



MANUAL

THE K3 INTEGRATED AMPLIFIER



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MANUAL

This manual is divided into the following sections:

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- Safety Certification
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K3 INTEGRATED AMPLIFIER

Congratulations on your purchase of the ROKSAN K3 Integrated Amplifier. This Integrated Amplifier is designed and manufactured to the highest specification and rigorously tested to reward you with many years of listening pleasure.

Your K3 Integrated Amplifier is an integral part of your system. Its correct installation, set-up and operation will have a significant influence on the performance of the entire hi-fi installation.

Please read the contents of this manual thoroughly. It will help you to understand your hi-fi equipment better and further enhance your listening pleasure.

Unpacking

Included in the packing of your K3 Integrated Amplifier you will find:

- One mains lead fitted with the correct mains power plug for your country.
- One Roksan R7 remote control

After removing these items please retain all packing material. Correct packing is necessary for future transportation of your K3 Integrated Amplifier.

Maintenance

After disconnecting the K3 Integrated Amplifier from the mains supply, the cabinet and front panel may be cleaned with a lightly dampened soft cloth or chamois leather. Avoid using abrasive substances or solvents.

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EU Directives

This product is designed to comply with the legal provisions of EU Directives 89/3336/EC and 72/23/EC. The standards which have been applied are those which were in force at the time of the introduction of this product.

This product bears the CE mark.

This product must be earthed. Please ensure that other equipment connected to it is earthed according to the manufacturer's instructions.

Cautions

AC Mains Supply

Your K3 Integrated Amplifier is set to operate from a fixed supply voltage which is marked on a label next to the mains input plug. Before connecting the mains lead please check that your mains supply corresponds to the label as below:

230V Products: Voltage Range 220V - 240V

115V Products: Voltage Range: 110V - 120V

100V Products : Voltage Range: 90V - 110V

The mains lead supplied with this product has an IEC mains socket which plugs into the IEC connector on the unit's rear panel. The other end is normally attached to the appropriate mains plug for your country. In the UK this is the standard UK13A plug.

This plug should ordinarily not be removed from the lead. If you do remove it, please dispose of it safely so that it cannot be plugged into a mains socket whilst in a potentially dangerous condition. We suggest that you obtain from your dealer a complete set of replacement leads.

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Should you move to another area where either the mains voltage or the mains plug are different from those as supplied with your Integrated Amplifier, please contact the appointed ROKSAN distributor for assistance.

Please observe correct mains polarity at all times.

The Integrated Amplifier mains fuse is located on the rear panel next to the IEC mains connector. This must only be replaced by the fuse of the type and rating as described on the fuse rating label on the rear panel of the unit.

This product requires connection to earth (ground). The earth wire (in the UK this is colour coded green/yellow) of the mains cable supplied with your Integrated Amplifier must be connected to a suitable earthing point established for this purpose by your electricity supply company. If you are in any doubt, consult a qualified electrician.

If the equipment is likely to be unattended for some time, unplug it from the mains supply.

General Cautions

FCC Warning

This equipment may generate or use Radio Frequency energy. The user may lose the right to operate this equipment if unauthorised modifications are made.

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Interference

Properly installed, this unit should not cause harmful interference to radio communications. There is, however, no guarantee that such interference will not occur in a specific installation. If interference arises (which you can determine by switching the unit off and on) you could try to remedy matters by using the following methods:

- Re-orient or re-locate the receiving antenna.
- Increase the distance between the K3 Integrated Amplifier and receiver.
- Connect the unit to a different mains circuit from that of the receiver.
- Consult your ROKSAN appointed dealer or an experienced Radio/TV technician for help and advice.

Location

Your K3 Integrated Amplifier should be located in a well ventilated area and kept away from sources of heat, dust and humidity and from direct sunlight. The integrated Amplifier may be positioned either as a free standing unit or along side another audio/video product. Never allow liquids or other objects to fall into the unit.

This unit contains no user serviceable parts. DO NOT remove any panels or attempt to service it yourself. Unauthorised servicing will void the warranty.

