

NEW TECHNOLOGY TELESCOPE

HOW TO RELOAD THE PARAMETER SETTINGS INTO THE M1 DATALOGGER

You can easily reload parameters settings using a PC or a notebook.

1.- For connecting, use the cable rs232 for datalogger labelled "M1 DATALOGGER RS232".

Open the door of chassis containing the datalogger unit.

Once the door is open, by means of a screwdriver #4 you must unscrew the big bolt which keeps closed the inner part of chassis.

Open the chassis body, disconnect the rs232 (DB25 connector) cable (VME communication) and connect your cable (There are 2 DB25 Male Connectors at the rear chassis. We have to connect our cable to the vertical one).

Connect the other cable end to the PC, com1 or com2.

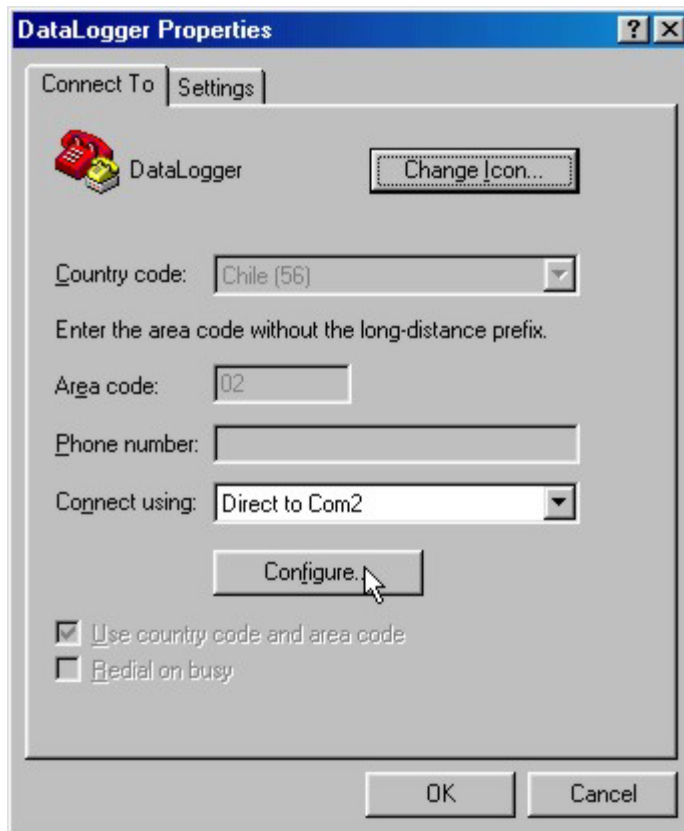
2.- Start Hyperterminal (from windows 95/98)

