

E1 Line Settings (TD1232)

This is common setting in Brazil.

*** Be careful! DISA can not be the destination from DID of E1.**

*** Please check extension cards(TD170 and TD174).**

These card should be version 2. ((2) is printed on back side of each card.)



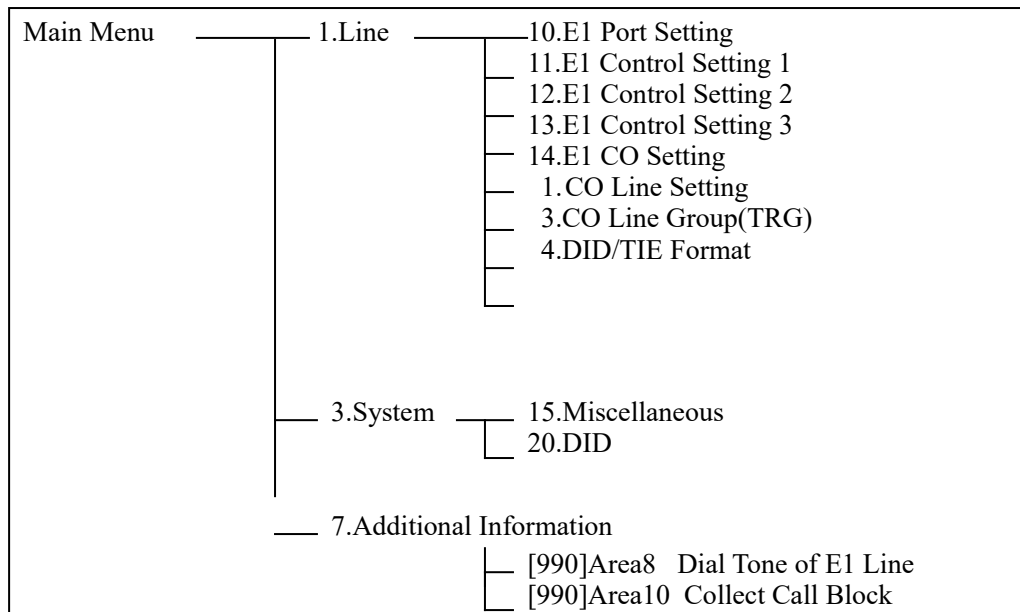
If version 1 is used with E1 card, last 4 channels don't work well. And another problem may happen.

(Please refer Installation Manual – 4.2 E1 line installation.)

*** After you set some parameter related with E1, you must reset Main Unit.**

After this reset, new setting will begin to work.

Structure of Menu which this document explaining



1.Line – 10.E1 Port Setting

[740]	Channel Assignment	Disable	->	DR2
[741]	Dial Mode	Pulse-10	->	MFC-R2
[742]	CPC (IN)	02		
[743]	CPC(out)	02		
[744]	DID Digit	4		
[745]	DR2 Receiver	Undefined	->	MFC-R2

```

E1 Port Setting                               う      Off-line      う KX-TD1232 Master
=====
      CH  Channel      Dial      CPC      DID      DR2
      No. Assignment  Mode      (IN) (OUT) Digit Receiver
      01  DR2          MFC-R2  [02] [02]  [4]   MFC-R2
      02  DR2          MFC-R2  [02] [02]  [4]   MFC-R2
      03  DR2          MFC-R2  [02] [02]  [4]   MFC-R2
      04  DR2          MFC-R2  [02] [02]  [4]   MFC-R2
      05  DR2          MFC-R2  [02] [02]  [4]   MFC-R2
      06  DR2          MFC-R2  [02] [02]  [4]   MFC-R2
      07  DR2          MFC-R2  [02] [02]  [4]   MFC-R2
      08  DR2          MFC-R2  [02] [02]  [4]   MFC-R2
      09  DR2          MFC-R2  [02] [02]  [4]   MFC-R2
      10  DR2          MFC-R2  [02] [02]  [4]   MFC-R2
      11  DR2          MFC-R2  [02] [02]  [4]   MFC-R2
      12  DR2          MFC-R2  [02] [02]  [4]   MFC-R2
      13  DR2          MFC-R2  [02] [02]  [4]   MFC-R2
      14  DR2          MFC-R2  [02] [02]  [4]   MFC-R2
      15  DR2          MFC-R2  [02] [02]  [4]   MFC-R2

Hit spacebar to select parameter
  2 COPY   3   4 HELP   5 P-PAGE  6 N-PAGE  7 SAVE  8 EXIT
  
