

File created: 8-Dec-2023 21:36:09 {WMEDLEY}<lispusers>COURIERIMAGESTREAM.;2

edit by: rmk

changes to: (FNS \INITCOURIERIMAGESTREAM)
(VARS COURIERIMAGESTREAMCOMS)

previous date: 20-Jul-88 10:15:36 {WMEDLEY}<lispusers>COURIERIMAGESTREAM.;1

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

(RPAQQ **COURIERIMAGESTREAMCOMS**

```
(( * * ImageOp Functions)
 (FNS \BACKCOLOR.COURIER \BITBLT.COURIER \BLTSHADE.COURIER \BOTTOMMARGIN.COURIER \CHARSET.COURIER
 \CHARWIDTH.COURIER \CHARWIDTHY.COURIER \CLIPPINGREGION.COURIER \CLOSEFN.COURIER \COLOR.COURIER
 \COURIERIMAGESTREAM.BOUT \DEFAULTSTATE.COURIER \DRAWARC.COURIER \DRAWCIRCLE.COURIER
 \DRAWCURVE.COURIER \DRAWELLIPSE.COURIER \DRAWLINE.COURIER \DRAWPOINT.COURIER \DRAWPOLYGON.COURIER
 \FILLCIRCLE.COURIER \FILLPOLYGON.COURIER \FONT.COURIER \LEFTMARGIN.COURIER \LINEFEED.COURIER
 \MOVETO.COURIER \NEWPAGE.COURIER \OPENIMAGESTREAM.COURIER \OPERATION.COURIER \POPSTATE.COURIER
 \PUSHSTATE.COURIER \RESET.COURIER \RIGHTMARGIN.COURIER \ROTATE.COURIER \SCALE.COURIER
 \SCALEDBITBLT.COURIER \SCALE2.COURIER \SPACEFACTOR.COURIER \STRINGWIDTH.COURIER \TERPRI.COURIER
 \TOPMARGIN.COURIER \TRANSLATE.COURIER \XPOSITION.COURIER \YPOSITION.COURIER \OUTCHAR.COURIER)
 (* * Courier Server Functions)
 (FNS \COURIER.BACKCOLOR \COURIER.BITBLT \COURIER.BLTSHADE \COURIER.BOTTOMMARGIN \COURIER.CHARWIDTH
 \COURIER.CHARWIDTHY \COURIER.CLIPPINGREGION \COURIER.CLOSEIMAGESTREAM \COURIER.COLOR
 \COURIER.DEFAULTSTATE \COURIER.DRAWARC \COURIER.DRAWCIRCLE \COURIER.DRAWCURVE \COURIER.DRAWELLIPSE
 \COURIER.DRAWLINE \COURIER.DRAWPOINT \COURIER.DRAWPOLYGON \COURIER.FILLCIRCLE \COURIER.FILLPOLYGON
 \COURIER.FONT \COURIER.FONTTYPE \COURIER.LEFTMARGIN \COURIER.LINEFEED \COURIER.MOVETO
 \COURIER.NEWPAGE \COURIER.OPERATION \COURIER.OPENIMAGESTREAM \COURIER.OUTCHAR \COURIER.POPSTATE
 \COURIER.PUSHSTATE \COURIER.RESET \COURIER.RIGHTMARGIN \COURIER.ROTATE \COURIER.SCALE
 \COURIER.SCALEDBITBLT \COURIER.SCALE2 \COURIER.SPACEFACTOR \COURIER.STRINGWIDTH \COURIER.TERPRI
 \COURIER.TOPMARGIN \COURIER.TRANSLATE \COURIER.XPOSITION \COURIER.YPOSITION)
 (* * etc.)
 (FNS \INITCOURIERIMAGESTREAM READSTREAMHANDLE WRITESTREAMHANDLE)
 (INITVARS \COURIERIMAGEOPS \NULLFDEV IMAGESTREAMALST)
 (PROP COURIERDEF STREAMHANDLE)
 (GLOBALVARS \COURIERIMAGEOPS \NULLFDEV IMAGESTREAMALST)
 (DECLARE%: DONTCOPY (RECORDS COURIERIMAGEDATA))
 [ADDVARS (IMAGESTREAMTYPES (COURIER (OPENSTREAM \OPENIMAGESTREAM.COURIER)
 (FILES BITMAPFNS COURIERDEFS COURIERSERVE)
 (COURIERPROGRAMS IMAGESTREAM OLDIMAGESTREAM)
 (P (\INITCOURIERIMAGESTREAM)
 (COURIER.START.SERVER) ) ) ) )
```

(* * ImageOp Functions)

(DEFINEQ

(\ **BACKCOLOR.COURIER**

```
[LAMBDA (STREAM COLOR) (* cdl "10-Oct-85 20:56")
 (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
 (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'BACKCOLOR CIS.IMAGESTREAM COLOR])
```

(\ **BITBLT.COURIER**

```
[LAMBDA (SOURCE SOURCELEFT SOURCEBOTTOM STREAM DESTINATIONLEFT DESTINATIONBOTTOM WIDTH HEIGHT SOURCETYPE
 OPERATION TEXTURE CLIPPINGREGION) ; Edited 20-Jul-88 09:09 by cdl
 (PROG (BULK.DATA.STREAM (BITMAP (BITMAPCREATE WIDTH HEIGHT)))
 (DECLARE (SPECVARS BULK.DATA.STREAM))
 (BITBLT SOURCE SOURCELEFT SOURCEBOTTOM BITMAP)
 (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
 (SETQ BULK.DATA.STREAM (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'BITBLT CIS.IMAGESTREAM NIL
 DESTINATIONLEFT DESTINATIONBOTTOM WIDTH HEIGHT SOURCETYPE OPERATION
 TEXTURE CLIPPINGREGION))
 (RESETLST
 [RESETSAVE NIL `(CLOSEF? ,BULK.DATA.STREAM)
 (WRITEBINARYBITMAP BITMAP BULK.DATA.STREAM) ] )
```

(\ **BLTSHADE.COURIER**

```
[LAMBDA (TEXTURE STREAM LEFT BOTTOM WIDTH HEIGHT OPERATION CLIPPINGREGION) (* cdl "30-Oct-85 20:59")
 (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
 (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'BLTSHADE (SELECTQ TEXTURE
 (NIL WHITESHADE)
 (T BLACKSHADE)
 TEXTURE)
 CIS.IMAGESTREAM LEFT BOTTOM WIDTH HEIGHT OPERATION CLIPPINGREGION])
```

(\ **BOTTOMMARGIN.COURIER**

```
[LAMBDA (STREAM YPOSITION) (* cdl "10-Oct-85 20:33")
 (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
```

```
(COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'BOTTOMMARGIN CIS.IMAGESTREAM YPOSITION))
```

(\CHARSET.COURIER

```
[LAMBDA (STREAM CHARACTERSET) (* cdl "7-Nov-85 20:01")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'CHARSET CIS.IMAGESTREAM CHARACTERSET))
```

