# How to Use the IOGear GFR212SDW6 Pocket Card Reader



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# Introduction

### Preface

# **Technical Definition**



Figure 1.

This document provides instructions for use of the IOGEAR GFR212SDW6 Pocket Card Reader.

The IOGEAR GFR212SDW6 Pocket Card Reader (*Figure 1*) resembles a small portable USB flash drive in which image and data files are transferred rapidly between Secure Digital (SD) and MultiMedia (MMC) memory cards and a PC or MAC computer using the existing file managing software on the computer. The built in device driver operates on plug and play capability so the computer instantly recognizes the Card Reader when connected and files can be easily opened, viewed, and transferred (moved, copied, and pasted) to the memory card just like a USB flash drive. The IOGEAR GFR212SDW6 Pocket Card Reader can also be used as a USB Flash drive. Transfer pictures, data, and music at USB 2.0 speeds, up to 480 Mbps -- 4 times faster than a direct connection with the electronic device! The compact and sturdy enclosure allows you to carry your digital images, audio, and data files with you with ease. The SD or MMC memory card is fully enclosed within the Card Reader case making transport worry free.

# Recommendations

**CAUTION** Keep out of the reach of children. This device is not a toy and is not intended for small children.

**CAUTION** Do Not use the Card Reader should it become wet! Exposure to electricity when wet can be dangerous or cause electrical shock. Damage to the Card Reader or computer can result if wet.

**CAUTION** Care should be taken in handling of the:

- *memory card* to avoid bending or forcing the card into the Card Reader or damaging its contacts.
- *contact pins* to avoid bending or breaking the contact pins contained within the Card Reader card compartment.
- *lid* of the Card Reader to avoid breaking the lid.
- USB connector to avoid damaging the USB Connector and its connector pins.

## Uses for the IOGEAR GFR212SDW6 Pocket Card Reader:

- Interface for transferring files from a device's memory card.
- USB Flash Drive (with a separate purchase of a memory card).

The Card Reader supports integrated use with these operating systems:

- Microsoft Windows 2000, XP, Vista \*
- Macintosh MAC OS 9 or greater \*
- Sun
- Linux

\*No Driver needed for Win ME/2000/XP, MAC OS 9.2.x / OS X

Memory cards (purchased separately):

- Secure Digital (SD)
- Secure Digital High Capacity (SDHC)
- MultiMedia (MMC)
- MultiMedia Plus (MMC+)

Transfer files from:

- digital cameras
- personal digital assistants (PDAs)
- handheld/palmtop PCs
- voice recorders, MP3
- mobile electronic devices that use SD or MMC memory cards
- Handheld PCs
- The Card Reader itself

The IOGEAR GFR212SDW6 Card Reader offers a three year limited warranty.

# **Components**

The **IOGEAR GFR212SDW6 Card Reader** consists of a lightweight (0.2lb) sturdy plastic case that measures 3 inches long, 1.18 inches wide, and 0.6 inches thick when closed. Once the memory card is positioned in place and the lid is closed, the card is concealed within for durable protection. In using the IOGEAR GFR212SDW6 Card Reader (Card Reader) as an interface for file transfer, the electronic device which created the file is not used in transferring the data files and is therefore protected from possible hazards and damage that could incur should the electronic device be directly connected to the computer. (See *Figure 2* to locate the components of the Card Reader. Component descriptions are listed on page 3.)



Figure 2. Components of the IOGear GRF212SDW6 Pocket Card Reader

# **Component Descriptions**

Case. The case is made of durable plastic and resembles a USB Flash drive.

**Strap with Clasp.** The strap retains the cap and permits the Card Reader to be clipped to a keychain, bracelet, or even a zipper latch by means of the lobster clasp.

**Contact Pins.** The contact pins serve to electrically connect the memory card to the Card Reader. Two sets of contact pins exist and are interpolated; each set aligns with either the SD or MMC card.

**Card Compartment.** The card compartment secures the memory card in place so the electrical connections can be made from the memory card to the contact pins of the Card Reader. SD, SDHC, MMC, and MCC plus memory cards are supported.

**Lid.** The lid covers the card compartment to protect the memory card while it is transported or while the Card Reader is connected to a computer.

**USB Connector.** The USB connector is inserted into the computer's USB port as an interface for bidirectional transmission with the computer. The Card Reader supports both USB 1.1 and USB 2.0 standards and is *hot swappable* in that the memory card can be replaced by safely removing the Card Reader without restarting the computer. One type A USB port is required on the computer. All power requirements for the Card Reader are obtained through the USB bus. The Card Reader operates with Windows ME/2000/XP, Vista 64, MAC OS 9 or greater, Sun, and Linux Operating systems. No card driver is required for Win ME/2000/XP, MAC 9.2.x / OS X.

