



# ***Exploding The Phone***

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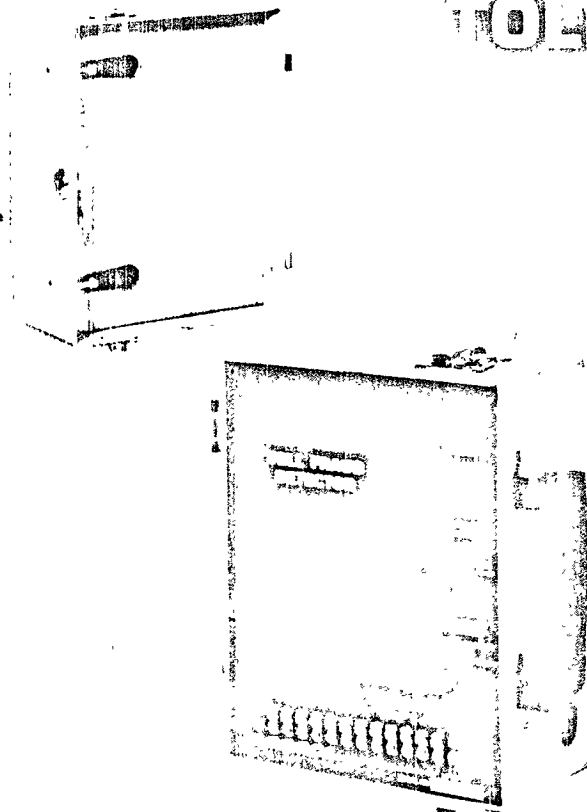
## **Bibliographic Cover Sheet**

<b>Title</b>	<b>Data Sheet for CMC 2600 Toll Fraud Detector/Blue Box Detector</b>
<b>Date</b>	0000-00-00
<b>Author(s)</b>	CMC Communication Mfg. Co.
<b>V/I/P</b>	p. G-11
<b>Abstract</b>	This data sheet contains marketing and technical information and prices. The device is described in the data sheet as: "The CMC 2600 TOLL FRAUD DETECTOR is a portable Set that automatically detects the fraudulent use of telephone facilities and provides suitable evidence for the prosecution of such cases."
<b>Keywords</b>	CMC 2600; CMC2600; blue box; yellow box; black box; CMC Communication Mfg. Co., Long Beach, CA
<b>Source</b>	An anonymous phone phreak

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# CMC 2600

## TOLL FRAUD DETECTOR



- DETECTS "BLUE BOX", "YELLOW BOX" AND "BLACK BOX" FRAUD
- SIGNAL TO GUARD TYPE 2600 HZ DETECTOR WITH ANTI-TALK-OFF PERFORMANCE
- INSTANTLY RESETTABLE UPON "ON-HOOK" OF THE FRAUDULENT CALL
- LOCKABLE COVER TO INSURE THE INTEGRITY OF THE CHAIN OF EVIDENCE
- HAS A TAPE RECORDER OUTPUT FOR RECORDING OF ILLEGAL CALLS
- PORTABLE — CAN BE TEMPORARILY ATTACHED TO LINE EQUIPMENT AT VARIOUS LOCATIONS
- CAUSES NO INTERFERENCE ON SUBSCRIBER LINE

The CMC 2600 TOLL FRAUD DETECTOR is a portable Set that automatically detects the fraudulent use of telephone facilities and provides suitable evidence for the prosecution of such cases.

The Set is temporarily attached across the TIP and RING of any suspect subscriber's line or on any trunk at the main distributing frame or at the equipment location. The input impedance is in excess of 100,000 ohms which prevents any interference to the "suspect" line or trunk.

The CMC 2600 Toll Fraud Detector operates on 48V central office battery supply. A rotary mode switch on the face panel arranges the Set for detection of either a 2600 Hz SF tone, a 2600 Hz SF tone followed by a KP signal or voice with no supervision. In each position, a register operates to indicate the number of fraudulent calls placed.

