

TABLE-TOP STEREO EFFECTS PROCESSOR

**Reference
Manual**

2001

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Welcome!

Thank you for making the Alesis Ineko™ 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

How to Use This Manual

This manual is divided into the following sections describing the various functions and applications of the Ineko. While it's a good idea to read through the entire manual once carefully, users who are already familiar with studio equipment can use the table of contents to look up specific functions.

Chapter 1: Quick Start. If you're already familiar with recording, this will get you started using the Ineko right away. It's a short guide to the essential elements of connections and operation.

Chapter 2: Connections. This section gives detailed instructions for connecting the Ineko to a variety of typical audio systems.

Chapter 3: Basics of Effects. This section explains what an effects processor does and explains the function of each of the controls.

Chapter 4: Description of Programs. This chapter lists each of the programs and gives a description of their parameters.

Chapter 5: Troubleshooting. Refer to this chapter if you experience any problems while using the Ineko.

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

The names of specific controls or connectors on the Ineko are printed in a special font, i.e., the **BYPASS** button.



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 Ineko.

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 un-insulated 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.
17. Do not expose the apparatus to dripping or splashing. Do not place objects filled with liquids (flower vases, softdrink 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.**

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.

Veillez 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

See the Internet site:

www.alesis.com

Instructions to the User (FCC Notice)

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 and 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 must 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 manufacturer could void the user's authority to operate this equipment.

Chapter 1

Quick Start Guide

If you can't wait to get started:

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

Step 1: Hook it up to a mixer

1. Pull the Ineko out of the package.
2. Plug the **POWER** jack on the back of the Ineko into a grounded AC power source with the supplied power adapter.
3. Using a pair of 1/4" cables, plug the insert sends of the mixer to the left and right **INPUTS** on the back of the Ineko.
4. Connect the Ineko's **OUTPUTS** to the effects return of the mixer.
5. Adjust the **INPUT LEVEL** knob on the back of the Ineko until the red **INPUT** light does not light when signal is played into the unit. Turn the control counter-clockwise to increase the level.

For more information on connecting the Ineko, see chapter 2: **Connections**.

Step 2: Try some effects

Play some signal into the unit

While learning the unit, it is helpful to play a CD or a multi-track source into the effects processor. Choose a song or part that doesn't change much, so that you can take your time experimenting with the different features.

1. Turn the **INPUT LEVEL** all the way down so that you don't distort the unit.
2. Begin to play your source material. Turn the **INPUT** knob clockwise until the red **INPUT** light comes on, then back down a bit.
3. Use the **PROGRAM ▼** and **▶** buttons to change programs on the Ineko.
4. Turn the **A**, **B** and **C** knobs to adjust the program.
5. Press the **BYPASS** button to hear your signal without the effect. Press it again to return to the effected signal.

If you aren't hearing any effect, check your connections or try another program. Some programs are easier to hear than others.

Chapter 2

Connections

Unpacking and Inspection

Your Ineko 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 Ineko for servicing.

The shipping carton should contain the following items:

- Ineko with the same serial number as shown on shipping carton
- P3 Power Adapter
- This instruction manual

Power

AC Power Hookup

Plug the female end of the power adapter into the Ineko's **9V~ POWER INPUT** socket and the male (plug) end into a good quality AC power outlet.

Tip: It's good practice to not plug in the Ineko until all other audio cables are hooked up as well. Make sure your amplifier or powered speakers are switched off when turning the Ineko on or off to avoid damage.

The Ineko works with the AC line voltage listed on the P3 adapter that came with the unit. To use the Ineko with a different voltage, contact your Alesis dealer for a compatible P3 adapter.

