LG Key System Software Technical Information

STI-0046 Sep 21 2001

Title	LDK-300 and LDK-100 Monitor/Maintenance
System	LDK-300/LDK-100
Abstract	

Revision History			
Revision	By	History	
1.0	J. Kwon	2001. 09. 21	
1.1	J. Kwon	2001. 11. 06 – System access procedure added.	
1.2	H. Lim	2002. 04. 23 – LDK-100 Added	
1.3	Cho.W.S	2005. 06. 16 – Enhanced Trace Added	
1.4	SJ Ryu	2005. 12. 14 – Enhanced Trace Guide Added	
1.5	Cho.W.S	2007. 02. 28 – Comments Added	
1.6	Babmuse	2007. 08. 31 – Comments Added.	

Table of Contents

1. S\	STEM ACCESS PROCEDURE	1
1.1 1.2 1.3	SERIAL CONNECTION LAN CONNECTION MODEM CONNECTION	1 1 1
2. SY	STEM MONITORING COMMANDS	2
2.1 2.2 2.3	DIP Switch setting and meaning Trace Commands Other Commands	2 2 4
3. SY	STEM DIAGNOSTIC/MAINTENANCE COMMANDS	5
3.1 3.2	Maintenance Commands Diagnostic Commands	5 7
4.EN	HANCED TRACE GUIDE(GRAPHICAL TRACE MODE)	1
4.1 4.2 4.3 4 4 4.4 4.4 4 4	PROFILE OF ENHANCED TRACE USAGE OF ENHANCED TRACE SUPPORTED MESSAGES OF ENHANCED TRACE .3.1 Digital Line (PRI, VOI, BRI, STI-t, NPRI, NBRI) Type .3.2 Analog Line Type (DCO, LCO) Type ENHANCED TRACE EXAMPLES .4.1 Incoming Call with PRIB. (ISDN Call) .4.2 Outgoing Call with VOIB. (NET Call) .4.3 Outgoing Call with LCOB. (Analog Call)	1 1 1 2 4 4 1 3

1. System access procedure

- 1.1 Serial Connection
- Be sure PC application port is not assigned to serial port that you want to connect.
- For trace, program print port to the proper serial port(PGM 175 BTN 7).
- Connect using hyper terminal or other terminal program.

1.2 LAN Connection

- Be sure PC application port is not assigned to telnet.
- Program IP address and Gateway of the system(PGM 108 BTN 2, BTN 4).
- Reset the system with DIP Switch 8 at OFF position.
- For trace, program print port to telnet(PGM 175 BTN 7).
- Connect via telnet.

1.3 Modem Connection

- Be sure PC application port is not assigned to COM3-MODU.
- For trace, program print port to COM3-MODU(PGM 175 BTN 7).
- Connect via modem.

2. System monitoring commands

Password : jennie mon> [t|d|m|s|c|p|?|x] [option|parameters]

2.1 DIP Switch setting and meaning

DIP switch/LED	Setting and Meaning
DIP3	Trace Control : ON-trace off OFF-trace on
DIP8	Database initialize: ✓ ON - initialize memory ✓ OFF-save database

2.2 Trace Commands

Monitoring Type	Command	Meaning
	mon>t d.⊣	Delete all current trace commands and revert to idle condition.
		Set trace for board in slot xx
		,where 1≤ y ≤ 29 for LDK-300.
		(28 is CPTU, and 29 is DTRU)
		,where 1≤ y ≤ 14 for LDK-100.
		(13 is CPTU, and 14 is DTRU)
Board		Option 'n' is graphical CO simple trace mode (Enhanced Trace). Option 'n' support the PRIB, VOIB, DCOB & LCO Type Boards.
(Max 6)	mon>t b xx n,J	If PRI or VOI board was set, you can see the net msgs and information elements: IP info, Calling num, Called num and etc
		Also in DCO or LCO board case, you can see the Calling num, Called num, and some of circuit commands related communications with outside system.
		e.g1) For setting trace for board in slot 7;
		mon>t b 07
		e.g2) enhanced trace for board in slot 8;
		mon>t b 07 n