```

1.Line – 11.E1 Control Setting 1

[707]	Clock Mode	External		
[747]	Line Cording	HDB3		
[748]	Frame Sequence	PCM30		
[749]	Frame Option	C=0, D=1		
[750]	First Digit Timer (DR2/TIE)	[002] (*32ms)		
[751]	%Break	60%	->	67%
[752]	Dial Click Tone	Yes		
[753]	Inter Digit Pause	830ms		
[754]	Flash Detection	208-1016ms	->	Disable or 80-1016ms
[755]	Answer Decision Timer	[001] (*32ms)		
[756]	Seizure ACK Wait Timer	[05] (*0.5s)	->	[14]
[757]	Pulse Type	Type-A		
[758]	DR2 Signaling Type	Normal		
[759]	Inter Digit Time	[05] (*1.0s)		
[760]	Bit Position for Dial Pulse	A-bit		
[761]	Bit Position for Clear Back	A-bit	->	B-bit

```

E1 Control Setting 1          Off-line          KX-TD1232 Master
|||||
      Clock Mode : External
      Line Coding : HDB3
      Frame Sequence : PCM30
      Frame Option : C=0, D=1
      First Dial timer (DR2/TIE) : [002]
      %Break : 67%
      Dial Click Tone : Yes
      Inter Digit Pause : 830msec
      Flash Detection : 80-1016msec
      Answer decision timer : [001]
      Seizure ACK Wait Time : [14]
      Pulse Type : Type-A
      DR2 Signaling Type : Normal
      Inter Digit Timer : [05]
      Bit Position for Dial Pulse : A-bit
      Bit Position for Clear Back : B-bit

Hit spacebar to select parameter
1 2 3 4 HELP 5 6 7 SAVE 8 EXIT
  
```

1.Line – 12.E1 Control Setting 2

[762]	E&M Signaling Type	Type-2		
[763]	E&M Pulse Length (seizure)	150ms		
[764]	E&M Pulse Length (answer)	600ms		
[765]	E&M Pulse Length (clear)	600ms		
[766]	Meter Pulse Detection Mode	No Detection		
[767]	Meter Pulse detection Bit Position	B-Bit		
[768]	Meter Pulse Detection Length	[16] (*8ms)		
[769]	DSP Gain DTMF Transmit	[03]		
[770]	DSP Gain DTMF Receive	[16]		
[771]	DSP Gain MFC-R2 Transmit	[16]		
[772]	DSP Gain MFC-R2 Receive	[08]		
[773]	Frame Error Detection	No	->	Yes
[774]	Error Rate	[0]		
[775]	ANI Service Mode	None	->	Both
[776]	ANI Max Digits	[00]	->	[12]
[777]	MFC-R2 Forward Timer	[15]		
[778]	MFC-R2 Backward Timer	[15]		
[779]	MFC-R2 Disappearance Timer	[24]		
[785]	Tone Type for Make Call	Busy+Reorder		

```

E1 Control Setting 2                               Off-line      KX-TD1232 Master
|||||
E&M Signaling Type      : Type-2
E&M Pulse Length (Seizure) : 150msec
E&M Pulse Length (Answer) : 600msec
E&M Pulse Length (Clear)  : 600msec
Meter Pulse Detection Mode : No Detection
Meter Pulse Detection Bit Position : B-bit
Meter Pulse Detection Length : [16]
  DSP Gain DTMF Transmit   : [03]
  DSP Gain DTMF Receive    : [16]
  DSP Gain MFC-R2 Transmit : [16]
  DSP Gain MFC-R2 Receive  : [08]
  Frame Error Detection    : Yes
  Error Rate               : [0]
  ANI Service Mode        : Both Calls
  ANI Max Digits          : [12]
MFC-R2 Forward Timer     : [15]
MFC-R2 Backward Timer    : [15]
MFC-R2 Disappearance Timer : [24]
  Tone Type for Make Call : Busy+Reorder

Hit spacebar to select parameter
1 2 3 4 HELP 5 6 7 SAVE 8 EXIT
  
```

1.Line – 13.E1 Control Setting 3

<Group-I> 1.ANI Start	[14]	->	[00]	<Group-A> 1.Address Complete	[03]		
<Group-I> 2.ANI Complete	[15]			<Group-A> 2.ANI Request	[05]		
<Group-I> 3.ANI Reject	[12]			<Group-A> 3.Set UP speech	[06]	->	[13]
<Group-II> 1	Undefined	->	Subscriber	<Group-A> 4.(First)Request	[00]	->	[02]
<Group-II> 2	Subscriber			<Group-A> 5.(N)Request	[00]		
<Group-II> 3	Undefined	->	Subscriber	<Group-A> 6.(N-1)Request	[00]	->	[09]
<Group-II> 4	Undefined	->	Subscriber	<Group-A> 7.(N-2)Request	[00]	->	[07]
<Group-II> 5	Undefined	->	Subscriber	<Group-A> 8.(N-3)Request	[00]	->	[08]
<Group-II> 6	Undefined	->	Subscriber	<Group-B> 1.Idle(1)	[01]		
<Group-II> 7	Undefined	->	Subscriber	<Group-B> 2.Idle(2)	[00]	->	[05]
<Group-II> 8	Undefined	->	Collect Call	<Group-B> 3.Idle(3)	[00]	->	[06]
<Group-II> 9	Undefined	->	Subscriber	<Group-B> 4.No Billing	[00]		
<Group-II> 10	Undefined			<Group-B> 5.Busy	[02]		
<Group-II> 11	Undefined			<Group-B> 6.Unallocated	[03]		
<Group-II> 12	Undefined			<Group-B> 7.Congestion	[04]		
<Group-II> 13	Undefined			<Group-B> 8.Out of Service	[04]		
<Group-II> 14	Undefined			<Group-B> 9.Collect Call Reject	[00]	->	[08] or [07]
<Group-II> 15	Undefined			<Group-C> 1.Group-C ANI(N+1)	[00]		
				<Group-C> 2.Group-II ANI	[00]		

<Group-I> setting → [780], <Group-II> setting → [781], <Group-A> setting → [782],

