

SDDR/SDDL

User's Manual

1 Introduction

Congratulations on your purchase of the Adtron SDDR/SDDL! The SDDR/SDDL allows SRAM, Compact Flash, ATA, and Linear Flash PC Cards to be read on any computer with either a serial (SDDR) or parallel port (SDDL) interface. The SDDR/SDDL simplifies transferring information between PC Cards and a computer. This manual describes how to install and use the SDDR/SDDL.

Before beginning the installation, turn the computer's power OFF.

Model	Description
SDDR	Serial card reader with drivers
SDDL	Parallel card reader with drivers

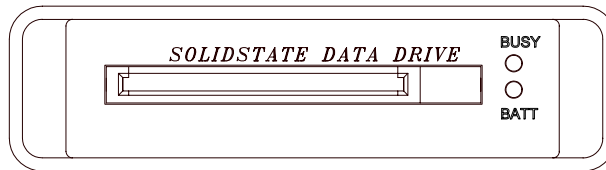
2 System Requirements

The system requirements for the SDDR or SDDL are listed below:

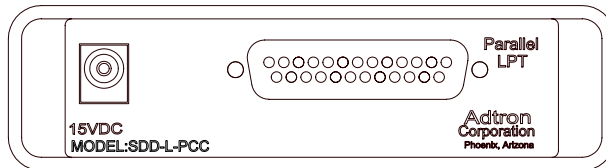
Computer and Operating System

- IBM or compatible computer
- Windows 95/98/NT, DOS / Windows 3.x
- SDDR: an unused serial port
- SDDL: an unused parallel port

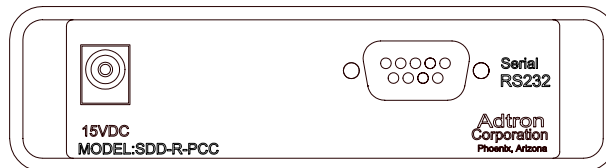
Front view of SDDR and SDDL



Rear view of SDDL



Rear view of SDDR



3 Hardware Installation

SDDR

Attach one end of the included cable to the SDDR and the other end to a COM port (a connector with pins) on the computer. Note which COM port that you will be using. You may need to obtain a 9-pin to 25-pin adapter to connect it to the COM port. **Do not use a Gender Changer with the SDDR.**

SDDL

Attach one end of the included cable to the SDDL and the other end to the printer port (a connector with sockets) on the computer. If possible, we recommend installing an additional printer port for the SDDL, since it does not support printer pass-through. **Do not use a Gender Changer with the SDDL.**

NOTE: Use of hardware locks/dongles/keys and printer switch boxes may prevent the SDDL from working properly. Install an additional printer port to guarantee operation.

4 Connect the Power Supply

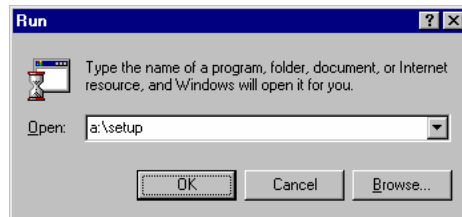
Plug the power adapter into the computer's power strip or a standard wall outlet. Connect the other end to the SDDR/SDDL. The SDDR/SDDL must be turned on before the computer is turned on.

5 Indicator Lights

When the SDDR/SDDL is first powered, the BATT LED indicator should flash RED-GREEN, RED-GREEN, and then go out. The LEDs remain out until the computer accesses the PC Card. As the computer starts, the BUSY LED will flash briefly if the unit is connected and found.

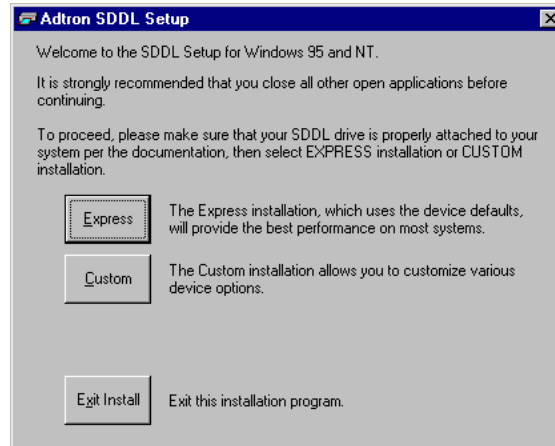
6 Setup for Windows95/98

Place the installation disk into the 3.5" floppy drive. Click on Start, Run, type a:\setup, and then click on OK.