			At the sxxx, xxx should be physical station number. (i.e. port number of station)
		Command options :	
			c : device command tracing. (MP \rightarrow PP)
			e : event tracing. (PP, Internal, Timer Event)
			h : highway tracing.
			t : CTI device command / event tracing.
	mon> t ₊J	ceht sxxx	(Multi-options can be used; ceh, c, eh, chi .etc.)
			Example
			If you want to trace the Station 102, you should enter the physical station number as following;
			mon>t ceh s003
		Even if the station number was changed from 102 to 702, the physical station number is not changed;	
Device			mon>t ceh s003
(Max 15)		Tracing related to CO xxx.	
(Command options :
			n: Enhanced Tracing(Graphical Mode)
	mon>t cehtn cxxx ↓	cehtn cxxx	(This side option 'n' is detailed enhanced trace mode. If you set the option 'n' at the particular CO in PRI or VOI boards, you may see all of network information elements.)
			Example
		For setting the command/event/hiway trace for CO line 07;	
		mon>t ceh c007	
		For the command/event graphical trace for CO line 08;	
			mon>t cen c008
	mon> t ₊J	c sxxx a	Include LED / LCD data.
	mon> t nct	nct	(Network Command Trace)
		Only printed network text message.	

* Enhanced Trace Option 'n' must need the DRAM. And It is executed over IP-LDK V3.5

Monitoring Type	Command	Meaning
Dump	mon> d xxxxxx	Dump memory between address xxxxxx and yyyyyy.
Memory	уууууу	(xxxxxx and yyyyyy : memory address in hexadecimal.)
Modifv		Modify memory of address xxxxxx to bb.
Memory	mon> m xxxxxx bb₊J	(xxxxxx: memory address in hexadecimal,
Content		bb: byte value in hexadecimal)
		Show STA xxx status
		, where 1 ≤ y ≤ 300 for LDK-300.
Show STA Status	mon>s xxx ₊	, where 1 \leq y \leq 96 for LDK-100.
otatuo		e.g., For showing status of station 100
		mon> s 001
		Show CO xxx status
		, where 1 \leq x \leq 200 for LDK-300.
Show CO Status	mon> c xxx ₊J	, where $1 \le x \le 40$ for LDK-100.
		e.g., For showing status of CO number 7
		mon> c 007
		This command views and sets print channel.
Print Channel	mon> p [v s]₊J	Command options are:
Assign		v: View print channel
		s: Set print channel
Help Menu	mon> ? ₊J	This command shows the available commands and their description.
Exit	mon> x ₊	Exit monitor.

2.3 Other Commands

3. System Diagnostic/Maintenance commands

Password : brandy

3.1 Maintenance Commands

	Commands	Meaning
Maintenance	maint> bc	Shows board configuration table.
Commanus		Listens B-channel of specified time-slot.
		Example
	maint> bl xxx yyy {r t}	To listen to rx channel of time-slot 2 at station 100(port 1):
		maint> bl 1 2 r
		Press any key to finish or after finished.
	maint> bs [xx],J	Shows board status. xx is slot number, 00 for MPB.
	maint> hd	Shows HDLC status.
	maint> reboot	This commands reboots the system. It needs admin password,and if it is not specified, '147*' is used temporarily.

		Shows traffic analysis data.
		Command options:
		all <timetype>: Print All Traffic Report</timetype>
		period <hhmm> <timetype>: Print Traffic Report Periodically</timetype></hhmm>
		period_abort: Cancel Periodic Print
		atd <timetype>: Print Attendant Traffic Report</timetype>
		callsum: Print Call Summary Report
		callhour: Print Call Hourly Report
	maint> ta [options]	hw <timetype>: Print H/W Usage Summary Report</timetype>
		cosum <timetype>: Print CO Traffic Summary Report</timetype>
		cohour <cogrp#>: Print CO Traffic Hourly Report</cogrp#>
		<timetype> can be one of following:</timetype>
		tt : Today Total
		yt : Yesterday Total
		Ih : Last Hour
_		yp : Yesterday Peak
		tp : Today Peak
		xx is slot number.
	maint> ws xx [options]	Shows WTIB statistics data.
		Command options:
		call: Lotal number of call & direction of the call
		subs: Information per subscripted device
		eoc: End of call
		cell: Usage of frequency and slot
		traf: Show holding time
		acce: Access info.(basic/hand-over)
		clea: Clear statistics data

