

Installation-Instruction B-DAB-261 in Revox B261 (Studer A726)

Version 1.0

This document provides step-by-step instructions for installing the B-DAB-261 DAB+/FM retrofit kit for the Revox B261 tuner. The retrofit for the Studer A726 is performed in the same manner. Please also note the prerequisites and optional steps.

Principle

The installation of the B-DAB-261 retrofit kit is fully reversible and can therefore be undone or removed later, if desired, without causing any permanent changes to the device. This means that no holes are drilled and no other visible changes are made to the housing.

Time requirement

For an experienced electronics technician, you can expect the installation of all components to take about 30 minutes, including opening and closing the device, removing dust, cleaning the front panel and controls, and performing a final test.

Prerequisites

Once the Revox B261 has been converted to DAB+/FM, not all components are used, so it is also possible to convert a unit that is slightly defective. The components listed below are **no longer** used and may therefore be defective. All other components continue to be used.

- 1.726.770.00 Synthesizer
- 1.726.730.00 RF Amp
- 1.726.740.00 IF Amp
- 1.726.750.00 Demodulator
- 1.726.760.00 Stereo Decoder

Tools

- Various screwdrivers
- Soldering iron
- Desoldering braid or desoldering pump
- Adhesive tape

In principle, the retrofit kit can be installed in the unit without overhauling it. However, to ensure you can continue to enjoy your unit for many years to come, it's worth thoroughly overhauling all remaining components. In particular, you should replace the electrolytic capacitors in the power supply unit 1.726.720.00, and, if possible, also in the audio section 1.726.820/821. We also strongly recommend replacing the electrolytic capacitors on the IR receiver board 1.726.890.00. Control issues with the IR remote control or malfunctions with LED or fluorescent lamps often occur when the electrolytic capacitors are no longer in good condition.

Important !

This product may only be installed by specialists who have in-depth knowledge of electronics. For laymen, the installation can usually not be accomplished in a compliant manner. In addition, the B261 will only function correctly with the technically correct procedure.

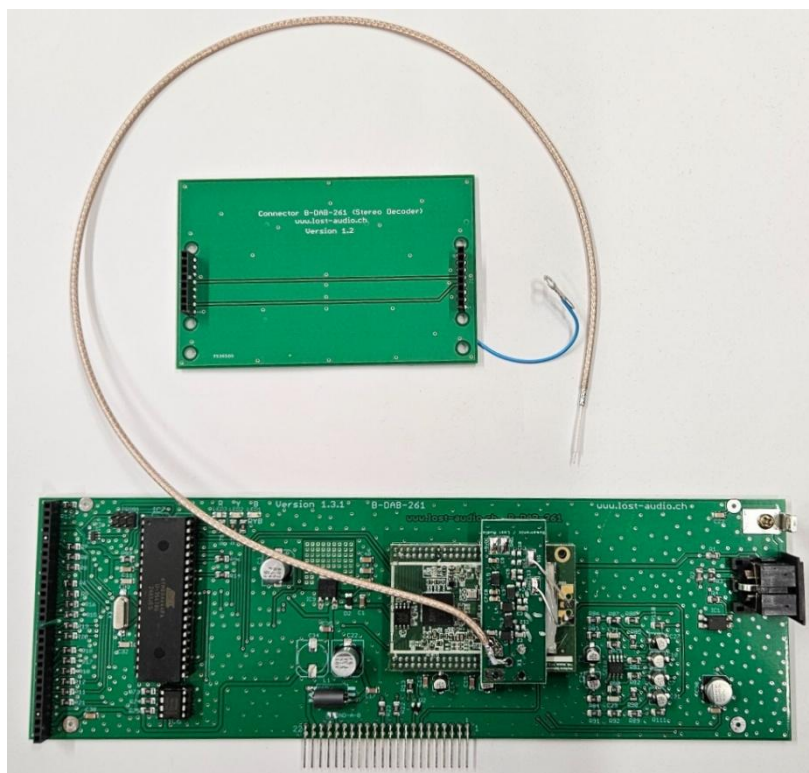
If you cannot fulfill the requirements below or you do not want to install the module yourself for other reasons, please contact Sumatronic AG or Lost Audio GmbH. You will receive a recommendation who can perform the installation for you.

