



PDT 3540

*Quick Reference • Guide utilisateur • Kurzübersicht
Guida rapida • Guía rapida • Quick Reference
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Quick Reference

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<http://www.symbol.com>

Patents

This product is covered by one or more of the following U.S. and foreign Patents:

U.S. Patent No. 4,360,798; 4,369,361; 4,387,297; 4,460,120; 4,496,831; 4,593,186; 4,603,262; 4,607,156; 4,652,750; 4,673,805; 4,736,095; 4,758,717; 4,816,660; 4,845,350; 4,896,026; 4,897,532; 4,923,281; 4,933,538; 4,992,717; 5,015,833; 5,017,765; 5,021,641; 5,029,183; 5,047,617; 5,103,461; 5,113,445; 5,130,520; 5,140,144; 5,142,550; 5,149,950; 5,157,687; 5,168,148; 5,168,149; 5,180,904; 5,229,591; 5,230,088; 5,235,167; 5,243,655; 5,247,162; 5,250,791; 5,250,792; 5,262,627; 5,262,628; 5,266,787; 5,278,398; 5,280,162; 5,280,163; 5,280,164; 5,280,498; 5,304,786; 5,304,788; 5,306,900; 5,321,246; 5,324,924; 5,337,361; 5,367,151; 5,373,148; 5,378,882; 5,396,053; 5,396,055; 5,399,846; 5,408,081; 5,410,139; 5,410,140; 5,412,198; 5,418,812; 5,420,411; 5,436,440; 5,444,231; 5,449,891; 5,449,893; 5,468,949; 5,471,042; 5,478,998; 5,479,000; 5,479,002; 5,479,441; 5,504,322; 5,519,577; 5,528,621; 5,532,469; 5,543,610; 5,545,889; 5,552,592; 5,578,810; 5,581,070; 5,589,679; 5,589,680; 5,608,202; 5,612,531; 5,619,028; 5,664,229; 5,668,803; 5,675,139; 5,693,929; 5,698,835; 5,705,800; 5,714,746; 5,723,851; 5,734,152; 5,734,153; 5,745,794; 5,754,587; 5,762,516; 5,763,863; 5,767,500; 5,789,728; 5,808,287; 5,811,785; 5,811,787; 5,815,811; 5,821,519; 5,821,520; 5,823,812; 5,828,050; D305,885; D341,584; D344,501; D359,483; D362,453; D363,700; D363,918; D370,478; D383,124; D391,250.

Invention No. 55,358; 62,539; 69,060; 69,187 (Taiwan); No. 1,601,796; 1,907,875; 1,955,269 (Japan).

European Patent 367,299; 414,281; 367,300; 367,298; UK 2,072,832; France 81/03938; Italy 1,138,713.

rev. 10/98

Quick Reference

Introduction

The Symbol portable data terminal (PDT) 3540 is a hand-held data collection device with an integrated radio used to communicate in a Spectrum24 radio network environment. The terminal downloads the application and operational software from the Spectrum24 network.

Package Checklist

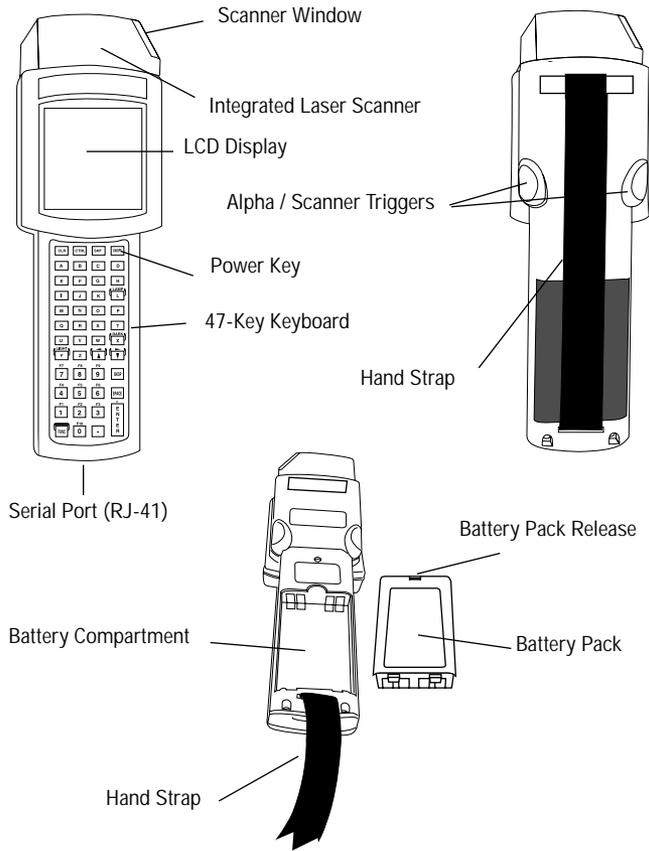
Check the package for the following contents:

