



```

BBBBBBBB      AAAAAA      SSSSSSSS      EEEEEEEEEE      CCCCCCCC      HH      HH      000000
BBBBBBBB      AAAAAA      SSSSSSSS      EEEEEEEEEE      CCCCCCCC      HH      HH      000000
BB      BB      AA      AA      SS      SS      EE      CC      HH      HH      00      00
BB      BB      AA      AA      SS      SS      EE      CC      HH      HH      00      00
BB      BB      AA      AA      SS      SS      EE      CC      HH      HH      00      00
BBBBBBBB      AA      AA      SSSSSS      EEEEEEEE      CC      HH      HH      00      00
BBBBBBBB      AA      AA      SSSSSS      EEEEEEEE      CC      HH      HH      00      00
BB      BB      AAAAAAAAAA      SS      EE      CC      HH      HH      00      00
BB      BB      AAAAAAAAAA      SS      EE      CC      HH      HH      00      00
BB      BB      AA      AA      SS      SS      EE      CC      HH      HH      00      00
BB      BB      AA      AA      SS      SS      EE      CC      HH      HH      00      00
BBBBBBBB      AA      AA      SSSSSSSS      EEEEEEEEEE      CCCCCCCC      HH      HH      000000
BBBBBBBB      AA      AA      SSSSSSSS      EEEEEEEEEE      CCCCCCCC      HH      HH      000000

```

```

LL      IIIIII      SSSSSSSS
LL      IIIIII      SSSSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SSSSSS
LL      II      SSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LLLLLLLLLL      IIIIII      SSSSSSSS
LLLLLLLLLL      IIIIII      SSSSSSSS

```

```

1 0001 0 MODULE BASSECHO (
2 0002 0 IDENT = '1-002'
3 0003 0 ) =
4 0004 1 BEGIN
5 0005 1
6 0006 1 *****
7 0007 1 *
8 0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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25 0025 1 *
26 0026 1 *
27 0027 1 *****
28 0028 1
29 0029 1
30 0030 1 ++
31 0031 1 FACILITY: BASIC-PLUS-2 Miscellaneous I/O
32 0032 1
33 0033 1 ABSTRACT:
34 0034 1
35 0035 1 This module contains the BASIC ECHO and NOECHO functions,
36 0036 1 Which turn on and off echoing on a specified channel.
37 0037 1
38 0038 1 ENVIRONMENT: VAX-11 User Mode
39 0039 1
40 0040 1 AUTHOR: John Sauter, CREATION DATE: 17-APR-1979
41 0041 1
42 0042 1 MODIFIED BY:
43 0043 1
44 0044 1 1-001 - Original.
45 0045 1 1-002 - Set up ISB$A_USER_FP. JBS 25-JUL-1979
46 0046 1 --
47 0047 1
48 0048 1 !<BLF/PAGE>

```

```

50 0049 1 |
51 0050 1 | SWITCHES:
52 0051 1 |
53 0052 1 |
54 0053 1 SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
55 0054 1 |
56 0055 1 |
57 0056 1 | LINKAGES:
58 0057 1 |
59 0058 1 |
60 0059 1 REQUIRE 'RTLIN:OTSLNK'; ! Define linkages
61 0488 1 |
62 0489 1 |
63 0490 1 | TABLE OF CONTENTS:
64 0491 1 |
65 0492 1 |
66 0493 1 FORWARD ROUTINE
67 0494 1 BAS$ECHO, ! Enable echoing
68 0495 1 BAS$NOECHO; ! Disable echoing
69 0496 1 |
70 0497 1 |
71 0498 1 | INCLUDE FILES:
72 0499 1 |
73 0500 1 |
74 0501 1 REQUIRE 'RTLML:OTSLUB'; ! Get LUB definitions
75 0641 1 |
76 0642 1 REQUIRE 'RTLML:OTSISB'; ! Get ISB definitions
77 0810 1 |
78 0811 1 REQUIRE 'RTLIN.RTLPSECT'; ! Macros for defining psects
79 0906 1 |
80 0907 1 LIBRARY 'RTLSTARLE'; ! System symbols
81 0908 1 |
82 0909 1 |
83 0910 1 | MACROS:
84 0911 1 |
85 0912 1 NONE
86 0913 1 |
87 0914 1 | EQUATED SYMBOLS:
88 0915 1 |
89 0916 1 NONE
90 0917 1 |
91 0918 1 | PSECTS:
92 0919 1 |
93 0920 1 DECLARE_PSECTS (BAS); ! Declare psects for BAS$ facility
94 0921 1 |
95 0922 1 | OWN STORAGE:
96 0923 1 |
97 0924 1 NONE
98 0925 1 |
99 0926 1 | EXTERNAL REFERENCES:
100 0927 1 |
101 0928 1 |
102 0929 1 EXTERNAL ROUTINE
103 0930 1 BAS$$OPEN_ZERO : NOVALUE, ! Open channel zero
104 0931 1 BAS$$CB_PUSH : JSB CB PUSH NOVALUE, ! Load register CCB
105 0932 1 BAS$$CB_POP : JSB CB POP NOVALUE, ! Done with register CCB
106 0933 1 BAS$$STOP_IO : NOVALUE; ! Signal fatal I/O error

