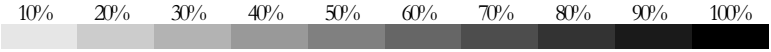
AMPLITON

Reference Manual

ALESIS

This page intentionally left blank



Copyright 2002, Alesis. All rights reserved
Reproduction in whole or in part is prohibited.
Specifications subject to change without notice.
All trademarks are the property of their respective holders.

7-51-0110-A
8/2002

Table of Contents

Introduction

Welcome!

Thank you for making the Alesis Ampliton a part of your studio. Since 1984, we've been designing and building creative tools for the audio community. We believe in our products, because we've heard the results that creative people like you have achieved with them. One of Alesis' goals is to make high-quality studio equipment available to everyone, and this Reference Manual is an important part of that. After all, there's no point in making equipment with all kinds of capabilities if no one explains how to use them. So, we try to write our manuals as carefully as we build our products.

The goal of this manual is to get you the information you need as quickly as possible, with a minimum of hassle. We hope we've achieved that. If not, please drop us an email and give us your suggestions on how we could improve future editions of this manual.

We hope your investment will bring you many years of creative enjoyment and help you achieve your goals.

Sincerely,
The people of Alesis

For more effective service and product update notices, please register your Ampliton online at:
http://www.alesis.com/support/warranty.htm

About the Ampliton

Your new Ampliton is a member of the Alesis ModFX family of performance effects boxes. This particular ModFX unit, the Ampliton, is an amplitude modulator that combines a tremolo effect with an autopan effect.

Each box in the line provides a different set of sound effects and signal processing, and they are easy to arrange and connect to each other. With a uniform, friendly, uncomplicated user interface and high-resolution digital processing, the ModFX product line is perfect for keyboardists, guitarists, and any other studio or live performance artists.

Important features of your Ampliton

High Resolution Processing

The Ampliton internally uses 28-bit stereo digital signal processing. The digital-to-analog and analog-to-digital conversion is sampled at 48kHz with 24 bits of resolution. That means you can get the effect you want, without adding unwanted noise and distortion.

ModLink

If you're using multiple ModFX boxes to make your own unique effects chain, ModLink makes it easy to hookup without needing patch cords within the chain. The nine-pin connectors built into each side of the case enable a ModFX box to transfer digital audio and word clock directly to another. Any number of units can be connected together.

Configurable Modulation

Both the tremolo and the autopan effects have configurable modulation. The user can control the shape, rate, and depth of the modulation. The rate of each modulation can be synchronized to the tempo, both by tap tempo and by audio input.

Ampliton Key Features

- Two digital effects in one box (tremolo and autopan), each with its own separate controls for modulation sources, depth and speed
- Uniform, friendly, uncomplicated user interface—no fiddling with complicated menus or "hidden" knobs
- Tempo synchronization for tremolo and/or autopan speed keeps effects modulation in time with the music
- Tap Tempo makes it easy to set the speed of tremolo and/or autopan by tapping a beat on the top panel
- Reset Mod lets you reset the phase of any modulation shape from its beginning
- Stereo processing via four 1/4" unbalanced connectors
- ModLink port, a cable-free connection that transfers digital audio and word clock to other boxes in the ModFX family
- Footswitch connection to control the bypass function
- Ability to mount 3 ModFX boxes in the optional ModFX rack adapter
- Input trim control to adjust input level
- Internal 28-bit digital processing
- 24-bit D/A and A/D conversion at 48kHz sampling rate for quiet, distortion-free effects
- External 9VAC power supply included

How to Use This Manual

A little technical knowledge will help you get the most out of your gear...it's really pretty simple. This manual is divided into the following sections describing the various functions and applications for the Ampliton. While it's a good idea to read through the entire manual once carefully, those having general knowledge about effect devices should use the table of contents to look up specific functions.

Helpful tips and advice are highlighted in a shaded box like this

Chapter 1: Quick Start. If you're already experienced with effect boxes, this will get you started using the Ampliton right away. It's a short guide to the essential elements of hooking it up and using it for the first time. A brief tour of the front and rear panels also directs you to the chapters focused on individual features.

Chapter 2: Connections gives detailed instructions for connecting the Ampliton to a variety of typical audio systems. It also discusses the process of linking the Ampliton with other ModFX devices.

Chapter 3: Using the Ampliton explains the controls of the Ampliton and their functions.

Chapter 4: Sample Settings provides a selection of sound charts created by the sound designers at Alesis for you to try.

Near the end of the manual are troubleshooting tips, specifications, and an index to help you find what you're looking for.

***When something important appears in the manual**, an exclamation mark (like the one shown at left) will appear with some explanatory text. This symbol indicates that this information is vital when operating the Ampliton.*

Safety Instructions/Notices

Important Safety Instructions (English)

Safety symbols used in this product

 This symbol alerts the user that there are important operating and maintenance instructions in the literature accompanying this unit.

 This symbol warns the user of uninsulated voltage within the unit that can cause dangerous electric shocks.

 This symbol warns the user that output connectors contain voltages that can cause dangerous electrical shock.

Please follow these precautions when using this product:

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a damp cloth. Do not spray any liquid cleaner onto the faceplate, as this may damage the front panel controls or cause a dangerous condition.
7. 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 are provided for your safety. When 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 plugs, convenience receptacles, and the point where they exit from the apparatus.

Continued next page

11. Use only attachments or accessories specified by the manufacturer.

12. Use only with a cart, stand, bracket, or table designed for use with professional audio or music equipment. In any installation, make sure that injury or damage will not result from cables pulling on the apparatus and its mounting. If 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 when the 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.
15. This unit produces heat when operated normally. Operate in a well-ventilated area with at least six inches of clearance from peripheral equipment.
16. This product, in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
17. Do not expose the apparatus to dripping or splashing. Do not place objects filled with liquids (flower vases, soft drink cans, coffee cups) on the apparatus.
18. WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

CE Declaration Of Conformity

See our website at:

http://www.alesis.com

FCC Compliance Statement

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: 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.

Instructions de Sécurité Importantes (French)

Symboles utilisés dans ce produit

 Ce symbole alèrte l'utilisateur qu'il existe des instructions de fonctionnement et de maintenance dans la documentation jointe avec ce produit.

 Ce symbole avertit l'utilisateur de la présence d'une tension non isolée à l'intérieur de l'appareil pouvant engendrer des chocs électriques.

 Ce symbole prévient l'utilisateur de la présence de tensions sur les raccordements de sorties, représentant un risque d'électrocution.

Veuillez suivre ces précautions lors de l'utilisation de l'appareil:

1. Lisez ces instructions.
2. Gardez ces instructions.
3. Tenez compte de tous les avertissements.
4. Suivez toutes les instructions.
5. N'utilisez pas cet allareil à proximité de l'eau.
6. Ne nettoyez qu'avec un chiffon humide. Il est potentiellement dangereux d'utiliser des pulvérisateurs ou nettoyants liquides sur cet appareil.
7. Installez selon les recommandations du constructeur.
8. Ne pas installer à proximilé de sources de chaleur comme radiateurs, cuisinière ou autre appareils (don't les amplificateurs) produisant de la chaleur.
9. Ne pas enlever la prise de terre du cordon secteur. Une prise murale avec terre deux broches et une troisièrme reliée à la terre. Cette dernière est présente pour votre sécurité. Si le cordon secteur ne rentre pas dans la prise de courant, demandez à un électricien qualifié de remplacer la prise.
10. Evitez de marcher sur le cordon secteur ou de le pincer, en particulier au niveau de la prise, et aux endroits où il sor de l'appareil.

Suite de la page suivante

11. N’utilisez que des accessoires spécifiés par le constructeur.

12. N’utilisez qu’avec un stand, ou table conçus pour l’utilisation d’audio professionnel ou instruments de musique. Dans toute installation, veillez de ne rien endommager à cause de câbles qui tirent sur des appareils et leur support.

