

***aip* SYNTH™**

REFERENCE MANUAL

Alesis airSynth Reference Manual

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Introduction

Thank you for purchasing this Alesis airSynth. To take full advantage of this synthesizer's functions, and to enjoy long and trouble-free use, please read this user's manual carefully.

How to Use This Manual

This manual is divided into the following sections describing the various functions and applications for the airSynth. Though we recommend you take time to read through the entire manual once carefully, those having general knowledge about synthesizers should use the table of contents to look up specific functions.

Chapter 1: Quick Start. If you want to start using the airSynth right away, here's a one-page guide to hooking it up and trying it out.

Chapter 2: Connections. This chapter gives detailed instructions for connecting the airSynth to a variety of typical sound systems.

Chapter 3: Performance. This section explains how to select programs, use the Axyz™ Controller, and use the Hold and Bypass functions. It also explains how to use some of the special programs in the unit.

Chapter 4: Troubleshooting. This chapter contains troubleshooting tips and service information should problems occur.



When something important appears in the manual, an icon (like the one on the left) will appear in the left margin. This symbol indicates that this information is vital when operating the airSynth.

IMPORTANT SAFETY INSTRUCTIONS

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.

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.

Instructions de Sécurité Importantes (French)

Symboles utilisés dans ce produit



Ce symbole alerte 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 appareil à proximité de l'eau.
6. Ne nettoyez qu'avec un chiffon humide. Il est potentiellement dangereux d'utiliser des pulvérisateurs ou nettoyeurs liquides sur cet appareil.
7. Installez selon les recommandations du constructeur.
8. Ne pas installer à proximité de sources de chaleur comme radiateurs, cuisinière ou autres appareils (dont 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 troisième 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 sort de l'appareil.
 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 lorsque 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 fonctionnement normale génère de la chaleur, placez cet appareil au moins 15cm. des équipements périphériques 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 produire 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.

Beim Benutzen dieses Produktes beachten Sie bitte die folgenden Sicherheitshinweise: (German)



- 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 nicht in der Nähe von Heizkörpern, Heizungsklappen oder anderen Wärmequellen (einschließlich Verstärkern) auf.
9. Verlegen Sie das Netzkabel des Gerätes niemals so, daß man darüber stolpern kann oder daß es gequetscht wird.
10. Benutzen Sie nur das vom Hersteller empfohlene Zubehör.
11. 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.
12. Ziehen Sie während eines Gewitters oder wenn Sie das Gerät über einen längeren Zeitraum nicht benutzen den Netzstecker aus der Steckdose.
13. 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.
14. Dieses Gerät produziert auch im normalen Betrieb Wärme. Achten Sie deshalb auf ausreichende Lüftung mit mindestens 15 cm Abstand von anderen Geräten.
15. 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 ist. Wenn Sie ein Nachlassen des Gehörs oder ein Klingeln in den Ohren feststellen, sollten Sie einen Ohrenarzt aufsuchen.

CE Declaration of Conformity

Manufacturer's Name: Alesis Corporation

Manufacturer's Address: 1633 26th Street
Santa Monica, CA 90404
USA

declares, that the product:

Product Name: airSynth

Model Type: Signal Processor

conforms to the Standards listed for this product on the web site

www.alesis.com

European Contact: Sound Technology
17 Letchworth Point, Letchworth,
Hertfordshire, SG6 1ND, England.
Phone: +44.1462.480000
Fax: +44.1462.480800

March 2001

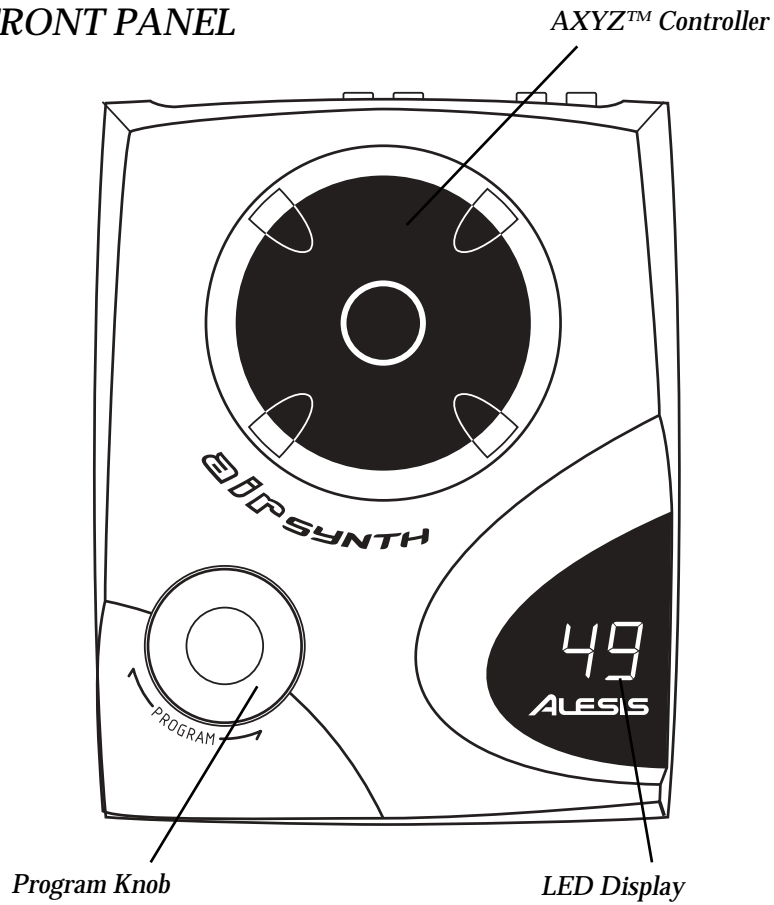
INSTRUCTIONS TO THE USER (FCC compliance)

