

Overview

IntegrIT CFSI Analog – is a functional component for conventional fixed radio station implementing Conventional Fixed Station Interface (CFSI), which often referred as Tone Remote Control (TRC) and allows glue less integration with analogue FM and digital APCO P25 radio stations. Strictly confirmed with TIA-102.BAHA **CFSI Analog** provides voice transferring, TRC and intercom capabilities.

Features

- transport of clear audio between a fixed station and its host, providing capabilities for full-duplex, half-duplex and simplex communications at the discretion of the fixed station.
- transport of E&M control signaling between a fixed station and its host to provide a simple “Push-to-talk” and “COR” capability.
- transport of Tone Remote Control (TRC) control signaling from a host to a fixed station to provide a variety of control functions including transmit channel control, squelch control, monitor control, clear/secure controls, analog/digital mode controls, etc.
- A primitive “Intercom” capability allowing for the transport of audio between the fixed station and its host without initiating an RF transmission

Applications

- APCO P25 communication
- Telephony
- Trunking

Specification

The analog fixed station interface models an analog station as a single fixed station connected via a 2 or 4 wire audio interface with 1 or 2 additional optional control signals to a single host. Control may be provided using the optional E&M (COR/PTT) signaling on the control signals, or through in-band tones.

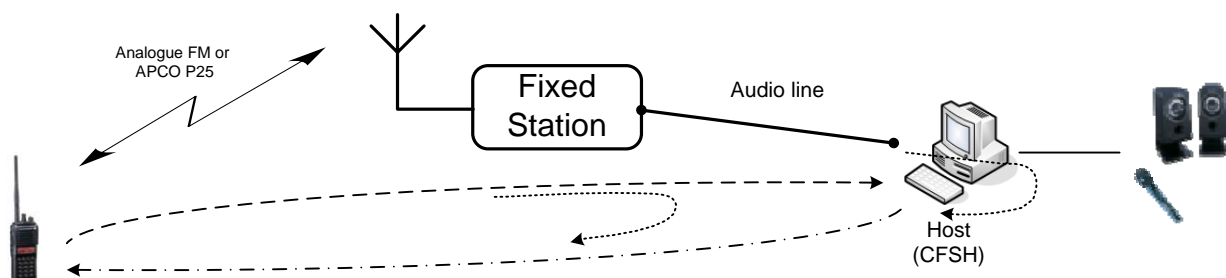


Figure: Analog Fixed Station Interface

Audio from the Host is sent to the fixed station where it is transmitted to subscriber units (radio). Likewise, audio received by the fixed station from subscribers is transmitted to the host. Two repeat modes may be supported:

1. The fixed station may be configured to retransmit on the outbound air interface the voice stream it is receiving via the inbound air interface. This configuration would be overridden by a transmission from the CFSH.
2. If the connection is full-duplex, the CFSH may optionally send the audio received from the fixed station back to the fixed station for retransmission so that other subscriber units can hear.

Contacts

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Performance

Item	Value	
HLGT (High Level Guard Tone) tone	2100, 2175, 2325 Hz	
LLGT (Low Level Guard Tone) tone	2100, 2175, 2325 Hz	
FT (Functional tone) tones	650, 750, 850, 950, 1050, 1150, 1250, 1350, 1450, 1550, 1650, 1750, 1850, 1950, 2050 Hz	
HLGT detection range	-30...+10dB	
LLGT detection range	-60...-20dB	
Nominal Speech level	-6...-18dB below HLGT	
FT level	-10dB below HLGT	
FT duration	40msec	
Frequency tolerance	+/- 5Hz	

Availability

This software is available in binary/source code written on fully portable C-language for:

- Texas Instruments TMS320C55xx, TMS320C64xx, DaVinci, OMAP
- ARM9E
- x86

Porting on other platforms is upon request.

Pricing/Licensing

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