(\CHARWIDTH.COURIER

```
[LAMBDA (STREAM CHARCODE) (* cdl "26-Nov-85 17:33")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (if CIS.LOCALFONT?
      then (CHARWIDTH CHARCODE CIS.FONT)
      else (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'CHARWIDTH CIS.IMAGESTREAM CHARCODE))
```

(\CHARWIDTHY.COURIER

```
[LAMBDA (STREAM CHARCODE) (* cdl "26-Nov-85 17:55")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (if CIS.LOCALFONT?
      then (CHARWIDTHY CHARCODE CIS.FONT)
      else (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'CHARWIDTHY CIS.IMAGESTREAM CHARCODE))
```

(\CLIPPINGREGION.COURIER

```
[LAMBDA (STREAM REGION) (* cdl "10-Oct-85 20:50")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'CLIPPINGREGION CIS.IMAGESTREAM REGION))
```

(\CLOSEFN.COURIER

```
[LAMBDA (STREAM) (* cdl "10-Oct-85 19:01")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'CLOSE CIS.IMAGESTREAM))
```

(\COLOR.COURIER

```
[LAMBDA (STREAM COLOR) (* cdl "10-Oct-85 19:08")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'COLOR CIS.IMAGESTREAM COLOR))
```

(\COURIERIMAGESTREAM.BOUT

```
[LAMBDA (STREAM BYTE) (* cdl "26-Nov-85 16:50")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'OUTCHAR CIS.IMAGESTREAM BYTE))
```

(\DEFAULTSTATE.COURIER

```
[LAMBDA (STREAM) ; Edited 3-Sep-87 09:01 by cdl
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'DEFAULTSTATE CIS.IMAGESTREAM))
```

(\DRAWARC.COURIER

```
[LAMBDA (STREAM CENTERX CENTERY RADIUS ANGLE DEGREES BRUSH DASHING)
  ; Edited 3-Sep-87 08:47 by cdl
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'DRAWARC CIS.IMAGESTREAM CENTERX CENTERY RADIUS ANGLE
      DEGREES BRUSH DASHING))
```

(\DRAWCIRCLE.COURIER

```
[LAMBDA (STREAM CENTERX CENTERY RADIUS BRUSH DASHING) (* cdl "10-Oct-85 18:28")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'DRAWCIRCLE CIS.IMAGESTREAM CENTERX CENTERY RADIUS BRUSH
      DASHING))
```

(\DRAWCURVE.COURIER

```
[LAMBDA (STREAM KNOTS CLOSED BRUSH DASHING) (* cdl "21-Nov-85 18:51")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'DRAWCURVE CIS.IMAGESTREAM KNOTS CLOSED BRUSH DASHING))
```

(\DRAWELLIPSE.COURIER

```
[LAMBDA (STREAM CENTERX CENTERY SEMIMINORRADIUS SEMIMAJORRADIUS ORIENTATION BRUSH DASHING)
  (* cdl "10-Oct-85 20:23")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'DRAWELLIPSE CIS.IMAGESTREAM CENTERX CENTERY
      SEMIMINORRADIUS SEMIMAJORRADIUS ORIENTATION BRUSH DASHING))
```

(\DRAWLINE.COURIER

```
[LAMBDA (STREAM X1 Y1 X2 Y2 WIDTH OPERATION COLOR DASHING) (* cdl "10-Nov-85 17:56")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
```

```
(COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'DRAWLINE CIS.IMAGESTREAM X1 Y1 X2 Y2 WIDTH OPERATION
COLOR DASHING])
```

(\DRAWPOINT.COURIER

```
[LAMBDA (STREAM X Y BRUSH OPERATION) ; Edited 3-Sep-87 09:20 by cdl
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'DRAWPOINT CIS.IMAGESTREAM X Y BRUSH OPERATION])
```

(\DRAWPOLYGON.COURIER

```
[LAMBDA (STREAM POINTS CLOSED BRUSH DASHING) (* cdl "21-Nov-85 18:52")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'DRAWPOLYGON CIS.IMAGESTREAM POINTS CLOSED BRUSH DASHING])
```

(\FILLCIRCLE.COURIER

```
[LAMBDA (STREAM CENTERX CENTERY RADIUS TEXTURE) (* cdl "10-Oct-85 19:11")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'FILLCIRCLE CIS.IMAGESTREAM CENTERX CENTERY RADIUS TEXTURE
    ])
```

(\FILLPOLYGON.COURIER

```
[LAMBDA (STREAM POINTS TEXTURE) (* cdl "26-Nov-85 16:25")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'FILLPOLYGON CIS.IMAGESTREAM POINTS TEXTURE])
```

(\FONT.COURIER

```
[LAMBDA (STREAM FONT) (* cdl "5-Dec-85 19:15")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (PROG1 CIS.FONT
      (if (AND FONT (NEQ FONT CIS.FONT))
        then (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'FONT CIS.IMAGESTREAM FONT)
        (SETQ CIS.FONT FONT))))]
```

(\LEFTMARGIN.COURIER

```
[LAMBDA (STREAM XPOSITION) (* cdl "10-Oct-85 19:42")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'LEFTMARGIN CIS.IMAGESTREAM XPOSITION])
```

(\LINEFEED.COURIER

```
[LAMBDA (STREAM DELTAY) (* cdl "10-Oct-85 19:54")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'LINEFEED CIS.IMAGESTREAM DELTAY])
```

(\MOVETO.COURIER

```
[LAMBDA (STREAM X Y) (* cdl "10-Oct-85 19:14")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'MOVETO CIS.IMAGESTREAM X Y])
```

(\NEWPAGE.COURIER

```
[LAMBDA (STREAM) (* cdl "10-Oct-85 20:29")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'NEWPAGE CIS.IMAGESTREAM])
```

(\OPENIMAGESTREAM.COURIER

```
[LAMBDA (COURIERSTREAM OPTIONS) ; Edited 3-Sep-87 09:29 by cdl
  (* DECLARATIONS%: (RECORD PAIR
  (KEY VALUE)))

  (LET (FILE TYPE IMAGESTREAM IMAGEOPS STREAM)
    (DECLARE (GLOBALVARS DEFAULTFONT))
    [if (NULL \NULLFDEV)
      then (SETQ \NULLFDEV (create FDEV
        CLOSEFILE _ (FUNCTION NIL))
      [SETQ OPTIONS (for PAIR on OPTIONS by (CDDR PAIR) when (with PAIR PAIR (SELECTQ KEY
        (FILE (SETQ FILE VALUE)
        NIL)
        (TYPE (SETQ TYPE VALUE)
        NIL)
        T))
      join (with PAIR PAIR (LIST KEY VALUE)
      (if (NULL TYPE)
        then (SETQ TYPE 'DISPLAY))
      (SETQ IMAGESTREAM (COURIER.CALL COURIERSTREAM 'IMAGESTREAM 'OPEN FILE TYPE (MKSTRING OPTIONS T)))
      (SETQ IMAGEOPS (create IMAGEOPS
        IMFONTCREATE _ (COURIER.CALL COURIERSTREAM 'IMAGESTREAM 'FONTTYPE IMAGESTREAM)
        reusing \COURIERIMAGEOPS))
      (SETQ STREAM (create STREAM
        IMAGEDATA _ (create COURIERIMAGEDATA
        CIS.COURIERSTREAM _ COURIERSTREAM
```

```

CIS.IMAGESTREAM _ IMAGESTREAM
CIS.FONT _ (FONTCLASSCOMPONENT DEFAULTFONT (with IMAGEOPS
IMAGEOPS
IMFONTCREATE)))

IMAGEOPS _ IMAGEOPS
OUTCHARFN _ (FUNCTION \OUTCHAR.COURIER)
ACCESS _ 'OUTPUT
DEVICE _ \NULLFDEV))
(with STREAM STREAM (SETQ STRMBOUTFN (FUNCTION \COURIERIMAGESTREAM.BOUT)))
STREAM])