```

```

: 107      0934 1
: 108      0935 1 !+
: 109      0936 1 !- The following are the error codes used in this module.
: 110      0937 1 !-
: 111      0938 1
: 112      0939 1 EXTERNAL LITERAL
: 113      0940 1     BAS$K_IO_CHANOT : UNSIGNED (8);           ! Channel not open.
: 114      0941 1
```

```

116 0942 1 GLOBAL ROUTINE BASSECHO (           ! Enable echoing
117 0943 1     CHAN                               ! Channel on which to enable echoing
118 0944 1     ) =
119 0945 1
120 0946 1 ++
121 0947 1 FUNCTIONAL DESCRIPTION:
122 0948 1
123 0949 1     Enables echoing on the terminal open on the specified channel.
124 0950 1
125 0951 1 FORMAL PARAMETERS:
126 0952 1
127 0953 1     CHAN.r.l.v     The channel whose terminal to enable echoing on
128 0954 1
129 0955 1 IMPLICIT INPUTS:
130 0956 1
131 0957 1     NONE
132 0958 1
133 0959 1 IMPLICIT OUTPUTS:
134 0960 1
135 0961 1     LUB$V_NOECHO which, when set, suppresses terminal echoing.
136 0962 1
137 0963 1 ROUTINE VALUE:
138 0964 1 COMPLETION CODES:
139 0965 1
140 0966 1     SSS_NORMAL
141 0967 1
142 0968 1 SIDE EFFECTS:
143 0969 1
144 0970 1     Signals if an error is encountered.
145 0971 1     BASS$CB_PUSH will signal if the channel number is invalid.
146 0972 1     We signal BASSK_IO_CHANOT if the channel is not open.
147 0973 1
148 0974 1 --
149 0975 1
150 0976 2 BEGIN
151 0977 2
152 0978 2 BUILTIN
153 0979 2     FP;
154 0980 2
155 0981 2 GLOBAL REGISTER
156 0982 2     CCB = K_CCB_REG : REF BLOCK [, BYTE];
157 0983 2
158 0984 2 LOCAL
159 0985 2     FMP : REF BLOCK [, BYTE];
160 0986 2
161 0987 2     FMP = .FP;
162 0988 2 ++
163 0989 2 Get the CCB for the channel.
164 0990 2 --
165 0991 2
166 0992 3 IF (.CHAN EQL 0)
167 0993 3 THEN
168 0994 3 BEGIN
169 0995 3 ++
170 0996 3 The user is referencing his controlling terminal.
171 0997 3 --
172 0998 3     BASS$CB_PUSH (LUB$K_LUN_INPU, LUB$K_ILUN_MIN);

```

```

173 0999      CCB [ISBSA_USER_FP] = .FMP [SF$L_SAVE_FP];
174 1000
175 1001      * If the controlling terminal is not yet open, open it.
176 1002
177 1003
178 1004      IF ( NOT .CCB [LUB$V_OPENED]) THEN BAS$$OPEN_ZERO (.FMP [SF$L_SAVE_FP]);
179 1005
180 1006      END
181 1007      ELSE
182 1008      BEGIN
183 1009      *
184 1010      * This is an ordinary channel.
185 1011
186 1012      BAS$$CB_PUSH (.CHAN, LUB$K_LUN_MIN);
187 1013      CCB [ISBSA_USER_FP] = .FMP [SF$L_SAVE_FP];
188 1014      END;
189 1015
190 1016      *
191 1017      * If the channel is not now open, either there is a problem with
192 1018      * the OPEN code, or the non-zero channel was not first opened.
193 1019
194 1020
195 1021      IF ( NOT .CCB [LUB$V_OPENED]) THEN BAS$$STOP_IO (BAS$K_IO_CHANOT);
196 1022
197 1023      *
198 1024      * Now clear the NOECHO bit, which will cause the record level code
199 1025      * to tell RMS to return to echoing terminal input.
200 1026
201 1027      CCB [LUB$V_NOECHO] = 0;
202 1028
203 1029      * We are done with register CCB.
204 1030
205 1031      BAS$$CB_POP ();
206 1032      RETURN (SS$NORMAL);
207 1033      END;

