

Christiaan Huygens Laboratorium



Artemis MK5 Engineering Note EN5-9

Modification IF Preamplifier (IPA) version 01

Modification A

Purpose modification

To reduce the influence of the transmitter cross talk on the distance measurement (drifting of the distance), especially when the VSWR of the antenna is high, for instance when the antenna radome is wet.

Modification status: mandatory

The modification is mandatory, however, for stations or systems which work fine, even when the antenna(s) is (are) wet, it can be decided to not carry out the modification.

IPA units effected

All IPA units of version 01 (serial no. YY-01XXX).

For IPA units of version 02 (serial no. YY-02XXX): see Engineering Note EN5-8A. IPA units from of version 03 (serial no. YY-03XXX) have the modification standard incorporated.

Modification description

- Remove the two boards from the IPA unit (keep boards and mixers together!) and locate on the boards the position indicated by the white circle on photo 1 overleaf.
- Apply some solder on the two points as shown on photo 2 overleaf.
- Solder an inductor of 4.7 uH (Epcos, 90 mA, Rs 3.8 Ω) between the two points as shown on photo 3 overleaf.
- Put the boards back in the housing and screw the mixers back on if these were removed.

Modification marking: MOD A

- A label "MOD A" is affixed to each of the two boards of the IPA unit. See photo 4 overleaf.
- A new type and serial number label with "MOD A" after the serial number is affixed to the housing of the IPA, or a label "MOD A" is affixed next to the existing type and serial number label on the housing of the IPA. See photo 4 overleaf.

Modification requirements

The modification requires equipment and facilities for the soldering of SMD components.

Remark

A quantity of 4.7 uH inductors and a quantity of "MOD A" labels will be made available to Reson to modify IPAB boards and to mark the modification on the IPAB boards and on the IPA units.

Distribution

CHL NETHERLANDS B.V.	: AEK, AKI, AKO, HEB, JMH, SHH
Reson B.V.	: A. van Valkenhoef, S. Gillebaard, T. Mulyono, B. Bos, D. Doorschodt,
	N. van Woerkom
Muco Technologies	: G. van Leeuwen, M. van Aalst
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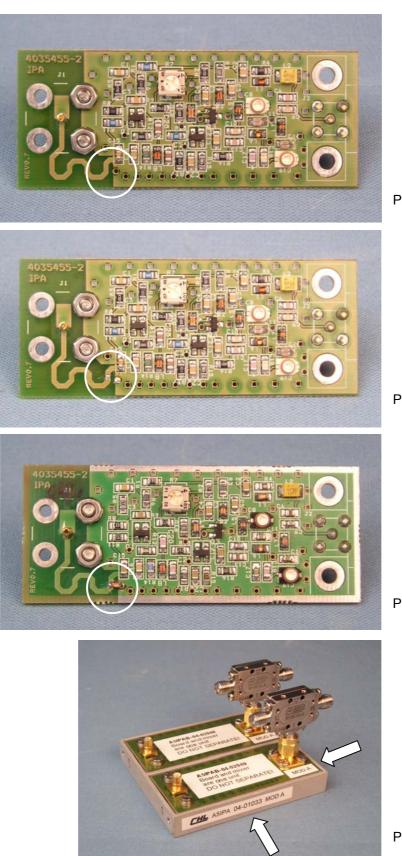


Photo 1

Photo 2

Photo 3

Photo 4

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