

Accessory Ports of the AOR AR5000

Rev. 1.0

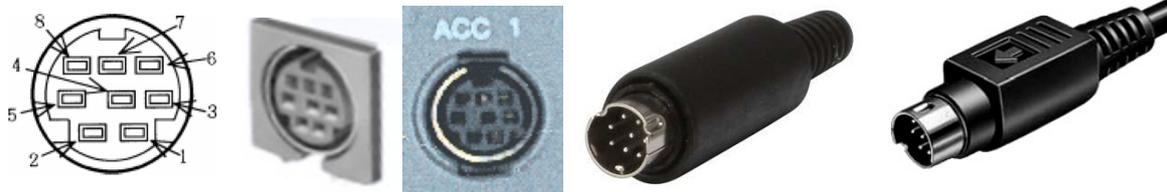
Recently I was able to acquire second hand an AR5000 wideband receiver from AOR and when looking for the accessory connectors recognized, that it seems to be not so easy to buy them. Please note, that the port signals at later models such as AR5000A or AR5000A+3 are probably slightly changed.

Here is a brief description of both ports, ACC1 at the front of the radio and ACC2 at the back of the radio. Please note, that both ports use similar 8 pin connectors but unfortunately they are not identical and not compatible.

ACC1:

The port ACC1 is located at the lower left end corner of the front panel. It provides outputs for audio, tape motor control and discriminator. It also includes an audio input.

Below please find a description of this ACC1 socket and the corresponding plug.



The pinout of ACC1 is:

PIN number	Type	Function
1	Output	12V DC, 30mA max., nonregulated
2	Output	Unfiltered detector, 180mV RMS @ >100kOhms
3	Input	Audio, goes to RX audio amplifier, 180mV RMS, 100kOhms, to be activated by menu
4	Output	Tape recorder motor switching, for 12V DC 350mA max., Rdson=1.2 Ohms
5	Output	Tape recorder motor switching, for 12V DC 350mA max., Rdson=1.2 Ohms
6	Output	High level audio, independent of volume control, 700mV RMS @ 600 Ohms
7	Output	Low level audio, not squelch controlled, 2mV RMS @ 600 Ohms
8	GND	Ground

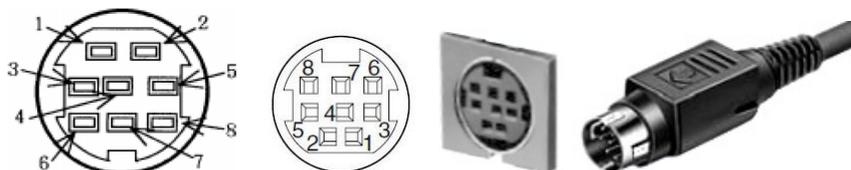
BTW ACC1 uses the same 8 pin connector as has been used on the AOR AR-8600 wideband receiver. However the signals on ACC1 of the AR5000 and of ACC of the AR8600 are different and not compatible.

You can get the corresponding plug for connector for instance from a company called BKL Electronics as a "MINI-DIN-Stecker 8 polig" with the part number 0204022.

ACC2:

The port ACC2 is located at the upper left area of the back panel between the power supply input and external speaker output. It provides outputs for DC power, AGC voltage and antenna switching control.

Below please find a description of this ACC2 socket and the corresponding plug.



Again, please note the differences of ACC1 and ACC2. They are not compatible.

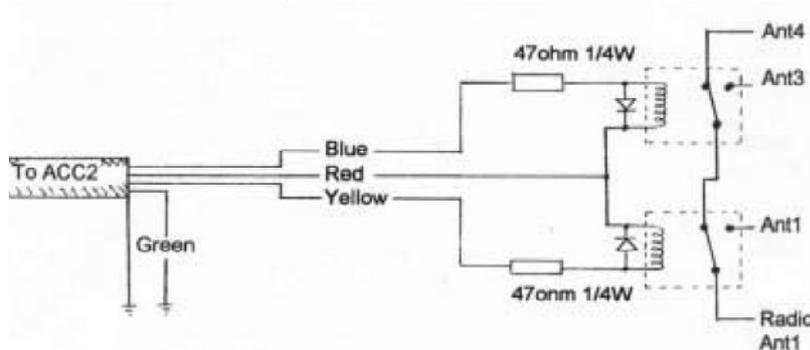
The pinout of ACC2 is:

PIN number	Type	Function
1	Output	12V DC, 50mA max.
2	Output	10V DC, 50mA max.
3	Output	AGC voltage (4.5 ... 3.0 V)
4	N.C.	Non connected
5	Output	ANT SW A (data line), open collector 100mA max.
6	Output	ANT SW B (data line), open collector 100mA max.
7	N.C.	Non connected
8	GND	Ground

The optional antenna switching unit supplied from AOR is AS5000. It is connected to ANT 1 and the control switching signal is taken from ACC 2. ANT 2 is left unaffected and available for connection to an aerial leaving the AS5000 to provide access to ANT 1, ANT 3 and ANT 4. Switching can be accomplished automatically using a user defined form of band plan (frequency bands associated with each antenna port) or manually from the ANT select menu. Here is the truth table for the antenna switching unit:

Antenna port	ANT SW A	ANT SW B
ANT 1	High	High
ANT 3	Low	High
ANT 4	Low	Low

Here is the AS5000 circuit diagram. ANT SW A (PIN 5) is the yellow wire, ANT SW B (PIN 6) is the blue wire, the red wire is +12V DC (PIN 1).



You can get the corresponding plug for this ACC2 port from Hosiden type TCP6180-01-1120. It is called there also "MINI-DIN 8-pin plug". The corresponding "MINI-DIN 8-pin receptable" has the part number TCS6180-1010. This kind of connectors are harder to find than ACC1 but are for instance used in some SONY equipment.

You can buy a kit including both connectors (ACC1 & ACC2) from www.thiecom.de.

I always appreciate any feedback and suggestions for improvements. I am interested in any other hints with respect to the use or improvement of the AOR AR5000 wideband receiver. I am especially interested a copy of the service manual. Please send your feedback to Email address below. Many thanks in advance.

Best regards

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