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:

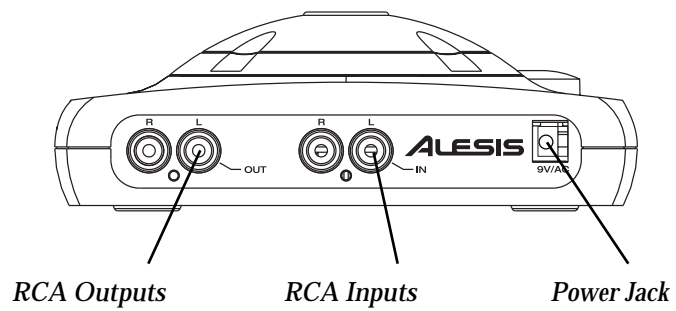
1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

This equipment has been verified to comply with the limits for a class B computing device, pursuant to FCC Rules. In order to maintain compliance with FCC regulations, shielded cables should be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of the manufacturer could void the user's authority to operate this equipment.

FRONT PANEL



REAR PANEL

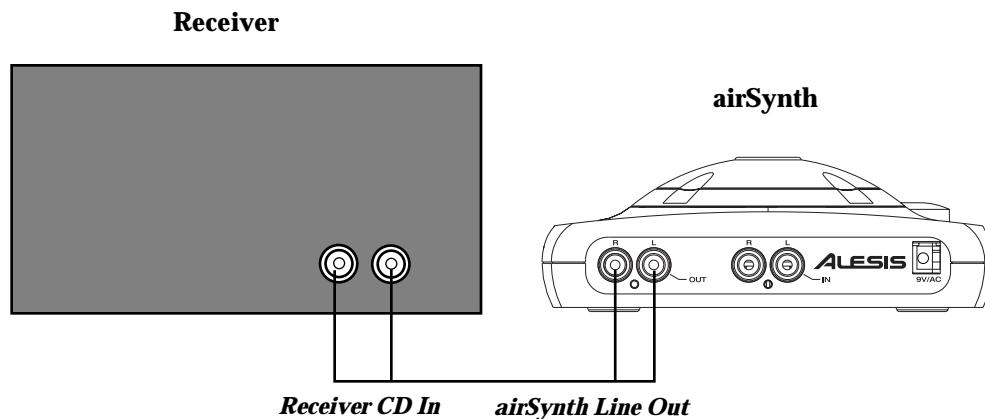


QUICK START GUIDE

This page gives you brief instructions so that you can start using the airSynth right away. If you have questions about any of the steps, don't worry – the following chapters will expand on these instructions in mind-numbing detail.

Step 1: Hook it up

Pull the airSynth out of the package, and plug it into the wall with the supplied Power Supply. Connect the Left and Right outputs of the airSynth into the Left and Right CD Inputs of a stereo receiver or mixer.



NOTE: If your system looks different from this one, skip ahead to Chapter 2, Connections.

Step 2: Select a Program

Turn the Program Select knob and select a Program between 00 and 49. When you've found one you like, press the knob down to select it. There is a list of program names printed on the bottom of the unit.

Step 3: Have fun

Move your hand over the black Axyz™ dome on the unit. Try moving from side to side, front to back, as well as up and down. Get down!

CONNECTIONS

Unpacking and Inspection

Your Alesis airSynth was carefully packed at the factory, and 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 your processor for servicing.

The shipping carton should contain the following items:

- airSynth Processor
- This instruction manual
- Program Chart
- Power Supply, Alesis model P3
- Alesis Warranty card
- 2 3' RCA stereo cables



It is important to register your purchase; if you have not already filled out your warranty card and mailed it back to Alesis, please take the time to do so now.

