

HYBRID RECEIVER MSR004

FEATURES:

- ROBUST CONSTRUCTION FOR FIXED WING FIGHTER OR ATTACK HELICOPTER PLATFORM.
- INTERFACES WITH OTHER FCL BUILDING BLOCKS
- PROVIDES CRYSTAL VIDEO RECEIVER & SUPERHET. RECEIVER OUTPUTS SIMULTANEOUSLY
- CURRENTLY IN PRODUCTION

DESCRIPTION:

The MSR004 is a dual hybrid receiver operating in the 0.4-2GHz band. It consists of a pair of identical channels whose input comes from a preceding filter conditioning module FCL type QA014. Each channel accepts an input signal and amplifies it before splitting it two ways. One path leads to an RF output which serves as a CVR channel output for termination in a DLVA e.g. FCL type RV057. The other path is fed to a mixer.

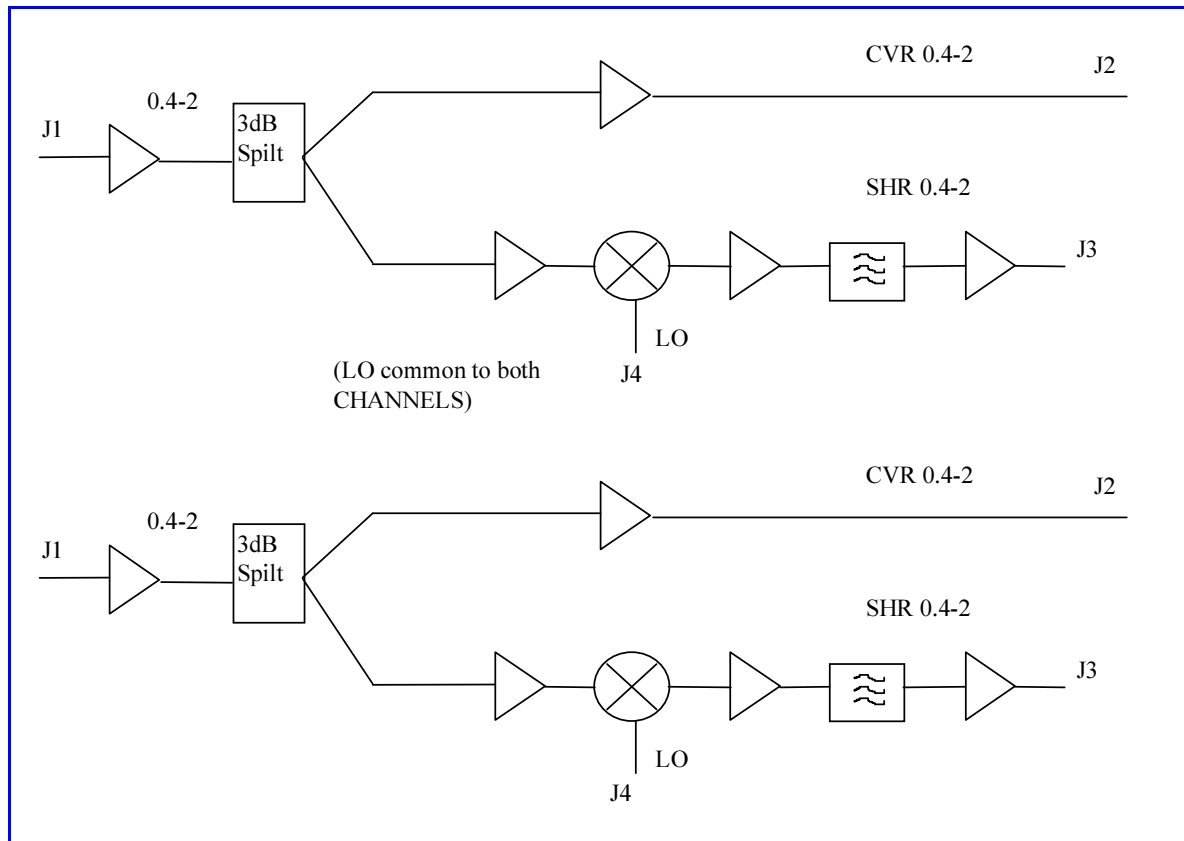
An externally applied LO signal downconverts the signal to a 160MHz IF. The signal is filtered an output for further measurement with e.g. an IF Log Amplifier.

The receiver and other FCL building blocks may be used in fixed wing fighter and rotary wing RWR/ESM applications.

The device exhibits excellent performance tracking and is built to withstand the rigours of fixed wing fighter or attack helicopter environments.

FCL manufactures another such assembly, the MSR003 which has two separate 2-8 and 8-18 GHz inputs and outputs Crystal Video Receiver signals 2-8 and 8-18 GHz and a Superhet Receiver channel of the two channels combined at 160 MHz.

CHARACTERISTICS



Performance Summary:

Input Frequency:

CVR channel gain

NF

P1dB

IF

LO

IF channel gain

NF

P1dB

Population tracking

Operating Temperature

0.4-2 GHz

10dB nominal

4.5 dB

10 dBm nominal

160 MHz 23 MHz 3dB BW

.23-2.17 GHz 0 to +5 dBm

33 dB nominal

7.5dB

10 dBm nominal

2dB

-54 to +85C