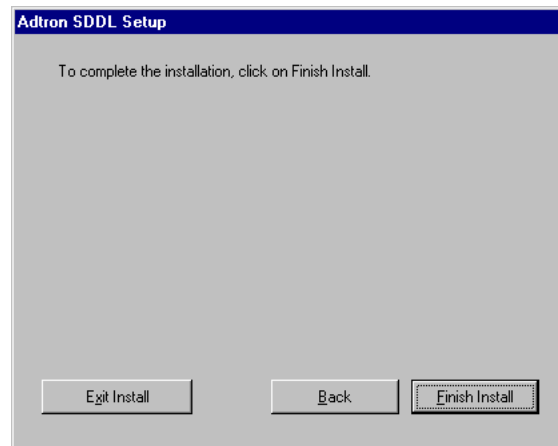


6-1 Express Setup

Choose either express (recommended), custom setup, or exit the setup. This screen is the same for either the SDDR or the SDDL. The only difference is the drive model will be displayed.



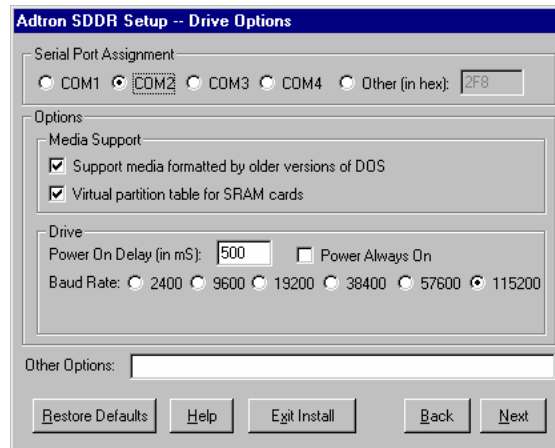
Custom setup should only be used if you know your computer system very well and what port settings that you will want to use.



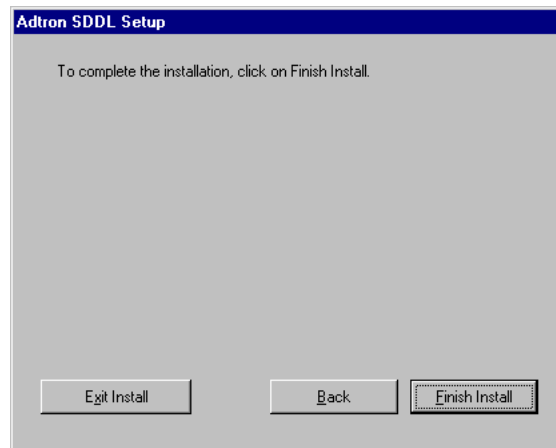
Click finish and the install will be completed and asked that the system be restarted. Once the system comes back up you should see a removable disk in either Windows Explorer or My Computer. This screen will be the same for either the SDDR or SDDL. The only difference is the drive model will be displayed.

6-2 Custom Setup - SDDR

In the screen below, you will see that you can set where the SDDR is located on the system and the baud rate. If the SDDR is on another port beyond COM4 then the 'Other' must be used. In the Other box place the address of the COM port. This screen is for ONLY the SDDR.



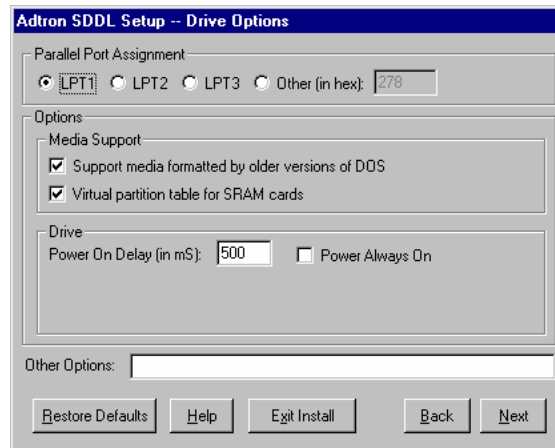
After the changes have been made click next.



