

File created: 2-Feb-87 23:35:29 {ERIS}<IRIS>NEXT>IRISLIB.;7

changes to: (VARS IRISLIBCOMS)  
(FNS IRIS\ERROR)

previous date: 9-Sep-85 05:32:30 {ERIS}<IRIS>NEXT>IRISLIB.;1

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

::  
:: Copyright (c) 1985, 1987 by Xerox Corporation. All rights reserved.

(RPAQQ **IRISLIBCOMS**

((DECLARE%: EVAL@COMPILE DONTCOPY (FILES SPPDECLS (LOADCOMP)  
IRISIO IRISSTREAM))

(GLOBALVARS IRISCONN)

(FNS IRIS.XSETLOWCOM IRIS.XSETFASTCOM IRIS.GVERSION IRIS.GDOWNLOAD IRIS.PAGECOLOR IRIS.TEXTCOLOR  
IRIS.TEXTPORT IRIS.ARC IRIS.ARCF IRIS.ARCFI IRIS.ARCI IRIS.ATTACHCURSOR IRIS.BACKBUFFER IRIS.BBOX2  
IRIS.BBOX2I IRIS.BLINK IRIS.CALLOBJ IRIS.CHARSTR IRIS.CIRC IRIS.CIRCF IRIS.CIRCFI IRIS.CIRCI  
IRIS.CLEAR IRIS.CLEARHITCODE IRIS.CLOSEOBJ IRIS.CMOV IRIS.CMOV2 IRIS.CMOV2I IRIS.CMOVI IRIS.COLOR  
IRIS.CURSOFF IRIS.CURSON IRIS.CURVEIT IRIS.DEFCURSOR IRIS.DEFLINESTYLE IRIS.DEFRASTERFONT  
IRIS.DELOBJ IRIS.DOUBLEBUFFER IRIS.DRAW IRIS.DRAW2 IRIS.DRAW2I IRIS.DRAWI IRIS.EDITOBJ IRIS.ENDPICK  
IRIS.ENDSELECT IRIS.FINISH IRIS.FONT IRIS.FRONTBUFFER IRIS.GCONFIG IRIS.GENOBJ IRIS.GENTAG  
IRIS.GETBUFFER IRIS.GETBUTTON IRIS.GETCMODE IRIS.GETCOLOR IRIS.GETCURSOR IRIS.GETDEPTH  
IRIS.GETDISPLAYMODE IRIS.GETFONT IRIS.GETHEIGHT IRIS.GETHITCODE IRIS.GETLSBACKUP IRIS.GETLSTYLE  
IRIS.GETLWIDTH IRIS.GETMAP IRIS.GETMATRIX IRIS.GETPLANES IRIS.GETRESETLS IRIS.GETSCRMASK  
IRIS.GETVALUATOR IRIS.GETVIEWPORT IRIS.GETWRITEMASK IRIS.XGINIT IRIS.XGRESET IRIS.GRBCOLOR  
IRIS.GRBCURSOR IRIS.GRGBMASK IRIS.ISOBJ IRIS.ISTAG IRIS.LINEWIDTH IRIS.LOADMATRIX IRIS.LOOKAT  
IRIS.LSBACKUP IRIS.MAKEOBJ IRIS.MAKETAG IRIS.MAPCOLOR IRIS.MAPW IRIS.MAPW2 IRIS.MOVE IRIS.MOVE2  
IRIS.MOVE2I IRIS.MOVEI IRIS.MULTIMAP IRIS.MULTMATRIX IRIS.NOISE IRIS.ONEMAP IRIS.ORTHO IRIS.ORTHO2  
IRIS.PERSPECTIVE IRIS.PICK IRIS.PICKSIZE IRIS.PNT IRIS.PNT2 IRIS.PNT2I IRIS.PNTI IRIS.POLARVIEW  
IRIS.POLF IRIS.POLF2 IRIS.POLF2I IRIS.POLFI IRIS.POLY IRIS.POLY2 IRIS.POLY2I IRIS.POLYI  
IRIS.POPATTRIBUTES IRIS.POPMATRIX IRIS.POPVIEWPORT IRIS.PUSHATTRIBUTES IRIS.PUSHMATRIX  
IRIS.PUSHVIEWPORT IRIS.QENTER IRIS.QREAD IRIS.QRESET IRIS.QTEST IRIS.READPIXELS IRIS.READRGB  
IRIS.RECT IRIS.RECTF IRIS.RECTFI IRIS.RECTI IRIS.RESETLS IRIS.RGBCOLOR IRIS.RGBCURSOR IRIS.RGBMODE  
IRIS.RGBWRITEMASK IRIS.ROTATE IRIS.SCALE IRIS.SCRMASK IRIS.SELECT IRIS.SETBUTTON IRIS.SETCURSOR  
IRIS.SETDEPTH IRIS.SETLINESTYLE IRIS.SETMAP IRIS.SETVALUATOR IRIS.SINGLEBUFFER IRIS.STRWIDTH  
IRIS.SWAPBUFFERS IRIS.SWAPINTERVAL IRIS.GSYNC IRIS.TIE IRIS.TRANSLATE IRIS.VIEWPORT IRIS.WINDOW  
IRIS.WRITEMASK IRIS.WRITEPIXELS IRIS.WRITERGB IRIS.TPON IRIS.TPOFF IRIS.TEXTWRITEMASK IRIS.XGEXIT  
IRIS.CLKON IRIS.CLKOFF IRIS.LAMPON IRIS.LAMPOFF IRIS.SETBELL IRIS.RINGBELL IRIS.TADELAY IRIS.ARCFS  
IRIS.ARCS IRIS.BBOX2S IRIS.BLANKSCREEN IRIS.BLKQREAD IRIS.GETMCOLOR IRIS.CALLFUNC IRIS.CHUNKSIZE  
IRIS.CIRCFI IRIS.CIRCS IRIS.CMOV2S IRIS.CMOV2S IRIS.COMPACTIFY IRIS.QDEVICE IRIS.UNQDEVICE  
IRIS.CURVEBASIS IRIS.CURVEPRECISION IRIS.CRV IRIS.GETTP IRIS.GBEGIN IRIS.TEXTINIT IRIS.CRVN  
IRIS.DEFBASIS IRIS.DELTAG IRIS.DEPTHQUE IRIS.DRAW2S IRIS.DRAWS IRIS.ENDFEEDBACK IRIS.FEEDBACK  
IRIS.GETCPOS IRIS.GETDCM IRIS.GETGPOS IRIS.GETLSREPEAT IRIS.GETMEM IRIS.GETMONITOR IRIS.GETOPENOBJ  
IRIS.GETZBUFFER IRIS.GEWRITE IRIS.INITNAMES IRIS.LOADNAME IRIS.LSREPEAT IRIS.MOVE2S IRIS.MOVES  
IRIS.NEWTAG IRIS.PASSTHROUGH IRIS.PATCHBASIS IRIS.PATCHPRECISION IRIS.PATCH IRIS.PCLOS IRIS.PDR  
IRIS.PDR2 IRIS.PDRI IRIS.PDR2I IRIS.PDRS IRIS.PDR2S IRIS.POLF2S IRIS.POLFS IRIS.POLY2S IRIS.POLYS  
IRIS.PMV IRIS.PMV2 IRIS.PMVI IRIS.PMV2I IRIS.PMVS IRIS.PMV2S IRIS.PNT2S IRIS.PNTS IRIS.POPNAME  
IRIS.PUSHNAME IRIS.RDR IRIS.RDR2 IRIS.RDRI IRIS.RDR2I IRIS.RDRS IRIS.RDR2S IRIS.RECTCOPY IRIS.RMV  
IRIS.RMV2 IRIS.RMVI IRIS.RMV2I IRIS.RMVS IRIS.RMV2S IRIS.RPDR IRIS.RPDR2 IRIS.RPDRI IRIS.RPDR2I  
IRIS.RPDRS IRIS.RPDR2S IRIS.RPMV IRIS.RPMV2 IRIS.RPMVI IRIS.RPMV2I IRIS.RPMVS IRIS.RPMV2S  
IRIS.SETDBLIGHTS IRIS.SETMONITOR IRIS.SETSHADE IRIS.SHADERANGE IRIS.SPCLOS IRIS.SPLF IRIS.SPLF2  
IRIS.SPLFI IRIS.SPLF2I IRIS.SPLFS IRIS.SPLF2S IRIS.XFPT IRIS.XFPTI IRIS.XFPTS IRIS.XFPT2  
IRIS.XFPT2I IRIS.XFPT2S IRIS.XFPT4 IRIS.XFPT4I IRIS.XFPT4S IRIS.ZBUFFER IRIS.CHARST IRIS.STRWID  
IRIS.DEFPATTERN IRIS.GETPATTERN IRIS.SETPATTERN IRIS.OBJINSERT IRIS.OBJDELETE IRIS.OBJREPLACE  
IRIS.ZCLEAR IRIS.CURORIGIN IRIS.PAGEWRITEMASK IRIS.PATCHCURVES IRIS.DBTEXT IRIS.LASTONE IRIS\ERROR)

))

(DECLARE%: EVAL@COMPILE DONTCOPY

(FILESLOAD SPPDECLS (LOADCOMP)  
IRISIO IRISSTREAM)

)

(DECLARE%: DOEVAL@COMPILE DONTCOPY

(GLOBALVARS IRISCONN)

)

(DEFINEQ

(**IRIS.XSETLOWCOM**

[LAMBDA (sppStream)

(if sppStream

then [OR (SPPSTREAM? sppStream)

(SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)

else (SETQ sppStream IRISCONN))

(IRIS.GCMD 0 sppStream)])

(**IRIS.XSETFASTCOM**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
            (IRIS.GCMD 1 sppStream])
```

**(IRIS.GVERSION**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (LET (retval)
      (IRIS.ECHOFF sppStream)
      (IRIS.GCMD 2 sppStream)
      (IRIS.FLUSHG sppStream)
      (SETQ retval (IRIS.RECL sppStream))
      (IRIS.RECCR sppStream)
      (IRIS.ECHOON sppStream)
      retval])
```

**(IRIS.GDOWNLOAD**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (IRIS.GCMD 3 sppStream])
```

**(IRIS.PAGECOLOR**

```
[LAMBDA (color sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if color
    then (IRIS.GCMD 4 sppStream)
         (IRIS.SENDS color sppStream)
    else (IRIS\ERROR %'IRIS.PAGECOLOR %' (color]))
```

**(IRIS.TEXTCOLOR**

```
[LAMBDA (color sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if color
    then (IRIS.GCMD 5 sppStream)
         (IRIS.SENDS color sppStream)
    else (IRIS\ERROR %'IRIS.TEXTCOLOR %' (color]))
```

**(IRIS.TEXTPORT**

```
[LAMBDA (left right top bottom sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND left right top bottom)
    then (IRIS.GCMD 6 sppStream)
         (IRIS.SENDS left sppStream)
         (IRIS.SENDS right sppStream)
         (IRIS.SENDS top sppStream)
         (IRIS.SENDS bottom sppStream)
    else (IRIS\ERROR %'IRIS.TEXTPORT %' (left right top bottom]))
```

**(IRIS.ARC**

```
[LAMBDA (x y radius startang endang sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND x y radius startang endang)
    then (IRIS.GCMD 7 sppStream)
         (IRIS.SENDF x sppStream)
         (IRIS.SENDF y sppStream)
         (IRIS.SENDF radius sppStream)
         (IRIS.SENDS startang sppStream)
         (IRIS.SENDS endang sppStream)
    else (IRIS\ERROR %'IRIS.ARC %' (x y radius startang endang]))
```

**(IRIS.ARCF**

```
[LAMBDA (x y radius startang endang sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
  (if (AND x y radius startang endang)
    then (IRIS.GCMD 8 sppStream)
         (IRIS.SENDF x sppStream)
         (IRIS.SENDF y sppStream)
         (IRIS.SENDF radius sppStream)
         (IRIS.SENDS startang sppStream)
         (IRIS.SENDS endang sppStream)
    else (IRIS\ERROR %'IRIS.ARCF %' (x y radius startang endang]))
```

**(IRIS.ARCFI**

```
[LAMBDA (x y radius startang endang sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
  (if (AND x y radius startang endang)
    then (IRIS.GCMD 9 sppStream)
         (IRIS.SENDL x sppStream)
         (IRIS.SENDL y sppStream)
         (IRIS.SENDL radius sppStream)
         (IRIS.SENDS startang sppStream)
         (IRIS.SENDS endang sppStream)
    else (IRIS\ERROR %'IRIS.ARCFI %' (x y radius startang endang]))
```

**(IRIS.ARCI**

```
[LAMBDA (x y radius startang endang sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
  (if (AND x y radius startang endang)
    then (IRIS.GCMD 10 sppStream)
         (IRIS.SENDL x sppStream)
         (IRIS.SENDL y sppStream)
         (IRIS.SENDL radius sppStream)
         (IRIS.SENDS startang sppStream)
         (IRIS.SENDS endang sppStream)
    else (IRIS\ERROR %'IRIS.ARCI %' (x y radius startang endang]))
```

**(IRIS.ATTACHCURSOR**

```
[LAMBDA (vx vy sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
  (if (AND vx vy)
    then (IRIS.GCMD 11 sppStream)
         (IRIS.SENDS vx sppStream)
         (IRIS.SENDS vy sppStream)
    else (IRIS\ERROR %'IRIS.ATTACHCURSOR %' (vx vy]))
```

**(IRIS.BACKBUFFER**

```
[LAMBDA (b sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
  (if b
    then (IRIS.GCMD 12 sppStream)
         (IRIS.SENDO b sppStream)
    else (IRIS\ERROR %'IRIS.BACKBUFFER %' (b]))
```

**(IRIS.BBOX2**

```
[LAMBDA (xmin ymin x1 y1 x2 y2 sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
  (if (AND xmin ymin x1 y1 x2 y2)
    then (IRIS.GCMD 14 sppStream)
         (IRIS.SENDS xmin sppStream)
         (IRIS.SENDS ymin sppStream)
         (IRIS.SENDF x1 sppStream)
         (IRIS.SENDF y1 sppStream)
         (IRIS.SENDF x2 sppStream)
```

```

      (IRIS.SENDF y2 sppStream)
    else (IRIS\ERROR %'IRIS.BBOX2 %' (xmin ymin x1 y1 x2 y2])

```

**(IRIS.BBOX2I**

```

[LAMBDA (xmin ymin x1 y1 x2 y2 sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if (AND xmin ymin x1 y1 x2 y2)
      then (IRIS.GCMD 15 sppStream)
            (IRIS.SENDS xmin sppStream)
            (IRIS.SENDS ymin sppStream)
            (IRIS.SENDL x1 sppStream)
            (IRIS.SENDL y1 sppStream)
            (IRIS.SENDL x2 sppStream)
            (IRIS.SENDL y2 sppStream)
      else (IRIS\ERROR %'IRIS.BBOX2I %' (xmin ymin x1 y1 x2 y2])

```

**(IRIS.BLINK**

```

[LAMBDA (rate color red green blue sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if (AND rate color red green blue)
      then (IRIS.GCMD 17 sppStream)
            (IRIS.SENDS rate sppStream)
            (IRIS.SENDS color sppStream)
            (IRIS.SENDS red sppStream)
            (IRIS.SENDS green sppStream)
            (IRIS.SENDS blue sppStream)
      else (IRIS\ERROR %'IRIS.BLINK %' (rate color red green blue])

```

**(IRIS.CALLOBJ**

```

[LAMBDA (obj sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if obj
      then (IRIS.GCMD 18 sppStream)
            (IRIS.SENDL obj sppStream)
      else (IRIS\ERROR %'IRIS.CALLOBJ %' (obj])

```

**(IRIS.CHARSTR**

