

EK-616

SMDR UNIT

NEED MCCU-6TC PC BOARD FOR SMDR

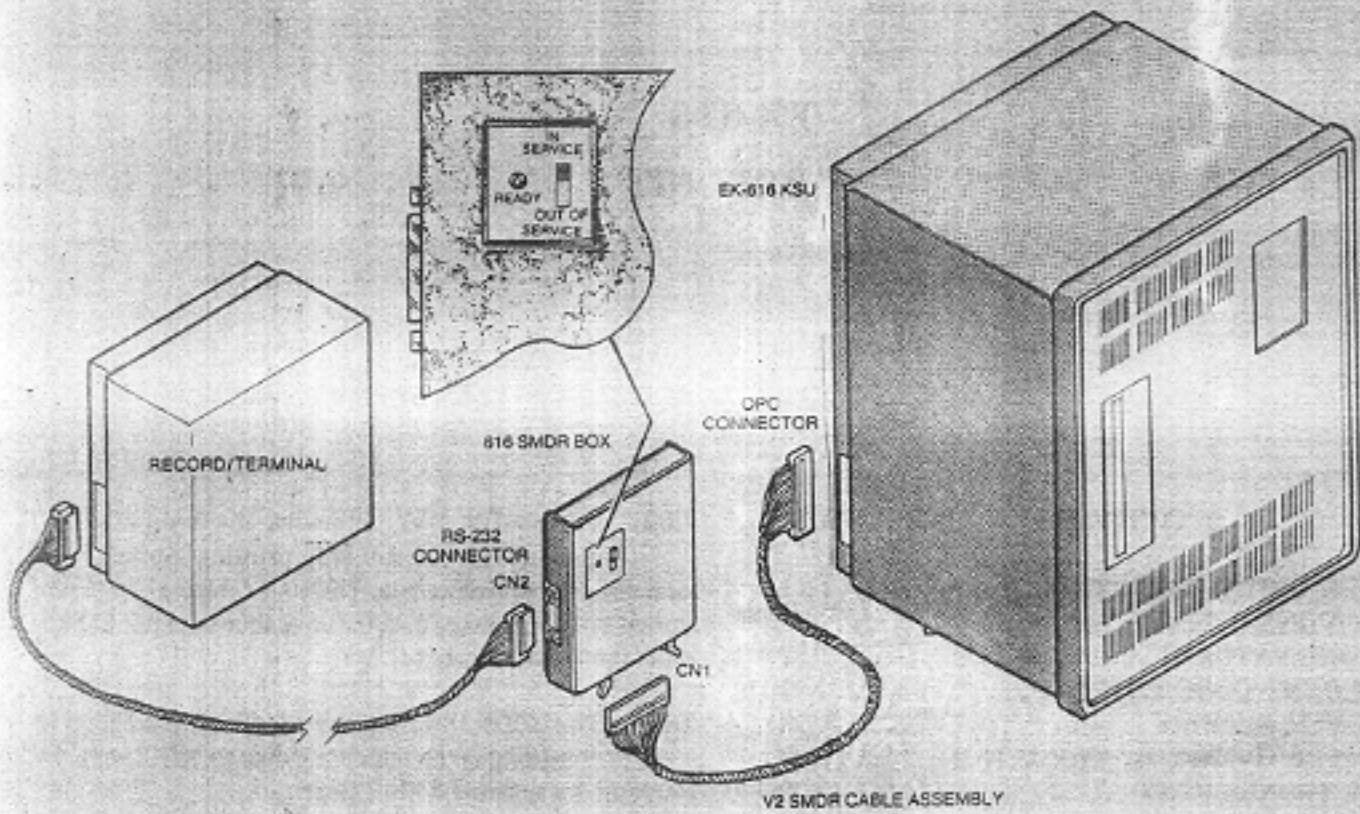
CONTENTS	PAGE	
1. SMDR UNIT DESCRIPTION	1	1.02 The SMDR UNIT contains the programs and memory for controlling printing options and formatting transmission data. This unit contains a buffer for storing station message data for up to four calls per CO line when the recorder is busy.
2. COMPONENTS	1	1.03 The SMDR UNIT is supplied with an installation kit consisting of: an interface cable, an MCCU-6TC PC Board and a separate SMDR Box.
3. SMDR FEATURES	2	
ACCOUNT CODE ENTRY	2	
BUFFER MEMORY	2	
BUFFER OVERFLOW INDICATION	2	
ALL TRUNKS BUSY	2	
OPTION FEATURES	4	
OUTPUT DATA FORMAT	4	
4. UNIT AND CABLE ASSEMBLY	6	
5. POWER-UP	6	

1. SMDR UNIT DESCRIPTION

1.01 The SMDR UNIT provides Station Message Detail Recording data (SMDR), such as class of call, date and time made, duration, and telephone number dialed, including account codes. It is an optional piece of equipment which enables a customer to manage the operation of an EK-616 key telephone system more efficiently and economically.