- Terminal
- NiMH battery

If any items are missing, contact the Symbol Support Center at 1-800-653-5350 for assistance.

Quick Reference

3540 Terminal Components



Quick Reference

Accessories

Required Accessories

Required PDT 3540 accessories include:

- single-slot cradle, or
four-slot cradle
- replacement nickel metal hydride (NiMH) battery

Optional Accessories

Optional PDT 3540 accessories include:

- Symbol printers
 - PS 200
- Symbol laser scanners
 - LS 2000 - LS 3000
 - LS 5000 - LS 9100
 - LT 1700
- Symbol contact wand scanner, LP 1500
- Battery charger, UBC 1000 charger

Installation Overview

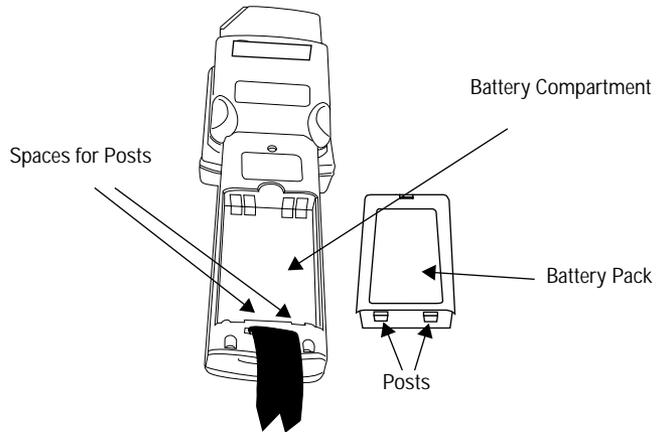
- Install the battery
- Charge the battery
- Initiate the network connection

Each procedure is detailed on the following pages.

Quick Reference

Install a New or Recharged NiMH Battery

1. Insert the battery pack in the bottom of the compartment.
Two posts on the battery pack must fit in corresponding spaces in the housing.



2. Push the battery pack's upper surface forward until it lies flat in the compartment, flush with the housing.
When it lies in this position, the lift tab snaps in and the contacts meet.
You may wish to charge another battery pack to have a spare available. See *Charge the Battery*.
3. Reattach the handstrap.

Quick Reference

Charge the Battery

Charge the NiMH battery prior to terminal use. Optional equipment for charging the battery is listed in *Accessories*.

Note: For information on charging the PDT 3540 in a Symbol cradle, refer to the **3165/3166 Cradle Base Modules Quick Reference Guide**, Symbol P/N 70-11313-01.

Initiate Network Connection

Cold Boot the Terminal

Note: Verify that terminal is OFF before cold booting.

1. Press and hold A+B+D.
2. Press PWR.
3. Release A+B+D.

The terminal boots DR-DOS and loads the TCP/IP drivers while displaying a series of boot messages.

Enter New Net Id in Configurator

On first boot (out of the box), the terminal automatically brings up the Configurator screen for entering a new Net Id:

```
CONFIGURATOR 1.XX
View config params
Net Id
Subnet Mask
Default Router
Terminal IP Address
Exit
↑↓ , Clear, Enter
```

Quick Reference

To enter a new Net Id (obtained from the network administrator):

1. Use the UpArrow and DownArrow to cursor to Net Id.
2. The default Net Id appears in hex format. Backspace over the existing value, type a new value in the range 102-1FE (in hex, not case sensitive), and press ENTER.
3. Power the terminal off.
4. Cold boot the terminal again.