Prerequisites:

- You are familiar with the handling of electronic components and assemblies and are particularly well versed in the subject of ESD (Electro Static Discharge).
- You have an appropriately equipped workplace and can thus ensure that the ESD specifications remain complied with.
- Among other things, they have the following tools at their disposal:
 - Soldering iron for electronic soldering work on printed circuit boards with ESD connection.
 - ESD work pad and wrist strap

Basic safety instructions

- Unplug the power cord and wait at least 10 minutes before starting your work.
- NEVER leave the opened device alone with the power cord plugged in, otherwise another person, or even yourself, could suffer life-threatening injuries.
- Read this manual and the safety instructions completely and do not connect the unit to the power supply until the manual tells you to do so.
- Any liability is excluded.
- Any warranty claim that may still exist for the device (e.g. after an overhaul or repair) may be voided by the installation. Because these devices have not been manufactured for many years, there is usually no longer any factory warranty.
- Do not touch any components on the circuit boards. Touch the circuit boards only at the edges.



Conversion Revox B261

1. The device must now be turned off and completely disconnected from all cables, especially the 230V power cord.
2. Place the B261 in front of you with the back facing forward and the feet pointing down. Now look at the B261 from the back, loosen the two screws at the top of the device, and then lift off the upper metal cover. The device will then be open at the top.



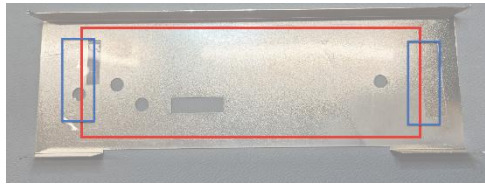
3. Now turn the device over so that the feet are facing up and you are still looking at the back of the device. Remove the 5 screws on the bottom, and then lift off the bottom cover. Also remove the screw near the "REMOTE POWER ON" jack.



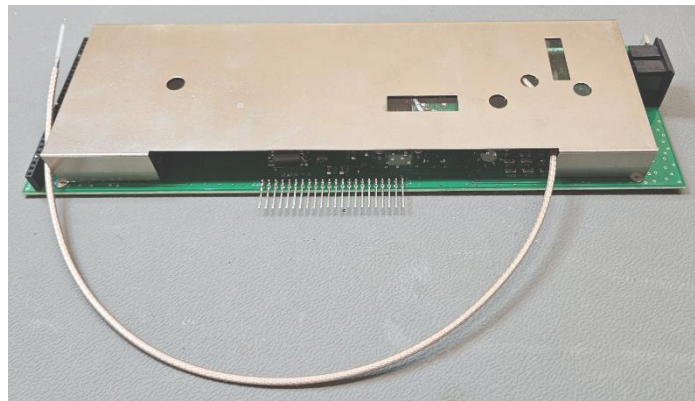
4. On the right side of the device, you will see the microprocessor board. In your unit, this board is still covered by a silver shielding plate over the components. Disconnect the two cables (red) and then very carefully lift the entire board out. If the connector (blue) is stuck tightly, you may need to wiggle it back and forth while holding the lower interconnection board in place to release it.



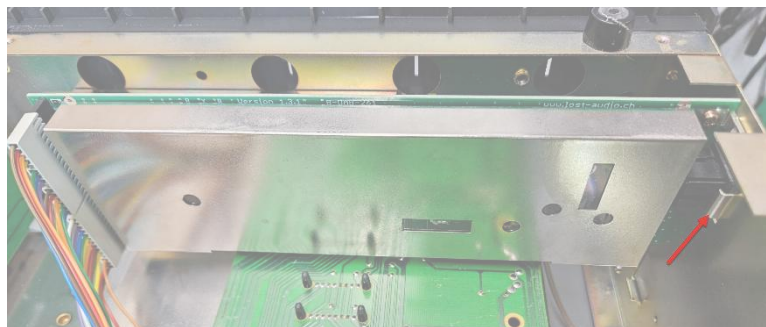
5. Now take this microprocessor board and desolder the shielding plate by desoldering the 4 solder joints on the shielding plate using the desoldering pump or desoldering braid. Next, take this shielding plate and glue the included insulation (red) inside it. Secure it roughly in the center with two adhesive strips (blue).



