RC102 Remote Control Panel

Unintentional activation of self-test on RC102 RCP

1. PLANNING INFORMATION

A. Effectivity

This Service Bulletin is applicable to the installation of RC102 Remote Control Panels, P/N S1820513-21 installed with KANNAD 406 AF-COMPACT S1840501-01 **at amendment M** and KANNAD 406 AF-COMPACT (ER) S1840501-04 **at amendment A** manufactured by KANNAD.

B. Concurrent Requirements

Not applicable

C. Reason

Some RC102 RCP installation may be sensitive to electrostatic influence when they are installed on certain aircraft. This default may be detected after the first installation when powering on or off the main power supply of the aircraft or any electrical circuits.

In this case, the ELT may perform unintentional self tests.

To check if the existing installation is affected by the default, perform the following tests:

- Switch ON and OFF several times the main electrical switch of the aircraft;
- Switch ON the main power switch then ON and OFF every possible electrical switch of the aircraft: avionics, lights, starter, alternator, etc.

In general, every device activated by a relay, or containing coil, or calling a high current at startup, shall be tested ON and OFF. If necessary, repeat the test with engine running.

If the installation is affected by the default, the ELT will perform self-test visible by a temporary switch ON of the RC102 led.

This problem can be solved by soldering a 100 nF capacitor between pin M and pin K in the DIN-12 connector of the ELT and eventually connecting pin M of the DIN-12 connector to the chassis ground of the aircraft as close as possible to the ELT.

D. Description

This Service Bulletin describes the procedure to modify the installation of RC102 RCP wiring.

E. Compliance

RECOMMENDED

It is recommended to apply this Service Bulletin:

- before any first installation of RC102 RCPs with KANNAD 406 AF-COMPACT S1840501-01 **at amendment M** and KANNAD 406 AF-COMPACT (ER) S1840501-04 **at amendment A** manufactured by KANNAD;
- to any installation of RC102 RCPs with KANNAD 406 AF-COMPACT S1840501-01 **at amendment M** and KANNAD 406 AF-COMPACT (ER) S1840501-04 **at amendment A** for which this fault has been detected at the earliest opportunity where manpower and facilities are available.

OPTIONAL

Regarding existing RC102 RCP installation with KANNAD 406 AF-COMPACT S1840501-01 **at amendment M** and KANNAD 406 AF-COMPACT (ER) S1840501-04 **at amendment A** where no fault has been detected, this Service Bulletin may be optionally applied at discretion of the operator.

F. Approval

This Service Bulletin contains no modification information that revises the approved configuration and therefore does not require governmental or other regulatory agency approval.

G. Manpower

1 (one) hour.

H. Weight and balance

None.

I. Electrical Load Data

Not Changed.

J. Software Accomplishment Summary

Not applicable.

K. References

None.

L. Other Publications Affected

None.

M. Interchangeability

Not applicable.

2. MATERIAL INFORMATION

A. Material - Price and Availability

Capacitor 100 nF / 63 V minimum, commercially available.

B. Industry Support Information

According to EUROCAE ED62A, the cost will be borne by the Operators:

EUROCAE ED62A

"6.2.2 Interference Effects

The equipment shall not be the source of harmful conducted or radiated interference nor be adversely affected by conducted or radiated interference from other equipment or systems installed in the aircraft.

NOTE: Electromagnetic compatibility problems noted after installation may result from such factors as design characteristics of previously-installed systems or equipment and the physical installation itself. It is not intended that the ELT manufacturer design for all installation environments. The installing facility is responsible for resolving any incompatibility between this equipment and previously-installed equipment in the aircraft. The various factors contributing to incompatibility shall be considered."

C. Material Necessary for Each Component

Any capacitor 100 nF / 63 V minimum, commercially available.

D. Material necessary for Each Spare

Not applicable.

E. Re-identified Parts

Not applicable.

F. Tooling - Price and Availability

Not applicable.

