

Installation Instructions Fan Kit

1.942.186.00

Reason:

Under certain circumstances, the power supply unit in On-Air 2000 consoles can run too hot. The fan kit improves the heat transfer to the environment and transports excess heat away from the console. The fan control (Fan Supply Board) reduces the fan speed (low noise) but nevertheless takes care for a reliable start of the fan.

Contents of the Kit 1.942.186.00:

Allen screw, M3×30	21.53.0364	4
Allen screw, M3×6	21.53.9354	12
Threaded stud M3	27.10.0310	2
Cover cap, black D31.0/28.5	31.03.0114	1
Spring washer D3.2/8×0.3	37.01.0101	4
Axial fan, 80×80 mm, 12 V _{DC}	72.01.0111	1
Protective grill LZ 22 N	72.03.0001	1
Spacer sleeve 17 mm	27.01.0417	4
Air duct top cover	1.942.010.45	1
Air duct case	1.942.010.46	1
Air duct side cover	1.942.010.48	1
Air duct mounting bracket	1.942.010.47	1
Fan Supply Board	1.942.185.00	1
Wire set (1 × yel/blk, short; 1 × red/blk, long)	1.942.185.93	1
This Instruction Sheet	10.27.4920	1

Required Tools:

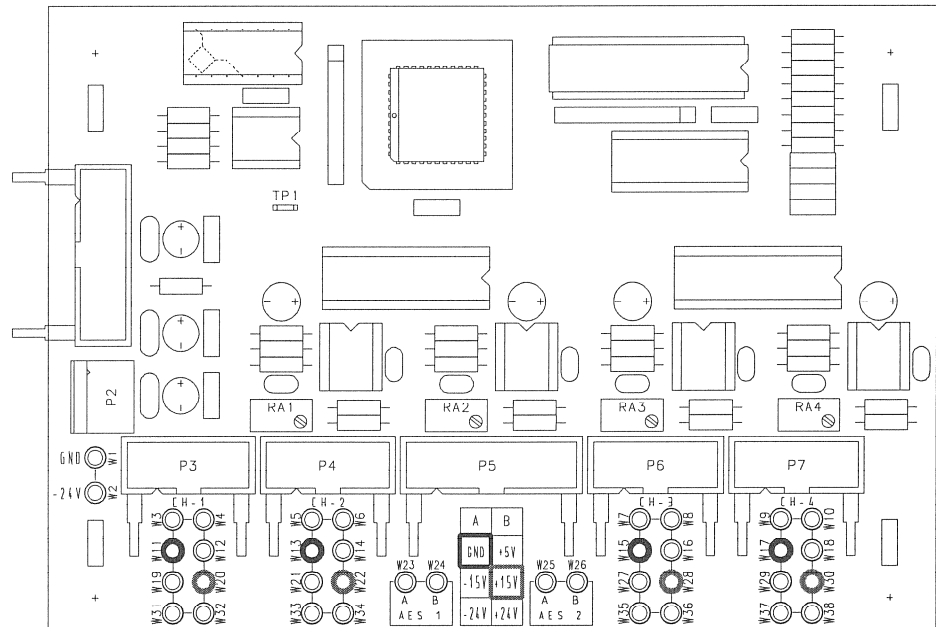
Allen screwdriver no. 2.5
 Allen screwdriver no. 2.5 with spherical tip, if available
 Wrench (or socket wrench) no. 5.5
 Soldering iron, approx. 20 W, with fine tip; solder

Preparation:

- Switch the console off and separate it from the mains.
- Remove the fader module at the left of the center touch screen unit (usually, these are faders no. 7...12; 6 screws); leave the cables connected. Fold the fader module over to the left and place it on the console.
- Remove the center touch-screen and the monitoring panels in the center section of the console; leave the cables connected. Fold the panels forward and place them on the console.
- Unplug the two cables from P1 and P4 on the Power Supply PCB 1.942.105.
- Loosen, but do not remove, the module (or blank panel) directly at the left of the primary supply unit (remove 2 screws); leave the cable connected (this step is required only to get access to two of the fixing screws of the primary supply unit).
- Loosen, but do not remove the primary supply unit (remove 8 screws) at the rear side of the console.
- Pull the two cables that have been unplugged before backwards through the hole in the console's frame.
- Remove the rubber grommet from this hole and re-insert it in the lower hole.
- Guide the two cables through the lower hole and re-connect them to the Power Supply PCB. Plug the long cable to P1, the short one to P4.
- Locate the Level Meter Interface 1.942.113 (behind the monitoring panel). On the Level Meter Interface you will find four solder pads each for +15 V and ground (GND), refer to the illustration on the next page; some of the pads may already be in use, depending on the console configuration. Select

