

Bendix King KNI 582 Pilot's Guide

Radio Magnetic Indicator (RMI). Three versions are provided:

Filename: **BendixKingRMI2!KNI582_JD** for a normal installation.

Filename: **BendixKingRMI2!KNI582_JD_2ADF** for aircraft with two ADF radios.

Filename: **BendixKingRMI2!KNI582_JD_2RMI** second RMI for aircraft with two RMIs.

The KNI582 was often installed on prop and jet twins, such as the Beechcraft King Air, Learjet 35, etc.



Hotspots:



1. Needle 1 Source Selector (NAV1 or ADF/ADF1)
2. Needle 2 Source Selector (NAV2 or ADF/ADF2)

Source Selector Needle 1 (1)

This button selects the radio (NAV or ADF) connected to needle 1, the green needle.

Press to toggle between the NAV1 radio or the ADF radio [or the ADF1 radio in the case of the 2ADF version]. The small arrow above the button indicates the selected source.

Source Selector Needle 2 (2)

This button selects the radio (NAV or ADF) connected to needle 2, the yellow double needle.

Press to toggle between the NAV2 radio or the ADF radio [or the ADF2 radio in the case of the 2ADF version]. The small arrow above the button indicates the selected source.

The sophisticated KNI 582 radio magnetic indicator reduces the pilot's workload by displaying 3 data points at once. First, it shows the magnetic heading of your aircraft on the compass card. The heading information comes from a compass system. Second (and third) the indicator's two needles can be each switched to present either directional or non-directional radio navigation data. This switching is accomplished easily with two push buttons on the front of the indicator. Combining all this information in one device gives you a much faster grasp of your aircraft's overall situation.

Note 1. Two ADF radios

If two ADF radios are fitted, use the KNI582_JD_2ADF version.

The user can then select the ADF1 radio to drive needle 1, and the ADF2 radio to drive needle 2.

For an ADF2 radio see my KR87A.zip available from FlightSim.com.

Note 2. ADF2 Radio

For an ADF2 radio to function the following must be added to the [Radios] section of aircraft.cfg:
ADF.2=1

Note 3. Two RMIs

If two RMIs are fitted, use KNI582_JD for the left (captain's) RMI, and KNI582_JD_2RMI for the right (co-pilot's) RMI. The two RMIs can then be operated independently.

Note 4. Realistic Needle Movement

An attempt has been made to make the needle move in a realistic way when connected to an ADF radio. The needle moves slowly, and wanders about by an amount inversely proportional to the signal strength, and therefore the range of the NDB.

(The code uses a pseudo-random number generator based on a multiplicative linear congruential generator by Pierre L'Ecuyer.) Credit to Pierre L'Ecuyer.