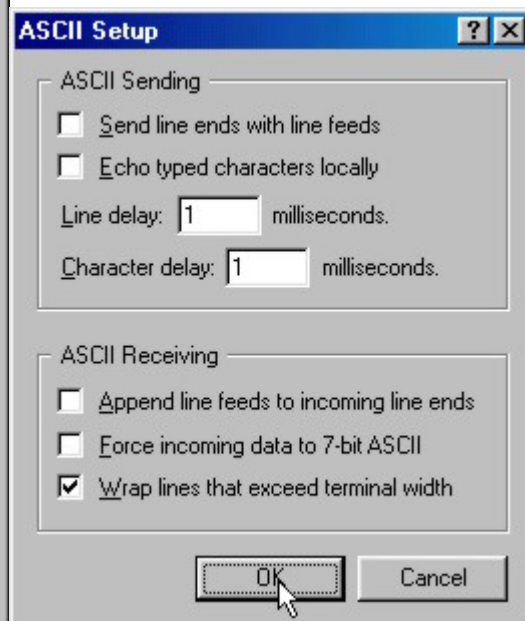
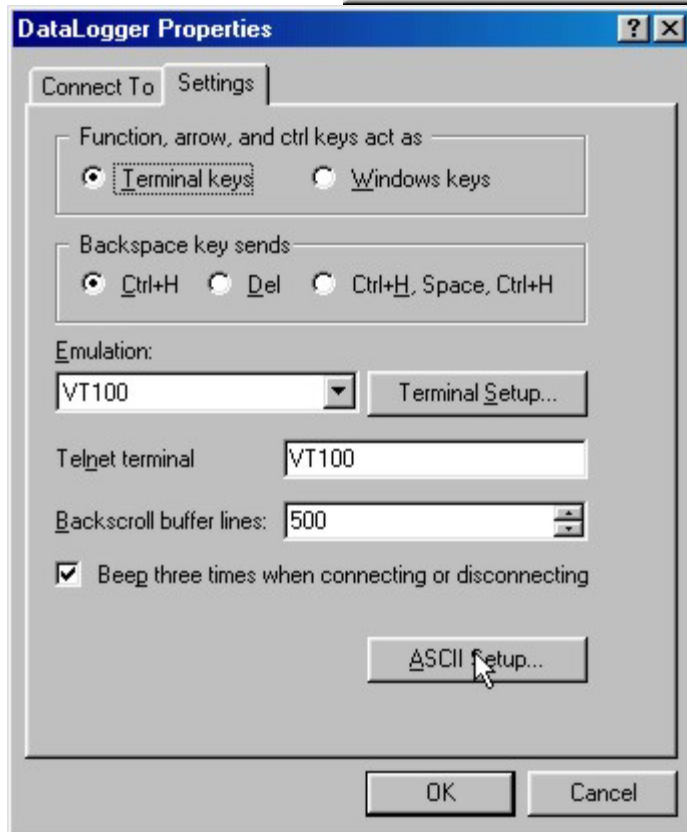
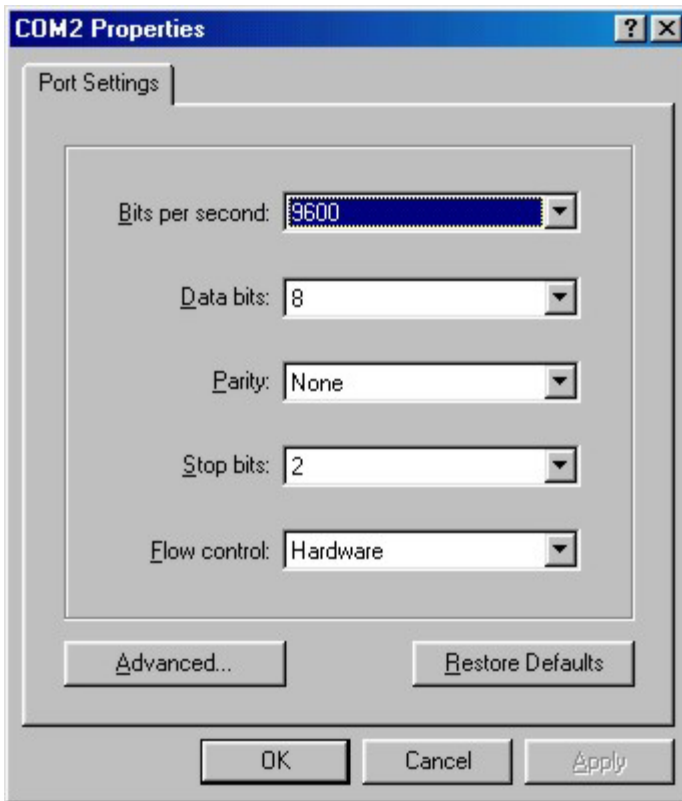
settings:

Connect using "Direct to com1" (or com2, depending on what port you connected your cable).

9600,8,none, 2, hardware

An image is better than 1000 words:





- 3.- Before starting the reload, verify that you have communication.
- Give the following commands (USE CAPS LOCK).
 - *Note: The system doesn't give any reply, except if you make a mistake ("command unknown")*
 - Command meaning
 - [ESC]2 REMOTE ON (press and release [ESC], then press key [2])
 - D1 [ENTER] DIALOGUE ON
 - E0 [ENTER] ECHO OFF
 - T0 [ENTER] MENU OFF
 - L0 [ENTER] LIMIT DATA OFF
 - R0 [ENTER] RECORDER OFF

If you have communication and the system is ok, when you type P the system answers with "PROGMODE=0=DATE+TIME" . Press S (stop) and the system answers "REMOTE", aborting the programming mode and informing you that it is in remote mode, ie, communication via serial link.

