



KRAMER ELECTRONICS LTD.

# USER GUIDE

## In-Out Resolutions Guide

P/N: 2900-300373 Rev 3

# Contents

<b>1</b>	<b>VP-790</b>	<b>1</b>
1.1	VP-790 Input Resolutions	1
1.2	VP-790 Output Resolutions	1
<b>2</b>	<b>VP-770, VP-771, VP-773, VP-774, VP-773AMP and VP-774AMP</b>	<b>3</b>
2.1	Input Resolutions	3
2.2	Output Resolutions	4
<b>3</b>	<b>VP-747</b>	<b>5</b>
3.1	VP-747 Input Resolutions	5
3.2	VP-747 Output Resolutions	6
<b>4</b>	<b>VP-730/VP-731</b>	<b>7</b>
4.1	VP-730/731 Input Resolutions	7
4.2	VP-730/731 Output Resolutions	8
<b>5</b>	<b>VP-728/VP-729</b>	<b>9</b>
5.1	VP-728/729 Input Resolutions	9
5.2	VP-728/VP-729 Output Resolutions	10
<b>6</b>	<b>VP-725N/VP-725NA</b>	<b>12</b>
6.1	VP-725N/A Input Resolutions	12
6.2	VP-725N/A Output Resolutions	13
<b>7</b>	<b>VP-690</b>	<b>14</b>
7.1	VP-690 Input Resolutions	14
7.2	VP-690 Output Resolutions	14
<b>8</b>	<b>VP-553</b>	<b>15</b>
8.1	VP-553 Input Resolutions	15
8.2	VP-553 Output Resolutions	15
<b>9</b>	<b>VP-506</b>	<b>16</b>
9.1	VP-506 Input Resolutions	16
9.2	VP-506 Output Resolutions	16
<b>10</b>	<b>VP-501N</b>	<b>17</b>
10.1	VP-501N Input Resolutions	17
10.2	VP-501N Output Resolutions	17
<b>11</b>	<b>VP-483</b>	<b>18</b>
11.1	VP-483 Input Resolutions	18
11.2	VP-483 Output Resolutions	18
<b>12</b>	<b>VP-482</b>	<b>19</b>
12.1	VP-482 Input Resolutions	19
12.2	VP-482 Output Resolutions	19
<b>13</b>	<b>VP-481</b>	<b>20</b>
13.1	VP-481 Input Resolutions	20
13.2	VP-481 Output Resolutions	20
<b>14</b>	<b>VP-480</b>	<b>21</b>
14.1	VP-480 Input Resolutions	21
14.2	VP-480 Output Resolutions	21
<b>15</b>	<b>VP-461</b>	<b>22</b>
15.1	VP-461 Input Resolutions	22
15.2	VP-461 Output Resolutions	23
<b>16</b>	<b>VP-460</b>	<b>24</b>
16.1	VP-460 Input Resolutions	24
16.2	VP-460 Output Resolutions	24
<b>17</b>	<b>VP-444</b>	<b>25</b>
17.1	VP-444 Input Resolutions	25
17.1	VP-443 Output Resolutions	25
<b>18</b>	<b>VP-443</b>	<b>26</b>
18.1	VP-443 Input Resolutions	26
18.2	VP-443 Output Resolutions	26
<b>19</b>	<b>VP-441</b>	<b>27</b>
19.1	VP-441 Input Resolution	27
19.2	VP-441 Output Resolutions	27
<b>20</b>	<b>VP-438</b>	<b>28</b>
20.1	VP-438 Input Resolution	28
20.2	VP-438 Output Resolutions	28
<b>21</b>	<b>VP-437xl</b>	<b>29</b>
21.1	VP-437xl Input Resolutions	29
21.2	VP-437xl Output Resolutions	29
<b>22</b>	<b>VP-437N</b>	<b>30</b>
22.1	VP-437N Input Resolutions	30
22.2	VP-437N Output Resolutions	30
<b>23</b>	<b>VP-436N</b>	<b>31</b>
23.1	VP-436N Input Resolutions	31

23.2	VP-436N Output Resolutions	31
<b>24</b>	<b>VP-435</b>	<b>32</b>
24.1	VP-435 Input Resolutions	32
24.2	VP-435 Output Resolutions	32
<b>25</b>	<b>VP-434</b>	<b>33</b>
25.1	VP-434 Input Resolutions	33
25.2	VP-434 Output Resolutions	33
<b>26</b>	<b>VP-427A</b>	<b>34</b>
26.1	VP-427A Input Resolutions	34
26.2	VP-427A Output Resolutions	34
<b>27</b>	<b>VP-427</b>	<b>35</b>
27.1	VP-427 Input Resolutions	35
27.2	VP-427 Output Resolutions	35
<b>28</b>	<b>VP-425</b>	<b>36</b>
28.1	VP-425 Input Resolutions	36
28.2	VP-425 Output Resolutions	36
<b>29</b>	<b>VP-424</b>	<b>37</b>
29.1	VP-424 Input Resolutions	37
29.2	VP-424 Output Resolutions	37
<b>30</b>	<b>VP-423</b>	<b>38</b>
30.1	VP-423 Input Resolutions	38
30.2	VP-423 Output Resolutions	38
<b>31</b>	<b>VP-422</b>	<b>39</b>
31.1	VP-422 Input Resolutions	39
31.2	VP-422 Output Resolutions	39
<b>32</b>	<b>VP-421</b>	<b>40</b>
32.1	VP-421 Input Resolutions	40
32.2	VP-421 Output Resolutions	40
<b>33</b>	<b>VP-420</b>	<b>41</b>
33.1	VP-420 Input Resolutions	41
33.2	VP-420 Output Resolutions	41
<b>34</b>	<b>VP-419xl</b>	<b>42</b>
34.1	VP-419xl Input Resolution	42
34.2	VP-419xl Output Resolution	42
<b>35</b>	<b>VP-417</b>	<b>43</b>
35.1	VP-417 Input Resolution	43
35.2	VP-417 Output Resolution	43
<b>36</b>	<b>VP-413xl</b>	<b>44</b>
36.1	VP-413xl Output Resolution	44
<b>37</b>	<b>VP-410</b>	<b>45</b>
37.1	VP-410 Input Resolution	45
37.2	VP-410 Output Resolution	45
<b>38</b>	<b>VP-409</b>	<b>46</b>
38.1	VP-409 Input Resolution	46
38.2	VP-409 Output Resolution	46

# 1 VP-790

## 1.1 VP-790 Input Resolutions

This section defines the input resolutions for each input.

### 1.1.1 HDMI Input Resolutions

HDMI Input Resolutions (Video)				
480i	576p	1080i @59.94	1080p @25	1080p @59.94
576i	720p	1080i @60	1080p @30	1080p @60
480p	1080i @50	1080p @24	1080p @50	

HDMI Input Resolutions (Computer):

### 1.1.2 PC Input Resolutions

From 640x480 to 1920x1200.

### 1.1.3 SDI Input Resolutions

SMPTE 292M, SMPTE 259M-C and SMPTE 424M compliant, accepts 484i (480i), 576i, 720p, 1080i and 1080p single link formats at 270Mb, 1.485Gb or 2.97Gb rates.

### 1.1.4 YUV, RGB and RGBS Input Resolutions

YUV, RGB and RGBS Input Resolutions				
480i	576p	1080i @59.94	1080p @24	1080p @30
576i (SD)	720p	1080i @60	1080p @25	
480p	1080i @50	1080p @23.98	1080p @29.97	



Note that this input does not support computer 1080x600 signals. 1080x600 signals should be passed via the PC IN 15-pin HD connector. The PC input supports the separate H and V syncs.

### 1.1.5 CV and s-Video Input Resolutions

NTSC, PAL and SECAM.

## 1.2 VP-790 Output Resolutions

This section defines the output resolutions.

