

Communication Protocol for the FC-400:

1. RS-232 using NULL MODEM at 9600 baud.
2. Command structure is 4 bytes.

First byte options:

	DEC	HEX	
1.	128	80	RESET VIDEO
2.	160	A0	READ PARAMETER
3.	161	A1	WRITE PARAMETER
4.	189	BD	IDENTIFY MACHINE
5.	33	21	Set (for the rest of commands)

Second byte is the command type (7 bits + 80 HEX).

Third byte is the parameter value (7 bits + 80 HEX).

Byte 4 is the machine address: can be 98 or 99 (in HEX).

Note:

1. When working in HEX, add 80 to the values in the table.
2. When working in DEC, add 128 to the values in the table.
3. All values in the table are in DEC.

Byte 2	Command Description	Byte 3 (parameter value)
0	INPUT FORMAT	0 - CV 1 - YC 2 - YUV
1	INPUT_STANDARD	0 - PAL B 1 - PAL N 2 - PAL M 3 - NT 3 4 - NT 4 5 - SEC
21	OUTPUT_STANDARD (Read only)	0 - PAL B 3 - NT 3
22	GENLOCK	0 - OFF 1 - ON
23	PANEL_LOCK	0 - OFF 1 - ON
28	GENLOCK_STAT (Read only)	0 - No genlock 1 - Genlock
32	NO_INPUT_DETECT (Read only)	0 - Input detected 1 - No input signal

First byte = I; Second byte = D; Third byte = E

MACHINE TO PC:

-----MACHINE POWER-UP-----

From machine: I = 0; D = 0; E = 0
I = 33; D = 0; E = INPUT FORMAT
I = 33; D = 22; E = GENLOCK STATUS
I = 33; D = 0; E = PANEL LOCK STATUS

-----CHANGE MADE VIA FRONT PANEL KEYS-----

From machine: I = 33; D = PARAMETER NUMBER; E = PARAMETER

PC TO MACHINE:

-----RESET VIDEO (PSEUDO POWER UP)-----

From PC: I = 0; D = 0; E = 0
From machine: I = 0; D = 0; E = 0

-----PARAMETER READ-----

From PC: I = 32; D = PARAMETER NUMBER; E = 0
From machine: I = 32; D = PARAMETER NUMBER; E = PARAMETER

-----PARAMETER WRITE-----

From PC: I = 33; D = PARAMETER NUMBER; E = PARAMETER
From machine: I = 33; D = PARAMETER NUMBER; E = PARAMETER

-----IDENTIFY MACHINE-----

-----MACHINE NAME-----

From PC: I = 61; D = 1; E = 0
From machine: I = 61; D = MACH. NAME HIGH; E = MACH. NAME LOW

-----SOFTWARE VERSION-----

From PC: I = 61; D = 3; E = 0
From machine: I = 61; D = S/WARE VER. HIGH; E = S/WARE VER. LOW

Examples:

1. Select CV input format: H21 H80 H80 H98
Unit response: H61 H80 H80 H98
2. Reset: H80 H80 H80 H98