3. ACCOMPLISHMENT INSTRUCTIONS

Refer to Figure 1: Diagram of connection

(1) Disconnect DIN-12 connector on the ELT side.

(2) Disassemble the DIN-12 connector supplied with the ELT.

(3) Solder the 100 nF capacitor between pin M and Pin K of DIN-12 connector.

(4) Reassemble the DIN-12 connector.

(5) Connect the DIN-12 connector to the DIN-12 receptacle of the ELT.

(6) Check the installation by following the procedure described in Section C. Reason.

(7) If unintentional self-tests still occur, an **optional** additional wire must be connected to the chassis ground of the aircraft.
IMPORTANT: this option should be selected only if unintentional activations still occur after the soldering of the 100 nF capacitor.

(a) Identify a chassis ground of the aircraft as close as possible to the ELT.

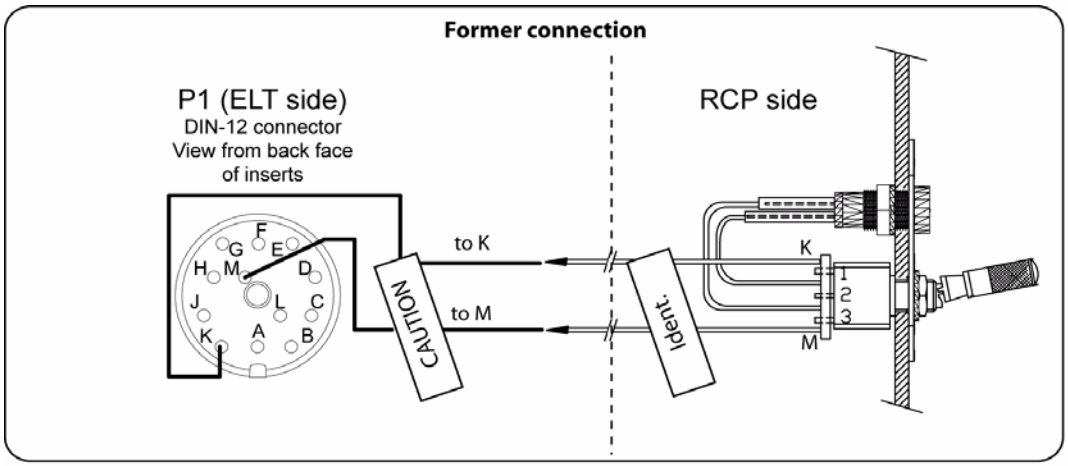
(b) Pass a wire long enough to reach the chassis ground through the cap of the DIN-12 connector.

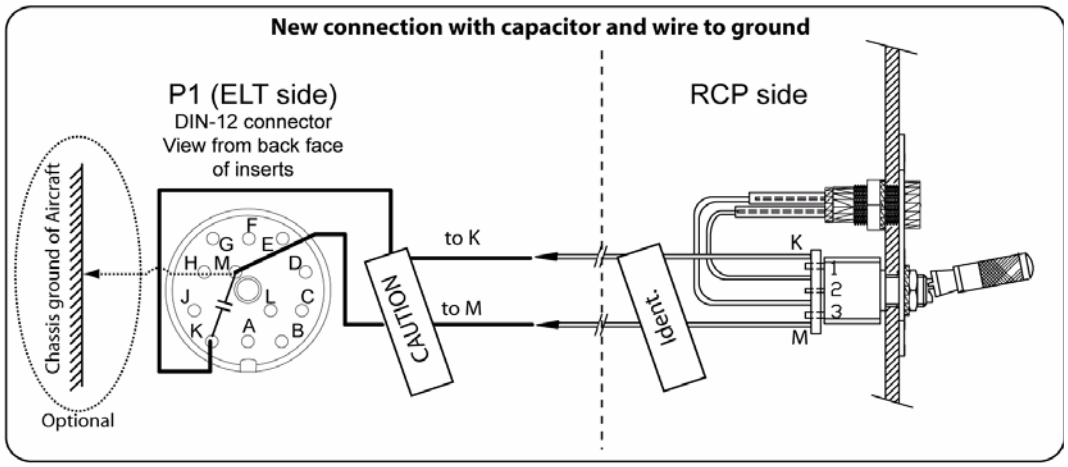
(c) Solder one end of the wire to pin M of DIN-12 connector, connect the other end to the chassis ground.
IMPORTANT: The additional wire has to be connected to the leg of the capacitor.