Basic Connections

The airSynth is designed to function with a wide range of equipment, from CD players to musical instruments. The only requirement is that the input and output signals be line level (for the technically minded, unbalanced -10 dBu).

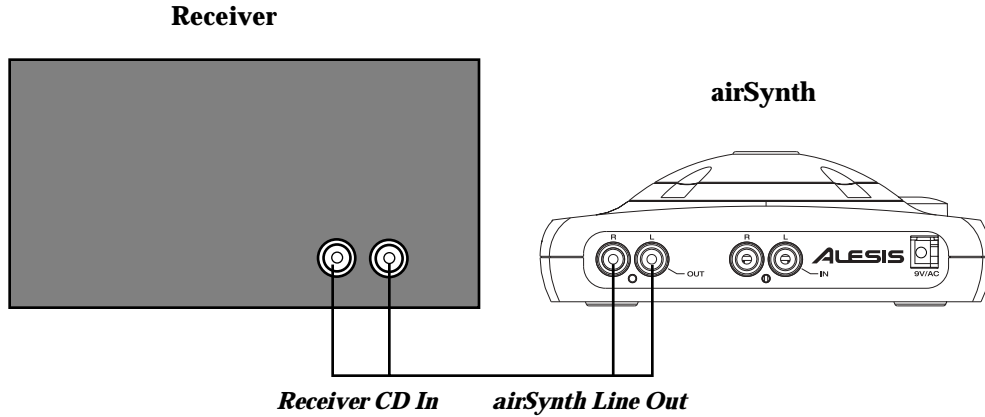


This means that you never want to plug the powered output of an amplifier or receiver into the airSynth. These speaker-level voltages will fry the electronics inside of the airSynth.

The systems on the next few pages will give you some examples of typical systems where the airSynth is used. If you can't apply one of

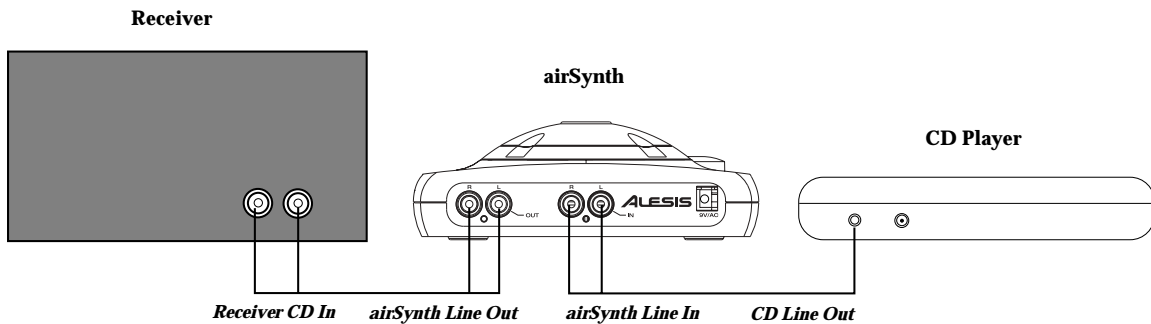
these systems to your own setup, contact Alesis or your dealer for assistance.

Connecting to a Stereo Receiver



The simplest method for listening to the airSynth is to connect the Left and Right Outputs to the Left and Right Inputs of a stereo receiver. The CD or Tape inputs of your receiver are best for this purpose – if you use Phono inputs the airSynth will sound very noisy.

Connecting between a CD Player and a Stereo Receiver



The above system allows you to hear the airSynth with a CD player through your home stereo system. Although the airSynth does not change the sound of the CD, this method allows you to hear both sources at once. Using a stereo RCA (phono) cable, plug the Left and Right outputs of your CD player into the Left and Right Inputs of the airSynth. Usually, the white connector is connected to the Left side and the red connector is connected to the Right side.

Next, using another stereo RCA cable, plug the Left and Right outputs of the airSynth into the Left and Right CD inputs of your receiver. (Actually, any unused inputs on the receiver should work except for “Phono” or “Record Player”.)

If the unit doesn't have RCA outputs:

The instructions above are fine for home or professional CD Players. However, most portable CD players don't have a pair of RCA outputs like component CD players do. Instead, they have a 1/8" Mini jack. This is usually labeled “Line Out”. If your CD Player doesn't have a Line Out, then use the Headphone output and set the Volume to about 80% to avoid distorting the airSynth.