If you experience problems to get this messages, try [ESC] 1(local). This should remove the message "REMOTE" on the datalogger display. No matter the displayed message, if "REMOTE" is removed with [ESC]1, and restored with [ESC]2, it means that you have communication.

Should be the case that the system seems to be hanged, then try power off-wait 5 seconds, power on (remove the power connector and insert it again), and try again.

4.- Now you can restore the parameters settings. On Hyperterminal select Transfer - Send Text File :



You will be asked for the file. Choose the file named "DATALOGGER ASCII_PROGRAM.TXT" (you can take a copy of it from the present directory, from the diskette "M1 DATALOGGER", or copy and paste from appendix c to a file).

The system will send replies at the time it receives the parameter settings. It would take from 1 to 2 minutes. At the end, last reply lines should look like:

```

158 ARITH.=0=OFF
158 PARGRP=5=LEVELS
158 HI1=.=NO LEVEL
158 LO1=.=NO LEVEL
158 HI2=.=NO LEVEL
158 LO2=.=NO LEVEL
158 TRH=.=NO LEVEL
158 TRL=.=NO LEVEL
158 PARGRP=6=ALARM
158 AL1OUT=.=OFF
158 ALARM2=0=OFF
158 RESPON=0=NO GRP
158 PARGRP=7=AN.-OUT

```

158 AN.-CH=.=OFF

These lines correspond to the channel 158 settings.

5.- If you want to check the programming:

<u>you type</u>	<u>datalogger answers</u>
0	OPERMODE=0=MEASURE
2	OPERMODE=2=LIST
[ENTER]	LIST =0=PARAMETER
0 [ENTER]	LSTOUTS1=0=NO SER 1
1	LSTOUTS1=1=SER 1
[ENTER]	LSTOUTS4=0=NO SER 4
[ENTER]	LSTLINE =01 FRM/LINE
1	LSTLINE = 1 FRM/LINE
[ENTER]	System starts listing the parameters in the screen

To stop, press S until you get the message "REMOTE":

S	LSTLINE = 1 FRM/LINE
S	LSTLINE =01 FRM/LINE
S	OPERMODE=2=LIST
S	REMOTE

In apendix A you can see a sample of what you should get.

6.- Now put the system ready for VME:

0	OPERMODE....
0	MEASURE
D0 [enter]	DIALOGUE OFF

Disconnect the PC from the datalogger and replace the VME serial connection.

Datalogger is READY. Facil y Bonito No?

APENDIX A

SAMPLE OF A PARAMETERS LISTING

FIRST PART:

PROGMODE=0=DATE+TIME

DATE =01-02-01

TIME =16.05.12

PROGMODE=1=GENOUTPAR

GENTITLE=.