Terminal Attempts to Associate with Access Point

The terminal attempts to associate with an Access Point (AP) using the default Net Id.

If Terminal Association with AP Is Not Successful

If the terminal is unable to associate with the AP (the Net Id is wrong or forgotten), it displays the message:

```
STAT24 Ver 1.XX  
NOT Associated
```

for a few seconds. A second message follows:

```
Terminal cannot associate with AP. You're  
out of range or not configured. Ctrl+C to end  
or other key to retry. Strike any key when  
ready.....
```

The terminal continues trying to connect until attempt is cancelled.

Quick Reference

To cancel and set up a new Net Id (obtained from the network administrator):

1. Press Ctrl+C to end the attempt. The terminal displays the message:

```
Halt Batch process Y/N?
```

2. Type **Y** to exit to the DOS prompt (D:).
3. At the DOS prompt, type **CFG24** and press ENTER to initiate the Configurator and bring up the Configurator screen:

```
CONFIGURATOR 1.XX  
View config params  
Net Id  
Subnet Mask  
Default Router  
Terminal IP Address  
Exit  
↑↓, Clear, Enter
```

4. Use the UpArrow and DownArrow to cursor to Net Id.
5. The current Net Id appears in hex format. Backspace over the existing value, type a new value in the range 102-1FE (in hex, not case sensitive), and press ENTER.
6. Power the terminal off.
7. Cold boot again.
8. The terminal attempts to associate with an AP.

If Terminal Association with AP Is Successful

If the association is successful, the terminal obtains an IP address and boot file name, displays the message:

```
BOOTP 1.0X
```

and begins downloading files from the BOOTP server. As the download runs, the terminal displays a series of application-defined messages. If the download is successful, the terminal displays messages indicating success and the application logon screen. Begin operating the terminal application.

If Association Is Successful But Download Fails

The download may fail due to one of the following reasons:

Terminal Cannot Find BOOTP Server: If the terminal cannot find the BOOTP Server for download, it displays the message:

```
Cannot find Boot Server, time out
```

```
You have no boot server or it has problems
```

and returns to the DOS prompt. Request help from the administrator.

Quick Reference

File Transfer Fails. If the file transfer fails, the terminal displays the message:

```
TFTP retry counter exceeded, Receive timeout.  
Error <filename>  
Ctrl-C to end or other key to retry.
```

where **<filename>** is the file being transferred that was not fully downloaded. The terminal may be out of range of the AP and cannot find the files to transfer.

1. Ctrl+C to exit and request help from the administrator.

OR

Press a key to retry the file transfer.

2. If the file transfer retry is successful, the terminal displays messages indicating success and the application logon screen. Begin operating the terminal application.

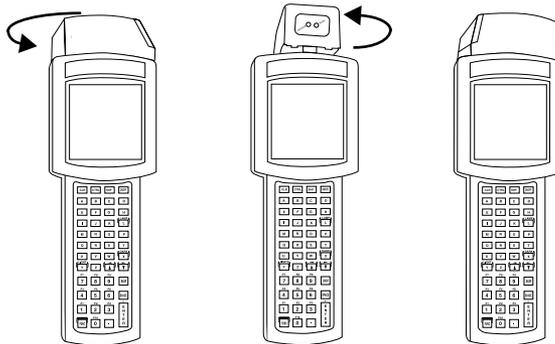
If not, contact the administrator.

Note: *This process is for the terminal with a 256KB NVM; messages for the 1.2MB version may differ.*

Using the Integrated Scanner

The integrated scanner has a unique trigger that the operator can configure. To select the trigger and use the integrated laser scanner:

1. Power on the system and scanner by pressing **ON/OFF** or the scanner trigger.
2. Lift and turn the scanner toward the back until it turns to the direction you wish for scanning.