```

(\OPERATION.COURIER

```

[LAMBDA (STREAM OPERATION) (* cdl "10-Oct-85 20:41")
(with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
(COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'OPERATION CIS.IMAGESTREAM OPERATION])

```

(\POPSTATE.COURIER

```

[LAMBDA (STREAM) ; Edited 3-Sep-87 08:59 by cdl
(with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
(COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'POPSTATE CIS.IMAGESTREAM])

```

(\PUSHSTATE.COURIER

```

[LAMBDA (STREAM) ; Edited 3-Sep-87 08:58 by cdl
(with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
(COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'PUSHSTATE CIS.IMAGESTREAM])

```

(\RESET.COURIER

```

[LAMBDA (STREAM) (* cdl "26-Nov-85 16:42")
(with STREAM STREAM (SETQ CHARPOSITION 0)
(with COURIERIMAGEDATA IMAGEDATA (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'RESET CIS.IMAGESTREAM])

```

(\RIGHTMARGIN.COURIER

```

[LAMBDA (STREAM XPOSITION) (* cdl "10-Oct-85 19:42")
(with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
(COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'RIGHTMARGIN CIS.IMAGESTREAM XPOSITION])

```

(\ROTATE.COURIER

```

[LAMBDA (STREAM ROTATION) ; Edited 3-Sep-87 08:40 by cdl
(with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
(COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'ROTATE CIS.IMAGESTREAM ROTATION])

```

(\SCALE.COURIER

```

[LAMBDA (STREAM SCALE) (* cdl "10-Oct-85 18:47")
(with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
(COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'SCALE CIS.IMAGESTREAM SCALE])

```

(\SCALEDBITBLT.COURIER

```

[LAMBDA (SOURCE SOURCELEFT SOURCEBOTTOM STREAM DESTINATIONLEFT DESTINATIONBOTTOM WIDTH HEIGHT SOURCETYPE
OPERATION TEXTURE CLIPPINGREGION CLIPPEDSOURCELEFT CLIPPEDSOURCEBOTTOM SCALE)
; Edited 20-Jul-88 09:22 by cdl

(PROG (BULK.DATA.STREAM BITMAP)
(DECLARE (SPECVARS BULK.DATA.STREAM))
(if (NULL WIDTH)
then (SETQ WIDTH (BITMAPWIDTH SOURCE)))
(if (NULL HEIGHT)
then (SETQ HEIGHT (BITMAPHEIGHT SOURCE)))
(BITBLT SOURCE SOURCELEFT SOURCEBOTTOM (SETQ BITMAP (BITMAPCREATE WIDTH HEIGHT)))
(with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
(SETQ BULK.DATA.STREAM (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'SCALEDBITBLT CIS.IMAGESTREAM
NIL DESTINATIONLEFT DESTINATIONBOTTOM WIDTH HEIGHT SOURCETYPE
OPERATION TEXTURE CLIPPINGREGION SCALE))

(RESETLST
[RESETSAVE NIL '(CLOSEF? ,BULK.DATA.STREAM)
(WRITEBINARYBITMAP BITMAP BULK.DATA.STREAM)]))

```

(\SCALE2.COURIER

```

[LAMBDA (STREAM X Y) ; Edited 3-Sep-87 08:54 by cdl
(with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
(COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'SCALE2 CIS.IMAGESTREAM X Y])

```

(\SPACEFACTOR.COURIER

```

[LAMBDA (STREAM FACTOR) (* cdl "10-Oct-85 20:43")
(with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
(COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'SPACEFACTOR CIS.IMAGESTREAM FACTOR])

```

(\STRINGWIDTH.COURIER

```
[LAMBDA (STREAM STRING RDTBL) (* cdl "26-Nov-85 17:32")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (if CIS.LOCALFONTS?
      then (STRINGWIDTH STRING CIS.FONT)
      else (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'STRINGWIDTH CIS.IMAGESTREAM STRING]))
```

(\TERPRI.COURIER

```
[LAMBDA (STREAM) (* cdl "26-Nov-85 16:35")
  (with STREAM STREAM (SETQ CHARPOSITION 0)
    (with COURIERIMAGEDATA IMAGEDATA (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'TERPRI CIS.IMAGESTREAM]))
```

(\TOPMARGIN.COURIER

```
[LAMBDA (STREAM YPOSITION) (* cdl "10-Oct-85 20:32")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'TOPMARGIN CIS.IMAGESTREAM YPOSITION))
```

(\TRANSLATE.COURIER

```
[LAMBDA (STREAM X Y) ; Edited 3-Sep-87 08:52 by cdl
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'TRANSLATE CIS.IMAGESTREAM X Y))
```

(\XPOSITION.COURIER

```
[LAMBDA (STREAM XPOSITION) (* cdl "10-Oct-85 18:43")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'XPOSITION CIS.IMAGESTREAM XPOSITION))
```

(\YPOSITION.COURIER

```
[LAMBDA (STREAM YPOSITION) (* cdl "10-Oct-85 18:45")
  (with COURIERIMAGEDATA (with STREAM STREAM IMAGEDATA)
    (COURIER.CALL CIS.COURIERSTREAM 'IMAGESTREAM 'YPOSITION CIS.IMAGESTREAM YPOSITION))
```

(\OUTCHAR.COURIER

```
[LAMBDA (STREAM CHARCODE) (* cdl "3-Dec-85 17:47")
  [if (EQ CHARCODE (CHARCODE EOL))
    then (with STREAM STREAM (SETQ CHARPOSITION 0))
    else (freplace CHARPOSITION of STREAM with (PROGN
      (* Ugh. Don't overflow)
      (\LOLOC (\ADDBASE (ffetch CHARPOSITION of STREAM)
        1]
      (BOUT STREAM CHARCODE]))
```

)

(* * Courier Server Functions)