13. Débranchez l’appareil lors d’un orage ou lorsqu’il n’est pas utilisé pendant longtemps.
14. Faites réparer par un personnel qualifié. Une réparation est nécessaire lorsque l’appareil a été endommagé de quelque sorte que ce soit, par exemple losrque le cordon secteur ou la prise sont endommagés, si du liquide a coulé ou des objets se sont introduits dans l’appareil, si celui-ci a été exposé à la pluie ou à l’humidité, ne fonctionne pas normalement ou est tombé.
15. Puisque son fonctionement normale génère de la chaleur, placez cet appareil au moins 15cm. des équipments péripheriques et assurez que l’emplacement permet la circulation de l’air.
16. Ce produit, utilisé avec un amplificateur et un casque ou des enceintes, est capable de produite des niveaux sonores pouvant engendrer une perte permanente de l’ouïe. Ne l’utilisez pas pendant longtemps à un niveau sonore élevé ou à un niveau non confortable. Si vous remarquez une perte de l’ouïe ou un bourdonnement dans les oreilles, consultez un spécialiste.
17. N'exposez pas l'appareil à l'égoutture ou à l'éclaboussement. Ne placez pas les objets remplis de liquides (vases à fleur, boîtes de boisson non alcoolique, tasses de café) sur l'appareil.
18. AVERTISSEMENT: Pour réduire le risque du feu ou de décharge électrique, n'exposez pas cet appareil à la pluie ou à l'humidité.

Lesen Sie bitte die folgende Sicherheitshinweise (German)

Sicherheit Symbole verwendet in diesem Produkt

 Dieses Symbol alarmiert den Benutzer, daß es wichtige Funktionieren und Wartung Anweisungen in der Literatur gibt, die diese Maßeinheit begleitet.

 Dieses Symbol warnt den Benutzer der nicht isolierten Spannung innerhalb der Maßeinheit, die gefährliche elektrische Schläge verursachen kann.

 Dieses Symbol warnt den Benutzer, dem Ausgabestecker Spannungen enthalten, die gefährlichen elektrischen Schlag verursachen können.

Folgen Sie bitte diesen Vorkehrungen, wenn dieses Produkt verwendet wird:

1. Lesen Sie die Hinweise.
2. Halten Sie sich an die Anleitung.
3. Beachten Sie alle Warnungen.
4. Beachten Sie alle Hinweise.
5. Bringen Sie das Gerät nie mit Wasser in Berührung.
6. Verwenden Sie zur Reinigung nur ein weiches Tuch. Verwenden Sie keine flüssigen Reinigungsmittel. Dies kann gefährliche Folgen haben.
7. Halten Sie sich beim Aufbau des Gerätes an die Angaben des Herstellers.
8. Stellen Sie das Gerät nich in der Nähe von Heizkörpern, Heizungsklappen oder anderen Wärmequellen (einschließlich Verstärkern) auf.
9. Verfehlen Sie nicht den Zweck des grounging Terminals auf dem Netzstecker. Dieses Terminal wird für Ihre Sicherheit zur Verfügung gestellt.
10. Verlegen Sie das Netzkabel des Gerätes niemals so, daß man darüber stolpern kann oder daß es gequetscht wird.

Fortsetzung auf nächster Seite

11. Benutzen Sie nur das vom Hersteller empfohlene Zubehör.

12. Verwenden Sie ausschließlich Wagen, Ständer, oder Tische, die speziell für professionelle Audio- und Musikinstrumente geeignet sind. Achten Sie immer darauf, daß die jeweiligen Geräte sicher installiert sind, um Schäden und Verletzungen zu vermeiden. Wenn Sie einen Rollwagen benutzen, achten Sie darauf, das dieser nicht umkippt, um Verletzungen auszuschließen.
13. Ziehen Sie während eines Gewitters oder wenn Sie das Gerät über einen längeren Zeitraum nicht benutzen den Netzstecher aus der Steckdose.

14. Die Wartung sollte nur durch qualifiziertes Fachpersonal erfolgen. Die Wartung wird notwendig, wenn das Gerät beschädigt wurde oder aber das Stromkabel oder der Stecker, Gegenstände oder Flüssigkeit in das Gerät gelangt sind, das Gerät dem Regen oder Feuchtigkeit ausgesetzt war und deshalb nicht mehr normal arbeitet oder heruntergefallen ist.
15. Dieses Gerät produziert auch im normalen Betrieb Wärme. Achten Sie deshalb auf ausreichende Lüftung mit mindestens 15 cm Abstand von anderen Geräten.
16. Dieses Produkt kann in Verbindung mit einem Verstärker und Kopfhörern oder Lautsprechern Lautstärkepegel erzeugen, die anhaltende Gehörschäden verursachen. Betreiben Sie es nicht über längere Zeit mit hoher Lautstärke oder einem Pegel, der Ihnen unangenehm is. Wenn Sie ein Nachlassen des Gehörs oder ein Klingeln in den Ohren feststellen, sollten Sie einen Ohrenarzt aufsuchen.
17. Setzen Sie den Apparat nicht Bratenfett oder dem Spritzen aus. Plazieren Sie die Nachrichten, die mit Flüssigkeiten (gefüllt werden Blumevases, Getränkdosen, Kaffeetassen) nicht auf den Apparat.
18. WARNING: um die Gefahr des Feuers oder des elektrischen Schlages zu verringern, setzen Sie diesen Apparat nicht Regen oder Feuchtigkeit aus.

This page intentionally left blank.

1 Quick Start Guide

If you can't wait to get started

The Alesis Ampliton is a unique product, but its basic hookup and operation is similar to other effects units in most respects. If you're experienced with signal processors, this chapter is a "shorthand" guide for those who want to start using the Ampliton right away. If you have questions about any of the features, don't worry – later chapters will unveil the mysteries of the Ampliton's special features.

If you're new to signal processing...

start with the more detailed instructions for hookup and operation starting in the next chapter.

Hook it up to a synthesizer

1. First, make sure the power is off to all the components you're connecting to: amp, mixer, and instruments.
2. Pull the Ampliton and its power supply out of the package.
3. Using a pair of 1/4" instrument cables, plug the outputs of the synthesizer into the INPUTS on the back of the Ampliton.
4. Connect the OUTPUTS of the Ampliton to the inputs of a mixer, powered speakers, or instrument amplifier.
5. Insert the power jack of the Ampliton's power adapter into the POWER 9VAC input on the rear panel of the Ampliton and plug the power adapter into an AC outlet (preferably on a power strip with its switch off).

   The Ampliton doesn't have a POWER switch of its own. The moment you plug in the power, its top panel LEDs will come on.
6. Turn the power on to the system: the keyboard, then the Ampliton's power strip (if it's not already on), then the mixer, then the amp.
7. Turn the INPUT TRIM knob on the back of the Ampliton while playing the keyboard to adjust the input level. The SIGNAL LED on the top panel will light green, not red, when the level is correct.
8. Experiment with the knob and button settings on the Ampliton to create different sounds.

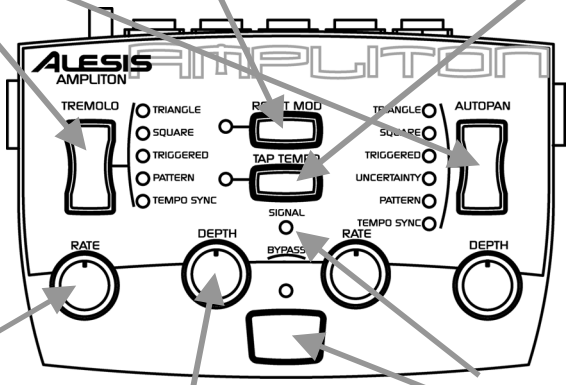
For more detailed information on connecting the Ampliton, see chapter 2: Connections.

A quick overview of the controls

Rocker switches
The TREMOLO and AUTOPAN switches select the current effect mode, as shown by the LEDs next to them.

Reset Mod
Restarts the modulation from the beginning of its cycle. Generates a trigger in TRIGGERED mode, or changes the pattern in PATTERN mode.

Tap Tempo
Active for effects in TEMPO SYNC mode only. Tap a regular beat on this button, and the speed of the effect will be set at some multiple of that beat , as set by the RATE knobs.