### 1.2.1 HDMI Output Resolutions

Technical Specifications of the HDMI Output Signal			
640x480@60	1280x1024@50	1680x1050@60	1080p25
640x480@75	1280x1024@60	1920x1200@60	1080p29.97
800x600@50	1280x1024@75	480i60	1080p30
800x600@60	1360x768@60	480p60	1080p50
800x600@75	1366x768@50	576i50	1080p59.94
1024x768@50	1366x768@60	576p50	1080p60
1024x768@60	1400x1050@50	720p50	2K50
1024x768@75	1400x1050@60	720p59.94	2K60
1280x768@50	1600x900@60	720p60	
1280x768@60	1600x1200@50	1080p23.976	
1280x800@60	1600x1200@60	1080p24	

### **1.2.1 SDI Output Resolutions**

SMPTE 292M, SMPTE 259M-C and SMPTE 424M compliant, accepts (484i) 480i, 576i, 720, 1080i and 1080p single link formats at 270Mb, 1.485Gb or 2.97Gb rates.

### **1.2.2 PC Output Resolutions**

From 640x480 to 1920x1200, up to 165 MHz pixel clock.

## 2 VP-770, VP-771, VP-773, VP-774, VP-773AMP and VP-774AMP

### 2.1 Input Resolutions

This section defines the input resolutions for each input

#### 2.1.1 PC Input Resolutions

PC Input Resolutions				
640X480_60	800x600_75	625_P50	1280x1024_60	1400x1050_75
640x480_72	800x600_85	525_P60	1280x1024_75	1600x900_60
640x480_75	1024x768_60	720_P50	1280x1024_85	1600x1200_60
640x480_85	1024x768_70	720_P60	1360x768_60	1680x1050_60
800x600_56	1024x768_75	1280x800_60	1366x768_60	1920x1200_60RB
800x600_60	1024x768_85	1280x960_85	1440x900_60	1080_P50
800x600_72	1152x864_75	1280x768_60	1400x1050_60	1080_P60

#### 2.1.2 DP Input Resolutions

DP Input Resolutions				
640X480_60	800x600_85	1280x800_60	1366x768_60	1920x1200_60RB
640x480_75	848x480_60	1280x960_85	1440x900_60	720_P60
640x480_85	1024x768_60	1280x768_60	1400x1050_60	1080_P60
800x600_56	1024x768_70	1280x1024_60	1400x1050_75	2k50
800x600_60	1024x768_75	1280x1024_75	1600x900_60	2k60
800x600_72	1024x768_85	1280x1024_85	1600x1200_60	
800x600_75	1152x864_75	1360x768_60	1680x1050_60	

#### 2.1.3 CV Input Resolutions

NTSC and PAL

#### 2.1.4 HDMI Input Resolutions

HDMI Input Resolutions				
NTSC	1080_I60	640x480_72	1024x768_70	1360x768_60
PAL	1080_P23_976	640x480_75	1024x768_75	1366x768_60
525_P60	1080_P24	640x480_85	1024x768_85	1440x900_60
625_P50	1080_P25	800x600_56	1152x864_75	1400x1050_60
720_P24	1080_P30	800x600_60	1280x800_60	1400x1050_75
720_P25	1080_P50	800x600_72	1280x960_85	1600x900_60
720_P30	1080_P60	800x600_75	1280x768_60	1600x1200_60
720_P50	2k50	800x600_85	1280x1024_60	1680x1050_60
720_P60	2k60	848x480_60	1280x1024_75	1920x1200_60RB
1080_I50	640X480_60	1024x768_60	1280x1024_85	

#### 2.1.5 SDI Input Resolutions (applies to VP-771 and VP-774)

SDI Input Resolution			
NTSC	720_P60	1080_P24	1080_P50
PAL	1080_I50	1080_P25	1080_P60
720_P50	1080_I60	1080_P30	

## 2.2 Output Resolutions

This section defines the output resolutions

### 2.2.1 HDMI Output Resolutions

Technical Specifications of the HDMI Output Signal			
640x480@60	1280x1024@50	1680x1050@60	1080p25
640x480@75	1280x1024@60	1920x1200@60	1080p29.97
800x600@50	1280x1024@75	480i60	1080p30
800x600@60	1360x768@60	480p60	1080p50
800x600@75	1366x768@50	576i50	1080p59.94
1024x768@50	1366x768@60	576p50	1080p60
1024x768@60	1400x1050@50	720p50	2k50
1024x768@75	1400x1050@60	720p59.94	2k60
1280x768@50	1600x900@60	720p60	
1280x768@60	1600x1200@50	1080p23.976	
1280x800@60	1600x1200@60	1080p24	

### 2.2.2 PC Output Resolutions

Technical Specifications of the PC Output Signal			
640x480@60	1280x1024@75	480p60	1080p29.97
640x480@75	1360x768@60	576i50	1080p30
800x600@60	1366x768@60	576p50	1080p50
800x600@75	1400x1050@60	720p50	1080p59.94
1024x768@60	1600x900@60	720p59.94	1080p60
1024x768@75	1600x1200@60	720p60	2k50
1280x768@60	1680x1050@60	1080p23.976	2k60
1280x800@60	1920x1200@60	1080p24	
1280x1024@60	480i60	1080p25	

### 2.2.3 SDI Output Resolutions (applies to VP-771 and VP-774)

Technical Specifications of the SDI Output Signal			
480i60	720p60	1080p25	1080p50
576i50	1080p23.976	1080p29.97	1080p59.94
720p50	1080p24	1080p30	1080p60
720p59.94			

### 3 VP-747

The following are the **VP-747** input and output resolutions

#### 3.1 VP-747 Input Resolutions

RGBHV / RGBS (PC) / RGSB (PC) Input Signal					
Resolution	Vertical Frequency (Hz)	Notes	Resolution	Vertical Frequency (Hz)	Notes
640x480	60		1152x870	75	Mac21
640x480	67	Mac13	1152x900	66	Sun
640x480	72		1152x900	76	Sun
640x480	75		1280x720	60	
640x480	85		1280x800	60	
720x400	70		1280x960	60	
720x400	85		1280x960	85	
800x600	56		1280x768	60	
800x600	60		1280x1024	60	
800x600	72		1280x1024	75	
800x600	75		1280x1024	76	Sun
800x600	85		1280x1024	85	
832x624	75	Mac16	1366x768	60	
1024x768	60		1400x1050	60	
1024x768	70		1400x1050	75	
1024x768	75		1440x900	60	
1024x768	75	Mac19	1600x1200	60	
1024x768	85		1680x1050	60	
1024x800	84	Sun	1920x1080	60	
1152x864	75		1920x1200	60	

Technical Specifications of the HDMI Input Signal (for RGB Colorspace)					
Resolution	Vertical Frequency (Hz)	Notes	Resolution	Vertical Frequency (Hz)	Notes
640x480	60		1152x870	75	Mac21
640x480	67	Mac13	1152x900	66	Sun
640x480	72		1152x900	76	Sun
640x480	75		1280x720	60	
640x480	85		1280x800	60	
720x400	70		1280x960	60	
720x400	85		1280x960	85	
800x600	56		1280x768	60	
800x600	60		1280x1024	60	
800x600	72		1280x1024	75	
800x600	75		1280x1024	76	Sun
800x600	85		1280x1024	85	
832x624	75	Mac16	1366x768	60	
1024x768	60		1400x1050	60	
1024x768	70		1400x1050	75	
1024x768	75		1440x900	60	
1024x768	75	Mac19	1600x1200	60	
1024x768	85		1680x1050	60	
1024x800	84	Sun	1920x1200	60	
1152x864	75				

Technical Specifications of the Y/C, Video Signal	
Standard	NTSC, NTSC4.43, PAL, PAL-M, PAL-N, SECAM, PAL-60



Technical Specifications of the HDMI Signal (for RGB or YUV Colorspace)		
Resolution	Vertical Frequency (Hz)	Notes
1080i	60	YPbPr
1080i	50	YPbPr
1080p	60	YPbPr
1080p	50	YPbPr
1080P	24fps	YPbPr
720p	60	YPbPr
720p	50	YPbPr
480i	60	YPbPr
480p	60	YPbPr
576i	50	YPbPr
576p	50	YPbPr

Technical Specifications of the Component Input Signal		
Resolution	Vertical Frequency (Hz)	Remark
1080i	60	YPbPr
1080i	50	YPbPr
1080p	60	YPbPr
1080p	50	YPbPr
720p	60	YPbPr
720p	50	YPbPr
480i	60	YPbPr
480p	60	YPbPr
576i	50	YPbPr
576p	50	YPbPr