(DEFINEQ

(\COURIER.BACKCOLOR

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM COLOR) ; Edited 24-Mar-87 20:52 by cdl
  '(RETURN , (IMAGEOP 'IMBACKCOLOR IMAGESTREAM IMAGESTREAM COLOR))
```

(\COURIER.BITBLT

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM BULK.DATA.STREAM DESTINATIONLEFT DESTINATIONBOTTOM WIDTH
  HEIGHT SOURCTYPE OPERATION TEXTURE CLIPPINGREGION) ; Edited 24-Mar-87 20:52 by cdl
  (BITBLT (READBINARYBITMAP WIDTH HEIGHT BULK.DATA.STREAM)
    NIL NIL IMAGESTREAM DESTINATIONLEFT DESTINATIONBOTTOM WIDTH HEIGHT SOURCTYPE OPERATION TEXTURE
    CLIPPINGREGION)
  '(RETURN))
```

(\COURIER.BLTSHADE

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE TEXTURE IMAGESTREAM LEFT BOTTOM WIDTH HEIGHT OPERATION CLIPPINGREGION)
  ) (* cdl "10-Nov-85 16:36")
  (COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
  (IMAGEOP 'IMBLTSHADE IMAGESTREAM TEXTURE IMAGESTREAM LEFT BOTTOM WIDTH HEIGHT OPERATION CLIPPINGREGION)
  NIL])
```

(\COURIER.BOTTOMMARGIN

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM YPOSITION) ; Edited 24-Mar-87 20:54 by cdl
  '(RETURN , (IMAGEOP 'IMBOTTOMMARGIN IMAGESTREAM IMAGESTREAM YPOSITION))
```

(\COURIER.CHARWIDTH

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM CHARCODE) ; Edited 24-Mar-87 20:55 by cdl
  '(RETURN , (IMAGEOP 'IMCHARWIDTH IMAGESTREAM IMAGESTREAM CHARCODE))
```

(\COURIER.CHARWIDTHY

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM CHARCODE) ; Edited 24-Mar-87 20:55 by cdl
  '(RETURN , (IMAGEOP 'IMCHARWIDTHY IMAGESTREAM IMAGESTREAM CHARCODE))
```

(\COURIER.CLIPPINGREGION

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM REGION) ; Edited 24-Mar-87 20:56 by cdl
  '(RETURN , (IMAGEOP 'IMCLIPPINGREGION IMAGESTREAM IMAGESTREAM REGION))
```

(\COURIER.CLOSEIMAGESTREAM

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE HANDLE) ; Edited 24-Mar-87 20:56 by cdl
  (* DECLARATIONS%: (RECORD PAIR
    (KEY . VALUE)))

  [LET ((PAIR (ASSOC HANDLE IMAGESTREAMALST)))
    (SETQ IMAGESTREAMALST (DREMOVE PAIR IMAGESTREAMALST))
    (with PAIR PAIR (if (IMAGESTREAMTYPEP VALUE 'DISPLAY)
      then (CLOSEW VALUE)
      else (CLOSEF? VALUE)
    )
  )
  '(RETURN))
```

(\COURIER.COLOR

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM COLOR) ; Edited 24-Mar-87 20:50 by cdl
  '(RETURN , (IMAGEOP 'IMCOLOR IMAGESTREAM IMAGESTREAM COLOR))
```

(\COURIER.DEFAULTSTATE

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM) ; Edited 3-Sep-87 09:00 by cdl
  (COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
  (IMAGEOP 'IMDEFAULTSTATE IMAGESTREAM IMAGESTREAM)
  NIL])
```

(\COURIER.DRAWARC

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM X Y RADIUS ANGLE DEGREES BRUSH DASHING) ; Edited 3-Sep-87 08:46 by cdl
  (COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
  (IMAGEOP 'IMDRAWARC IMAGESTREAM IMAGESTREAM X Y RADIUS ANGLE DEGREES BRUSH DASHING)
  NIL])
```

(\COURIER.DRAWCIRCLE

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM X Y RADIUS BRUSH DASHING)
  (* cdl "10-Nov-85 16:40")
  (COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
  (IMAGEOP 'IMDRAWCIRCLE IMAGESTREAM IMAGESTREAM X Y RADIUS BRUSH DASHING)
  NIL])
```

(\COURIER.DRAWCURVE

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM KNOTS CLOSED BRUSH DASHING)
  (* cdl "21-Nov-85 19:14")
  (COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
  (IMAGEOP 'IMDRAWCURVE IMAGESTREAM IMAGESTREAM KNOTS CLOSED BRUSH DASHING)
  NIL])
```

(\COURIER.DRAWELLIPSE

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM CENTERX CENTERY SEMIMINORRADIUS SEMIMAJORRADIUS
  ORIENTATION BRUSH DASHING)
  (* cdl "10-Nov-85 16:42")
  (COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
  (IMAGEOP 'IMDRAWELLIPSE IMAGESTREAM IMAGESTREAM CENTERX CENTERY SEMIMINORRADIUS SEMIMAJORRADIUS ORIENTATION
  BRUSH DASHING)
  NIL])
```

(\COURIER.DRAWLINE

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM X Y X2 Y2 WIDTH OPERATION COLOR DASHING)
  (* cdl "10-Nov-85 17:58")
  (COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
  (IMAGEOP 'IMDRAWLINE IMAGESTREAM IMAGESTREAM X Y X2 Y2 WIDTH OPERATION COLOR DASHING)
  NIL])
```

(\COURIER.DRAWPOINT

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM X Y BRUSH OPERATION) ; Edited 3-Sep-87 09:04 by cdl
  (COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
  (IMAGEOP 'IMDRAWPOINT IMAGESTREAM IMAGESTREAM X Y BRUSH OPERATION)
  NIL])
```

(\COURIER.DRAWPOLYGON

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM POINTS CLOSED BRUSH DASHING)
  (* cdl "21-Nov-85 20:20")
  (COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
```

```
(IMAGEOP 'IMDRAWPOLYGON IMAGESTREAM IMAGESTREAM POINTS CLOSED BRUSH DASHING)
NIL])
```

(\COURIER.FILLCIRCLE

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM X Y RADIUS TEXTURE)
(* cdl "10-Nov-85 16:43")
(COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
(IMAGEOP 'IMFILLCIRCLE IMAGESTREAM IMAGESTREAM X Y RADIUS TEXTURE)
NIL])
```

(\COURIER.FILLPOLYGON

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM POINTS TEXTURE)
(* cdl "26-Nov-85 16:25")
(COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
(IMAGEOP 'IMFILLPOLYGON IMAGESTREAM IMAGESTREAM POINTS TEXTURE)
NIL])
```

(\COURIER.FONT

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM FONT) ; Edited 24-Mar-87 20:58 by cdl
'(RETURN ,(IMAGEOP 'IMFONT IMAGESTREAM IMAGESTREAM FONT])
```

(\COURIER.FONTTYPE

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM) ; Edited 24-Mar-87 20:58 by cdl
'(RETURN ,(with IMAGEOPS (with STREAM IMAGESTREAM IMAGEOPS)
IMFONTCREATE])
```

(\COURIER.LEFTMARGIN

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM XPOSITION) ; Edited 24-Mar-87 20:59 by cdl
'(RETURN ,(IMAGEOP 'IMLEFTMARGIN IMAGESTREAM IMAGESTREAM XPOSITION])
```