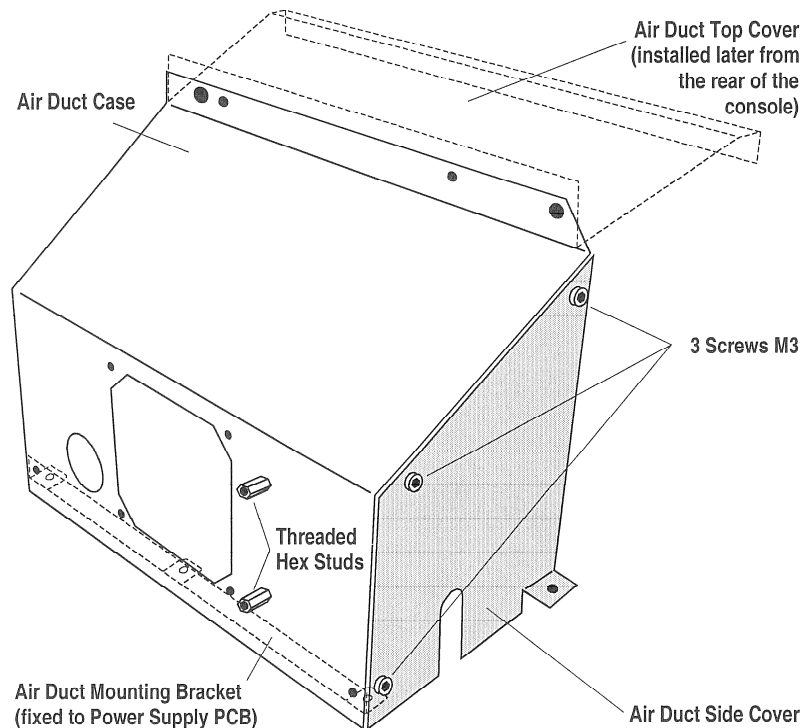
a free pair of pads and solder the loose ends of the long red and black wires (+15 V: red; GND: black) in place. If you proceed carefully, not using excess solder, the wires can also be connected without having to remove the Level Meter Interface.

Should all four pairs of solder pads already be occupied, the red and black wires can also be connected in parallel to wires already present.



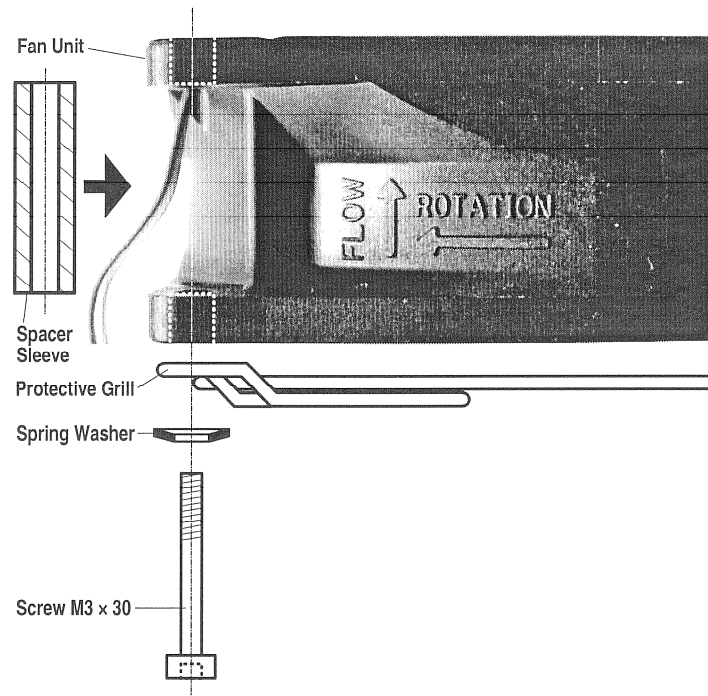
Installation:

- Remove the 3 front mounting screws of the Power Supply PCB 1.942.105, put on the mounting bracket, and fasten it together with the PCB using the 3 screws removed before.
- Assemble the air duct (i.e. the parts shown in the drawing below in solid lines); use the air duct case and the air duct side cover, and 3 screws M3.