Connecting inputs and outputs

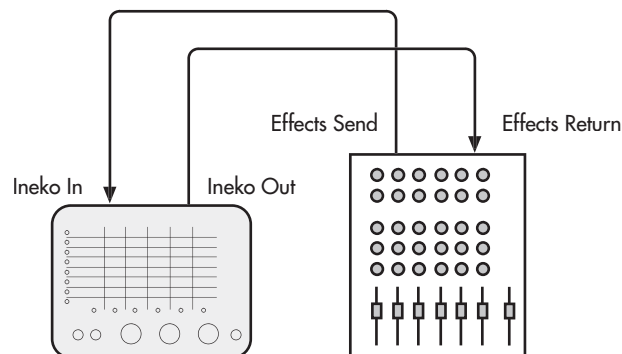
★ *When connecting audio cables and/or turning power on and off, make sure that all devices in your system are turned off and the volume controls are turned down.*

Connecting to an Instrument or Microphone:

The Ineko's **INPUT LEVEL** knob has been calibrated to accept "instrument level" signals such as a microphone or guitar input. To use the Ineko this way, simply plug the guitar or microphone into the Ineko's Input and connect the output to an amplifier, mixer or recorder. When using the Ineko with a Microphone, you may need an XLR to 1/4" adapter (not included).

Connecting to the Effects Send and Return of a mixing console:

Most mixing consoles have post-fader effects send and return jacks on their rear panels. This is usually the best choice for connecting the Ineko, as you will be able to use an effect on several sources at once.

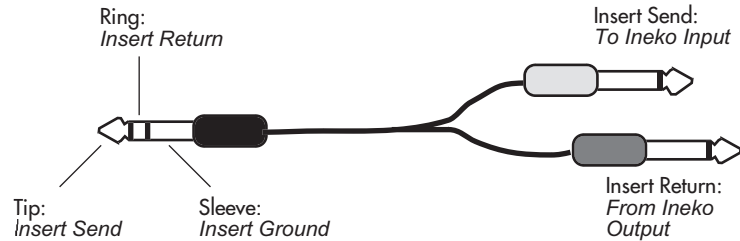


When you connect the Ineko this way, you may hear an odd phasing sound on some of the reverb and delay programs. To prevent this, always set the **MIX** parameter (usually the **A** knob) fully clockwise. You can then control the balance between the

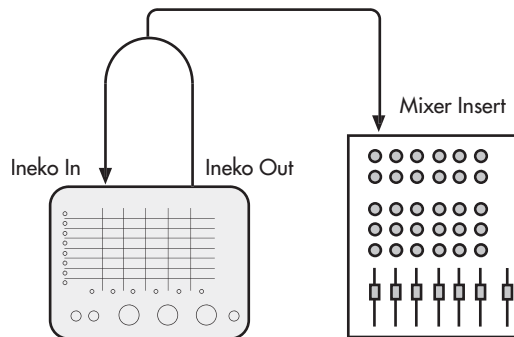
direct and effect signal with the effects return level control on your mixer.

Connecting to the Channel Inserts of a mixing console:

Most mixing 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 Ineko 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 effects processor and the ring is connected to the **OUTPUT** of the effects processor. However, this may be reversed on some mixing consoles. Check your mixer's Reference Manual to be sure or just try it both ways – this won't damage the Ineko. You may need to raise the mixer's input trim if the signal coming back from the Ineko is too low.

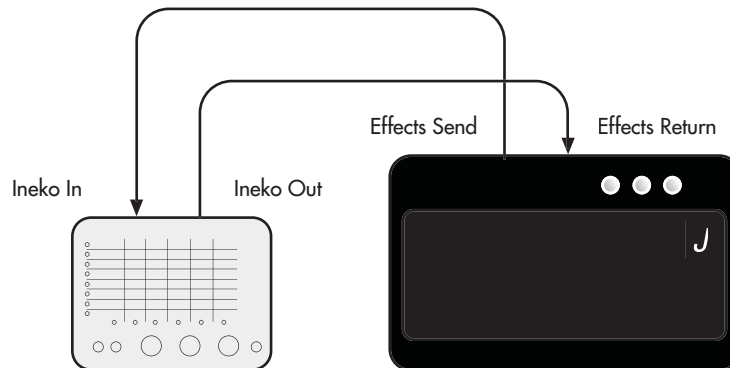


Connecting to the Main Inserts of a mixing console:

In addition to channel inserts, most mixing consoles have main insert jacks near the main outputs. You can use insert cables to connect the Ineko 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 Ineko. Use another insert cable to connect the right main insert to the right **INPUT** and **OUTPUT** of the Ineko.