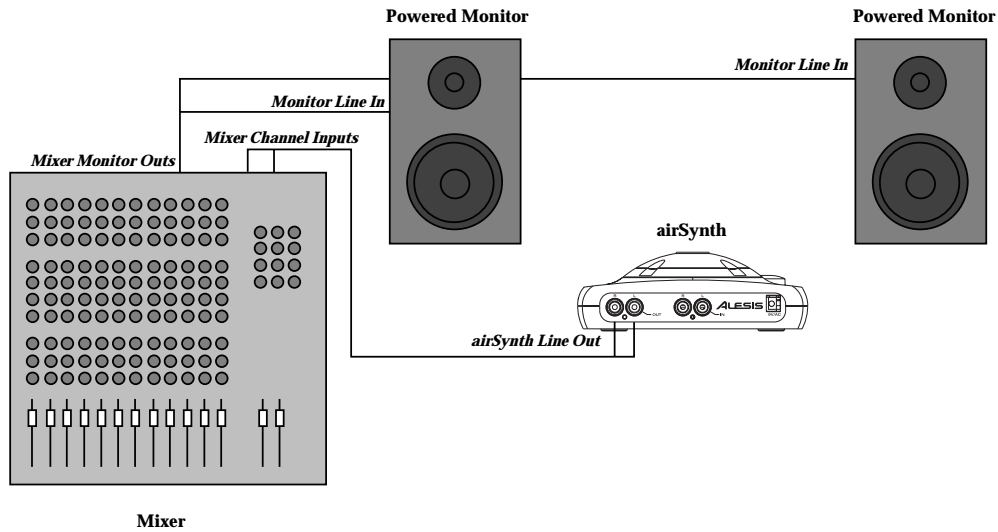
Many portable CD players include a cable with a 1/8" mini jack on one side and a pair of RCA connectors on the other. You will need to locate or purchase this cable to use a portable CD player with the airSynth. Plug the RCA connectors on this cable into the Left and Right Inputs of the airSynth. You should be able to use these instructions to connect a game console, DVD player or video camera through the airSynth.



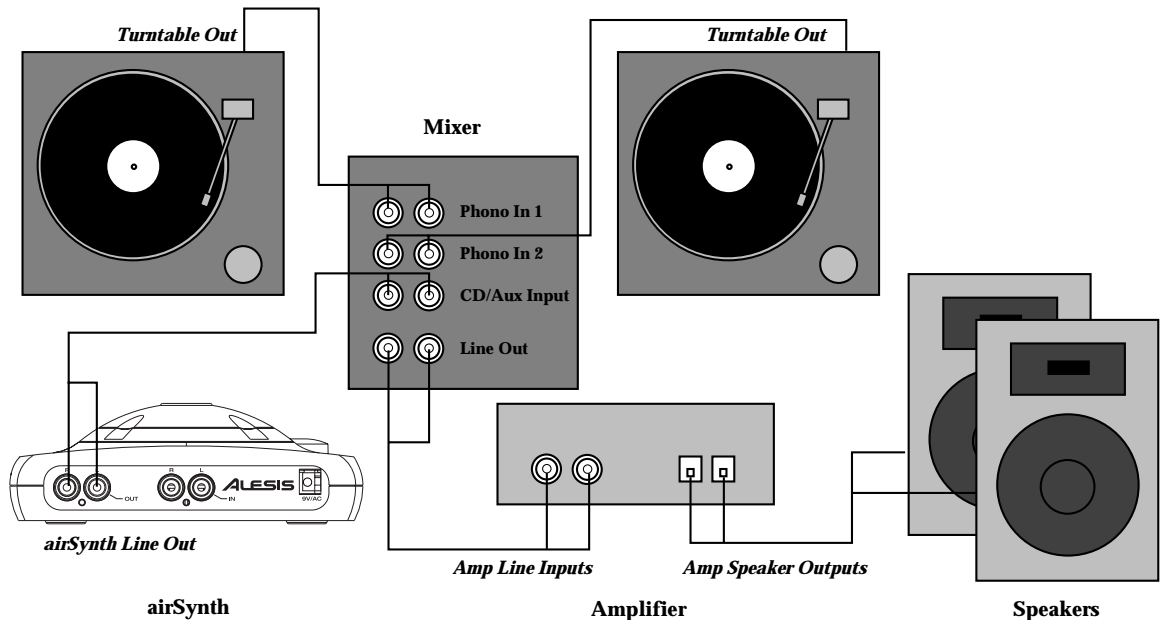
Although the speaker outputs of many compact stereo systems use an RCA connector between the main outputs and the speakers, speaker level voltages like these will distort and possibly damage the airSynth.

Connecting to a Studio Mixer

The best method of connecting the airSynth to a mixing console is to use a pair of channel line inputs. You'll need a cable with two 1/4" connectors on one side and two RCA connectors on the other. Connect the RCA jacks to the airSynth's line outputs, then connect the 1/4" jacks to a pair of line inputs on the mixer. If no channel line inputs are available, tape returns or effects returns may be used instead.