### 3.2 VP-747 Output Resolutions

Supported Output Resolutions			
Resolution	Vertical Frequency (Hz)	Resolution	Vertical Frequency (Hz)
640x480	60	1680x1050xHz	60
640x480	75	1920x1080xHz	50
800x600	50	1920x1080 cvt-r	60
800x600	60	1920x1200	60
800x600	75	480p	60
832x624	75	576p	
852x480	60	720p	50
1024x768	x50	720p	60
1024x768	60	1080i	50
1024x768	75	1080i	60
1280x720	60	1080p	50
1280x768	50	1080p	60
1280x768	60	1080p	24
1280x800	60	480p	59.94
1280x1024	50	720p	59.94
1280x1024	60	1080i	59.94
1280x1024	75	1080p	23.97
1366x768	50	1080p	29.97
1366x768	60	1080p	59.94
1400x1050	50	Custom 1	
1400x1050	60	Custom 2	
1440x900	60	Custom 3	
1600x1200	50	Custom 4	
1600x1200	60		

## 4 VP-730/VP-731

The following are the **VP-730** and **VP-731** input and output resolutions

### 4.1 VP-730/731 Input Resolutions

RGBHV / RGBS (PC) / RGSB (PC) Input Signal					
Resolution	Vertical Frequency (Hz)	Notes	Resolution	Vertical Frequency (Hz)	Notes
640x480	60		1152x870	75	Mac21
640x480	67	Mac13	1152x900	66	Sun
640x480	72		1152x900	76	Sun
640x480	75		1280x720	60	
640x480	85		1280x800	60	
720x400	70		1280x960	60	
720x400	85		1280x960	85	
800x600	56		1280x768	60	
800x600	60		1280x1024	60	
800x600	72		1280x1024	75	
800x600	75		1280x1024	76	Sun
800x600	85		1280x1024	85	
832x624	75	Mac16	1366x768	60	
1024x768	60		1400x1050	60	
1024x768	70		1400x1050	75	
1024x768	75		1440x900	60	
1024x768	75	Mac19	1600x1200	60	
1024x768	85		1680x1050	60	
1024x800	84	Sun	1920x1080	60	
1152x864	75		1920x1200	60	

Technical Specifications of the HDMI Input Signal (for RGB Colorspace)					
Resolution	Vertical Frequency (Hz)	Notes	Resolution	Vertical Frequency (Hz)	Notes
640x480	60		1152x870	75	Mac21
640x480	67	Mac13	1152x900	66	Sun
640x480	72		1152x900	76	Sun
640x480	75		1280x720	60	
640x480	85		1280x800	60	
720x400	70		1280x960	60	
720x400	85		1280x960	85	
800x600	56		1280x768	60	
800x600	60		1280x1024	60	
800x600	72		1280x1024	75	
800x600	75		1280x1024	76	Sun
800x600	85		1280x1024	85	
832x624	75	Mac16	1366x768	60	
1024x768	60		1400x1050	60	
1024x768	70		1400x1050	75	
1024x768	75		1440x900	60	
1024x768	75	Mac19	1600x1200	60	
1024x768	85		1680x1050	60	
1024x800	84	Sun	1920x1200	60	
1152x864	75				

Technical Specifications of the Y/C, Video Signal	
Standard	NTSC, NTSC4.43, PAL, PAL-M, PAL-N, SECAM, PAL-60

Technical Specifications of the HDMI Signal (for RGB or YUV Colorspace)		
Resolution	Vertical Frequency (Hz)	Notes
1080i	60	YPbPr
1080i	50	YPbPr
1080p	60	YPbPr
1080p	50	YPbPr
1080P	24fps	YPbPr
720p	60	YPbPr
720p	50	YPbPr
480i	60	YPbPr
480p	60	YPbPr
576i	50	YPbPr
576p	50	YPbPr

Technical Specifications of the Component Input Signal		
Resolution	Vertical Frequency (Hz)	Remark
1080i	60	YPbPr
1080i	50	YPbPr
1080p	60	YPbPr
1080p	50	YPbPr
720p	60	YPbPr
720p	50	YPbPr
480i	60	YPbPr
480p	60	YPbPr
576i	50	YPbPr
576p	50	YPbPr

## 4.2 VP-730/731 Output Resolutions

Supported Output Resolutions			
Resolution	Vertical Frequency (Hz)	Resolution	Vertical Frequency (Hz)
640x480	60	1600x1200	60
640x480	75	1920x1080	60
800x600	50	1920x1200	60
800x600	60	1680x1050	60
800x600	75	1080i	60
1024x768	50	1080i	50
1024x768	60	720p	60
1024x768	75	720p	50
1280x720	60	480p	60
1280x768	50	576p	50
1280x768	60	1080p	50
1280x800	60	1080p	60
1280x1024	50	1080p	24Hz
1280x1024	60	480p	59.94Hz
1280x1024	75	720p	59.94Hz
1366x768	50	1080i	59.94Hz
1366x768	60	1080p	23.98Hz
1400x1050	50	1080p	29.97Hz
1400x1050	60	1080p	59.94Hz
1600x1200	50		

## 5 VP-728/VP-729

The following are the **VP-728** and **VP-729** input and output resolutions

### 5.1 VP-728/729 Input Resolutions

Technical Specifications of the RGBHV / RGBS (PC) / RGB (PC) Input Signal					
Resolution	Vertical Frequency (Hz)	Notes	Resolution	Vertical Frequency (Hz)	Notes
640x480	60		1152x870	75	Mac21
640x480	67	Mac13	1152x900	66	Sun
640x480	72		1152x900	76	Sun
640x480	75		1280x720	60	
640x480	85		1280x800	60	
720x400	70		1280x960	60	
720x400	85		1280x960	85	
800x600	56		1280x768	60	
800x600	60		1280x1024	60	
800x600	72		1280x1024	75	
800x600	75		1280x1024	76	Sun
800x600	85		1280x1024	85	
832x624	75	Mac16	1366x768	60	
1024x768	60		1440x900	60	
1024x768	70		1400x1050	60	
1024x768	75		1400x1050	75	
1024x768	75	Mac19	1600x1200	60	
1024x768	85		1680x1050	60	
1024x800	84	Sun	1920x1080	60	
1152x864	75		1920x1200	60	

Technical Specifications of the HDMI Input Signal (for RGB Colorspace)					
Resolution	Vertical Frequency (Hz)	Notes	Resolution	Vertical Frequency (Hz)	Notes
640x480	60		1152x870	75	Mac21
640x480	67	Mac13	1152x900	66	Sun
640x480	72		1152x900	76	Sun
640x480	75		1280x720	60	
640x480	85		1280x800	60	
720x400	70		1280x960	60	
720x400	85		1280x960	85	
800x600	56		1280x768	60	
800x600	60		1280x1024	60	
800x600	72		1280x1024	75	
800x600	75		1280x1024	76	Sun
800x600	85		1280x1024	85	
832x624	75	Mac16	1366x768	60	
1024x768	60		1400x1050	60	
1024x768	70		1400x1050	75	
1024x768	75		1440x900	60	
1024x768	75	Mac19	1600x1200	60	
1024x768	85		1680x1050	60	
1024x800	84	Sun	1920x1080	60	
1152x864	75		1920x1200	60	

Technical Specifications of the Y/C, Video Signal	
Standard	NTSC, NTSC4.43, PAL, PAL-M, PAL-N, SECAM, PAL-60

HDMI Signal (for RGB or YUV Colorspace)		
Resolution	Vertical Frequency (Hz)	Notes
1080i	60	YPbPr
1080i	50	YPbPr
1080p	60	YPbPr
1080p	50	YPbPr
1080p	24fps	YPbPr
720p	60	YPbPr
720p	50	YPbPr
480i	60	YPbPr
480p	60	YPbPr
576i	50	YPbPr
576p	50	YPbPr

Component Input Signal		
Resolution	Vertical Frequency (Hz)	Notes
1080i	60	YPbPr
1080i	50	YPbPr
1080p	60	YPbPr
1080p	50	YPbPr
720p	60	YPbPr
720p	50	YPbPr
480i	60	YPbPr
480p	60	YPbPr
576i	50	YPbPr
576p	50	YPbPr