<Group-B> setting → [783], <Group-C> setting → [784]

```

E1 Control Setting 3          Off-line          KX-TD1232 Master
|||||
<Group-I>  1. ANI Start          : [00]
            2. ANI Complete      : [15]
            3. ANI Reject        : [12]
<Group-II> 01. Subscriber        02. Subscriber        03. Subscriber
            04. Subscriber        05. Subscriber        06. Subscriber
            07. Subscriber        08. Collect call     09. Subscriber
            10. Undefined         11. Undefined         12. Undefined
            13. Undefined         14. Undefined         15. Undefined
<Group-A>  1. Address Complete   : [03]  2. ANI Request       : [05]
            3. Set UP speech     : [13]  4. (First)Request   : [02]
            5. (N)Request        : [00]  6. (N-1)Request     : [09]
            7. (N-2)Request      : [07]  8. (N-3)Request     : [08]
<Group-B>  1. Idle(1)           : [01]  2. Idle(2)          : [05]
            3. Idle(3)           : [06]  4. No Billing        : [00]
            5. Busy               : [02]  6. Unallocated      : [03]
            7. Congestion        : [04]  8. Out of Service   : [04]
            9. Collect Call Reject : [08]
<Group-C>  1. Group-C ANI(N+1)  : [00]
            2. Group-II ANI      : [00]
Enter numeric code
| 1 | 2 | 3 | 4 HELP | 5 | 6 | 7 SAVE | 8 EXIT
  
```

Line – 14.E1 CO Setting

Please note TRG and Ref.CO. These information will be needed in setting of “1.Line-1.CO Line Setting 1”.

[400]	CON	Y		
[401]	TRG	[8]		
[417]	CO Name	[]	->	Max. 10 Characters
[418]	CO Number	[]	->	Max. 16 Digits
[720]	TIE RING	TIE		
[721]	Ref. CO	[09]		
[722]	Ans.Wait	1 min		
[723]	TIE ID	Yes		

```

E1 CO Setting                               Off-line                               KX-TD1232 Master
┌──────────────────────────────────────────┴──────────────────────────────────────────┐
CO(CH)  C  T      CO      CO      TIE  Ref.  Ans.  TIE
No.     O  R      Name    Number  RING CO   Wait  ID
        N  G
25(01)  Y  [8]  [        ] [        ] TIE  [09]  1 min Yes
26(02)  Y  [8]  [        ] [        ] TIE  [09]  1 min Yes
27(03)  Y  [8]  [        ] [        ] TIE  [09]  1 min Yes
28(04)  Y  [8]  [        ] [        ] TIE  [09]  1 min Yes
29(05)  Y  [8]  [        ] [        ] TIE  [09]  1 min Yes
30(06)  Y  [8]  [        ] [        ] TIE  [09]  1 min Yes
31(07)  Y  [8]  [        ] [        ] TIE  [09]  1 min Yes
32(08)  Y  [8]  [        ] [        ] TIE  [09]  1 min Yes
33(09)  Y  [8]  [        ] [        ] TIE  [09]  1 min Yes
34(10)  Y  [8]  [        ] [        ] TIE  [09]  1 min Yes
35(11)  Y  [8]  [        ] [        ] TIE  [09]  1 min Yes
36(12)  Y  [8]  [        ] [        ] TIE  [09]  1 min Yes
37(13)  Y  [8]  [        ] [        ] TIE  [09]  1 min Yes
38(14)  Y  [8]  [        ] [        ] TIE  [09]  1 min Yes
39(15)  Y  [8]  [        ] [        ] TIE  [09]  1 min Yes

Hit spacebar to select parameter
1 2 COPY 3 4 HELP 5 P-PAGE 6 N-PAGE 7 SAVE 8 EXIT
  
```

Hint!

If you want to restrict each channel of E1 Line, please change “CON” from Y to N.

1.Line – 1.CO Line Setting 1

Please check TRG of CO09.

(CO09 is a Ref.CO in “14.E1 CO Setting”. If you set Ref.CO as CO10, you should check CO10.)

If TRG is different from “14.E1 CO Setting”, you should change TRG of CO09 as same as “14.E1 CO Setting”.

(TRG setting → [401])

CO Line Setting 1													Off-line	KX-TD1232 Master	
CO No	C O	T R	D I	D A	P M	C S	CPC Detection Mode		DIL 1:1 EXT No	Day	Night	R E	DIL 1:1 Lunch Break Group		
	N	G	L	F								V			
01	Y	[1]	D	80	10	N	Disable	Disable	Disable	Disable	Disable	Reg.	[]	[]	
02	Y	[2]	D	80	10	N	Disable	Disable	Disable	Disable	Disable	Reg.	[]	[]	
03	Y	[3]	D	80	10	N	Disable	Disable	Disable	Disable	Disable	Reg.	[]	[]	
04	Y	[4]	D	80	10	N	Disable	Disable	Disable	Disable	Disable	Reg.	[]	[]	
05	Y	[5]	D	80	10	N	Disable	Disable	Disable	Disable	Disable	Reg.	[]	[]	
06	Y	[6]	D	80	10	N	Disable	Disable	Disable	Disable	Disable	Reg.	[]	[]	
07	Y	[7]	D	80	10	N	Disable	Disable	Disable	Disable	Disable	Reg.	[]	[]	
08	Y	[8]	D	80	10	N	Disable	Disable	Disable	Disable	Disable	Reg.	[]	[]	
09	Y	[8]	D	80	10	N	Disable	Disable	Disable	Disable	Disable	Reg.	[]	[]	
10	Y	[8]	D	80	10	N	Disable	Disable	Disable	Disable	Disable	Reg.	[]	[]	
11	N	[8]	D	80	10	N	Disable	Disable	Disable	Disable	Disable	Reg.	[]	[]	
12	N	[8]	D	80	10	N	Disable	Disable	Disable	Disable	Disable	Reg.	[]	[]	

Enter numeric code

1 | 2 COPY | 3 | 4 HELP | 5 P-PAGE | 6 N-PAGE | 7 SAVE | 8 EXIT

1.Line – 3.CO Line Groups (TRG)

You should check TRG8.

