KbdXlate

Bindings: C, MASM

This call translates scan codes with shift states into ASCII codes.

KbdXlate (XlateRecord, KbdHandle)

XlateRecord (**PKBDTRANS**) - input Address of the translation record structure:

chardata (**KBDKEYINFO**) Character data information structure as defined in *KbdCharIn* call.

kbdflag (**USHORT**) See the *KbdDDFlagWord* call in the “Keyboard Device Driver” section of IBM Operating System/2 Version 1.2 I/O Subsystems And Device Support Volume 1.

xlate (**USHORT**) Translation flag:

Value	Definition
0	Translation incomplete.
1	Translation complete.

xlatestate1 (**USHORT**) Identifies the state of translation across successive calls; initially the value should be zero. It may take several calls to this function to complete a character. The value should not be changed unless a new translation is required, that is, reset value to zero.

xlatestate2 (**USHORT**) See description for *xlatestate1*.

KbdHandle (**HKBD**) - input Default keyboard or the logical keyboard.

rc (**USHORT**) - return Return code descriptions are:

0	NO_ERROR
439	ERROR_KBD_INVALID_HANDLE
445	ERROR_KBD_FOCUS_REQUIRED
447	ERROR_KBD_KEYBOARD_BUSY
464	ERROR_KBD_DETACHED
504	ERROR_KBD_EXTENDED_SG

Remarks

It may take several calls to complete a translation because of accent key combinations, or other complex operations.

The *Xlatestate1* and *Xlatestate2* are for use by the keyboard translation routines. These fields are reserved and must only be accessed by the caller prior to starting a translation sequence and then they must be set to zero. The *KbdXlate* function is intended to be used for translating a particular scan code for a given shift state. The *KbdXlate* function is not intended to be a replacement for the OS/2 system keystroke translation function.

C bindings

```
typedef struct _KBDTRANS {    /* kbxl */
  UCHAR      chChar;          /* ASCII character code */
  UCHAR      chScan;          /* Scan code */
  UCHAR      fbStatus;        /* State of the character */
  UCHAR      bNlsShift;       /* Shift status (reserved set to zero) */
  USHORT     fsState;         /* Shift state */
  ULONG      time;
  USHORT     fsDD;
  USHORT     fsXlate;
  USHORT     fsShift;
  USHORT     sZero;
} KBDTRANS;

#define INCL_KBD

USHORT  rc = KbdXlate(XlateRecord, KbdHandle);

PKBDTRANS        XlateRecord;   /* Translation Record */
HKBD             KbdHandle;     /* Keyboard handle */

USHORT           rc;            /* return code
```

MASM bindings

```
KBDTRANS struc
  kbxl_chChar    db  ? ;ASCII character code
  kbxl_chScan    db  ? ;scan code
  kbxl_fbStatus  db  ? ;State of the character
  kbxl_bNlsShift db  ? ;shift status (reserved set to zero)
  kbxl_fsState   dw  ? ;shift state
  kbxl_time      dd  ?
  kbxl_fsDD      dw  ?
  kbxl_fsXlate   dw  ?
  kbxl_fsShift   dw  ?
  kbxl_sZero     dw  ?
KBDTRANS ends

EXTRN  KbdXlate:FAR
INCL_KBD            EQU 1

PUSH@  OTHER   XlateRecord   ;Translation Record
PUSH   WORD    KbdHandle     ;Keyboard handle
CALL   KbdXlate

Returns WORD
```