```

[LAMBDA (str sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if str
      then (IRIS.GCMD 19 sppStream)
            (IRIS.SENDC str sppStream)
      else (IRIS\ERROR %'IRIS.CHARSTR %' (str])

```

**(IRIS.CIRC**

```

[LAMBDA (x y radius sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if (AND x y radius)
      then (IRIS.GCMD 20 sppStream)
            (IRIS.SENDF x sppStream)
            (IRIS.SENDF y sppStream)
            (IRIS.SENDF radius sppStream)
      else (IRIS\ERROR %'IRIS.CIRC %' (x y radius])

```

**(IRIS.CIRCF**

```

[LAMBDA (x y radius sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if (AND x y radius)
      then (IRIS.GCMD 21 sppStream)
            (IRIS.SENDF x sppStream)
            (IRIS.SENDF y sppStream)
            (IRIS.SENDF radius sppStream)
      else (IRIS\ERROR %'IRIS.CIRCF %' (x y radius])

```

**(IRIS.CIRCFI**

```
[LAMBDA (x y radius sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if (AND x y radius)
      then (IRIS.GCMD 22 sppStream)
            (IRIS.SENDL x sppStream)
            (IRIS.SENDL y sppStream)
            (IRIS.SENDL radius sppStream)
          else (IRIS\ERROR %'IRIS.CIRCFI %' (x y radius])
```

**(IRIS.CIRCI**

```
[LAMBDA (x y radius sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if (AND x y radius)
      then (IRIS.GCMD 23 sppStream)
            (IRIS.SENDL x sppStream)
            (IRIS.SENDL y sppStream)
            (IRIS.SENDL radius sppStream)
          else (IRIS\ERROR %'IRIS.CIRCI %' (x y radius])
```

**(IRIS.CLEAR**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (IRIS.GCMD 24 sppStream])
```

**(IRIS.CLEARHITCODE**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (IRIS.GCMD 25 sppStream])
```

**(IRIS.CLOSEOBJ**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (IRIS.GCMD 29 sppStream])
```

**(IRIS.CMOV**

```
[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if (AND x y z)
      then (IRIS.GCMD 30 sppStream)
            (IRIS.SENDF x sppStream)
            (IRIS.SENDF y sppStream)
            (IRIS.SENDF z sppStream)
          else (IRIS\ERROR %'IRIS.CMOV %' (x y z])
```

**(IRIS.CMOV2**

```
[LAMBDA (x y sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if (AND x y)
      then (IRIS.GCMD 31 sppStream)
            (IRIS.SENDF x sppStream)
            (IRIS.SENDF y sppStream)
          else (IRIS\ERROR %'IRIS.CMOV2 %' (x y])
```

**(IRIS.CMOV2I**

```
[LAMBDA (x y sppStream)
  (if sppStream
```

```

    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if (AND x y)
    then (IRIS.GCMD 32 sppStream)
         (IRIS.SENDL x sppStream)
         (IRIS.SENDL y sppStream)
    else (IRIS\ERROR %'IRIS.CMOV2I %' (x y])

```

**(IRIS.CMOVI**

```

[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if (AND x y z)
    then (IRIS.GCMD 33 sppStream)
         (IRIS.SENDL x sppStream)
         (IRIS.SENDL y sppStream)
         (IRIS.SENDL z sppStream)
    else (IRIS\ERROR %'IRIS.CMOVI %' (x y z])

```

**(IRIS.COLOR**

```

[LAMBDA (color sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if color
    then (IRIS.GCMD 34 sppStream)
         (IRIS.SENDS color sppStream)
    else (IRIS\ERROR %'IRIS.COLOR %' (color])

```

**(IRIS.CURSOFF**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (IRIS.GCMD 35 sppStream))

```

**(IRIS.CURSON**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (IRIS.GCMD 36 sppStream))

```

**(IRIS.CURVEIT**

```

[LAMBDA (iterationcount sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if iterationcount
    then (IRIS.GCMD 38 sppStream)
         (IRIS.SENDS iterationcount sppStream)
    else (IRIS\ERROR %'IRIS.CURVEIT %' (iterationcount])

```

**(IRIS.DEFCURSOR**

```

[LAMBDA (n curs sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if (AND n curs)
    then (IRIS.GCMD 39 sppStream)
         (IRIS.SENDS n sppStream)
         (IRIS.SENDSS curs 16 sppStream)
    else (IRIS\ERROR %'IRIS.DEFCURSOR %' (n curs])

```

**(IRIS.DEFLINESTYLE**

```

[LAMBDA (n ls sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if (AND n ls)
    then (IRIS.GCMD 40 sppStream)

```

```

      (IRIS.SENDS n sppStream)
      (IRIS.SENDS ls sppStream)
    else (IRIS\ERROR %'IRIS.DEFLINESTYLE %' (n ls])

```

**(IRIS.DEFRASTERFONT**

```

[LAMBDA (n ht nc chars nr raster sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
           else (SETQ sppStream IRISCONN))
    (if (AND n ht nc chars nr raster)
      then (IRIS.GCMD 42 sppStream)
           (IRIS.SENDS n sppStream)
           (IRIS.SENDS ht sppStream)
           (IRIS.SENDS nc sppStream)
           (IRIS.SENDQS chars nc sppStream)
           (IRIS.SENDS nr sppStream)
           (IRIS.SENDSS raster nr sppStream)
      else (IRIS\ERROR %'IRIS.DEFRASTERFONT %' (n ht nc chars nr raster])

```

**(IRIS.DELOBJ**

```

[LAMBDA (obj sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
           else (SETQ sppStream IRISCONN))
    (if obj
      then (IRIS.GCMD 45 sppStream)
           (IRIS.SENDL obj sppStream)
      else (IRIS\ERROR %'IRIS.DELOBJ %' (obj])

```

**(IRIS.DOUBLEBUFFER**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
           else (SETQ sppStream IRISCONN))
    (IRIS.GCMD 46 sppStream])

```

**(IRIS.DRAW**

```

[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
           else (SETQ sppStream IRISCONN))
    (if (AND x y z)
      then (IRIS.GCMD 47 sppStream)
           (IRIS.SENDF x sppStream)
           (IRIS.SENDF y sppStream)
           (IRIS.SENDF z sppStream)
      else (IRIS\ERROR %'IRIS.DRAW %' (x y z])

```

**(IRIS.DRAW2**

```

[LAMBDA (x y sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
           else (SETQ sppStream IRISCONN))
    (if (AND x y)
      then (IRIS.GCMD 48 sppStream)
           (IRIS.SENDF x sppStream)
           (IRIS.SENDF y sppStream)
      else (IRIS\ERROR %'IRIS.DRAW2 %' (x y])

```

**(IRIS.DRAW2I**

```

[LAMBDA (x y sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
           else (SETQ sppStream IRISCONN))
    (if (AND x y)
      then (IRIS.GCMD 49 sppStream)
           (IRIS.SENDL x sppStream)
           (IRIS.SENDL y sppStream)
      else (IRIS\ERROR %'IRIS.DRAW2I %' (x y])

```

**(IRIS.DRAWI**

```

[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)

```

```

      (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND x y z)
      then (IRIS.GCMD 50 sppStream)
          (IRIS.SENDL x sppStream)
          (IRIS.SENDL y sppStream)
          (IRIS.SENDL z sppStream)
      else (IRIS\ERROR %'IRIS.DRAWI %' (x y z])

```

**(IRIS.EDITOBJ**

```

[LAMBDA (obj sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if obj
      then (IRIS.GCMD 51 sppStream)
          (IRIS.SENDL obj sppStream)
      else (IRIS\ERROR %'IRIS.EDITOBJ %' (obj])

```

**(IRIS.ENDPICK**

```

[LAMBDA (buffer sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if buffer
      then (LET (retval)
            (IRIS.ECHOFF sppStream)
            (IRIS.GCMD 52 sppStream)
            (IRIS.FLUSHG sppStream)
            (SETQ retval (IRIS.RECL sppStream))
            (IRIS.RECSS buffer sppStream)
            (IRIS.RECCR sppStream)
            (IRIS.ECHOOON sppStream)
            retval)
          else (IRIS\ERROR %'IRIS.ENDPICK %' (buffer])

```

**(IRIS.ENDSELECT**

```

[LAMBDA (buffer sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if buffer
      then (LET (retval)
            (IRIS.ECHOFF sppStream)
            (IRIS.GCMD 53 sppStream)
            (IRIS.FLUSHG sppStream)
            (SETQ retval (IRIS.RECL sppStream))
            (IRIS.RECSS buffer sppStream)
            (IRIS.RECCR sppStream)
            (IRIS.ECHOOON sppStream)
            retval)
          else (IRIS\ERROR %'IRIS.ENDSELECT %' (buffer])

```

**(IRIS.FINISH**

```

[LAMBDA (sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (IRIS.GCMD 54 sppStream))

```

**(IRIS.FONT**

```

[LAMBDA (fntnum sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if fntnum
      then (IRIS.GCMD 55 sppStream)
          (IRIS.SENDS fntnum sppStream)
      else (IRIS\ERROR %'IRIS.FONT %' (fntnum])

```

**(IRIS.FRONTBUFFER**

```

[LAMBDA (b sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))

```

```
(if b
  then (IRIS.GCMD 56 sppStream)
        (IRIS.SENDO b sppStream)
  else (IRIS\ERROR %'IRIS.FRONTBUFFER %' (b))
```

**(IRIS.GCONFIG**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)
             else (SETQ sppStream IRISCONN))
    (IRIS.GCMD 57 sppStream))
```

**(IRIS.GENOBJ**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (LET (retval)
    (IRIS.ECHOFF sppStream)
    (IRIS.GCMD 58 sppStream)
    (IRIS.FLUSHG sppStream)
    (SETQ retval (IRIS.RECL sppStream))
    (IRIS.RECCR sppStream)
    (IRIS.ECHOON sppStream)
    retval])
```

**(IRIS.GENTAG**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (LET (retval)
    (IRIS.ECHOFF sppStream)
    (IRIS.GCMD 59 sppStream)
    (IRIS.FLUSHG sppStream)
    (SETQ retval (IRIS.RECL sppStream))
    (IRIS.RECCR sppStream)
    (IRIS.ECHOON sppStream)
    retval])
```

**(IRIS.GETBUFFER**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (LET (retval)
    (IRIS.ECHOFF sppStream)
    (IRIS.GCMD 60 sppStream)
    (IRIS.FLUSHG sppStream)
    (SETQ retval (IRIS.RECL sppStream))
    (IRIS.RECCR sppStream)
    (IRIS.ECHOON sppStream)
    retval])
```

**(IRIS.GETBUTTON**

```
[LAMBDA (b sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if b
    then (LET (retval)
          (IRIS.ECHOFF sppStream)
          (IRIS.GCMD 61 sppStream)
          (IRIS.SENDS b sppStream)
          (IRIS.FLUSHG sppStream)
          (SETQ retval (IRIS.RECO sppStream))
          (IRIS.RECCR sppStream)
          (IRIS.ECHOON sppStream)
          retval)
    else (IRIS\ERROR %'IRIS.GETBUTTON %' (b))
```

**(IRIS.GETCMODE**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)
```

```

else (SETQ sppStream IRISCONN)
(LET (retval)
  (IRIS.ECHOFF sppStream)
  (IRIS.GCMD 62 sppStream)
  (IRIS.FLUSHG sppStream)
  (SETQ retval (IRIS.RECO sppStream))
  (IRIS.RECCR sppStream)
  (IRIS.ECHOON sppStream)
  retval))

```

**(IRIS.GETCOLOR**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
      (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
        else (SETQ sppStream IRISCONN))
    (LET (retval)
      (IRIS.ECHOFF sppStream)
      (IRIS.GCMD 63 sppStream)
      (IRIS.FLUSHG sppStream)
      (SETQ retval (IRIS.RECL sppStream))
      (IRIS.RECCR sppStream)
      (IRIS.ECHOON sppStream)
      retval))

```

**(IRIS.GETCURSOR**

```

[LAMBDA (index color wtm b sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
      (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
        else (SETQ sppStream IRISCONN))
  (if (AND index color wtm b)
    then (IRIS.ECHOFF sppStream)
      (IRIS.GCMD 64 sppStream)
      (IRIS.FLUSHG sppStream)
      (SET index (IRIS.RECS sppStream))
      (SET color (IRIS.RECS sppStream))
      (SET wtm (IRIS.RECS sppStream))
      (SET b (IRIS.RECO sppStream))
      (IRIS.RECCR sppStream)
      (IRIS.ECHOON sppStream)
    else (IRIS/ERROR %'IRIS.GETCURSOR %' (index color wtm b])

```

**(IRIS.GETDEPTH**

```

[LAMBDA (near far sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
      (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
        else (SETQ sppStream IRISCONN))
  (if (AND near far)
    then (IRIS.ECHOFF sppStream)
      (IRIS.GCMD 65 sppStream)
      (IRIS.FLUSHG sppStream)
      (SET near (IRIS.RECS sppStream))
      (SET far (IRIS.RECS sppStream))
      (IRIS.RECCR sppStream)
      (IRIS.ECHOON sppStream)
    else (IRIS/ERROR %'IRIS.GETDEPTH %' (near far])

```

**(IRIS.GETDISPLAYMODE**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
      (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
        else (SETQ sppStream IRISCONN))
  (LET (retval)
    (IRIS.ECHOFF sppStream)
    (IRIS.GCMD 66 sppStream)
    (IRIS.FLUSHG sppStream)
    (SETQ retval (IRIS.RECL sppStream))
    (IRIS.RECCR sppStream)
    (IRIS.ECHOON sppStream)
    retval))

```

**(IRIS.GETFONT**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
      (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
        else (SETQ sppStream IRISCONN))
  (LET (retval)
    (IRIS.ECHOFF sppStream)

```

```

(IRIS.GCMD 67 sppStream)
(IRIS.FLUSHG sppStream)
(SETQ retval (IRIS.RECL sppStream))
(IRIS.RECCR sppStream)
(IRIS.ECHOON sppStream)
retval])

```

**(IRIS.GETHEIGHT**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (LET (retval)
      (IRIS.ECHOFF sppStream)
      (IRIS.GCMD 68 sppStream)
      (IRIS.FLUSHG sppStream)
      (SETQ retval (IRIS.RECL sppStream))
      (IRIS.RECCR sppStream)
      (IRIS.ECHOON sppStream)
      retval])

```

**(IRIS.GETHITCODE**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (LET (retval)
      (IRIS.ECHOFF sppStream)
      (IRIS.GCMD 69 sppStream)
      (IRIS.FLUSHG sppStream)
      (SETQ retval (IRIS.RECL sppStream))
      (IRIS.RECCR sppStream)
      (IRIS.ECHOON sppStream)
      retval])

```

**(IRIS.GETLSBACKUP**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (LET (retval)
      (IRIS.ECHOFF sppStream)
      (IRIS.GCMD 70 sppStream)
      (IRIS.FLUSHG sppStream)
      (SETQ retval (IRIS.RECO sppStream))
      (IRIS.RECCR sppStream)
      (IRIS.ECHOON sppStream)
      retval])

```

**(IRIS.GETLSTYLE**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (LET (retval)
      (IRIS.ECHOFF sppStream)
      (IRIS.GCMD 71 sppStream)
      (IRIS.FLUSHG sppStream)
      (SETQ retval (IRIS.RECL sppStream))
      (IRIS.RECCR sppStream)
      (IRIS.ECHOON sppStream)
      retval])

```

**(IRIS.GETLWIDTH**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (LET (retval)
      (IRIS.ECHOFF sppStream)
      (IRIS.GCMD 72 sppStream)
      (IRIS.FLUSHG sppStream)
      (SETQ retval (IRIS.RECL sppStream))
      (IRIS.RECCR sppStream)
      (IRIS.ECHOON sppStream)
      retval])

