

# GTCO CALCOMP ADB COMMANDS

## ***ADB FEATURES station and ultraslate products***

ADB unit powers up as a mouse and driver switches to tablet mode when talk r2 is received (note units release before 7/1/98 switched on talk r1).  
Inc run at 1000 lpi with extended data enabled.

### ***ADB FORMATS***

The unit powers up as both a mouse and tablet. Only one of the two devices is active at any one time. The mouse is the default. To change over to the tablet you must issue a (talk reg 1 pre july 98 firmware ) reg 2(post july 98 firmware) to address 4 or the current tablet address. ADDRESS 3

#### REG 0 MOUSE FORMAT

BYTE	B	B6	B5	B4	B3	B2	B1	B0
1	TIP	DY6	DY5	DY4	DY3	DY2	DY1	DY0
2	1	DX6	DX5	DX4	DX3	DX2	DX1	DX0

#### ADDRESS 4 REG 0 TABLET FORMAT

BYTE	B7	B6	B5	B4	B3	B2	B1	B0
1	PROX	Y14	Y13	Y12	Y11	Y10	Y9	Y8
2	Y7	Y6	Y5	Y4	Y3	Y2	Y1	Y0
3	X15	X14	X13	X12	X11	X10	X9	X8
4	X7	X6	X5	X4	X3	X2	X1	X0
5	00=TILT 01=HIGHT 10=PRSSURE 11= SPEICAL DATA		BD	B3	B2	B1	B0	P8
6	P7 XTILT =0 YTILT =1 H7	P6 T6  H6 SP2	P5 T5  H5 SP1	P4 T4  H4 SP0	P3 T3  H3 TYP E3	P2 T2  H2 TYPE2	P1 T1  H1 TYPE1	P0 T0  H0 TYPE0

	SP3							
7IF ENABLED	SAME DATA AS MOUSE FOR THESE TWO BYTES IE DELTA AT 100 LPI BD REFLECTS ALL BUTTONS							
8 IF ENABLED								

Pn = pressure bits Tn = TILT BITS Bn = button bits(16 button) BD = BUTTONS DOWN

Note AT 1000 lpi. prox 1=out 0=in transducer type 000 = pressure pen 001= MOUSE 011 16 BUTTON CURSOR

100 = UNKNOWN ELSE RESERVED HEIGHT DATA WHEN BYTE 5 0XXXXXX1 TILT= 0XXXXXX0

PENS OR MOUSE 4 button cursor

BUTTON	43210	BUTTON	43210	BUTTON	43210	BUTTON	43210
Up	00000						
0	10001	0+1	10011	1+3	11010	0+2+3	11101
1	10010	0+2	10101	2+3	11100	1+2+3	11110
2	10100	0+3	11001	0+1+2	10111	1+2+3+0	11111
3	11000	1+2	10110	0+1+3	11011		

5 button mouse button cursor tbd

BUTTON	43210
Up	00000
LEFT	XXXX1
RIGHT	XXX1X
FRONT	XX1XX
SIDE	1XXXX

BACK	X1XXX
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SPECIAL DATA FIELD

0000 0000 PEN  
 0000 0001 reserved  
 0000 0010 4 button cursor (tbd)  
 0000 0011 16 BUTTON CURSOR  
 0000 0100 UNKNOWN  
 0000 0101 click tip pen  
 0000 0110 4 button cursor square buttons IBM style  
 0000 0111 5 button mouse  
 0000 1XXX RESERVED  
 0001 0000 REREAD SIZE INFORMATION (NOT ON THIS PRODUCT but  
 if ADB/RS232 box )  
 OTHERS CODES RESERVED

REGISTER 01 OUTPUT

	B7	B6	B5	B4	B3	B2	B1	B0
1	TYPE							
2	SUBTYPE							
3	REV	-	-	-	-	-	-	-
4	X IN .5 INCH-	-	-	-	-	-	-	X DIM
5	Y IN .5 INCH	-	-	-	-	-	-	-

type = 1 is Ultraslate  
 type = 2 is ADB box  
 type = 3 creation station  
 type = 4 creation station pro ,design station pro  
 SUB TYPE 0 = 4X5  
 SUB TYPE 1 = 6x9  
 SUB TYPE 2 = 12X12  
 SUB TYPE 3 = 12x18

INTERFACE: ADB (APPLE DESKTOP BUS)

BUS ADDRESS: 04

HANDLER ID: 64 (40 HEX)

OPERATING MODE: RUN INCREMENT

IE On change in data by 2 count or change in button state a service request is generated; a data pair will be available on the next read.

talk r2

	msb	lsb	
byte 1	0 1	x x x y y y	offset
byte 2	0 1	x x x y y y	mouse
byte 3	0 1	x x x y y y	cursor
byte 4	0 1	x x x y y y	pen
byte 5	0 0 0 0 0 0 0 0		reserved
byte 6	0 0 0 0 0 0 0 0		reserved
byte 7	0 0 0 0 0 0 0 0		reserved
byte 8	0 0 0 0 0 0 0 0		reserved