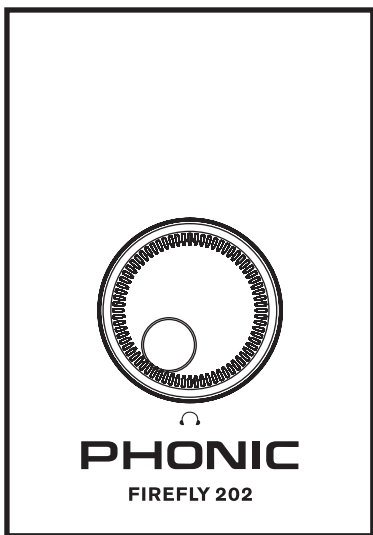


PHONIC

FIREFLY 202

AUDIO INTERFACE



English / Español / 简体中文

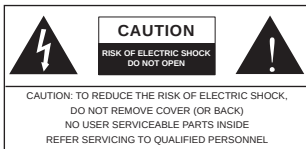
User's Manual
Manual del Usuario
使用手册

IMPORTANT SAFETY INSTRUCTIONS

The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus. The MAINS plug is used as the disconnect device, the disconnect device shall remain readily operable.

Warning: the user shall not place this apparatus in the confined area during the operation so that the mains switch can be easily accessible.

1. Read these instructions before operating this apparatus.
2. Keep these instructions for future reference.
3. Heed all warnings to ensure safe operation.
4. Follow all instructions provided in this document.
5. Do not use this apparatus near water or in locations where condensation may occur.
6. Clean only with dry cloth. Do not use aerosol or liquid cleaners. Unplug this apparatus before cleaning.
7. Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plug, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

CAUTION: Use of controls or adjustments or performance of procedures other than those specified may result in hazardous radiation exposure.



FIREFLY 202

AUDIO INTERFACE

USER'S MANUAL

TABLE OF CONTENTS

INTRODUCTION.....	4
FEATURES.....	4
INCLUDED ITEMS.....	4
SYSTEM REQUIREMENTS.....	4
QUICK INSTALLATION (WINDOWS).....	5
QUICK INSTALLATION (MAC).....	5
PRODUCT OVERVIEW.....	6
EASY FIREWIRE CONTROL PANEL.....	7
DIGITAL AUDIO WORKSTATION.....	11
TROUBLESHOOTING.....	12
SPECIFICATIONS.....	13
BLOCK DIAGRAM.....	14

INTRODUCTION

Congratulations on your purchase of the Phonic 'Firefly 202' portable FireWire audio interface. Offering two balanced 1/4" phone jack inputs and two balanced 1/4" phone jack outputs, as well as a stereo headphones output with volume control, the Firefly 202 offers users the ability to record either two mono channels or a single stereo channel to their computer anywhere they go.

This user's manual was created with the express purpose of creating an easy reference guide for operating the Firefly 202. It is recommended that you read the manual before operating the unit then store the manual for future reference.

FEATURES

- 2 x 2 24-bit/96kHz FireWire stream I/O
- Headphone output with dedicated level control
- Two 1/4" TRS inputs and two 1/4" TRS outputs
- 6-pin FireWire connector
- Low-latency ASIO software direct monitoring
- FireWire LED indicator
- Powered via included DC power supply or FireWire connection
- Mac and Windows compatible

INCLUDED ITEMS

- Firefly 202 Unit
- 12V DC Power Adapter
- FireWire Cable
- Driver Installation CD
- User's Manual

SYSTEM REQUIREMENTS

The following are the minimum required specifications for use with the Firefly 202. If your computer does not meet these requirements, you will experience lagging of audio and possible freezing of your computer when attempting to operate the unit.

Windows

- Microsoft Windows XP with SP2 or Windows Vista
- Available FireWire port (we suggest the ADS Pyro PCI 64 or 64R2 cards)
- Intel Pentium 4 processor or equivalent AMD Athlon processor
- Motherboard with Intel or VIA chipset
- 5400 RPM or faster hard disk drive (7200 RPM or faster with 8 MB cache recommended)
- 256 MB or more of RAM (512 MB recommended)

Macintosh

- OS X 10.3.5 or later with native FireWire support (OS X 10.4.7 may have some stability issues)
- G4 or newer processor
- 256 MB or more of RAM

QUICK INSTALLATION (WINDOWS)

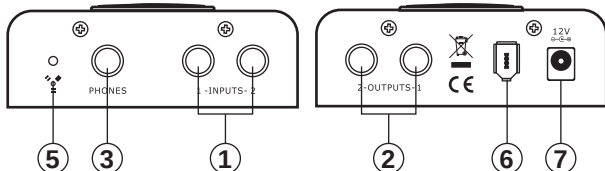
The Firefly 202 requires the installation of a driver to function correctly. Please do not connect the Firefly 202 to the computer until you have read the following installation instructions.