(8) Check the installation by following the procedure described in Section C. Reason.

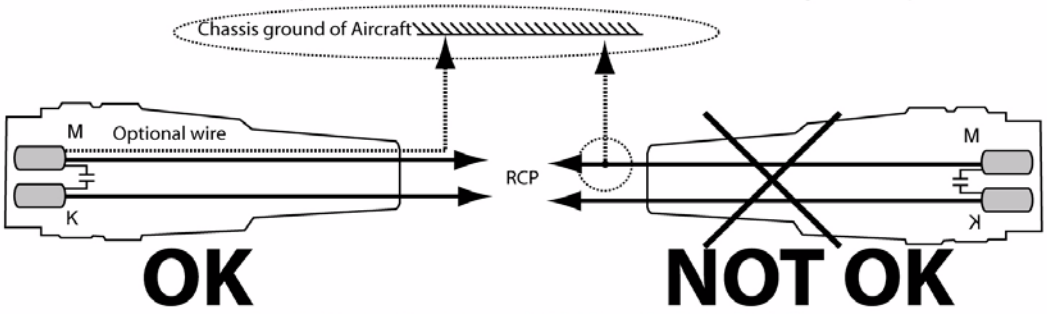
(9) Perform RCP operational tests (Refer to Figure 2: RCP Operational Test).

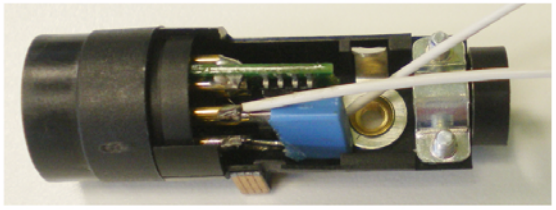
Figure 1: Diagram of connection





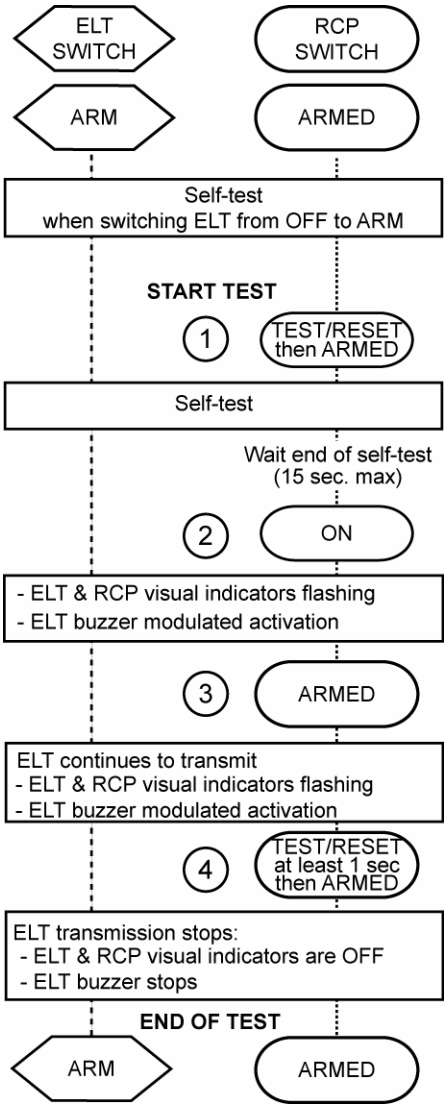
IMPORTANT: the optional additional wire has to be soldered to the leg of the capacitor.





Example of connection with dongle connector

Figure 2: RCP Operational Test



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