3.2 Diagnostic Commands

	Commands	Meaning
Diagnostic	maint> db ?	Shows help screen about Diagnostic.
Commands	maint> db cc	Shows configuration constraints check result. It gives OK if the system configuration meets the maximum board configuration constraints.
	maint> db pf	Shows preprogrammed faults. It checks if the admin programming configuration is same with the installed boards.
	maint> db ts {sl cf}	Shows time slot assignment and conflict status.
	maint> db ht xx yy #	Tests PCM hiway using one DKT and one DTMF receiver.The first DKT of the assigned slot is used for the test. Command options: xx: slot number(DTIB) yy: dtmf duration time(10ms base) #: hiway number (0-7 for LDK-300, 0-2 for LDK-100) Example To test hiway #1 using DTIB installed at 1 st slot: maint> db ht 01 01 1
	maint> db dt	Tests DTMF receiver. This feature tests all DTMF receivers(LDK-300: up to 32 / LDK-600: up to 64) in the system. Only idle DTMF receivers can be tested.
	maint> db ct	This command tests CPTU.
	maint> db mt	This command tests DRAM module installed.
	maint> db rt	Tests RTC. You can see current time and modify it. The time does not elapse while you are testing RTC.
	maint> db pc	Shows power capacity of the PSU and current power usage status of the system.
	maint> db rc	Shows RGU capacity. This feature shows RGU capacity, CO incoming ring cadence and ICM call ring cadence.
	maint> de hs	Shows HDLC status.

	maint> dr {is ic}	Shows ISDN line status information. Command options: is: Shows ISDN line information. ic: Clears ISDN line information.
	maint> dr {ri rc}	Shows reset information. Command options: ri: Shows reset information. rc: Clears reset information.
	maint> dr li {d c v a}	Shows current resource assignment. Command options: d: DTMF receiver assignment c: CPTU assignment v: VMIB channel assignment a: DTMF, CPTU, VMIB channel assignment

This is Help Screen of Diagnostic Commands.

ROCOMM PLUS for Wind	dows	- 🗆 🗙
<u>File E</u> dit <u>S</u> etup <u>O</u> nline F <u>a</u> x	Scripts <u>T</u> ools <u>H</u> elp	
Rapid Dial-Data:ScriptDatastorm111	: File:	
DATE: 02/28/07 TIME: 10:31:51 SITE NAME : ENTER PASSWORD: ***** maint> db ?		_
Diagnostic Command Lis db cc db pf db ts [sl][cf] db ht db dt db ct db mt db rt db pc db rc	t: - Configuration Constraint - Pre-programmed Fault - Time-slot Assignment & Conflict - Hiway Test - DTRU Test - CPTU Test - Memory Test - RTC Test - Power Capacity - RGU Capacity	
de hs dr [is ic] dr [ri rc] dr li [d c v a] maint>	- HDLC Status - ISDN Line Status - HDLC Fault Information - Resource Assignment	•
Port opened - Com1	online	00:00:29

4. Enhanced Trace Guide(Graphical Trace Mode)

4.1 Profile of Enhanced Trace

Enhanced Trace is a graphical trace mode of IP-LDK V3.5. This new feature supports the networking message trace of PRI / VOI / BRI / STI (t-mode) / DCO / LCO / NBRI / NPRI Boards. Enhanced Trace is composed of translated messages of digital and analog lines. In case of digital line, networking messages are analyzed by the standard ETSI/ITU protocol and analyzed data is printed with large arrows. In case of analog line, communicated commands with other systems are analyzed and analyzed data is printed with small arrows. Below picture is example of Enhanced Trace.

051343 C>07 01, D5 0B 05 04 03 80 90 Å3 18 03 Å9 83 81	056960 CO - 1,01
(CO 1) SETUP IE_BEARER_CAPABILITY	(CO 35) S
CCITT standardized coding speech circuit mode	056960 CO - 3,40
64kbits recommandation G.711 A-law	
IE_CHANNEL_INFO interface implicitly identified	057001 CO - 1,01
exclusive is not D-channel	(CO 35) S
ClTT standard coding indicated by num in following octet B channel units 81	057002 C0 057003 C0 - 35,43 057005 C0 - 1,01
051343 D>07 01, C1 00 00 051343 COL 001:07 01 Stiwt sz rsp (00) EVT :D6 06 0D 18 03 A9 83 81 (U1) <<<<>>	(CO 35) S
(CO 1) SETUP ACK IE CHANNEL_INFO interface implicitly identified other inferfacetly identified exclusive is not b-channel	057006 C0 057007 C0 - 35.43 057010 C0 - 1.01
B1 channel CCITT standard coding	(CO 35) S
indicated by num in following octet B channel units 81	057011 C0 057012 C0 - 35,43
051345 COL 001:07 01 St:wt sz rsp (00) Ev-I:pp sz ack P1: 0 P2: 0 EVT: 16 < - 1,61	057028 CO - 1,01
051345 D>07 01, C0 00 18 051384 COL 001:07 01 St:dialing (00) Ev-I:dial P1: 1 P2: 0 EVT: 50 < - 1.01	(CO 35) S
051384 C>07 01, E6 05 7B 70 02 80 31 	057028 C0 057029 C0 - 35,43 057066 C0 - 1,01
unkown	(00.05) 5