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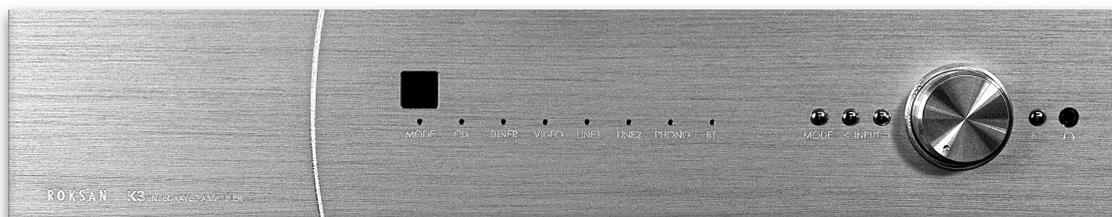
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Installation



K3 Integrated Amplifier- Front Panel View

1. Mode Button
2. Input Button (back)
3. Input Button (forward)
4. Mode Indicator
5. CD Input Indicator
6. Aux 1 Input Indicator
7. AV Input Indicator
8. Aux 2 Input Indicator
9. Aux 3 Input Indicator
10. Phono Input Indicator
11. Bluetooth Indicator
12. Bluetooth Button
13. Headphone Socket (3.5mm)
14. Volume Control
15. AC Mains Power Switch

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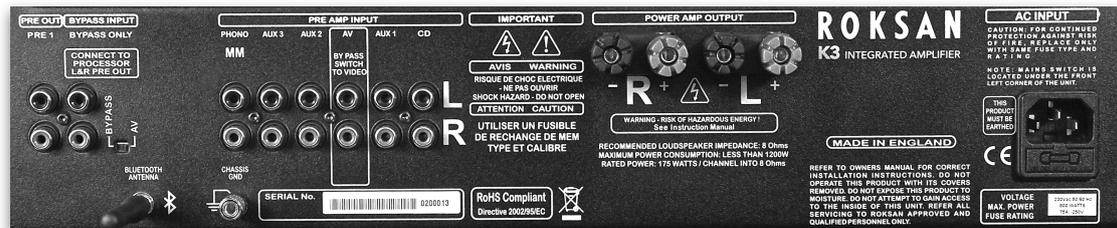
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K3 Integrated Amplifier- Rear Panel View



17. Pre amp Output 1 (Multi-Amping or Subwoofer)
18. Bypass Input (When Bypass switch 31 is set to BYPASS)
19. Phono Input (Moving Magnet)
20. Aux 3 Input
21. Aux 2 Input
22. AV Input
23. Aux 1 Input
24. CD Input
25. Right Speaker Output
26. Left Speaker Output
27. AC mains Input
28. AC Mains Fuse Holder
29. Voltage & Fuse Label
30. Phono Input / Chassis Grounding Terminal
31. Bypass Switch (Selects between AV & Bypass Inputs)
32. Bluetooth Antenna

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Set-Up

Connecting mains Power

Please refer to the front & rear panel view on Pages 5&6. The moulded IEC connector or the supplied mains lead should be plugged into socket (27) on the rear of the unit first and then plugged into the mains supply. The mains power switch (15) is on the front under side of the Integrated Amplifier. This switch can be left on; if however the amplifier is likely to be unattended for a long period of time, switch it off and unplug the mains lead from the wall.

Signal Connections

There are 6 Inputs (18 -24) on your K3 Integrated Amplifier. Except for PHONO input (19) all other inputs are line level and will accept virtually all currently available source components. The PHONO input is factory set for Moving Magnet Cartridges to accommodate record players fitted with MM phono cartridges. The AV input (22) is linked to the BYPASS input (18) and switch to set BYPASS, then the AV input will be deactivated and the BYPASS input will become activated. In this mode, the BYPASS input can be used to a surround sound processor's front L & R pre output for home theatre use. The BYPASS input is directly connected to the power amp section and bypasses the preamp. The volume is then controlled via the surround sound processor and not the K3 Integrated. You could also use the integrated as a power amp in this mode.

All the inputs use gold plated RCA phono connectors and should be connected according to the standard convention.

- Right Channel - Red
- Left Channel - Black or White

Also in accordance with standard practice, the upper row of phono Sockets carries the Left Channel and the Lower row carries the Right Channel. The input sockets are labelled with their legends upside down as well as the normal way up to assist you should you be connecting an input from a position in front of and above the amplifier.

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MC Input Connection

If you wish to use a Moving Coil Cartridge, an in-line MC step-up transformer should be connected to the Phono Input. Alternatively a dedicated Phono Stage can be connected to a line level input. (NOTE: if you wish to connect to the Phono input, it must be set for line level signal. See above). For advice and demonstration of ROKSAN state of the art turntable reproduction systems contact your authorised retailer.

Loudspeaker Connections

The right and left loudspeakers are connected to the amplifier via the rear panel binding posts (25) and (26) respectively. There are two basic types of cable:

- Figure 8 cable has two insulated conductors which lie parallel, either side by side, or spaced by insulation.
- Overall sheathed cable has both conductors insulated and enclosed in an overall plastic sheath.