Connecting to the inserts on an instrument amplifier:

Guitar and bass amplifiers often have insert points for effects as well. These are typically labeled "effects send and return" or "insert send and return".



About Audio Cables

The connections between the Ineko 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 Ineko 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.

And most importantly, keep connectors clean. Every few months, unplug them and wipe off oxidation with a clean cloth soaked in alcohol or contact cleaner. Insert the plugs in the jacks a few times, to clean the internal jack contacts. Although Alesis does not endorse any specific product, chemicals such as Tweek and Cramolin, when applied to electrical connectors, are claimed to improve the electrical contact between connectors.

Chapter 3

Using the Ineko

This section explains the functions of the controls on the Ineko and lists the programs and their parameters' functions.

Description of Controls

The Ineko has five controls on its front panel:

PROGRAM ▼

This button changes programs within a column of effects.

PROGRAM ►

This button selects a column of effects. Use this control to switch to an entirely different type of effect.

A, B and C

These knobs adjust the parameters of an effect.

BYPASS

This button disables the effect of the Ineko, allowing the direct signal to be heard without Effect.

List of Programs

This section lists the Ineko's programs and describes the functions of the **A**, **B** and **C** parameter knobs.

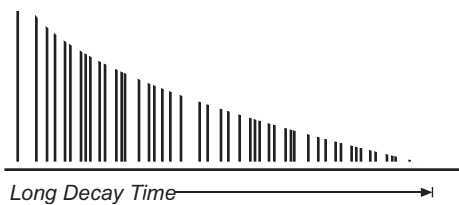
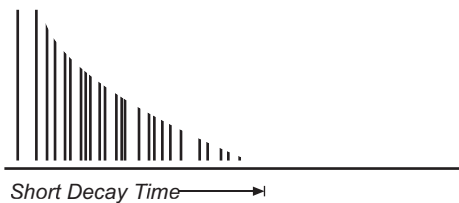
Reverb Effects (1st Column)

The first column of effects programs in the Ineko are all reverberation programs. Reverb is made up of a large number of distinct echoes, called reflections. In a natural acoustic space, each reflection's amplitude and brightness decays over time. This decaying action is influenced by the room size, the location of the sound source in the room, the hardness of the walls, and other factors.

Most of the reverb programs share the following three parameters:

MIX Mix controls the balance between the original, direct sound and the effected sound. When this control is turned fully counter-clockwise, you should hear no effect from the Ineko. When it is fully clockwise, you will hear only reverb.

DECAY Decay controls the length of the reverb tail. Turn the control clockwise for a longer reverb sound or to simulate a larger space.



COLOR The tonal balance or "EQ" of the reverb signal. This is often described in terms of "brightness" or "darkness". Turn the control clockwise for a brighter, livelier sound. Turn it counter-clockwise for a darker, less defined sound.

HALL

A simulation of a large concert hall.

VOCAL HALL

A smaller, brighter concert hall designed for vocals.

VOC PLATE

Emulation of a classic plate reverb, transparent and smooth, also good for vocals.

DRUM ROOM

Room reverb optimized for drums.

SPACE

A large space for sounds to swim around in.

TRASH CAN

A trashy metallic reverb. Try it on drums and guitars.

GATED

This reverb's signal abruptly cuts in and which abruptly cuts off, good for rock drums.

REVERSE

This reverb has a reversed decay envelope – fading in, then cutting off abruptly.

MIX Balance between direct/reverb signal.

TIME Length of time until the effect cuts off.

RATE This adjusts the fade-in slope, or “attack” of the effect. Turn the control clockwise for a more gradual fade-in.

Delay Effects (2nd Column)

The second column of effects programs in the Ineko are delay programs. Delay provides a discrete repetition, or echo of the input signal. A portion of the delayed signal is fed back into the input to produce additional echoes of the original signal.