GENHEAD =0=NO HEAD

GENLIMIT=0=LIMIT OFF

GENOUTS1=1=SER 1

GENOUTS4=0=NO SER 4

GENFORMAT=2= 8CHR/FRM

GENLINE =00=NO LINE

ERRALOUT=.=OFF

COMALOUT=.=OFF

COMALRES=0=NO

TEWALOUT=.=OFF

PROGMODE=2=INTERVAL

INTERVAL=0=MONINTVL

MONINTVL=00.00.01

INTERVAL=1=INTERVL1

INTERVL1=00.00.00

IV1START=.=NO START

IV1STOP =00.00.00

IV1TITLE=NOIMPORTA1

IV1HEAD =0=NO HEAD

IV1LIMIT=0=LIMIT OFF

IV1LCHCK=1=AVERAGE

IV1OUTS1=1=SER 1

IV1OUTS4=0=NO SER 4

IV1FORMAT=1=12CHR/FRM

IV1LINE =00=NO LINE

INTERVAL=2=INTERVL2

INTERVL2=00.00.00

IV2START=.=NO START

IV2STOP =00.00.00

IV2TITLE=NOIMPORTA2

IV2HEAD =0=NO HEAD

IV2LIMIT=0=LIMIT OFF

IV2LCHCK=1=AVERAGE

IV2OUTS1=1=SER 1

IV2OUTS4=0=NO SER 4

IV2FORMAT=1=12CHR/FRM

IV2LINE =00=NO LINE

INTERVAL=3=INTERVL3

INTERVL3=00.00.00

IV3START=.=NO START

IV3STOP =00.00.00

IV3TITLE=NOIMPORTA3

IV3HEAD =0=NO HEAD

IV3LIMIT=0=LIMIT OFF

IV3LCHCK=1=AVERAGE

IV3OUTS1=1=SER 1

IV3OUTS4=0=NO SER 4

IV3FORMAT=1=12CHR/FRM

IV3LINE =00=NO LINE

INTERVAL=4=INTERVL4

INTERVL4=00.00.00

IV4START=.=NO START

IV4STOP =00.00.00

IV4TITLE=NOIMPORTA4

IV4HEAD =0=NO HEAD

IV4LIMIT=0=LIMIT OFF

IV4LCHCK=1=AVERAGE

IV4OUTS1=1=SER 1

IV4OUTS4=0=NO SER 4

IV4FORMAT=1=12CHR/FRM

IV4LINE =00=NO LINE

INTERVAL=5=INTERVL5

INTERVL5=00.00.00

IV5START=.=NO START

IV5STOP =00.00.00

IV5TITLE=NOIMPORTA5

IV5HEAD =0=NO HEAD

IV5LIMIT=0=LIMIT OFF

IV5LCHCK=1=AVERAGE

IV5OUTS1=1=SER 1

IV5OUTS4=0=NO SER 4

IV5FORMAT=1=12CHR/FRM

IV5LINE =00=NO LINE

INTERVAL=6=INTERVL6

INTERVL6=00-00.00

IV6START=.=NO START

IV6TITLE=NOIMPORTA6

IV6HEAD =0=NO HEAD

IV6LIMIT=0=LIMIT OFF

IV6LCHCK=1=AVERAGE

IV6OUTS1=1=SER 1

IV6OUTS4=0=NO SER 4

IV6FORMAT=1=12CHR/FRM

IV6LINE =00=NO LINE

INTERVAL=7=INTERVL7

INTERVL7=00.00.00

IV7START=.=NO START

IV7STOP =00.00.00

IV7TITLE=NOIMPORTA7

IV7HEAD =0=NO HEAD

IV7LIMIT=0=LIMIT OFF

IV7LCHCK=1=AVERAGE

IV7OUTS1=1=SER 1

IV7OUTS4=0=NO SER 4

IV7FORMAT=1=12CHR/FRM

IV7LINE =00=NO LINE

PROGMODE=3=SEPARATOR

FRMDELIM=000
MARKER =0=NOMARKER
MARK: 1 =027
MARK: 2 =077

XON/XOFF=0=OFF

PROGMODE=4=IEC-BUS

IEC-BUS =1=LI/TA
ENDCHR:1=225
ENDCHR:2=011

PROGMODE=5=REFTEMP

REFTEMP =0=MEASURED
REFTEMP =1=REFTEMP1
REFTEMP1= 0.4CEL
REFTEMP =2=REFTEMP2
REFTEMP2= 7.0CEL
REFTEMP =3=REFTEMP3
REFTEMP3= 0.2CEL
REFTEMP =4=REFTEMP4
REFTEMP4= 4.6CEL

PROGMODE=6=AL-TITLE

AL-TITLE=0=AT0
AT0=ALARM0
AL-TITLE=1=AT1
AT1=ALARM1
AL-TITLE=2=AT2
AT2=ALARM2
AL-TITLE=3=AT3
AT3=ALARM3
AL-TITLE=4=AT4
AT4=ALARM4
AL-TITLE=5=AT5
AT5=ALARM5
AL-TITLE=6=AT6
AT6=ALARM6
AL-TITLE=7=AT7
AT7=ALARM7
AL-TITLE=8=AT8
AT8=ALARM8
AL-TITLE=9=AT9
AT9=ALARM9