Carefully remove any over all sheath or split the figure 8 cable to a depth of about 75mm (3"). Carefully strip the insulation on each wire to a depth of about 12 mm (1/2") exposing the bare core. If the conductor is stranded, twist the strands together on each conductor.

Unscrew the binding post. There is a cross-hole about 5 mm from the panel end of the binding post. Insert the bared conductor through the hole and tighten the binding post securely making sure that there are no loose strands or bare ends protruding through the post. Carefully observe polarity ensuring that the RED (+) speaker terminal is connected to the RED (+) amplifier terminal and the BLACK (-) speaker terminal to the BLACK (-) amplifier terminal. When both left and right channels are connected to the irrespective speaker's the amplifier is ready for use.

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IMPORTANT NOTE: For optimum performance it is recommended to use high quality inter-connect cable such as ROKSAN HDC-03A High Definition Analogue Cable.

IMPORTANT NOTE: For optimum performance it is recommended to use high quality cable such as ROKSAN HDC 03S High Definition Loudspeaker Cable. Many speaker cables such as the ROKSAN HDC-03S are directional. Please observe this characteristic. DO NOT use a speaker cable with conductor size less than 16 AWG (1.6mm Diameter). The binding posts accept conductor sizes up to 12 AWG.

Multi-amping Loudspeakers

If the system loudspeakers utilise more than one drive unit with individual input terminals, for example a Tweeter and Woofer, then the loudspeakers performance should benefit from bi-amping by use of the addition of a K3 Power Amplifier. Dedicating one amplifier to the Tweeter and another to the Woofer isolates them from each other, hence reducing distortion and increasing reserved power. Speakers work significantly better with most amplifiers when multi-amped than using one, more powerful, amplifier.

For setup and connection details on multi-amping refer to the K3 Power Amplifier Manual.

Multi-wiring Loudspeakers

NOTE: Multi-Wiring connects the Woofer and the Tweeter terminals directly to the output terminals of the amplifier and is the first step towards Multi-Amping.

Operation

Please refer to the front and rear panel views on Page 3

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Switching On

The mains power switch (15) is located on the front under side of the amplifier. This switch can be left ON for normal operation. If unattended for a long period of time (going on a short break, holidays etc.) the mains power should be switched OFF and the power cord disconnected from the mains power input. When switched ON, your K3 integrated amplifier will be on STANDBY with the MODE indicator (4) illuminated in GREEN. The amplifier is now ready for use.

You can activate your K3 Integrated Amplifier in two ways:

- Press the MODE button (1) on the front panel once.
- Press the AMP button on the remote handset once.

The K3 Integrated will 'wake up', the MODE indicator illumination will change to RED, the CD input will be selected and the CD input indicator (5) will illuminate ORANGE. The amplifier will then automatically check its input/output status and after a brief moment when no problems are detected, the speaker output relays will click on and the amplifier starts in normal operation mode responding to all front panel buttons and the remote.

Using the Controls

Mode Control

The MODE button on the Front Panel (1) has the following functions:

- It activates the amplifier from Standby.
- Pressing the MODE button once with the amplifier activated will mute/ lower the volume level by 20dB. The MODE indicator light will change to AMBER. The amplifier remains fully functional in this mode. Pressing MODE again un-mutes the amplifier and the MODE indicator light will change to RED.

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Volume Control

The VOLUME control is a precision device. It follows algorithmic law so that its response approximates that of the human ear. There is an indicator on the volume control to show the appropriate volume setting.

Input Selector Button

The INPUT Selector Buttons (2) and (3) shift through the inputs one click at a time. They connect each signal source to the amplifier by shifting through the Inputs. Pressing the Forward Button (3) repeatedly will select inputs in this sequence: CD - AUX1 - AV - AUX2 - AUX3 - PHONO

Pressing the Backward Button (2) repeatedly reverses the sequence. Whenever an input is selected the appropriate indicator light will illuminate.

NB: To select the Bluetooth input, press the Bluetooth on/off button (12). The Bluetooth on light will flash when selected.

Bluetooth Connection and Pairing

Make sure your device's Bluetooth is enabled and press the Bluetooth on/off button (12) located on the front panel of the amplifier. This will select the Bluetooth source and when your device has found the amplifier, 'ROKSAN K3' will appear on your device. Next, connect to pair your device. When paired or connected the blue light will stop flashing and remain on. You are now ready to stream music to the K3 from the paired device. If your device is aptX compatible and contains high resolution audio files, then these will be streamed in the original high quality bit rate through the K3.

