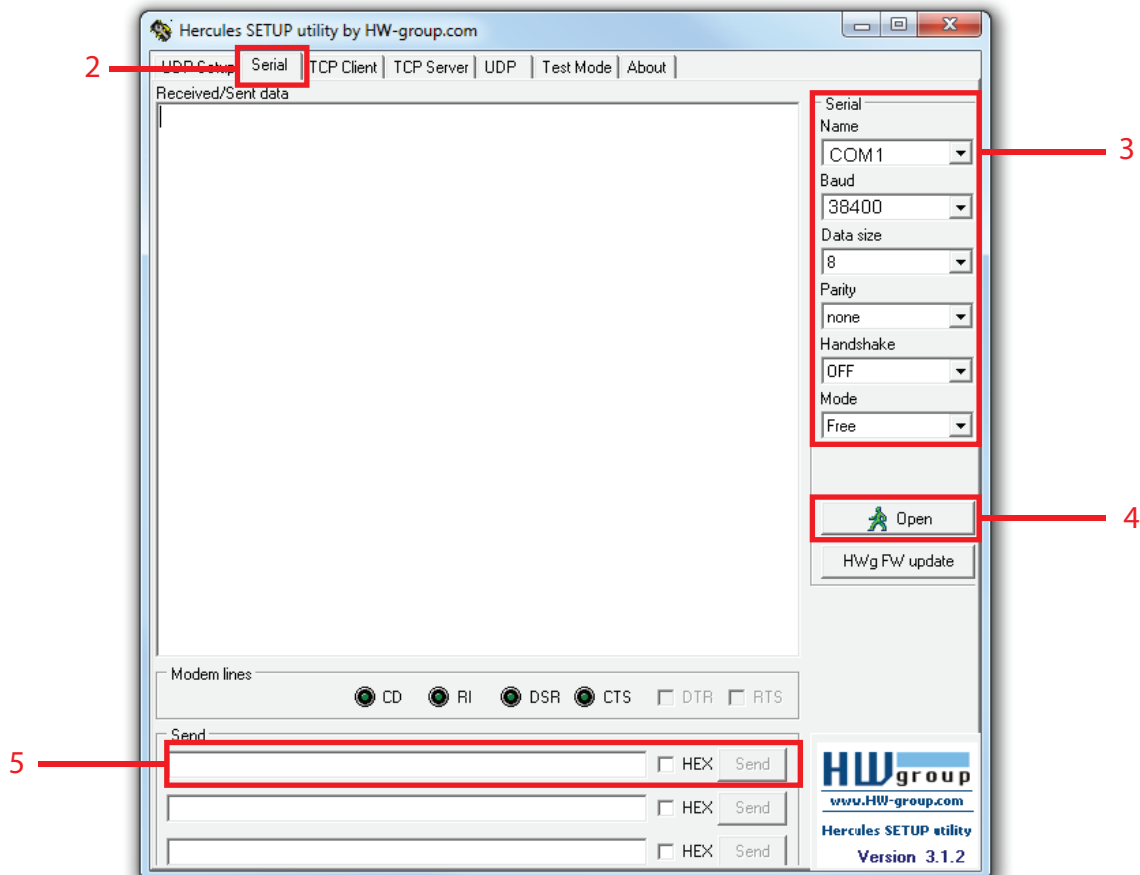


RS232 operating instructions...

1. Connect the RS232 output from the PC to the TV and power both on
2. Open the 'hercules.exe' programme on your PC and select the 'Serial' tab
3. Set the data on the right hand side to
 - Name : COM1
 - Baud : 38400
 - Data size : 8
 - Parity : none
 - Handshake : OFF
 - Mode : Free
4. Click on the 'open' button and if the settings are correct and your TV is connected to your PC correctly then you should see the following message 'Serial port COM1 opened'.
5. Enter the appropriate hex codes (shown in this document) at the bottom of the screen in the area headed up with 'Send'. Ensure the HEX tick box is checked then click 'Send' to pass this command to the TV.