PROGMODE=7=LOCK

LOCK =0=ALL

PROGMODE=8=CHANNEL

CHANNEL =000

000 PARGRP=0=TITLE
000=. =NO TITLE
000 PARGRP=1=IVLGRP
000 IVLGRP=1
000 PARGRP=2=MEASFU
000 MEASFU=0=DCVOLT
000 DCVOLT=1=4mV
000 RESOLU=0= 4000S
000 PARGRP=3=SCALING
000 UNIT=. =MEASUNIT
000 PARGRP=4=CALCUL.
000 OUT-VL=0=NO OUTV

000 TREND =0=NO
000 ARITH.=0=OFF
000 PARGRP=5=LEVELS
000 HI1=. =NO LEVEL
000 LO1=. =NO LEVEL
000 HI2=. =NO LEVEL
000 LO2=. =NO LEVEL
000 TRH=. =NO LEVEL
000 TRL=. =NO LEVEL
000 PARGRP=6=ALARM
000 AL1OUT=. =OFF
000 ALARM2=0=OFF
000 RESPON=0=NO GRP
000 PARGRP=7=AN.-OUT
000 AN.-CH=. =OFF

CHANNEL =001

001 PARGRP=0=TITLE
001=. =NO TITLE
001 PARGRP=1=IVLGRP
001 IVLGRP=1
001 PARGRP=2=MEASFU
001 MEASFU=0=DCVOLT
001 DCVOLT=4=4V
001 RESOLU=0= 4000S
001 PARGRP=3=SCALING
001 UNIT=. =MEASUNIT
001 PARGRP=4=CALCUL.
001 OUT-VL=0=NO OUTV
001 TREND =0=NO
001 ARITH.=0=OFF
001 PARGRP=5=LEVELS
001 HI1=. =NO LEVEL
001 LO1=. =NO LEVEL
001 HI2=. =NO LEVEL
001 LO2=. =NO LEVEL
001 TRH=. =NO LEVEL
001 TRL=. =NO LEVEL
001 PARGRP=6=ALARM
001 AL1OUT=. =OFF
001 ALARM2=0=OFF
001 RESPON=0=NO GRP
001 PARGRP=7=AN.-OUT
001 AN.-CH=. =OFF

CHANNEL =002

002 PARGRP=0=TITLE
002=. =NO TITLE
002 PARGRP=1=IVLGRP
002 IVLGRP=1
002 PARGRP=2=MEASFU
002 MEASFU=0=DCVOLT
002 DCVOLT=1=4mV
002 RESOLU=0= 4000S
002 PARGRP=3=SCALING
002 UNIT=. =MEASUNIT
002 PARGRP=4=CALCUL.
002 OUT-VL=0=NO OUTV
002 TREND =0=NO

002 ARITH.=0=OFF
002 PARGRP=5=LEVELS
002 HI1=. =NO LEVEL
002 LO1=. =NO LEVEL
002 HI2=. =NO LEVEL
002 LO2=. =NO LEVEL
002 TRH=. =NO LEVEL
002 TRL=. =NO LEVEL
002 PARGRP=6=ALARM
002 AL1OUT=. =OFF
002 ALARM2=0=OFF
002 RESPON=0=NO GRP
002 PARGRP=7=AN. -OUT
002 AN. -CH=. =OFF

CHANNEL =003

003 PARGRP=0=TITLE
003=. =NO TITLE
003 PARGRP=1=IVLGRP
003 IVLGRP=1
003 PARGRP=2=MEASFU
003 MEASFU=0=DCVOLT
003 DCVOLT=4=4V
003 RESOLU=0= 4000S
003 PARGRP=3=SCALING
003 UNIT=. =MEASUNIT
003 PARGRP=4=CALCUL.
003 OUT-VL=0=NO OUTV
003 TREND =0=NO
003 ARITH.=0=OFF
003 PARGRP=5=LEVELS
003 HI1=. =NO LEVEL
003 LO1=. =NO LEVEL
003 HI2=. =NO LEVEL
003 LO2=. =NO LEVEL
003 TRH=. =NO LEVEL
003 TRL=. =NO LEVEL
003 PARGRP=6=ALARM
003 AL1OUT=. =OFF
003 ALARM2=0=OFF
003 RESPON=0=NO GRP
003 PARGRP=7=AN. -OUT
003 AN. -CH=. =OFF

