FastLane-USB

QuickStart Guide for Windows



Mark of the Unicorn License Agreement and Limited Warranty on Software

TO PERSONS WHO PURCHASE OR USE THIS PRODUCT carefully read all the terms and conditions of this agreement before using this software package. Using this software package indicates your acceptance of the terms and conditors of this license agreement.

Mark of the Unicorn, Inc. (*MOTU") owns both this program and its documentation. Both the program and the documentation are protected under applicable copyright laws. Your right to use the program and the documentation are limited to the terms and conditions described herein.

License

VOL MAVE, (a) use the enclosed program on a single computer, (b) physically transfer the program from one computer to another provided that the program is used on only one computer at a time and that you remove any cosies of the program from the computer from which the program is being transferred, (c) make copies of the program solely for backup unproses. You must reproduce and include the copyright notice on a label on any backup copy.

YOU MAY NOT: (a) distribute copies of the program or the documentation to others; (b) rent, lease or grant subicioness or other rights to the program; (c) provide use of the program in a computer service business theories, then schemic public PCP or multiple user arrangement without the prior written consent of MOTU; (d) transitiste or otherwise after the program or related documentation without the prior written consent of MOTU.

Term

Your license to use the program and documentation will automatically terminate if you fail to comply with the terms of this Agreement. If this license is terminated you agree to destroy all copies of the program and documentation.

Limited Warranty

MOTU warrants to the original licensee that the disk(s) on which the program is recorded be free from delects in materials and workmanship under normal use for a period of ninety (90) days from the date of purchase as evidenced by a copy of your receipt. If aliure of the disk has resulted from accident, abuse or misapplication of the product, them MOTU shall have no responsibility to replace the disk(s) under this Limide Warranty.

THIS LIMITED WARRANTY AND RIGHT OF REPLOCEMENT IS N LIEU OF, AND YOU HEREBY WARVE, ANY AN ALL OTHER WARRANTES, BOTT EXPRESS AND MINELE INCLUDARED BIT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE LUBLITY OF MOTTUP URSIANT OT THE LUMITED WARRANTY SHALL BE LUBLET DO THE REPLOCEMENT OF THE DEFECTIVE DEK(S), AND IN DEVENT SHALL MOTU BE LUBLE FOR INDERVIL OF RODSCUBENTLU DAMAGES. INCLUDING BIT NOT LIMITED TO THE DESIGN OF RODSCUBENTLU DAMAGES. INCLUDING BIT NOT LIMITED TO LISS OF USE SUSTAINED BY THEID PARTIES EVEN IF MOTU HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THIS WARRANTY OKEYS OUT SUECED THE POSSIBILITY OF SUCH TO STATE SOME STATES DO NOT ALLOW THE LUBLIFICITIE MOTE WARK THAN YOR FORM STATE TO STATE SOME STATES DO NOT ALLOW THE LUBLIFICITIE FOR UDSEQUENTLU BANGES. SINCI DAGE DAVE LUBLIFICATION OF DUL

Update Policy

In order to be eligible to obtain updates of the program, you must complete and return the attached Mark of the Unicorn Purchaser Registration Card to MOTU.

General

This License Agreement shall be governed by the laws of the Commonwealth of Massachusetts and shall inure to the benefit of MOTU, its successors, administrators, heirs and assigns.

Copyright Notice

Copright © 2005, 2004, 2003, 2002, 2001, 2000, 1999 by Mark of the Unicorn, Inc. All rights reserved. No part of the publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any human or computer language, in any form or by any means whatsoever, without express written permission of Mark of the Unicorn, Inc., 1280 Massachusett Avenue, Cambridge, MA (2138, U.S.A.

Limited Warranty on Hardware

Mark of the Unicorn, Inc. and S&S Research ('MOTU/S&S') warrant this equipment against defects in materials and workmarship for a period of NINETY (90) DAYS from the date of original retail purchase. This warranty applies only to hardware products; (MOTU software is licensed and warranted pursuant to separate written statements.