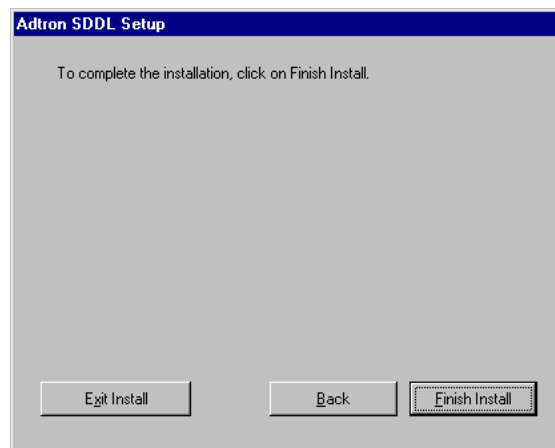
Click on Finish and the installation will be completed and you will be asked to restart the computer. When the system comes back up you should see a removable disk in either Windows Explorer or My Computer.

6-3 Custom Setup - SDDL

In the screen below, you will see that you can set where the SDDL is located on the system. If the SDDL is on another port beyond LPT3 then the 'Other' must be used. In the Other box place the address of the LPT port. This screen is for ONLY the SDDL.



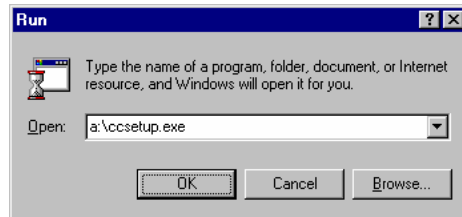
After the changes have been made click on next.



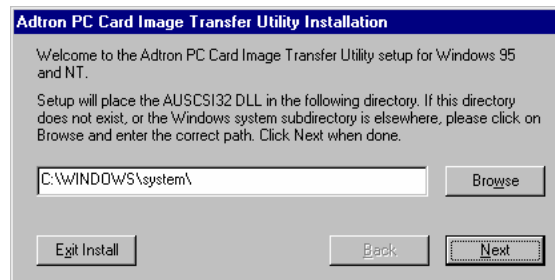
Click on Finish, the installation will be completed and you will be asked to restart the computer. When the system comes back up you should see a removable disk in either Windows Explorer or My Computer.

7 CardCopy Setup

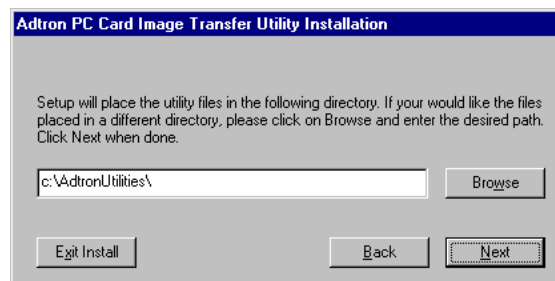
Click on Start, Run..., type a:\ccsetup and then click OK.



The installation program will put the files in the Windows System folder. Click on Next.



If you'd like to place the CardCopy files in an other directory than the default directory, place the desired location into the box.

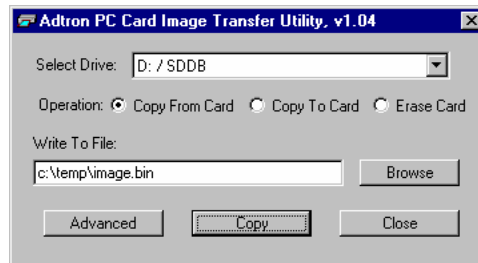


After you click on Next, the installation program will continue to install CardCopy. When it finishes, restart the computer.

