



ANI-F Multi-Format ANI Encoder

Midian Electronics' Automatic Number Identification (ANI) products enable the dispatcher or system administrator to monitor fleet communications by identifying which field radio keyed. This is used to identify system abusers, accurately and timely identify emergency conditions, and allows the dispatcher to know who he or she is talking with and to assign calls fairly. When the user keys or unkeys the radio the ANI-F transmits a unique PTT ID. This PTT ID can then be displayed on Midian's ADD, CAD, DDU and TRC series ANI display decoders.

Midian's ANI modules also offer an Emergency ANI Input that can be hooked to a switch on the radio or a tilt switch. When the switch is activated, the ANI module will send a sequence with an emergency status attached. The ANI display decoder will then show an alarm indication for that unit.

The ANI-F offers features such as Key-Up Delay, Time-Out-Timer and Penalty Timer. The Key-Up Delay holds the ANI from being sent for a preprogrammed period of time to allow CTCSS to go out and open the repeater. The Time-Out-Timer features stops someone from talking too long and tying up the channel or eliminates stuck-mic conditions. The Penalty Timer prevents someone that has timed out from keying again for a predetermined period of time.

Applications

PTT ID/ANI Encoder: The ANI-F encodes a unique PTT ID for field radios that enables the dispatcher to know which field radio is being keyed.

Paging Encoder: The ANI-F can also be used as a paging encoder for formats such as 2-Tone, POCSAG, DTMF or 5-Tone. This can be used to activate pagers or remotely control sirens and other equipment.

Emergency Alert Encoder: Midian's ANI-F can be used to encode custom alert tones when a condition occurs. For example if a repeater site goes on back up power, the ANI-F can periodically key-up and send an alert tone or if an emergency is taking place the dispatcher can send emergency alert tones to indicate to users to keep the channel clear.



Shown: ANI-F

Features

Supported Formats: Midian's ANI-F is the only ANI encoder on the market that offers all of the following formats:

- Motorola's MDC-1200 & MDC-600
- Kenwood's FleetSync
- Harris' G-Star (aka GE-Star)
- DTMF
- 5-Tone (all formats)
- 2-Tone (all formats)
- POCSAG
- Custom Tones

Plug-In Modules: Midian offers plug-in versions of the ANI-F for Icom, Kenwood, Maxon, and Vertex radios. For radios without an options connector, Midian's ANI-F will wire into the radio. Midian offers many application notes for installation into various radios.

Use in Most Systems: The ANI-F can be used in conventional, trunked and voted systems. The unit has a trunking delay input to await a strobe from the radio before sending the ANI.

Product Quality: Midian believes in and adheres to a strict quality program. This is backed up by Midian's 3-year warranty on parts and labor.





ANI-F: General Specifications	
Operating Voltage	Varies on Module
Operating Current	< 2.75 mA
Operating Temperature	-30 to +60 C
Audio Output Level	90-170 mVPP
ANI-F: Signaling Specifications	
MDC-1200 ANI Range	0000-FFFF
MDC-1200 Timing	~180 msec
FleetSync Fleet ID Range	100-349
FleetSync Unit ID Range	1000-3999
FleetSync Timing	~180 msec
G-Star ANI Range	0001-16,383
G-Star Timing	320 msec
DTMF ANI Length	10-digits (maximum)
DTMF Timing	60/40 standard (programmable)
5-Tone ANI Length	20-digits (maximum)
5-Tone Timing	Varies per format (programmable)
Emergency ANI	Yes

ANI-F: Plug-In Versions	
Icom Mobiles	F-120/220/320/420/520/620/1020/1720/1820/2020
Icom Portables	F-3/3G/4/4G/14/24/30/30G/33G/40/40G/43G
Kenwood Mobiles	TK-5710/7180/8180
Kenwood Portables	TK-2180/3180
Maxon Mobiles	SM-2000 Series
Maxon Portables	SP-120/130/140/310/320/330/340
Vertex Mobiles	VX-4000/4100/4200/5500/6000
Vertex Portables	VX-410/420/600/800/820/900/920