(\COURIER.LINEFEED

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM DELTAY) ; Edited 24-Mar-87 20:59 by cdl
'(RETURN ,(IMAGEOP 'IMLINEFEED IMAGESTREAM IMAGESTREAM DELTAY])
```

(\COURIER.MOVETO

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM X Y) (* cdl "10-Nov-85 16:46")
(COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
(IMAGEOP 'IMMOVETO IMAGESTREAM IMAGESTREAM X Y)
NIL])
```

(\COURIER.NEWPAGE

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM) (* cdl "10-Nov-85 16:47")
(COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
(IMAGEOP 'IMNEWPAGE IMAGESTREAM IMAGESTREAM)
NIL])
```

(\COURIER.OPERATION

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM OPERATION) ; Edited 24-Mar-87 20:59 by cdl
'(RETURN ,(IMAGEOP 'IMOPERATION IMAGESTREAM IMAGESTREAM OPERATION])
```

(\COURIER.OPENIMAGESTREAM

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE FILE IMAGETYPE OPTIONS) ; Edited 20-Jul-88 09:00 by cdl
(DECLARE (SPECVARS OPTIONS))
(LET (STREAM HANDLE)
(DECLARE (SPECVARS STREAM))
[SETQ OPTIONS (RESETLST
[RESETSAVE NIL '(CLOSEF? ,(SETQ STREAM (OPENSTRINGSTREAM OPTIONS 'INPUT)
(CAR (NLSETQ (READ STREAM))))])
(SETQ HANDLE (if IMAGESTREAMALST
then (ADD1 (in IMAGESTREAMALST maximize CAR))
else (ZERO)))
(push IMAGESTREAMALST (CONS HANDLE (OPENIMAGESTREAM FILE IMAGETYPE OPTIONS)))
'(RETURN ,HANDLE])
```

(\COURIER.OUTCHAR

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM CHARCODE) (* cdl " 7-Nov-85 18:49")
(COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
(\OUTCHAR IMAGESTREAM CHARCODE)
NIL])
```

(\COURIER.POPSTATE

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM) ; Edited 3-Sep-87 08:58 by cdl
```

```
(COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
(IMAGEOP 'IMPOPSTATE IMAGESTREAM IMAGESTREAM)
NIL])
```

(\COURIER.PUSHSTATE

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM) ; Edited 3-Sep-87 08:57 by cdl
(COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
(IMAGEOP 'IMPUSHSTATE IMAGESTREAM IMAGESTREAM)
NIL])
```

(\COURIER.RESET

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM) (* cdl "10-Nov-85 16:48")
(COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
(IMAGEOP 'IMRESET IMAGESTREAM IMAGESTREAM)
NIL])
```

(\COURIER.RIGHTMARGIN

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM XPOSITION)
; Edited 24-Mar-87 21:00 by cdl
'(RETURN ,(IMAGEOP 'IMRIGHTMARGIN IMAGESTREAM IMAGESTREAM XPOSITION]))
```

(\COURIER.ROTATE

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM COLOR ROTATION)
; Edited 3-Sep-87 08:38 by cdl
'(RETURN ,(IMAGEOP 'IMROTATE IMAGESTREAM IMAGESTREAM ROTATION]))
```

(\COURIER.SCALE

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM SCALE) ; Edited 24-Mar-87 21:00 by cdl
'(RETURN ,(IMAGEOP 'IMSCALE IMAGESTREAM IMAGESTREAM SCALE]))
```

(\COURIER.SCALEDBITBLT

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM BULK.DATA.STREAM DESTINATIONLEFT DESTINATIONBOTTOM WIDTH
HEIGHT SOURCETYPE OPERATION TEXTURE CLIPPINGREGION SCALE)
(* cdl "13-Nov-85 19:46")
(SCALEDBITBLT (READBINARYBITMAP WIDTH HEIGHT BULK.DATA.STREAM)
NIL NIL IMAGESTREAM DESTINATIONLEFT DESTINATIONBOTTOM WIDTH HEIGHT SOURCETYPE OPERATION TEXTURE
CLIPPINGREGION SCALE)
'(RETURN))
```

(\COURIER.SCALE2

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM X Y) ; Edited 3-Sep-87 08:53 by cdl
(COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
(IMAGEOP 'IMSCALE2 IMAGESTREAM IMAGESTREAM X Y)
NIL])
```

(\COURIER.SPACEFACTOR

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM FACTOR) ; Edited 24-Mar-87 21:01 by cdl
'(RETURN ,(IMAGEOP 'IMSPACEFACTOR IMAGESTREAM IMAGESTREAM FACTOR]))
```

(\COURIER.STRINGWIDTH

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM STRING) ; Edited 24-Mar-87 21:01 by cdl
'(RETURN ,(IMAGEOP 'IMSTRINGWIDTH IMAGESTREAM IMAGESTREAM STRING]))
```

(\COURIER.TERPRI

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM) (* cdl "10-Nov-85 16:52")
(COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
(IMAGEOP 'IMTERPRI IMAGESTREAM IMAGESTREAM)
NIL])
```

(\COURIER.TOPMARGIN

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM YPOSITION)
; Edited 24-Mar-87 21:02 by cdl
'(RETURN ,(IMAGEOP 'IMTOPMARGIN IMAGESTREAM IMAGESTREAM YPOSITION]))
```

(\COURIER.TRANSLATE

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM X Y) ; Edited 3-Sep-87 08:51 by cdl
(COURIER.RETURN COURIERSTREAM PROGRAM PROCEDURE)
(IMAGEOP 'IMTRANSLATE IMAGESTREAM IMAGESTREAM X Y)
NIL])
```

(\COURIER.XPOSITION

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM XPOSITION)
; Edited 24-Mar-87 21:02 by cdl
'(RETURN ,(IMAGEOP 'IMXPOSITION IMAGESTREAM IMAGESTREAM XPOSITION]))
```


(COURIER.YPOSITION

```
[LAMBDA (COURIERSTREAM PROGRAM PROCEDURE IMAGESTREAM YPOSITION)
; Edited 24-Mar-87 21:02 by cdl
  (RETURN , (IMAGEOP 'IMYPOSITION IMAGESTREAM IMAGESTREAM YPOSITION))
)
```

```
(* * etc.)
```

```
(DEFINEQ
```