## 5.2 VP-728/VP-729 Output Resolutions

RGBHV/Comp/YPbPr Output Signal			
Resolution	Vertical Frequency (Hz)	Resolution	Vertical Frequency (Hz)
640x480	60	1600x1200	50
640x480	75	1600x1200	60
800x600	50	1920x1080	60
800x600	60	1920x1200	60
800x600	75	1680x1050	60
1024x768	50	1080i	60
1024x768	60	1080i	50
1024x768	75	720p	60
1280x720	60	720p	50
1280x768	50	480p	60
1280x768	60	576p	50
1280x800	60	1080p	50
1280x1024	50	1080p	60
1280x1024	60	480p	59.94
1280x1024	75	720p	59.94
1366x768	50	1080i	59.94
1366x768	60	1080p	23.98
1400x1050	50	1080p	29.97
1400x1050	60	1080p	59.94

HDMI/DVI/RGB Output Signal				
Resolution	Vertical Frequency (Hz)		Resolution	Vertical Frequency (Hz)
640x480	60		1600x1200	60
640x480	75		1920x1080	60
800x600	50		1920x1200	60
800x600	60		1680x1050	60
800x600	75		1080i	60
1024x768	50		1080i	50
1024x768	60		720p	60
1024x768	75		720p	50
1280x720	60		480p	60
1280x768	50		576p	50
1280x768	60		1080p	50
1280x800	60		1080p	60
1280x1024	50		1080p	24
1280x1024	60		480p	59.94
1280x1024	75		720p	59.94
1366x768	50		1080i	59.94
1366x768	60		1080p	23.98
1400x1050	50		1080p	29.97
1400x1050	60		1080p	59.94
1600x1200	50			

## 6 VP-725N/VP-725NA

The following are the **VP-725N** and **VP-725NA** input and output resolutions:

### 6.1 VP-725N/A Input Resolutions

Technical Specifications of the RGBHV/RGBS (PC)/RGsB (PC) Input Signal					
Resolution	Vertical Frequency (Hz)	Notes	Resolution	Vertical Frequency (Hz)	Notes
640x480 (480p)	60	VESA	1152x870	75	Mac21
640x480	67	Mac13	1152x900	66	Sun
640x480	72	VESA	1152x900	76	Sun
640x480	75	VESA	1280x720	60	VESA
640x480	85	VESA	1280x800	60	VESA
720x400	70		1280x960	60	VESA
720x400	85	VESA	1280x960	85	VESA
800x600	56	VESA	1280x768	60	VESA
800x600	60	VESA	1280x1024	60	VESA
800x600	72	VESA	1280x1024	75	VESA
800x600	75	VESA	1280x1024	76	Sun
800x600	85	VESA	1280x1024	85	VESA
832x624	75	Mac16	1366x768	60	VESA
1024x768	60	VESA	1440x900	60	VESA
1024x768	70	VESA	1400x1050	60	VESA
1024x768	75	VESA	1400x1050	75	VESA
1024x768	75	Mac19	1600x1200	60	VESA
1024x768	85	VESA	1680x1050	60	VESA
1024x800	84	Sun	1920x1080	60	VESA
1152x864	75	VESA	1920x1200	60	VESA

Technical Specifications of the Y/C, Video Signal	
Standard	NTSC, NTSC4.43, PAL, PAL-M, PAL-N, SECAM, PAL-60

HDMI Input Signal (for RGB or YUV Colorspace)		
Resolution	Vertical Frequency (Hz)	Notes
1080i	60	YPbPr
1080i	50	YPbPr
1080p	60	YPbPr
1080p	50	YPbPr
1080P	24fps	YPbPr
720p	60	YPbPr
720p	50	YPbPr
480i	60	YPbPr
480p	60	YPbPr
576i	50	YPbPr
576p	50	YPbPr

Component Input Signal		
Resolution	Vertical Frequency (Hz)	Notes
1080i	60	YPbPr
1080i	50	YPbPr
1080p	60	YPbPr
1080p	50	YPbPr
720p	60	YPbPr
720p	50	YPbPr
480i	60	YPbPr
480p	60	YPbPr
576i	50	YPbPr
576p	50	YPbPr

## 6.2 VP-725N/A Output Resolutions

Technical Specifications of the RGBHV/Comp/YPbPr Output Signal					
Resolution	Vertical Frequency (Hz)	Notes	Resolution	Vertical Frequency (Hz)	Notes
640x480	60	VESA	1366x768	60	VESA
640x480	75	VESA	1400x1050	50	
800x600	50		1400x1050	60	VESA
800x600	60	VESA	1600x1200	50	
800x600	75	VESA	1600x1200	60	VESA
1024x768	50		1920x1080	60	VESA
1024x768	60	VESA	1920x1200	60	VESA
1024x768	75	VESA	1680x1050	60	VESA
1280x720	60	VESA	1080i	60	Comp/ YPbPr
1280x768	50		1080i	50	
1280x768	60	VESA	720p	60	
1280x800	60	VESA	720p	50	
1280x1024	50		480p	60	
1280x1024	60	VESA	576p	50	
1280x1024	75	VESA	1080p	50	
1366x768	50		1080p	60	



## 7 VP-690

The following are the **VP-690** input and output resolutions:

### 7.1 VP-690 Input Resolutions

Resolution/Refresh Rate	CV	Component	PC	SDI	HDMI
480i/576i(NTSC/PAL)	Yes	Yes	No	Yes	Yes
480p/576p	No	Yes	No	No	Yes
720p@(60/50)	No	Yes	No	Yes	Yes
1080i@(60/50)	No	Yes	No	Yes	Yes
1080p@(60/50)	No	Yes	No	Yes	Yes
1080p@(24/25/30)	No	Yes	No	Yes	Yes
1080psF @(24/25/30)	No	No	No	Yes	No
480p/576p-RGB	No	No	Yes	No	Yes
720p@(60/50)-RGB	No	No	Yes	No	Yes
1080i@(60/50)-RGB	No	No	No	No	Yes
1080p@(60/50)-RGB	No	No	Yes	No	Yes
1080p@(24/25/30)-RGB	No	No	No	No	Yes
640x480@(60/67/72/75/85)	No	No	Yes	No	Yes
1080x600@(56/60/72/75)	No	No	Yes	No	Yes
1024x768@(60/70/75)	No	No	Yes	No	Yes
1280x1024@(60/75)	No	No	Yes	No	Yes
1280X960	No	No	Yes	No	Yes
1600X900@60	No	No	Yes	No	Yes
1600X1200@60	No	No	Yes	No	Yes
1280x800@60	No	No	Yes	No	Yes
1440x900@60	No	No	Yes	No	Yes
1366x768@60	No	No	Yes	No	Yes
1400x1050@60	No	No	Yes	No	Yes
1680x1050@60	No	No	Yes	No	Yes
1920x1200@60	No	No	Yes	No	Yes
2K@50 (2048X1080)	No	No	Yes	No	Yes
2K@60 (2048X1080)	No	No	Yes	No	Yes

### 7.2 VP-690 Output Resolutions

640x480	1080x600	1024x768	1280x1024	1600x1200
480i	480p	720p60	1080i60	1080p60
576i	576p	720p50	1080i50	1080p50
1366x768	1680x1050	1920x1200	1280x800	1440x900
1400x1050	1600x900	2048x1080@50	2048x1080@60	480i59
480p59	720p59	1080i59	1080p59	

## 8 VP-553

The following are the **VP-553** input and output resolutions.

### 8.1 VP-553 Input Resolutions

Resolution/Refresh Rate	CV	PC	HDMI
NTSC	Yes	No	No
PAL	Yes	No	No
640x480 (@60/72/75Hz)	No	Yes	Yes
800x600 (@56/60/72/75Hz)	No	Yes	Yes
1024x768 (@60/70/75Hz)	No	Yes	Yes
1152x864 @75Hz	No	Yes	Yes
1280x720 @60Hz	No	Yes	Yes
1280x768 @60Hz	No	Yes	No
1280x800 @60Hz	No	Yes	Yes
1280x960 @60Hz	No	Yes	Yes
1280x1024 (@60/75Hz)	No	Yes	Yes
1360x768 @60Hz	No	Yes	Yes
1400x1050 @60Hz	No	Yes	Yes
1440x900 @60Hz	No	Yes	Yes
1600x900 RB @60Hz	No	Yes	Yes
1600x1200 @60Hz	No	Yes	Yes
1680x1050 RB @60Hz	No	Yes	Yes
1920x1080 @60Hz	No	Yes	Yes
1920x1200 RB @60Hz	No	Yes	Yes
480I/576I	No	No	Yes
480P/576P	No	No	Yes
720P(@50/60Hz)	No	No	Yes
1080I(@50/60Hz)	No	No	Yes
1080P(@24/30Hz)	No	No	Yes
1080P(@50/60Hz)	No	No	Yes

### 8.2 VP-553 Output Resolutions

NATIVE	640x480@60	800x600@60	1024x768@60	1280x768@60
1360x768@60	1280x720@60	1280x800@60	1280x1024@60	1440x900@60
1400x1050@60	1680x1050@60	1600x1200@60	1920x1080@60	1920x1200@60
720x480p@60	1280x720p@60	1920x1080i@60	1920x1080p@60	720x576p@60
1280x720p@50	1920x1080i@50	1920x1080p@50		

## 9 VP-506

The following are the **VP-506** input and output resolutions.