Digital CO line Trace (with large arrows)

NIMBER |5 >2 |035:03 01 St:talk 035:03 01 St:talk (00) Ev-I:dial 0 EVT: 51 D NUMBER 05 >A 035:03 01 St:talk (00) Ev-I:dummy acd P1:26D6 P2: 0 EVT: 0 D NUMBER 5 >A 035:03 01 St:talk (00) Ev-I:dummy acd P1:26D6 P2: 0 EVT: 0 (00) Ev-I:dial 0 EVT: 51 ID NUMBER 5 >A 035:03 01 St:talk (00) Ev-I:dummy acd P1:26D6 P2: 0 EVT: 0 035:03 01 St:talk (00) Ev-I:release P1: 0 P2: 0 EVT: 27

035:03 01 St:wt sz rsp (00) Ev-I:pp sz ack P1: 0 P2: 0 EVT: 16

Analog CO line Trace (with small arrows)

Toward right arrows mean the outgoing message. Otherwise toward left arrows mean the incoming message

(Example) Digital CO case

* Enhanced Trace must need the DRAM. And It is executed over IP-LDK V3.5

4.2 Usage of Enhanced Trace

Enhanced Trace is one of system monitoring commands.					
Board Trace:	t	b	X	n	('x' means board number)
All of Networking Trace:	t	nct	ţ		('nct' means the set all of networking CO graphical trace)
Specific CO Trace:	t	n	c#		(option 'n' could be used with other options (e, h, c, t))

* Board Trace & All of Networking Trace: Simple Display Type

* Specific CO Trace: Complete Display Type

=> Simple Display Type shows the Networking Connection Message and Information Elements, but all of Information Elements (IE) could not be analyzed. Only including data of Called IP, Calling Number, Called Number and Cause elements could be analyzed, and then these data is printed.

=> Complete Display Type shows the Networking Connection Message, Information Elements and all of data contained on Information Elements (IE) data.

4.3 Supported Messages of Enhanced Trace

4.3.1 Digital Line (PRI, VOI, BRI, STI-t, NPRI, NBRI) Type

In case of digital line, networking messages are analyzed by the standard ETSI/ITU protocol.

Enhanced Trace Supported Messages	s for Networking Connection
Call Establishment Message	Call Information Phase Messages
ALERTING	USER INFORMATION
CALL PROCEEDING	
CONNECT	
CONNECT ACK	
PROGRESS	
SETUP	
SETUP ACK	
Call Clearing Messages	Miscellaneous Messages
DISCONNECT	FACILITY
RELEASE	INFORMATION
RELEASE COMPLETE	STATUS
	STATUS REO

* Additional Messages on ISDN also could be supported.

Enhanced Trace Supported Message for Information Elements

N. 4	Decoded		Decoded
Networking	& Print	Networking	& Print
Information Element	/ Only	Information Element	/ Only
	Print		Print
IE_BEARER_CAPABILITY	Decoded	IE_CONNECTED_NO	Decoded
	& Print		& Print
IE_CAUSE	Decoded	IE_CONNECTED_SUBADDR	Only
	& Print		Print Data
IE_CALL_IDENTITY	Only Print	IE_CALLING_NO	Decoded
	Data		& Print
IE_CALL_STATUS	Decoded	IE_CALLING_SUBADDR	Only
	& Print		Print Data
IE_CHANNEL_INFO	Decoded	IE_CALLED_NO	Decoded
	& Print		& Print