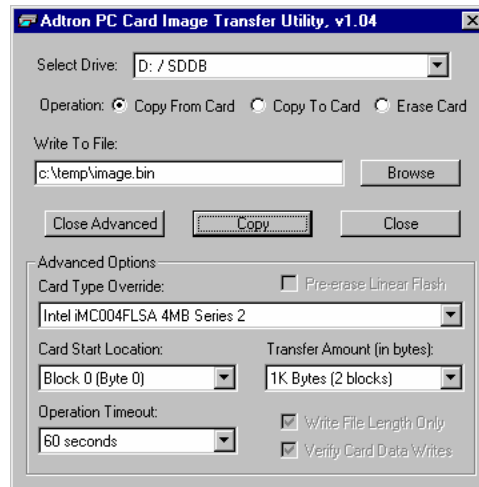
8 Using CardCopy

This is the standard screen. The standard setting is for SRAM cards. If you are going to write an image onto a PC Card other than an SRAM card use the Advanced options.

Note: If you are using this in the WinNT environment, you must be logged in as an Administrator, or Card Copy will not function.



The advanced screen will allow you to select the card type, starting location on a 512byte boundary, to either pre-erase or not, and transfer size from the PC Card. Once you have made your selections click on the copy button.



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9 Using Cardinit

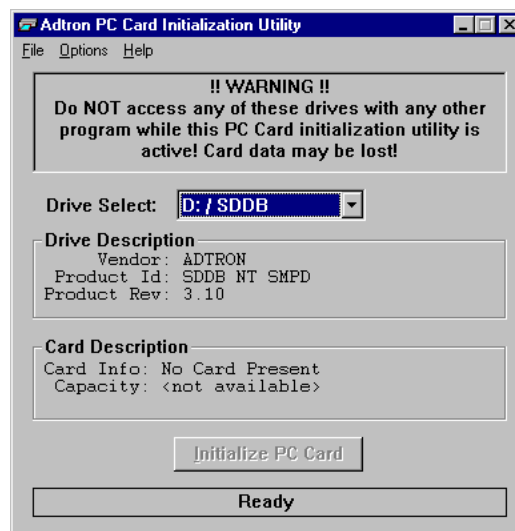
Cardinit is used for ATA and SRAM cards only.

Place the card into the drive and run cardinit.

Click on the initialize button to process the card. The processing indicator will start.

Note: If you have one drive and load cardinit prior to placing the card into the drive it will not operate.

Running Cardinit on the PC Card will not make the PC Card bootable, only usable.



10 Installing the DOS drivers in DOS

To install the DOS driver's run the setup program and it will ask questions concerning the location of the drive and where to store the Adtron files. It will then ask if you want to make the changes to the CONFIG.SYS and AUTOEXEC.BAT files. Once these changes have been made the installer will ask you to restart the computer. When the system comes back up, watch for the driver to be loaded. It will indicate what drive letter has been assigned. If you missed the drive letter assignment, run the program called DRIVES.EXE.

10-1 Manually installing the DOS device driver

To install the DOS drivers in the Win95/98 environment you must add the device line to the CONFIG.SYS file. To do this open the CONFIG.SYS file with NOTEPAD. At the top of the "DEVICE=" list add the following:

For the SDDR: DEVICE=C:\ADTRON\SDDRPCC.SYS /P1 /B1
For the SDDL: DEVICE=C:\ADTRON\SDDLPC.SYS /P1

SDDR - /P and /B values(these values apply to the DOS installation) ;

COM1 - /P1 Baud rate 115,200 - /B1
COM2 - /P2 Baud rate 57,600 - /B2
COM3 - /P3 Baud rate 38,400 - /B3
COM4 - /P4 Baud Rate 9,600 - /B9
PS/2 COM3 - /P5
PS/2 COM4 - /P6

SDDL - /P values(these values apply to the DOS installation);

LPT1 - /P1
LPT2 - /P2
LPT3 - /P3

Save the changes and exit NOTEPAD.

Go into the Windows directory and look for the file IOS.INI. Open this file with NOTEPAD. Below the word [SAFELIST] place the corresponding drive information:

For SDDR: sddrpcc.sys,non_disk ;Adtron SDDR file
For SDDL sddlpc.sys,non_disk ;Adtron SDDL file

Save the changes and exit NOTEPAD.

At this point make sure of all connections and re-start the computer.

Note: Make sure that the directory/folder ADTRON does exist and that the files are copied into the directory/folder.

11 Using CMGRC

It is recommended that you print out the CMGRC.HLP file.