```

**(IRIS.GETMAP**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))]
    else (SETQ sppStream IRISCONN))
  (LET (retval)
    (IRIS.ECHOFF sppStream)
    (IRIS.GCMD 73 sppStream)
    (IRIS.FLUSHG sppStream)
    (SETQ retval (IRIS.RECL sppStream))
    (IRIS.RECCR sppStream)
    (IRIS.ECHOON sppStream)
    retval])
```

**(IRIS.GETMATRIX**

```
[LAMBDA (m sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))]
    else (SETQ sppStream IRISCONN))
  (if m
    then (IRIS.ECHOFF sppStream)
         (IRIS.GCMD 74 sppStream)
         (IRIS.FLUSHG sppStream)
         (IRIS.RECFS m sppStream)
         (IRIS.RECCR sppStream)
         (IRIS.ECHOON sppStream)
    else (IRIS\ERROR %'IRIS.GETMATRIX %' (m]))
```

**(IRIS.GETPLANES**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))]
    else (SETQ sppStream IRISCONN))
  (LET (retval)
    (IRIS.ECHOFF sppStream)
    (IRIS.GCMD 76 sppStream)
    (IRIS.FLUSHG sppStream)
    (SETQ retval (IRIS.RECL sppStream))
    (IRIS.RECCR sppStream)
    (IRIS.ECHOON sppStream)
    retval])
```

**(IRIS.GETRESETLS**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))]
    else (SETQ sppStream IRISCONN))
  (LET (retval)
    (IRIS.ECHOFF sppStream)
    (IRIS.GCMD 77 sppStream)
    (IRIS.FLUSHG sppStream)
    (SETQ retval (IRIS.RECO sppStream))
    (IRIS.RECCR sppStream)
    (IRIS.ECHOON sppStream)
    retval])
```

**(IRIS.GETSCRMASK**

```
[LAMBDA (left right bottom top sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))]
    else (SETQ sppStream IRISCONN))
  (if (AND left right bottom top)
    then (IRIS.ECHOFF sppStream)
         (IRIS.GCMD 78 sppStream)
         (IRIS.FLUSHG sppStream)
         (SET left (IRIS.RECS sppStream))
         (SET right (IRIS.RECS sppStream))
         (SET bottom (IRIS.RECS sppStream))
         (SET top (IRIS.RECS sppStream))
         (IRIS.RECCR sppStream)
         (IRIS.ECHOON sppStream)
    else (IRIS\ERROR %'IRIS.GETSCRMASK %' (left right bottom top]))
```

**(IRIS.GETVALUATOR**

```
[LAMBDA (v sppStream)
  (if sppStream
```

```

    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if v
    then (LET (retval)
            (IRIS.ECHOFF sppStream)
            (IRIS.GCMD 80 sppStream)
            (IRIS.SENDS v sppStream)
            (IRIS.FLUSHG sppStream)
            (SETQ retval (IRIS.RECL sppStream))
            (IRIS.RECCR sppStream)
            (IRIS.ECHOON sppStream)
            retval)
    else (IRIS/ERROR %'IRIS.GETVALUATOR %' (v))

```

**(IRIS.GETVIEWPORT**

```

[LAMBDA (left right bottom top sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if (AND left right bottom top)
    then (IRIS.ECHOFF sppStream)
          (IRIS.GCMD 81 sppStream)
          (IRIS.FLUSHG sppStream)
          (SET left (IRIS.RECS sppStream))
          (SET right (IRIS.RECS sppStream))
          (SET bottom (IRIS.RECS sppStream))
          (SET top (IRIS.RECS sppStream))
          (IRIS.RECCR sppStream)
          (IRIS.ECHOON sppStream)
    else (IRIS/ERROR %'IRIS.GETVIEWPORT %' (left right bottom top])

```

**(IRIS.GETWRITEMASK**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (LET (retval)
    (IRIS.ECHOFF sppStream)
    (IRIS.GCMD 82 sppStream)
    (IRIS.FLUSHG sppStream)
    (SETQ retval (IRIS.RECL sppStream))
    (IRIS.RECCR sppStream)
    (IRIS.ECHOON sppStream)
    retval))

```

**(IRIS.XGINIT**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (IRIS.GCMD 83 sppStream))

```

**(IRIS.XGRESET**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (IRIS.GCMD 84 sppStream))

```

**(IRIS.GRGBCOLOR**

```

[LAMBDA (red green blue sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if (AND red green blue)
    then (IRIS.ECHOFF sppStream)
          (IRIS.GCMD 85 sppStream)
          (IRIS.FLUSHG sppStream)
          (SET red (IRIS.RECS sppStream))
          (SET green (IRIS.RECS sppStream))
          (SET blue (IRIS.RECS sppStream))
          (IRIS.RECCR sppStream)
          (IRIS.ECHOON sppStream)
    else (IRIS/ERROR %'IRIS.GRGBCOLOR %' (red green blue])

```

**(IRIS.GRGBCURSOR**

```
[LAMBDA (index red green blue redm greenm blum b sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
  (if (AND index red green blue redm greenm blum b)
    then (IRIS.ECHOFF sppStream)
         (IRIS.GCMD 86 sppStream)
         (IRIS.FLUSHG sppStream)
         (SET index (IRIS.RECS sppStream))
         (SET red (IRIS.RECS sppStream))
         (SET green (IRIS.RECS sppStream))
         (SET blue (IRIS.RECS sppStream))
         (SET redm (IRIS.RECS sppStream))
         (SET greenm (IRIS.RECS sppStream))
         (SET blum (IRIS.RECS sppStream))
         (SET b (IRIS.RECO sppStream))
         (IRIS.RECCR sppStream)
         (IRIS.ECHOON sppStream)
    else (IRIS\ERROR %'IRIS.GRGBCURSOR %' (index red green blue redm greenm blum b]))
```

**(IRIS.GRGBMASK**

```
[LAMBDA (redm greenm blum sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
  (if (AND redm greenm blum)
    then (IRIS.ECHOFF sppStream)
         (IRIS.GCMD 87 sppStream)
         (IRIS.FLUSHG sppStream)
         (SET redm (IRIS.RECS sppStream))
         (SET greenm (IRIS.RECS sppStream))
         (SET blum (IRIS.RECS sppStream))
         (IRIS.RECCR sppStream)
         (IRIS.ECHOON sppStream)
    else (IRIS\ERROR %'IRIS.GRGBMASK %' (redm greenm blum]))
```

**(IRIS.ISOBJ**

```
[LAMBDA (obj sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
  (if obj
    then (LET (retval)
          (IRIS.ECHOFF sppStream)
          (IRIS.GCMD 89 sppStream)
          (IRIS.SENDL obj sppStream)
          (IRIS.FLUSHG sppStream)
          (SETQ retval (IRIS.RECO sppStream))
          (IRIS.RECCR sppStream)
          (IRIS.ECHOON sppStream)
          retval)
    else (IRIS\ERROR %'IRIS.ISOBJ %' (obj]))
```

**(IRIS.ISTAG**

```
[LAMBDA (t sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
  (if t
    then (LET (retval)
          (IRIS.ECHOFF sppStream)
          (IRIS.GCMD 90 sppStream)
          (IRIS.SENDL t sppStream)
          (IRIS.FLUSHG sppStream)
          (SETQ retval (IRIS.RECO sppStream))
          (IRIS.RECCR sppStream)
          (IRIS.ECHOON sppStream)
          retval)
    else (IRIS\ERROR %'IRIS.ISTAG %' (t]))
```

**(IRIS.LINEWIDTH**

```
[LAMBDA (n sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
  (if n
    then (IRIS.GCMD 92 sppStream)
```

```
(IRIS.SENDS n sppStream)
else (IRIS'ERROR %'IRIS.LINEWIDTH %' (n])
```

**(IRIS.LOADMATRIX**

```
[LAMBDA (m sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
           else (SETQ sppStream IRISCONN))
    (if m
      then (IRIS.GCMD 93 sppStream)
            (IRIS.SENDFS m 16 sppStream)
      else (IRIS'ERROR %'IRIS.LOADMATRIX %' (m])
```

**(IRIS.LOOKAT**

```
[LAMBDA (vx vy vz px py pz twist sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
           else (SETQ sppStream IRISCONN))
    (if (AND vx vy vz px py pz twist)
      then (IRIS.GCMD 94 sppStream)
            (IRIS.SENDF vx sppStream)
            (IRIS.SENDF vy sppStream)
            (IRIS.SENDF vz sppStream)
            (IRIS.SENDF px sppStream)
            (IRIS.SENDF py sppStream)
            (IRIS.SENDF pz sppStream)
            (IRIS.SENDS twist sppStream)
      else (IRIS'ERROR %'IRIS.LOOKAT %' (vx vy vz px py pz twist])
```

**(IRIS.LSBACKUP**

```
[LAMBDA (b sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
           else (SETQ sppStream IRISCONN))
    (if b
      then (IRIS.GCMD 95 sppStream)
            (IRIS.SENDO b sppStream)
      else (IRIS'ERROR %'IRIS.LSBACKUP %' (b])
```

**(IRIS.MAKEOBJ**

```
[LAMBDA (obj sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
           else (SETQ sppStream IRISCONN))
    (if obj
      then (IRIS.GCMD 96 sppStream)
            (IRIS.SENDL obj sppStream)
      else (IRIS'ERROR %'IRIS.MAKEOBJ %' (obj])
```

**(IRIS.MAKETAG**

```
[LAMBDA (t sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
           else (SETQ sppStream IRISCONN))
    (if t
      then (IRIS.GCMD 97 sppStream)
            (IRIS.SENDL t sppStream)
      else (IRIS'ERROR %'IRIS.MAKETAG %' (t])
```

**(IRIS.MAPCOLOR**

```
[LAMBDA (color red green blue sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
           else (SETQ sppStream IRISCONN))
    (if (AND color red green blue)
      then (IRIS.GCMD 98 sppStream)
            (IRIS.SENDS color sppStream)
            (IRIS.SENDS red sppStream)
            (IRIS.SENDS green sppStream)
            (IRIS.SENDS blue sppStream)
      else (IRIS'ERROR %'IRIS.MAPCOLOR %' (color red green blue])
```

**(IRIS.MAPW**

```
[LAMBDA (vobj sx sy wx1 wy1 wz1 wx2 wy2 wz2 sppStream)
```

```

(if sppStream
  then [OR (SPPSTREAM? sppStream)
        (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
      ]
  else (SETQ sppStream IRISCONN))
(if (AND vobj sx sy wx1 wy1 wz1 wx2 wy2 wz2)
  then (IRIS.ECHOFF sppStream)
       (IRIS.GCMD 99 sppStream)
       (IRIS.SENDL vobj sppStream)
       (IRIS.SENDS sx sppStream)
       (IRIS.SENDS sy sppStream)
       (IRIS.FLUSHG sppStream)
       (SET wx1 (IRIS.RECF sppStream))
       (SET wy1 (IRIS.RECF sppStream))
       (SET wz1 (IRIS.RECF sppStream))
       (SET wx2 (IRIS.RECF sppStream))
       (SET wy2 (IRIS.RECF sppStream))
       (SET wz2 (IRIS.RECF sppStream))
       (IRIS.RECCR sppStream)
       (IRIS.ECHOOON sppStream)
  else (IRIS\ERROR %'IRIS.MAPW %' (vobj sx sy wx1 wy1 wz1 wx2 wy2 wz2]))

```

(IRIS.MAPW2

```

[LAMBDA (vobj sx sy wx wy sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
          (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
        ]
    else (SETQ sppStream IRISCONN))
  (if (AND vobj sx sy wx wy)
    then (IRIS.ECHOFF sppStream)
         (IRIS.GCMD 100 sppStream)
         (IRIS.SENDL vobj sppStream)
         (IRIS.SENDS sx sppStream)
         (IRIS.SENDS sy sppStream)
         (IRIS.FLUSHG sppStream)
         (SET wx (IRIS.RECF sppStream))
         (SET wy (IRIS.RECF sppStream))
         (IRIS.RECCR sppStream)
         (IRIS.ECHOOON sppStream)
    else (IRIS\ERROR %'IRIS.MAPW2 %' (vobj sx sy wx wy]))

```

(IRIS.MOVE

```

[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
          (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
        ]
    else (SETQ sppStream IRISCONN))
  (if (AND x y z)
    then (IRIS.GCMD 102 sppStream)
         (IRIS.SENDF x sppStream)
         (IRIS.SENDF y sppStream)
         (IRIS.SENDF z sppStream)
    else (IRIS\ERROR %'IRIS.MOVE %' (x y z]))

```

(IRIS.MOVE2

```

[LAMBDA (x y sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
          (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
        ]
    else (SETQ sppStream IRISCONN))
  (if (AND x y)
    then (IRIS.GCMD 103 sppStream)
         (IRIS.SENDF x sppStream)
         (IRIS.SENDF y sppStream)
    else (IRIS\ERROR %'IRIS.MOVE2 %' (x y]))

```

(IRIS.MOVE2I

```

[LAMBDA (x y sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
          (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
        ]
    else (SETQ sppStream IRISCONN))
  (if (AND x y)
    then (IRIS.GCMD 104 sppStream)
         (IRIS.SENDL x sppStream)
         (IRIS.SENDL y sppStream)
    else (IRIS\ERROR %'IRIS.MOVE2I %' (x y]))

```

(IRIS.MOVEI

```

[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
          (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
        ]

```

```
    else (SETQ sppStream IRISCONN)
  (if (AND x y z)
      then (IRIS.GCMD 105 sppStream)
          (IRIS.SENDL x sppStream)
          (IRIS.SENDL y sppStream)
          (IRIS.SENDL z sppStream)
      else (IRIS\ERROR %'IRIS.MOVEI %' (x y z]))
```

### (IRIS.MULTIMAP

```
[LAMBDA (sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
          (IRIS.GCMD 106 sppStream)]
```

### (IRIS.MULTMATRIX

```
[LAMBDA (m sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
          (if m
              then (IRIS.GCMD 107 sppStream)
                  (IRIS.SENDFS m 16 sppStream)
              else (IRIS\ERROR %'IRIS.MULTMATRIX %' (m)))]
```

### (IRIS.NOISE

```
[LAMBDA (v delta sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
          (if (AND v delta)
              then (IRIS.GCMD 108 sppStream)
                  (IRIS.SENDS v sppStream)
                  (IRIS.SENDS delta sppStream)
              else (IRIS\ERROR %'IRIS.NOISE %' (v delta)))]
```

### (IRIS.ONEMAP

```
[LAMBDA (sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
          (IRIS.GCMD 111 sppStream)]
```

### (IRIS.ORTHO

```
[LAMBDA (left right bottom top near far sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
          (if (AND left right bottom top near far)
              then (IRIS.GCMD 112 sppStream)
                  (IRIS.SENDF left sppStream)
                  (IRIS.SENDF right sppStream)
                  (IRIS.SENDF bottom sppStream)
                  (IRIS.SENDF top sppStream)
                  (IRIS.SENDF near sppStream)
                  (IRIS.SENDF far sppStream)
              else (IRIS\ERROR %'IRIS.ORTHO %' (left right bottom top near far)))]
```

### (IRIS.ORTHO2

```
[LAMBDA (left right bottom top sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
          (if (AND left right bottom top)
              then (IRIS.GCMD 113 sppStream)
                  (IRIS.SENDF left sppStream)
                  (IRIS.SENDF right sppStream)
                  (IRIS.SENDF bottom sppStream)
                  (IRIS.SENDF top sppStream)
              else (IRIS\ERROR %'IRIS.ORTHO2 %' (left right bottom top)))]
```

### (IRIS.PERSPECTIVE

```
[LAMBDA (fovy aspect near far sppStream)
  (if sppStream
```

```

    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if (AND fovy aspect near far)
    then (IRIS.GCMD 114 sppStream)
         (IRIS.SENDS fovy sppStream)
         (IRIS.SENDF aspect sppStream)
         (IRIS.SENDF near sppStream)
         (IRIS.SENDF far sppStream)
    else (IRIS\ERROR %'IRIS.PERSPECTIVE %' (fovy aspect near far])