Most of the programs in this column share the following three parameters:

MIX Mix controls the balance between the original, direct sound and the effected sound. When this control is turned fully counter-clockwise, you should hear no effect from the Ineko. When it is fully clockwise, you will hear only the delayed signal.

DELAY This control specifies the amount of time that the input sound is delayed.

FDBK Feedback adjusts the amount of the delayed signal which is fed back into the input. This effectively controls how many times you will hear the input signal repeat. When Feedback is set fully counter-clockwise, you will only hear one repeat of the input signal. When it is fully clockwise, the high feedback level can cause self-oscillation.

DELAY

A simple mono delay.

ST DELAY

A stereo delay program.

RUNAWAY

A mono delay where the Mix control has been placed in front of the delay loop. Careful manipulation of the Mix knob will let you create complex looping phrases. Or just crank up the Mix for out-of-control fun.

LPF DELAY

A delay program which passes the delayed signal through a low-pass filter.

HPF DELAY

A delay program with a high-pass filter in the delay feedback loop.

BPF DELAY

A delay program with a band-pass filter in the delay feedback loop.

PHASE DELAY

A delay program with a phasor effect in the delay feedback loop.

DYN REVERB

A reverb program whose decay is made shorter or longer, depending on the level of the input signal.

MIX Balance between direct/reverb signal

SENS This controls the sensitivity of the effect – how closely it follows the input level.

-DECAY+ This adjusts whether the reverb decay time grows shorter or longer when the input level increases.

Pitch Effects (3rd Column)

The third column of programs are Pitch effects. The Pitch effects alter the pitch of a signal in various ways to produce “layered” timbres that are more complex than the original signal.

Many of these effects make use of a Low Frequency Oscillator - LFO – to modulate the signal. The effect of the LFO modulation is heard as a sound characteristic rising and falling at a constant, cyclical rate.

PHASE 1

A classic 4-stage phasor effect with feedback.

FDBK Adjusts the amount of feedback, making the effect more pronounced.

WIDTH Controls how far the LFO sweeps.

RATE Rate of the LFO.

PHASE 2

Deeper, 8-stage phasor effect.

PITCH Adjusts the center frequency from which the LFO modulates up and down. This effectively sets the frequency range and character of the effect.

WIDTH Controls how far the LFO sweeps.

RATE Rate of the LFO.

FLANGER

Classic sweeping tape flange effect.

PITCH Adjusts the center frequency from which the LFO modulates up and down. This effectively sets the frequency range and character of the effect.

WIDTH Controls how far the LFO sweeps.

RATE Rate of the LFO.

INV FLANGER

Flanger effect with the feedback signal inverted for a hollow, metallic sound.

PITCH Adjusts the center frequency from which the LFO modulates up and down. This effectively sets the frequency range and character of the effect.

WIDTH Controls how far the LFO sweeps.

RATE Rate of the LFO.

TRANSPOSE

Dual pitch shifter which transposes the signal harmonically.

MIX Balance between direct and pitch-shifted signal.

PITCH L Amount of pitch shift (+/-) applied to Left signal.

PITCH R Amount of pitch shift (+/-) applied to Right signal.

ST DETUNE

Dual pitch detune effect.

MIX Balance between direct and pitch-shifted signal.

PITCH L Amount of detune (+/-) applied to Left signal.

PITCH R Amount of detune (+/-) applied to Right signal.

CHORUS

Rich 6-voice chorus effect.

MIX Balance of direct and effected signals.

PITCH Adjusts the center frequency from which the LFO modulates up and down. This effectively sets the frequency range and character of the effect.

WIDTH Controls how far the LFO sweeps.

VIBRATO

LFO controlled pitch shift.

DEPTH How far the pitch is shifted by the LFO.

SHAPE Shape of the LFO wave. Constantly variable from a smooth sine to chaotic sample-and-hold.

RATE Rate of the LFO.

Filter Effects (4th Column)

The fourth column of effects on the Ineko has a series of filter effects. These effects change the frequency response of the input by boosting or cutting parts of the signal.