Note: CMGRC can be done in a DOS prompt under Win95/98 only if the DOS drivers are loaded. If the Windows drivers are loaded then CMGRC will not work.

CMGRC will not work in the WinNT environment. You will need to use Card Copy to read and write binary images to the PC Cards.

Here's an example of a typical READ command line entry. It doesn't matter what switch comes first.

ex. (Reading from the PC Card) C:\cmgrc d: -tintf04 -rfile.bin -s20000 -a10

The number used in the "-s" switch is a hex value.

The number used in the "-a" switch is a hex value.

Here's an example of a typical WRITE command line entry.

ex. (Writing to the PC Card) C:\cmgrc d: -tintf04 -wfile.bin -a10

The number used in the "-s" switch is a hex value.

The number used in the "-a" switch is a hex value.

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14 DOS Utilities

FINDSDDR.EXE/FINDSDDL.EXE

If several COM or LPT ports exist on the computer, the utility FINDSDDR.EXE or FINDSDDL.EXE can be used to determine exactly which port the SDDR or SDDL is connected to. The port number is needed to correctly install the device driver. This utility will take several minutes to locate the drive.

CARDINFO.EXE

This utility program will display information about how the memory card is formatted. It can also determine the type of SRAM and Flash memory cards, with or without a CIS. Parameters can be upper or lower case.

To obtain information about the card in drive D:, use the command:

```
cardinfo D:
```

Information about the partition and card type will be displayed.

If the card is an ATA additional information pertaining to the disk drive aspects of the card is available with the command:

```
cardinfo /L D:
```

If only information needed is the card type, use command:

```
cardinfo /G D:
```

If the card has a CIS, the information from the CIS will be used in the display.

If the card does not have a CIS, then CARDINFO will make an educated guess about the card type. In rare cases, the contents of SRAM cards may be altered by this process. To force the guessing algorithm for all cards, use /gg instead of simply /g. Do not force guessing algorithm for Sandisk or ATA cards.

READCIS.EXE

The READCIS program is a utility to read and display the Card Information Structure (CIS) of a memory card. The display is normally in hexadecimal format, each tuple listed separately. To list the CIS from the card in drive D:, use the command;

```
readcis d:
```

READCIS can also decode and display some tuples using ASCII text. Not all tuples can be decoded. Use the command:

```
readcis /a d:
```

For instructions, use the command

```
readcis /h
```

DRIVES.EXE

The program DRIVES will check for installed Adtron device drivers and list them on the display. An option causes all Media Technology Drivers (MTD) within the drives and drivers to be listed also.

To list all drive currently installed, use the command:

```
drives
```

at the DOS prompt. The assigned drive letter, driver name, and version string will be displayed for all Adtron drives.

With the -m option

```
drives -m
```

all MTD's will be listed.

To list the MTD's for a single drive, specify that drive letter.

```
drives -m d:
```

For instructions, use the command:

```
drives /?
```

The Media Technology Drivers are parts of the SolidStat Data Drive firmware that allow the drive to work with specific card types. All drives include the SRAM MTD for reading and writing SRAM memory cards. Other MTD's handle Sandisk, ATA, and the various types of Flash memory. The MTD list determines which cards can be programmed by the Card Manager (CMGRC) commands or Card Copy.