### 9.1 VP-506 Input Resolutions

Resolution/Refresh Rate	DVI-I Input			
	Component	PC (RGB)	DVI	HDMI
480i/576i (NTSC/PAL)	Yes	No	No	Yes
480p/576p	Yes	No	No	Yes
720p@(60/50)	Yes	No	No	Yes
1080i@(60/50)	Yes	No	No	Yes
1080p@(60/50)	Yes	No	No	Yes
1080p@(24/25/30)	Yes	No	No	Yes
480p-RGB	No	No	Yes	Yes
576p-RGB	No	Yes	Yes	Yes
720p@(60/50)-RGB	No	Yes	Yes	Yes
1080i@(60/50)-RGB	No	No	No	Yes
1080p@(60/50)-RGB	No	Yes	Yes	Yes
1080p@(24/25/30)-RGB	No	Yes	Yes	Yes
640x480@(60/67/72/75/85)	No	Yes	Yes	Yes
1080x600@(56/60/72/75)	No	Yes	Yes	Yes
1024x768@(60/70/75)	No	Yes	Yes	Yes
1280x1024@(60/75)	No	Yes	Yes	Yes
1600x900@60	No	Yes	Yes	Yes
1600x1200@60	No	Yes	Yes	Yes
1280x800@60	No	Yes	Yes	Yes
1440x900@60	No	Yes	Yes	Yes
1366x768@60	No	Yes	Yes	Yes
1400x1050@60	No	Yes	Yes	Yes
1680x1050@60	No	Yes	Yes	Yes
1920x1200@60	No	Yes	Yes	Yes

### 9.2 VP-506 Output Resolutions

NTSC/PAL

---

## 10 VP-501N

The following are the **VP-501N** input and output resolutions.

### 10.1 VP-501N Input Resolutions

Resolution/Refresh Rate	PC	Component
640x480@60	Yes	No
800x600@60	Yes	No
1024x768@60	Yes	No
1152x864@75	Yes	No
1280x800@60	Yes	No
1280x1024@60	Yes	No
1280x1024@75	Yes	No
1366x768@60	Yes	No
1440x900@60	Yes	No
1400x1050@60	Yes	No
1600x1200@60	Yes	No
1080i@60	No	Yes
1080i@50	No	Yes
1080p@60	No	Yes
1080p@50	No	Yes
720p@60	No	Yes
720p@50	No	Yes
480p@60	No	Yes
576p@50	No	Yes

### 10.2 VP-501N Output Resolutions

640x480 up to 1600x1200; 480p, 576p, 720p, 1080i (for 1080i, does not support 50Hz)

---

## 11 VP-483

The following are the **VP-483** input and output resolutions.

### 11.1 VP-483 Input Resolutions

720p@(60/50) RGB	1080p@(60/50) RGB	640x480@(60/72/75/85)
1080x600@(56/60/72/75/85)	1024x768@(60/70/75/85)	1280x1024@(60/75/85)
1440x900@60	1280x800@60	1600x1200@60
1366x768@60	1400x1050@60	1680x1050@60

### 11.2 VP-483 Output Resolutions

720p @60	1080p SF30/29/25	1080p @30/29/25/24/23	1080p @59	1080i @59
720p @59	480i @59	576i	1080p @50	1080i @50
720p @50	1080p @60	1080i @60		

---

## 12 VP-482

The following are the **VP-482** input and output resolutions.

### 12.1 VP-482 Input Resolutions

480p/576p RGB	720p@(60/50) RGB	1080i@(60/50) RGB
1080p@(60/50) RGB	1080p@(24/25/30) RGB	640x480@(60/72/75/85)
1080x600@(56/60/72/75/85)	1024x768@(60/70/75/85)	1280x1024@(60/75/85)
1440x900@60	1280x800@60	1600x1200@60
1366x768@60	1400x1050@60	1680x1050@60

### 12.2 VP-482 Output Resolutions

720p @60	1080p SF30/29/25	1080p @30/29/25/24/23	1080p @59	1080i @59
720p @59	480i @59	576i	1080p @50	1080i @50
720p @50	1080p @60	1080i @60		

---

## 13 VP-481

The following are the **VP-481** input and output resolutions.

### 13.1 VP-481 Input Resolutions

480p/576p RGB	720p@(60/50) RGB	1080i@(60/50) RGB
1080p@(60/50) RGB	1080p@(24/25/30) RGB	640x480@(60/72/75/85)
1080x600@(56/60/72/75/85)	1024x768@(60/70/75/85)	1280x1024@(60/75/85)
1440x900@60	1280x800@60	1600x1200@60
1366x768@60	1400x1050@60	1680x1050@60()

### 13.2 VP-481 Output Resolutions

720p @60	1080p SF30/29/25	1080p @30/29/25/24/23	1080p @59	1080i @59
720p @59	480i @59	576i	1080p @50	1080i @50
720p @50	1080p @60	1080i @60		

---

## 14 VP-480

The following are the **VP-480** input and output resolutions.

### 14.1 VP-480 Input Resolutions

480i30x2 / 576i25x2 (NTSC/PAL)

### 14.2 VP-480 Output Resolutions

720p @60	1080p SF30/29/25	1080p @30/29/25/24/23	1080p @59	1080i @59
720p @59	480i @59	576i	1080p @50	1080i @50
720p @50	1080p @60	1080i @60		



## 15 VP-461

### 15.1 VP-461 Input Resolutions

This section defines the input resolutions for each input

#### 15.1.1 HDMI Input Resolutions

HDMI Input Resolutions				
NTSC	1080_I60	640x480_72	1024x768_70	1360x768_60
PAL	1080_P23_976	640x480_75	1024x768_75	1366x768_60
525_P60	1080_P24	640x480_85	1024x768_85	1440x900_60
625_P50	1080_P25	800x600_56	1152x864_75	1400x1050_60
720_P24	1080_P30	800x600_60	1280x800_60	1400x1050_75
720_P25	1080_P50	800x600_72	1280x960_85	1600x900_60
720_P30	1080_P60	800x600_75	1280x768_60	1600x1200_60
720_P50	2K50	800x600_85	1280x1024_60	1680x1050_60
720_P60	2K60	848x480_60	1280x1024_75	1920x1200_60RB
1080_I50	640X480_60	1024x768_60	1280x1024_85	

#### 15.1.2 PC Input Resolutions

PC Input Resolutions				
640X480_60	800x600_75	625_P50	1280x1024_60	1400x1050_75
640x480_72	800x600_85	525_P60	1280x1024_75	1600x900_60
640x480_75	1024x768_60	720_P50	1280x1024_85	1600x1200_60
640x480_85	1024x768_70	720_P60	1360x768_60	1680x1050_60
800x600_56	1024x768_75	1280x800_60	1366x768_60	1920x1200_60RB
800x600_60	1024x768_85	1280x960_85	1440x900_60	1080_P50
800x600_72	1152x864_75	1280x768_60	1400x1050_60	1080_P60

#### 15.1.3 DisplayPort Input Resolutions

Display Port Input Resolution			
640X480_60	848x480_60	1280x768_60	1400x1050_75
640x480_75	1024x768_60	1280x1024_60	1600x900_60
640x480_85	1024x768_70	1280x1024_75	1680x1050_60
800x600_56	1024x768_75	1280x1024_85	1920x1200_60RB
800x600_60	1024x768_85	1360x768_60	720_P60
800x600_72	1152x864_75	1366x768_60	1080_P60
800x600_75	1280x800_60	1440x900_60	2K50
800x600_85	1280x960_85	1400x1050_60	2K60