1. Insert the installation CD that accompanied your Firefly 202.
2. If the installation program does not run immediately, please find the 'setup.exe' file in the appropriate driver subdirectory.
3. Follow the onscreen instructions to install the Firefly 202 driver.
4. When instructed to 'disconnect and reconnect' the Firefly 202, connect the unit to the computer and turn the power on.
5. Finalize the installation process.

QUICK INSTALLATION (MAC)

The Firefly 202 operates as a plug-and-play device with Macintosh computers. Simply connect the Firefly 202 to your Mac through the FireWire connection and it should be immediately recognized by the Mac. To ensure your Firefly 202 is working, enter the Utilities folder and double-click the Audio MIDI Setup icon. Here you should be able to select the Firefly 202 as your default audio input and output device.

PRODUCT OVERVIEW



1. 1/4" TRS Inputs

Connect your balanced line-level input signals here using 1/4" TRS phone jack plugs. The signals from these connections are sent through the FireWire interface to the computer for recording.

2. 1/4" TRS Outputs

These jacks accept 1/4" TRS phone jack connectors and are for the output of balanced line-level signals. The signal sent through these outputs is taken from the FireWire interface. Typically this signal is defined by the user in their digital audio workstation (DAW) software.

3. Headphones Output

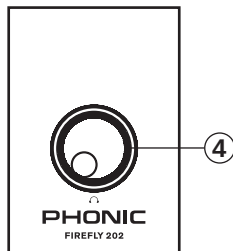
Plug standard stereo headphones or in-ear monitors into this 1/4" TRS phone jack connection. The headphones output is taken from the FireWire interface and is identical to that sent through the 1/4" TRS Outputs.

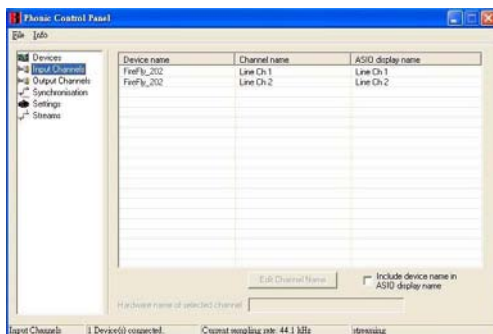
4. Level Control

This large jog wheel control allows users to adjust the output level of the signal that is sent to the headphones output.

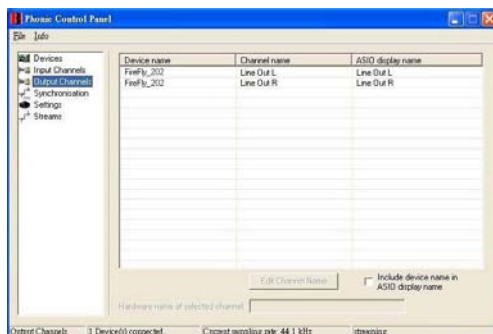
5. FireWire Indicator

This small LED indicator will light up when a FireWire connection is established.





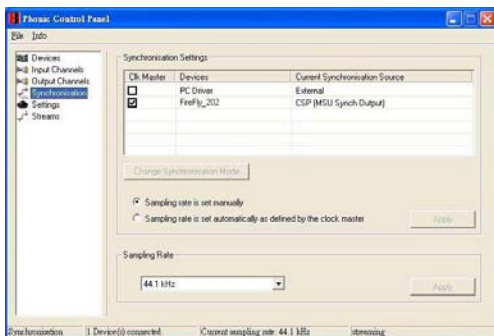
Input Channels: The Input Channels section allows users to view and edit the name of the various input channels received from the FireWire input.