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NOTE: If you wish to revert to a line level or the MM phono input, push the Bluetooth on/off button and it will disconnect and the light will turn off. You can then select the required input as per normal operation. To reconnect to Bluetooth you must push the Bluetooth on/off button again. You will then have to re-connect the device (at which point the blue light will stop flashing and remain on) but pairing is not necessary.

Knowing Your K3

When you first power up from the Mains Switch the amplifier goes into Standby and the MODE indicator glows Green.

In order to reduce power consumption and heat, the power stage of the amplifier is shut down when in STANDBY mode.

If the amplifier output current exceeds its safe operating range (very low loudspeaker impedance and/or very high volume level) the protective circuitry of the K3 will take the amp into Standby mode. If subsequently lowered or the loudspeakers changed, the amplifier can be brought out of Standby to resume as normal.

NOTE: First time when you bring the K3 out of STANDBY mode after switching it ON at the mains, the input selector will default to CD (as described previously.)

Troubleshooting

If you suspect that your ROKSAN K3 Integrated Amplifier is not operating properly, you should check all the connections carefully. Pay particular attention to speaker phasing and channel connections. Phono plugs should be fully inserted - a frequent cause of problems is due to the phono plug surrounds not making proper contact. On the next page are some commonly encountered problems with suggestions for possible cures. The list is not exhaustive: If you have any unresolved problems, please consult ROKSAN or your appointed ROKSAN dealer or distributor.

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SYMPTOM	LIKELY CAUSE	SUGGESTED REMEDY
No power	AC Mains lead not inserted properly Unit not switched on	Ensure AC Mains lead is fully inserted Switch unit on (on the front underside)
No output on one or both channels Very low sound output Poor speaker imaging, lack of Bass output	Amplifier in STAND BY mode (MODE light GREEN) Missing or bad input signal connection Incorrect speaker connection Wrong input selected Tape Monitor selected Amplifier set in 20dB MUTE position (MODE light AMBER) Loudspeakers connected out of phase	Press MODE button to set amplifier in operational mode (MODE light RED) Check all input connections Check speaker output connections on rear panel Select correct input, ascertain source is working Deselect Tape Monitor Press MODE button to set amplifier in operational mode (MODE light RED - check volume setting first) Check polarity of speaker connections (especially important if Multi-wiring, Multi-amping)
Hum from speakers	Incorrect grounding	Check Mains polarity and grounding on all connected equipment

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Guarantee

Your ROKSAN Product is guaranteed against any defect in materials and workmanship for a period of five years from the date of purchase.

This guarantee only becomes effective once your product has been registered within fourteen days of purchase. Roksan reserves the right to ask for a copy of your purchase invoice.

This guarantee excludes:

1. Damage caused due to accident, misuse, neglect and incorrect installation, adjustment or repair.
2. Liability for damage or loss during transit from the retailer or purchaser to ROKSAN or its authorised distributor for the purposes of repair or inspection.

Carriage costs to ROKSAN shall be borne by the consignor.

All claims under this warranty must be made through an authorised ROKSAN retailer. If equipment returned for repair to ROKSAN is found on inspection to comply with the product specification, ROKSAN reserves the right to make a charge for examination and return carriage. Unauthorised servicing will void this guarantee. Warranty will only be valid when the product is bought through the authorized retailer. All the warranty issues will be dealt through the selling retailer.

Warranty registration can be done online at:

<http://www.roksan.co.uk/rw.php>

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Specifications

Inputs:	Line Level (x5) Moving Magnet (x1) Bluetooth (x1) Bypass (x1)
Bluetooth:	aptX
Input Impedance:	47k Ω
Input Sensitivity:	Lines 510mV
Outputs Speaker:	L & R (x1) Preamplifier (x1) Headphone (x1)
Output Power:	>150 W Into 8 Ω Both Channels Driven >300 W Into 4 Ω Both Channels Driven
Power Supply:	550VA Ultra Low Noise Toroidal Transformer. 5 Regulated Supply Rails
Frequency Response:	(-3dB), <3Hz - >100kHz
Gain:	37.3dB Overall (Pre & Power)
Harmonic Distortion:	<0.005% 1kHz - 8 Ohms
Power Consumption:	Standby: <25W Full Power 2-CH: 8 Ω <330W, 4 Ω <550W
Dimensions:	432 x 380 x 90mm (W x D x H) 432 x 380 x 102mm (Incl. Feet)
Weight:	14kg

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Notes

Please keep a record for future reference:

Date of Purchase:
Roksan Retailer:
Serial Number:
Name:
Location:

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