(If you assign TRG of E1 as another group number, you should check the number which you assigned.)

You should assign “DID/TIE FMT”. For example table 1 as below.

(DID/TIE FMT → [430])

TRG	Intercept EXT No	Flash Time (msec)	Pause Time (sec)	DSC Time (sec)	PBX Access	DID/TIE FMT
G	Day	Night			1 2 3 4	
1	Disable	Disable	600	1.5	1.5	[] [] [] [] []
2	Disable	Disable	600	1.5	1.5	[] [] [] [] []
3	Disable	Disable	600	1.5	1.5	[] [] [] [] []
4	Disable	Disable	600	1.5	1.5	[] [] [] [] []
5	Disable	Disable	600	1.5	1.5	[] [] [] [] []
6	Disable	Disable	600	1.5	1.5	[] [] [] [] []
7	Disable	Disable	600	1.5	1.5	[] [] [] [] []
8	Disable	Disable	600	1.5	1.5	[] [] [] [] [] [1]

Hit spacebar to select parameter
1 2 COPY 3 4 HELP 5 6 7 SAVE 8 EXIT

Hint!

IRNA Destination (Intercept Routing Extension)

- You can set IRNA destination with changing Intercept EXT No(Day/Night).

(→ Day = [409], Night = [410])

3.System – 15.Miscellaneous

Please change following parameters.

- [109] **Expansion Card Type (Master)**
Please set here as "EL". This means TD188.
- [103] **Local Access**
This setting is which TRG should be hunt at first, when Local Access Number (9 or 0) pushed.
If cliente want to use E1 at first, you should set TRG of E1 line as priority 1.
- [135] **DID SELECT**
You have two choice.
If DID number from E1 line is same as EXT Number, you can set here "EXT Number".
If you want to use DID Table (refer 3.System – 20.DID), please set here as "Transfer Table". And you should notice the item **DID Transfer Table**.
- [154] **DID Transfer Table**
If you want to use DID Table, please set here as "Use". And you should notice the item "DID SELECT".

```

Miscellaneous                               ㊄ Off-line          ㊄ KX-TD1232 Master
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
Expansion Card Type (Master) => EXP1  EXP2  EXP3
                               (Slave) => EL   EXT1 EXT2
                               (Slave) => ----  ----  ----

Local Access => Priority = 1    2    3    4    5    6    7    8
                  TRG No. = [8] [1] [2] [3] [4] [5] [6] [7]

Call Hunting => EXG No. = 1    2    3    4    5    6    7    8
                   D    D    D    D    D    D    D    D

SPD TRS Override           => Disable      HOTEL FEATURE           => On
CO Auto-Hold by Push DSS-Key => Enable      DID SELECT                => Transfer Table
                          CO-Key  => Disable  Off-Hook Monitor         => Enable
Adjust Time                => [01:00] AM

PBX Code                   => [    ]           Caller ID Extension
E&M Signal                 => CONTINUOUS        EXP 1 Not Stored
DID Transfer Table         => Use              EXP 2 Not Stored
PS N/A EXT.                => [ ]            EXP 3 Not Stored
                               EXP 4 Not Stored

Enter numeric code
1 2 3 4 HELP 5 6 7 SAVE 8 EXIT
  
```

3.System – 20.DID

- [139] Name : DID Name
- [136] Number : DID Number, usually Telefonica sends 4 digits in Sao Paulo.
- [137],[138] Day, Night : Destination to transfer

DID	Name	Number	Day	Night
001	[Panasonic	[4000	EXT [4017]	EXT [4017]
002	[William	[4040	EXT [4040]	EXT [4017]
003	[Fabio	[4060	EXT [4060]	EXT [4017]
004	[Kazu	[4063	EXT [4063]	EXT [4017]
005	[Lucimar	[4033	EXT [4033]	EXT [4017]
006	[	[	Disable	Disable
007	[	[	Disable	Disable
008	[	[	Disable	Disable
009	[	[	Disable	Disable
010	[	[	Disable	Disable
011	[	[	Disable	Disable
012	[	[	Disable	Disable
013	[	[	Disable	Disable
014	[	[	Disable	Disable
015	[	[	Disable	Disable
016	[	[	Disable	Disable
017	[	[	Disable	Disable
018	[	[	Disable	Disable
019	[	[	Disable	Disable
020	[	[	Disable	Disable

Enter numeric code

1 2 3 4 HELP 5 P-PAGE 6 N-PAGE 7 SAVE 8 EXIT

7.Additional Information

Dial Tone of E1 Line

[990] Area10 Bit1-8 for TRG1-8

1-Disable (default) : Dial Tone does not come

0-Enable : Dial Tone comes

Collect Call Block

[990] Area8 Bit9-16 for TRG1-8

1-Disable(default) : You do not set "Collect Call Block"

0-Enable : You set "Collect Call Block"

Caution

Collect Call Block on E1 is different from the case of Analog CO line.(Sometime, it's same.) Before extension starts to ring, Collect Call Block will be done.