Connecting into a DJ System



This section explains how to connect the airSynth into a DJ system. The first point to mention is that the output of a turntable is *not* at line level. Therefore, unlike a CD player, you can't just connect the output of the turntable through the airSynth. You would need to connect the turntable to a preamp, then connect this output to the airSynth.

A much better method is to use a DJ mixer. This allows you to control the volume of both turntables (or CD players) and the airSynth

separately. In the system above, we first connect the two turntables into two inputs of the mixer. We then plug the Left and Right outputs of the airSynth into another mixer input. Next, plug the Left and Right outputs of the mixer into the Left and Right inputs of your power amplifier.



If your amplifier is built into the mixer, make sure you don't plug those speaker-level outputs into the inputs of the airSynth. The voltage levels needed to drive large DJ speakers will distort and possibly damage the airSynth.

Mounting on a Microphone Stand

The bottom of the airSynth features a threaded socket for a standard microphone stand. This allows the unit to be mounted away from the area where the other equipment is, so that unintended movements won't be picked up by the Axyz controller.

When mounting on a stand, avoid tipover by:

- Using a stand with a heavy base
- Tying the input, output and power cables to the stand in several places, especially near the base (so if someone pulls on the cord, it pulls on the base)
- Using cords that are long enough

Mono Operation

The airSynth does not have a mono output. If your sound system is mono, you should use a "Y-cable" to sum the outputs of the airSynth. Connect the two connectors of the Y-cable to a single RCA cable, then connect this cable to your mono destination.

You can also simply connect one of the outputs to a mono input. However, the panning effects will cause many programs to jump up and down in volume.

PERFORMANCE

Selecting a Program

The Alesis airSynth contains 50 programs, each one creating a different effect. There is a list of program names printed on the bottom of the unit, and you should have received a program chart with the unit that describes each program.

Selecting a new program is simple:

1. Turn the program knob on the bottom left side of the airSynth to select a program number. The new program will not load right away, allowing you to keep using one program while you find another.

12.

Notice that there is a decimal point after the program number to indicate that it hasn't been loaded yet.

2. Press the Program knob to load this new program.

12

The decimal point goes away, showing that the program has been loaded.

Using the Axyz™ Controller

The airSynth is the second in a line of Alesis products to use the groundbreaking Axyz controller. This controller allows you to use your hand to control the sound of your music in a way never before possible.

The Axyz Controller works by sending a beam of invisible infrared light out of the top of the unit. There are sensors all around the dome which see the light when it is reflected back. By moving your hand around the dome, you reflect the light to different sensors, and this changes the sound of the effect.

There are three sets of sensors in the Axyz controller, they are known as the X-axis, Y-axis, and Z-axis.

The **X-axis** sensor reads your hand position from left to right.

The **Y-axis** sensor reads your hand position from the front to the back of the unit.

The **Z-axis** sensor reads how close your hand is to the sensor (up and down).

Tip: When playing the airSynth, make sure to move your hand in all three directions. Some of the programs don't use the Y-axis, but most use all three.

You should hear an effect when your hand gets within 6" (15 cm) of the Axyz controller. For a list of what each axis does to the sound, see the Program Chart which came with your unit.

Note that ambient light can affect the sensitivity of the Axyz controller. Make sure that you don't sit the airSynth right next to a light source or in the sun, or you may notice that you need to move your hand closer to hear an effect. You may also notice this if a large light is pointed directly at the airSynth when you are on stage.

Effect Hold

The airSynth has a function that allows you to freeze the current effect from the airSynth without needing to hold your hand in place. This function is called Hold.

To use the Hold function:

1. Recall a program as described in the previous section. There should be no decimal points showing in the display.

1 2

Note that there are no decimal points in the display, showing that the effect is loaded and operational.

2. Move your hand around the Axyz controller, stopping your hand position when you find an effect that you want to freeze.
3. Press and hold the Program knob for one second. A decimal point should appear in the display between the first and second number of the program.

1.2

A decimal point has appeared between the first and second digits of the program number, showing that the Hold function is set.

4. Move your hand away from the Axyz controller. Notice that the effect continues as if your hand was still there.
5. To turn off the hold function and resume normal operation, press the Program knob one more time. The decimal point should go away and you can use the Axyz controller again to modify the sound.

On Program 2 and Programs 42-49, the Hold function puts the unit in a different mode. These programs will be discussed later in this chapter.

Effect Bypass

The effect Hold function can also be used as a Bypass. This function turns off the Axyz controller so that the effect is not accidentally triggered.

To use the Bypass function:

1. Recall a program as described in the previous section. There should be no decimal points showing in the display.

1 2

Note that there are no decimal points in the display, showing that the effect is loaded and operational.

2. Move your hand away from the Axyz controller, making sure that the airSynth isn't affecting the sound.
3. Press and hold the Program knob for one second. A decimal point should appear in the display between the first and second number of the program.