**Cap.** The cap helps to guard the USB connector and is retained by the strap. The cap slides along the strap to move it away from the case when detached.

**LED.** The LED operates as a power indicator that the Card Reader is connected to the computer. When the connection is made the Card Reader signals to the computer and the plug and play operation becomes activated as the computer reads the device driver from the Card Reader. The LED will flash during the plug and play execution. After the connection is complete the LED will remain steadily lit with inactive use. When the Card Reader is employed, the LED will flash with data transfer activity.

# Step-by-Step Instructions

### **STEP 1:**



### **1.** Position the Card Reader on a flat surface with the IOGear lettering and LED facing up.

This positions the USB Card Reader so the lid is facing up and allows access to the card compartment contained within, as shown in *Figure 3*.

Figure 3.

### **STEP 2:**



Figure 4.

**CAUTION** Do not damage the contact pins contained within the card compartment, as this is where the electrical connection is made from the memory card contacts to the Card Reader.

# 2. Lift the lid to view the card compartment.

The contact pins are contained inside the card compartment as shown in *Figure 4*.

The contact pins make the electrical connection from the Card Reader to the memory card contacts.

A Take care not to damage the contact pins while handling.



Figure 5.

Secure Digital (SD) memory card

### **STEP 3:**



Figure 7.

**CAUTION** Do not force the card into place! Note the orientation of the memory card to the Card Reader contacts. The memory card will insert with contacts down and keyed end inserted first.

# **Memory Card information**

The memory card contains contacts on one side (*Figure 5a*) and a label on the other (*Figure 5b*). The diagonal cut on the corner of the memory card is the *key* of the card.

To add files (write) to the memory card, be sure the *locking mechanism* on the side of the card is <u>not</u> in the locked position (as shown in *Figure 5b*). Slide the lever to the front of the memory card to unlock the card. (To prevent adding or removing (deleting) files from the card, slide the lever to the rear to lock and "write protect" the memory card.)

### 3. Insert the memory card.

- 3.1 Position the memory card so the contacts are facing downward and the label is facing up as shown in *Figure* 6.
- 3.2 Insert the *key* end of the card first into the card compartment with contacts facing down and to the front as shown in *Figure 6 and 7*.

The label on the memory card should have an arrow indicating the direction in which to insert the card.

Do not try to force the card in place. The card will not insert into the card compartment with the contacts facing up.

# **STEP 4:**



Figure 8.

**CAUTION** Do not bend or force the memory card while inserting the memory card into place into the card compartment.

### **STEP 5:**



Figure 9.

# 4. Slide the memory card into the card compartment.

A Do not bend or force the memory card as it is inserted.

The memory card will slide into place to the point it will stop as shown in *Figure 8*.

The memory card is in place when contact is made between the Card Reader contact pins and the memory card contacts, and the lid can be closed

### 5. Close the lid.

The lid will snap securely in place as shown in *Figure 9*.

## **STEP 6:**



Figure 10.

**STEP 7:** 



Figure 11.



Figure 12.

**CAUTION** Do not force the Card Reader into place! Note the orientation of the card reader. The Card Reader USB connector will align with the USB port in only one direction.

### 6. Remove the Cap.

6.1 Slide the cap along the strap to clear it from the Card Reader.

This reveals the USB connector encased within as shown in *Figure 10*.

## 7. Insert the IOGEAR GFR212SDW6 Card Reader into the USB port on your computer.

7.1 Insert the Card Reader into the USB port (*Figure 11*) on the front or back of the computer (*Figure 12*).

The Card Reader USB connector will align with the USB port in only one direction. Do not force the Card Reader into place.

- 7.2 The computer will automatically detect the Card Reader.
- 7.3 The LED will flash to indicate the Card Reader is being read by the computer.
- 7.4 When the LED remains steadily lit, files can be opened, viewed, moved, copied, or pasted using the computer's file managing program. (See Step 8 for examples of Windows and MAC file management.)

# **STEP 8:**



Figure 13.



Consult the Windows Operating System help files for more information on its file manager program!

# 8. Manage the Files.

# WINDOWS

The computer will detect the Card Reader and WINDOWS will prompt you with the Removable disk Window as shown in Figure 13.

- 8.1 Click on Open folder to view files using Windows Explorer as highlighted in Figure 13.
- 8.2 Click OK. Windows Explorer will appear as shown in Figure 14.
- 8.3 Data files can be opened, viewed, moved, copied, or pasted using Windows Explorer file managing program.

*Windows Explorer*, shown in *Figure 14*, is also accessed by clicking on the My Documents icon on the My Documents desktop of the computer.