13 Troubleshooting

Problem	Possible Solution
<p>Driver reports "Device not Responding" when accessed or during boot up. DOS</p> <p>No drive letter appearing in the Windows Explorer or My Computer. WIN</p>	<ul style="list-style-type: none"> • Check the cable connection to the drive and correct I/O port of the computer. • For the SDDL Check the BIOS settings for the printer port mode. • For the SDDR check for COM port enabling in the BIOS. • Check the power to the drive. The BATT LED will flash GREEN-RED-GREEN-RED when power is first applied. • For the SDDR the Buad rate maybe to high for
<p>No drive letter appearing in the Windows Explorer or My Computer. WinNT</p>	<ul style="list-style-type: none"> • Check the settings for the drive in the registry. To do this see our web site for instructions. • For the SDDL check the BIOS settings. Make sure that the printer port mode is in SPP. Also check the printer port adress settings. • For the SDDR make sure that the drive is enabled. • Where you the Administrator when the drivers were installed? If not, you will need to log in as an administrator and check all the user rights and security options. For more help on this see our web site. • Check the power to the drive. The BATT LED
<p>Windows95/98 reports that the device is not working properly.</p>	<ul style="list-style-type: none"> • Check the settings in Device Manager. Is the drive connected to the correct port? • Check the power supply. Is it plugged in? • Check the connection to the computer port. Is it
<p>In Windows Explorer, when I try to access the card, it just shows a 3.97MB card with nothing on it. I can't copy anything to the PC Card.</p>	<ul style="list-style-type: none"> • The card may have a poor format on it. Try adding the parameter "/DF" to the adaptor settings field in Device Manager. • The driver doesn't recongnize the format of the card. Verify that the card has a good format
<p>After accessing a card, the BATT LED blinks RED.</p>	<ul style="list-style-type: none"> • The SRAM card's battery is low. Replace the
<p>After accessing a card, the BATT LED is constantly RED.</p>	<ul style="list-style-type: none"> • The SRAM card's bettery is dead. Relace.
<p>The LED does not come on when the power is applied.</p>	<ul style="list-style-type: none"> • Check the power cable and verify that the wall plug has power.

13 Troubleshooting cont.

Problem	Possible Solution
Card Copy gave the error "erase zone error results."	<ul style="list-style-type: none"> Restart the computer and re-run Card Copy. If this still doesn't work then there maybe a
Card Copy gave the error "Could not properly set the card votlage."	<ul style="list-style-type: none"> Make sure that the card is plugged in the drive or the drive has power.
Cardinit or Card Copy will not operate properly under WinNT.	<ul style="list-style-type: none"> You must be logged in as an administrator for Cardinit or Card Copy to operate properly.
CMGRC will not operate properly under Win95/98/NT.	<ul style="list-style-type: none"> CMGRC is a DOS only program. It will not work with the Windows95/98 drivers installed. In the WinNT environment CMGRC will not work at all. For these

To access the computers BIOS setting you will need to restart or completely shutdown the computer. In the very begining of the computers boot cycle some message should appear that says "press <??> to enter setup." Press this key to enter the setup. For Compaq users it will be F10. Once your in the BIOS settings (for the SDDL) look for a periphrial manger or something similar that will let you look at the parallel port mode and address. For the SDDL the printer port mode should be SPP. If this mode is not available you can use the ECP mode. For DELL computers the mode will be AT. For Compaq computers the mode should be standard. If the mode is something differnt than what's listed please change. For the SDDR in the same periphrial manager see that the COM port has an address and not AUTO and is enabled. For WinNT users please visit our Web site.

12 Specifications

Card Types	Type I and II PC Card ATA Flash, CompactFlash, SRAM , and Linear Flash
Indicators	Two bi-color LEDs indicate battery status (BATT) and activity (BUSY)
Interface	SDDR - 9 pin RS232 socket connector set for DCE SDDL - 25 pin LPT socket connector
Size	4.6" Wx 6.25"L x 1.25" (116.84mm x 158.75mm x 31.75mm)
Weight	15oz. (425.24g)
Power Adapter	AC wall adapter supplying 15V @ 300 mA

11 Warranty

Adtron warrants this product to be free from defects in materials and workmanship for two years. If this product fails within two years due to such a defect, Adtron will repair or replace this product at no charge.

This warranty does not apply if this product has been damaged by abuse, accident, disaster, misuse or incorrect installation.

Contact the dealer or distributor to obtain warranty service instructions. Some dealers may have specific return policies not covered by these instructions.

Do not return this product directly to Adtron.

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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 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.



ESD Caution

Static electricity may be discharged through the PC Card into the Accent. In extreme cases this may temporarily interrupt the Accent operation. To prevent this, touch a grounded device, such as a computer case, prior to inserting the PC Card.

There are no user-serviceable components within the Accent.

NOTICE

This manual describes the features of Adtron's Accent. Adtron reserves the right to modify, amend, or in any way change the contents and/or products described herein, at any time, without notification.

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Revision: O
PN: 6102000xx
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