1.2

A decimal point has appeared between the first and second digits of the program number, showing that the Bypass/Hold function is set.

4. The Axyz controller should now have no effect, so moving your hand towards the Axyz dome should not change the sound.
5. To turn off the hold function and resume normal operation, press the Program knob one more time. The decimal point should go away and you can use the Axyz controller again to modify the sound.

Special Programs

The airSynth has a few Programs that act differently than the others. This section describes their special operation.

Sequencers

Programs 2, 42, 43, 44, 45

The Programs listed above are Sequencer programs. A sequencer is a device that records in a loop, remembering which notes you play. You can keep adding notes each time the sequencer loops around. When you're finished recording, the airSynth allows you to filter or adjust the loop.

When you recall one of these programs, the first thing you will hear is a metronome click. As you move your hand towards the sensor from different sides, you will trigger one of several pitches or drum sounds.

After one measure has passed (8 clicks) you will hear this tone played again. The airSynth corrects the timing so that it plays back in the nearest $1/16^{\text{th}}$ note. It's easier to think about your timing falling on a grid:

Click								
Open HH								●
Closed HH	●	●	●	●	●	●		●
Snare				●				●
Kick	●						●	●

The grid above shows the 16 different timing locations where a drum hit or pitch can fall. If you play a note a little bit early or late, the airSynth will move it so that it falls right on a beat.

The airSynth will continue looping as you add notes. When you think you've finished creating your loop, turn on the Hold function by pressing the Program knob for one second. You will notice that the click goes away and that a decimal point appears between the first and second digits of the Program number in the display.

0.2

A decimal point has appeared between the first and second digits of the program number, showing that the Hold function is set.

When you've entered Hold mode, you can move your hand around the sensor to modulate the loop. On some programs, your hand controls the balance between the instruments. On others, your hand changes the octave of the bass line or filters the loop.

Pressing the Program knob again exits the Hold function and allows you to create a new loop.

In summary, to make a new sequence:

1. (Optional:) Select the "--" program to set the tempo of the loop. See "The Tempo Program" section later in this chapter. (If the tempo is not set, the unit will operate at 120bpm upon power-up.)
2. Select the Program you want to sequence, number 2 or 42-45.
3. Play the drum sounds or pitches by approaching the sensor from different sides.
4. When you're finished adding notes, press and hold the Program knob to enter Hold mode.
5. Move your hand around the sensors to modulate the loop you've created.
6. To start over, press the Program knob again to turn off the Hold function.

Pads

Programs 1, 5, 6, 7

These programs allow you to select a pitch, then move around the sensors to change the timbre. The trick is to approach the sensor from a different direction when you want a new pitch.

To use these programs:

1. Approach the sensor from one of its sides. For example, approach from the left.
2. Twist your hand around the sensors to filter and modulate the sound.

3. Move your hand away from the sensors to stop playing the note.
4. Now, approach the sensors from another direction. The airSynth should play a different pitch.

Auto-Melody Generators

Programs 46, 47, 48, 49

These programs automatically generate a melody. When you hear something you like, you can freeze it using the Hold function and then modulate the performance.

To use these programs:

1. (Optional:) Select the "--" program to set the tempo of the loop. See "The Tempo Program" section later in this chapter. (If the tempo is not set, the unit will operate at 120bpm upon power-up.)
2. Hold your hand over the sensors. The airSynth will start playing notes at random.
3. When the airSynth plays something you like, press and hold the Program knob to engage the Hold function. While the airSynth is in Hold mode, it will keep repeating the last melody it generated.
4. Move your hands around the sensors to modulate the looping melody.
5. Press the Program knob again to exit Hold mode. The looping melody will stop and the unit is ready to generate a new melody.

The airSynth may take an entire measure before the first note sounds. If the Global tempo is slow, you may need to leave your hand in the field for a bit of time. Be patient, it's worth it!

The Global Tempo Program

Program --

Located between Program 49 and Program 00, this Program controls the tempo of every loop in the airSynth. To change the tempo, select this program and tap over the sensor at least three times. As you tap 1/4 notes in rhythm, you will hear the unit play back 1/8 notes to indicate the tempo. When you have finished, select a new program to continue using the airSynth at this new tempo.

TROUBLESHOOTING

Troubleshooting Index

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

Symptom	Cause	Solution
No audio from outputs	You're not close enough to the sensors	Try selecting Program "02" and listen for the click. If you hear one, try moving closer to the sensors or try another program.
	Bad cables	Replace the cables.
	Destination is turned down	Check the connections and the level of the mixer or amp that the airSynth is connected to.
	Power is not connected	Time for a coffee break.
Buzz from outputs	Cables are crossing a power cable	Make sure that the airSynth and its audio cables are kept away from power cables, other power transformers and wall warts.
	Bad cables	Replace the cable with a new, high-quality cable.
	Problem with the input signal	Try disconnecting the inputs to the airSynth and see if the problem remains.