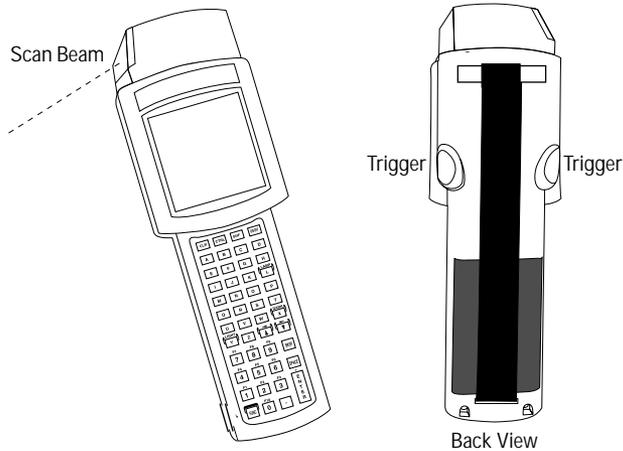


3. Press **FUNC** key and the trigger you are most comfortable using. This selects the scanner trigger. The other trigger defaults to an Alpha Shift key (produces capital letters).

Quick Reference

Scanning 1D (Linear) Bar Codes

1. Point the scanner at the bar code and press the trigger or press the soft trigger key (ENTER).



2. The thin, red laser beam covers the entire length of the bar code.



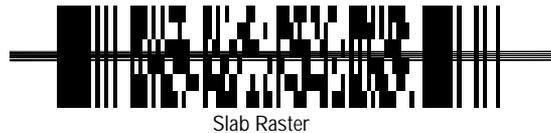
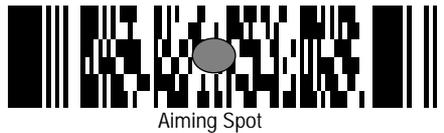
3. The terminal indicates a successful scan by illuminating the green scanner LED, beeping one or more times, and/or displaying the decoded bar code on the screen.

Quick Reference

Scanning 2-D (PDF) Bar Codes

The PDF417 bar code symbol has multiple rows, but the raster pattern also has multiple scanning rows. Whether the aiming pattern is a spot or slab raster, do two basic things as you scan:

1. Point the scanner at the bar code and press the trigger or press the soft trigger key (ENTER).
2. Center the aiming pattern (a spot or slab raster, as programmed) on the bar code.



3. As the raster pattern spreads, keep the pattern in the same horizontal plane as the bar code.



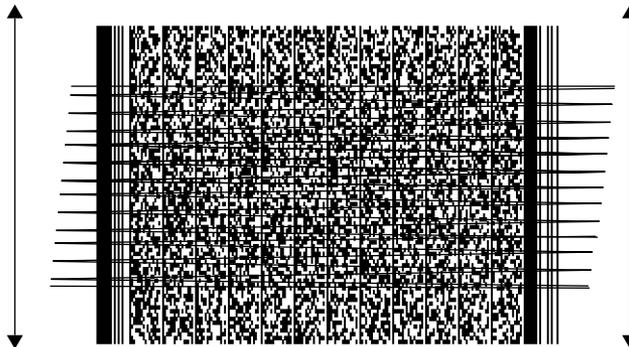
Quick Reference

4. The terminal indicates a successful scan by illuminating the green scanner LED, beeping one or more times, and/or displaying the decoded bar code on the screen.

“Tall” PDF Bar Codes

If the PDF417 symbol is “tall,” the vertical scan pattern may not be high enough to cover it.

In this case, try a slow “up and down” scanning motion. With the raster pattern open, try to move the scanner slowly down toward the bottom of the symbol, keeping the beam horizontal to the rows, and then slowly back upward toward the top.



The scan beam does not have to be perfectly parallel with the top and bottom of the symbol (up to a 4° tilt will work).