2. COMPONENTS

2.01 The SMDR UNIT has two Dual-In-Line Package (DIP) switch assemblies (SW1, SW2) containing eight switches; one single, eight-position slide switch (SW3). Switch SW1 controls various options. SW2 has no function at this time and SW3 sets the rate data is transmitted to the recording device. Switch SW4 is for in/out of service.



3. SMDR FEATURES

ACCOUNT CODE ENTRY

3.01 An ACCOUNT CODE ENTRY is provided as a part of the station message detail. This code (up to eight digits) is entered by the station user in the following sequence: *, code digits, *. Other parties on the line are unable to detect the account code entry.

NOTE: Dial restricted stations will be unable to enter account codes.

BUFFER MEMORY

3.02 The BUFFER MEMORY stores SMDR data for up to four calls per CO line. This allows sufficient time to change paper on the recording device. Data will be stored in the buffer when the printer status switch is placed in the OUT OF SERVICE position. When the recorder is returned to service by placing the printer status switch in the IN SERVICE position, the SMDR automatically transmits a new heading line followed by the SMDR data stored in the buffer.

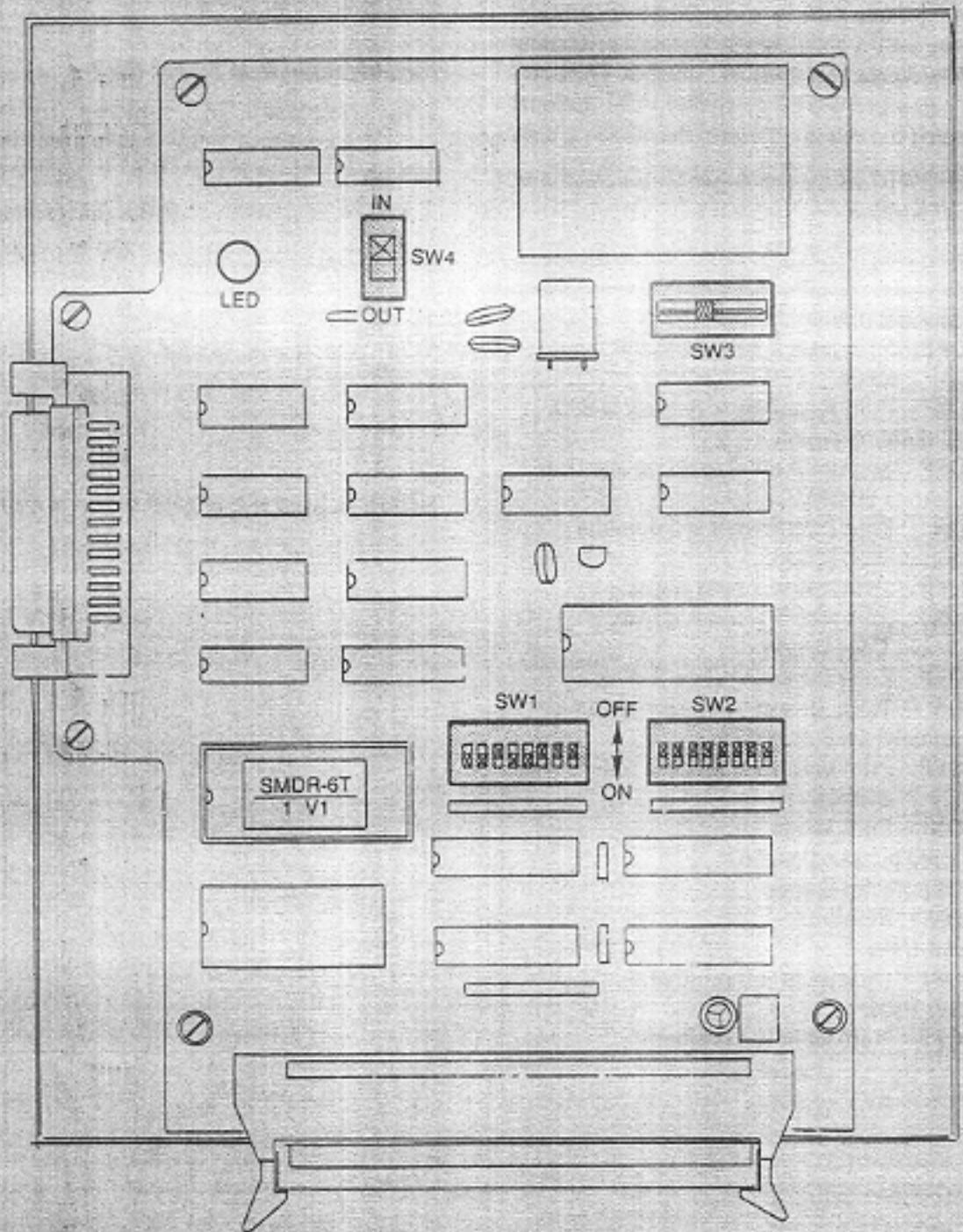
3.03 The buffer may be employed via the data terminal ready lead if it can be accommodated by the terminal. However, a new heading line is not printed on return to service.