Symptom	Cause	Solution
Axyz controller is not as sensitive as it should be	Too much ambient light	Move airSynth away from bright lights or sunlight.
	Too much interference from smoke	If a fog machine or cigarette smoke is nearby, try moving the airSynth.
Can't change programs	Software problem	Unplug the airSynth and plug it back in
No effect	Hold feature is turned on	If there is a decimal point between the numbers, press the Program knob quickly so that it goes away.
	Not close enough to the Axyz sensor, effect too subtle	Try moving your hand closer to the sensor or switching to a different program.

Care and Maintenance

Cleaning

Disconnect the AC cord, then use a damp cloth to clean the airSynth'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 airSynth is one of the best 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. 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, call Alesis USA at 1-800-5-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. Next day service is available for a surcharge. Field repairs are not authorized during the warranty period, and repair attempts by unqualified personnel may invalidate the warranty.

Service address for customers in the USA:

Alesis Service Department
12520 Wilkie Avenue
Hawthorne, CA 90250

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.

Internet Address: Important information and advice is available on our web site:

<http://www.alesis.com>

Email may be addressed to:

Support@alesis.com

Program Chart

Top Five:					
#	Program Name	Description	X Axis	Y Axis	Z Axis
0	Chopper	Use your hand to control the helicopter as it flies around you	Left/Right Pan	Forward/Back Pan	Proximity
1	Android Choir	The direction that your hand approaches chooses the pitch, then twist it around to adjust the tone	Pitch/Formant	Pitch/Formant	Volume
2	Beat Machine	Slap all around the sensor to add to the drum loop. Next, hold the Program knob down to stop the metronome and adjust the mix	Each quadrant adds a different drum	Each quadrant adds a different drum	–
3	FM	Moving your hand around the sensor triggers a biting, sweeping tone	FM Osc. 1 Freq.	FM Osc. 2 Freq.	Volume
4	Didgiri-Don't	A groaning synthesized digeridoo, try moving from front to back to change the pitch	Filters	Pitch	Volume
Tone:					
5	Oberon Swell	For the next three programs, approach the sensor from different directions for different pitches, then move your hand around to change the sound	Pitch/shaping	Pitch/shaping	Volume
6	Demon Pad	A darker tone, move your hand farther back for some twisted feedback	Pitch/shaping	Pitch/shaping/feedback	Volume
7	Star Chime	After a bell tone attack, moving your hand around the sensors adds filtering and panning effects	Pitch	Filter	Volume

8	C-Saw	Move left to right to play a pentatonic scale, then back to front to bend the pitch	Quantized Pitch	Pitch bend	Volume
9	Air-amin	A Theremin-like sound whose pitch rises as you hand moves back and to the right	Pitch	Octaves	Volume

Tone:					
#	Program Name	Description	X Axis	Y Axis	Z Axis
10	Radio Bass	A bass rumble with radio interference tones makes this the perfect excuse to end cell phone calls	Osc. Frequency	Modulation amount	Volume
11	Free Bass	Approach from the sides to create a bass line that sweeps up and down an octave	Pitch	Filter	Volume
12	Distorted Annoyance	The name says it all, your neighbors should start banging on the door in minutes	Pitch/shaping	Shaping	Volume
13	Chewie	Make vocal-like sounds understandable only to other airSynths	Pitch	Filter	Volume
14	LFO Abuse	Sounds like a broken UFO, move from left to right to change the speed and pitch	Pitch and LFO frequency	Filter	Volume
15	Pet Sounds	Theremin-like sound with almost two octaves of range for spooky sci-fi music	Pitch	Brightness	Volume
16	Square-amin	Another theremin, this one has a square-wave timbre	Pitch/Filter	Duty cycle/Filter	Volume
17	Ther-FM-in	This theremin uses an FM sound generator, try moving your hand forward to back to change the tone	Pitch	FM	Volume
18	Supergrowl	Did you like to break your toys when you were a kid? Then this program is for you.	Wild interrelation of FM Osc.		Volume
19	Robo-Vox	Strange vocal-sounding theremin, rotate your hand forward and back to change the Filter	Pitch	Filter	Volume

