

# Midian's PC Based Encoders & ANI Decoders

## CAD Series

Midian Electronics' PC based dispatch products enable the dispatcher to monitor and control fleet communications. When the user keys the radio a PTT ID or ANI is transmitted. This ID can then be displayed in Midian's CAD software along with the time, alias and status (if applicable). Why is ANI important?

**Accurate Identification:** Sometimes it can be difficult to recognize a radio caller due to background noise or a weak signal. ANI clearly identifies the caller for the dispatcher.

**System Abuse:** Many radio systems are plagued by radio users that key-up over other users, make obscene comments, etc. Radio systems use ANI to accurately identify who the abusers are so that action may be taken.

**Emergency Identification:** When a field radio has an emergency, time should not be wasted with the dispatcher trying to identify the caller. With ENI, users in distress can be identified accurately & in a timely manner.

**Call Assignments:** In taxi, limousine and towing fleets many calls are assigned by which radio user replies first. ANI display decoders, such as Midian's CAD enable the dispatcher to see which field radio replied first.

In addition to decoding and displaying ANI's and Emergency ANI's, Midian's CAD-100, CAD-200, CAD-300, CAD-400, CAD-500 and CAD-600 offer the following encoding features\*:

**Selective Calling:** Enables the dispatcher to call a particular unit or group of units.

**Radio Kill:** Allows the dispatcher to enable and/or disable a lost, stolen or non-paying field unit.

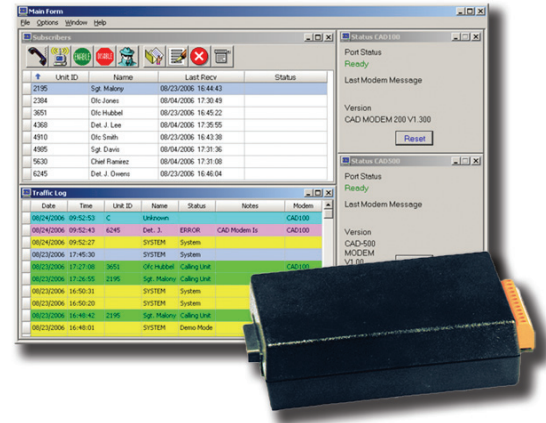
**Spy:** The dispatcher can remotely monitor a radio for a programmed amount of time to eavesdrop or triangulate on a particular field unit. Not available in the CAD-500 & CAD-600.

**Radio Check:** Informs the dispatcher if a field unit is turned on/off or is decoding properly. Not available in the CAD-600.

**Emergency Acknowledge:** The dispatcher sends an acknowledgement of an Emergency ANI back to the transmitting radio.

**Over-The-Air Reprogramming (OTAR):** Allows the dispatcher to change the security codes in Midian's TVS-2 and VPU-15 series voice scramblers (CAD-300 only).

\*The above features require that the radio be capable of the above features or that the radio is equipped with Midian's UD-1B, UED-1B, TVS-2 or VPU-15 series products.



## Features

CAD-100: DTMF Encode and ANI Decode

CAD-200: 5-Tone Encode and ANI Decode

CAD-300: Midian's Kryptic Encode and ANI Decode

CAD-400: Harris' G-Star (aka GE-Star) Encode & ANI Decode

CAD-500: Motorola's MDC-1200 Encode and ANI Decode

CAD-600: Kenwood's FleetSync Encode and ANI Decode

CAD-MF: ANI Decode in DTMF, 5-Tone, G-Star, MDC-1200 and FleetSync.

CAD Option B: The CAD Option B is a serial to ethernet adaptor for any of the above products (decode only). This enables dispatchers to access the incoming ID's via a network.

## Applications

**Public Safety:** Police and fire systems use emergency ANI to accurately and quickly identify radio users in distress.

**Transit:** Bus & train systems use ANI & statuses (i.e. in service/out of service) to inform the dispatcher of route information or emergency conditions.

**Fleets:** Taxi, towing & limousine services may assign jobs to the first user to respond to a call. Using ANI allows the dispatcher to identify the first field radio to respond and fairly assign the call. Radio Kill can disable non-paying units.

**Industrial & Utilities:** Industrial and utility radio users employ the emergency ANI or man-down feature to alert the dispatcher of an accident. When a lone worker is at a site without anyone to assist in an emergency the ENI function can help save lives.



# CAD Series Specifications

CAD: General Specifications	
Operating Voltage	12-15 VDC
Operating Current	100 mA @ 12 VDC
Operating Temperature	-30 to +60 C
Audio Input Level	100 - 3000 mV p-p
CAD: Signaling Specifications	
MDC-1200 Range	0000-DEEE
MDC-1200 Timing	~180 msec
FleetSync Fleet ID Range	100-349
FleetSync Unit ID Range	1000-3999
FleetSync Timing	~180 msec
G-Star Range (11 bits)	0001-2047
G-Star Range (12 bits)	0001-4095
G-Star Range (13 bits)	0001-8191
G-Star Range (14 bits)	0001-16383
G-Star Timing (1.5 packets)	320 msec
DTMF Length	8-digits (maximum)
DTMF Timing	60/40 standard
5-Tone Length	8-digits (maximum)
5-Tone Timing	Varies per format (programmable)
Kryptic Range	0000-9999
Kryptic Timing	150 msec
Emergency ANI	Yes

## Why choose Midian?

**Customer Support:** Midian believes in creating lasting relationships with it's customers and our support does not end once the order is placed. Our sales and technical support staff are dedicated to ensuring that you are completely satisfied with your experience.

**Value:** Products that provide the same encode/decode, aliasing and other benefits can cost 2 to 3 times more from other vendors.

**Product Quality:** Midian takes the utmost care to make certain that you receive only the highest quality products. To demonstrate our commitment to quality Midian offers a 3 year product warranty on parts and labor.

**Experience:** Midian Electronics has been in business since 1975. It's engineers, technicians and sales staff have over 100 years of combined experience in the two-way radio industry. This experience enables Midian's staff to understand your applications and find the best product to fit the applications.

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