```

(IRIS.PICK

```

[LAMBDA (numNames buffer sppStream) (* LeL, " 9-Sep-85 04:19")
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if (AND numNames buffer)
    then (IRIS.GCMD 115 sppStream)
         (IRIS.SENDSS buffer 0 sppStream)
         (IRIS.SENDL numNames sppStream)
    else (IRIS\ERROR %'IRIS.PICK %' (numNames buffer])

```

(IRIS.PICKSIZE

```

[LAMBDA (deltax delay sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if (AND deltax delay)
    then (IRIS.GCMD 116 sppStream)
         (IRIS.SENDS deltax sppStream)
         (IRIS.SENDS delay sppStream)
    else (IRIS\ERROR %'IRIS.PICKSIZE %' (deltax delay])

```

(IRIS.PNT

```

[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if (AND x y z)
    then (IRIS.GCMD 117 sppStream)
         (IRIS.SENDF x sppStream)
         (IRIS.SENDF y sppStream)
         (IRIS.SENDF z sppStream)
    else (IRIS\ERROR %'IRIS.PNT %' (x y z])

```

(IRIS.PNT2

```

[LAMBDA (x y sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if (AND x y)
    then (IRIS.GCMD 118 sppStream)
         (IRIS.SENDF x sppStream)
         (IRIS.SENDF y sppStream)
    else (IRIS\ERROR %'IRIS.PNT2 %' (x y])

```

(IRIS.PNT2I

```

[LAMBDA (x y sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if (AND x y)
    then (IRIS.GCMD 119 sppStream)
         (IRIS.SENDL x sppStream)
         (IRIS.SENDL y sppStream)
    else (IRIS\ERROR %'IRIS.PNT2I %' (x y])

```

(IRIS.PNTI

```

[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if (AND x y z)
    then (IRIS.GCMD 120 sppStream)
         (IRIS.SENDL x sppStream)

```

```

      (IRIS.SENDL y sppStream)
      (IRIS.SENDL z sppStream)
    else (IRIS\ERROR %'IRIS.PNTI %' (x y z])

```

**(IRIS.POLARVIEW**

```

[LAMBDA (dist azim inc twist sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND dist azim inc twist)
    then (IRIS.GCMD 121 sppStream)
         (IRIS.SENDF dist sppStream)
         (IRIS.SENDS azim sppStream)
         (IRIS.SENDS inc sppStream)
         (IRIS.SENDS twist sppStream)
    else (IRIS\ERROR %'IRIS.POLARVIEW %' (dist azim inc twist])

```

**(IRIS.POLF**

```

[LAMBDA (n parray sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND n parray)
    then (IRIS.GCMD 122 sppStream)
         (IRIS.SENDL n sppStream)
         (IRIS.SENDFS parray (TIMES 3 n)
                          sppStream)
    else (IRIS\ERROR %'IRIS.POLF %' (n parray])

```

**(IRIS.POLF2**

```

[LAMBDA (n parray sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND n parray)
    then (IRIS.GCMD 123 sppStream)
         (IRIS.SENDL n sppStream)
         (IRIS.SENDFS parray (TIMES 2 n)
                          sppStream)
    else (IRIS\ERROR %'IRIS.POLF2 %' (n parray])

```

**(IRIS.POLF2I**

```

[LAMBDA (n parray sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND n parray)
    then (IRIS.GCMD 124 sppStream)
         (IRIS.SENDL n sppStream)
         (IRIS.SENDLS parray (TIMES 2 n)
                          sppStream)
    else (IRIS\ERROR %'IRIS.POLF2I %' (n parray])

```

**(IRIS.POLFI**

```

[LAMBDA (n parray sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND n parray)
    then (IRIS.GCMD 125 sppStream)
         (IRIS.SENDL n sppStream)
         (IRIS.SENDLS parray (TIMES 3 n)
                          sppStream)
    else (IRIS\ERROR %'IRIS.POLFI %' (n parray])

```

**(IRIS.POLY**

```

[LAMBDA (n parray sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND n parray)
    then (IRIS.GCMD 126 sppStream)
         (IRIS.SENDL n sppStream)
         (IRIS.SENDFS parray (TIMES 3 n)
                          sppStream)

```



(IRIS.GCMD 134 sppStream])

**(IRIS.PUSHVIEWPORT**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
             else (SETQ sppStream IRISCONN))
    (IRIS.GCMD 135 sppStream])
```

**(IRIS.QENTER**

```
[LAMBDA (qtype val sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
             else (SETQ sppStream IRISCONN))
  (if (AND qtype val)
    then (IRIS.GCMD 137 sppStream)
         (IRIS.SENDS qtype sppStream)
         (IRIS.SENDS val sppStream)
    else (IRIS\ERROR %'IRIS.QENTER %' (qtype val])
```

**(IRIS.QREAD**

```
[LAMBDA (data sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
             else (SETQ sppStream IRISCONN))
  (if data
    then (LET (retval)
          (IRIS.ECHOFF sppStream)
          (IRIS.GCMD 139 sppStream)
          (IRIS.FLUSHG sppStream)
          (SETQ retval (IRIS.RECL sppStream))
          (SET data (IRIS.RECS sppStream))
          (IRIS.RECCR sppStream)
          (IRIS.ECHON sppStream)
          retval)
    else (IRIS\ERROR %'IRIS.QREAD %' (data])
```

**(IRIS.QRESET**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
             else (SETQ sppStream IRISCONN))
  (IRIS.GCMD 140 sppStream])
```

**(IRIS.QTEST**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
             else (SETQ sppStream IRISCONN))
  (LET (retval)
    (IRIS.ECHOFF sppStream)
    (IRIS.GCMD 141 sppStream)
    (IRIS.FLUSHG sppStream)
    (SETQ retval (IRIS.RECL sppStream))
    (IRIS.RECCR sppStream)
    (IRIS.ECHON sppStream)
    retval])
```

**(IRIS.READPIXELS**

```
[LAMBDA (n colors sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
             else (SETQ sppStream IRISCONN))
  (if (AND n colors)
    then (LET (retval)
          (IRIS.ECHOFF sppStream)
          (IRIS.GCMD 143 sppStream)
          (IRIS.SENDS n sppStream)
          (IRIS.FLUSHG sppStream)
          (SETQ retval (IRIS.RECL sppStream))
          (IRIS.RECSS colors sppStream)
          (IRIS.RECCR sppStream)
          (IRIS.ECHON sppStream)
          retval)
    else (IRIS\ERROR %'IRIS.READPIXELS %' (n colors])
```

**(IRIS.READRGB**

```
[LAMBDA (n red green blue sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
    (if (AND n red green blue)
      then (LET (retval)
            (IRIS.ECHOFF sppStream)
            (IRIS.GCMD 144 sppStream)
            (IRIS.SENDS n sppStream)
            (IRIS.FLUSHG sppStream)
            (SETQ retval (IRIS.RECL sppStream))
            (IRIS.RECBS red sppStream)
            (IRIS.RECBS green sppStream)
            (IRIS.RECBS blue sppStream)
            (IRIS.RECCR sppStream)
            (IRIS.ECHOON sppStream)
            retval)
      else (IRIS\ERROR %'IRIS.READRGB %' (n red green blue])
```

**(IRIS.RECT**

```
[LAMBDA (x1 y1 x2 y2 sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
    (if (AND x1 y1 x2 y2)
      then (IRIS.GCMD 145 sppStream)
            (IRIS.SENDF x1 sppStream)
            (IRIS.SENDF y1 sppStream)
            (IRIS.SENDF x2 sppStream)
            (IRIS.SENDF y2 sppStream)
      else (IRIS\ERROR %'IRIS.RECT %' (x1 y1 x2 y2])
```

**(IRIS.RECTF**

```
[LAMBDA (x1 y1 x2 y2 sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
    (if (AND x1 y1 x2 y2)
      then (IRIS.GCMD 146 sppStream)
            (IRIS.SENDF x1 sppStream)
            (IRIS.SENDF y1 sppStream)
            (IRIS.SENDF x2 sppStream)
            (IRIS.SENDF y2 sppStream)
      else (IRIS\ERROR %'IRIS.RECTF %' (x1 y1 x2 y2])
```

**(IRIS.RECTFI**

```
[LAMBDA (x1 y1 x2 y2 sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
    (if (AND x1 y1 x2 y2)
      then (IRIS.GCMD 147 sppStream)
            (IRIS.SENDL x1 sppStream)
            (IRIS.SENDL y1 sppStream)
            (IRIS.SENDL x2 sppStream)
            (IRIS.SENDL y2 sppStream)
      else (IRIS\ERROR %'IRIS.RECTFI %' (x1 y1 x2 y2])
```

**(IRIS.RECTI**

```
[LAMBDA (x1 y1 x2 y2 sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream))
            else (SETQ sppStream IRISCONN))
    (if (AND x1 y1 x2 y2)
      then (IRIS.GCMD 148 sppStream)
            (IRIS.SENDL x1 sppStream)
            (IRIS.SENDL y1 sppStream)
            (IRIS.SENDL x2 sppStream)
            (IRIS.SENDL y2 sppStream)
      else (IRIS\ERROR %'IRIS.RECTI %' (x1 y1 x2 y2])
```

**(IRIS.RESETLS**

```
[LAMBDA (b sppStream)
  (if sppStream
```

```

    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if b
        then (IRIS.GCMD 150 sppStream)
              (IRIS.SENDO b sppStream)
        else (IRIS\ERROR %'IRIS.RESETLS %' (b))

```

**(IRIS.RGBCOLOR**

```

[LAMBDA (red green blue sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND red green blue)
    then (IRIS.GCMD 151 sppStream)
          (IRIS.SENDS red sppStream)
          (IRIS.SENDS green sppStream)
          (IRIS.SENDS blue sppStream)
    else (IRIS\ERROR %'IRIS.RGBCOLOR %' (red green blue])

```

**(IRIS.RGBCURSOR**

```

[LAMBDA (index red green blue redm greenm blum sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND index red green blue redm greenm blum)
    then (IRIS.GCMD 152 sppStream)
          (IRIS.SENDS index sppStream)
          (IRIS.SENDS red sppStream)
          (IRIS.SENDS green sppStream)
          (IRIS.SENDS blue sppStream)
          (IRIS.SENDS redm sppStream)
          (IRIS.SENDS greenm sppStream)
          (IRIS.SENDS blum sppStream)
    else (IRIS\ERROR %'IRIS.RGBCURSOR %' (index red green blue redm greenm blum])

```

**(IRIS.RGBMODE**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (IRIS.GCMD 153 sppStream])

```

**(IRIS.RGBWRITEMASK**

```

[LAMBDA (red green blue sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND red green blue)
    then (IRIS.GCMD 154 sppStream)
          (IRIS.SENDS red sppStream)
          (IRIS.SENDS green sppStream)
          (IRIS.SENDS blue sppStream)
    else (IRIS\ERROR %'IRIS.RGBWRITEMASK %' (red green blue])

```

**(IRIS.ROTATE**

```

[LAMBDA (a axis sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND a axis)
    then (IRIS.GCMD 155 sppStream)
          (IRIS.SENDS a sppStream)
          (IRIS.SENDB axis sppStream)
    else (IRIS\ERROR %'IRIS.ROTATE %' (a axis])

```

**(IRIS.SCALE**

```

[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND x y z)
    then (IRIS.GCMD 156 sppStream)
          (IRIS.SENDF x sppStream)
          (IRIS.SENDF y sppStream)

```

```

      (IRIS.SENDF z sppStream)
    else (IRIS\ERROR %'IRIS.SCALE %' (x y z])

```

**(IRIS.SCRMASK**

```

[LAMBDA (left right bottom top sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND left right bottom top)
    then (IRIS.GCMD 158 sppStream)
         (IRIS.SENDS left sppStream)
         (IRIS.SENDS right sppStream)
         (IRIS.SENDS bottom sppStream)
         (IRIS.SENDS top sppStream)
    else (IRIS\ERROR %'IRIS.SCRMASK %' (left right bottom top])

```

**(IRIS.SELECT**

```

[LAMBDA (numnames buffer sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND numnames buffer)
    then (IRIS.GCMD 159 sppStream)
         (IRIS.SENDSS numnames 0 sppStream)
         (IRIS.SENDL buffer sppStream)
    else (IRIS\ERROR %'IRIS.SELECT %' (numnames buffer])

```

**(IRIS.SETBUTTON**

```

[LAMBDA (b value sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND b value)
    then (IRIS.GCMD 160 sppStream)
         (IRIS.SENDS b sppStream)
         (IRIS.SENDO value sppStream)
    else (IRIS\ERROR %'IRIS.SETBUTTON %' (b value])

```

**(IRIS.SETCURSOR**

```

[LAMBDA (index color wtm sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND index color wtm)
    then (IRIS.GCMD 161 sppStream)
         (IRIS.SENDS index sppStream)
         (IRIS.SENDS color sppStream)
         (IRIS.SENDS wtm sppStream)
    else (IRIS\ERROR %'IRIS.SETCURSOR %' (index color wtm])

```

**(IRIS.SETDEPTH**

```

[LAMBDA (near far sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND near far)
    then (IRIS.GCMD 162 sppStream)
         (IRIS.SENDS near sppStream)
         (IRIS.SENDS far sppStream)
    else (IRIS\ERROR %'IRIS.SETDEPTH %' (near far])

```

**(IRIS.SETLINESTYLE**

```

[LAMBDA (index sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if index
    then (IRIS.GCMD 163 sppStream)
         (IRIS.SENDS index sppStream)
    else (IRIS\ERROR %'IRIS.SETLINESTYLE %' (index])

```

**(IRIS.SETMAP**

```

[LAMBDA (mapnum sppStream)
  (if sppStream

```

```

    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if mapnum
        then (IRIS.GCMD 164 sppStream)
              (IRIS.SENDS mapnum sppStream)
        else (IRIS\ERROR %'IRIS.SETMAP %' (mapnum])

```

**(IRIS.SETVALUATOR**

```

[LAMBDA (v init min max sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND v init min max)
    then (IRIS.GCMD 167 sppStream)
          (IRIS.SENDS v sppStream)
          (IRIS.SENDS init sppStream)
          (IRIS.SENDS min sppStream)
          (IRIS.SENDS max sppStream)
    else (IRIS\ERROR %'IRIS.SETVALUATOR %' (v init min max])

```

**(IRIS.SINGLEBUFFER**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (IRIS.GCMD 168 sppStream])

```

**(IRIS.STRWIDTH**

```

[LAMBDA (str sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if str
    then (LET (retval)
          (IRIS.ECHOFF sppStream)
          (IRIS.GCMD 169 sppStream)
          (IRIS.SENDC str sppStream)
          (IRIS.FLUSHG sppStream)
          (SETQ retval (IRIS.RECL sppStream))
          (IRIS.RECCR sppStream)
          (IRIS.ECHOON sppStream)
          retval)
    else (IRIS\ERROR %'IRIS.STRWIDTH %' (str])

```

**(IRIS.SWAPBUFFERS**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (IRIS.GCMD 170 sppStream])

```

**(IRIS.SWAPINTERVAL**

```

[LAMBDA (i sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if i
    then (IRIS.GCMD 171 sppStream)
          (IRIS.SENDS i sppStream)
    else (IRIS\ERROR %'IRIS.SWAPINTERVAL %' (i])

```

**(IRIS.GSYNC**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (IRIS.GCMD 172 sppStream])

```

**(IRIS.TIE**

```

[LAMBDA (b v1 v2 sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)

```

```

else (SETQ sppStream IRISCONN)
(if (AND b v1 v2)
  then (IRIS.GCMD 173 sppStream)
        (IRIS.SENDS b sppStream)
        (IRIS.SENDS v1 sppStream)
        (IRIS.SENDS v2 sppStream)
  else (IRIS\ERROR %'IRIS.TIE %' (b v1 v2]))

```

**(IRIS.TRANSLATE**