BAND LIMIT

Limits the high and low frequency range of the input. Good for emulating telephones, radio and other low-fidelity sound sources.

FREQ Adjusts the center frequency of the effect – mid point between the high and low frequency cut-offs.

WIDTH The bandwidth of the filter. This determines the distance between the highest and lowest frequencies which will be heard.

NOISE Adds noise to the signal. Useful for “Lo-Fi” effects.

LP BP HP

A selectable low-pass, band-pass or hi-pass filter with resonance.

FREQ Cut-off frequency of the filter. This sets which frequencies are boosted and which are cut by the filter.

Q Adjusts the resonance, or shape of the filter at the cut-off frequency. Turning the knob clockwise increases the level boost at the cutoff frequency. At high Q levels, the filter can self-oscillate.

LP-BP-HP Toggles between low-pass, band-pass and high-pass filter modes.

LFO LP

A resonant low-pass filter whose frequency is modulated by an LFO.

FREQ Initial cut-off frequency of the filter.

WIDTH Width of the filter change.

RATE Rate of the LFO.

AUTOWAH

Wah-wah filter effect with envelope control. The frequency of the filter changes in response to the input signal level.

FREQ Initial filter frequency.

ENV Envelope sensitivity. This determines how much effect the input signal has on the wah-wah.

RATE Envelope rate. This determines how quickly the filter frequency responds to the input level.

FORMANTS

Filters which simulate human vocal sounds. An LFO sweeps through a series of "vowel" sounds.

VOWEL The starting "vowel" filter shape of the effect.

RANGE Controls how many "vowel" filter shapes will be used in the effect.

RATE Rate of the LFO.

SAMPLED BP

Band-pass filter whose frequency is driven by a sample-and hold circuit.

MIX Balance between the input and the filtered signal.

FREQ Initial band-pass filter frequency.

RATE Rate at which the filter frequency will change.

RESONATOR

Resonant band-pass filters swept by an LFO.

PITCH Center frequency of the filters.

RANGE Controls how far from the center frequency the filters are swept.

RATE Rate of the LFO.

AUTOPHAZ

An envelope controlled phasor effect. The sweep of the phasor tracks the input signal level.

SENS Sensitivity of the envelope. This determines how closely the phasor follows the input level.

FDBK Amount of feedback. Turn clockwise to make the effect more pronounced.

RATE Rate of the envelope. This determines how quickly the phasor sweeps.

Misc. Effects (5th and 6th columns)

The last two columns of effects on the Ineko are a selection of miscellaneous effects.

RING MOD

Ring modulator effect with envelope follower.

DEPTH Amount of ring modulation.

ENV Input envelope follower amount. Turn this knob clockwise to increase the effect that the input level has on the modulator frequency.

FREQ Frequency of the modulating signal.

DECIMATOR

Reduces the digital resolution of the signal to create unique lo-fi distortion.

DECIM Amount of decimation.

RING Turn clockwise to increase the aliasing artifacts.

DAMP Filter to decrease high frequency distortion and aliasing artifacts.

FREQ SHIFT

Shifts frequency without preserving harmonics.

MIX Balance of Frequency shifted signal and input.

FREQ Adjusts how far frequency is shifted from original.

WARP Stereo modulation amount.

RMS LIMITER

A faithful emulation of a classic optical limiter.

DRIVE Amount of gain reduction.

RATE Attack and release envelope rate. Turn clockwise for slower envelope.

OUTPUT Output volume.

VOCO-BEND

40-band vocoder with adjustable formant frequencies.

SHIFT Shifts the frequencies of the output formant filters.

SIBIL Amount of sibilant boost for intelligibility.

IN MIX Mix between input signal and vocoder output.

VOCODER

40-band vocoder effect for robotic vocals.

PITCH Pitch of the carrier wave.

SIBIL Amount of sibilant boost for intelligibility.

IN MIX Mix between input signal and vocoder output.

GRINDER

Filtered, multi-band distortion. Works best with dynamic material.