*The **RATE** knobs affect the speed of modulation, in cooperation with the TEMPO SYNC and TAP TEMPO buttons. See page33.*

***DEPTH** controls how much of the effect you'll hear. The left one's for Tremolo, the right for Autopan.*

***BYPASS** lets signal pass through without any effects.*

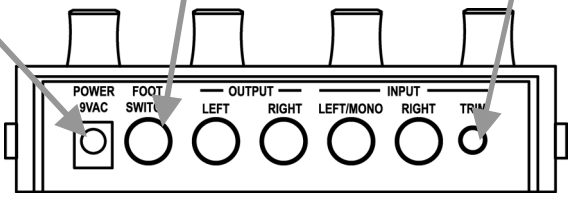
Signal LED
When this lights green, the Ampliton is getting an input signal. When it's red, it's seeing too much level...so turn down the instrument...

*...or the **TRIM** control here on the back panel.*

Rear Panel

Plug the power adapter in here.

*The **FOOT SWITCH** may be connected to any momentary pedal, to engage the BYPASS function.*



*The **ModLink connectors** let you arrange several ModFX units in a chain, without having to use input and output cables inside the chain.*

***INPUTS and OUTPUTS** are standard 1/4" line-level jacks.*

If you're using a ModLink chain, you only need to connect to the first unit's input, and the last unit's output.

2 Connections

Unpacking and Inspection

Your Ampliton was packed carefully at the factory. The shipping carton was designed to protect the unit during shipping. Please retain this container in the highly unlikely event that you need to return the Ampliton for servicing.

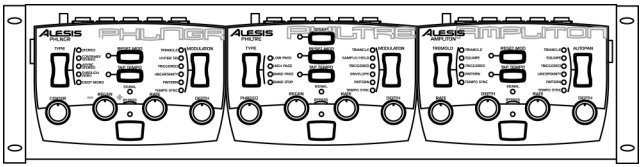
The shipping carton should contain the following items:

- Ampliton with the same serial number as shown on the shipping carton
- Power Adapter
- This instruction manual

To register your purchase, go to the Alesis website at www.alesis.com.

Installing in a Rack

The Ampliton is designed for tabletop use, but can also be installed in a standard 19" audio equipment rack. For rack mounting, contact your Alesis dealer for the ModFX Rack. This rack shelf holds three ModFX units in a 3-space high 19" rack.



Power

The Ampliton comes with an AC power adapter that transforms the voltage from a standard outlet into 9 volts AC (830 mA). Plug the small end of the power adapter cord into the Ampliton's POWER INPUT socket and then plug the adapter itself into a good quality, noise-free AC power source of the proper rating.

The supplied AC line adapter is designed only for the destination to which the unit is shipped. To use the Ampliton in another country, contact your Alesis dealer for an Alesis P3 adapter suitable for the electrical system in the country you are traveling to.

Make sure you read the initial Important Safety Instructions chapter at the front of this manual.

Avoid "popping":

Don't plug the power adapter into the Ampliton until all other audio cables have been hooked up. Make sure your amplifier or powered speakers are switched off when plugging in the Ampliton to avoid damage.

Connecting audio

The Ampliton will work in many different applications, whether you are connecting an instrument directly into it, or connecting it through a mixing console. But since the Ampliton is a stereo effect unit, it's important to know whether the source will be stereo or mono.

When connecting audio cables and/or turning power on and off, make sure that all devices in your system are turned off and the volume controls are turned down.

Mono In, Mono or Stereo Out

If you're connecting a guitar or bass directly to the Ampliton, hook it up this way:

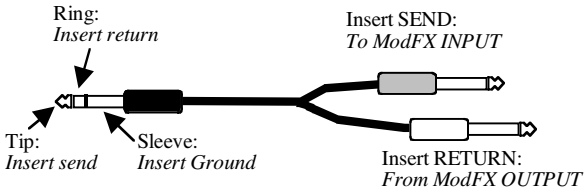
1. Connect a 1/4" phone cord to the [LEFT/MONO] INPUT of the Ampliton from a mono source. (The Left input will then feed both inputs of the effect.)
2. Connect another 1/4" phone cord from the LEFT OUTPUT of the Ampliton to an amplification system or mixer input.
3. **If the amp or mixer is stereo,** connect a second 1/4" phone cord from the RIGHT OUTPUT of the Ampliton to the other input of the stereo amplification system, or the next mixer input.
4. If you're connecting directly to a stereo mixer, pan the two channels hard left and hard right to get the maximum effect.

Turn up the trim...

Most guitars and basses have relatively low output levels. For the quietest effect, turn up the volume on the guitar to full, then crank up the [TRIM] control on the back of the Ampliton until the SIGNAL LED on its top panel flashes red while you play, then back it off a bit.

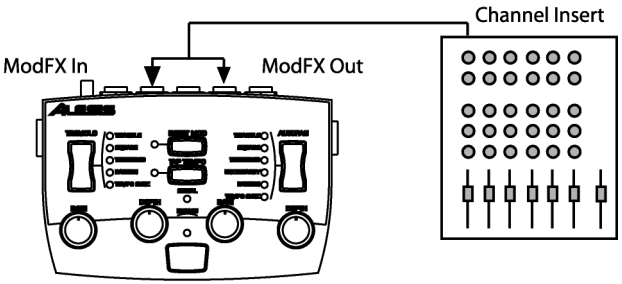
Connecting to the Channel Inserts of a mixing console:

Most recording consoles have a jack near the mic and line inputs labeled "Insert". This is typically a TRS jack with the send and return on the same jack. To use the Ampliton as a channel insert, you will need an insert cable (not included).



This cable splits the TRS insert jack into two unbalanced mono connectors. Usually, the tip is connected to the INPUT of the Ampliton and the ring is connected to the OUTPUT of the Ampliton. However, this may be reversed on some recording consoles. Check your mixer's Reference Manual to be sure or just try it both ways – this won't damage the Ampliton.

For stereo operation, you would use two insert cables, inserted into two adjacent channels of the mixer. One would send and receive signal to the left channel of the Ampliton, and the pan pot of that mixer channel would normally be panned to the left. Pan the next mixer channel, for the right side of the Ampliton, to the right.



Connecting to the Main Outputs of a mixing console:

In addition to channel inserts, most mixing consoles have main insert jacks near the main outputs. You can use insert cables to connect the Ampliton to the main L/R bus the same way you connect it to a pair of channels. Simply connect one insert cable to the left main insert of the mixer, and connect the two mono jacks to the left INPUT and OUTPUT of the Ampliton. Use another insert cable to connect the right main insert to the right INPUT and OUTPUT of the Ampliton.

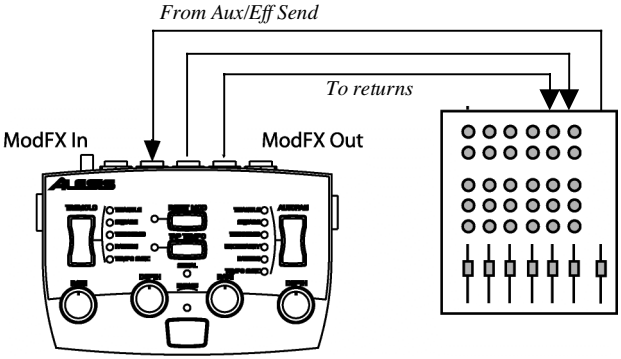
Alternatively, you could plug the mixing console's main outputs directly into the Ampliton's inputs, then feed the Ampliton's outputs to your monitor amps or mixdown recorder. However, with this method if you fade down the volume at the end of the song, the sound quality may change as you fade. That's why it's better to use insert jacks, if they're available.

Connecting to the Effect Send/Return of a mixing console:

Since the ModFX boxes don't have a wet/dry mix control, they're designed more for in-line processing than the send/receive kind of processing typically used for reverb units. However, plugging the Ampliton into a mixer's effect send/return loop will allow you to flange a mix of several instruments, from any mixer channel that has its effect send raised.

If you use mixer channels for the returns from the Ampliton, *be sure the Effect Sends for those channels are turned all the way off to avoid feedback.*

To do this, connect a single cable from the Effect Send Out (sometimes labeled "Aux Out") to the [LEFT/MONO] input of the Ampliton. Use two separate cables to connect the [LEFT OUTPUT] and [RIGHT OUTPUT] of the Ampliton to the left and right inputs of a Stereo Effect Return, or to two adjacent mixer channels panned to left and right.