```

! end of BAS\$ECHO

```

.TITLE BAS$ECHO
.IDENT \1-002\

.EXTRN BAS$$OPEN_ZERO, BAS$$CB_PUSH
.EXTRN BAS$$CB_POP, BAS$$STOP_IO
.EXTRN BAS$K_IO_CHANOT

.PSECT _BAS$CODE, NOWRT, SHR, PIC, 2

```

```

081C 00000
54 00000000G 00 9E 00002
53          5D  D0 00009
          04  AC  D5 0000C
          1E  12 0000F
          50  08  CE 00011
          52  07  CE 00014
          64  16 00017
FF4C CB      0C  A3  D0 00019
          29  FC  AB  E8 0001F
          0C  A3  DD 00023

```

```

.ENTRY BAS$ECHO, Save R2,R3,R4,R11
MOVAB BAS$$CB_PUSH, R4
MOVL  FP, FMP
TSTL  CHAN
BNEQ  1$
MNEGL #8, R0
MNEGL #7, R2
JSB   BAS$$CB_PUSH
MOVL  12(FMP), -180(CCB)
BLBS  -4(CCB), 3$
PUSHL 12(FMP)

```

: 0942  
: 0987  
: 0992  
: 0998  
: 0999  
: 1004  
:

00000000G	00		01	FB	00026	CALLS	#1, BAS\$\$OPEN_ZERO	
			0E	11	0002D	BRB	2\$	: 0992
			50	D4	0002F	CLRL	R0	: 1012
	52	04	AC	D0	00031	MOVL	CHAN, R2	
			64	16	00035	JSB	BAS\$\$CB_PUSH	
FF4C	CB	0C	A3	D0	00037	MOVL	12(FMP), -180(CCB)	: 1013
	0B	FC	AB	E8	0003D	BLBS	-4(CCB), 3\$	: 1021
	7E	00G	8F	9A	00041	MOVZBL	#BAS\$K_IO_CHANOT, -(SP)	
00000000G	00		01	FB	00045	CALLS	#1, BAS\$\$STOP_IO	
	A0		01	8A	0004C	BICB2	#1, -96(CCB)	: 1027
		00000000G	00	16	00050	JSB	BAS\$\$CB_POP	: 1031
	50		01	D0	00056	MOVL	#1, R0	: 1032
			04	00	00059	RET		: 1033

; Routine Size: 90 bytes, Routine Base: \_BAS\$CODE + 0000

; 208 1034 1



```

210 1035 1 GLOBAL ROUTINE BAS$NOECHO (
211 1036 1     CHAN
212 1037 1     ) =
213 1038 1
214 1039 1
215 1040 1
216 1041 1
217 1042 1
218 1043 1
219 1044 1
220 1045 1
221 1046 1
222 1047 1
223 1048 1
224 1049 1
225 1050 1
226 1051 1
227 1052 1
228 1053 1
229 1054 1
230 1055 1
231 1056 1
232 1057 1
233 1058 1
234 1059 1
235 1060 1
236 1061 1
237 1062 1
238 1063 1
239 1064 1
240 1065 1
241 1066 1
242 1067 1
243 1068 1
244 1069 2
245 1070 2
246 1071 2
247 1072 2
248 1073 2
249 1074 2
250 1075 2
251 1076 2
252 1077 2
253 1078 2
254 1079 2
255 1080 2
256 1081 2
257 1082 2
258 1083 2
259 1084 2
260 1085 3
261 1086 3
262 1087 3
263 1088 3
264 1089 3
265 1090 3
266 1091 3

! Disable echoing
! Channel on which to disable echoing

**
FUNCTIONAL DESCRIPTION:
    Disables echoing on the terminal open on the specified channel.
FORMAL PARAMETERS:
    CHAN.rl.v      The channel whose terminal to disable echoing on
IMPLICIT INPUTS:
    NONE
IMPLICIT OUTPUTS:
    LUB$V_NOECHO which, when set, suppresses terminal echoing.
ROUTINE VALUE:
COMPLETION CODES:
    SSS_NORMAL
SIDE EFFECTS:
    Signals if an error is encountered.
    BAS$$CB_PUSH will signal if the channel number is invalid.
    We signal BAS$K_IO_CHANOT if the channel is not open.
--
BEGIN
BUILTIN
    FP;
GLOBAL REGISTER
    CCB = K_CCB_REG : REF BLOCK [, BYTE];
LOCAL
    FMP : REF BLOCK [, BYTE];
    FMP = .FP;
    Get the CCB for the channel.
    IF (.CHAN EQL 0)
    THEN
        BEGIN
        The user is referencing his controlling terminal.
        BAS$$CB_PUSH (LUB$K_LUN_INPU, LUB$K_ILUN_MIN);