CHANNEL =004

004 PARGRP=0=TITLE
004=. =NO TITLE
004 PARGRP=1=IVLGRP
004 IVLGRP=1
004 PARGRP=2=MEASFU
004 MEASFU=0=DCVOLT
004 DCVOLT=1=4mV
004 RESOLU=0= 4000S
004 PARGRP=3=SCALING
004 UNIT=. =MEASUNIT
004 PARGRP=4=CALCUL.
004 OUT-VL=0=NO OUTV
004 TREND =0=NO
004 ARITH.=0=OFF

004 PARGRP=5=LEVELS
004 HI1=. =NO LEVEL
004 LO1=. =NO LEVEL
004 HI2=. =NO LEVEL
004 LO2=. =NO LEVEL
004 TRH=. =NO LEVEL
004 TRL=. =NO LEVEL
004 PARGRP=6=ALARM
004 AL1OUT=. =OFF
004 ALARM2=0=OFF
004 RESPON=0=NO GRP
004 PARGRP=7=AN. -OUT
004 AN. -CH=. =OFF

CHANNEL =005

005 PARGRP=0=TITLE
005=. =NO TITLE
005 PARGRP=1=IVLGRP
005 IVLGRP=1
005 PARGRP=2=MEASFU
005 MEASFU=0=DCVOLT
005 DCVOLT=4=4V
005 RESOLU=0= 4000S
005 PARGRP=3=SCALING
005 UNIT=. =MEASUNIT
005 PARGRP=4=CALCUL.
005 OUT-VL=0=NO OUTV
005 TREND =0=NO
005 ARITH.=0=OFF
005 PARGRP=5=LEVELS
005 HI1=. =NO LEVEL
005 LO1=. =NO LEVEL
005 HI2=. =NO LEVEL
005 LO2=. =NO LEVEL
005 TRH=. =NO LEVEL
005 TRL=. =NO LEVEL
005 PARGRP=6=ALARM
005 AL1OUT=. =OFF
005 ALARM2=0=OFF
005 RESPON=0=NO GRP
005 PARGRP=7=AN. -OUT
005 AN. -CH=. =OFF

CHANNEL =006

006 PARGRP=0=TITLE
006=. =NO TITLE
006 PARGRP=1=IVLGRP
006 IVLGRP=1
006 PARGRP=2=MEASFU
006 MEASFU=0=DCVOLT
006 DCVOLT=1=4mV
006 RESOLU=0= 4000S
006 PARGRP=3=SCALING
006 UNIT=. =MEASUNIT
006 PARGRP=4=CALCUL.
006 OUT-VL=0=NO OUTV
006 TREND =0=NO
006 ARITH.=0=OFF
006 PARGRP=5=LEVELS

006 HI1=.=NO LEVEL
006 LO1=.=NO LEVEL
006 HI2=.=NO LEVEL
006 LO2=.=NO LEVEL
006 TRH=.=NO LEVEL
006 TRL=.=NO LEVEL
006 PARGRP=6=ALARM
006 AL1OUT=.=OFF
006 ALARM2=0=OFF
006 RESPON=0=NO GRP
006 PARGRP=7=AN.-OUT
006 AN.-CH=.=OFF
Etc, etc, etc...
In the final part put attention
to channel #158:

CHANNEL =158
158 PARGRP=0=TITLE
158=.=NO TITLE
158 PARGRP=1=IVLGRP
158 IVLGRP=1
158 PARGRP=2=MEASFU
158 MEASFU=0=DCVOLT
158 DCVOLT=0=AUTO
158 RESOLU=2=40000S
158 PARGRP=3=SCALING
158 UNIT=.=MEASUNIT
158 PARGRP=4=CALCUL.
158 OUT-VL=0=NO OUTV
158 TREND =0=NO
158 ARITH.=0=OFF
158 PARGRP=5=LEVELS
158 HI1=.=NO LEVEL
158 LO1=.=NO LEVEL
158 HI2=.=NO LEVEL
158 LO2=.=NO LEVEL
158 TRH=.=NO LEVEL
158 TRL=.=NO LEVEL
158 PARGRP=6=ALARM
158 AL1OUT=.=OFF
158 ALARM2=0=OFF
158 RESPON=0=NO GRP
158 PARGRP=7=AN.-OUT
158 AN.-CH=.=OFF