```

[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)
             else (SETQ sppStream IRISCONN))
  (if (AND x y z)
    then (IRIS.GCMD 175 sppStream)
          (IRIS.SENDF x sppStream)
          (IRIS.SENDF y sppStream)
          (IRIS.SENDF z sppStream)
    else (IRIS\ERROR %'IRIS.TRANSLATE %' (x y z))

```

**(IRIS.VIEWPORT**

```

[LAMBDA (left right bottom top sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)
             else (SETQ sppStream IRISCONN))
  (if (AND left right bottom top)
    then (IRIS.GCMD 179 sppStream)
          (IRIS.SENDS left sppStream)
          (IRIS.SENDS right sppStream)
          (IRIS.SENDS bottom sppStream)
          (IRIS.SENDS top sppStream)
    else (IRIS\ERROR %'IRIS.VIEWPORT %' (left right bottom top))

```

**(IRIS.WINDOW**

```

[LAMBDA (left right bottom top near far sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)
             else (SETQ sppStream IRISCONN))
  (if (AND left right bottom top near far)
    then (IRIS.GCMD 180 sppStream)
          (IRIS.SENDF left sppStream)
          (IRIS.SENDF right sppStream)
          (IRIS.SENDF bottom sppStream)
          (IRIS.SENDF top sppStream)
          (IRIS.SENDF near sppStream)
          (IRIS.SENDF far sppStream)
    else (IRIS\ERROR %'IRIS.WINDOW %' (left right bottom top near far))

```

**(IRIS.WRITEMASK**

```

[LAMBDA (wtm sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)
             else (SETQ sppStream IRISCONN))
  (if wtm
    then (IRIS.GCMD 181 sppStream)
          (IRIS.SENDS wtm sppStream)
    else (IRIS\ERROR %'IRIS.WRITEMASK %' (wtm))

```

**(IRIS.WRITEPIXELS**

```

[LAMBDA (n colors sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)
             else (SETQ sppStream IRISCONN))
  (if (AND n colors)
    then (IRIS.GCMD 182 sppStream)
          (IRIS.SENDS n sppStream)
          (IRIS.SENDSS colors n sppStream)
    else (IRIS\ERROR %'IRIS.WRITEPIXELS %' (n colors))

```

**(IRIS.WRITERGB**

```

[LAMBDA (n red green blue sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)
             else (SETQ sppStream IRISCONN))
  (if (AND n red green blue)

```

```

    then (IRIS.GCMD 183 sppStream)
          (IRIS.SENDS n sppStream)
          (IRIS.SENDBS red n sppStream)
          (IRIS.SENDBS green n sppStream)
          (IRIS.SENDBS blue n sppStream)
    else (IRIS\ERROR %'IRIS.WRITERGB %' (n red green blue))

```

**(IRIS.TPON**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (IRIS.GCMD 184 sppStream)]

```

**(IRIS.TPOFF**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (IRIS.GCMD 185 sppStream)]

```

**(IRIS.TEXTWRITEMASK**

```

[LAMBDA (tmask sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if tmask
      then (IRIS.GCMD 187 sppStream)
            (IRIS.SENDS tmask sppStream)
      else (IRIS\ERROR %'IRIS.TEXTWRITEMASK %' (tmask))

```

**(IRIS.XGEXIT**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (IRIS.GCMD 188 sppStream)]

```

**(IRIS.CLKON**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (IRIS.GCMD 189 sppStream)]

```

**(IRIS.CLKOFF**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (IRIS.GCMD 190 sppStream)]

```

**(IRIS.LAMPON**

```

[LAMBDA (lamps sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if lamps
      then (IRIS.GCMD 191 sppStream)
            (IRIS.SENDB lamps sppStream)
      else (IRIS\ERROR %'IRIS.LAMPON %' (lamps))

```

**(IRIS.LAMPOFF**

```

[LAMBDA (lamps sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if lamps
      then (IRIS.GCMD 192 sppStream)
            (IRIS.SENDB lamps sppStream)
      else (IRIS\ERROR %'IRIS.LAMPOFF %' (lamps))

```

**(IRIS.SETBELL**

```
[LAMBDA (arg sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if arg
      then (IRIS.GCMD 193 sppStream)
            (IRIS.SENDB arg sppStream)
      else (IRIS\ERROR %'IRIS.SETBELL %' (arg]))
```

**(IRIS.RINGBELL**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (IRIS.GCMD 194 sppStream])
```

**(IRIS.TADELAY**

```
[LAMBDA (arg1 sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if arg1
    then (IRIS.GCMD 195 sppStream)
          (IRIS.SENDS arg1 sppStream)
    else (IRIS\ERROR %'IRIS.TADELAY %' (arg1]))
```

**(IRIS.ARCFS**

```
[LAMBDA (x y radius startang endang sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND x y radius startang endang)
    then (IRIS.GCMD 196 sppStream)
          (IRIS.SENDS x sppStream)
          (IRIS.SENDS y sppStream)
          (IRIS.SENDS radius sppStream)
          (IRIS.SENDS startang sppStream)
          (IRIS.SENDS endang sppStream)
    else (IRIS\ERROR %'IRIS.ARCFS %' (x y radius startang endang]))
```

**(IRIS.ARCS**

```
[LAMBDA (x y radius startang endang sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND x y radius startang endang)
    then (IRIS.GCMD 197 sppStream)
          (IRIS.SENDS x sppStream)
          (IRIS.SENDS y sppStream)
          (IRIS.SENDS radius sppStream)
          (IRIS.SENDS startang sppStream)
          (IRIS.SENDS endang sppStream)
    else (IRIS\ERROR %'IRIS.ARCS %' (x y radius startang endang]))
```

**(IRIS.BBOX2S**

```
[LAMBDA (xmin ymin x1 y1 x2 y2 sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND xmin ymin x1 y1 x2 y2)
    then (IRIS.GCMD 199 sppStream)
          (IRIS.SENDS xmin sppStream)
          (IRIS.SENDS ymin sppStream)
          (IRIS.SENDS x1 sppStream)
          (IRIS.SENDS y1 sppStream)
          (IRIS.SENDS x2 sppStream)
          (IRIS.SENDS y2 sppStream)
    else (IRIS\ERROR %'IRIS.BBOX2S %' (xmin ymin x1 y1 x2 y2]))
```

**(IRIS.BLANKSCREEN**

```
[LAMBDA (bool sppStream)
  (if sppStream
```

```

    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if bool
    then (IRIS.GCMD 200 sppStream)
         (IRIS.SENDO bool sppStream)
    else (IRIS\ERROR %'IRIS.BLANKSCREEN %' (bool]))

```

**(IRIS.BLKQREAD**

```

[LAMBDA (data n sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if (AND data n)
    then (LET (retval)
           (IRIS.ECHOFF sppStream)
           (IRIS.GCMD 202 sppStream)
           (IRIS.SENDS n sppStream)
           (IRIS.FLUSHG sppStream)
           (SETQ retval (IRIS.RECL sppStream))
           (IRIS.RECSS data sppStream)
           (IRIS.RECCR sppStream)
           (IRIS.ECHOON sppStream)
           retval)
    else (IRIS\ERROR %'IRIS.BLKQREAD %' (data n]))

```

**(IRIS.GETMCOLOR**

```

[LAMBDA (color r g b sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if (AND color r g b)
    then (IRIS.ECHOFF sppStream)
         (IRIS.GCMD 203 sppStream)
         (IRIS.SENDS color sppStream)
         (IRIS.FLUSHG sppStream)
         (SET r (IRIS.RECS sppStream))
         (SET g (IRIS.RECS sppStream))
         (SET b (IRIS.RECS sppStream))
         (IRIS.RECCR sppStream)
         (IRIS.ECHOON sppStream)
    else (IRIS\ERROR %'IRIS.GETMCOLOR %' (color r g b]))

```

**(IRIS.CALLFUNC**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (IRIS.GCMD 204 sppStream))

```

**(IRIS.CHUNKSIZE**

```

[LAMBDA (chunk sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if chunk
    then (IRIS.GCMD 205 sppStream)
         (IRIS.SENDL chunk sppStream)
    else (IRIS\ERROR %'IRIS.CHUNKSIZE %' (chunk]))

```

**(IRIS.CIRCFS**

```

[LAMBDA (x y radius sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream))
    else (SETQ sppStream IRISCONN))
  (if (AND x y radius)
    then (IRIS.GCMD 206 sppStream)
         (IRIS.SENDS x sppStream)
         (IRIS.SENDS y sppStream)
         (IRIS.SENDS radius sppStream)
    else (IRIS\ERROR %'IRIS.CIRCFS %' (x y radius]))

```

**(IRIS.CIRCS**

```

[LAMBDA (x y radius sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)

```

```

      (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND x y radius)
      then (IRIS.GCMD 207 sppStream)
          (IRIS.SENDS x sppStream)
          (IRIS.SENDS y sppStream)
          (IRIS.SENDS radius sppStream)
    else (IRIS\ERROR %'IRIS.CIRCS %' (x y radius])

```

**(IRIS.CMOV2S**

```

[LAMBDA (x y sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND x y)
      then (IRIS.GCMD 208 sppStream)
          (IRIS.SENDS x sppStream)
          (IRIS.SENDS y sppStream)
    else (IRIS\ERROR %'IRIS.CMOV2S %' (x y])

```

**(IRIS.CMOVS**

```

[LAMBDA (x y z sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND x y z)
      then (IRIS.GCMD 209 sppStream)
          (IRIS.SENDS x sppStream)
          (IRIS.SENDS y sppStream)
          (IRIS.SENDS z sppStream)
    else (IRIS\ERROR %'IRIS.CMOVS %' (x y z])

```

**(IRIS.COMPACTIFY**

```

[LAMBDA (obj sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if obj
      then (IRIS.GCMD 210 sppStream)
          (IRIS.SENDL obj sppStream)
    else (IRIS\ERROR %'IRIS.COMPACTIFY %' (obj])

```

**(IRIS.QDEVICE**

```

[LAMBDA (v sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if v
      then (IRIS.GCMD 211 sppStream)
          (IRIS.SENDS v sppStream)
    else (IRIS\ERROR %'IRIS.QDEVICE %' (v])

```

**(IRIS.UNQDEVICE**

```

[LAMBDA (v sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if v
      then (IRIS.GCMD 212 sppStream)
          (IRIS.SENDS v sppStream)
    else (IRIS\ERROR %'IRIS.UNQDEVICE %' (v])

```

**(IRIS.CURVEBASIS**

```

[LAMBDA (basisid sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if basisid
      then (IRIS.GCMD 213 sppStream)
          (IRIS.SENDS basisid sppStream)
    else (IRIS\ERROR %'IRIS.CURVEBASIS %' (basisid])

```

**(IRIS.CURVEPRECISION**

```

[LAMBDA (nsegments sppStream)

```

```
(if sppStream
  then [OR (SPPSTREAM? sppStream)
          (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
        ]
  else (SETQ sppStream IRISCONN))
(if nsegments
  then (IRIS.GCMD 214 sppStream)
       (IRIS.SENDS nsegments sppStream)
  else (IRIS\ERROR %'IRIS.CURVEPRECISION %' (nsegments]))
```

**(IRIS.CRV**

```
[LAMBDA (geom sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          ]
    else (SETQ sppStream IRISCONN))
  (if geom
    then (IRIS.GCMD 215 sppStream)
         (IRIS.SENDFS geom (TIMES 4 3)
                        sppStream)
    else (IRIS\ERROR %'IRIS.CRV %' (geom]))
```

**(IRIS.GETTP**

```
[LAMBDA (left right bottom top sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          ]
    else (SETQ sppStream IRISCONN))
  (if (AND left right bottom top)
    then (IRIS.ECHOFF sppStream)
         (IRIS.GCMD 216 sppStream)
         (IRIS.FLUSHG sppStream)
         (SET left (IRIS.RECS sppStream))
         (SET right (IRIS.RECS sppStream))
         (SET bottom (IRIS.RECS sppStream))
         (SET top (IRIS.RECS sppStream))
         (IRIS.RECCR sppStream)
         (IRIS.ECHOON sppStream)
    else (IRIS\ERROR %'IRIS.GETTP %' (left right bottom top]))
```

**(IRIS.GBEGIN**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          ]
    else (SETQ sppStream IRISCONN))
  (IRIS.GCMD 217 sppStream))
```

**(IRIS.TEXTINIT**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          ]
    else (SETQ sppStream IRISCONN))
  (IRIS.GCMD 218 sppStream))
```

**(IRIS.CRVN**

```
[LAMBDA (n geom sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          ]
    else (SETQ sppStream IRISCONN))
  (if (AND n geom)
    then (IRIS.GCMD 219 sppStream)
         (IRIS.SENDL n sppStream)
         (IRIS.SENDFS geom (TIMES 3 n)
                        sppStream)
    else (IRIS\ERROR %'IRIS.CRVN %' (n geom]))
```

**(IRIS.DEFBASIS**

```
[LAMBDA (id matrix sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          ]
    else (SETQ sppStream IRISCONN))
  (if (AND id matrix)
    then (IRIS.GCMD 220 sppStream)
         (IRIS.SENDS id sppStream)
         (IRIS.SENDFS matrix 16 sppStream)
    else (IRIS\ERROR %'IRIS.DEFBASIS %' (id matrix]))
```

**(IRIS.DELTAG**

```
[LAMBDA (t sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if t
    then (IRIS.GCMD 221 sppStream)
         (IRIS.SENDL t sppStream)
    else (IRIS\ERROR %'IRIS.DELTAG %' (t])
```

**(IRIS.DEPTHQUE**

```
[LAMBDA (mode sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if mode
    then (IRIS.GCMD 222 sppStream)
         (IRIS.SENDO mode sppStream)
    else (IRIS\ERROR %'IRIS.DEPTHQUE %' (mode])
```

**(IRIS.DRAW2S**

```
[LAMBDA (x y sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if (AND x y)
    then (IRIS.GCMD 223 sppStream)
         (IRIS.SENDS x sppStream)
         (IRIS.SENDS y sppStream)
    else (IRIS\ERROR %'IRIS.DRAW2S %' (x y])
```

**(IRIS.DRAWS**

```
[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if (AND x y z)
    then (IRIS.GCMD 224 sppStream)
         (IRIS.SENDS x sppStream)
         (IRIS.SENDS y sppStream)
         (IRIS.SENDS z sppStream)
    else (IRIS\ERROR %'IRIS.DRAWS %' (x y z])
```

**(IRIS.ENDFEEDBACK**

```
[LAMBDA (buffer sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if buffer
    then (LET (retval)
          (IRIS.ECHOFF sppStream)
          (IRIS.GCMD 225 sppStream)
          (IRIS.FLUSHG sppStream)
          (SETQ retval (IRIS.RECL sppStream))
          (IRIS.RECSS buffer sppStream)
          (IRIS.RECCR sppStream)
          (IRIS.ECHOON sppStream)
          retval)
    else (IRIS\ERROR %'IRIS.ENDFEEDBACK %' (buffer])
```

**(IRIS.FEEDBACK**

```
[LAMBDA (buffer size sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if (AND buffer size)
    then (IRIS.GCMD 226 sppStream)
         (IRIS.SENDSS buffer 0 sppStream)
         (IRIS.SENDL size sppStream)
    else (IRIS\ERROR %'IRIS.FEEDBACK %' (buffer size])
```

**(IRIS.GETCPOS**

```
[LAMBDA (ix iy sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
```

```

      (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND ix iy)
      then (IRIS.ECHOFF sppStream)
           (IRIS.GCMD 227 sppStream)
           (IRIS.FLUSHG sppStream)
           (SET ix (IRIS.RECS sppStream))
           (SET iy (IRIS.RECS sppStream))
           (IRIS.RECCR sppStream)
           (IRIS.ECHOON sppStream)
      else (IRIS\ERROR %'IRIS.GETCPOS %' (ix iy])