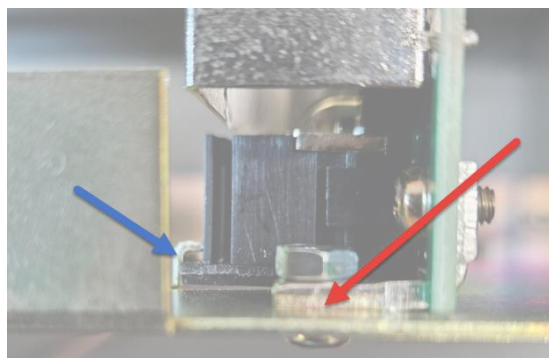
6. Next, place this shielding plate onto the new DAB+ circuit board and solder it in place using the four solder points. Make sure the shielding plate is fully in contact with the new circuit board. Also make sure the shielding plate is positioned as shown in the picture and that the antenna cable is routed out as shown in the picture.



7. Now reinsert this new circuit board into the slot on the device from which you removed the old microprocessor board. Make sure that the remote jack is properly seated in the metal groove on the rear panel. This is important to prevent the jack from being pulled out when you plug in the remote cable.



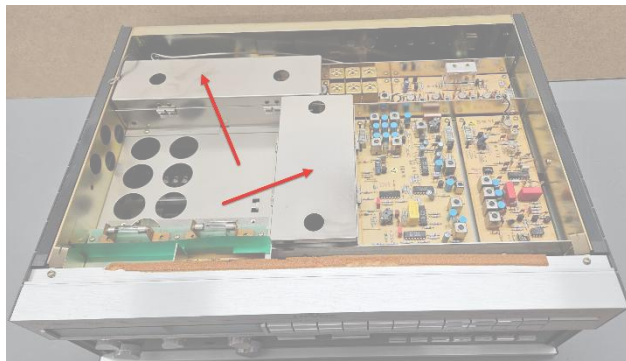
8. Now remove the screw from the remote jack and insert it from the back through the rear cover, aligning it precisely with the non-threaded hole in the mounting bracket of the new microprocessor board. Then use the included M3 nut to secure the new microprocessor board. Make sure once again that the remote jack is seated correctly (blue).



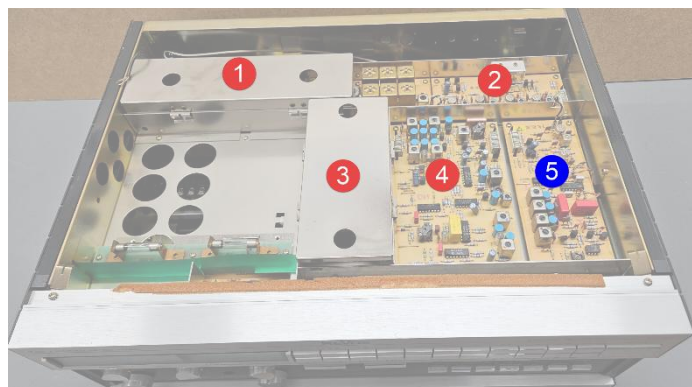
9. Now turn the device over so that it is standing on its feet again and you are still looking at it from the back. You will now see the antenna jack on the right. Use a soldering iron to disconnect the old antenna cable from this jack—first the ground wires, then the inner conductor.
10. Now thread the new antenna cable through the large opening in the device to this antenna jack. Solder it to this jack in place of the old one by carefully bending the inner conductor slightly while it is still on the insulated wire and then soldering it to the inner terminal of the jack. Next, solder the ground (tinned ground braid) to the ground terminal on the jack.



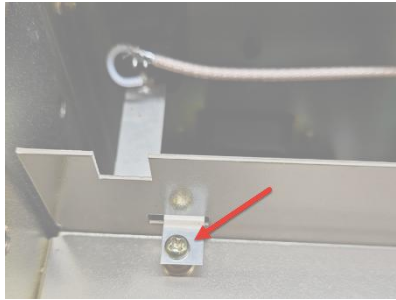
11. Now rotate the device so that it is still standing on its feet, but with the front facing you. Remove the two shielding plates that are inserted in the RF area.



