

1.1 Location

Panorama 2 can be controlled via the “service port”. This is basically a RS232 connection with non-standard connector and voltage levels.

Panorama 2 has the service port located on the rear connector panel. It is indicated by the word “service”. This port accepts a 3.5mm stereo jack. See Figure 1.

1.2 Interface for Panorama 2 service port

A small interface is required to convert the Panorama 2 service port signals to standard RS232 signals and physical DB-9 connector. See Figure 1.

1.3 RS232 Communication Parameters

The RS232 parameters settings are:

- 19200 baud
- 8 databits
- No parity
- 1 stopbit
- no handshaking

1.4 Command Protocol

Panorama 2 can be controlled by sending strings of characters via the service port. Every string consists of:

- 1 character indicating the command
- body with variable number of characters
- <CR>
- <LF> (optional)

1.5 Command List

Each command strings should be terminated with <CR> and optionally <LF>.

Following commands are used to request information from Panorama 2:

Command	Description
R1	On/standby toggle
R2	Volume up (1 step)
R3	Mute toggle
R5	Mode toggle (Cinema - Music)
R6	Volume down (1 step)
R7	Input toggle (IN 1, 2, 3, 4, 5)
R8	Night mode toggle
R:	Select IN1
R;	Select IN2
R<	Select IN3

Command	Description
R=	Select IN4
R>	Select IN5
R?	Standby
R@	On
RB	Music
RC	Cinema
RD	Mute off
RE	Mute on
RF	Night mode off
RG	Night mode on
K0	Keylock disable (local and remote keys)
K1	Keylock activated (local and remote keys) (*)
K2	Keyboard disable (local and remote keys) stored (**)
K3	Keyboard enable (local and remote keys) stored (**)
vx (*)	Set volume directly to x (**)

Command	Description	Answer from Panorama 2
N	Ask for firmware version	N2xx2yyzz xx = version of microcontroller yy = version of DPS zz = not used (will show ‘--’)
Q	Status request	Qaxcdef a = power state: “0” = standby, “1” is on x = volume (**) “0” = 0, “R” = 34 c = mute: “0” is normal, “1” is muted d = input: “1” = IN1, “2” = IN2 etc. e = mode: “1” = music, “2” = cinema f = night mode: “0” = night mode off, “1” = night mode on“

(*) This setting is not remembered after mains disconnect (not stored in permanent memory). After poweron, the keys are always enabled.

(**) “x” is the ASCII character of (vol + 48) (vol is a value between 0 and 34)
Example: set volume 18: **vB** <CR>

(***) only present from serial number 0003776 onwards

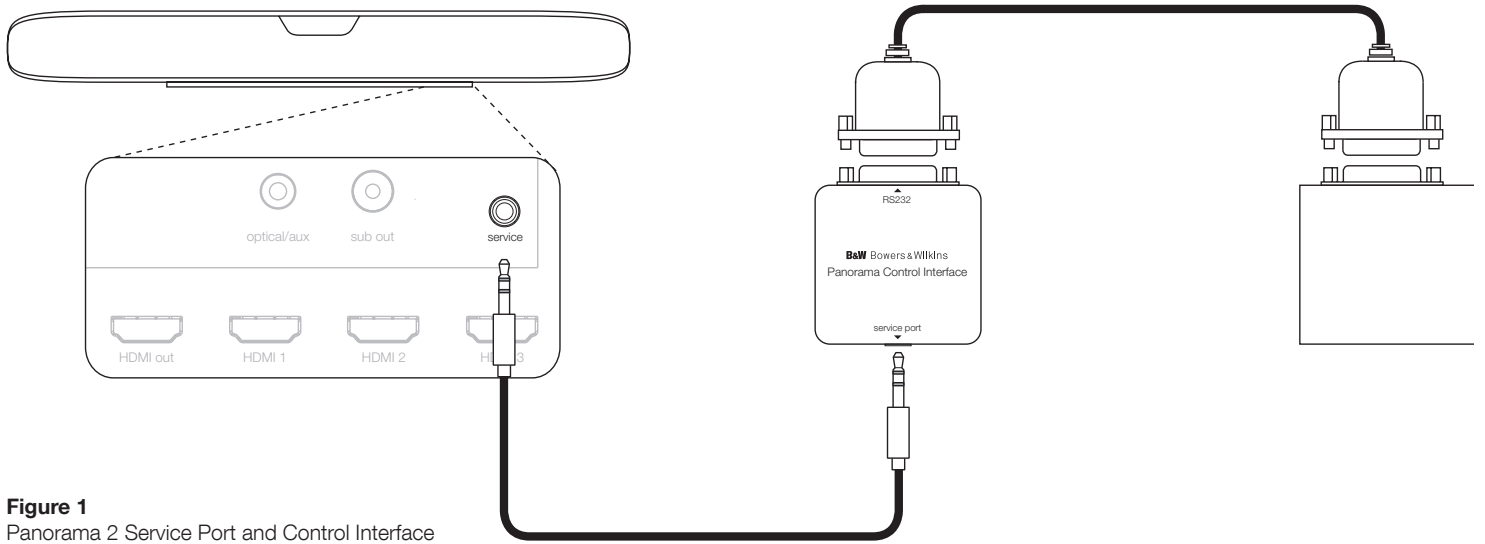


Figure 1
Panorama 2 Service Port and Control Interface

IR Command Codes

Function	Manufacturer (System) code - HEX	Command code - HEX	Manufacturer (System) code - DECIMAL	Command code - DECIMAL
Power On	D3	1C	211	28
Power Off	D3	1D	211	29
Mute	D3	1E	211	30
Unmute	D3	1F	211	31
Input 1	D3	20	211	32
Input 2	D3	21	211	33
Input 3	D3	22	211	34
Input 4	D3	23	211	35
Input 5	D3	24	211	36
Cinema mode	D3	25	211	37
Music mode	D3	26	211	38