```

**(IRIS.GETDCM**

```

[LAMBDA (sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (LET (retval)
      (IRIS.ECHOFF sppStream)
      (IRIS.GCMD 228 sppStream)
      (IRIS.FLUSHG sppStream)
      (SETQ retval (IRIS.RECO sppStream))
      (IRIS.RECCR sppStream)
      (IRIS.ECHOON sppStream)
      retval])

```

**(IRIS.GETGPOS**

```

[LAMBDA (x y z w sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND x y z w)
      then (IRIS.ECHOFF sppStream)
           (IRIS.GCMD 229 sppStream)
           (IRIS.FLUSHG sppStream)
           (SET x (IRIS.RECF sppStream))
           (SET y (IRIS.RECF sppStream))
           (SET z (IRIS.RECF sppStream))
           (SET w (IRIS.RECF sppStream))
           (IRIS.RECCR sppStream)
           (IRIS.ECHOON sppStream)
      else (IRIS\ERROR %'IRIS.GETGPOS %' (x y z w])

```

**(IRIS.GETLSREPEAT**

```

[LAMBDA (sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (LET (retval)
      (IRIS.ECHOFF sppStream)
      (IRIS.GCMD 230 sppStream)
      (IRIS.FLUSHG sppStream)
      (SETQ retval (IRIS.RECL sppStream))
      (IRIS.RECCR sppStream)
      (IRIS.ECHOON sppStream)
      retval])

```

**(IRIS.GETMEM**

```

[LAMBDA (sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (LET (retval)
      (IRIS.ECHOFF sppStream)
      (IRIS.GCMD 231 sppStream)
      (IRIS.FLUSHG sppStream)
      (SETQ retval (IRIS.RECL sppStream))
      (IRIS.RECCR sppStream)
      (IRIS.ECHOON sppStream)
      retval])

```

**(IRIS.GETMONITOR**

```

[LAMBDA (sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (LET (retval)

```

```

( (IRIS.ECHOFF sppStream)
  (IRIS.GCMD 232 sppStream)
  (IRIS.FLUSHG sppStream)
  (SETQ retval (IRIS.RECL sppStream))
  (IRIS.RECCR sppStream)
  (IRIS.ECHOON sppStream)
  retval))

```

**(IRIS.GETOPENOBJ**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
             (SETQ sppStream IRISCONN))
    else (SETQ sppStream IRISCONN))
  (LET (retval)
    (IRIS.ECHOFF sppStream)
    (IRIS.GCMD 233 sppStream)
    (IRIS.FLUSHG sppStream)
    (SETQ retval (IRIS.RECL sppStream))
    (IRIS.RECCR sppStream)
    (IRIS.ECHOON sppStream)
    retval))

```

**(IRIS.GETZBUFFER**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
             (SETQ sppStream IRISCONN))
    else (SETQ sppStream IRISCONN))
  (LET (retval)
    (IRIS.ECHOFF sppStream)
    (IRIS.GCMD 234 sppStream)
    (IRIS.FLUSHG sppStream)
    (SETQ retval (IRIS.RECO sppStream))
    (IRIS.RECCR sppStream)
    (IRIS.ECHOON sppStream)
    retval))

```

**(IRIS.GEWRITE**

```

[LAMBDA (arg1 arg2 sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
             (SETQ sppStream IRISCONN))
    else (SETQ sppStream IRISCONN))
  (if (AND arg1 arg2)
    then (IRIS.GCMD 235 sppStream)
         (IRIS.SENDSS arg1 arg2 sppStream)
         (IRIS.SENDL arg2 sppStream))
    else (IRIS\ERROR %'IRIS.GEWRITE %' (arg1 arg2]))

```

**(IRIS.INITNAMES**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
             (SETQ sppStream IRISCONN))
    else (SETQ sppStream IRISCONN))
  (IRIS.GCMD 236 sppStream))

```

**(IRIS.LOADNAME**

```

[LAMBDA (name sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
             (SETQ sppStream IRISCONN))
    else (SETQ sppStream IRISCONN))
  (if name
    then (IRIS.GCMD 237 sppStream)
         (IRIS.SENDS name sppStream))
    else (IRIS\ERROR %'IRIS.LOADNAME %' (name]))

```

**(IRIS.LSREPEAT**

```

[LAMBDA (factor sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
             (SETQ sppStream IRISCONN))
    else (SETQ sppStream IRISCONN))
  (if factor
    then (IRIS.GCMD 238 sppStream)
         (IRIS.SENDL factor sppStream))
    else (IRIS\ERROR %'IRIS.LSREPEAT %' (factor]))

```

**(IRIS.MOVE2S**

```
[LAMBDA (x y sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if (AND x y)
    then (IRIS.GCMD 239 sppStream)
         (IRIS.SENDS x sppStream)
         (IRIS.SENDS y sppStream)
    else (IRIS\ERROR %'IRIS.MOVE2S %' (x y])
```

**(IRIS.MOVES**

```
[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if (AND x y z)
    then (IRIS.GCMD 240 sppStream)
         (IRIS.SENDS x sppStream)
         (IRIS.SENDS y sppStream)
         (IRIS.SENDS z sppStream)
    else (IRIS\ERROR %'IRIS.MOVES %' (x y z])
```

**(IRIS.NEWTAG**

```
[LAMBDA (newtag oldtag offset sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if (AND newtag oldtag offset)
    then (IRIS.GCMD 241 sppStream)
         (IRIS.SENDL newtag sppStream)
         (IRIS.SENDL oldtag sppStream)
         (IRIS.SENDL offset sppStream)
    else (IRIS\ERROR %'IRIS.NEWTAG %' (newtag oldtag offset])
```

**(IRIS.PASSTHROUGH**

```
[LAMBDA (token sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if token
    then (IRIS.GCMD 242 sppStream)
         (IRIS.SENDS token sppStream)
    else (IRIS\ERROR %'IRIS.PASSTHROUGH %' (token])
```

**(IRIS.PATCHBASIS**

```
[LAMBDA (uid vid sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if (AND uid vid)
    then (IRIS.GCMD 243 sppStream)
         (IRIS.SENDL uid sppStream)
         (IRIS.SENDL vid sppStream)
    else (IRIS\ERROR %'IRIS.PATCHBASIS %' (uid vid])
```

**(IRIS.PATCHPRECISION**

```
[LAMBDA (usegments vsegments sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if (AND usegments vsegments)
    then (IRIS.GCMD 244 sppStream)
         (IRIS.SENDL usegments sppStream)
         (IRIS.SENDL vsegments sppStream)
    else (IRIS\ERROR %'IRIS.PATCHPRECISION %' (usegments vsegments])
```

**(IRIS.PATCH**

```
[LAMBDA (geomx geomz sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if (AND geomx geomz)
    then (IRIS.GCMD 245 sppStream)
```

```

      (IRIS.SENDFS geomx 16 sppStream)
      (IRIS.SENDFS geomy 16 sppStream)
      (IRIS.SENDFS geomz 16 sppStream)
    else (IRIS\ERROR %'IRIS.PATCH %' (geomx geomy geomz])

```

**(IRIS.PCLOS**

```

[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (IRIS.GCMD 246 sppStream])

```

**(IRIS.PDR**

```

[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND x y z)
    then (IRIS.GCMD 247 sppStream)
         (IRIS.SENDF x sppStream)
         (IRIS.SENDF y sppStream)
         (IRIS.SENDF z sppStream)
    else (IRIS\ERROR %'IRIS.PDR %' (x y z])

```

**(IRIS.PDR2**

```

[LAMBDA (x y sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND x y)
    then (IRIS.GCMD 248 sppStream)
         (IRIS.SENDF x sppStream)
         (IRIS.SENDF y sppStream)
    else (IRIS\ERROR %'IRIS.PDR2 %' (x y])

```

**(IRIS.PDRI**

```

[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND x y z)
    then (IRIS.GCMD 249 sppStream)
         (IRIS.SENDL x sppStream)
         (IRIS.SENDL y sppStream)
         (IRIS.SENDL z sppStream)
    else (IRIS\ERROR %'IRIS.PDRI %' (x y z])

```

**(IRIS.PDR2I**

```

[LAMBDA (x y sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND x y)
    then (IRIS.GCMD 250 sppStream)
         (IRIS.SENDL x sppStream)
         (IRIS.SENDL y sppStream)
    else (IRIS\ERROR %'IRIS.PDR2I %' (x y])

```

**(IRIS.PDRS**

```

[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND x y z)
    then (IRIS.GCMD 251 sppStream)
         (IRIS.SENDS x sppStream)
         (IRIS.SENDS y sppStream)
         (IRIS.SENDS z sppStream)
    else (IRIS\ERROR %'IRIS.PDRS %' (x y z])

```

**(IRIS.PDR2S**

```

[LAMBDA (x y sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)

```

```

      (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
else (SETQ sppStream IRISCONN))
  (if (AND x y)
      then (IRIS.GCMD 252 sppStream)
          (IRIS.SENDS x sppStream)
          (IRIS.SENDS y sppStream)
      else (IRIS\ERROR %'IRIS.PDR2S %' (x y])

```

**(IRIS.POLF2S**

```

[LAMBDA (n parray sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
else (SETQ sppStream IRISCONN))
  (if (AND n parray)
      then (IRIS.GCMD 253 sppStream)
          (IRIS.SENDL n sppStream)
          (IRIS.SENDSS parray (TIMES 2 n)
            sppStream)
      else (IRIS\ERROR %'IRIS.POLF2S %' (n parray])

```

**(IRIS.POLFS**

```

[LAMBDA (n parray sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
else (SETQ sppStream IRISCONN))
  (if (AND n parray)
      then (IRIS.GCMD 254 sppStream)
          (IRIS.SENDL n sppStream)
          (IRIS.SENDSS parray (TIMES 3 n)
            sppStream)
      else (IRIS\ERROR %'IRIS.POLFS %' (n parray])

```

**(IRIS.POLY2S**

```

[LAMBDA (n parray sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
else (SETQ sppStream IRISCONN))
  (if (AND n parray)
      then (IRIS.GCMD 255 sppStream)
          (IRIS.SENDL n sppStream)
          (IRIS.SENDSS parray (TIMES 2 n)
            sppStream)
      else (IRIS\ERROR %'IRIS.POLY2S %' (n parray])

```

**(IRIS.POLYS**

```

[LAMBDA (n parray sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
else (SETQ sppStream IRISCONN))
  (if (AND n parray)
      then (IRIS.GCMD 256 sppStream)
          (IRIS.SENDL n sppStream)
          (IRIS.SENDSS parray (TIMES 3 n)
            sppStream)
      else (IRIS\ERROR %'IRIS.POLYS %' (n parray])

```

**(IRIS.PMV**

```

[LAMBDA (x y z sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
else (SETQ sppStream IRISCONN))
  (if (AND x y z)
      then (IRIS.GCMD 257 sppStream)
          (IRIS.SENDF x sppStream)
          (IRIS.SENDF y sppStream)
          (IRIS.SENDF z sppStream)
      else (IRIS\ERROR %'IRIS.PMV %' (x y z])

```

**(IRIS.PMV2**

```

[LAMBDA (x y sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
else (SETQ sppStream IRISCONN))
  (if (AND x y)
      then (IRIS.GCMD 258 sppStream)

```

```

      (IRIS.SENDF x sppStream)
      (IRIS.SENDF y sppStream)
    else (IRIS\ERROR %'IRIS.PMV2 %' (x y])

```

**(IRIS.PMVI**

```

[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
                                else (SETQ sppStream IRISCONN))
          (if (AND x y z)
            then (IRIS.GCMD 259 sppStream)
                 (IRIS.SENDL x sppStream)
                 (IRIS.SENDL y sppStream)
                 (IRIS.SENDL z sppStream)
            else (IRIS\ERROR %'IRIS.PMVI %' (x y z])

```

**(IRIS.PMV2I**

```

[LAMBDA (x y sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
                                else (SETQ sppStream IRISCONN))
          (if (AND x y)
            then (IRIS.GCMD 260 sppStream)
                 (IRIS.SENDL x sppStream)
                 (IRIS.SENDL y sppStream)
            else (IRIS\ERROR %'IRIS.PMV2I %' (x y])

```

**(IRIS.PMVS**

```

[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
                                else (SETQ sppStream IRISCONN))
          (if (AND x y z)
            then (IRIS.GCMD 261 sppStream)
                 (IRIS.SENDS x sppStream)
                 (IRIS.SENDS y sppStream)
                 (IRIS.SENDS z sppStream)
            else (IRIS\ERROR %'IRIS.PMVS %' (x y z])

```

**(IRIS.PMV2S**

```

[LAMBDA (x y sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
                                else (SETQ sppStream IRISCONN))
          (if (AND x y)
            then (IRIS.GCMD 262 sppStream)
                 (IRIS.SENDS x sppStream)
                 (IRIS.SENDS y sppStream)
            else (IRIS\ERROR %'IRIS.PMV2S %' (x y])

```

**(IRIS.PNT2S**

```

[LAMBDA (x y sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
                                else (SETQ sppStream IRISCONN))
          (if (AND x y)
            then (IRIS.GCMD 263 sppStream)
                 (IRIS.SENDS x sppStream)
                 (IRIS.SENDS y sppStream)
            else (IRIS\ERROR %'IRIS.PNT2S %' (x y])

```

**(IRIS.PNTS**

```

[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
           (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
                                else (SETQ sppStream IRISCONN))
          (if (AND x y z)
            then (IRIS.GCMD 264 sppStream)
                 (IRIS.SENDS x sppStream)
                 (IRIS.SENDS y sppStream)
                 (IRIS.SENDS z sppStream)
            else (IRIS\ERROR %'IRIS.PNTS %' (x y z])

```

**(IRIS.POPNAME**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
            (IRIS.GCMD 265 sppStream])
```

**(IRIS.PUSHNAME**

```
[LAMBDA (name sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if name
      then (IRIS.GCMD 266 sppStream)
            (IRIS.SENDS name sppStream)
      else (IRIS\ERROR %'IRIS.PUSHNAME %' (name)])
```

**(IRIS.RDR**

```
[LAMBDA (dx dy dz sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if (AND dx dy dz)
      then (IRIS.GCMD 267 sppStream)
            (IRIS.SENDF dx sppStream)
            (IRIS.SENDF dy sppStream)
            (IRIS.SENDF dz sppStream)
      else (IRIS\ERROR %'IRIS.RDR %' (dx dy dz)])
```

**(IRIS.RDR2**

```
[LAMBDA (dx dy sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if (AND dx dy)
      then (IRIS.GCMD 268 sppStream)
            (IRIS.SENDF dx sppStream)
            (IRIS.SENDF dy sppStream)
      else (IRIS\ERROR %'IRIS.RDR2 %' (dx dy)])
```

**(IRIS.RDRI**

```
[LAMBDA (dx dy dz sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if (AND dx dy dz)
      then (IRIS.GCMD 269 sppStream)
            (IRIS.SENDL dx sppStream)
            (IRIS.SENDL dy sppStream)
            (IRIS.SENDL dz sppStream)
      else (IRIS\ERROR %'IRIS.RDRI %' (dx dy dz)])
```

**(IRIS.RDR2I**

```
[LAMBDA (dx dy sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if (AND dx dy)
      then (IRIS.GCMD 270 sppStream)
            (IRIS.SENDL dx sppStream)
            (IRIS.SENDL dy sppStream)
      else (IRIS\ERROR %'IRIS.RDR2I %' (dx dy)])
```