How to Test E1 Line

Synchronization

3.System - 26.E1 Card

```
E1 Card                               う On-line:ROM[P211I]う           Empty
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
CARD TYPE          : E1
CONNECTION         : Establish

DSP Card          : INS

RAM CHECK (EVEN)  : OK
                  (ODD) : OK
ROM VERSION       : ---Q321AA10206BR
ROM CHECKSUM (EVEN) : 44F9
                  (ODD) : AFC5

Communication Error count
CHECK-SUM        : 0
DATA-EMPTY      : 50
CARD RESET      : 1

CLOCK DETECT    : o
CLOCK SELECT    : o

1 2 3 READ 4 HELP 5 6 7 8 EXIT
```

CONNECTION : it should be Establish. --- This is connection between MainUnit and TD188.

DSP Card : it should be INS.

RAM CHECK (EVEN / ODD) : they should be OK.

Communication Error count

- CHECK-SUM : it should be 0.
- DATA-EMPTY : it should be around 50. (47 - 53)
- CARD RESET : it should be 1.

➔If this part is not good, there is some hardware problem.

CLOCK DETECT : o

CLOCK SELECT : o

➔If this part is not good, please check parameters of 1.Line - 10, 11, 12, 13.

Error Log

3.System - 27.E1 Minor Error

```

E1 Minor Error                               On-line:ROM[P211I]          Empty
|||||On-line:ROM[P211I]          Empty

NO CODE          DATE          NO CODE          DATE
01 0987 [ *01.May.23 WED 08:04:03 PM] 17 0000
02 0987 [ *01.May.26 SAT 02:27:04 PM] 18 0000
03 0987 [ *01.May.31 THU 12:02:17 PM] 19 0000
04 0996 [ *01.May.31 THU 12:03:21 PM] 20 0000
05 098F [ *01.May.31 THU 12:03:22 PM] 21 0000
06 0996 [ *01.May.31 THU 12:03:23 PM] 22 0000
07 098F [ *01.May.31 THU 12:15:26 PM] 23 0000
08 0996 [ *01.May.31 THU 12:15:36 PM] 24 0000
09 0000 25 0000
10 0000 26 0000
11 0000 27 0000
12 0000 28 0000
13 0000 29 0000
14 0000 30 0000
15 0000 31 0000
16 0000 32 0000

1 2 3 READ 4 HELP 5 6 7 8 EXIT

```

0996 : this means TD188 recovered from error situation.

If you can not find 0996 at the end of error log, there is big possibility that the system has some problem with

E1.

0980	Card Type Mismatch. Card send the different card type to TD1232 CPU.	098D	Detect Error Rare during setting up communication with CO.
0981	Not installed DSP Card	098E	Detect RAI signal from CO during normal operation.
0982	Self Diagnostic Error : RAM1(IC18) R/W Error	098F	Detect un-synchronization during normal operation.
0983	Self Diagnostic Error : RAM2(IC19) R/W Error	0990	Detect AIS signal from CO during normal operation.
0984	Self Diagnostic Error : DSP card Error	0991	Detect Multi Frame Error during normal operation.
0986	Sequence Error during initial data communication	0992	Detect Error Rate during normal operation.
0987	Detect No Synchronization during setting up communication with CO.	0993	Detect Download Data Error(TD1232->TD188) during normal operation. TD1232 will restart TD188.
0988	Detect Synchronization during setting up communication with CO.	0994	Detect DSP Card Error
0989	Detect RAI signal from CO during setting up communication with CO.	0996	Receive Error Recover information from TD188(E1 Card).
098A	Detect un-synchronization (Once detect synchronization) during setting up communication with CO.	0997	Detect pulling off TD188(E1 Card).
098B	Detect AIS signal from CO during setting up communication with CO.	0998	Detect FIFO communication Disconnect.(There is no communication.)
098C	Detect Multi Frame Error during setting up communication with CO.	0999	Detect FIFO communication Disconnect.(IDLE frame is normal, but TD1232 can't send data to E1 card.)

(0980)

I have no experience to receive this. But if it appears, E1 card or TD1232 main unit has hardware trouble.

(0981)

This error means that E1 card does not have DSP card. Maybe part of DSP is broken. You should change E1 Card.

(0982)

This means that IC18 is broken. You should change E1 card.

(0983)

This means that IC19 is broken. You should change E1 card.

(0984)

This means that DSP can not work well. Maybe you can not make/receive a call. You should change card.

(0986)

This means that communication between main unit and E1 card is not good. Main unit or E1 card is broken.

(0987)

This means that E1 card could not receive CLK from Central Office. It happens after resetting when Central Office does not open E1 line or our card is broken. Or miss connected TX and RX.

(0988)

This means that, after resetting main unit, in boot up procedure, E1 card could get CLK from Central Office.

Normally you can get this information only after resetting main unit.

(0989)

This means that E1 card received RAI from CO in boot up procedure.

RAI signal means that Central Office received wrong data from PBX.