The CMC 2600 Toll Fraud Detector recognizes a fraudulent call originating from a telephone subscriber's line or from a trunk. The Set detects the following types of toll fraud procedures:

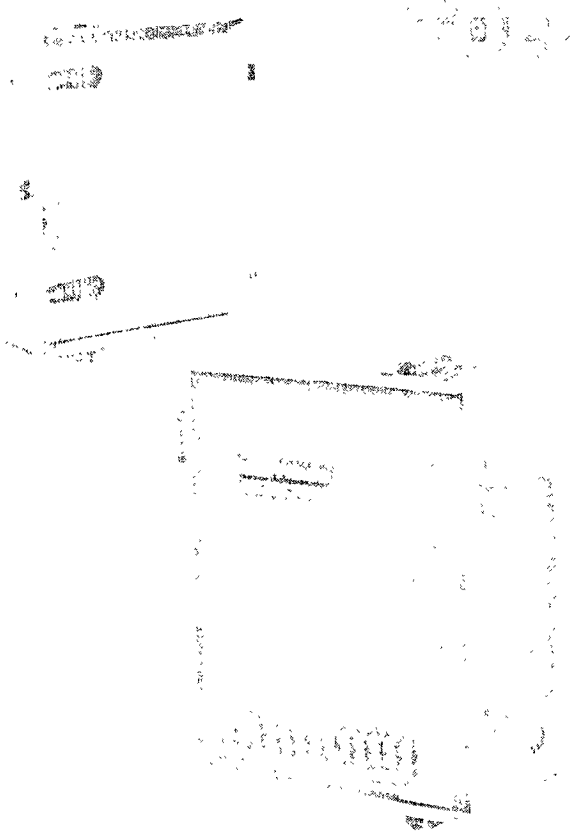
- (a) Use of the "Blue Box" in which a 2600 Hz SF (single frequency) signal is applied to the calling end of the telephone circuit, followed with a KP (key pulse) signal and the associated MF (multi frequency) tones required to switch long distance calls. This operation is detected with the FRAUD MODE SELECTOR set in either the 2600 Hz +KP or the 2600 Hz position.

- (b) Use of the "Yellow Box" in which a 2600 Hz SF signal is applied to the line by the called party immediately upon answering. The tone causes the called station to appear to be returned to on-hook. A conversation is carried on over the tone. This operation is detected with the FRAUD MODE SELECTOR in the 2600 Hz position.

- (c) Use of the "Black Box" in which the telephone circuit is prevented from returning answer (off-hook) supervision to the calling station by a resistance network applied to the phone at the called station. A conversation is carried on over the resistance. This operation is detected with the FRAUD MODE SELECTOR set in the VOICE-NO SUPERVISION position.

Any two-channel voice frequency tape recorder with remote-start features can be used with the CMC 2600 Toll Fraud Detector. It is placed with the CMC 2600 or operated at a remote location. The second channel of the tape recorder is connected to an Audicron® or GTE A.E. Co. Type B time announcer for positive time records and billing information. The Set's amplifier is factory adjusted for an output of -10 dBm into a 600 ohm load. If required, the Set can be removed from the case and the output readjusted for a maximum of 0 dBm.

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A timing switch on the face panel controls the operating time of the tape recorder. The time intervals are 1, 2 or 4 minutes and INFINITY. When the FRAUD MODE SELECTOR is in the 2600 Hz position and a fraudulent 2600 Hz SF tone is detected, the recorder is turned on for the duration of the TAPE RECORDER TIME SELECTOR setting.

When the FRAUD MODE SELECTOR is in the 2600 Hz + KP position, comparable action takes place upon receipt of the KP signal. However, if the KP signal does not follow the 2600 Hz SF tone within 15 seconds, the tape recorder is turned off.

When the FRAUD MODE SELECTOR is placed in the VOICE-NO SUPERVISION position, action is comparable to the 2600 Hz position. When a voice frequency is detected, and the circuit being monitored indicates "on-hook" supervision, the CMC 2600 is activated. A registration is made and the recorder is turned on for the selected time interval. When the Set is used in the VOICE-NO SUPERVISION position, the circuitry is immune to dial pulses and ringing signals. Any normal off-hook indication disables the voice frequency detection.

*NOTE: In all mode switch positions, except VOICE-NO SUPERVISION, if a call disconnects prior to the selected timing interval, the recorder continues for 15 seconds to allow a disconnect time entry on the tape. If the call extends beyond the selected timing interval, the recorder is reactivated for 15 seconds upon an "on-hook" condition allowing for a disconnect time entry.*

The 2600 Hz detector used in the Set is the signal-to-guard-type with anti-talk-off performance. The quality of the detector is equal to the SF detectors used within the telephone network. The design and close manufacturing standards of the 2600 Hz detector ensure the detection and registration of only 2600 Hz tones. The expense and time used in investigating legitimate calls are eliminated.

The CMC 2600 Toll Fraud Detector has a cover that can be locked to prevent tampering with the controls and interrupting the chain of evidence being prepared. Included with the Set and stored in the cover of the case is a bracket that attaches on the back of the case when the Set is to be hung on the frame. A 2P9A two conductor cord is also furnished for connecting battery and ground to the Set.

A detailed technical description of the CMC 2600 Toll Fraud Detector is available to authorized security personnel. Verification of credentials is required.