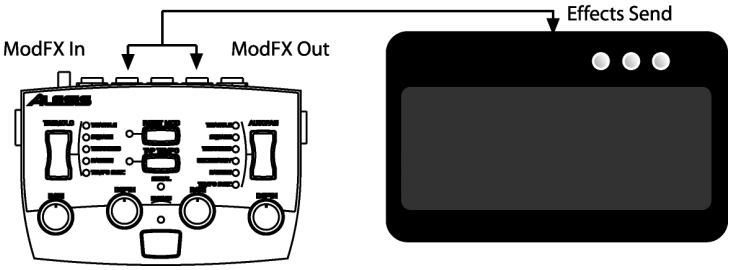


Connecting to the inserts on an instrument amplifier:

The insert send on a guitar or bass amp is usually labeled "effects send and return" or "insert send and return". This allows you to preamplify your instrument before flanging it and sending it to the power amp.

Most guitar amps are single channel, so connect a single insert cable from the amp to the LEFT INPUT and LEFT OUTPUT of the Ampliton. Some amps have separate “effect send” and “effect return” jacks; for these, use standard cables. Check the manual of your amplifier for details.

Never connect the Ampliton between the power amp and the speaker!
The high power levels created by the power amp will destroy the circuitry of the Ampliton.



If you are using a dedicated rack-mount preamplifier, another method would be to insert the Ampliton between the preamp and the input(s) of the power amp.

Connecting to equipment with XLR inputs and outputs:

If you are connecting the Ampliton to a product with XLR balanced inputs and outputs, you will need to convert this signal to a 1/4" unbalanced connector. Make sure that Pin 2 of the XLR connector is connected to the Tip of the 1/4" adapter or cable.

Watch out for high levels, however: some XLR sources put out levels close to the maximum the Ampliton can accept (about +12 dBu) even when its trim is at minimum. Lower the level of the source if the [SIGNAL] LED flashes red.

Don't use line transformers:

Many XLR-to-1/4" adapters sold at electronics stores are NOT adapters, but transformers (and very low quality transformers at that). Don't use these on the output of the Ampliton—they're unnecessary and generally sound awful because they don't have the headroom to handle the Ampliton's output.. Get a hard-wired adapter or cable from your professional audio dealer, or make one yourself from components.

About audio cables

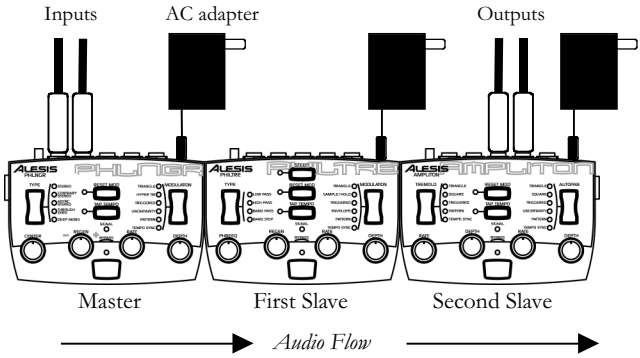
The connections between the Ampliton and your studio are your music's lifeline, so use only high quality cables. These should be low-capacitance shielded cables with a stranded (not solid) internal conductor and a low-resistance shield. Although quality cables cost more, they do make a difference.

Route cables to the Ampliton correctly by observing the following precautions:

- Do not bundle audio cables with AC power cords.
- Avoid running audio cables near sources of electromagnetic interference such as transformers, monitors, computers, etc.
- Do not place cables where they can be stepped on. Stepping on a cable may not cause immediate damage, but it can compress the insulation between the center conductor and shield (degrading performance) or reduce the cable's reliability.
- Avoid twisting the cable or having it make sharp, right angle turns.
- Never unplug a cable by pulling on the wire itself. Always unplug by firmly grasping the body of the plug and pulling directly outward.

Using the ModLink

The Ampliton can be connected to other effect boxes in the ModFX family via the ModLink. The ModLink is a cable-free connection between two ModFX units that transfers digital audio and word clock. The 9-pin male connector on the left side of the unit is the ModLink IN port. The 9-pin female connector on the right side is the ModLink OUT port. By directly connecting two ModFX units via the ModLink, audio will pass from the left-most unit to the right-most unit.



The audio signal flows from left to right. The Master will send its digital audio output to the First Slave, and the First Slave will, in turn, send its output to the Second Slave.

What about the 1/4" jacks on the slave units?

When a unit is a slave to another unit, its audio input jacks are disabled; it will get its audio input digitally from its ModLink port. The output jacks, however, are always active; so an audio output can be tapped from any linked unit, without interrupting the flow to the rest of the chain.

This page intentionally left blank.

3 Using the Ampliton

This section defines tremolo and autopan, and explains the functions of the Ampliton's controls in greater detail.

The two sides of the Ampliton

The basic operation of the Ampliton couldn't be simpler. It gives you access to two different kinds of amplitude-based effects: on the left side is *tremolo,* which feeds the *autopan* on the right side. Each side is independent of the other, so they can be used alone or together. The particular type of tremolo is chosen by the switch on the left, with the rate and depth of tremolo set by the two knobs on the left. The switch and two knobs on the right control the Autopan effects. Down the center of the Ampliton are controls that affect both sides: RESET MOD, TAP TEMPO, the SIGNAL LED, and the BYPASS switch.

What is Tremolo?

Tremolo is an effect that rapidly changes the volume of a signal up and down. If you have ever grabbed the volume knob on your radio and moved it up and down as fast as you could, that was tremolo. Tremolo first became a common effect on surf guitar in the 50s and 60s. It also sounds good on electric piano.

*A more technical term for tremolo is **amplitude modulation—**you can achieve it on a synthesizer by routing a low-frequency oscillator (LFO) to the final amplifier stage (VCA). Many classic tube amps featured tremolo.*

What is Autopan?

Autopan is similar to Tremolo, but it changes pan position (the left and right balance in a stereo field) instead of volume. The simplest autopan would take a signal and slowly pan it from the left to the right speaker and back again. However, the Ampliton is capable of much more complex autopan effects than that, as you will see later in this chapter.

Autopan is by definition a stereo effect. If the left and right outputs of the Ampliton aren't connected to two different amps and speakers (for example, inline to a mono guitar amplifier), Autopan will sound like tremolo...as it pans to the side that's not connected, the level will go down in the side that is.

Autopan and a stereo input

The Ampliton can take any mono input and turn it into a quasi-stereo output, by panning it from side to side. (In some cases, you may want to connect only to the left input to get the most dramatic panning effect.) But Autopan does interesting things when it receives two different inputs. In Triangle mode, for example, the left and right inputs will start the cycle panned to the left output. Then the right input will move towards the right output; when it gets there the left input will pan towards the right output, then back again, followed by the right side, sounding as if they're "chasing" each other. The best way to learn about how this works in different modes is to split a keyboard (violin on the right and flute on the left, for example) and listen to the result on headphones.

What is Tempo Sync?

Tremolo and Autopan are both rhythmic effects—they have a beat. Sometimes, you'll want the rate of the effect to match the beat of your music instead of being random. For example, you can set the rate so that the Autopan effect pans from side to side once per measure, or once per quarter note. The TEMPO SYNC feature of the Alesis ModFX series not only lets you set a tempo naturally by tapping on the TAP TEMPO button, it can automatically adjust its speed slightly relative to a "tapped" audio input, after setting the basic speed using the TAP button.

To use Tempo Sync:

Both the tremolo and the autopan can be independently set to TEMPO SYNC mode, as follows:

1. Press the down side of the rocker switch for the tremolo or autopan to select the next modulation type.

   You can see the type of effect by the LED lit next to the name—for example, TRIANGLE, SQUARE, TRIGGERED and so on.

2. Keep pressing the rocker switch through all the normal modes until you enter TEMPO SYNC mode, and then advance to the type of modulation you want.