But factly, it happens with bad quality line.

If a customer use bad quality line, the signal from PBX may change to another data.

And Central Office receives this changed data.

So if you find much of this error code, usually, problem comes from line quality problem.

But in other hand, there is one possibility that it exactly our problem.

When TD1232 got electric shock from thunder, some part of PCB will be broken.

After this also RAI will be send by Central Office, because our PBX sends wrong data.

In this case you should change PCB step by step. (I got this problem only once.)

(098A)

I never got this. But I understand this as line quality problem.

(098B)

Please refer to (0990)

(098C)

Please check line quality. If you have another E1 card, try to change E1 card.

Usually this error code indicates line quality is not good.

(098D)

Please refer to (0992)

(098E)

After synchronization is established, PBX received RAI from Central Office.
About detail information, please refer to explanation of (0989).

(098F)

If line quality is not good, it should be received. Usually, after this error code, (0996) follows.

It means, synchronization was lost temporary.

(0990)

If PBX received AIS information, it's better to confirm what kind of error is included in this AIS.

But usually, AIS is received when line quality is not good.

(0991)

Sometimes, it can be happen on bad quality line. It is not normal. I have no idea to solve this problem with our side. If this makes customers unhappy, please complain Central Office.

(0992)

According your setting of "Flame Error Detection" (1.Line - 12.E1 Control Setting 2), it will appear.

If you set this parameter "Yes" and you also set "Error Rate" as some number, PBX detect frame error.

After PBX detects the number (you sent this number) of frame error, this error code appear. And also PBX let this E1 fall down.

(0993)

The communication between E1 card and main unit made some mistake. If you have this error code much, some hardware error happen on E1 card.

(0994)

This means that DSP can not work well. Maybe you can not make/receive a call. You should change card.

(0996)

E1 card recovered from error situation. Usually "error situation" means miss-synchronization.

(0997)

E1 card is pulled off without turning off main unit.

(0998)

The communication between E1 card and main unit disappear. It means E1 card is broken.

(0999)

Same as (0998). The communication between E1 card and main unit disappear. It means

E1 card is broken.

Monitor de Bits de Sinalização para tronco - E1

Após conectar na TD1232 vá até o Main Menu e insira o comando **[ALT]+[K][X][T][D]**.
Vai aparecer um outro MENU.

8. E1 Option – 3.E1 BITS de SINALIZAÇÃO

```
T1/E1 SIGNALING BIT DISPLAY
CH  TX  RX
   A B C D  A B C D  CH  TX  RX
   A B C D  A B C D
01  1 0 0 1  1 0 0 1  16  1 0 0 1  1 0 0 1
02  1 0 0 1  1 0 0 1  17  1 0 0 1  1 0 0 1
03  1 0 0 1  1 0 0 1  18  1 0 0 1  1 0 0 1
04  0 0 0 1  0 1 0 1  19  1 0 0 1  1 0 0 1
05  1 0 0 1  1 0 0 1  20  1 0 0 1  1 0 0 1
06  0 0 0 1  0 1 0 1  21  1 0 0 1  1 0 0 1
07  1 0 0 1  1 0 0 1  22  1 0 0 1  1 0 0 1
08  1 0 0 1  1 0 0 1  23  1 0 0 1  1 0 0 1
09  1 0 0 1  1 0 0 1  24  1 0 0 1  1 0 0 1
10  1 0 0 1  1 0 0 1  25  1 0 0 1  1 0 0 1
11  1 0 0 1  1 0 0 1  26  1 0 0 1  1 0 0 1
12  1 0 0 1  1 0 0 1  27  1 0 0 1  1 0 0 1
13  1 0 0 1  1 0 0 1  28  1 0 0 1  1 0 0 1
14  1 0 0 1  1 0 0 1  29  1 0 0 1  1 0 0 1
15  1 0 0 1  1 0 0 1  30  1 0 0 1  1 0 0 1

T1/E1 SIGNALING BIT MONITOR
CH NO. [01]  MODE [RA,RB,RC,RD]
Enter the number
1 STOP 2 3 Execute 4 Wait 5 6 CONT 7 READ 8 EXIT
```

CH = Canal de linha E1.

TX = Bits enviados da placa E1 para a Operadora.

RX = Bits enviados da Operadora para a placa E1.

Explicação para cada Bit

O bit C e o bit D não são usados no Brasil e devem ficar **sempre C = 0 e D = 1**

Sobre o bit A e o B, siga o fluxo na tabela abaixo.

Outgoing Call			Incoming Call		
TX (ABCD)	RX (ABCD)	Status	TX (ABCD)	RX (ABCD)	Status
10 01	10 01	Livre	10 01	10 01	Livre
00 01	11 01	Capturou um canal	11 01	00 01	Operadora nos envia sinal
00 01	11 01	Discando	11 01	00 01	Recebendo DID, ANI
00 01	11 01	Ringing no outro lado	11 01	00 01	Nosso Ramal Ringing
00 01	01 01	Atendeu	11 01	00 01	Atendeu
00 01	01 01	Falando	11 01	00 01	Falando
00 01	11 01	Desconectou do outro lado	11 01	00 01	Desconectou do nosso lado
10 01	01 01	Desconectou do nosso lado	01 01	01 01	Desconectou do outro lado
10 01	10 01	Livre	10 01	10 01	Livre

Se você encontrar (TX = 1001 e RX = 1101) o canal foi bloqueado pela Operadora.