For additional information on Windows *Explorer*, please refer to the following links:

#### Using Windows Explorer

http://www.microsoft.com/windows/windows 2000/en/advanced/help/app\_win\_explorer.ht m

#### To move files by dragging

http://www.microsoft.com/windows/windows 2000/en/advanced/help/opt\_drag.htm

#### Managing Files

http://technet.microsoft.com/enus/library/bb727006.aspx



### Figure 15.

0 0 USB2.0	Card Reader	0
View Botate Left Rotate Right	None ‡	Download Folder
and the second second	day to a	C
DSCN5757 DSCN5758 DS	CN5759 DSCN57	60
		¥
(Options.) 1 of 352 selected	Cancel	) ( Download )

Figure 16.



Consult the MAC Operating System help files for more information on its file manager program!

# MAC

The computer will detect the Card Reader and MAC will prompt you with an *Image Capture Window* as shown in *Figure 15* in which all images or a selection of images can be downloaded to the computer.

By clicking on the *Download Some* button, the selection window shown in *Figure 16* appears in which images can be selected for download to the computer.

Data files can be opened, viewed, moved, copied, or pasted by the use of MAC's *Finder* file manager as shown in *Figure 17*, by either:

- selecting the *Finder* file manager from the *Download To* option in the *Image Capture Window* of *Figure 15*.
- clicking on the *Finder* file manager icon on the desktop of the computer.



For additional information on *Finder*, please refer to the following links:

*Mac 101: Connect Your Camera* http://support.apple.com/kb/HT2498

*Mac 101: The Finder* http://support.apple.com/kb/HT2470

# Conclusion

# Summary

The IOGEAR GFR212SDW6 Pocket Card Reader allows the user to view or transfer files from Secure Digital (SD), Secure Digital High Capacity (SDHC), MultiMedia (MMC), and MultiMedia Plus (MMC +) memory cards that can be easily moved, copied, and pasted between PC or MAC and the memory card just like a USB flash drive. The Card Reader can also be used as a USB Flash Drive with the separate purchase of a memory card.

### **Related Documentation**

For more information regarding the IOGEAR GFR212SDW6 Pocket Card Reader, please refer to the IOGEAR website at: *www.iogear.com/product/GFR212SD* or contact IOGEAR at 1-866-9-IOGEAR

# **Technical Information**

# Troubleshooting

Technical Issue	Troubleshooting Tips
Card Reader is not detected by Plug and Play or Auto-Start	Enable auto-detect or plug-and-play on the computer. (Refer to the computer's operating system documentation for more information.) Navigate to the drive being utilized with your file managing program.
LED does not flash	<ol> <li>Verify the alignment of the USB connector with the computer's USB port.         <ol> <li>Disconnect the Plug and Play operation of the USB device.</li> <li>Remove the Card Reader.</li> <li>Reinsert the Card Reader into the USB port.</li> </ol> </li> <li>Verify the memory card is inserted into the Card Reader correctly.         <ol> <li>Disconnect the Plug and Play operation of the USB device.</li> <li>Disconnect the Plug and Play operation of the USB device.</li> <li>Remove the Card Reader.</li> <li>Remove the Card Reader.</li> <li>Remove the card aligns with the contact pins. Refer to pages 8 and 9 of this manual for more information.</li> </ol> </li> </ol>
Files do not copy to, move off, or delete from the memory card. Device is "write protected."	Unlock the locking mechanism on the memory card. See page 8 of this manual for more information.

# **Contact Support**

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# **Specifications**

#### **Operating Specifications for the IOGear GRF212SDW6 Pocket Card Reader**

Cited from ©2008 IOGEAR Inc. http://www.iogear.com/product/GFR212SD

#### Features

- Easy installation; Plug-n-Play
- Functions as a portable USB Flash Drive or card reader
- Read and write SD & MMC Flash Memory Cards
- Supports USB specification v2.0
- USB bus powered, no external power needed
- 480Mbits/sec transfer rate
- SD, SDHC, MMC, MMCplus
- LED power indicator/data indicator light
- Remarkable high-speed digital image and data transfer to computer
- Specifically designed for digital cameras and also ideal for using with Palmtop PCs, Handheld PCs, PDAs, Voice Recorders and other mobile electronics

VISTA

64

Compatible

MAC Compatible

• Hot swapping capacity for replacing PC storage cards without restarting the computer

W/N

Compatible

- No Driver needed for Win ME/2000/XP, Mac OS 9.2.x / OS X
- 3 year limited warranty
- 1 Type A USB connection

#### Requirements

- For PC users:
- Windows 2000, XP
- Available USB port
- For MAC users:
- Mac OS 9 or greater
- Available USB port

#### Package Content

- Universal Memory Drive (USB 2.0 Memory Card Reader/Writer)
- Quick Start Guide
- Warranty card