   Both the Mod Type and TEMPO SYNC LEDs will be lit. For example, if you press the down side of the rocker switch when you're in PATTERN mode, the Ampliton will go to TRIANGLE/TEMPO SYNC mode. At this point, the TAP TEMPO LED will start flashing at the last speed it was set at (or at the default rate of 120 bpm if no tempo has been set since the unit was turned on).

3. Tap the [TAP TEMPO] button several times to set the desired tempo.

   The TAP TEMPO LED will flash in time to the hits. As long as the [RATE] control is in the center position, the tremolo or autopan speed will match the tempo.

4. If the tempo isn't quite right, "tap" a steady, discrete beat on any instrument connected to the input. The internal processor will then synchronize the tapped tempo with the audio input. The processor will make slight alterations to the tempo such that it stays synchronized with the beat of the audio input.

To turn Tempo Sync off:

Simply press the UP side of the [MODULATION] switch repeatedly until the Tempo Sync LED goes off, then select the autopan or tremolo mode/waveform you want.

The RATE knob is different in Tempo sync mode

In TEMPO SYNC mode, the RATE knob acts as a multiplier to the speed set by TAP TEMPO, so you can't get the tempo to change slightly by adjusting that knob. Note that changes to RATE won't affect the flashing of the TEMPO LED.

Description of Controls

Rate

The [RATE] knobs change the speed of the Ampliton's effects:

- The [RATE] knob on the left controls how quickly the Tremolo effect will happen.
- The [RATE] knob on the right controls how quickly the Autopan effect will happen.

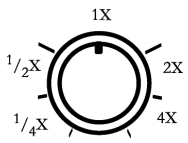
In normal modulation modes (TEMPO SYNC LED off), turning the [RATE] knobs will smoothly alter the rate from very slow to very fast. Turn the knobs clockwise for a faster tremolo or autopan effect.

Rate knobs in TEMPO SYNC mode

When an effect is in TEMPO SYNC mode, the fundamental speed of the effect is set by the TAP TEMPO function, and the rate knob can be used to adjust that rate to an even fraction or multiple of the current tempo:

- With the knob indicator in the 12 o'clock position, the mod rate will be the same as tempo (i.e, quarter note).
- Turn the knob to the left to set the mod rate at a half of the tempo (i.e., one cycle per half note), then a quarter of the tempo (once per measure).
- Turn the knob to the right to set the modulation to twice the tempo (eighth notes), or four times the tempo (sixteenth notes).

The diagram below shows where you can set the [RATE] knob to modulate the Ampliton at different multiples of the tempo during TEMPO SYNC mode.



Synchronizing the Tremolo and Autopan

When both effects are in TEMPO SYNC mode, you can adjust the rate knobs of each side, but they'll always be a multiple of the same tempo. Try setting the Autopan Rate to its slowest setting, and the Tremolo rate to the fastest setting as an example.

Depth

The [DEPTH] knobs change the intensity of the tremolo or autopan effect. As with the [RATE] knobs, the left [DEPTH] knob affects Tremolo, and the right affects Autopan. A tremolo with low depth will barely affect the volume of the output, but a higher depth will cause the volume to drop out completely. A mono signal going into an autopan with little depth will cause it to pan slightly, but a greater depth will cause it to pan all the way from the left to the right output and back again. Turn the knobs clockwise for a deeper tremolo or autopan effect.

To turn one effect off but leave the other on, use the DEPTH knobs:

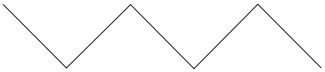
For example, turn the Tremolo depth knob full counter-clockwise while leaving the Autopan depth knob at the desired level.

Tremolo Mode Rocker Switch

The up/down rocker switch beside the Tremolo label on the left side of the unit selects the type of tremolo effect. The LEDs next to the switch light up to indicate the current mode. There are four kinds of Tremolo available, explained below. The rocker switch also selects TEMPO SYNC mode, as explained earlier.

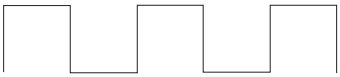
Triangle

This mode uses a triangle wave for the tremolo effect. Use this when you want the smooth up-and-down cycle of traditional tremolo (such as for electric piano or surf guitar).



Square

This mode uses a square wave for the tremolo effect, so the volume level sharply alternates between two different levels, or plateaus. If the [DEPTH] knob is turned all the way up, the sound will jump between on and off once each cycle.



Triggered

This is one of the most useful effects in the Ampliton. The triggered mode selects a triangle wave for the tremolo effect that will increase its rate for a short interval when a trigger occurs. A trigger is any sudden increase in the input audio level. Pressing the [RESET MOD] button will also cause a trigger.

Triggering reacts directly to your playing

With a little practice and some careful level adjustment of your instrument, you'll adjust to the feel of how loud you have to play to generate a trigger and speed up the effect, and how soft to play to keep the rate low.

Pattern

This mode randomly generates a 16-step sequence to modulate the tremolo or autopan and repeats it over and over. Pattern mode sometimes makes the level jump quickly from step to step, while other levels "glide" from step to step. It sounds somewhat like using "sample and hold" to modulate a VCA on a synthesizer, except that the pattern repeats regularly until you change the pattern.

- Press the [RESET MOD] button to generate a new 16-step pattern.
- Try using the [RATE] knob, or the TEMPO SYNC/TAP TEMPO features, to make the steps of the pattern play in sync with your music. Keep in mind that the pattern has 16 steps per 4 beats, so adjust the RATE knob accordingly.

RATE in Pattern mode

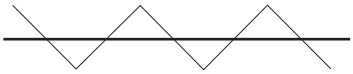
You can think of Pattern mode as being 4x the rate of Triangle or Square. In Tempo Sync mode, turn the [RATE] knob full clockwise (1/4 speed) to get one step per beat, the same as the other mod sources at a 12 o'clock setting of [RATE].

Autopan Mode Rocker Switch

The up/down rocker switch beside the Autopan label on the right side of the unit selects the type of autopan effect. The LEDs next to the switch light up to indicate the current mode. There are five kinds or shapes of Autopan available. Four of these are similar to the Tremolo modes, except of course they modulate the stereo pan position instead of the amplitude of the signals.

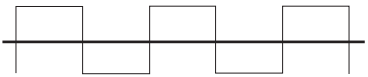
Triangle

This mode selects a triangle wave for the autopan effect. In Triangle mode, the sound pans smoothly from side to side at whatever rate you select.



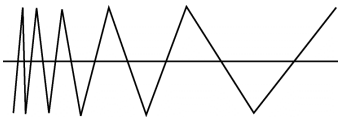
Square

This mode selects a square wave for the autopan effect so the position of each signal jumps more sharply from side to side, and holds its position until it's time to jump again. If the [DEPTH] knob is turned all the way up, the sound will jump completely from side to side once each cycle.



Triggered

The triggered mode selects a triangle wave for the autopan effect that starts out fast when a trigger occurs, then slows down. A trigger is any sudden increase in the input audio level. So, if you play a heavy accent on a note, the signals will flutter from side to side quickly, then slow down. Pressing the [RESET MOD] button will also cause a trigger.



Triggering with a volume pedal

With sustained sounds, you can trigger the Autopan or Tremolo by using a volume pedal, or the volume knob on the instrument itself. Try it!

Uncertainty

This mode randomly generates a continually altering waveform for the autopan.

Pattern

This mode randomly generates a 16-step pattern for the autopan modulation and repeats it over and over. Pattern mode sometimes makes the level jump quickly from step to step, while other levels "glide" from step to step. Another important difference is that the pattern will repeat regularly until you change the pattern.

- Press the [RESET MOD] button to generate a new 16-step pattern.
- Try using the [RATE] knob, or the TEMPO SYNC/TAP TEMPO features, to make the steps of the pattern play in sync with your music. Keep in mind that the pattern has 16 steps per 4 beats, so adjust the RATE knob accordingly.

When the Autopan is in Pattern mode, the signals will jump around to varying positions in the stereo field according to the pattern.

RATE in Pattern mode

You can think of Pattern mode as being 4x the rate of the other modulation sources. In Tempo Sync mode, turn the [RATE] knob full clockwise (1/4 speed) to get one step per beat, the same as Square at a 12 o'clock setting of [RATE].