BUFFER OVERFLOW INDICATION

3.04 If, during the time that the printer is out-of-service, more than four calls on a CO line are made, the BUFFER OVERFLOW INDICATION will be printed on the hour after the printer is returned to service. This indication includes the date, time, and number of calls missed.

ALL TRUNKS BUSY

3.05 An ALL TRUNKS BUSY (ATB) printout indicates that all lines in a group have been busy for more than one minute. When one or more of the lines in the queue group have returned to an idle state for more than one minute, the ATB data is transmitted to the printer/recorder.



OPTION FEATURES

Option Switch SW1

3.06 Option Switch SW1 is used to select optional features. SW1 is a DIP switch assembly containing eight Single Pole, Single Throw (SPST) switches. The SPST switches are numbered SW1-1 to SW1-8. The optional features and switch controls are shown in the following table.

NOTE: Switch SW1-7&8 are not presently used and must be set to the off position.

SW1-1	Dial digits option
	OFF No print if number length is 7 or less.
	ON Print regardless of number length.
SW1-2	Call duration option
	OFF No print if call duration is less than 1 minute.
	ON Print regardless of call duration.
SW1-3	Counter start option
	OFF Start after 1 second elapses.
	ON Start after 5 seconds elapse.
SW1-4	Account Code option
	OFF Enter the code before dialing.
	ON The code can be entered anytime.
SW1-5	Incoming call option
	OFF Print only when account code is entered.
	ON Print always.
SW1-6	Barred outgoing option
	OFF Print always.
	ON No print.
SW1-7	Not Used.
	OFF Must set in this position
SW1-8	Not Used.
	OFF Must set in this position

C1930W 1-96

Option Switch SW2

3.07 Option Switch SW2 contains eight SPST switches (SW2-1 to SW2-8) that are not used. These switches must be in the off position.

Variable Baud Rate Switch SW3

3.08 Slide switch, SW3, provides a Variable Baud Rate for transmitting SMDR data to a recording device. The settings for this switch, from left to right are:

POS.	RATE (bits/second)
1	150
2	300
3	600
4	1200
5	2400
6	4800
7	not used
8	not used

NOTE: A baud rate of 2400 or less is recommended.

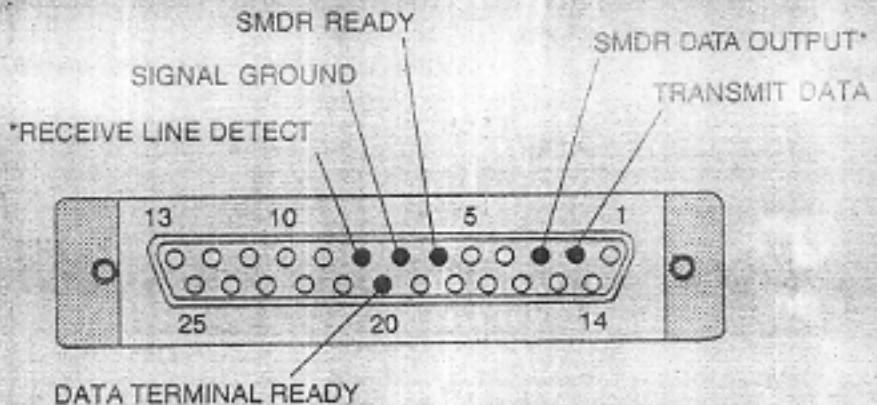
OUTPUT DATA FORMAT

3.09 Data is sent to the recorder in a seven-bit ASCII code with no parity bit. The transmission is one-way with one start bit and one stop bit.

3.10 The SMDR automatically provides the line feed operation. The field for outgoing calls can accommodate up to 24 digits extending into the Duration of Incoming RING field. The Duration of Incoming RING field is not used for outgoing calls.

<u>Class</u>	<u>Description</u>
OTG	Outgoing Call
INC	Incoming Call
BRD	Barred (restricted) call attempted
BFL	Buffer Overflow
ATB	All trunks Busy In Queue Group

Figure 2-2 Sample Data Output Printout



* Not Required

4. UNIT AND CABLE ASSEMBLY

- 4.01 Mount the unit on the wall and connect the cable into it and into the "OPC" jack on the side of the KSU.

5. POWER-UP

- 5.01 Put the printer status switch on the unit in the OUT OF SERVICE position and connect the RS232-C recorder input cable to the RS232-C jack on the side of the unit.

5.02 Place the printer status switch on the panel to IN SERVICE. The heading line should print. If the heading line is properly printed, then proceed.

5.03 If the heading line is not printed, or printed incorrectly, the following items should be checked:

- System power ON.
- Recorder power switch ON.
- Interface cable connected.
- RS232C cable connected.
- RS232C cable wiring (pin 20).
- Baud rate compatibility.
- Instructions for printer.