

MIDLAND ALAN 48^{plus}

The Midland Alan 48 plus in the CEPT version is a 27 MHz transceiver that is standard set to 40 FM channels and an output power of 4 watts and as such is permitted in the Netherlands for use without authorization on the 27 MHz band.

Originally, the Midland Alan 48 plus was designed with 400 channels, FM / AM

Whoever appreciates this can achieve this with the next modification. It should be noted that both the manufacturer's warranty on the device and the CEPT authorization of the device lapse and that the use of the device without authorization can at that time be regarded as a crime and is therefore punishable.

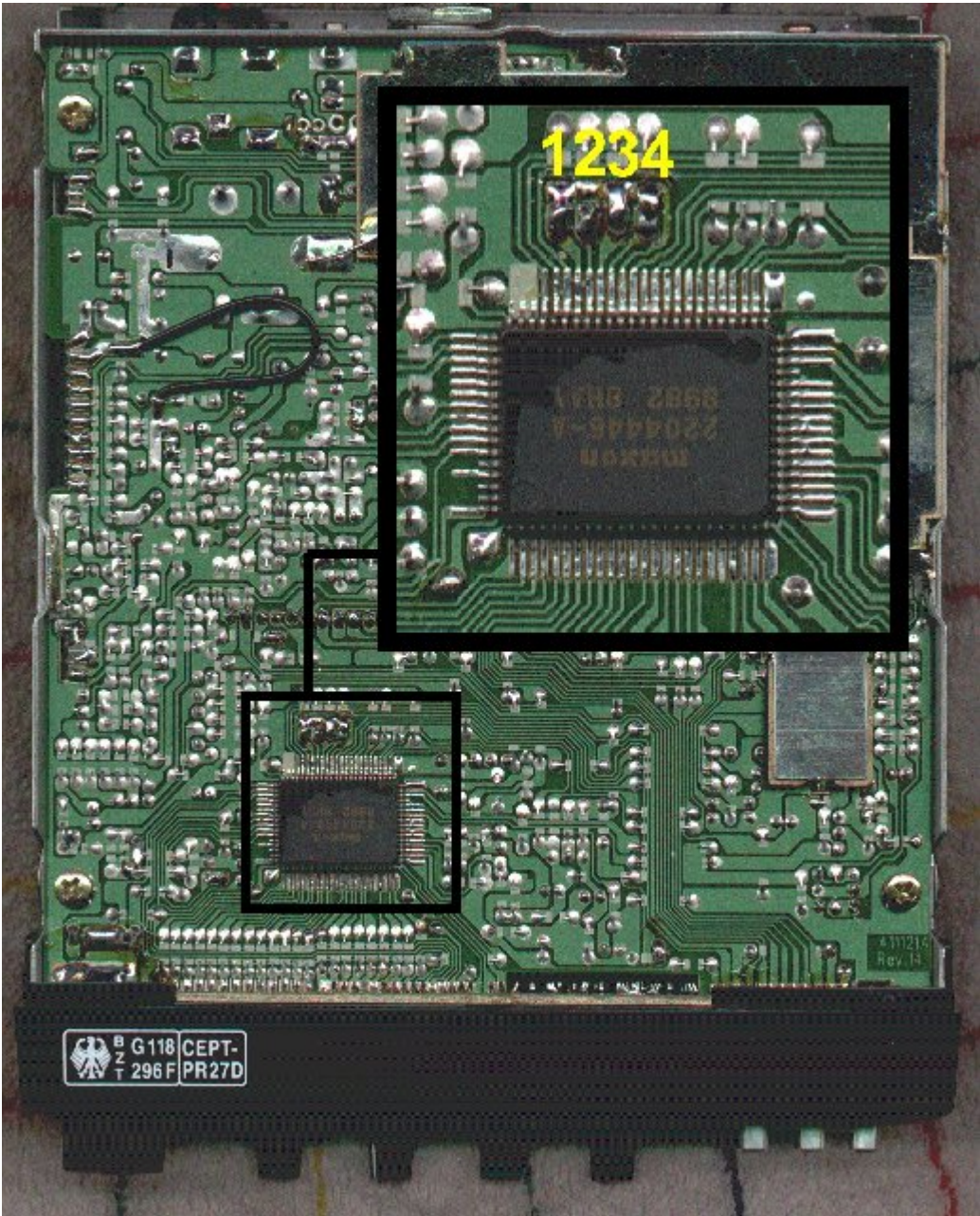
For the following activities, it should be pointed out that this can only be carried out if you have access to a spot soldering iron with a capacity of approx. 15 Watt, a firm hand and a large solder experience!

Requirements for the modification:

- A point soldering iron of approx. 15 Watt. (Do not use a gun, these become too hot and can damage / burn the print islands.
- Tin vacuum

Description:

- Remove the 4 screws on the side and the 2 screws on the back of the device and detach the top and bottom covers.
- Now vacuum all three solder bridges with a tin vacuum cleaner (see drawing).



- Now place the desired one, see next diagram, solder bridges.

Modification scheme

S1	S2	S3	S4	Modification
0	0	0	0	400 channels
0	0	0	1	34 channels
0	0	1	0	11 channels
0	0	1	1	40 channels AM / FM
0	1	0	0	40 channels (CEPT)
0	1	0	1	As a 4 but "0" grid
0	1	1	0	As a 4 but "0" grid
0	1	1	1	As a 4 but "0" grid

0	1	0	0	As a 4 but "0" grid
1	0	0	0	40/12 channels AM / FM
1	0	0	1	400 channels "0" grid
1	0	1	0	80 channels AM / FM
1	0	1	1	Factory setting, 40 channels FM (CEPT)
1	1	0	0	400 channels "0" grid
1	1	0	1	400 channels "0" grid
1	1	1	0	22 channels
1	1	1	1	40 channels AM
				1 = Solder bridge 0 = Do not solder

- For switching from AM / FM, the following steps must be followed.
- Remove the 4 screws on the side of the front front, remove the nut from the microphone input.
- Now carefully slide the front of the device.
- Look for the texts LCR and AM / FM on the front of the print. With LCR there is a wire bridge, remove it or cut it. Restore a new wire bridge at AM / FM.
- Now slide the front front back into place, tighten the four screws and the microphone plug nut
- Now reassemble the bottom and top cover on the device and reattach the 6 screws.
- Now switch on the device and a channel number with letter (usually D) will appear in the display. If this does not happen, the device must be disconnected for a few minutes.

The bands AI can now be switched with the channel selector. The 'D' band is the CEPT 40 channel band. To select AM / FM, press the LCR button. The modulation is shown in the display.

In order to also be able to broadcast AM, you need a so-called AM transformer. This can be ordered via my email, indicate if it is for the Alan 48 or the Alan 78, and costs f 37.50 including shipping and you can pay to the postman. Instructions for assembly are included.