## 15.2 VP-461 Output Resolutions

This section defines the output resolutions

### 15.2.1 HDMI Output Resolutions

Technical Specifications of the HDMI Output Signal			
640x480@60	1280x1024@50	1680x1050@60	1080p25
640x480@75	1280x1024@60	1920x1200@60	1080p29.97
800x600@50	1280x1024@75	480i60	1080p30
800x600@60	1360x768@60	480p60	1080p50
800x600@75	1366x768@50	576i50	1080p59.94
1024x768@50	1366x768@60	576p50	1080p60
1024x768@60	1400x1050@50	720p50	2K50
1024x768@75	1400x1050@60	720p59.94	2K60
1280x768@50	1600x900@60	720p60	
1280x768@60	1600x1200@50	1080p23.976	
1280x800@60	1600x1200@60	1080p24	

### 15.2.2 PC Output Resolutions

Technical Specifications of the PC Output Signal			
640x480@60	1280x1024@75	480p60	1080p29.97
640x480@75	1360x768@60	576i50	1080p30
800x600@60	1366x768@60	576p50	1080p50
800x600@75	1400x1050@60	720p50	1080p59.94
1024x768@60	1600x900@60	720p59.94	1080p60
1024x768@75	1600x1200@60	720p60	2K50
1280x768@60	1680x1050@60	1080p23.976	2K60
1280x800@60	1920x1200@60	1080p24	
1280x1024@60	480i60	1080p25	

## 16 VP-460

### 16.1 VP-460 Input Resolutions

This section defines the input resolutions for each input

#### 16.1.1 PC Input Resolutions

PC Input Resolutions				
640X480_60	800x600_75	625_P50	1280x1024_60	1400x1050_75
640x480_72	800x600_85	525_P60	1280x1024_75	1600x900_60
640x480_75	1024x768_60	720_P50	1280x1024_85	1600x1200_60
640x480_85	1024x768_70	720_P60	1360x768_60	1680x1050_60
800x600_56	1024x768_75	1280x800_60	1366x768_60	1920x1200_60RB
800x600_60	1024x768_85	1280x960_85	1440x900_60	1080_P50
800x600_72	1152x864_75	1280x768_60	1400x1050_60	1080_P60

#### 16.1.1 CV Input Resolutions

NTSC and PAL

#### 16.1.2 SDI Input Resolutions

SDI Input Resolution			
NTSC	720_P60	1080_P24	1080_P50
PAL	1080_I50	1080_P25	1080_P60
720_P50	1080_I60	1080_P30	

### 16.2 VP-460 Output Resolutions

This section defines the output resolutions

#### 16.2.1 HDMI Output Resolutions

Technical Specifications of the HDMI Output Signal			
640x480@60	1280x1024@50	1680x1050@60	1080p25
640x480@75	1280x1024@60	1920x1200@60	1080p29.97
800x600@50	1280x1024@75	480i60	1080p30
800x600@60	1360x768@60	480p60	1080p50
800x600@75	1366x768@50	576i50	1080p59.94
1024x768@50	1366x768@60	576p50	1080p60
1024x768@60	1400x1050@50	720p50	2K50
1024x768@75	1400x1050@60	720p59.94	2K60
1280x768@50	1600x900@60	720p60	
1280x768@60	1600x1200@50	1080p23.976	
1280x800@60	1600x1200@60	1080p24	

#### 16.2.2 SDI Output Resolutions

Technical Specifications of the SDI Output Signal			
480i60	720p60	1080p25	1080p50
576i50	1080p23.976	1080p29.97	1080p59.94
720p50	1080p24	1080p30	1080p60
720p59.94			

## 17 VP-444

The following are the **VP-444** input and output resolutions:

### 17.1 VP-444 Input Resolutions

Resolution/Refresh Rate	PC 1/PC 2	HDMI 1-10
640x480 (60/72/75/85Hz)	Yes	Yes
800x600 (56/60/72/75/85Hz)	Yes	Yes
1024x768 (60/70/75/85Hz)	Yes	Yes
1280x720 60Hz	Yes	Yes
1280x800 60Hz	Yes	Yes
1280x1024 (60/75/85Hz)	Yes	Yes
1366x768 60Hz	Yes	Yes
1400x1050 60Hz	Yes	Yes
1440x900 60Hz	Yes	Yes
1600x1200 60Hz	Yes	Yes
1600x900 RB 60Hz	Yes	Yes
1680x1050 RB 60Hz	Yes	Yes
1920x1080 60Hz	Yes	Yes
1920x1200 RB 60Hz	Yes	Yes
480I/576I	No	Yes
480P/576P	No	Yes
720P(50/60Hz)	No	Yes
1080I(50/60Hz)	No	Yes
1080P(24/25/30Hz)	No	Yes
1080P(50/60Hz)	No	Yes

### 17.1 VP-443 Output Resolutions

NATIVE	640x480 (60)	800x600 (60)	1024x768 (60)
1280x768 (60)	1360x768 (60)	1280x720 (60)	1280x800 (60)
1280x1024 (60)	1440x900 (60)	1400x1050 (60)	1680x1050 (60)
1600x1200 (60)	1920x1080 (60)	1920x1200 (60)	480p (60)
720p (60)	1080i (60)	1080p (60)	576p (50)
720p (50)	1080i (50)	1080p (50)	

## 18 VP-443

The following are the **VP-443** input and output resolutions:

### 18.1 VP-443 Input Resolutions

Resolution/Refresh Rate	CV	Component	VGA	HDMI
480i/576i (NTSC/PAL)	Yes	Yes	No	Yes
480p/576p	No	Yes	No	Yes
720p@(60/50)	No	Yes	No	Yes
1080i@(60/50)	No	Yes	No	Yes
1080p@(60/50)	No	Yes	No	Yes
1080p@(24/25/30)	No	Yes	No	Yes
480p/576p-RGB	No	No	Yes	Yes
720p@(60/50)-RGB	No	No	Yes	Yes
1080i@(60/50)-RGB	No	No	No	Yes
1080p@(60/50)-RGB	No	No	Yes	Yes
1080p@(24/25/30)-RGB	No	No	Yes	Yes
640x480@(60/67/72/75/85)	No	No	Yes	Yes
1080x600@(56/60/72/75)	No	No	Yes	Yes
1024x768@(60/70/75)	No	No	Yes	Yes
1280x1024@(60/75)	No	No	Yes	Yes
1280X960	No	No	Yes	Yes
1600X900@60	No	No	Yes	Yes
1600X1200@60	No	No	Yes	Yes
1280x800@60	No	No	Yes	Yes
1440x900@60	No	No	Yes	Yes
1366x768@60	No	No	Yes	Yes
1400x1050@60	No	No	Yes	Yes
1680x1050@60	No	No	Yes	Yes
1920x1200@60	No	No	Yes	Yes
2K@50 (2048X1080)	No	No	Yes	Yes
2K@60 (2048X1080)	No	No	Yes	Yes

### 18.2 VP-443 Output Resolutions

NATIVE	640x480 (60)	800x600 (60)	1024x768 (60)
1280x800 (60)	1366x768 (60)	1440x900 (60)	1280x1024 (60)
1400x1050 (60)	1600x1200 (60)	1920x1200 (60)	1600x900 (60)
480p (60)	480i (60)	576p(60)	576i (60)
720p(50/60)	1080i(50/60)	1080p(50/60)	480i (59)
480p (59)	720p (59)	1080i (59)	1080p (59)
2048x1080 (50/60)			

## 19 VP-441

The following are the **VP-441** input and output resolutions:

