use a reliable master disc for archiving purposes. You should also try different specification and brands of blank discs.

You should also check the power supply's voltage and amperes. Insufficient power supply may decrease output rate or increase failure rate.

As a general rule, a lower writing speed will improve quality. When creating audio and video discs a lower writing speed is recommended to assure quality.

FREQUENTLY ASKED QUESTIONS

Why is my duplication failure rate so high?

- Try a lower writing speed using the software.
- Use a different brand of blank discs.
- Check the power source.

Why do my discs get stuck in the disc loader during the duplication process?

- Check to see if the disc is the standard size (120mm).
- Make sure discs are level in the loader.
- Reduce the quantity of discs per load. Some discs may bend from the weight of the discs placed on top of them.
- Use a different brand of blank discs.

Why won't the power switch work all the time?

- Allow a 30 second interval when switching the power on and off.

Why does the disc loader fail to pick up the disc?

- Check to see if the disc is the standard size (120mm).
- Make sure the discs are not bent or damaged.

Why is the disc unloader dropping two or more discs at a time?

- Check to see if the disc is the standard size (120mm).
- Make sure the discs are level when inserted.
- Separate or loosen the discs from each other before use.
- Use the same brand of discs. Do not mix disc types or brands.
- Reduce the quantity of discs per load. Some discs may bend from the weight of the discs placed on top of them.
- Use a different brand of blank discs.

How can I restart or reseBoxWriter when it is not working properly?

- Turn the power switch to the Off position and back to the On position after waiting 30 seconds. If this does not solve the problem, please contact your dealer or authorized service center.

