



The loop amplifier ISV1090 is a newly developed product made by axxent. This type of amplifier powers induction loops inside rooms – either in the floor or in ceilings. This induces an induction into the air between the outer borders of the cable loops. Reception loops are built into most hearing aids.

The audio signal from the induction loops is drastically better for the hearing impaired than the purely acoustic signal. This is because of the broad frequency spectrum fed into the loop, without room reflections, plus the compression used in the amplifier that enables the hearing impaired to hear low level music or speech.

The ISV1090 not only is a universal loop amplifier for almost all room sizes (jumpers inside to adjust to four different power outputs), but has three possible operation modes: Single unit use, coupled with another unit to feed multiple loops and mixing all inputs and the use with another unit in Master/Slave mode to feed so-called low spill-over loops. The latter needs to plug in a 90° phase shifter module into the master unit.

ISV 1090 Features:

- ✓ For induction loops of various room sizes, jumpers inside may be configured:
 - Up to 1,000 sqm, 8.8 A rms, 12.7 A peak power
 - 6.7 A rms (good for approx. 500 sqm)
 - 4.3 A rms (up to ca. 200 sqm) = pre-installed
 - 3 A rms (to approx.. 100 sqm)
- ✓ 2 balanced xlr-microphone inputs
- ✓ 48 v microphone phantom voltage singly switchable
- ✓ Xlr line input
- ✓ Line input with Euroblock connector and 24 vdc to feed external mic/line pre-amplifiers
- ✓ Built-in compressor
- ✓ Metal loss correction potentiometer
- ✓ Drive potentiometer
- ✓ 3.5 mm phone connector for headphone monitoring
- ✓ All potentiometer knobs may be removed and covered by blinds to avoid mis-adjustment by unqualified users
- ✓ IEC power connector with 2 A fuse, slow blow.
- ✓ Noise-less operation without fan
- ✓ Internal socket to plug in a 90° phase shifter module PSM90
- ✓ Phase shifter module PSM90 may be obtained from axxent
- ✓ Internal jumper array for various operation modes from A to G:
- ✓ Single - induction loop amplifier acting as a stand-alone unit (A or B)
- ✓ Master - induction loop amplifier with another unit as SLAVE and inserted 90° phase shifter module into the master unit (C, D or E)

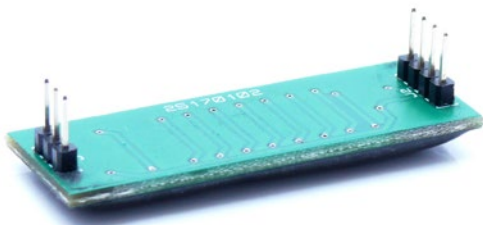
ISV 1090 Features:

- ✓ Slave - amplifier connected to the master unit (F or G)
- ✓ Phone jack 6.3 mm for amplifier coupling.
- ✓ Amplifiers may be used in parallel mode also. This also allows to mix the inputs of all amplifiers.
- ✓ All operation modes are explained in the user manual in detail. Adjustments of the operation modes are made by inserting/removal of internal jumpers.
- ✓ LED operation mode indication master/slave
- ✓ LED indication of compression
- ✓ LED indication of power output
- ✓ LED indication of operation temperature
- ✓ LED indication of power-on

Phase shifter module model PSM90

The Phase shifter module shifts the input phase by 90°, plugs into the ISV1090 and feeds a second ISV1090 through 6.3 mm jack plug cable with a 90° phase shifted signal. This operation mode is intended to drive multi-segment loops. Multi-segment loops allow to confine the induction field inside the loop more precisely than single loops.

Whenever an induction field is not wanted to be heard in neighboring rooms, this is the desirable operation mode. Necessary is a detailed lay-out of the loops (mostly computer assisted) made by qualified and experienced consultants. The phase shifter module is available from axxent.



Universal Induction Loop Amplifier

Technical comments:

The axxent induction loop amplifier ISV1090 may drive induction loops within an impedance range between approximately 0.3 to 2.5 ohms with full power.

Please note that at full power more than 12 A current drives the wire loop. A direct short of the wire loop must be avoided. Length of the wire loop should be planned according to planning tables available and it should be measured by an impedance meter.

Induction loop wire should be only one single core stranded. An alternative is to use self-adhesive copper foil, which is of advantage when a loop should be below carpet or similar - mostly only 1 mm thick and unobtrusive.

The ISV1090 features detachable rack-ears for its use as a table top amplifier. Rubber feet facilitate this use also. The housing is made of solid steel, powder coated.

Size

434 mm width (without rack ears), 190 mm depth (including potentiometer knobs and connectors), 44 mm height (without rubber feet)

Weight

3.6 kg net, shipping 5.6 kg.

Operation voltage

230 V AC, 50 Hz

Fuse

5x20 mm glass, 2 A, slow blow

