IFDV3 I.F OUTPUT UNIT

Option for the AR-DV3 Digital Voice Receiver

Overview

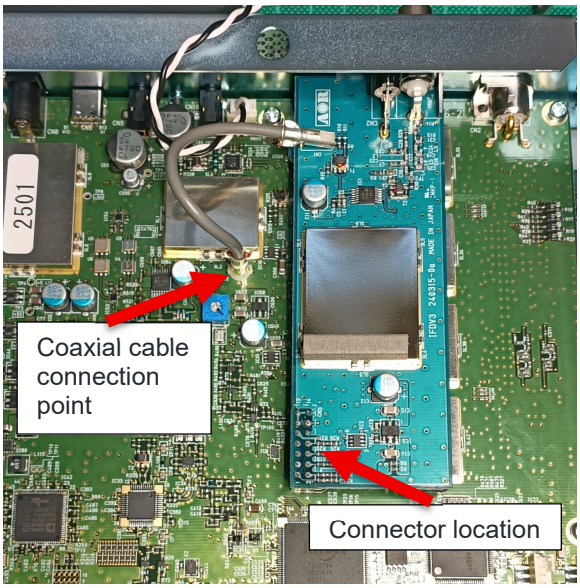
Installing this optional board inside the receiver provides a +/- 2MHz wide 10.7 MHz intermediate frequency (IF) output for reception at 18 MHz and above. Connect external analysis equipment to process and analyze signals detected by the receiver.

The board operates without affecting the receiver's existing functions and adds flexibility for applications that require an IF output.

Installation

Prepare No.1 and No.2 Phillips screwdrivers and gloves. Disconnect the AC adapter before starting. Handle the precision components carefully and wear gloves to avoid injury.

1. Remove the receiver's top cover (10 screws).
2. Remove the rectangular mounting plate (4 screws). Do not remove the speaker and its sqare shaped bracket from the mounting plate.
3. Remove the rear option-port cover (2 screws).
4. Fit the IFDV3 onto the receiver connector and secure it from the rear with the 2 screws.
5. Connect the supplied coaxial cable.
6. Reinstall the built-in speaker and top cover.

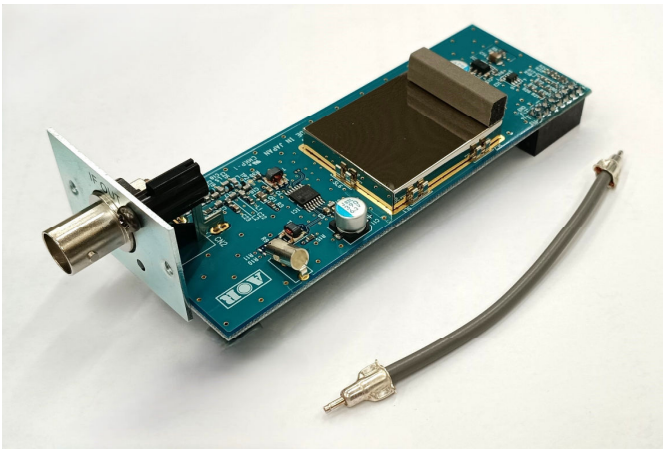


IFDV3 installed inside the AR-DV3

- Disconnect the AC adapter before starting work.
- This is a precision device; please handle it with care to avoid damage.
- Wear gloves while working to prevent injury.

Operation

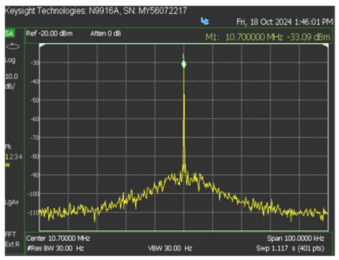
The IF signal is output whenever the receiver is receiving. No receiver-side setting is required.



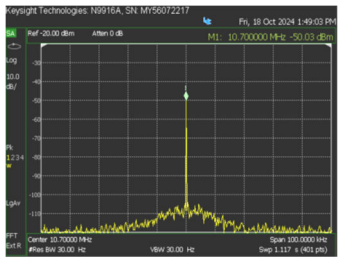
IFDV3 board and supplied coaxial cable

Measurement Examples

IF spectrum with a 25 MHz, -60 dBm input signal

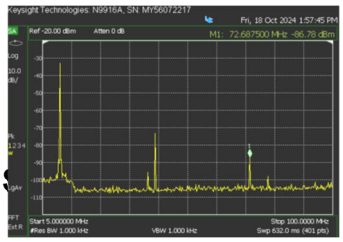


Preamp ON

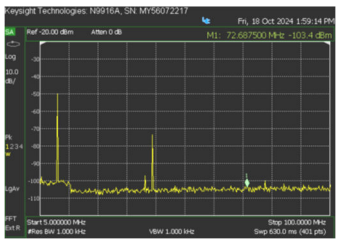


Preamp OFF

Local image suppression



Preamp ON



Preamp OFF

Specifications

Compatible receiver	AR-DV3
Reception frequency	18 MHz – 3000 MHz
IF output frequency	10.7 MHz
Bandwidth	+/- 2 MHz
Frequency stability	±1 ppm of the received frequency
Output level	Receiver antenna input +10 dB (preamp off)
Image suppression	-50 dBm
Power	Supplied by the receiver
Connector	BNC-J
Weight	40 g
Included accessory	1 coaxial cable