

Appendix C

HDMI Display Modes

YOU CAN USE the values in Table C-1 and Table C-2 with the `hdmi_mode` option in `config.txt` to alter the HDMI video output format. For more information, see Chapter 7, “Advanced Raspberry Pi Configuration”.

Table C-1 HDMI Group 1 (CEA)

Value	Description
1	VGA (640×480)
2	480p 60 Hz
3	480p 60 Hz (16:9 aspect ratio)
4	720p 60 Hz
5	1080i 60 Hz
6	480i 60 Hz
7	480i 60 Hz (16:9 aspect ratio)
8	240p 60 Hz
9	240p 60 Hz (16:9 aspect ratio)
10	480i 60 Hz (Pixel quadrupling enabled)
11	480i 60 Hz (Pixel quadrupling enabled) (16:9 aspect ratio)
12	240p 60 Hz (Pixel quadrupling enabled)
13	240p 60 Hz (Pixel quadrupling enabled) (16:9 aspect ratio)

continued

Table C-1 continued

Value	Description
14	480p 60 Hz (Pixel doubling enabled)
15	480p 60 Hz (Pixel doubling enabled) (16:9 aspect ratio)
16	1080p 60 Hz
17	576p 50 Hz
18	576p 50 Hz (16:9 aspect ratio)
19	720p 50 Hz
20	1080i 50 Hz
21	576i 50 Hz
22	576i 50 Hz (16:9 aspect ratio)
23	288p 50 Hz
24	288p 50 Hz (16:9 aspect ratio)
25	576i 50 Hz (Pixel quadrupling enabled)
26	576i 50 Hz (Pixel quadrupling enabled) (16:9 aspect ratio)
27	288p 50 Hz (Pixel quadrupling enabled)
28	288p 50 Hz (Pixel quadrupling enabled) (16:9 aspect ratio)
29	576p 50 Hz (Pixel doubling enabled)
30	576p 50 Hz (Pixel doubling enabled) (16:9 aspect ratio)
31	1080p 50 Hz
32	1080p 24 Hz
33	1080p 25 Hz
34	1080p 30 Hz
35	480p 60 Hz (Pixel quadrupling enabled)
36	480p 60 Hz (Pixel quadrupling enabled) (16:9 aspect ratio)
37	576p 50 Hz (Pixel quadrupling enabled)
38	576p 50 Hz (Pixel quadrupling enabled) (16:9 aspect ratio)
39	1080i 50 Hz (Reduced blanking)

Value	Description
40	1080i 100 Hz
41	720p 100 Hz
42	576p 100 Hz
43	576p 100 Hz (16:9 aspect ratio)
44	576i 100 Hz
45	576i 100 Hz (16:9 aspect ratio)
46	1080i 120 Hz
47	720p 120 Hz
48	480p 120 Hz
49	480p 120 Hz (16:9 aspect ratio)
50	480i 120 Hz
51	480i 120 Hz (16:9 aspect ratio)
52	576p 200 Hz
53	576p 200 Hz (16:9 aspect ratio)
54	576i 200 Hz
55	576i 200 Hz (16:9 aspect ratio)
56	480p 240 Hz
57	480p 240 Hz (16:9 aspect ratio)
58	480i 240 Hz
59	480i 240 Hz (16:9 aspect ratio)

Table C-2 HDMI Group 2 (DMT)

Value	Description
1	640×350 85 Hz
2	640×400 85 Hz
3	720×400 85 Hz

continued

Table C-2 continued

Value	Description
4	640×480 60 Hz
5	640×480 72 Hz
6	640×480 75 Hz
7	640×480 85 Hz
8	800×600 56 Hz
9	800×600 60 Hz
10	800×600 72 Hz
11	800×600 75 Hz
12	800×600 85 Hz
13	800×600 120 Hz
14	848×480 60 Hz
15	1024×768 43 Hz, incompatible with the Raspberry Pi
16	1024×768 60 Hz
17	1024×768 70 Hz
18	1024×768 75 Hz
19	1024×768 85 Hz
20	1024×768 120 Hz
21	1152×864 75 Hz
22	1280×768 (Reduced blanking)
23	1280×768 60 Hz
24	1280×768 75 Hz
25	1280×768 85 Hz
26	1280×768 120 Hz (Reduced blanking)
27	1280×800 (Reduced blanking)
28	1280×800 60 Hz

Value	Description
29	1280×800 75 Hz
30	1280×800 85 Hz
31	1280×800 120 Hz (Reduced blanking)
32	1280×960 60 Hz
33	1280×960 85 Hz
34	1280×960 120 Hz (Reduced blanking)
35	1280×1024 60 Hz
36	1280×1024 75 Hz
37	1280×1024 85 Hz
38	1280×1024 120 Hz (Reduced blanking)
39	1360×768 60 Hz
40	1360×768 120 Hz (Reduced blanking)
41	1400×1050 (Reduced blanking)
42	1400×1050 60 Hz
43	1400×1050 75 Hz
44	1400×1050 85 Hz
45	1400×1050 120 Hz (Reduced blanking)
46	1440×900 (Reduced blanking)
47	1440×900 60 Hz
48	1440×900 75 Hz
49	1440×900 85 Hz
50	1440×900 120 Hz (Reduced blanking)
51	1600×1200 60 Hz
52	1600×1200 65 Hz
53	1600×1200 70 Hz

continued

Table C-2 continued

Value	Description
54	1600×1200 75 Hz
55	1600×1200 85 Hz
56	1600×1200 120 Hz (Reduced blanking)
57	1680×1050 (Reduced blanking)
58	1680×1050 60 Hz
59	1680×1050 75 Hz
60	1680×1050 85 Hz
61	1680×1050 120 Hz (Reduced blanking)
62	1792×1344 60 Hz
63	1792×1344 75 Hz
64	1792×1344 120 Hz (Reduced blanking)
65	1856×1392 60 Hz
66	1856×1392 75 Hz
67	1856×1392 120 Hz (Reduced blanking)
68	1920×1200 (Reduced blanking)
69	1920×1200 60 Hz
70	1920×1200 75 Hz
71	1920×1200 85 Hz
72	1920×1200 120 Hz (Reduced blanking)
73	1920×1440 60 Hz
74	1920×1440 75 Hz
75	1920×1440 120 Hz (Reduced blanking)
76	2560×1600 (Reduced blanking)
77	2560×1600 60 Hz
78	2560×1600 75 Hz

Value	Description
79	2560×1600 85 Hz
80	2560×1600 120 Hz (Reduced blanking)
81	1366×768 60 Hz
82	1920×1080 (1080p) 60 Hz
83	1600×900 (Reduced blanking)
84	2048×1152 (Reduced blanking)
85	1280×720 (720p) 60 Hz
86	1366×768 (Reduced blanking)