#### Carrying Case

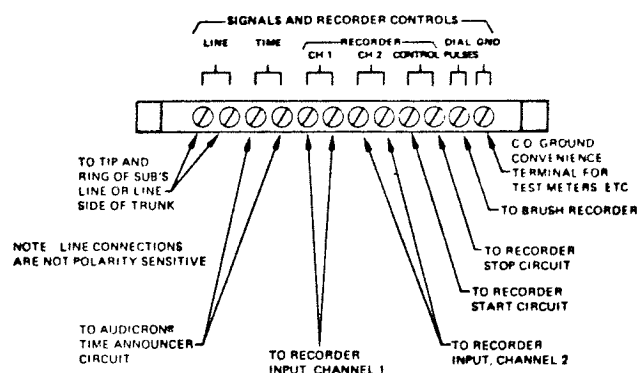
The CMC 2600-CC Carrying Case is available to give extra protection to the CMC 2600 Toll Fraud Detector when it is transported from one location to another or during storage. A complete description of the Carrying Case is given on the back of the Index for this Catalog Section.

#### Calibration and Repair

CMC offers complete Calibration and Repair Service in order to ensure that their Products remain accurate and reliable. A description of the Service is given on the back of the Index for this Catalog Section.

Sketch 1

#### CMC 2600 Toll Fraud Detector — Connections



#### APPLICATION

##### 1. Connection

- If the Set is to be hung on the frame, the mounting bracket is attached to the back of the CMC 2600 case.
- Lead connections for the line, tape recorder, Audicron® time announcer and convenience ground terminal are shown in Sketch 1.
- Battery and Ground Connections
  - Only -48V filtered central office battery (one amp fuse per Set) and common central office ground are used.
  - The power cord is inserted into the BATT jack on the side of the CMC 2600 and then connected to C.O. battery.

##### 2. Operation

- The register is reset to zero. The latch on the bottom side of the manual reset bar can be operated with the point of a ball point pen or pencil to prevent accidental changes in the setting.
- The mode switch is operated to the desired position.
- The timing switch is set to the desired position.
- The CMC 2600 is activated when the tone or voice frequency condition for which it had has been set occurs on the line. The recorder begins operating after the circuit has been activated and remains operating for the time interval set in the timing switch or until a disconnect condition (on-hook) occurs.

*NOTE: The tape recorder control will not time out in the INFINITY time position for the VOICE-NO SUPERVISION mode. The register control will still indicate each fraudulent attempt in the INFINITY time position. The recorder is reset by temporarily placing the mode switch in either the 2600 Hz or the 2600 Hz + KP position.*

A timing switch on the face panel controls the operating time of the tape recorder. The time intervals are 1, 2 or 4 minutes and INFINITY. When the FRAUD MODE SELECTOR is in the 2600 Hz position and a fraudulent 2600 Hz SF tone is detected, the recorder is turned on for the duration of the TAPE RECORDER TIME SELECTOR setting.