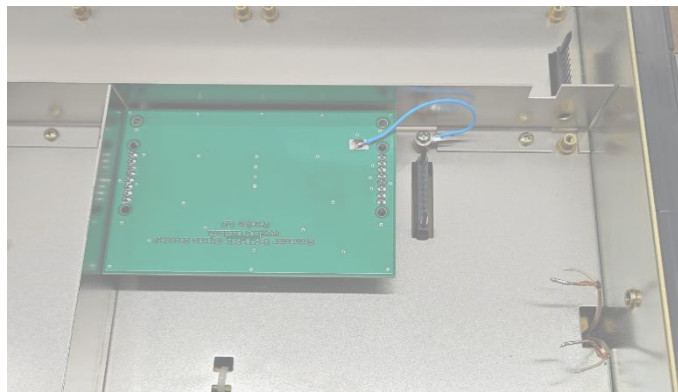
12. Now remove all four RF circuit boards marked with a red dot by loosening the numerous screws, disconnecting the short connectors, and then lifting the board out. Each board is connected to the interconnection board via one or two connectors. You can use pliers to gently lift the board at the connector and unplug it. For board 5 (blue), you'll also need to desolder the two wires on the side.



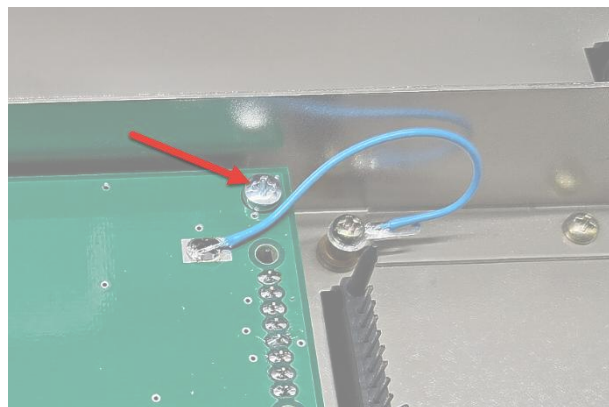
13. On Circuit Board 1, there is usually still a ground connection at the antenna. This should be secured again using one of the screws that were removed. Bend this ground connection slightly downward.



14. Now insert the included circuit board upside down in the slot where the stereo decoder was located (red dot 4). Then screw the ground wire securely into one of the adjacent threaded sockets. Take one of the screws you removed.



15. Take the included 16-mm-long M3 screw and use it to secure the attached circuit board. This screw does not need to be tightened; just tighten it enough so that it sits on the circuit board. If you tighten it too much, the circuit board will become crooked. The sole purpose of this screw is to prevent the circuit board from coming loose if the device is shipped.



16. You can now plug the device into a 230V outlet, turn it on, and test it. Be careful not to touch any live parts.
17. After the test, disconnect the device from the 230V power supply. Now reinstall the bottom panel and secure it with the 5 screws. Then replace the top cover and secure it with the two black screws.
18. The conversion is now complete. Test the device thoroughly according to the user manual. Connect the 230V power supply, the antenna, and the active speakers. Turn on the device and enjoy the new DAB+ and FM reception.

NOTE:

On the B261, IR reception is very often affected by interference, even if the IR remote control still works perfectly. In this case, the IR receiver continuously sends IR signals to the processor, which ultimately have to be discarded because they are merely interference. This places an unnecessary load on the processor and can slow down certain operations. This was the case with the original processor as well as with the B-DAB-261. A good indication of this is, for example, that the scrolling radio text moves more slowly.

This can easily be tested by simply unplugging the connector from the IR receiver module. If the scrolling text then moves faster, the IR receiver is flooding the processor with incorrect information.

IMPORTANT: Even if this is not the case with your unit, be sure to replace the three electrolytic capacitors on the IR receiver board. They are 1 x 2.2 μ F and 2 x 22 μ F – each rated at 50 V.

If the problems with the receiver still persist, another common source of failure is a defective IC on the IR receiver board, the TBA2800.