APENDIX B

Commented Contents of File DATALOGGER ASCII_PROGRAM.TXT

```
D1
E0
T0 | DIALOGUE ON, ECHO, MENU, LIMIT DATA, and RECORDER OFF
L0
R0
P9, 3, 0 | RESET ALL CHANNELS
P0 | PROGMODE=0= DATE&TIME, ANY DATE+TIME.
010201, 142135 | YOU CAN EDIT THE FILE AND PUT THE RIGHT DATE (NOT IMPORTANT)
P1 | PROGMODE=1=GENOUTPAR : OUT PARAMETERS: NO TITLE,NO HEAD
.,0,0,1,0,2,0,.,.,0,. | NO LIMIT,NO SERIAL4, YES SERIAL1, 8CHR/FRM, NO ERR, ETC
P2
0,000001
1,000000,.,000000,NOIMPORTA1,0,0,1,1,0,1,0
2,000000,.,000000,NOIMPORTA2,0,0,1,1,0,1,0 | P2= INTERVALS DEFINITION
3,000000,.,000000,NOIMPORTA3,0,0,1,1,0,1,0
4,000000,.,000000,NOIMPORTA4,0,0,1,1,0,1,0
5,000000,.,000000,NOIMPORTA5,0,0,1,1,0,1,0
6,000000,.,NOIMPORTA6,0,0,1,1,0,1,0
7,000000,.,000000,NOIMPORTA7,0,0,1,1,0,1,0
P3 | P3= MARKERS FOR SEPARATION. MARK0=NONE, MARK1=027
0,0,027,077,0 | MARK2=077, XON/XOFF=OFF
P4 | IEC-BUS SETTINGS: LI/TA, ENDCHARACTER1=225, ENDCHR2=011
1,225,011
P5 | REF TEMPERATURES (NOT IMPORTANT, BUT VALUES SHOULD BE
0,1,0.4,.,7.0,.,0.2,.,4.6 | INSIDE THE ALLOWED RANGE)
P6
ALARM0,.,ALARM1,.,ALARM2,.,ALARM3,.,ALARM4 | ALARM TITLES (IT DOESN'T MATTER).
THE DOUBLE LINE FEED (IE, [ENTER])
IS IMPORTANT
ALARM5,.,ALARM6,.,ALARM7,.,ALARM8,.,ALARM9
P7 | LOCK, ALL
0
P8 | PROGMODE=8=CHANNEL 0, NO TITLE, INTERVALGROUP0,
0,0,.,1,1,2,0,1,0,3,.,4,0,0,0 | DCVOLTS, RANGE:4mV, RES:40005, NO ALARM, NO
5,.,.,.,.,.,.,6,.,0,0,7,., | ARITH, NO LEVELS, NO ANALOG OUT
P9 | COPY CHANNEL 0 SETTINGS TO ALL CHANNELS FROM 2 TO 156
0,0,2,156
P8 | PROGMODE=8=CHANNEL 1, SAME AS BEFORE,
1,0,.,1,1,2,0,4,0,3,.,4,0,0,0 | BUT RANGE=4V
5,.,.,.,.,.,6,.,0,0,7,.,
P9,0,1,3,3,P9,0,1,5,5,P9,0,1,7,7,P9,0,1,9,9,P9,0,1,11,11
P9,0,1,13,13,P9,0,1,15,15,P9,0,1,17,17,P9,0,1,19,19
P9,0,1,21,21,P9,0,1,23,23,P9,0,1,25,25,P9,0,1,27,27
P9,0,1,29,29,P9,0,1,31,31,P9,0,1,33,33,P9,0,1,35,35
P9,0,1,37,37,P9,0,1,39,39,P9,0,1,41,41,P9,0,1,43,43
P9,0,1,45,45,P9,0,1,47,47,P9,0,1,49,49,P9,0,1,51,51
P9,0,1,53,53,P9,0,1,55,55,P9,0,1,57,57,P9,0,1,59,59
P9,0,1,61,61,P9,0,1,63,63,P9,0,1,65,65,P9,0,1,67,67
P9,0,1,69,69,P9,0,1,71,71,P9,0,1,73,73,P9,0,1,75,75
P9,0,1,77,77,P9,0,1,79,79,P9,0,1,81,81,P9,0,1,83,83
P9,0,1,85,85,P9,0,1,87,87,P9,0,1,89,89,P9,0,1,91,91
P9,0,1,93,93,P9,0,1,95,95,P9,0,1,97,97,P9,0,1,99,99
| COPY CHANNEL 1 TO
ALL ODD CHANNELS,
FROM 3 TO 157
```