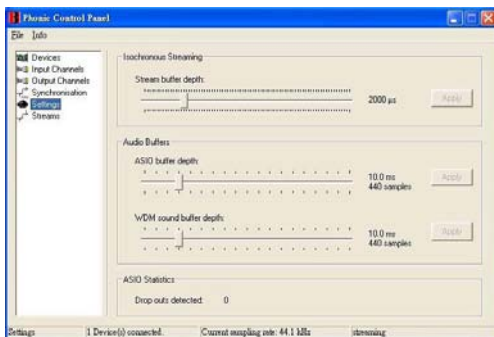
Output Channels: By entering the Output Channels section, users can view and edit the names of the two output channels from the computer to the Firefly 202.

When setting up inputs and outputs in your DAW software, the Firefly 202 inputs and outputs will appear as follows.

Unit Input	ASIO display name	Unit Output	ASIO display name
Input 1	Firefly202 – Line In 1	Output 1	Firefly202 – Line Out 1
Input 2	Firefly202 – Line In 2	Output 2	Firefly202 – Line Out 2



Synchronization: In the Synchronization section, users can adjust the sampling rate (between 44.1, 48, 88.2 and 96 kHz) and other synchronization properties. These properties are set for optimum performance and, unless you are an experienced user, are probably best left alone.

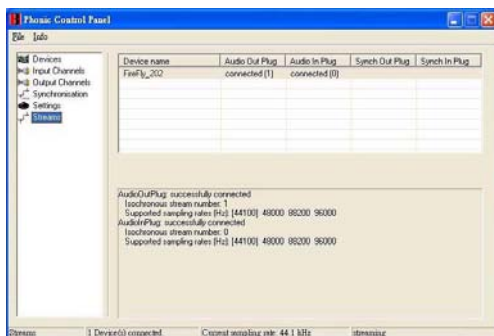


Settings: Users are able to adjust various buffer times in the Settings section.

The Stream Buffer Depth is adjustable between 0.5 and 20 milliseconds. It adjusts the buffer used when streaming a signal from the Firefly 202. If the depth is set too high, an obvious latency will become evident. If the depth is too low, various clicks and pops may become evident. It is best to set the Stream Buffer Depth to a level that allows users to get the lowest latency while still maintaining optimal performance. The default settings are ideal for most computers.

The ASIO Buffer Depth is adjustable between 4 and 40 milliseconds. This allows users to adjust the latency of the stream received by ASIO driver based software.

The WDM (Windows Driver Model) Sound Buffer Depth is adjustable between 4 and 40 milliseconds. This allows users to adjust the latency of the stream received by WDM based programs.



Streams: In the Streams section, the Firefly 202 device properties can be viewed. Each input and output stream can be scrutinized, and the isochronous stream number, and its supported sampling rates, can be viewed.

DIGITAL AUDIO WORKSTATION

The Phonic Firefly 202's ASIO driver is compatible with the most popular DAW software, including (but definitely not limited to) Steinberg Cubase, Steinberg Nuendo, Cakewalk Sonar, Sony Sound Forge and Apple's Logic Pro. To activate the Firefly 202 in your DAW software, simply go into the program's 'devices' setup section and select the appropriate ASIO driver, or consult your program's manual for detailed instructions.

TROUBLESHOOTING

Driver won't install

- Be sure not to connect the Firefly 202 until the installation instructs you 'disconnect and reconnect' the unit.
- Uninstall any previously installed driver. Even an unsuccessful installation attempt may have installed the control panel, so check the "Install/Uninstall Programs" menu in the Control Panel.
- Try disabling/closing any virus protection programs or firewalls you may have installed.

No audio is being recorded

- Make sure you have a signal connected to the Firefly 202's inputs.
- Is the AC-DC power adapter connected and the unit is powered?
- Check the Firefly 202 control panel. If a connection has been established between the computer and the unit, then the cause is more likely software-based.
- Route all of your input signals in your DAW software correctly. Be sure to select the ASIO driver as your default driver in that program, and assign your input channels to your project's tracks or buses (whichever may be the case for your software). Check your DAW software's operation manual for detailed instructions.