THRES Threshold of the distortion.

RES Filter resonance.

FREQ Band-pass frequencies.

SUB BASS

Sub-harmonic synthesizer. Adds ultra-low bass to the signal.

SUB Sub-harmonic (sub-bass) level.

DRIVE Multi-band limiter threshold. This adjusts the “feel” of the bass – turn counter-clockwise for a more dynamic sound, clockwise for longer sustain..

LO CUT Adjusts frequency of steep high-pass filter. At high volumes, the ultra-low bass frequencies produced by the SUB BASS program have the potential to damage some speakers. Turn knob clockwise to reduce the low frequencies.

AUTOPAN

Automated stereo panning effect.

CENTER Pan location of the mono summed input.

WIDTH Width of the panning effect.

RATE Rate at which the signal is panned.

TREMOLO

Mono tremolo (volume modulation) effect.

DEPTH Amount of volume change.

SHAPE Shape of the tremolo wave, from sine to square.

RATE Rate at which the volume will be varied.

REC NOISE

Vinyl record emulator.

DUST Amount of dust on the record.

TICKS Amount of scratches on the record.

SKIP Turn the control in either direction to simulate a record skipping.

TAPE SAT

Simulates the effects of analog tape saturation.

DRIVE Amount of tape saturation.

NOISE Amount of simulated tape hiss.

BUMP Amount of bass boost.

FUZZ

Big and furry, analog-style distortion.

DRIVE Amount of distortion.

LOW Low frequency boost.

HIGH High frequency boost.

G GARAGE

Multi-effect with compression, stereo detune, and trashy reverb.

Try it on guitar or drums.

COMP Amount of compression.

DETUNE Depth of detune effect.

REVERB Reverb level.

PITCH / REV

A reverb's decay is looped through a pitch shifter with spacey and supernatural results. Try it on vocals or lead instruments.

MIX Balance between the direct and effected signal.

DECAY Reverb decay time.

PITCH Amount of pitch shift up or down.

VIBROWOBL

Unsynchronized Vibrato and tremolo effects.

VIBRO Rate of the Vibrato effect.

TREMO Rate of the Tremolo effect.

DEPTH Depth of the Vibrato and Tremolo effects. Large amounts may cause sea-sickness!

Troubleshooting

Troubleshooting Index

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

<i>Symptom</i>	<i>Cause</i>	<i>Solution</i>
No audio from outputs	No input audio	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 Ineko is connected to.
	Power is not connected	Verify that power supply is plugged in.
Buzz from outputs	Cables are crossing a power cable	Make sure that the Ineko and its audio cables are kept away from power cables, and wall warts.
	Bad cables	Replace the cable with a new, high-quality cable.
	Problem with the source	Try removing the Ineko from the signal path, 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, 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:**

- A) Disconnect the power from all outboard devices and tape machines except for the Ineko, the mixer and control room monitor power amp.
- B) 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.

- C) 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!!
- D) 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 Protectors

Although the Ineko 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 Ineko'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 Ineko 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. 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.

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

Specifications

Subject to change without notice

Audio I/O

Input/Output Connectors:	1/4" mono jacks
Maximum Input Level:	+10dBV (7.78 Vrms)
Input impedance:	470k Ohms
Maximum Output Level:	+10dBV (7.78 Vrms)
Output impedance:	470 Ohms

Audio Performance

Dynamic Range:	>95dB
THD+N @ 1kHz:	0.006%
Frequency Response:	20Hz -20 kHz \pm 0.1 dB
A/D-D/A Conversion:	24 bit, 44.1 kHz
Signal Processing:	28 bit Alesis DSP

Physical

Dimensions:	5.75" x 1.75" x 5.50" (146mm x 45mm x 140mm)
Weight:	13.4 oz (6.1 kg)
Power:	9V AC

Alesis Limited Warranty

ALESIS STUDIO ELECTRONICS ("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.

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 printed below 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.

ALESIS Studio Electronics
Los Angeles, CA
www.alesis.com

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