Percussion:					
#	Program Name	Description	X Axis	Y Axis	Z Axis
20	Water Drum	Move from left to right as you airdrum to change the pitch	Pitch	Pitch	Volume
21	Clockwork Bell	Makes a bell tone, try different sides of the sensor for variations on the tone	Pitch	Pitch	Volume
22	Ring Wood	“Strike” high in the field for higher notes, nearer to the dome for lower notes	Pitch	Pitch	Pitch
23	Plink	Sounds like a steel drum, add an island beat to your mix	Pitch	Pitch	–
24	Broken Chime	If you move your hand towards the back, it adds a bouncing sound	Clank	Bounce	Volume
25	Yo-Yo Drum	Hold your hand over the sensor after triggering the drum for more zaniness. Triggering close to the dome will start a sound with infinite decay. Retrigger high in the field to stop. In the meantime, play.	Pitch	Burble	Decay
26	Boom-Boom Chik	Kick drum on the right, snare on the left, try not to breakdance when playing this one	Boom/ chick	Drum tone	Volume
27	One Hand Clapping	Clap the night away, moving further back adds Decay to the sound	Pitch	Decay	–
SFX:					
28	Time Bells	Floating hammered bells change pitch and tone as you wave you hand around	Moving your hand makes pretty bell sounds		Volume
29	Cyber Chant	Chanting robotic voices, try going to Program "--" to change the tempo	Pitch	Morphing	Volume

SFX:					
#	Program Name	Description	X Axis	Y Axis	Z Axis
30	Off The Dial	"We interrupt this broadcast...", try using this radio interference program to disrupt the signal coming into the inputs	Shaping	Shaping	Volume
31	Soul Craft	Cool transport effect which adds a stereo panning effect when you move your hand away	LFO Freq/ Tone Freq.	Filter	Volume
32	Water Torture	Sounds like water dripping in a pan, move from side to side to change the pitch	Sample and Hold value	Pitch	Volume
33	Ishara	Like the pounding surf with sweeping filter effects, a great ambience bed	Filter coefficients	Filter coefficients	Volume
34	Vega Transmission	Great sci-fi transmission sound, move from side to side for some interesting stereo panning	Modula- tion amounts	Pitch	Volume
35	Whispering Wind	Spooky talking wind effect, let the airSynth tell you ghost stories	Formant change frequency	-	Volume
36	Phoneme- anon	Quite possibly the most annoying sound ever	Formant/ consonant	Formant/ consonant	Volume
37	Idle Growl	Great engine effect - move your hand to the left to step on the gas	RPM's	Amount of muffler	Volume
38	Gunplay	Stage your own battle, or a Chinese New Year if you're a pacifist	Resonance of Filter	Ferocity of battle	Volume
39	Processing...	The sound that computers make on game shows and cartoons	FM Osc. 1 frequency	FM Osc. 2 frequency	Sample and hold level
40	Soap Dish	Fun bubbly effect, stereo panning from left to right sounds great in headphones	Panning	Pitch	Volume
41	Sabre Tooth	A squeaky alien roar, try very slow movements around the sensors	FM amount	Roar!	Volume

Rhythm:					
#	Program Name	Description	X Axis	Y Axis	Z Axis
42	Bongo Beat	Slap all around the sensor to add to the drum loop. Next, hold the Program knob down to stop the metronome and Filter the loop	Filter LPF	Filter Q	-
43	Caloopso	This program allows you to program your own steel drum melody. Hold the sequence to change the key.	Hold to change key	-	-
44	Walking Bass	Another sequencer program, this one lets you program a bass line. Try changing the key after you press hold.	Hold to change key	-	-
45	Jungle Boogie	This drum sequencer uses deep bass notes and synth sounds to create hypnotic dance loops. Use the Hold function to Filter the loop.	Filter LPF	Filter Q	-
46	Auto-Bass	Hold your hand over the sensor to create a random bass line. Next, hold the PROGRAM knob to freeze the melody so you can Filter it.	LP Filter	Portamento	-
47	Auto-Melody	Like the last program, only this one creates a random melody. Use the Hold function to control Portamento amount.	Octave jump	Portamento	-
48	Auto-Techno	Another random melody generator, this one uses a techno lead tone for dance. Use the Hold function to add Filtering.	LP Filter	Portamento	-
49	Auto-Pop	This random melody generator has a mellower tone for pop songs and robotic soap opera themes	LP Filter	Portamento	-
--	Global Tempo	Tap your hand over the sensor to the beat to set the tempo for every rhythm program in the airSynth	-	-	-

SPECIFICATIONS

I/O:	Stereo RCA in and out
Nominal Input Voltage:	-10dBu
Max Input Voltage:	11.96dBu (4.34Vpp)
Dynamic Range:	102.8 dB (A-weighted)
Signal to Noise Ratio:	-102.4dB (A-weighted)
THD+N:	0.0065%
Frequency Response:	20-20000Hz
Sampling Frequency:	44.1KHz
Converter Resolution:	24bit (ADC and DAC)
Processor Resolution:	28bit

All measurements done over a 20Hz-22,000Hz range with 1KHz sine wave at Full Scale, except for the dynamic range which was done with a -60dBFS 1KHz sine wave.