Memory Dump of TD188

From Main Menu, after connected to TD1232, Input [ALT]+[K][X][T][D]. Another Menu will appear.

8.T1/E1 Option – 6.T1/E1 Memory Dump

If you can not solve problem, please take dump data when your problem happen.

Start Address : 200000

Length : 40000

Dump Filename : You can name as you want. Default is "T1E1MEM.LOG".

After this please send this with Error Log(3.System – 27 E1 Minor Error).

Reset DSP of TD188

There are 2 methods to reset only TD188.

<method 1>

Disconnect and re-connect the cable between E1 modem and TD188.

DSP of TD188 will be reset.

<method 2>

From Main Menu, after connected to TD1232, Input [ALT]+[K][X][T][D]. Another Menu will appear.

8.T1/E1 Option – 5.T1/E1 Memory Read/Write

Start Address = 20d14c

Length = 1

Change 0000 → 0010 and push[F4] (WRITE)

DSP reset will be done.

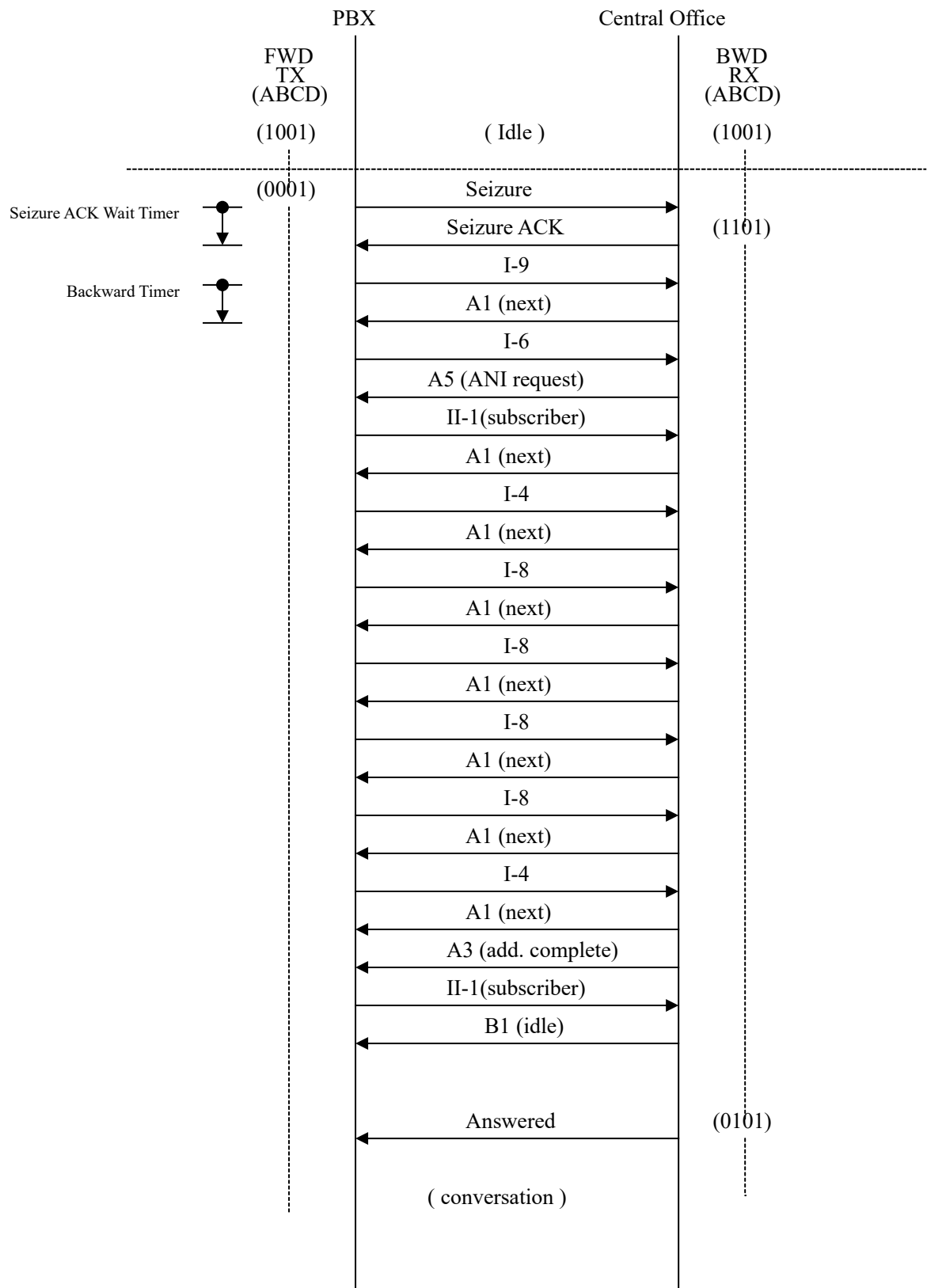
You can do this procedure from RMT site.

Getting FIFO Log (Communication data) between E1 card and Main Unit

1. Connect PC-Soft
2. 7.Additional data SYS11 : 1111.1111.1111.1111 → 0010.1111.1111.0111 and [Save]
3. →0000.1111.1111.0111 and [Save]
4. Disconnect PC-Soft
5. Connect Hyper Terminal (9600 / 8bit / None / 1bit) and start to capture text data.
After your problem happen, quit Hyer Terminal.
6. 7.Additional data SYS11 : → 1111.1111.1111.1111 and [Save]
7. Send this text data to Panasonic do Brasil by E-mail.