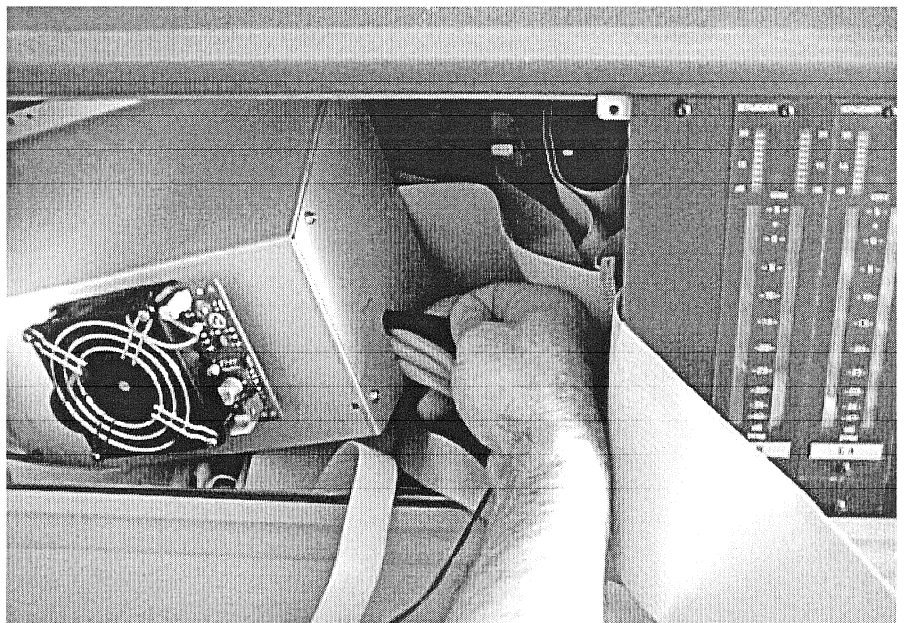


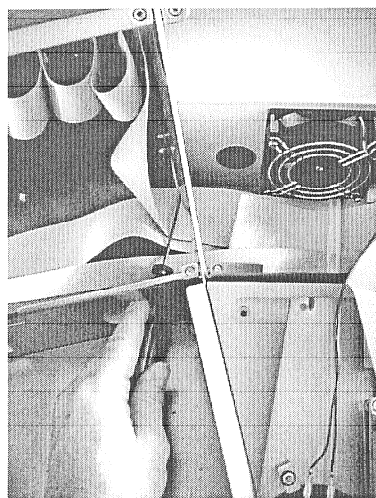
- Install 2 threaded studs on the air duct case (wrench no. 5.5).

- Connect the short wires (yellow and black) to the fan and guide them through the slots in the fan frame.
- Install the fan with the protective grill to the air duct case in such a way that the “FLOW” arrow on the fan frame points inside the air duct case, and that the “FLOW” and “ROTATION” labels point towards the threaded studs. Use the long screws M3, the spring washers, and do not forget to insert the spacer sleeves between the fan's flanges, refer to the illustration.

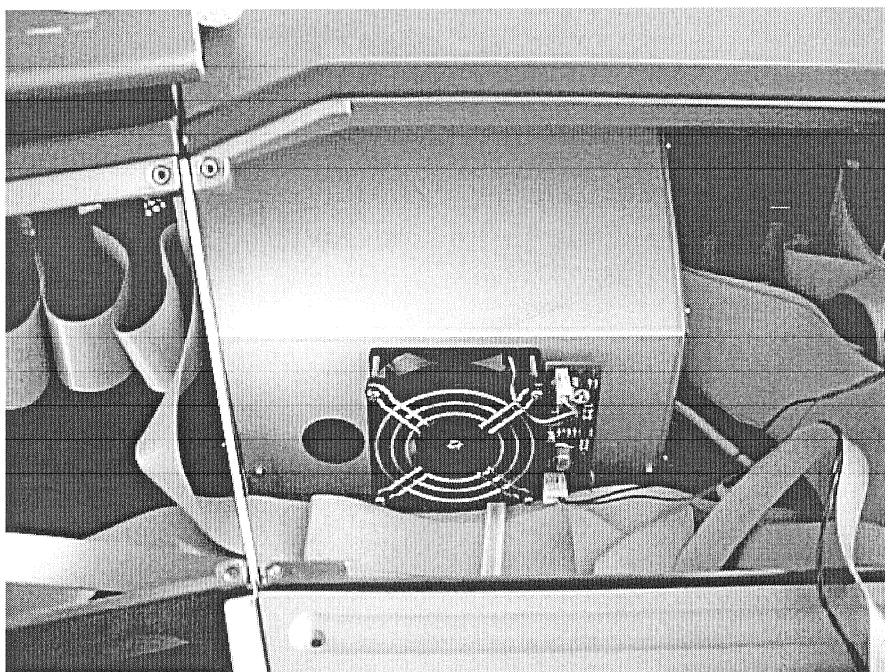


- Fix the Fan Supply Board with 2 screws M3 on the threaded studs.
- Plug the fan wires to the Fan Supply Board.
- Insert the black plastic cover into the large hole in the air duct case.
- Insert the completed air duct case into the console; guide the cables (from Power Supply PCB to DSP PCB) through the slot at the right of the air duct case, as shown below.





- Plug the long red and black wires from the Level Meter Interface to the Fan Supply Board.
- Fix the air duct case assembly to the air duct mounting bracket (2 screws M3); use a ball-point Allen key, if available. The left-hand screw is accessible through the holes in the On-Air 2000 frame (see left); the right-hand screw is accessible through an other hole in the frame, after the center writing panel of the console has been removed. A third screw is used to fix the flap at the right and rear of the air duct. Refer to the photograph at the left. A picture of the installed air duct case assembly is shown below.



- Insert the air duct top cover (from the rear) above the primary supply unit into the console. Fix it to the air duct case assembly with two screws M3 (from the front). *For this step, we recommend that you ask a second person for help – unless your arms should be of unusual length and flexibility.*
- Fasten the primary supply unit (8 screws), and fix the air duct top cover to the two matching air vent holes of the primary supply unit.
- Fasten the module (or blank panel) at the left of the primary supply unit (2 screws).

Function Check:

Connect the console to the mains and switch it on; the fan must start, the air flow must be in the direction from the front of the console to its rear.

Final Assembly:

Re-install the fader module, the monitoring panel and the center touch-screen unit; tighten all screws.