POWER

(A0 F0 55 FF D7 28)

MUTE

(A0 F0 55 FF DF 20)

VOL+

(A0 F0 55 FF 83 7C)

AUDIO

(A0 F0 55 FF 82 70)

ZOOM

(A0 F0 55 FF 81 7E)

CH+

(A0 F0 55 FF 80 7F)

VOL-

(A0 F0 55 FF 86 79)



(A0 F0 55 FF 92 6D)

CH-

(A0 F0 55 FF 8E 71)



(A0 F0 55 FF 97 68)

ENTER

(A0 F0 55 FF 9B 64)



(A0 F0 55 FF 9F 60)

MENU

(A0 F0 55 FF D4 2B)



(A0 F0 55 FF D8 27)

EXIT

(A0 F0 55 FF DC 23)

1

(A0 F0 55 FF 95 6A)

2

(A0 F0 55 FF 99 66)

3

(A0 F0 55 FF 9D 62)

4

(A0 F0 55 FF D6 29)

5

(A0 F0 55 FF DA 25)

6

(A0 F0 55 FF DE 21)

7

(A0 F0 55 FF 96 69)

8

(A0 F0 55 FF 9A 65)

9

(A0 F0 55 FF 9E 61)

0

(A0 F0 55 FF D9 26)

-/--

(A0 F0 55 FF D5 2A)

O

(A0 F0 55 FF DD 22)

INPUT
(A0 F0 55 FF C3 3C)

P-MODE
(A0 F0 55 FF C2 3D)

S-MODE
(A0 F0 55 FF C1 3E)

SLEEP
(A0 F0 55 FF CD 3F)

INFO
(A0 F0 55 FF C7 38)

FAV
(A0 F0 55 FF C6 39)

TV/RADIO
(A0 F0 55 FF C5 3A)

EPG
(A0 F0 55 FF C4 3B)

TEXT
(A0 F0 55 FF CB 34)

HOLD
(A0 F0 55 FF CA 35)

LANG
(A0 F0 55 FF C9 36)

SUBTITLE
(A0 F0 55 FF C8 37)

INDEX
(A0 F0 55 FF CF 30)

SIZE
(A0 F0 55 FF CE 31)

REVEAL
(A0 F0 55 FF CD 32)

SUBPAGE
(A0 F0 55 FF CC 33)


(A0 F0 55 FF D3 2C)


(A0 F0 55 FF D2 2D)


(A0 F0 55 FF D1 2E)


(A0 F0 55 FF D0 2F)

POWER ON
(A0, F0, 55, FF, a8, 57)

POWER OFF
(A0, F0, 55, FF, a9, 56)

AV
(A0, F0, 55, FF, a0, 5f)

HDMI 1
(A0, F0, 55, FF, A1, 5e)

HDMI 2
(A0, F0, 55, FF, Ab, 54)

PC
(A0, F0, 55, FF, a3, 5c)

DTV
(A0, F0, 55, FF, a4, 5b)





ATV
(A0, F0, 55, FF, a5, 5a)

COMPONENT
(A0, F0, 55, FF, A6, 59)

USB
(A0, F0, 55, FF, Aa, 55)




IC Protocol: NEC

Custom code: 08F7

		Data Code				Data Code	
Name	Key No.	HEX	BINARY	NAME	Key No.	HEX	BINARY
	K1	D7	1110 1011	MENU	K15	D4	0010 1011
	K4	DF	1111 1011	▼	K16	D8	0001 1011
CH+	K5	80	0000 0001	EXIT	K17	DC	0011 1011
ZOOM	K6	81	0001 1000	4	K18	D6	0110 1011
AUDIO	K7	82	0100 0001	3	K19	9D	1011 1001
VOL+	K8	83	1100 0001	2	K20	99	1001 1001
VOL-	K9	86	0110 0001	1	K21	95	1010 1001
▲	K10	92	0100 1001	5	K22	DA	0101 1011
CH-	K11	8E	0111 0001	6	K23	DE	0111 1011
➤	K12	9F	1111 1001	7	K24	96	0110 1001
	K13	9B	1101 1001	8	K25	9A	0101 1001
◀	K14	97	1110 1001		K26	DD	1011 1011

IC Protocol: NEC

Custom code: 08F7

		Data Code				Data Code		
Name	Key No.	HEX	BINARY		NAME	Key No.	HEX	BINARY
-/--	K27	D5	1010 1011		HOLD	K39	CA	0101 0011
0	K28	D9	1001 1011		LANG	K40	C9	1001 0011
9	K29	9E	0111 1001		SUBTITLE	K41	C8	0001 0011
INPUT	K30	C3	1100 0011		SUBPAGE	K42	CC	0011 0011
P-MODE	K31	C2	0100 0011		REVEAL	K43	CD	1011 0011
S-MODE	K32	C1	1000 0011		SIZE	K44	CE	0111 0011
SLEEP	K33	C0	0000 0011		INDEX	K45	CF	1111 0011
EPG	K34	C4	0010 0011			K46	D3	1100 1011
TV/RADIO	K35	C5	1010 0011			K47	D2	0100 1011
FAV	K36	C6	0110 0011			K48	D1	1000 1011
INFO	K37	C7	1110 0011			K49	D0	0000 1011
TEXT	K38	CB	1101 0011					