**(IRIS.RDRS**

```
[LAMBDA (dx dy dz sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if (AND dx dy dz)
      then (IRIS.GCMD 271 sppStream)
            (IRIS.SENDS dx sppStream)
            (IRIS.SENDS dy sppStream)
            (IRIS.SENDS dz sppStream)
      else (IRIS\ERROR %'IRIS.RDRS %' (dx dy dz)])
```

**(IRIS.RDR2S**

```
[LAMBDA (dx dy sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if (AND dx dy)
      then (IRIS.GCMD 272 sppStream)
           (IRIS.SENDS dx sppStream)
           (IRIS.SENDS dy sppStream)
      else (IRIS.ERROR %'IRIS.RDR2S %' (dx dy))])
```

**(IRIS.RECTCOPY**

```
[LAMBDA (left right bottom top newx newy sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if (AND left right bottom top newx newy)
      then (IRIS.GCMD 273 sppStream)
           (IRIS.SENDS left sppStream)
           (IRIS.SENDS right sppStream)
           (IRIS.SENDS bottom sppStream)
           (IRIS.SENDS top sppStream)
           (IRIS.SENDS newx sppStream)
           (IRIS.SENDS newy sppStream)
      else (IRIS.ERROR %'IRIS.RECTCOPY %' (left right bottom top newx newy))])
```

**(IRIS.RMV**

```
[LAMBDA (dx dy dz sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if (AND dx dy dz)
      then (IRIS.GCMD 274 sppStream)
           (IRIS.SENDF dx sppStream)
           (IRIS.SENDF dy sppStream)
           (IRIS.SENDF dz sppStream)
      else (IRIS.ERROR %'IRIS.RMV %' (dx dy dz))])
```

**(IRIS.RMV2**

```
[LAMBDA (dx dy sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if (AND dx dy)
      then (IRIS.GCMD 275 sppStream)
           (IRIS.SENDF dx sppStream)
           (IRIS.SENDF dy sppStream)
      else (IRIS.ERROR %'IRIS.RMV2 %' (dx dy))])
```

**(IRIS.RMVI**

```
[LAMBDA (dx dy dz sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if (AND dx dy dz)
      then (IRIS.GCMD 276 sppStream)
           (IRIS.SENDL dx sppStream)
           (IRIS.SENDL dy sppStream)
           (IRIS.SENDL dz sppStream)
      else (IRIS.ERROR %'IRIS.RMVI %' (dx dy dz))])
```

**(IRIS.RMV2I**

```
[LAMBDA (dx dy sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if (AND dx dy)
      then (IRIS.GCMD 277 sppStream)
           (IRIS.SENDL dx sppStream)
           (IRIS.SENDL dy sppStream)
      else (IRIS.ERROR %'IRIS.RMV2I %' (dx dy))])
```

**(IRIS.RMVS**

```
[LAMBDA (dx dy dz sppStream)
```

```

(if sppStream
  then [OR (SPPSTREAM? sppStream)
        (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
      else (SETQ sppStream IRISCONN))
  (if (AND dx dy dz)
    then (IRIS.GCMD 278 sppStream)
         (IRIS.SENDS dx sppStream)
         (IRIS.SENDS dy sppStream)
         (IRIS.SENDS dz sppStream)
    else (IRIS\ERROR %'IRIS.RMVS %' (dx dy dz]))

```

**(IRIS.RMV2S**

```

[LAMBDA (dx dy sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if (AND dx dy)
    then (IRIS.GCMD 279 sppStream)
         (IRIS.SENDS dx sppStream)
         (IRIS.SENDS dy sppStream)
    else (IRIS\ERROR %'IRIS.RMV2S %' (dx dy]))

```

**(IRIS.RPDR**

```

[LAMBDA (dx dy dz sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if (AND dx dy dz)
    then (IRIS.GCMD 280 sppStream)
         (IRIS.SENDF dx sppStream)
         (IRIS.SENDF dy sppStream)
         (IRIS.SENDF dz sppStream)
    else (IRIS\ERROR %'IRIS.RPDR %' (dx dy dz]))

```

**(IRIS.RPDR2**

```

[LAMBDA (dx dy sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if (AND dx dy)
    then (IRIS.GCMD 281 sppStream)
         (IRIS.SENDF dx sppStream)
         (IRIS.SENDF dy sppStream)
    else (IRIS\ERROR %'IRIS.RPDR2 %' (dx dy]))

```

**(IRIS.RPDRI**

```

[LAMBDA (dx dy dz sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if (AND dx dy dz)
    then (IRIS.GCMD 282 sppStream)
         (IRIS.SENDL dx sppStream)
         (IRIS.SENDL dy sppStream)
         (IRIS.SENDL dz sppStream)
    else (IRIS\ERROR %'IRIS.RPDRI %' (dx dy dz]))

```

**(IRIS.RPDR2I**

```

[LAMBDA (dx dy sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if (AND dx dy)
    then (IRIS.GCMD 283 sppStream)
         (IRIS.SENDL dx sppStream)
         (IRIS.SENDL dy sppStream)
    else (IRIS\ERROR %'IRIS.RPDR2I %' (dx dy]))

```

**(IRIS.RPDRS**

```

[LAMBDA (dx dy dz sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
  (if (AND dx dy dz)
    then (IRIS.GCMD 284 sppStream)

```

```

      (IRIS.SENDS dx sppStream)
      (IRIS.SENDS dy sppStream)
      (IRIS.SENDS dz sppStream)
    else (IRIS\ERROR %'IRIS.RPDRS %' (dx dy dz])

```

**(IRIS.RPDR2S**

```

[LAMBDA (dx dy sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND dx dy)
    then (IRIS.GCMD 285 sppStream)
         (IRIS.SENDS dx sppStream)
         (IRIS.SENDS dy sppStream)
    else (IRIS\ERROR %'IRIS.RPDR2S %' (dx dy])

```

**(IRIS.RPMV**

```

[LAMBDA (dx dy dz sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND dx dy dz)
    then (IRIS.GCMD 286 sppStream)
         (IRIS.SENDF dx sppStream)
         (IRIS.SENDF dy sppStream)
         (IRIS.SENDF dz sppStream)
    else (IRIS\ERROR %'IRIS.RPMV %' (dx dy dz])

```

**(IRIS.RPMV2**

```

[LAMBDA (dx dy sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND dx dy)
    then (IRIS.GCMD 287 sppStream)
         (IRIS.SENDF dx sppStream)
         (IRIS.SENDF dy sppStream)
    else (IRIS\ERROR %'IRIS.RPMV2 %' (dx dy])

```

**(IRIS.RPMVI**

```

[LAMBDA (dx dy dz sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND dx dy dz)
    then (IRIS.GCMD 288 sppStream)
         (IRIS.SENDL dx sppStream)
         (IRIS.SENDL dy sppStream)
         (IRIS.SENDL dz sppStream)
    else (IRIS\ERROR %'IRIS.RPMVI %' (dx dy dz])

```

**(IRIS.RPMV2I**

```

[LAMBDA (dx dy sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND dx dy)
    then (IRIS.GCMD 289 sppStream)
         (IRIS.SENDL dx sppStream)
         (IRIS.SENDL dy sppStream)
    else (IRIS\ERROR %'IRIS.RPMV2I %' (dx dy])

```

**(IRIS.RPMVS**

```

[LAMBDA (dx dy dz sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND dx dy dz)
    then (IRIS.GCMD 290 sppStream)
         (IRIS.SENDS dx sppStream)
         (IRIS.SENDS dy sppStream)
         (IRIS.SENDS dz sppStream)
    else (IRIS\ERROR %'IRIS.RPMVS %' (dx dy dz])

```

**(IRIS.RPMV2S**

```
[LAMBDA (dx dy sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND dx dy)
    then (IRIS.GCMD 291 sppStream)
         (IRIS.SENDS dx sppStream)
         (IRIS.SENDS dy sppStream)
    else (IRIS\ERROR %'IRIS.RPMV2S %' (dx dy])
```

**(IRIS.SETDBLIGHTS**

```
[LAMBDA (mask sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if mask
    then (IRIS.GCMD 292 sppStream)
         (IRIS.SENDL mask sppStream)
    else (IRIS\ERROR %'IRIS.SETDBLIGHTS %' (mask])
```

**(IRIS.SETMONITOR**

```
[LAMBDA (type sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if type
    then (IRIS.GCMD 293 sppStream)
         (IRIS.SENDS type sppStream)
    else (IRIS\ERROR %'IRIS.SETMONITOR %' (type])
```

**(IRIS.SETSHADE**

```
[LAMBDA (shade sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if shade
    then (IRIS.GCMD 294 sppStream)
         (IRIS.SENDS shade sppStream)
    else (IRIS\ERROR %'IRIS.SETSHADE %' (shade])
```

**(IRIS.SHADERANGE**

```
[LAMBDA (lowindex highindex sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND lowindex highindex)
    then (IRIS.GCMD 295 sppStream)
         (IRIS.SENDS lowindex sppStream)
         (IRIS.SENDS highindex sppStream)
    else (IRIS\ERROR %'IRIS.SHADERANGE %' (lowindex highindex])
```

**(IRIS.SPCLOS**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (IRIS.GCMD 296 sppStream])
```

**(IRIS.SPLF**

```
[LAMBDA (n parray iarray sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
  (if (AND n parray iarray)
    then (IRIS.GCMD 297 sppStream)
         (IRIS.SENDL n sppStream)
         (IRIS.SENDFS parray (TIMES 3 n)
          sppStream)
         (IRIS.SENDSS iarray n sppStream)
    else (IRIS\ERROR %'IRIS.SPLF %' (n parray iarray])
```

**(IRIS.SPLF2**

```
[LAMBDA (n parray iarray sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if (AND n parray iarray)
      then (IRIS.GCMD 298 sppStream)
            (IRIS.SENDL n sppStream)
            (IRIS.SENDFS parray (TIMES 2 n)
              sppStream)
            (IRIS.SENDSS iarray n sppStream)
      else (IRIS\ERROR %'IRIS.SPLF2 %' (n parray iarray])
```

(IRIS.SPLFI

```
[LAMBDA (n parray iarray sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if (AND n parray iarray)
      then (IRIS.GCMD 299 sppStream)
            (IRIS.SENDL n sppStream)
            (IRIS.SENDLS parray (TIMES 3 n)
              sppStream)
            (IRIS.SENDSS iarray n sppStream)
      else (IRIS\ERROR %'IRIS.SPLFI %' (n parray iarray])
```

(IRIS.SPLF2I

```
[LAMBDA (n parray iarray sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if (AND n parray iarray)
      then (IRIS.GCMD 300 sppStream)
            (IRIS.SENDL n sppStream)
            (IRIS.SENDLS parray (TIMES 2 n)
              sppStream)
            (IRIS.SENDSS iarray n sppStream)
      else (IRIS\ERROR %'IRIS.SPLF2I %' (n parray iarray])
```

(IRIS.SPLFS

```
[LAMBDA (n parray iarray sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if (AND n parray iarray)
      then (IRIS.GCMD 301 sppStream)
            (IRIS.SENDL n sppStream)
            (IRIS.SENDSS parray (TIMES 3 n)
              sppStream)
            (IRIS.SENDSS iarray n sppStream)
      else (IRIS\ERROR %'IRIS.SPLFS %' (n parray iarray])
```

(IRIS.SPLF2S

```
[LAMBDA (n parray iarray sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if (AND n parray iarray)
      then (IRIS.GCMD 302 sppStream)
            (IRIS.SENDL n sppStream)
            (IRIS.SENDSS parray (TIMES 2 n)
              sppStream)
            (IRIS.SENDSS iarray n sppStream)
      else (IRIS\ERROR %'IRIS.SPLF2S %' (n parray iarray])
```

(IRIS.XFPT

```
[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if (AND x y z)
      then (IRIS.GCMD 303 sppStream)
            (IRIS.SENDF x sppStream)
            (IRIS.SENDF y sppStream)
            (IRIS.SENDF z sppStream)
      else (IRIS\ERROR %'IRIS.XFPT %' (x y z])
```

**(IRIS.XFPTI**

```
[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if (AND x y z)
      then (IRIS.GCMD 304 sppStream)
            (IRIS.SENDL x sppStream)
            (IRIS.SENDL y sppStream)
            (IRIS.SENDL z sppStream)
          else (IRIS\ERROR %'IRIS.XFPTI %' (x y z])
```

**(IRIS.XFPTS**

```
[LAMBDA (x y z sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if (AND x y z)
      then (IRIS.GCMD 305 sppStream)
            (IRIS.SENDS x sppStream)
            (IRIS.SENDS y sppStream)
            (IRIS.SENDS z sppStream)
          else (IRIS\ERROR %'IRIS.XFPTS %' (x y z])
```

**(IRIS.XFPT2**

```
[LAMBDA (x y sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if (AND x y)
      then (IRIS.GCMD 306 sppStream)
            (IRIS.SENDF x sppStream)
            (IRIS.SENDF y sppStream)
          else (IRIS\ERROR %'IRIS.XFPT2 %' (x y])
```

**(IRIS.XFPT2I**

```
[LAMBDA (x y sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if (AND x y)
      then (IRIS.GCMD 307 sppStream)
            (IRIS.SENDL x sppStream)
            (IRIS.SENDL y sppStream)
          else (IRIS\ERROR %'IRIS.XFPT2I %' (x y])
```

**(IRIS.XFPT2S**

```
[LAMBDA (x y sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if (AND x y)
      then (IRIS.GCMD 308 sppStream)
            (IRIS.SENDS x sppStream)
            (IRIS.SENDS y sppStream)
          else (IRIS\ERROR %'IRIS.XFPT2S %' (x y])
```

**(IRIS.XFPT4**

```
[LAMBDA (x y z w sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream))
          else (SETQ sppStream IRISCONN))
    (if (AND x y z w)
      then (IRIS.GCMD 309 sppStream)
            (IRIS.SENDF x sppStream)
            (IRIS.SENDF y sppStream)
            (IRIS.SENDF z sppStream)
            (IRIS.SENDF w sppStream)
          else (IRIS\ERROR %'IRIS.XFPT4 %' (x y z w])
```

**(IRIS.XFPT4I**

```
[LAMBDA (x y z w sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
```

```

      (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND x y z w)
      then (IRIS.GCMD 310 sppStream)
          (IRIS.SENDL x sppStream)
          (IRIS.SENDL y sppStream)
          (IRIS.SENDL z sppStream)
          (IRIS.SENDL w sppStream)
      else (IRIS\ERROR %'IRIS.XFPT4I %' (x y z w]))

```

**(IRIS.XFPT4S**

```

[LAMBDA (x y z w sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND x y z w)
      then (IRIS.GCMD 311 sppStream)
          (IRIS.SENDS x sppStream)
          (IRIS.SENDS y sppStream)
          (IRIS.SENDS z sppStream)
          (IRIS.SENDS w sppStream)
      else (IRIS\ERROR %'IRIS.XFPT4S %' (x y z w]))

```

**(IRIS.ZBUFFER**

```

[LAMBDA (bool sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if bool
      then (IRIS.GCMD 312 sppStream)
          (IRIS.SENDO bool sppStream)
      else (IRIS\ERROR %'IRIS.ZBUFFER %' (bool]))

```

**(IRIS.CHARST**

```

[LAMBDA (arg1 arg2 sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND arg1 arg2)
      then (IRIS.GCMD 313 sppStream)
          (IRIS.SENDBS arg1 arg2 sppStream)
          (IRIS.SENDL arg2 sppStream)
      else (IRIS\ERROR %'IRIS.CHARST %' (arg1 arg2]))

```

**(IRIS.STRWID**

```

[LAMBDA (arg1 arg2 sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND arg1 arg2)
      then (LET (retval)
              (IRIS.ECHOFF sppStream)
              (IRIS.GCMD 314 sppStream)
              (IRIS.SENDBS arg1 arg2 sppStream)
              (IRIS.SENDL arg2 sppStream)
              (IRIS.FLUSHG sppStream)
              (SETQ retval (IRIS.RECL sppStream))
              (IRIS.RECCR sppStream)
              (IRIS.ECHON sppStream)
              retval)
      else (IRIS\ERROR %'IRIS.STRWID %' (arg1 arg2]))

```

**(IRIS.DEFPATTERN**