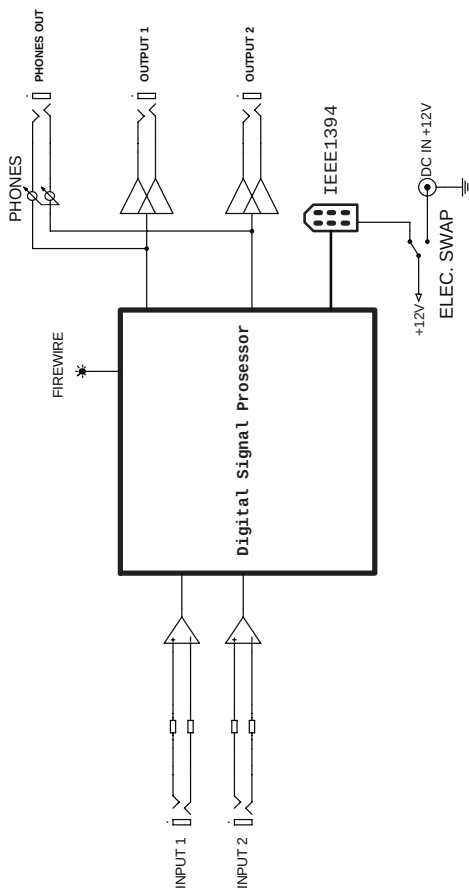
Distorted Sound or unexplained drop-outs

- Try increasing the buffer values in the Firefly 202 control panel.
- Close all unnecessary background programs or processes. Many programs may run in the background with no indication. It's important to either disable these or completely remove them.
- Reduce the amount of graphics acceleration your computer uses. This is typically done in the Control Panel's "Appearance" menu.

SPECIFICATIONS

Inputs (1 & 2)	2 x 1/4" TRS, Bal.
Outputs (1 & 2)	2 x 1/4" TRS, Bal.
Phones Output	1 x 1/4" TRS, Bal.
FireWire Interface	2 in & 2 out, 24-bit / 96 kHz
Control	1
Volume Controls	Rotary
Phones Level Control	Yes
Frequency Response (Input to output)	
20Hz ~ 20KHz	+0/-1 dB
S/N ratio	<-88 dBu
THD+N (Any output, 1KHz @ 0dBu, 20Hz to 20KHz, channel inputs)	<0.05%
Maximum Level	
Input	+16.1 dBu
Output	+6 dBu
Phone Output	+2 dBu/100 ohm (1/100W)
Impedance	
Input	10 K ohms
Output	100 ohms
Phones	50 ohms
Power Requirement (external power supply, depends on region)	AC-DC adaptor, output 12V 750mA (6 Watt)

BLOCK DIAGRAM



TO PURCHASE ADDITIONAL PHONIC GEAR AND ACCESSORIES

To purchase Phonic gear and optional accessories, contact any authorized Phonic distributor. For a list of Phonic distributors please visit our website at www.phonic.com and click on Get Gear. You may also contact Phonic directly and we will assist you in locating a distributor near you.

SERVICE AND REPAIR

Phonic has over 100 service centers worldwide. For replacement parts, service and repairs please contact the Phonic distributor in your country. Phonic does not release service manuals to consumers, and advice users to not attempt any self repairs, as doing so voids all warranties. You can locate a dealer near you at www.phonic.com.

WARRANTY INFORMATION

Phonic stands behind every product we make with a no-hassles warranty. Warranty coverage may be extended, depending on your region. Phonic Corporation warrants this product for a minimum of one year from the original date of purchase against defects in material and workmanship under use as instructed by the user's manual. Phonic, at its option, shall repair or replace the defective unit covered by this warranty. Please retain the dated sales receipt as evidence of the date of purchase. You will need it for any warranty service. No returns or repairs will be accepted without a proper RMA number (return merchandise authorization). In order to keep this warranty in effect, the product must have been handled and used as prescribed in the instructions accompanying this warranty. Any tempering of the product or attempts of self repair voids all warranty. This warranty does not cover any damage due to accident, misuse, abuse, or negligence. This warranty is valid only if the product was purchased new from an authorized Phonic dealer/distributor. For complete warranty policy information, please visit <http://www.phonic.com>.

CUSTOMER SERVICE AND TECHNICAL SUPPORT

We encourage you to visit our online help at <http://www.phonic.com/help/>. There you can find answers to frequently asked questions, tech tips, driver downloads, returns instruction and other helpful information. We make every effort to answer your questions within one business day.

PHONIC

support@phonic.com <http://www.phonic.com>

PHONIC
WWW.PHONIC.COM