IE_AOC	Only Print	IE_CALLED_SUBADDR	Only
	Data		Print Data
IE_FACILITY	Only Print	IE_TRANS_NET_SELECT	Decoded
	Data		& Print
IE_PROG_INDICATION	Decoded	IE_LOW_LAYER_COMPATIBLE	Only
	& Print		Print Data
IE_NET_SPECIFIC_FACILITY	Only Print	IE_HIGH_LAYER_COMPATIBLE	Only
	Data		Print Data
IE_NOTIFY_INDICATION	Decoded	IE_USER_USER	Only
	& Print		Print Data
IE_DISPLAY	Only Print	IE_CONGEST	Decoded
	Data		& Print
IE_DATE_TIME	Decoded	IE_ISDN_FLASH_REQ	Only
	& Print		Print Data
IE_KEYPAD_FACILITY	Only Print	IE_ISDN_FLASH_ACK	Only
	Data		Print Data
IE_CALLING_IP	Decoded		
	& Print		
IE_CALLED_IP	Decoded		
	& Print		

***Blue Mark: able to decode IE & print the analyzed results. And the others is printed raw** (HEX Value) **data.**

4.3.2 Analog Line Type (DCO, LCO) Type

In this case Enhanced Trace could show the related CO commands to communicate with other systems. Analog messages dose not include any information elements, so Enhanced Trace show only the sent or received digit.

DCO case

Supported Messages					
Receive M	lessage Part	Send M	Send Message Part		
Message Type	When the Msg is	Message Type	When the Msg is		
	appeared		appeared		
RING DETECT	Receive The Call	SEIZE	Try to Seize the CO Line		
RING STOP		RLS	CO Release		
METERING	Detect Call Metering	ANSWER	Answer the Call		
_	Signal				
LOOP IDLE		DGT SENT	Digit Sent		
DGT SENT ACK		SND REGISTER RCL			
SEIZE ACK	Receive CO Seize ACK	SND READY			
SEIZE NAK		SND END OF DIAL			
RLS ACK	Receive CO Release	SND END OF DIAL			
	ACK	BUSY			
RCV DGT	Receive Digit	MAKE IDLE			
RCV ANS	Receive Answer Signal	SND BLOCKING			
RCV BLOCK		ANI DGT OP	Send Another Digit		
RCV END OF DIAL					
CALLER ID	Receive Caller ID				
R2 END OF SIGNAL					
ANI SVC START	Detect Another Service				
	Start				
ANI DGT SENT					

*Blue Mark: Able to see the related digit.

LCO case

Supported Messages				
Receive M	lessage Part	Send Message Part		
Message Type	When the Msg is	Message Type	When the Msg is	
	appeared		appeared	
RING START	Receive The Call	SEIZE	Try to Seize the CO Line	
RING STOP		RELEASE	CO Release	
CALL METERING	Detect Call Metering	ANSWER	Answer the Call	
	Signal			
LOOP SUP DETECT		SEND_DIGIT	Digit Sent	
DIAL TX ACK		_		
SEIZE ACK	Receive CO Seize ACK			
SEIZE NAK				
RELEASE ACK	Receive CO Release			
	ACK			
FLASH ACK				
DISA DGT				
TONE DETECTED	Detect the Tone			
RELEASED				
CID DETECT	Receive Caller ID			

*Blue Mark: Able to see the related digit.

4.4 Enhanced Trace Examples

4.4.1 Incoming Call with PRIB. (ISDN Call)

```
SITE NAME
 ENTER PASSWOR<u>D: j</u>
                    CO 1 Enhanced Device Trace
 *****
                    Complete Display Type
 mon×t ne c1
t ne c1
 mon> x
 DATE: 07/07/05 TIME: 14:55:15
 Exiting monitor utility...
 180095 COL 001:07 01 St:co idle (00) EVT :D5 16 05 04 03 80 90 A3 18 03 A9 83
 35 30 31 30 30 30 (UO)
    Receive the SETUP networking message
with bearer cap, channel, calling number
of Information Elements
                                        (CO 1) SETUP
                                          IE_BEARER_CAPABILITY
                                           - CCITT standardized coding
                                            speech
                                            circuit mode
                                          64kbits
recommandation G.711 A-law
                                           IE CHANNEL INFO
                                            interface implicitly identified
                                            other inferface
                                            exclusive
                                            is not D-channel
                                            B1 channel
                                            CCITT standard coding
                                            indicated by num in following octet
                                           B channel units
                            Printed IE Data
                                            81
                                            IE CALLING NO
                                            national number
                                            ISDN numbering plan
                                            presentation allowed Calling Number
                                           not screened
                            Printed IE Data
                                            4501000
(CO 1) SETUP ACK
                                     Send the SETUP_ACK networking message
with channel, prog_indicator of Information Elements
 IE_CHANNEL_INFO
   interface implicitly identified
   other inferface
   exclusive
   is not D-channel
   B1 channel
   CCITT standard coding
   indicated by num in following octet
   B channel units
  IE PROG INDICATION
  CCITT standard coding
   private net serving local user
   call is not end-to-end ISDN
 180095 COL 001:07 01 St:co idle (00) Ev-I:ring start P1: 0 P2: 0 EVT: 11
```