If you discover a defect, first where call Mark of the Unicom at (81) 376-2780 to obtain a Return Merchandise Authorization Number. No activor will be performed on any product durationed without prior authorization. MOTU will, at its option, repair or replace the product at no charge to you, provided you return it during the varamity period, with transportation charges prepared, to Mark of the Unicom, Tex., 1280 Massachusetts Avenue, MA 20133. You must use the product so riginal packargin material for in singment, and insure the singment for the value of the product. Presise include you rame, address, takyohnen runker, a description of the problem, and the original, dated bill of sale with the returned unit and print the Return Merchandise Authorization Number on the outdide of the toxic bill existing with a singment.

This warranty does not apply if the equipment has been damaged by accident, abuse, misuse, or misapplication; has been modified without the written permission of MOTU, or if the product serial number has been removed or defacced.

ALL IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO NINETY (90) DAYS FROM THE DATE OF THE ORIGINAL RETAIL PURCHASE OF THIS PRODUCT.

THE WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, ORAL OR WRITTEN, EXPRESS OR IMPLIED. No MOTU/S&S dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

MOTUSAS ARE NOT RESPONSIBLE FOR SPECIAL, INCIDENTAL, OR CONSECULENTIAL DAMAGES RESULTING FROM WY BERCHOY OWNERMATTY OR UNDER MY LEGAL THEORY INCLUDING LOST PROFITS, DOWNTIME, GOODWILL, DAMAGE OR REPLACEMENT OF EQUIPMENT AND PROPERTY AND COST OF RECOVERING REPROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA STORED NO A USED WITH MOTUSAS PRODUCTS.

Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

FastLane, MOTU and Mark of the Unicorn are trademarks of Mark of the Unicorn, Inc.

All other trademarks are property of their respective holders.

This exponent has been type tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC-Marks. These limits and exisped to provide easeanable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio dequary energy and , if not restalled and used in accordance with the ristruction manual, may cause harmful inference to radio communications. However, there is no guarantee that inference will not occur in a particular installation. If this ediptiment does cause interference to allow of tablesion equipment decegours which can be determined by turning the equipment off and on, the user is encouraged to try to correct the inference by any combination of the biolowing measures:

- · Relocate or reorient the receiving antenna
- · Increase the separation between the equipment and the receiver
- Plug the equipment into an outlet on a circuit different from that to which the receiver is connected

If necessary, you can consult a dealer or experienced radio/television technician for additional assistance.

PLEASE NOTE: only equipment certified to comply with Class B (computer input/output devices, terminals, printers, etc.) should be attached to this equipment, and it must have shielded interface cables in order to comply with the Class B FCC limits on RF emissions.

WARNING: changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Packing List and System Requirements

THANK YOU FOR CHOOSING MOTU

Thank you for purchasing FastLane. Please read the important information in this booklet before using it.

PLEASE REGISTER TODAY

Please send in the registration card included with your FastLane interface. As a registered user, you will be eligible to receive on-line technical support email and announcements about product enhancements as soon as they become available. Only registered users receive these special update notices, so please, complete and mail this registration card! Thank you for taking the time to register your new Mark of the Unicorn product!

PACKING LIST

FastLane is shipped with the items listed below. If any are not present, please immediately contact your dealer or Mark of the Unicorn.

- FastLane-USB Interface
- USB cable
- CD with software drivers
- This manual
- Product registration card

MIDI CABLES NOT INCLUDED

To connect MIDI devices to FastLane-USB, you need MIDI cables, purchased separately.

COMPUTER REQUIREMENTS

Your MOTU MIDI interface will run with any USB-equipped PC compatible running Windows 98SE, Windows Me, Windows 2000 or Windows XP.

MIDI SOFTWARE COMPATIBILITY

Your MOTU MIDI interface will run with any MIDI-compatible software under Windows 98SE, Windows Me, Windows 2000 or Windows XP.

GETTING STARTED

Follow the directions in this booklet to successfully install and begin using FastLane-USB.