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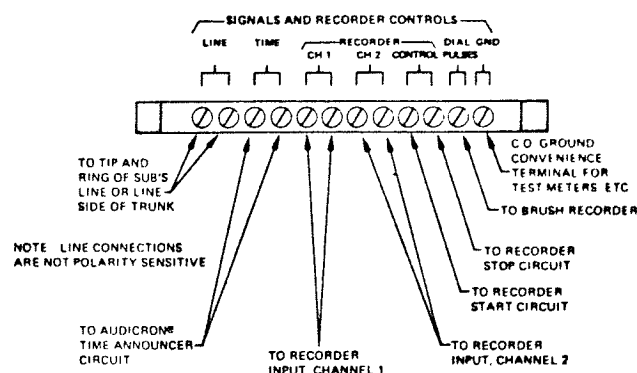
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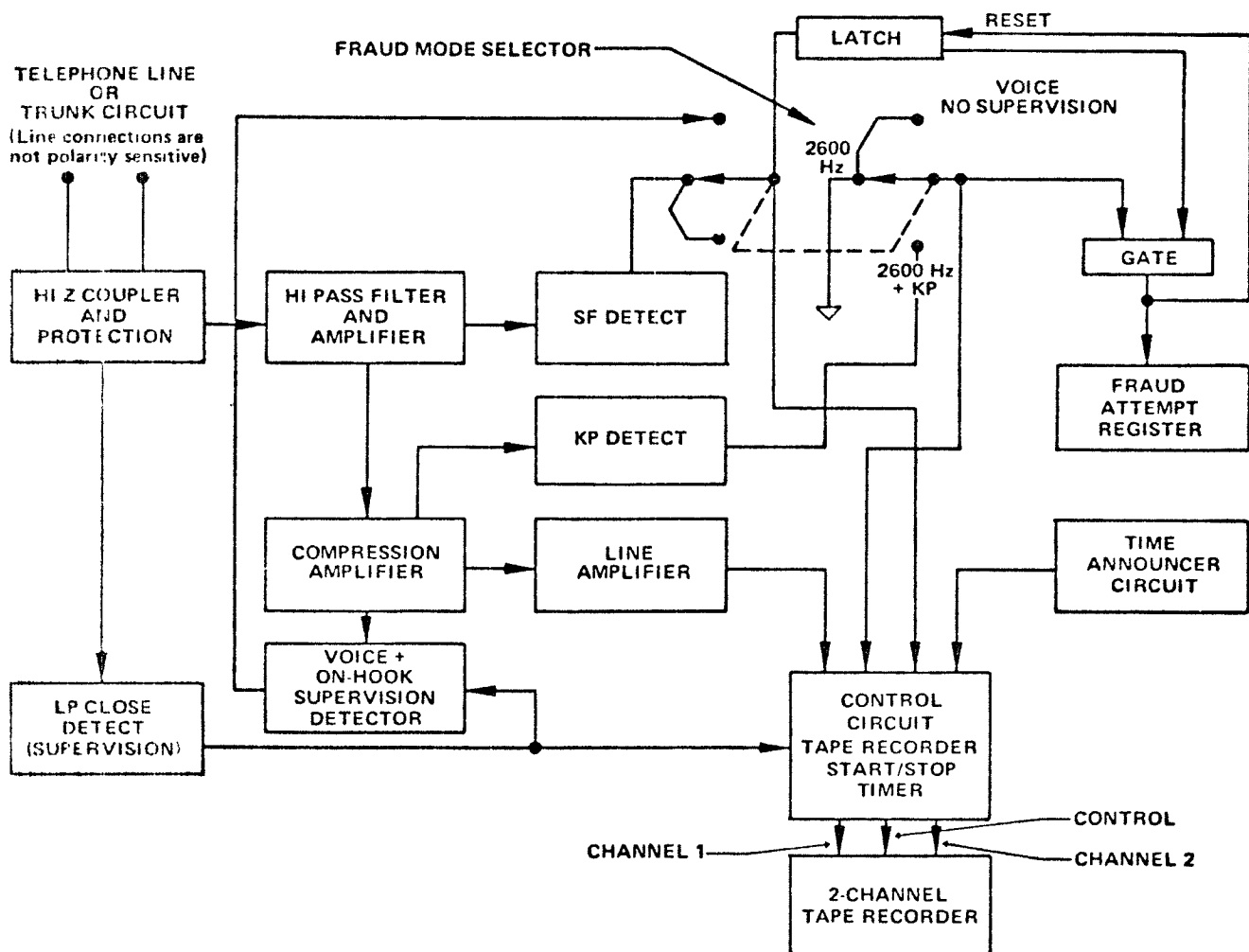
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## TECHNICAL SPECIFICATIONS

**Power:** C.O. battery

**Voltage:** -48

**Jack:** Labeled BATT; accepts 310 plug

**Register:** Four digits; reset bar with latch lock

**Terminal Strip:** Screw-down terminals; two pairs and two single terminals grouped under SIGNALS AND RECORDER CONTROLS and labeled LINE, TIME, DIAL PULSES and GND respectively. Three pairs sub-grouped under RECORDER and labeled CH1, CH2 and CONTROL respectively.

**Rotary Switches:** Two; one labeled FRAUD MODE SELECTOR with three positions labeled VOICE NO SUPERVISION, 2600 Hz and 2600 Hz + KP respectively, one labeled TAPE RECORDER TIME SELECTOR with four positions labeled 1 MINUTE, 2 MINUTE, 4 MINUTE and INFINITY respectively

**Power Cord 2P9A:** 9 ft., two conductors; each end equipped with a 310 plug

**Cover:** Detachable, cord storage space; equipped with lock and keys

**Size:** 9 in. x 7 in. x 7-3/4 in.

**Weight:** 8 lb.

## ORDERING INFORMATION

**Toll Fraud Detector**  
CMC 2600

\$ 875.00 ea.

**Carrying Case**  
CMC 2600-CC

29.50 ea.

*Product serialized for inventory purposes.*

F.O.B. LONG BEACH, CALIF. PRICE SUBJECT TO CHANGE



**COMMUNICATION MFG. CO.**

POST OFFICE BOX 2708 . 3300 EAST SPRING STREET  
LONG BEACH, CALIFORNIA 90801 213 426-8345