B ISAUSSIS ISIII		\sim
180095 COL 001:07 01 St:di-dialing(00) F 180113 COL 001:07 01 St:di-dialing(00) F <<<<<<<<=============================	Ev-I:dummy acd P1:26F3 P2: O EVT: O EVT :E6 05 7B 70 02 80 33 (U25)	^
Receive the INFORMATION networking message <	(CO 1) INFOMATION IE_CALLED_NO unkown unkown 3	
180113 COL 001:07 01 St:di-dialing(00) H 180116 COL 001:07 01 St:di-dialing(00) H	Ev-I:disa dgt P1: 3 P2: 0 EVT: 80 EVT :E6 05 7B 70 02 80 30 (U25)	
Receive the INFORMATION networking message < with called number '0'	(CO 1) INFOMATION IE_CALLED_NO unkown unkown O	
180116 COL 001:07 01 St:di-dialing(00) H 180119 COL 001:07 01 St:di-dialing(00) H	Ev-I:disa dgt P1: A P2: O EVT: 80 EVT :E6 05 7B 70 02 80 30 (U25)	
Receive the INFORMATION networking message <	(CO 1) INFOMATION IE_CALLED_NO unkown unkown O	
180119 COL 001:07 01 St:di-dialing(00) H 180122 COL 001:07 01 St:di-dialing(00) H	Ev-I:disa dgt P1: A P2: O EVT: 80 EVT :E6 05 7B 70 02 80 31 (U25)	
Receive the INFORMATION networking message <	(CO 1) INFOMATION IE_CALLED_NO unkown unkown 1	
180122 COL 001:07 01 St:di-dialing(00) H 180122 COL 001:07 01 St:dd-rng req(00) H 180122 COL 001:07 01 St:dd-rng req(00) H 180122 COL 001:07 01 St:dd-rng req(00) H	Ev-I:disa dgt P1: 1 P2: 0 EVT: 80 Ev-I:dummy acd P1:26AF P2: 1 EVT: 0 Ev-I:dummy acd P1:26F3 P2: 0 EVT: 0 Ev-I:dd rng ack P1: 0 P2: 0 EVT: 82	Ξ
CO 1) CALL PROCEEDING Send to IE_CHANNEL_INFO	he PROCEEDING networking message	
<pre>interface implicitly identified other inferface exclusive is not D-channel B1 channel CCITT standard coding indicated by num in following octet B channel units 81 IE_PROG_INDICATION CCITT standard coding nrivate net serving local user</pre>		
call is not end-to-end ISDN		



4.4.2 Outgoing Call with VOIB. (NET Call)



038991 C>04 01, E0 04 08 02 80 90		^
(CO 1) RELEASE COMPLETE Send the RELEASE COMPLETE IE_CAUSE This message means the DISCONNECT in this case. CCITT standardized coding user normal call clearing	>>	
038995 COL 001:04 01 St:rls guard (00) EVT :DF 04 08 02 80 90 (U0) <<<<<<<==============================		
038995 D>04 01, C1 00 00 038995 D>04 01, C5 00 00 038995 D>04 01, C5 00 00 038996 COL 001:04 01 St:rls guard (00) EVT :E2 04 08 02 80 90 (U0) <<<<<<<>>Receive the RELEASE COMPLETE (CO 1) RESTART ACK		
CCITT standardized coding user normal call clearing		=
038996 COL 001:04 01 St:rls guard (00) Ev-I:pp rls ack P1: O P2: O EVT: - 1,44 038997 COL 001:04 01 St:rls guard (00) Ev-T:isd rls gd P1: O P2: O TMR:	32 < 9 <	
- 1,44 038997 D>04 01, C5 00 00 039052 P:04 BD, F0 0 0(6)		

4.4.3 Outgoing Call with LCOB. (Analog Call)