FAMILIARITY WITH WINDOWS

This manual assumes that your are familiar with using a Windows computer. If not, please review your Windows User's Guide before proceeding.

VISIT OUR WEB SITE FOR SOFTWARE UPDATES

Driver updates are posted on our web site as soon as they become available, so check our web site for the latest drivers: www.motu.com.

Installing FastLane-USB

CONNECTING A USB COMPUTER

Using the USB cable included with your MOTU MIDI interface, put the Type A plug into a Type A USB jack on the computer, a USB hub, or any other USB device connected to the computer that has an available Type A USB jack. The USB cable allows the computer to communicate with all MIDI devices connected to your MOTU MIDI interface.

If you have several FastLane-USB (or other MOTU) interfaces, see "Connecting multiple USB interfaces" on page 8.



Figure-1: You can plug the Type A connector into a Type A jack directly on the computer itself, a USB keyboard connected to the computer, or any other USB device already connected to the computer that has an available Type A USB jack.



Figure-2: The square Type B plug goes into FastLane.

CONNECTING MIDI GEAR

Connect each MIDI device's MIDI IN jack to one of FastLane's two MIDI OUT jacks as shown by Connection 1 below. Conversely, connect the MIDI OUT jack on the MIDI device to one of FastLane's two MIDI IN jacks as shown by Connection 2.

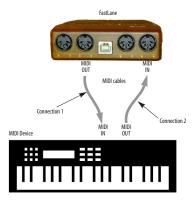


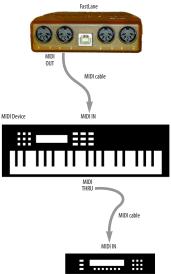
Figure-3: Connecting a MIDI device to FastLane-USB. If you are connecting a sound module or other device that does not need to transmit MIDI data, you only need to make Connection 1 shown above. Conversely, if the device is a MIDI controller such as a drum pad or guitar controller, you only need to make Connection 2.

One-way MIDI connections

MIDI devices that do not receive MIDI data, such as a dedicated keyboard controller, guitar controller, or drum pad, only need Connection 2 shown in Figure-3. Similarly, devices that never send data, such as a sound module, only need Connection 1. However, if you plan to use editor/ librarian software with the sound module, or if you need to get system exclusive bulk dumps from it, make both connections. In general, make both connections for any device that needs to both send and receive MIDI data.

CONNECTING ADDITIONAL GEAR WITH MIDI THRUS

If you use up both MIDI OUTs on the FastLane, and you still have more gear to connect, run a MIDI cable from the MIDI THRU of a device already connected to the interface to the MIDI IN on the additional device as shown below in Figure-4. The two devices then share the same MIDI OUT port on FastLane. This means that they share the same set of 16 MIDI channels, so try to do this with devices that receive on only one MIDI channel (such as effects modules) so their receive channels don't conflict with one another.



Additional device

Figure-4: Connecting additional devices with MIDI THRU ports.

CONNECTING MULTIPLE USB INTERFACES

The USB (*Universal Serial Bus*) specification allows you to connect multiple MOTU interfaces to a single computer. You can mix and match any combination of MOTU USB interfaces to suit your needs.

The USB (Universal Serial Bus) specification allows many USB devices - theoretically up to 127 - to be connected to a single computer. However, many USB devices, including all MOTU USB interfaces, reserve USB bandwidth, so the theoretical and practical limits for MOTU interfaces are considerably fewer. In theory, the maximum number of MOTU USB interfaces you can connect to one computer is around 25 interfaces. Practically speaking, regardless of how slow or fast your USB-equipped computer is, you should be able to connect upwards of 10 or more MOTU USB MIDI interfaces and still enjoy just as much performance from each one as if it were the only one connected. Just don't try to run your USB scanner or digital camera while playing back and recording MIDI!

For further details about USB, visit www.usb.org.