### 19.1 VP-441 Input Resolution

Resolution/Refresh Rate	CV/s-Video	Component	VGA	HDMI
480i/576i(NTSC/PAL)	Yes (480i30x2 / 576i25x2)	Yes	No	Yes
480p/576p	No	Yes	No	Yes
720p@(60/50)	No	Yes	No	Yes
1080i@(60/50)	No	Yes	No	Yes
1080p@(60/50)	No	Yes	No	Yes
1080p@(24/25/30)	No	Yes	No	Yes
480p/576p-RGB	No	No	Yes	Yes
720p@(60/50)-RGB	No	No	Yes	Yes
1080i@(60/50)-RGB	No	No	No	Yes
1080p@(60/50)-RGB	No	No	Yes	Yes
1080p@(24/25/30)-RGB	No	No	No	Yes
640x480@(60/67/72/75/85)	No	No	Yes	Yes
1080x600@(56/60/72/75)	No	No	Yes	Yes
1024x768@(60/70/75)	No	No	Yes	Yes
1280x1024@(60/75)	No	No	Yes	Yes
1280X960	No	No	Yes	Yes
1600X900@60	No	No	Yes	Yes
1600X1200@60	No	No	Yes	Yes
1280x800@60	No	No	Yes	Yes
1440x900@60	No	No	Yes	Yes
1366x768@60	No	No	Yes	Yes
1400x1050@60	No	No	Yes	Yes
1680x1050@60	No	No	Yes	Yes
1920x1200@60	No	No	Yes	Yes
2K@50 ( 2048X1080)	No	No	Yes	Yes
2K@60 ( 2048X1080)	No	No	Yes	Yes

### 19.2 VP-441 Output Resolutions

NATIVE	640x480 (60)	800x600 (60)	1024x768 (60)
1280X800 (60)	1366x768 (60)	1440x900 (60)	1280x1024 (60)
1400x1050 (60)	1600x1200 (60)	1920x1200 (60)	1600X900 (60)
480P (60)	480I (60)	576P(60)	576I (60)
720P(50/60)	1080i(50/60)	1080p(50/60)	480I (59)
480P (59)	720P (59)	1080I (59)	1080P (59)
2048x1080 (50/60)			

## 20 VP-438

The following are the **VP-438** input and output resolutions:

### 20.1 VP-438 Input Resolution

Resolution/Refresh Rate	CV	Y, Pb, Pr (Component)	PC	HDMI
480i/576i(NTSC/PAL)	Yes	Yes	No	Yes
480p/576p	No	Yes	No	Yes
720p@(60/50)	No	Yes	No	Yes
1080i@(60/50)	No	Yes	No	Yes
1080p@(60/50)	No	Yes	No	Yes
1080p@(24/25/30)	No	Yes	No	Yes
480p/576p-RGB	No	No	Yes	Yes
720p@(60/50)-RGB	No	No	Yes	Yes
1080i@(60/50)-RGB	No	No	No	Yes
1080p@(60/50)-RGB	No	No	Yes	Yes
1080p@(24/25/30)-RGB	No	No	No	Yes
640x480@(60/67/72/75/85)	No	No	Yes	Yes
1080x600@(56/60/72/75)	No	No	Yes	Yes
1024x768@(60/70/75)	No	No	Yes	Yes
1280x1024@(60/75)	No	No	Yes	Yes
1280X960	No	No	Yes	Yes
1600X900@60	No	No	Yes	Yes
1600x1200@60	No	No	Yes	Yes
1280x800@60	No	No	Yes	Yes
1440x900@60	No	No	Yes	Yes
1366x768@60	No	No	Yes	Yes
1400x1050@60	No	No	Yes	Yes
1680x1050@60	No	No	Yes	Yes
1920x1200@60	No	No	Yes	Yes
2K@50 (2048X1080)	No	No	Yes	Yes
2K@60 (2048X1080)	No	No	Yes	Yes

### 20.2 VP-438 Output Resolutions

480i	480p	720p @50Hz	1080i @60Hz	1080p @60Hz
576i	576p	720p @60Hz	1080i @50Hz	1080p @50Hz
480i@59.94Hz	480p@59.94 Hz	720p@59.94Hz	1080i@59.94Hz	1080p@59.94Hz
640x480	800x600	1024x768	1280x1024	1600x1200
1366x768	1680x1050	1920x1200	1280x800	1440x900
1400x1050	1600x900			

## 21 VP-437xl

### 21.1 VP-437xl Input Resolutions

Resolution/Refresh Rate	CV/s-Video	Component	VGA	HDMI
480i/576i(NTSC/PAL)	Yes (480i30x2 / 576i25x2)	Yes	No	No
480p/576p	No	Yes	Yes	Yes
720p @(60/50)	No	Yes	Yes	Yes
1080i @(60/50)	No	Yes	No	Yes
1080p @(60/50)	No	Yes	Yes	Yes
1080p @(24/30)	No	Yes	No	Yes
640x480 @(60/72/75/85)	No	No	Yes	Yes
1080x600 @(56/60/72/75/85)	No	No	Yes	Yes
1024x768 @(60/70/75/85)	No	No	Yes	Yes
1280x1024 @(60/75/85)	No	No	Yes	Yes
1600x1200 @60	No	No	Yes	Yes
1366x768 @60	No	No	Yes	Yes
1680x1050 @60	No	No	Yes	Yes
1920x1200 @60	No	No	Yes	Yes

### 21.2 VP-437xl Output Resolutions

Native	640x480	1080x600	1024x768	1280x1024
1600x1200	480i	480p	576i	576p
720p@60	1080i@60	1080p@60	720p@50	1080i@50
1080p@50	1366x768	1680x1050	1920x1200	1280x800
1440x900	1400x1050	1600x900		



## 22 VP-437N

### 22.1 VP-437N Input Resolutions

Resolution/Refresh Rate	CV/s-Video	Component	PC	HDMI
480i/576i(NTSC/PAL)	Yes	Yes	No	Yes
480p/576p	No	Yes	No	Yes
720p@(60/50)	No	Yes	No	Yes
1080i@(60/50)	No	Yes	No	Yes
1080p@(60/50)	No	Yes	No	Yes
1080p@(24/25/30)	No	Yes	No	Yes
1080psF @(24/25/30)	No	No	No	No
480p/576p-RGB	No	No	Yes	Yes
720p@(60/50)-RGB	No	No	Yes	Yes
1080i@(60/50)-RGB	No	No	No	Yes
1080p@(60/50)-RGB	No	No	Yes	Yes
1080p@(24/25/30)-RGB	No	No	No	Yes
640x480@(60/67/72/75/85)	No	No	Yes	Yes
1080x600@(56/60/72/75)	No	No	Yes	Yes
1024x768@(60/70/75)	No	No	Yes	Yes
1280x1024@(60/75)	No	No	Yes	Yes
1280X960	No	No	Yes	Yes
1600X900@60	No	No	Yes	Yes
1600x1200@60	No	No	Yes	Yes
1280x800@60	No	No	Yes	Yes
1440x900@60	No	No	Yes	Yes
1366x768@60	No	No	Yes	Yes
1400x1050@60	No	No	Yes	Yes
1680x1050@60	No	No	Yes	Yes
1920x1200@60	No	No	Yes	Yes
2K@50 (2048X1080)	No	No	Yes	Yes
2K@60 (2048X1080)	No	No	Yes	Yes

### 22.2 VP-437N Output Resolutions

NATIVE	640x480 (60)	800x600 (60)	1024x768 (60)
1280X800 (60)	1366x768 (60)	1440x900 (60)	1280x1024 (60)
1400x1050 (60)	1600x1200 (60)	1920x1200 (60)	1600X900 (60)
480P (60)	480I (60)	576P(60)	576I (60)
720P(50/60)	1080i(50/60)	1080p(50/60)	480I (59)
480P (59)	720P (59)	1080I (59)	1080P (59)

## 23 VP-436N

The following are the **VP-436N** input and output resolutions:

### 23.1 VP-436N Input Resolutions

Resolution/Refresh Rate	CV/s-Video	Component	PC	HDMI
480i/576i(NTSC/PAL)	Yes	Yes	No	Yes
480p/576p	No	Yes	No	Yes
720p@(60/50)	No	Yes	No	Yes
1080i@(60/50)	No	Yes	No	Yes
1080p@(60/50)	No	Yes	No	Yes
1080p@(24/25/30)	No	Yes	No	Yes
1080psF @(24/25/30)	No	No	No	No
480p/576p-RGB	No	No	Yes	Yes
720p@(60/50)-RGB	No	No	Yes	Yes
1080i@(60/50)-RGB	No	No	No	Yes
1080p@(60/50)-RGB	No	No	Yes	Yes
1080p@(24/25/30)-RGB	No	No	No	Yes
640x480@(60/67/72/75/85)	No	No	Yes	Yes
1080x600@(56/60/72/75)	No	No	Yes	Yes
1024x768@(60/70/75)	No	No	Yes	Yes
1280x1024@(60/75)	No	No	Yes	Yes
1280X960	No	No	Yes	Yes
1600X900@60	No	No	Yes	Yes
1600x1200@60	No	No	Yes	Yes
1280x800@60	No	No	Yes	Yes
1440x900@60	No	No	Yes	Yes
1366x768@60	No	No	Yes	Yes
1400x1050@60	No	No	Yes	Yes
1680x1050@60	No	No	Yes	Yes
1920x1200@60	No	No	Yes	Yes
2K@50 (2048X1080)	No	No	Yes	Yes
2K@60 (2048X1080)	No	No	Yes	Yes

### 23.2 VP-436N Output Resolutions

NATIVE	640x480 (60)	800x600 (60)	1024x768 (60)
1280X800 (60)	1366x768 (60)	1440x900 (60)	1280x1024 (60)
1400x1050 (60)	1600x1200 (60)	1920x1200 (60)	1600X900 (60)
480P (60)	480I (60)	576P(60)	576I (60)
720P(50/60)	1080i(50/60)	1080p(50/60)	480I (59)
480P (59)	720P (59)	1080I (59)	1080P (59)

## 24 VP-435

The following are the **VP-435** input and output resolutions.