#### Warranty: 3-YEAR

Linux

Compatible

Sun

Compatible

Specifications	
Function	GFR212SD
Housing	
Case	Plastic
LEDs	
On Line	1
Ports	1 - USB 2.0 Connection (Type A)
Operating Temperature	- 40 ~ + 176 ?F (- 40 ~ + 80 ?C)
Storage Temperature	+ 32 ~ + 158 ?F ( 0 ~ + 70 ?C)
Operating System Support	Win 2000, ME, XP, MAC OS 9 or greater
USB Specification	USB 1.1 and 2.0 compliant
Transfer Rate	480 Mbps
Humidity	20-80% RH, (Non Condensing)
Power Connections	Bus powered
Dimensions	GFR212SD
Unit Dimensions	
Width	1.18in
Height	3 in
Length	.6 in
Inner Pack	
Width	6.375 in.
Height	7 in.
Depth	5.5 in.
Inner Pack Qty.	12

# Specifications continued

Unit Package Dimensions		
Width	4.375 in. (11 cm.)	
Height	6.25 in. (16 cm.)	
Depth	.75 in. (1.5 cm.)	
Master Carton		
Width	15.2 in.	
Height	6.2 in.	
Depth	13.9 in.	
Master Carton Qty.	48 ( 4 x 12 pcs )	
Weight		
Master Carton Wt.	7.4 lbs	
Inner Pack Wt.	1.8 lbs	
Unit Pack Wt.	0.1 lbs (.04 Kg)	
Physical Properties		
Unit Weight	0.2lbs	
Case Weight	7.4 lbs	
Case Qty	48	

Glossary

# Glossary information is derived from **PC Magazine's eCyclopedia** and **Smart Computing's Computer Dictionary**:

**480 Mbps** – is the data rate of a USB 2.0 port transfer. Mega bits per second is the rate at which 1,000,000 data bits are transferred each second.

Card Reader – is a device used as an interface in which to read files from a memory card.

Copy - makes an exact replica of a file.

**Data files** – are a form of digital storage in a location of memory on a computer that contains digital information used by application software to produce a resulting image or document.

**Device Driver** – is a small file contained on the computer that is utilized by a device to interact with the operating system.

**File managing software** – is a software utility provided by the operating system software in which to organize, track, and maintain storage of digital files on the computer. File managers provide functions to view, delete, copy, move, and rename files as well as create and manage folders. When an image, name, or icon is clicked the file managers usually launch the application that then renders the file's contents.

**Handheld PC** – is small portable computer devices that perform a limited number of application software executions.

Move – is the ability of a computer system to relocate a digital file.

**MP3** – is a digital audio file stored in an audio compression format called *MPEG audio level 3* established by the *Motion Picture Experts Group*.

**MultiMedia** (**MMC**) **memory card** – is a form of 4MB to 2 GB capacity removable flash memory contained on a 32x24x1.4mm plastic card of less than two grams weight in which digital files from cell phones, PDAs and other handheld devices can be stored.

**Palmtop PC**– is a small portable computer device sized to fit within the size of a user's hand that serve as high tech message pads with basic word processing and spreadsheet capabilities.

Paste – is the ability of a computer system to insert a copied file in a specified memory location.

Personal Digital Assistants (PDAs) - see Palmtop PC

**Plug and Play** – is the ability of a device to be plugged into a computer and unplugged while the computer is powered, without having to shut down the computer to remove the device.

**Secure Digital (SD) memory card** – is a form of removable NAND flash memory contained on a 32x24mmX2.1mm plastic card in which digital files can be stored for digital cameras, cell phones and PDAs. SD cards offer a fast transfer rate of 10 and 20 MB/sec. SD cards store up to 2 GB of data and SDHC can store from 4GB to 64GB. SD utilizes the FAT16 file system and SDHC uses the FAT32 file system to store data files on its card.

**USB 2.0** – is a hardware interface with an external bus for attaching a maximum of 127 peripheral devices to a computer for data transfer or operability. USB connects keyboards, mice, printers and external drives as a replacement for serial and parallel ports. USB devices are popular due to the fact they are "hot swappable" as they can be plugged in and unplugged while the computer is on. Hi-Speed USB 2.0 (2001) provides a rate to 480 Mbps. USB 1.0 (1996) and USB 1.1 (1998) only provided a Low-Speed rate of 1.5 Mbps for keyboards and mice and a Full-Speed channel at 12 Mbps.

**USB Flash Drive** – is a portable memory device consisting of Flash memory that connects to a USB port to transfer data files.

**Voice recorder** – is a digital device that records audio usually in MP3 digital file format and stores the files for accessibility or playback at a later time.

**Write protect** – inhibits the ability to add or remove (delete) files from a memory card. A locking mechanism in the form of a sliding lever on the side of the card allows the user to *lock* the card and therefore *write protect* it.

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MAC window screen captures captured from Apple MAC OS2. Page 12. 2009.

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Photos and Graphics by MaryLou Washko, Pages 1 – 10. 2009.