P9,0,1,101,101,P9,0,1,103,103,P9,0,1,105,105,P9,0,1,107,107
P9,0,1,109,109,P9,0,1,111,111,P9,0,1,113,113,P9,0,1,115,115
P9,0,1,117,117,P9,0,1,119,119,P9,0,1,121,121,P9,0,1,123,123
P9,0,1,125,125,P9,0,1,127,127,P9,0,1,129,129,P9,0,1,131,131
P9,0,1,133,133,P9,0,1,135,135,P9,0,1,137,137,P9,0,1,139,139
P9,0,1,141,141,P9,0,1,143,143,P9,0,1,145,145,P9,0,1,147,147
P9,0,1,149,149,P9,0,1,151,151,P9,0,1,153,153,P9,0,1,155,155
P9,0,1,157,157

P8

158,0,,1,1,2,0,0,2,3,,4,0,0,0
5,,,,,,,,,,,,,6,,0,0,7,,

*PROGMODE=8-CHANNEL 158, SAME AS BEFORE, BUT
RANGE=AUTO, AND RES=40000S*

APENDIX C

Contents of File DATALOGGER ASCII_PROGRAM.TXT (w/o comments)

```
D1
E0
T0
L0
R0
P9, 3, 0
P0
010201, 142135
P1
.,0,0,1,0,2,0,.,.,0,.
P2
0,000001
1,000000,.,000000,NOIMPORTA1,0,0,1,1,0,1,0
2,000000,.,000000,NOIMPORTA2,0,0,1,1,0,1,0
3,000000,.,000000,NOIMPORTA3,0,0,1,1,0,1,0
4,000000,.,000000,NOIMPORTA4,0,0,1,1,0,1,0
5,000000,.,000000,NOIMPORTA5,0,0,1,1,0,1,0
6,000000,.,NOIMPORTA6,0,0,1,1,0,1,0
7,000000,.,000000,NOIMPORTA7,0,0,1,1,0,1,0
P3
0,0,027,077,0
P4
1,225,011
P5
0,1,0.4,,7.0,,0.2,,4.6
P6

ALARM0,,ALARM1,,ALARM2,,ALARM3,,ALARM4

ALARM5,,ALARM6,,ALARM7,,ALARM8,,ALARM9
P7
0
P8
0,0,..,1,1,2,0,1,0,3,..,4,0,0,0
5,.,.,.,.,.,.,.,.,6,.,0,0,7,.
P9
0,0,2,156
P8
1,0,..,1,1,2,0,4,0,3,..,4,0,0,0
5,.,.,.,.,.,.,.,6,.,0,0,7,.
P9,0,1,3,3,P9,0,1,5,5,P9,0,1,7,7,P9,0,1,9,9,P9,0,1,11,11
P9,0,1,13,13,P9,0,1,15,15,P9,0,1,17,17,P9,0,1,19,19
P9,0,1,21,21,P9,0,1,23,23,P9,0,1,25,25,P9,0,1,27,27
P9,0,1,29,29,P9,0,1,31,31,P9,0,1,33,33,P9,0,1,35,35
P9,0,1,37,37,P9,0,1,39,39,P9,0,1,41,41,P9,0,1,43,43
P9,0,1,45,45,P9,0,1,47,47,P9,0,1,49,49,P9,0,1,51,51
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P9,0,1,157,157
P8
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5,,,,,,,,,,,,6,,0,0,7,.