(INITCOURIERIMAGESTREAM

```
[LAMBDA NIL
; Edited 8-Dec-2023 21:35 by rmk
; Edited 3-Sep-87 09:59 by cdl
```

```
(SETQ \COURIERIMAGEOPS (create IMAGEOPS
  IMAGETYPE _ 'COURIER
  IMCLOSEFN _ (FUNCTION \CLOSEFN.COURIER)
  IMXPOSITION _ (FUNCTION \XPOSITION.COURIER)
  IMYPOSITION _ (FUNCTION \YPOSITION.COURIER)
  IMFONT _ (FUNCTION \FONT.COURIER)
  IMLEFTMARGIN _ (FUNCTION \LEFTMARGIN.COURIER)
  IMRIGHTMARGIN _ (FUNCTION \RIGHTMARGIN.COURIER)
  IMLINEFEED _ (FUNCTION \LINEFEED.COURIER)
  IMDRAWLINE _ (FUNCTION \DRAWLINE.COURIER)
  IMDRAWCURVE _ (FUNCTION \DRAWCURVE.COURIER)
  IMDRAWCIRCLE _ (FUNCTION \DRAWCIRCLE.COURIER)
  IMFILLCIRCLE _ (FUNCTION \FILLCIRCLE.COURIER)
  IMFILLPOLYGON _ (FUNCTION \FILLPOLYGON.COURIER)
  IMBITBLT _ (FUNCTION \BITBLT.COURIER)
  IMBLTSHADE _ (FUNCTION \BLTSHADE.COURIER)
  IMMOVETO _ (FUNCTION \MOVETO.COURIER)
  IMSCALE _ (FUNCTION \SCALE.COURIER)
  INTERPRI _ (FUNCTION \TERPRI.COURIER)
  IMFONTCREATE _ 'DISPLAY
  IMCOLOR _ (FUNCTION \COLOR.COURIER)
  IMBACKCOLOR _ (FUNCTION \BACKCOLOR.COURIER)
  IMSTRINGWIDTH _ (FUNCTION \STRINGWIDTH.COURIER)
  IMCHARWIDTH _ (FUNCTION \CHARWIDTH.COURIER)
  IMCHARWIDTHY _ (FUNCTION \CHARWIDTHY.COURIER)
  IMRESET _ (FUNCTION \RESET.COURIER)
  IMDRAWPOLYGON _ (FUNCTION \DRAWPOLYGON.COURIER)
  IMSCALEDITBLT _ (FUNCTION \SCALEDITBLT.COURIER)
  IMTOPMARGIN _ (FUNCTION \TOPMARGIN.COURIER)
  IMBOTTOMMARGIN _ (FUNCTION \BOTTOMMARGIN.COURIER)
  IMNEWPAGE _ (FUNCTION \NEWPAGE.COURIER)
  IMDRAWELLIPSE _ (FUNCTION \DRAWELLIPSE.COURIER)
  IMCLIPPINGREGION _ (FUNCTION \CLIPPINGREGION.COURIER)
  IMOPERATION _ (FUNCTION \OPERATION.COURIER)
  IMSPACEFACTOR _ (FUNCTION \SPACEFACTOR.COURIER)
  IMROTATE _ (FUNCTION \ROTATE.COURIER)
  IMDRAWARC _ (FUNCTION \DRAWARC.COURIER)
  IMTRANSLATE _ (FUNCTION \TRANSLATE.COURIER)
  IMSCALE2 _ (FUNCTION \SCALE2.COURIER)
  IMPUSHSTATE _ (FUNCTION \PUSHSTATE.COURIER)
  IMPOPSTATE _ (FUNCTION \POPSTATE.COURIER)
  IMDEFAULTSTATE _ (FUNCTION \DEFAULTSTATE.COURIER)
  IMDRAWPOINT _ (FUNCTION \DRAWPOINT.COURIER))
```

(READSTREAMHANDLE

```
[LAMBDA (STREAM PROGRAM TYPE)
(* cdl "10-Nov-85 17:13"
(* DECLARATIONS%: (RECORD ITEM
(TYPENAME VALUE)))
(CDR (ASSOC (COURIER.READ STREAM PROGRAM 'UNSPECIFIED)
  IMAGESTREAMALST])
```

(WRITESTREAMHANDLE

```
[LAMBDA (STREAM ITEM PROGRAM TYPE)
(* cdl "10-Nov-85 17:13"
(COURIER.WRITE STREAM ITEM PROGRAM 'UNSPECIFIED))
```

```
(RPAQ? \COURIERIMAGEOPS NIL)
```

```
(RPAQ? \NULLFDEV NIL)
```

```
(RPAQ? IMAGESTREAMALST NIL)
```

```
(PUTPROPS STREAMHANDLE COURIERDEF (READSTREAMHANDLE WRITESTREAMHANDLE))
```

```
(DECLARE%: DOEVAL@COMPILE DONTCOPY
```

```
(GLOBALVARS \COURIERIMAGEOPS \NULLFDEV IMAGESTREAMALST)
```

```

)

(DECLARE%: DONTCOPY

(DECLARE%: EVAL@COMPILE

(RECORD COURIERIMAGEDATA (CIS.COURIERSTREAM CIS.IMAGESTREAM CIS.FONT CIS.LOCALFONTS?)
  CIS.LOCALFONTS? _ T)
)
)

(ADDTTOVAR IMAGESTREAMTYPES (COURIER (OPENSTREAM \OPENIMAGESTREAM.COURIER)))

(FILESLoad BITMAPFNS COURIERDEFS COURIERSERVE)

(COURIERPROGRAM IMAGESTREAM (1111 1)
TYPES
  [(X1 INTEGER)
   (Y1 INTEGER)
   (X2 INTEGER)
   (Y2 INTEGER)
   (ANGLE INTEGER)
   (RADIUS INTEGER)
   (SEMIMINORRADIUS INTEGER)
   (SEMIMAJORRADIUS INTEGER)
   (X NUMBER)
   (Y NUMBER)
   (LEFT NUMBER)
   (BOTTOM NUMBER)
   (WIDTH NUMBER)
   (HEIGHT NUMBER)
   (SCALE NUMBER)
   (COLOR NUMBER)
   (ROTATION NUMBER)
   (ORIENTATION NUMBER)
   (CHARACTERSET NUMBER)
   (CHARACTER CARDINAL)
   (CLOSED BOOLEAN)
   (FILE ATOM)
   (IMAGETYPE ATOM)
   (OPTIONS STRING)
   (DASHING (SEQUENCE CARDINAL))
   (KNOTS (SEQUENCE POSITION))
   (SOURCETYPE (ENUMERATION (NIL 0)
                             (INPUT 1)
                             (INVERT 2)
                             (TEXTURE 3]
INHERITS
  (INTERLISP)
PROCEDURES
  ((OPEN 0 (FILE IMAGETYPE OPTIONS)
    RETURNS
    (CARDINAL)
    REPORTS NIL IMPLEMENTEDBY \COURIER.OPENIMAGESTREAM)
  (CLOSE 1 (CARDINAL)
    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.CLOSEIMAGESTREAM)
  (DRAWLINE 2 (STREAMHANDLE X1 Y1 X2 Y2 WIDTH OPERATION COLOR DASHING)
    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.DRAWLINE)
  (DRAWCIRCLE 3 (STREAMHANDLE X1 Y1 RADIUS BRUSH DASHING)
    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.DRAWCIRCLE)
  (OUTCHAR 4 (STREAMHANDLE CHARACTER)
    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.OUTCHAR)
  (DRAWCURVE 5 (STREAMHANDLE KNOTS CLOSED BRUSH DASHING)
    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.DRAWCURVE)
  (DRAWPOLYGON 6 (STREAMHANDLE KNOTS CLOSED BRUSH DASHING)
    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.DRAWPOLYGON)
  (SCALE 7 (STREAMHANDLE SCALE)
    RETURNS
    (SCALE)
    REPORTS NIL IMPLEMENTEDBY \COURIER.SCALE)
  (XPOSITION 8 (STREAMHANDLE X)
    RETURNS
    (X)
    REPORTS NIL IMPLEMENTEDBY \COURIER.XPOSITION)
  (YPOSITION 9 (STREAMHANDLE Y)
    RETURNS
    (Y)
    REPORTS NIL IMPLEMENTEDBY \COURIER.YPOSITION)
  (COLOR 10 (STREAMHANDLE COLOR)
    RETURNS
    (COLOR)
    REPORTS NIL IMPLEMENTEDBY \COURIER.COLOR)
  (FILLCIRCLE 11 (STREAMHANDLE X1 Y1 RADIUS TEXTURE)
    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.FILLCIRCLE)
  (MOVETO 12 (STREAMHANDLE X1 Y1)
    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.MOVETO)
  (RESET 13 (STREAMHANDLE)