```

```

267 1092 CCB [ISBSA_USER_FP] = .FMP [SF$&L_SAVE_FP];
268 1093
269 1094 :+ If the controlling terminal is not yet open, open it.
270 1095 -
271 1096
272 1097 IF ( NOT .CCB [LUB$V_OPENED]) THEN BAS$$OPEN_ZERO (.FMP [SF$&L_SAVE_FP]);
273 1098
274 1099 END
275 1100 ELSE
276 1101 BEGIN
277 1102 :+ This is an ordinary channel.
278 1103 -
279 1104
280 1105 BAS$$CB_PUSH (.CHAN, LUB$K_LUN_MIN);
281 1106 CCB [ISBSA_USER_FP] = .FMP [SF$&L_SAVE_FP];
282 1107 END;
283 1108
284 1109 :+ If the channel is not now open, either there is a problem with
285 1110 the OPEN code, or the non-zero channel was not first opened.
286 1111 -
287 1112
288 1113
289 1114 IF ( NOT .CCB [LUB$V_OPENED]) THEN BAS$$STOP_IO (BAS$K_IO_CHANOT);
290 1115
291 1116 :+ Now set the NOECHO bit, which will cause the record level code
292 1117 to tell RMS to stop echoing terminal input.
293 1118 -
294 1119
295 1120 CCB [LUB$V_NOECHO] = 1;
296 1121 :+ We are done with register CCB.
297 1122 -
298 1123
299 1124 BAS$$CB_POP ();
300 1125 RETURN (SS$&_NORMAL);
301 1126 END;
! end of BAS$NOECHO

```

			081C 00000	.ENTRY	BAS\$NOECHO, Save R2,R3,R4,R11	: 1035
	54	00000000G	00 9E 00002	MOVAB	BAS\$\$CB_PUSH, R4	: 1080
	53		5D D0 00009	MOVL	FP, FMP	: 1085
		04	AC D5 0000C	TSTL	CHAN	: 1091
			1E 12 0000F	BNEQ	1\$	: 1092
	50		08 CE 00011	MNEGL	#8, R0	: 1097
	52		07 CE 00014	MNEGL	#7, R2	: 1105
			64 16 00017	JSB	BAS\$\$CB_PUSH	: 1106
	FF4C	CB	A3 D0 00019	MOVL	12(FMP), -180(CCB)	: 1035
	29	FC	AB E8 0001F	BLF	-4(CCB), 3\$	: 1080
		OC	A3 DD 00023	PUSHL	12(FMP)	: 1085
	00000000G	00	01 FB 00026	CALLS	#1, BAS\$\$OPEN_ZERO	: 1105
			0E 11 0002D	BRB	2\$	: 1106
			50 D4 0002F 1\$:	CLRL	R0	: 1035
	52	04	AC D0 00031	MOVL	CHAN, R2	: 1080
			64 16 00035	JSB	BAS\$\$CB_PUSH	: 1105
	FF4C	CB	A3 D0 00037	MOVL	12(FMP), -180(CCB)	: 1106

```

00000000G 0B      FC  AB  E8 0003D 2$:  BLBS  -4(CCB), 3$
              7E      00G  8F  9A 00041  MOVZBL #BASSK IO CHANOT, -(SP)
              00      AB  01  FB 00045  CALLS  #1, BASS$STOP_IO
              A0      AB  01  88 0004C 3$:  BISB2  #1, -96(CCB) - IO
              50      00000000G 00 16 00050  JSB    BASS$CB_POP
              01      01  D0 00056  MOVL   #1, R0
              04      00059  RET
    
```

: Routine Size: 90 bytes, Routine Base: \_BASS\$CODE + 005A

```

: 302      1127 1
: 303      1128 1 END
: 304      1129 1
: 305      1130 0 ELUDOM
    
```

! end of module BASSECHO

PSECT SUMMARY

Name	Bytes	Attributes
_BASS\$CODE	180	NOVEC, NOWRT, RD, EXE, SHR, LCL, REL, CON, PIC, ALIGN(2)

Library Statistics

File	Total	Symbols Loaded	Percent	Pages Mapped	Processing Time
_\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	2	0	581	00:01.2

COMMAND QUALIFIERS

: BLISS/CHECK=(FIELD, INITIAL, OPTIMIZE)/NOTRACE/LIS=LIS\$:BASECHO/OBJ=OBJ\$:BASECHO MSRC\$:BASECHO/UPDATE=(ENH\$:BASECHO)

```

: Size:      180 code + 0 data bytes
: Run Time:  00:10.0
: Elapsed Time: 00:26.8
: Lines/CPU Min: 6759
: Lexemes/CPU-Min: 40301
: Memory Used: 119 pages
: Compilation Complete
    
```



0022 AH-BT13A-SE  
VAX/VMS V4.0

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