```

[LAMBDA (n size mask sppStream)
  (if sppStream
      then [OR (SPPSTREAM? sppStream)
              (SETQ sppStream (fetch SPPSTREAM of (fetch IRISDATA of sppStream)
    else (SETQ sppStream IRISCONN))
  (if (AND n size mask)
      then (IRIS.GCMD 315 sppStream)
          (IRIS.SENDS n sppStream)
          (IRIS.SENDS size sppStream)
          (IRIS.SENDSS mask (QUOTIENT (TIMES size size)
                                      16)
                    sppStream)
      else (IRIS\ERROR %'IRIS.DEFPATTERN %' (n size mask]))

```

(\* LeL, "9-Sep-85 04:19")

**(IRIS.GETPATTERN**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
                                     (SETQ sppStream IRISCONN)))]
    else (SETQ sppStream IRISCONN))
  (LET (retval)
    (IRIS.ECHOFF sppStream)
    (IRIS.GCMD 316 sppStream)
    (IRIS.FLUSHG sppStream)
    (SETQ retval (IRIS.RECL sppStream))
    (IRIS.RECCR sppStream)
    (IRIS.ECHOON sppStream)
    retval])
```

**(IRIS.SETPATTERN**

```
[LAMBDA (index sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
                                     (SETQ sppStream IRISCONN)))]
    else (SETQ sppStream IRISCONN))
  (if index
    then (IRIS.GCMD 317 sppStream)
         (IRIS.SENDS index sppStream)
    else (IRIS'ERROR %'IRIS.SETPATTERN %' (index]))
```

**(IRIS.OBJINSERT**

```
[LAMBDA (t sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
                                     (SETQ sppStream IRISCONN)))]
    else (SETQ sppStream IRISCONN))
  (if t
    then (IRIS.GCMD 318 sppStream)
         (IRIS.SENDL t sppStream)
    else (IRIS'ERROR %'IRIS.OBJINSERT %' (t]))
```

**(IRIS.OBJDELETE**

```
[LAMBDA (tag1 tag2 sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
                                     (SETQ sppStream IRISCONN)))]
    else (SETQ sppStream IRISCONN))
  (if (AND tag1 tag2)
    then (IRIS.GCMD 319 sppStream)
         (IRIS.SENDL tag1 sppStream)
         (IRIS.SENDL tag2 sppStream)
    else (IRIS'ERROR %'IRIS.OBJDELETE %' (tag1 tag2]))
```

**(IRIS.OBJREPLACE**

```
[LAMBDA (t sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
                                     (SETQ sppStream IRISCONN)))]
    else (SETQ sppStream IRISCONN))
  (if t
    then (IRIS.GCMD 320 sppStream)
         (IRIS.SENDL t sppStream)
    else (IRIS'ERROR %'IRIS.OBJREPLACE %' (t]))
```

**(IRIS.ZCLEAR**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
                                     (SETQ sppStream IRISCONN)))]
    else (SETQ sppStream IRISCONN))
  (IRIS.GCMD 321 sppStream))
```

**(IRIS.CURORIGIN**

```
[LAMBDA (n xorigin yorigin sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
             (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
                                     (SETQ sppStream IRISCONN)))]
    else (SETQ sppStream IRISCONN))
  (if (AND n xorigin yorigin)
    then (IRIS.GCMD 322 sppStream)
         (IRIS.SENDS n sppStream)
         (IRIS.SENDS xorigin sppStream)
         (IRIS.SENDS yorigin sppStream)
    else (IRIS'ERROR %'IRIS.CURORIGIN %' (n xorigin yorigin]))
```

**(IRIS.PAGEWRITEMASK**

```
[LAMBDA (arg sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if arg
      then (IRIS.GCMD 323 sppStream)
            (IRIS.SENDS arg sppStream)
      else (IRIS\ERROR %'IRIS.PAGEWRITEMASK %' (arg])
```

**(IRIS.PATCHCURVES**

```
[LAMBDA (ucurves vcurves sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if (AND ucurves vcurves)
      then (IRIS.GCMD 324 sppStream)
            (IRIS.SENDL ucurves sppStream)
            (IRIS.SENDL vcurves sppStream)
      else (IRIS\ERROR %'IRIS.PATCHCURVES %' (ucurves vcurves])
```

**(IRIS.DBTEXT**

```
[LAMBDA (str sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (if str
      then (IRIS.GCMD 325 sppStream)
            (IRIS.SENDBS str 8 sppStream)
      else (IRIS\ERROR %'IRIS.DBTEXT %' (str])
```

**(IRIS.LASTONE**

```
[LAMBDA (sppStream)
  (if sppStream
    then [OR (SPPSTREAM? sppStream)
            (SETQ sppStream (fetch SPOUTSTREAM of (fetch IRISDATA of sppStream)
            else (SETQ sppStream IRISCONN))
    (IRIS.GCMD 326 sppStream])
```

**(IRIS\ERROR**

```
[LAMBDA (FNNAME FNARGS)
```

; Edited 28-Jan-87 18:57 by gbn

;;; This function breaks whenever an IRIS library function gets a null arg

```
(ERROR (CONCAT FNNAME ": some input arg is NIL" "
")
  (APPLY 'CONCAT (for ARG in FNARGS join (LIST " " ARG " = " (EVAL ARG)
  "]))
```

)

(PUTPROPS IRISLIB COPYRIGHT ("Xerox Corporation" 1985 1987))

FUNCTION INDEX

IRIS.ARC	2	IRIS.GETBUFFER	9	IRIS.PATCHBASIS	35	IRIS.RMVS	40
IRIS.ARCF	3	IRIS.GETBUTTON	9	IRIS.PATCHCURVES	48	IRIS.ROTATE	23
IRIS.ARCFI	3	IRIS.GETCMMODE	9	IRIS.PATCHPRECISION	35	IRIS.RPDR	41
IRIS.ARCFS	28	IRIS.GETCOLOR	10	IRIS.PCLOS	36	IRIS.RPDR2	41
IRIS.ARCI	3	IRIS.GETCPOS	32	IRIS.PDR	36	IRIS.RPDR2I	41
IRIS.ARCs	28	IRIS.GETCURSOR	10	IRIS.PDR2	36	IRIS.RPDR2S	42
IRIS.ATTACHCURSOR	3	IRIS.GETDCM	33	IRIS.PDR2I	36	IRIS.RPDRI	41
IRIS.BACKBUFFER	3	IRIS.GETDEPTH	10	IRIS.PDR2S	36	IRIS.RPDRS	41
IRIS.BBOX2	3	IRIS.GETDISPLAYMODE	10	IRIS.PDRI	36	IRIS.RPMV	42
IRIS.BBOX2I	4	IRIS.GETFONT	10	IRIS.PDRS	36	IRIS.RPMV2	42
IRIS.BBOX2S	28	IRIS.GETGPOS	33	IRIS.PERSPECTIVE	17	IRIS.RPMV2I	42
IRIS.BLANKSCREEN	28	IRIS.GETHEIGHT	11	IRIS.PICK	18	IRIS.RPMV2S	43
IRIS.BLINK	4	IRIS.GETHITCODE	11	IRIS.PICKSIZE	18	IRIS.RPMVI	42
IRIS.BLKQREAD	29	IRIS.GETLSBACKUP	11	IRIS.PMV	37	IRIS.RPMVS	42
IRIS.CALLFUNC	29	IRIS.GETLSREPEAT	33	IRIS.PMV2	37	IRIS.SCALE	23
IRIS.CALLOBJ	4	IRIS.GETLSTYLE	11	IRIS.PMV2I	38	IRIS.SCRMASK	24
IRIS.CHARST	46	IRIS.GETLWIDTH	11	IRIS.PMV2S	38	IRIS.SELECT	24
IRIS.CHARSTR	4	IRIS.GETMAP	12	IRIS.PMVI	38	IRIS.SETBELL	28
IRIS.CHUNKSIZE	29	IRIS.GETMATRIX	12	IRIS.PMVS	38	IRIS.SETBUTTON	24
IRIS.CIRC	4	IRIS.GETMCOLOR	29	IRIS.PNT	18	IRIS.SETCURSOR	24
IRIS.CIRCF	4	IRIS.GETMEM	33	IRIS.PNT2	18	IRIS.SETDBLIGHTS	43
IRIS.CIRCFI	5	IRIS.GETMONITOR	33	IRIS.PNT2I	18	IRIS.SETDEPTH	24
IRIS.CIRCFs	29	IRIS.GETOPENOBJ	34	IRIS.PNT2S	38	IRIS.SETLINESTYLE	24
IRIS.CIRCI	5	IRIS.GETPATTERN	47	IRIS.PNTI	18	IRIS.SETMAP	24
IRIS.CIRCS	29	IRIS.GETPLANES	12	IRIS.PNTS	38	IRIS.SETMONITOR	43
IRIS.CLEAR	5	IRIS.GETRESETLS	12	IRIS.POLARVIEW	19	IRIS.SETPATTERN	47
IRIS.CLEARHITCODE	5	IRIS.GETSCRMASK	12	IRIS.POLF	19	IRIS.SETSHADE	43
IRIS.CLKOFF	27	IRIS.GETTP	31	IRIS.POLF2	19	IRIS.SETVALUATOR	25
IRIS.CLKON	27	IRIS.GETVALUATOR	12	IRIS.POLF2I	19	IRIS.SHADERANGE	43
IRIS.CLOSEOBJ	5	IRIS.GETVIEWPORT	13	IRIS.POLF2S	37	IRIS.SINGLEBUFFER	25
IRIS.CMOV	5	IRIS.GETWRITEMASK	13	IRIS.POLFI	19	IRIS.SPCLoS	43
IRIS.CMOV2	5	IRIS.GETZBUFFER	34	IRIS.POLFS	37	IRIS.SPLF	43
IRIS.CMOV2I	5	IRIS.GEWRITE	34	IRIS.POLY	19	IRIS.SPLF2	43
IRIS.CMOV2S	30	IRIS.GRGBCOLOR	13	IRIS.POLY2	20	IRIS.SPLF2I	44
IRIS.CMOVI	6	IRIS.GRGBCURSOR	14	IRIS.POLY2I	20	IRIS.SPLF2S	44
IRIS.CMOVS	30	IRIS.GRGBMASK	14	IRIS.POLY2S	37	IRIS.SPLFI	44
IRIS.COLOR	6	IRIS.GSYNC	25	IRIS.POLYI	20	IRIS.SPLFS	44
IRIS.COMPACTIFY	30	IRIS.GVERSION	2	IRIS.POLYS	37	IRIS.STRWID	46
IRIS.CRV	31	IRIS.INITNAMES	34	IRIS.POPATTRIBUTES	20	IRIS.STRWIDTH	25
IRIS.CRVN	31	IRIS.ISOBJ	14	IRIS.POPMATRIX	20	IRIS.SWAPBUFFERS	25
IRIS.CURORIGIN	47	IRIS.ISTAG	14	IRIS.POPNAME	38	IRIS.SWAPINTERVAL	25
IRIS.CURSOFF	6	IRIS.LAMPOFF	27	IRIS.POPVIEWPORT	20	IRIS.TADELAY	28
IRIS.CURSON	6	IRIS.LAMPON	27	IRIS.PUSHATTRIBUTES	20	IRIS.TEXTCOLOR	2
IRIS.CURVEBASIS	30	IRIS.LASTONE	48	IRIS.PUSHMATRIX	20	IRIS.TEXTINIT	31
IRIS.CURVEIT	6	IRIS.LINEWIDTH	14	IRIS.PUSHNAME	39	IRIS.TEXTPORT	2
IRIS.CURVEPRECISION	30	IRIS.LOADMATRIX	15	IRIS.PUSHVIEWPORT	21	IRIS.TEXTWRITEMASK	27
IRIS.DBTEXT	48	IRIS.LOADNAME	34	IRIS.QDEVICE	30	IRIS.TIE	25
IRIS.DEFBASIS	31	IRIS.LOOKAT	15	IRIS.QENTER	21	IRIS.TPOFF	27
IRIS.DEFCURSOR	6	IRIS.LSBACKUP	15	IRIS.QREAD	21	IRIS.TPON	27
IRIS.DEFLINESTYLE	6	IRIS.LSREPEAT	34	IRIS.QRESET	21	IRIS.TRANSLATE	26
IRIS.DEFPATTERN	46	IRIS.MAKEOBJ	15	IRIS.QTEST	21	IRIS.UNQDEVICE	30
IRIS.DEFRASTERFONT	7	IRIS.MAKETAG	15	IRIS.RDR	39	IRIS.VIEWPORT	26
IRIS.DELOBJ	7	IRIS.MAPCOLOR	15	IRIS.RDR2	39	IRIS.WINDOW	26
IRIS.DELTAG	32	IRIS.MAPW	15	IRIS.RDR2I	39	IRIS.WITEMASK	26
IRIS.DEPTHcue	32	IRIS.MAPW2	16	IRIS.RDR2S	40	IRIS.WRITEPIXELS	26
IRIS.DOUBLEBUFFER	7	IRIS.MOVE	16	IRIS.RDRI	39	IRIS.WRITERGB	26
IRIS.DRAW	7	IRIS.MOVE2	16	IRIS.RDRS	39	IRIS.XFPT	44
IRIS.DRAW2	7	IRIS.MOVE2I	16	IRIS.READPIXELS	21	IRIS.XFPT2	45
IRIS.DRAW2I	7	IRIS.MOVE2S	35	IRIS.READRGB	22	IRIS.XFPT2I	45
IRIS.DRAW2S	32	IRIS.MOVEI	16	IRIS.RECT	22	IRIS.XFPT2S	45
IRIS.DRAWI	7	IRIS.MOVES	35	IRIS.RECTCOPY	40	IRIS.XFPT4	45
IRIS.DRAWS	32	IRIS.MULTIMAP	17	IRIS.RECTF	22	IRIS.XFPT4I	45
IRIS.EDITOBJ	8	IRIS.MULTMATRIX	17	IRIS.RECTFI	22	IRIS.XFPT4S	46
IRIS.ENDFEEDBACK	32	IRIS.NEWTAG	35	IRIS.RECTI	22	IRIS.XFPTI	45
IRIS.ENDPICK	8	IRIS.NOISE	17	IRIS.RESETLS	22	IRIS.XFPTS	45
IRIS.ENDSELECT	8	IRIS.OBJDELETE	47	IRIS.RGBCOLOR	23	IRIS.XGEXIT	27
IRIS.FEEDBACK	32	IRIS.OBJINSERT	47	IRIS.RGBCURSOR	23	IRIS.XGINIT	13
IRIS.FINISH	8	IRIS.OBJREPLACE	47	IRIS.RGBMODE	23	IRIS.XGRESET	13
IRIS.FONT	8	IRIS.ONEMAP	17	IRIS.RGBWRITEMASK	23	IRIS.XSETFASTCOM	1
IRIS.FRONTBUFFER	8	IRIS.ORTHO	17	IRIS.RINGBELL	28	IRIS.XSETSLowCOM	1
IRIS.GBEGIN	31	IRIS.ORTHO2	17	IRIS.RMV	40	IRIS.ZBUFFER	46
IRIS.GCONFIG	9	IRIS.PAGECOLOR	2	IRIS.RMV2	40	IRIS.ZCLEAR	47
IRIS.GDOWNLOAD	2	IRIS.PAGEWRITEMASK	48	IRIS.RMV2I	40	IRIS\ERROR	48
IRIS.GENOBJ	9	IRIS.PASSTHROUGH	35	IRIS.RMV2S	41		
IRIS.GENTAG	9	IRIS.PATCH	35	IRIS.RMVI	40		