To connect multiple FastLanes (or other MOTU interfaces) to a computer, you'll need an inexpensive device called a *USB Hub* (purchased separately from your computer peripherals dealer). A USB Hub has multiple Type A ports on it, usually between 4 and 7 ports, to which you connect multiple USB MIDI interfaces as shown below in Figure-5. Connect them to the hub in the standard fashion, as if you were connecting them directly to the computer. If needed, you can connect multiple hubs to each other to get enough USB ports for your multiple MOTU USB interfaces.



Figure-5: An inexpensive, standard USB hub allows you to connect multiple MOTU USB MIDI interfaces. You can even mix and match different models of MOTU interfaces, using the combination that best suites your needs for synchronization, number of MIDI ports, etc.

Installing the MOTU USB Windows Driver

To install the MOTU USB MIDI driver:

1 If the FastLane-USB is currently connected to the computer, unplug it.

2 Turn on your computer.

3 If you have previously installed MOTU USB MIDI drivers, use the Windows *Add/Remove Programs* control panel to remove the old MOTU USB MIDI drivers before proceeding.

4 If the Windows *Add Hardware Wizard* appears during startup, do not proceed and exit from the Wizard.

Instead of installing the FastLane-USB drivers manually via the Wizard, you will run the FastLane-USB software installer.

5 Insert the MOTU USB software installer CD in the computer's CD drive (if you haven't already).

6 If the MOTU USB software installer program does not automatically begin running, double-click SETUP.EXE on the installer CD to launch it.

7 Follow the directions the installer gives you.

Using MOTU USB MIDI ports

MIDI PORTS

Once you have installed the MOTU FastLane-USB MIDI driver, you'll notice that two MIDI inputs and outputs are available to your MIDI programs. The port names appear as shown in Figure-6.

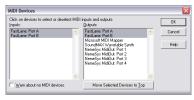


Figure-6: MOTU FastLane-USB ports in Cakewalk SONAR™.

TROUBLESHOOTING

My MOTU USB interface ports don't show up in my Windows MIDI software, no matter what I do. Have you unplugged the USB cable and then plugged it back in lately? Under certain circumstances, doing so will cause the interface's drivers to lose communication with the hardware. If this is happening to you, make sure the USB cable is plugged in (both to the computer and the interface, of course). Then, quit all MIDI applications. When you relaunch them, the interface should now be available to them again. If this is still not the case, shut down the computer, check the USB cable connections to the interface, make sure that its THRU button is NOT pushed in (disengaged), and power up the computer again.

TECHNICAL SUPPORT

Registered users who are unable, with their dealer's help, to solve problems they encounter with the their MOTU interface may contact our technical support department in one of the following ways:

- Tech support phone (9 am to 6 pm EST):
 (617) 576-3066
- Tech support fax: (617) 354-3068
- Tech support email: techsupport@motu.com
- On-line tech support database: www.motu.com

We are happy to provide customer support to our registered users. If you haven't already done so, please take a moment to complete the registration card in the front of the manual and send it in to us. When we receive your card, you'll be placed on our mailing list for free software updates and other information.

REPLACING DISKS

If your MOTU USB software CD becomes damaged or lost, our Customer Support Department will be glad to replace it. Or you can download the latest version of the drivers and consoles from www.motu.com.

THE MIDI THRU BUTTON

The MIDI THRU button on the front of the FastLane-USB, when pushed in, creates a direct connection from each MIDI IN connector to its corresponding MIDI OUT connector. For example, data received on MIDI IN A is routed directly to MIDI OUT A. Similarly, data received on MIDI IN B is routed directly to MIDI OUT B. This provides a direct connection from the MIDI device connected to the input to a different device connected to the output. For example, you could use your MIDI controller connected to MIDI IN A to play a MIDI sound module connected to MIDI OUT A, without the need to run any MIDI software on the computer.

When MIDI THRU is engaged, MIDI communication to and from the computer is temporarily disabled. The USB cable connection to the computer is still required, however, as it supplies power to the FastLane-USB. Therefore, MIDI THRU mode still requires the USB cable to be connected to the computer, and the computer must be turned on.



MIDI THRU button