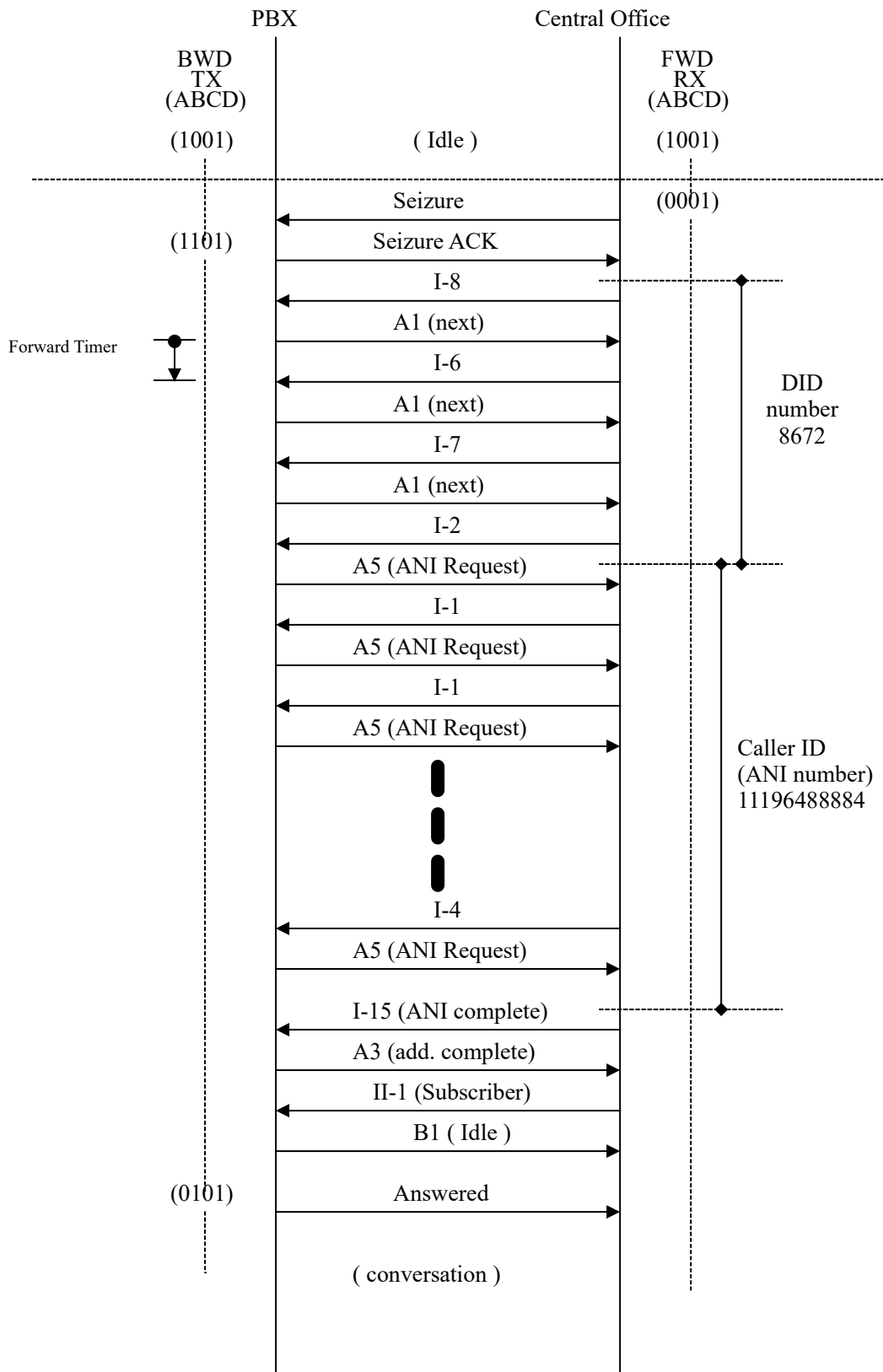
Regular Sequence (MFC-R2) in Brazil

Outgoing call (Outgoing call to 96488884)



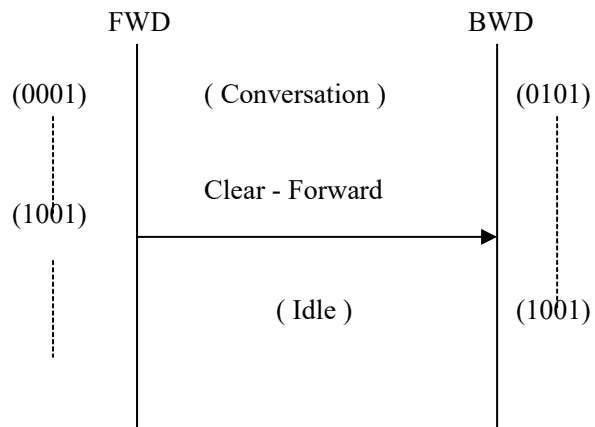
Incoming Call

(Incoming call to Ext.8672, Caller ID is 11196488884)



Disconnecting

Caller Party Disconnecting



Called Party Disconnecting