```

```

    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.RESET)
(BLTSHADE 14 (TEXTURE STREAMHANDLE LEFT BOTTOM WIDTH HEIGHT OPERATION REGION)
    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.BLTSHADE)
(RIGHTMARGIN 15 (STREAMHANDLE X)
    RETURNS
    (X)
    REPORTS NIL IMPLEMENTEDBY \COURIER.RIGHTMARGIN)
(LEFTMARGIN 16 (STREAMHANDLE X)
    RETURNS
    (X)
    REPORTS NIL IMPLEMENTEDBY \COURIER.LEFTMARGIN)
(TERPRI 17 (STREAMHANDLE)
    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.TERPRI)
(STRINGWIDTH 18 (STREAMHANDLE STRING)
    RETURNS
    (WIDTH)
    REPORTS NIL IMPLEMENTEDBY \COURIER.STRINGWIDTH)
(LINEFEED 19 (STREAMHANDLE Y)
    RETURNS
    (Y)
    REPORTS NIL IMPLEMENTEDBY \COURIER.LINEFEED)
(FONT 20 (STREAMHANDLE FONT)
    RETURNS
    (FONT)
    REPORTS NIL IMPLEMENTEDBY \COURIER.FONT)
(DRAWELLIPSE 21 (STREAMHANDLE X1 Y1 SEMIMINORRADIUS SEMIMAJORRADIUS ORIENTATION BRUSH DASHING)
    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.DRAWELLIPSE)
(NEWPAGE 22 (STREAMHANDLE)
    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.NEWPAGE)
(TOPMARGIN 23 (STREAMHANDLE Y)
    RETURNS
    (Y)
    REPORTS NIL IMPLEMENTEDBY \COURIER.TOPMARGIN)
(BOTTOMMARGIN 24 (STREAMHANDLE Y)
    RETURNS
    (Y)
    REPORTS NIL IMPLEMENTEDBY \COURIER.BOTTOMMARGIN)
(SPACEFACTOR 25 (STREAMHANDLE X)
    RETURNS
    (WIDTH)
    REPORTS NIL IMPLEMENTEDBY \COURIER.SPACEFACTOR)
(OPERATION 26 (STREAMHANDLE OPERATION)
    RETURNS
    (OPERATION)
    REPORTS NIL IMPLEMENTEDBY \COURIER.OPERATION)
(CHARWIDTH 27 (STREAMHANDLE CHARACTER)
    RETURNS
    (WIDTH)
    REPORTS NIL IMPLEMENTEDBY \COURIER.CHARWIDTH)
(CHARWIDTHY 28 (STREAMHANDLE CHARACTER)
    RETURNS
    (WIDTH)
    REPORTS NIL IMPLEMENTEDBY \COURIER.CHARWIDTHY)
(CLIPPINGREGION 29 (STREAMHANDLE REGION)
    RETURNS
    (REGION)
    REPORTS NIL IMPLEMENTEDBY \COURIER.CLIPPINGREGION)
(BACKCOLOR 30 (STREAMHANDLE COLOR)
    RETURNS
    (COLOR)
    REPORTS NIL IMPLEMENTEDBY \COURIER.BACKCOLOR)
(FILLPOLYGON 31 (STREAMHANDLE KNOTS TEXTURE)
    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.FILLPOLYGON)
(BITBLT 32 (STREAMHANDLE BULK.DATA.SOURCE LEFT BOTTOM WIDTH HEIGHT SOURCTYPE OPERATION TEXTURE REGION)
    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.BITBLT)
(SCALEDBITBLT 33 (STREAMHANDLE BULK.DATA.SOURCE LEFT BOTTOM WIDTH HEIGHT SOURCTYPE OPERATION TEXTURE
    REGION NUMBER)
    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.SCALEDBITBLT)
(CHARSET 34 (STREAMHANDLE CHARACTERSET)
    RETURNS
    (CHARACTERSET)
    REPORTS NIL IMPLEMENTEDBY \COURIER.CHARSET)
(FONTTYPE 35 (STREAMHANDLE)
    RETURNS
    (ATOM)
    REPORTS NIL IMPLEMENTEDBY \COURIER.FONTTYPE)
(ROTATE 36 (STREAMHANDLE ROTATION)
    RETURNS
    (ROTATION)
    REPORTS NIL IMPLEMENTEDBY \COURIER.ROTATE)
(DRAWARC 37 (STREAMHANDLE X1 Y1 RADIUS ANGLE ROTATION BRUSH DASHING)
    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.DRAWARC)
(TRANSLATE 38 (STREAMHANDLE X Y)
    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.TRANSLATE)
(SCALE2 39 (STREAMHANDLE X Y)
    RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.SCALE2)
(PUSHSTATE 40 (STREAMHANDLE)

```

```

    RETURNS NIL REPORTS NIL IMPEMETEDBY \COURIER.PUSHSTATE)
(POPSTATE 41 (STREAMHANDLE)
  RETURNS NIL REPORTS NIL IMPEMETEDBY \COURIER.POPSTATE)
(DEFAULTSTATE 42 (STREAMHANDLE)
  RETURNS NIL REPORTS NIL IMPEMETEDBY \COURIER.DEFAULTSTATE)
(DRAWPOINT 43 (STREAMHANDLE X1 Y1 BRUSH OPERATION)
  RETURNS NIL REPORTS NIL IMPEMETEDBY \COURIER.DRAWPOINT))

```

ERRORS

```

NIL)

```

```

(COURIERPROGRAM OLDIMAGESTREAM (1111 0)

```

TYPES

```

(X NUMBER)
(Y NUMBER)
(X1 INTEGER)
(Y1 INTEGER)
(X2 INTEGER)
(Y2 INTEGER)
(COLOR NUMBER)
(RADIUS CARDINAL)
(DASHING (SEQUENCE CARDINAL))
(SCALE NUMBER)
(LEFT NUMBER)
(BOTTOM NUMBER)
(WIDTH NUMBER)
(HEIGHT NUMBER)
(SEMINORRADIUS NUMBER)
(SEMIMAJORRADIUS NUMBER)
(ORIENTATION NUMBER))