Reset Mod

Press this button to reset the autopan and tremolo modulation as follows:

- In TRIANGLE and SQUARE modes, press [RESET MOD] to start the wave from the beginning of its phase.

  In Autopan, the wave starts at the right side, then moves to the center/left. In Tremolo, the wave starts loud, then becomes softer.

- In TRIGGERED mode press this button to generate a trigger for the modulation (momentarily speeding it up before slowing back down to the normal rate).

- In PATTERN mode press this button to generate a new 16-step pattern.

Rate settings are crucial in Triggered modes

If the rate is too slow to begin with, the increase in speed when you generate a trigger may not be noticeable, even if you use the RESET MOD feature.

Tap Tempo

This button affects the speed of the effect whenever the tremolo and/or autopan is set to TEMPO SYNC mode. In that mode, you can tap this button along with the music to set a new tempo. The Tap Tempo light will flash at the current tempo.

Tap Tempo technique

For a reliable tempo setting, make from four to eight taps in a row at a consistent speed, especially if you're changing the tempo drastically. Watch the flashing of the light to see what tempo the Ampliton is currently at.

Adjusting tempo with audio input

After the basic tempo has been set using the [TAP TEMPO] button, it is possible to make small adjustments to the tempo via the audio input. You do this by "tapping" on the instrument (playing sharp chords, or beats, without sustain or notes inbetween) at almost the same speed as the Ampliton's tempo LED, or by slightly changing the speed of a drum machine feeding the inputs. The Ampliton can derive a beat from a complex musical input, as long as it is reasonably close to the original "tapped" tempo. The tempo can adjust up or down about 15% from the original tempo tapped in.

How Tap Tempo works with Tempo Sync and the Rate knobs

When TEMPO SYNC mode is enabled, the rate of the modulation will be based on the tempo currently being flashed, multiplied by the position of its [RATE] knob: when it's in the middle position (around "12 o'clock"), the speed of the triangle, square, pattern etc. wave will be the same as the tempo. See the earlier descriptions of the [RATE] knob and Tempo Sync for more information.

To get fast modulations...

it isn't necessary to tap at a high speed if you want the effect to modulate at eighth or sixteenth notes. Just tap on the quarter-note beat, then turn the [RATE] knob to the right to double or quadruple the speed made by Tap Tempo.

Bypass

This button sends the signal directly from the input to the output without any effect. Press [BYPASS] to check the sound of the source without any effect from the Ampliton. When the red BYPASS LED is lit, both Tremolo and Autopan are off. The Bypass function can also be activated by the foot switch.

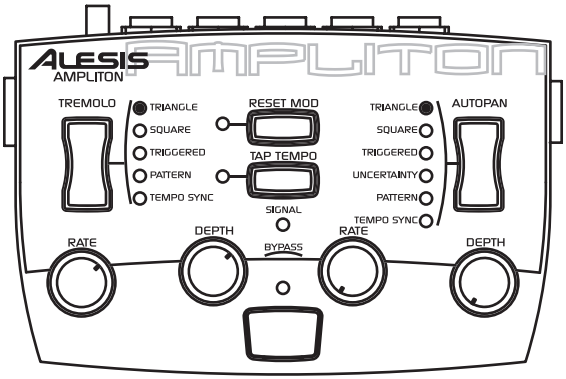
Since the Ampliton is a digital effect, signal always passes through the digital A/D–D/A conversion process, so that digital signal will flow through to other effects in a ModLink chain even when [BYPASS] is on. So, unlike old analog effects, this is not a "hardwire" bypass switch—the Ampliton must be powered on to pass signal through, even in bypass mode. Similarly, the [TRIM] control is always active, since it's an analog control regulating the level feeding the analog-to-digital converters.

Using the Foot Switch

If you need to bypass the effect totally but your hands aren't free, simply connect any momentary footswitch (such as those used for keyboard sustain pedals, either NC normally closed or NO normally open) to the [FOOT SWITCH] jack on the rear panel. The footswitch will turn the BYPASS LED on and off.

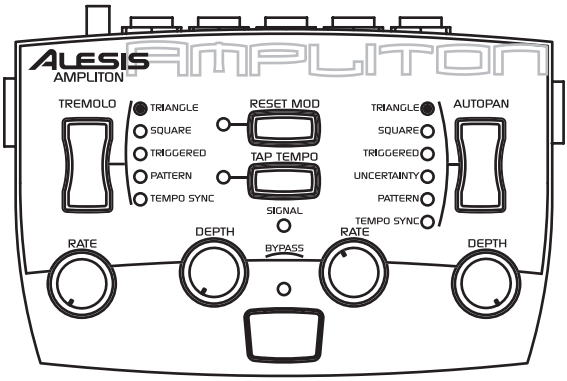
4 Sample Settings

While there's nothing like discovering new sounds for yourself, we thought it would be a good idea to provide some sample settings of the Ampliton to help get you started. Simply set the knobs on your Ampliton so they're at the positions shown, and press the rocker switches so each effect is in the mode shown by the LEDs. Feel free to modify these any way you want to suit your particular playing style.



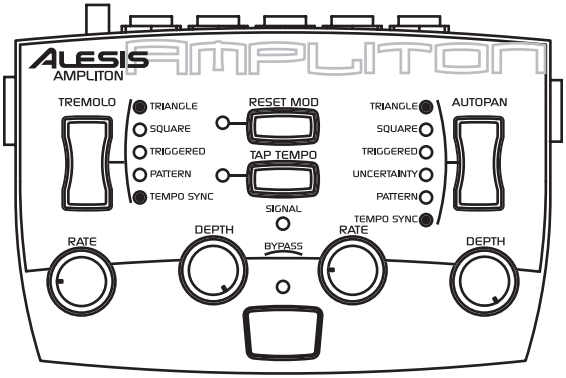
Classic Tremolo

A classic setting for guitars and electric pianos, this "patch" uses a triangle wave to generate a random-speed tremolo, with no autopan.



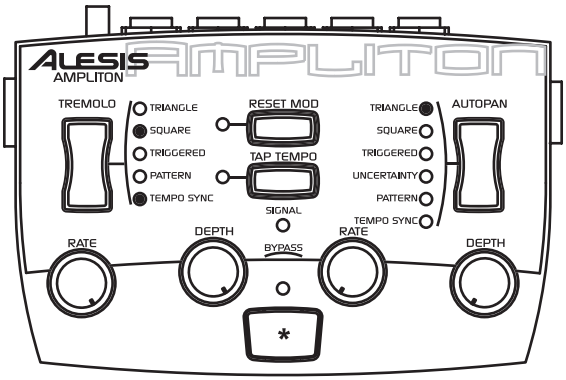
Master Pan

A slow, majestic autopan effect, with no tremolo.



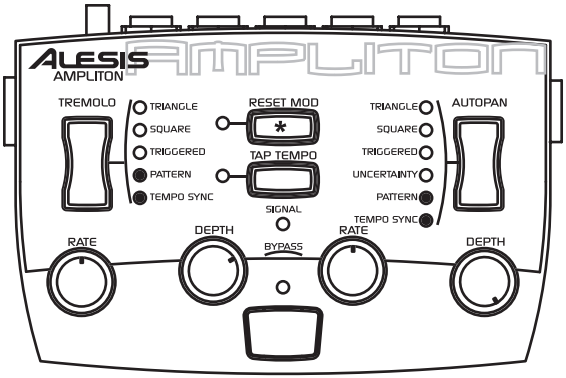
Around the World

This setting will make the sound revolve around your head. Both Tremolo and Autopan are synchronized at full depth. Use [TAP TEMPO] to match the speed to your music, and experiment with changing the [RATE] of either side.



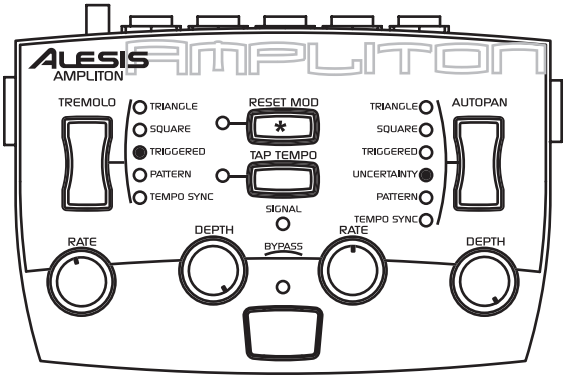
DJ Transform

This is a DJ transform (gating) effect in time with the music at 16th note intervals. Use [BYPASS] to toggle the effect on and off on cue.