Quick Reference

Troubleshooting

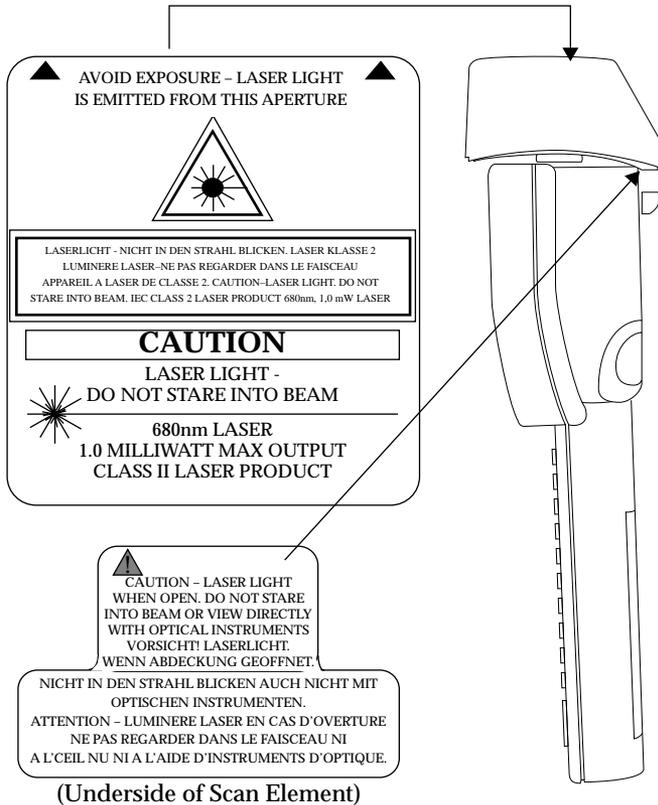
Problem	Explanation/Action
Boot process fails	<p>Terminal is out of the AP's range.</p> <p>If you move the terminal during the boot process, terminal may be out range of the AP and unable to complete the process. Move back in range and repeat the boot process.</p> <p>OR</p> <p>Boot server doesn't exist. Contact administrator.</p> <p>OR</p> <p>Boot server not configured for this terminal. Contact administrator.</p>
File transfer process failed	<p>Terminal is out of the AP's range.</p> <p>If you move the terminal during download, terminal may be out range of the AP and unable to complete the download. Move back in range and continue the download process.</p> <p>OR</p> <p>File transfer host is not set up with the boot file information or host is not available. Contact administrator.</p> <p>OR</p> <p>Segments missing from file transfer directory. Contact administrator.</p>
Low Battery Message	<p>Place the terminal in a cradle and recharge battery.</p> <p>OR</p> <p>Connect terminal to charger and recharge battery.</p> <p>OR</p> <p>Power terminal off and replace battery.</p>

Quick Reference

Problem	Explanation/Action
Battery is dead	Battery not replaced after receiving low battery message or terminal left on for more than 24 hours. Replace the battery. <i>Note:</i> Terminal loses software when power is lost. To reload software, cold boot terminal. Associate with AP and reacquire boot files as described in <i>Initiate Network Connection</i> .
Terminal disassociated from Access Point	Application does not respond to interactive operations. Applications using internal batch mode continue to function until required to transmit via radio, then fail to work. No message displayed. Contact administrator.

Quick Reference

Regulatory Information Scanner Labeling



Quick Reference

Radio Frequency Interference Requirements

This device must operate in compliance with Federal Communications Commission (FCC) Rules and Regulations Part 15.

This equipment has been tested and found to comply with the limits for Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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:

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

Class I

Symbol U.S. Federal (FDA)/IEC825/EN60825 Class 1 laser products use low power visible or IR lasers. Class 1 laser devices are not considered to be hazardous when used for their intended purpose. To comply with U. S. Federal and International regulations, the following statement is required.:

CAUTION: Use of controls, adjustments, or performance of procedures other than those specified herein may result in hazardous visible or invisible laser light exposure.

This advisory statement also applies to all other FDA/IEC825/EN60825 classes of laser products.

Quick Reference

In accordance with Clause 5, IEC 0825 and EN60825, the following information is provided to the user:

**ENGLISH**

CLASS 2 LASER LIGHT
DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT

DANISH

KLASSE 2 LASERLYF
SE IKKE IND I STRÅLEN
KLASSE 2 LASERPRODUKT

DUTCH

KLASSE 2 LASERLICHT
NIET IN STRAAL STAREN
KLASSE-2 LASERPRODUKT

FINNISH

LUOKKA 2 LASERVALO
ÄLÄ TUJOTA SÄDETTÄ
LUOKKA 2 LASERTUOTE

FRENCH

CLASSE 2 LUMIERE LASER
NE PAS REGARDER LE RAYON FIXEMENT

GERMAN

KLASSE 2 LASERSTRAHLEN
NICHT DIREKT IN DEN LASERSTRAHL SCHAUEN
LASERPRODUKT DER KLASSE 2

Quick Reference

HEBREW

אור לייזר
אין להביט אל תוך הזרם
מוצר לייזר רמה 2

ITALIAN

CLASSE 2 LUCE LASER
NON FISSARE IL RAGGIOPRODOTTO AL LASER DI CLASSE 2

NORWEGIAN

KLASSE 2 LASERLYS IKKE STIRR INN I LYSSTRÅLEN
LASERPRODUKT, KLASSE 2

PORTUGUESE

CLASSE 2 LUZ DE LASER NÃO FIXAR O RAIÓ LUMINOSO
PRODUTO LASER DA CLASSE 2

SPANISH

CLASE 2 LUZ LASER
NO MIRE FIJAMENTE EL HAZ
PRODUCTO LASER DE LA CLASE 2

SWEDISH

KLASS 2 LASERLJUS STIRRA INTE MOT STRÅLEN
LASERPRODUKT KLASS 2

Quick Reference

Service Information

Before you use a terminal, it must be configured to operate in your facility's network and run your applications.

If you have a problem with running your terminal or using your equipment, contact your facility's Technical or Systems Support. If there is a problem with the equipment, they will contact the Symbol Support Center:

1-800-653-5350

Outside North America, contact your local Symbol representative.

Warranty

Symbol Technologies, Inc. ("Symbol") manufactures its hardware products in accordance with industry-standard practices. Symbol warrants that for a period of twelve (12) months from date of shipment, products will be free from defects in materials and workmanship.

This warranty is provided to the original owner only and is not transferable to any third party. It shall not apply to any product (i) which has been repaired or altered unless done or approved by Symbol, (ii) which has not been maintained in accordance with any operating or handling instructions supplied by Symbol, (iii) which has been subjected to unusual physical or electrical stress, misuse, abuse, power shortage, negligence or accident or (iv) which has been used other than in accordance with the product operating and handling instructions. Preventive maintenance is the responsibility of customer and is not covered under this warranty.

Wear items and accessories having a Symbol serial number, will carry a 90-day limited warranty. Non-serialized items will carry a 30-day limited warranty.

Warranty Coverage and Procedure

During the warranty period, Symbol will repair or replace defective products returned to Symbol's manufacturing plant in the US. For warranty service in North America, call the Symbol Support Center at 1-800-653-5350. International customers should contact the local Symbol office or support center. If warranty service is required, Symbol will issue a Return Material Authorization Number. Products must be shipped in the original or comparable packaging, shipping and insurance charges prepaid. Symbol will ship the repaired or replacement product freight and insurance prepaid in North America. Shipments from the US or other locations will be made F.O.B. Symbol's manufacturing plant.

Quick Reference

Symbol will use new or refurbished parts at its discretion and will own all parts removed from repaired products. Customer will pay for the replacement product in case it does not return the replaced product to Symbol within 3 days of receipt of the replacement product. The process for return and customer's charges will be in accordance with Symbol's Exchange Policy in effect at the time of the exchange.

Customer accepts full responsibility for its software and data including the appropriate backup thereof.

Repair or replacement of a product during warranty will not extend the original warranty term.

Symbol's Customer Service organization offers an array of service plans, such as on-site, depot, or phone support, that can be implemented to meet customer's special operational requirements and are available at a substantial discount during warranty period.

General

Except for the warranties stated above, Symbol disclaims all warranties, express or implied, on products furnished hereunder, including without limitation implied warranties of merchantability and fitness for a particular purpose. The stated express warranties are in lieu of all obligations or liabilities on part of Symbol for damages, including without limitation, special, indirect, or consequential damages arising out of or in connection with the use or performance of the product.

Seller's liability for damages to buyer or others resulting from the use of any product, shall in no way exceed the purchase price of said product, except in instances of injury to persons or property.

Some states (or jurisdictions) do not allow the exclusion or limitation of incidental or consequential damages, so the preceding exclusion or limitation may not apply to you.



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