```

INHERITS

```

(INTERLISP IMAGESTREAM)

```

PROCEDURES

```

((DRAWLINE 2 (STREAMHANDLE X1 Y1 X2 Y2 CARDINAL OPERATION COLOR DASHING)
  RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.DRAWLINE)
(DRAWCIRCLE 3 (STREAMHANDLE X Y RADIUS BRUSH DASHING)
  RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.DRAWCIRCLE)
(SCALE 7 (STREAMHANDLE SCALE)
  RETURNS
  (CARDINAL)
  REPORTS NIL IMPLEMENTEDBY \COURIER.SCALE)
(XPOSITION 8 (STREAMHANDLE NUMBER)
  RETURNS
  (CARDINAL)
  REPORTS NIL IMPLEMENTEDBY \COURIER.XPOSITION)
(YPOSITION 9 (STREAMHANDLE NUMBER)
  RETURNS
  (CARDINAL)
  REPORTS NIL IMPLEMENTEDBY \COURIER.YPOSITION)
(COLOR 10 (STREAMHANDLE COLOR)
  RETURNS
  (CARDINAL)
  REPORTS NIL IMPLEMENTEDBY \COURIER.COLOR)
(FILLCIRCLE 11 (STREAMHANDLE X Y RADIUS TEXTURE)
  RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.FILLCIRCLE)
(MOVETO 12 (STREAMHANDLE CARDINAL CARDINAL)
  RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.MOVETO)
(DRAWELLIPSE 21 (STREAMHANDLE X Y SEMINORRADIUS SEMIMAJORRADIUS ORIENTATION BRUSH DASHING)
  RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.DRAWELLIPSE)
(BITBLT 32 (STREAMHANDLE BULK.DATA.SOURCE LEFT BOTTOM WIDTH HEIGHT ATOM OPERATION TEXTURE REGION)
  RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.BITBLT)
(SCALEDBITBLT 33 (STREAMHANDLE BULK.DATA.SOURCE LEFT BOTTOM WIDTH HEIGHT ATOM OPERATION TEXTURE REGION
  NUMBER)
  RETURNS NIL REPORTS NIL IMPLEMENTEDBY \COURIER.SCALEDBITBLT)
(CHARSET 34 (STREAMHANDLE NUMBER)
  RETURNS
  (CARDINAL)
  REPORTS NIL IMPLEMENTEDBY \COURIER.CHARSET))

```

ERRORS

```

NIL)

```

```

(\\INITCOURIERIMAGESTREAM)

```

```

(COURIER.START.SERVER)

```

FUNCTION INDEX

READSTREAMHANDLE	9	\COURIER.FILLPOLYGON	7	\DRAWELLIPSE.COURIER	2
WRITESTREAMHANDLE	9	\COURIER.FONT	7	\DRAWLINE.COURIER	2
\BACKCOLOR.COURIER	1	\COURIER.FONTTYPE	7	\DRAWPOINT.COURIER	3
\BITBLT.COURIER	1	\COURIER.LEFTMARGIN	7	\DRAWPOLYGON.COURIER	3
\BLTSHADE.COURIER	1	\COURIER.LINEFEED	7	\FILLCIRCLE.COURIER	3
\BOTTOMMARGIN.COURIER	1	\COURIER.MOVETO	7	\FILLPOLYGON.COURIER	3
\CHARSET.COURIER	2	\COURIER.NEWPAGE	7	\FONT.COURIER	3
\CHARWIDTH.COURIER	2	\COURIER.OPENIMAGESTREAM	7	\INITCOURIERIMAGESTREAM	9
\CHARWIDTHY.COURIER	2	\COURIER.OPERATION	7	\LEFTMARGIN.COURIER	3
\CLIPPINGREGION.COURIER	2	\COURIER.OUTCHAR	7	\LINEFEED.COURIER	3
\CLOSEFN.COURIER	2	\COURIER.POPSTATE	7	\MOVETO.COURIER	3
\COLOR.COURIER	2	\COURIER.PUSHSTATE	8	\NEWPAGE.COURIER	3
\COURIER.BACKCOLOR	5	\COURIER.RESET	8	\OPENIMAGESTREAM.COURIER	3
\COURIER.BITBLT	5	\COURIER.RIGHTMARGIN	8	\OPERATION.COURIER	4
\COURIER.BLTSHADE	5	\COURIER.ROTATE	8	\OUTCHAR.COURIER	5
\COURIER.BOTTOMMARGIN	5	\COURIER.SCALE	8	\POPSTATE.COURIER	4
\COURIER.CHARWIDTH	5	\COURIER.SCALE2	8	\PUSHSTATE.COURIER	4
\COURIER.CHARWIDTHY	6	\COURIER.SCALEDBITBLT	8	\RESET.COURIER	4
\COURIER.CLIPPINGREGION	6	\COURIER.SPACEFACTOR	8	\RIGHTMARGIN.COURIER	4
\COURIER.CLOSEIMAGESTREAM	6	\COURIER.STRINGWIDTH	8	\ROTATE.COURIER	4
\COURIER.COLOR	6	\COURIER.TERPRI	8	\SCALE.COURIER	4
\COURIER.DEFAULTSTATE	6	\COURIER.TOPMARGIN	8	\SCALE2.COURIER	4
\COURIER.DRAWARC	6	\COURIER.TRANSLATE	8	\SCALEDBITBLT.COURIER	4
\COURIER.DRAWCIRCLE	6	\COURIER.XPOSITION	8	\SPACEFACTOR.COURIER	4
\COURIER.DRAWCURVE	6	\COURIER.YPOSITION	9	\STRINGWIDTH.COURIER	4
\COURIER.DRAWELLIPSE	6	\COURIERIMAGESTREAM.BOUT	2	\TERPRI.COURIER	5
\COURIER.DRAWLINE	6	\DEFAULTSTATE.COURIER	2	\TOPMARGIN.COURIER	5
\COURIER.DRAWPOINT	6	\DRAWARC.COURIER	2	\TRANSLATE.COURIER	5
\COURIER.DRAWPOLYGON	6	\DRAWCIRCLE.COURIER	2	\XPOSITION.COURIER	5
\COURIER.FILLCIRCLE	7	\DRAWCURVE.COURIER	2	\YPOSITION.COURIER	5

VARIABLE INDEX

IMAGESTREAMALST	9	IMAGESTREAMTYPES	10	\COURIERIMAGEOPS	9	\NULLFDEV	9
-----------------------	---	------------------------	----	------------------------	---	-----------------	---

COURIERPROGRAM INDEX

IMAGESTREAM	10	OLDIMAGESTREAM	12
-------------------	----	----------------------	----

RECORD INDEX

COURIERIMAGEDATA	10
------------------------	----

PROPERTY INDEX

STREAMHANDLE	9
--------------------	---