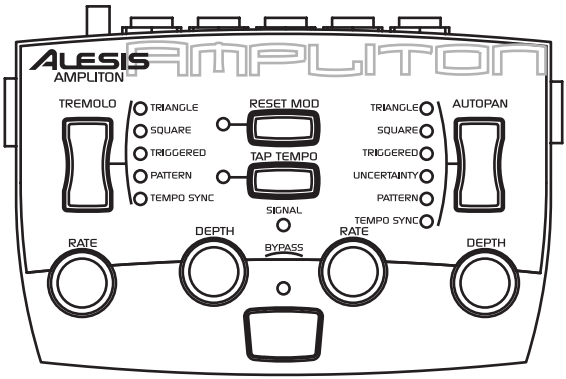
Kaleidophone

Moves audio in, out, left, and right in a complex repeating pattern in time with the music. Press [RESET MOD] to generate a new pattern.



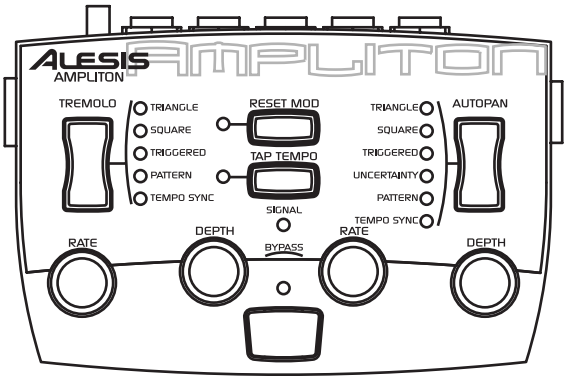
Spin the Wheel

Tremolo starts fast, ends slow, and you never know quite where the pan will end up. Trigger off the audio input or press [RESET MOD] to trigger it manually

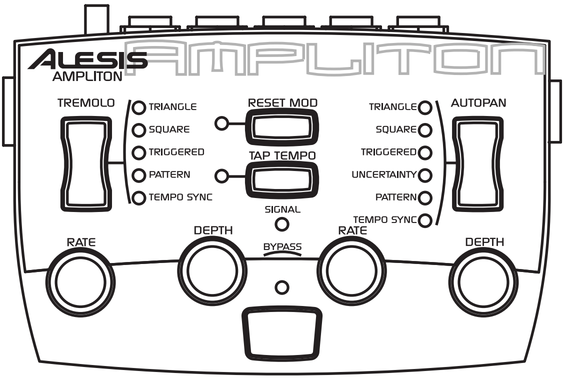


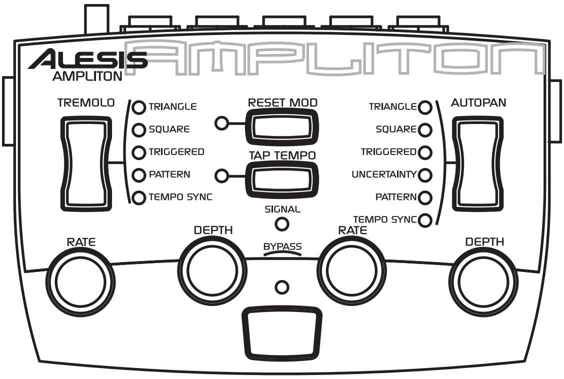
Blank

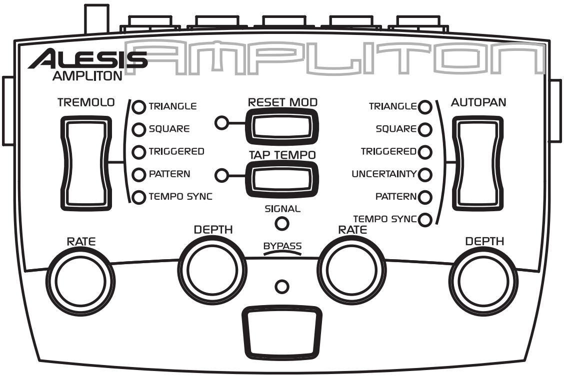
Fill in your own favorite settings here. Photocopy the next page if you need more space.



Blank templates







5 Troubleshooting

Troubleshooting Index

If you experience problems while operating your Ampliton, please use the following table to locate possible causes and solutions before contacting Alesis Product Support for assistance.

Symptoms	Cause	Solution
No audio outputs.	No input audio(SIGNAL LED doesn't flash).	Test with a known good input.
	Bad cables.	Replace the cables.
	Destination is turned down.	Check the connections and the level of the mixer or amp that the Ampliton is connected to.
	Input Trim knob is turned down	Adjust the knob to the proper level.
	Input cables are connected to a linked unit	Connect the input cables to the Master of the link chain
	Power is not connected	Go take a walk
[TAP TEMPO] button is not working	Neither Tremolo nor Autopan are in Tempo Sync mode	Select Tempo Sync mode on Tremolo or Autopan
ModLinked units are not working properly	Power dropout to one of the units in the chain	Plug in a power supply to every unit in a chain.
Distorted sound	Input level too high (SIGNAL LED on front panel flashes red)	Turn down the source, or the TRIM control on the Ampliton's back panel.
	RATE set at a high speed, to a point where it sounds like ring modulation	Turn down the RATE knob (below about "3 o'clock")
Distortion when you leave TEMPO SYNC mode	[RATE] knob is set high to get 4x the Tap Tempo rate; when you go back to a normal mode, the RATE jumps up high and sounds like distortion	Reduce the [RATE] setting
Buzz or hum from outputs	Audio cables are crossing a power cable or a power adapter.	Make sure that the Ampliton and its audio cables are kept away from power cables and wall warts. Don't wrap cable in tight bundles.
	Bad cables	Replace the cables

Symptoms	Cause	Solution
	Problem with the source	Try bypassing the Ampliton by connecting the input cables to the output cables and see if the problem remains.
AC hum	Ground loop	Place all equipment in the studio on a common ground (see next page).

Avoiding ground loop noise

In today's studio, where it seems every piece of equipment has its own computer chip inside, there are many opportunities for ground loop problems to occur. These show up as hums, buzzes or sometimes radio reception and can occur if a piece of equipment "sees" two or more different paths to ground. While there are methods to virtually eliminate ground loops and stray radio frequency interference, most of the professional methods are expensive and involve installing a separate power source just for the sound system. Alternatively, here are some helpful hints that professional studio installers use to keep those stray hums and buzzes to a minimum.

KEEP ALL ELECTRONICS OF THE SOUND SYSTEM ON THE SAME AC ELECTRICAL CIRCUIT.

Most stray hums and buzzes happen as a result of different parts of the sound system being plugged into outlets of different AC circuits. If any noise generating devices such as air conditioners, refrigerators, neon lights, etc., are already plugged into one of these circuits, you then have a perfect condition for stray buzzes. Since most electronic devices of a sound system don't require a lot of current (except for power amplifiers), it's usually safe to run a multi-outlet box or two from a SINGLE wall outlet and plug in all of the components of your system there.

KEEP AUDIO WIRING AS FAR AWAY FROM AC WIRING AS POSSIBLE.

Many hums come from audio cabling being too near AC wiring. If a hum occurs, try moving the audio wiring around to see if the hum ceases or diminishes. If it's not possible to separate the audio and AC wiring in some instances, make sure that the audio wires don't run parallel to any AC wire (they should only cross at right angles, if possible).

TO ELIMINATE HUM IF THE ABOVE HAS FAILED:

1. Disconnect the power from all outboard devices and tape machines except for the Ampliton, the mixer and control room monitor power amp.
2. Plug in each tape machine and outboard effects device one at a time. If possible, flip the polarity of the plug of each device (turn it around in the socket) until the quietest position is found.
3. Make sure that all of the audio cables are in good working order. Cables with a detached ground wire will cause a very loud hum!!
4. Keep all cables as short as possible, especially in unbalanced circuits.

If the basic experiments don't uncover the source of the problem, consult your dealer or technician trained in proper studio grounding techniques. In some cases, a "star grounding" scheme must be used, with the mixer at the center of the star providing the shield ground on telescoping shields, which do NOT connect to the chassis ground of other equipment in the system.

Line conditioners and spike protectors

Although the Ampliton is designed to tolerate typical voltage variations, in today's world the voltage coming from the AC line may contain spikes or transients. These can cause audible noises, and they can stress your gear and, over time, possibly cause a failure. There are three main ways to protect against this, listed in ascending order of cost and complexity:

- **Line spike/surge protectors.** Relatively inexpensive, these are designed to protect against strong surges and spikes, acting somewhat like fuses in that they need to be replaced if they've been hit by an extremely strong spike.
- **Line filters.** These generally combine spike/surge protection with filters that remove some line noise (dimmer hash, transients from other appliances, etc.). A good example is the Isobar™ series from Tripp Lite.
- **Uninterruptible power supply (UPS).** This is the most sophisticated option. A UPS provides power even if the AC power line fails completely. Intended for computer applications, a UPS allows you to complete an orderly shutdown of a computer system in the event of a power outage. In addition, the isolation it provides from the power line minimizes all forms of interference—spikes, noise, etc.

Care and Maintenance

Cleaning

Disconnect the AC cord, then use a damp cloth to clean the Ampliton's metal and plastic surfaces. For heavy dirt, use a non-abrasive household cleaner such as Formula 409™ or Fantastik™. DO NOT SPRAY THE CLEANER DIRECTLY ONTO THE FRONT OF THE UNIT AS IT MAY DESTROY THE LUBRICANTS USED IN THE SWITCHES AND CONTROLS! Spray onto a cloth, then use cloth to clean the unit.

Refer all servicing to Alesis

We believe that the Ampliton is one of the best signal processors that can be made using current technology, and should provide years of trouble-free use. However, should problems occur, DO NOT attempt to service the unit yourself unless you have training and experience. Service on this product should be performed only by qualified technicians. NO USER-SERVICEABLE PARTS INSIDE.

Obtaining repair service

Before contacting Alesis, check over all your connections, and make sure you've read the manual.

Customers in the USA and Canada:

If the problem persists, contact Alesis and request the Product Support department. Make sure you have the unit's serial number with you. Talk the problem over with one of our technicians; if necessary, you will be given a return order (RO) number and instructions on how to return the unit. All units must be shipped prepaid and COD shipments will not be accepted.

For prompt service, indicate the RO number on the shipping label. **Units without an RO will not be accepted.** If you do not have the original packing, ship the unit in a sturdy carton, with shock-absorbing materials such as Styrofoam pellets (the kind without CFCs, please) or "bubble-pack" surrounding the unit. Shipping damage caused by inadequate packing is not covered by the Alesis warranty.

Tape a note to the top of the unit describing the problem, include your name and a phone number where Alesis can contact you if necessary, as well as instructions on where you want the product returned. Alesis will pay for standard one-way shipping back to you on any repair covered under the terms of this warranty. Field repairs are not authorized during the warranty period, and repair attempts by unqualified personnel may invalidate the warranty.

Customers outside the USA and Canada:

Contact your local Alesis distributor for any warranty assistance. The Alesis Limited Warranty applies only to products sold to users in the USA and Canada. Customers outside of the USA and Canada are not covered by this Limited Warranty and may or may not be covered by an independent distributor warranty in the country of sale. Do not return products to the factory unless you have been given specific instructions to do so.

Specifications

Audio Input

Input Connectors:	2 unbalanced 1/4" jacks
Maximum Input Level:	+10 dBV
Nominal Level:	-10 dBV
Input Impedance:	470kΩ
Input Converter Resolution:	24-bit, 48 kHz sampling

All measurements done over a 22Hz – 22kHz range with a 1kHz sine wave at -1dBFS input. Impedances are measured at 1kHz.

Audio Output

Output Connectors:	2 unbalanced 1/4" jacks
Maximum Output Level:	+9 dBV
Output Impedance:	500Ω
Output Converter Resolution:	24-bit, 48 kHz sampling

Audio Performance

(Analog In to Analog Out)

Signal To Noise Ratio:	>100 dB A-weighted
THD+N:	< 0.005%
Frequency Response:	± 1dB from 22Hz to 22kHz
Internal DSP Resolution:	28-bit
Power Consumption:	7 Watts max (9VAC Alesis P3)

Mechanical

Size:	2.1" H x 5.8" W x 3.9" D (53mm H x 148mm W x 98mm D)
Weight:	12.6oz. (357 g)

This page intentionally left blank.

Index

Warranty / Contact Alesis

Alesis Limited Warranty

ALESIS CORPORATION ("ALESIS") warrants this product to be free of defects in material and workmanship for a period of one (1) year for parts and for a period of one (1) year for labor from the date of original retail purchase. This warranty is enforceable only by the original retail purchaser and cannot be transferred or assigned. For the most effective service, the purchaser should register the purchase on the ALESIS website at http://www.alesis.com/support/warranty.htm.

During the warranty period ALESIS shall, at its sole and absolute option, either repair or replace free of charge any product that proves to be defective on inspection by ALESIS or its authorized service representative. In all cases disputes concerning this warranty shall be resolved as prescribed by law.

To obtain warranty service, the purchaser must first call or write ALESIS at the address and telephone number available on the Alesis Website to obtain a Return Authorization Number and instructions concerning where to return the unit for service. All inquiries must be accompanied by a description of the problem. All authorized returns must be sent to ALESIS or an authorized ALESIS repair facility postage prepaid, insured and properly packaged. Proof of purchase must be presented in the form of a bill of sale, canceled check or some other positive proof that the product is within the warranty period. ALESIS reserves the right to update any unit returned for repair. ALESIS reserves the right to change or improve design of the product at any time without prior notice.

This warranty does not cover claims for damage due to abuse, neglect, alteration or attempted repair by unauthorized personnel, and is limited to failures arising during normal use that are due to defects in material or workmanship in the product.

THE ABOVE WARRANTIES ARE IN LIEU OF ANY OTHER WARRANTIES OR REPRESENTATIONS WHETHER EXPRESS OR IMPLIED OR OTHERWISE, WITH RESPECT TO THE PRODUCT, AND SPECIFICALLY EXCLUDE ANY IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY OR OTHER IMPLIED WARRANTIES. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

IN NO EVENT WILL ALESIS BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT OR OTHER DAMAGES RESULTING FROM THE BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING, AMONG OTHER THINGS, DAMAGE TO PROPERTY, DAMAGE BASED ON INCONVENIENCE OR ON LOSS OF USE OF THE PRODUCT, AND, TO THE EXTENT PERMITTED BY LAW, DAMAGES FOR PERSONAL INJURY. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

THIS CONTRACT SHALL BE GOVERNED BY THE INTERNAL LAWS OF THE STATE OF CALIFORNIA WITHOUT REFERENCE TO CONFLICTS OF LAWS. This warranty gives you specific legal rights, and you may also have other rights required by law which vary from state to state.

This warranty only applies to products sold to purchasers in the United States of America or Canada. The terms of this warranty and any obligations of Alesis under this warranty shall apply only within the country of sale. Without limiting the foregoing, repairs under this warranty shall be made only by a duly authorized Alesis service representative in the country of sale. For warranty information in all other countries please refer to your local distributor.

For more effective service and product update notices, please register your Ampliton online at:
http://www.alesis.com/support/warranty.htm

Alesis Contact Information

Alesis Studio Electronics
Los Angeles, CA USA

E-mail: support@alesis.com
Website: http://www.alesis.com

Alesis Ampliton Reference Manual
Revision 1.0 by Alex Souppa & Dan Tinen

Copyright 2002, Alesis. All rights reserved
Reproduction in whole or in part is prohibited. Specifications subject to change without notice. Trademarks are the property of their respective holders.

7-51-0110-A
8/2002