### 24.1 VP-435 Input Resolutions

Resolution/Refresh Rate	Component	VGA	HDMI
480I/576I(NTSC/PAL)	Yes	No	No
480P/576P	Yes	No	Yes (YUV)
720P@(60/50)	Yes	No	Yes (YUV)
1080I@(60/50)	Yes	No	Yes (YUV)
1080P@(60/50)	Yes	No	Yes (YUV)
1080P@(24/25/30)	Yes	No	Yes (YUV)
480P/576P-RGB	No	Yes	Yes
720P@(60/50)-RGB	No	Yes	Yes
1080I@(60/50)-RGB	No	No	Yes
1080P@(60/50)-RGB	No	Yes	Yes
1080P@(24/25/30)-RGB	No	No	Yes
640x480 @(60/67/72/75/85)	No	Yes	Yes
800x600 @(56/60/72/75)	No	Yes	Yes
1024x768 @(60/70/75)	No	Yes	Yes
1280x1024 @(60/75)	No	Yes	Yes
1280X960	No	Yes	Yes
1600X900 @60	No	Yes	Yes
1600X1200 @60	No	Yes	Yes
1280x800 @60	No	Yes	Yes
1440x900 @60	No	Yes	Yes
1366x768 @60	No	Yes	Yes
1400x1050 @60	No	Yes	Yes
1680x1050 @60	No	Yes	Yes
1920x1200 @60	No	Yes	Yes

### 24.2 VP-435 Output Resolutions

NATIVE	640x480 (60)	800x600 (60)	1024x768 (60)
1280X800 (60)	1366x768 (60)	1440x900 (60)	1280x1024 (60)
1400x1050 (60)	1680x1050 (60)	1600x1200 (60)	1920x1200 (60)
1600X900(60)	480P (60)	480I (60)	576P(50)
576I (60)	720P(50/60)	1080i(50/60)	1080p(50/60)

## 25 VP-434

The following are the **VP-434** input and output resolutions:

### 25.1 VP-434 Input Resolutions

Resolution/Refresh Rate	Component	HDMI
480i/576i(NTSC/PAL)	Yes	No
480p/576p	Yes	Yes (YUV)
720p@(60/50)	Yes	Yes (YUV)
1080i@(60/50)	Yes	Yes (YUV)
1080p@(60/50)	Yes	Yes (YUV)
1080p@(24/25/30)	Yes	Yes (YUV)
480p/576p-RGB	No	Yes
720p@(60/50)-RGB	No	Yes
1080i@(60/50)-RGB	No	Yes
1080p@(60/50)-RGB	No	Yes
1080p@(24/25/30)-RGB	No	Yes
640x480 @(60/67/72/75/85)	No	Yes
800x600 @(56/60/72/75)	No	Yes
1024x768 @(60/70/75)	No	Yes
1280x1024 @(60/75)	No	Yes
1280X960	No	Yes
1600X900 @60	No	Yes
1600X1200 @60	No	Yes
1280x800 @60	No	Yes
1440x900 @60	No	Yes
1366x768 @60	No	Yes
1400x1050 @60	No	Yes
1680x1050 @60	No	Yes
1920x1200 @60	No	Yes

### 25.2 VP-434 Output Resolutions

NATIVE	640x480 (60)	800x600 (60)	1024x768 (60)
1280X800 (60)	1366x768 (60)	1440x900 (60)	1280x1024 (60)
1400x1050 (60)	1680x1050 (60)	1600x1200 (60)	1920x1200 (60)
1600X900(60)	480P (60)	480i (60)	576p(50)
576i (60)	720p(50/60)	1080i(50/60)	1080p(50/60)

## 26 VP-427A

The following are the **VP-427A** input and output resolutions:

### 26.1 VP-427A Input Resolutions

Resolution/Refresh Rate	Resolution/Refresh Rate
480I/576I(NTSC/PAL)	1280x1024@(60)
480P/576P	1600x1200@60
720P@(60/50)	1280x800@60
1080I@(60/50)	1366x768@60
1080P@(60/50)	1680x1050@60
1080P@(24/25/30)	1920x1200 RB@60
640x480@(60/72/75)	1440x900@60
800x600@(56/60/72/75)	1400x1050@60
1024x768@(60/70/75)	

### 26.2 VP-427A Output Resolutions

NATIVE	640x480 (60)	800x600 (60)	1024x768 (60)
1280X800 (60)	1680x1050 (60)	1440x900 (60)	1920x1200 (60)
1400x1050 (60)	480p (60)	1600x1200 (60)	720p(50/60)
1080i(50/60)	1080p(50/60)	576p(50)	

## 27 VP-427

The following are the **VP-427** input and output resolutions:

### 27.1 VP-427 Input Resolutions

Resolution/Refresh Rate	DVI	HDMI
480i/576i(NTSC/PAL)	No	Yes
480p/576p	Yes	Yes
720p@(60/50)	Yes	Yes
1080i@(60/50)	Yes	Yes
1080p@(60/50)	Yes	Yes
1080p@(24/25/30)	Yes	Yes
480p/576p-RGB	Yes	Yes
720p@(60/50)-RGB	Yes	Yes
1080i@(60/50)-RGB	Yes	Yes
1080p@(60/50)-RGB	Yes	Yes
1080p@(24/25/30)-RGB	Yes	Yes
640x480@(60/67/72/75/85)	Yes	Yes
1080x600@(56/60/72/75)	Yes	Yes
1024x768@(60/70/75)	Yes	Yes
1280x1024@(60/75)	Yes	Yes
1280X960	Yes	Yes
1600X900@60	Yes	Yes
1600X1200@60	Yes	Yes
1280x800@60	Yes	Yes
1440x900@60	Yes	Yes
1366x768@60	Yes	Yes
1400x1050@60	Yes	Yes
1680x1050@60	Yes	Yes
1920x1200@60	Yes	Yes

### 27.2 VP-427 Output Resolutions

NATIVE	640x480 (60)	800x600 (60)	1024x768 (60)
1280X800 (60)	1366x768 (60)	1440x900 (60)	1280x1024 (60)
1400x1050 (60)	1680x1050 (60)	1600x1200 (60)	1920x1200 (60)
1600X900(60)	480p (60)	576p(50)	720p(50/60)
1080i(50/60)	1080p(50/60)		

## 28 VP-425

The following are the **VP-425** input and output resolutions:

### 28.1 VP-425 Input Resolutions

Resolution/Refresh Rate	Component	VGA
480i/576i(NTSC/PAL)	Yes	No
480p/576p	Yes	No
720p@(60/50)	Yes	No
1080i@(60/50)	Yes	No
1080p@(60/50)	Yes	No
1080p@(24/25/30)	Yes	No
720p@(60/50)-RGB	No	Yes
1080p@(60/50)-RGB	No	Yes
640x480@(60/67/72/75/85)	No	yes
1080x600@(56/60/72/75)	No	Yes
1024x768@(60/70/75)	No	Yes
1280x1024@(60/75)	No	Yes
1280X960	No	Yes
1600X900@60	No	Yes
1600X1200@60	No	Yes
1280x800@60	No	Yes
1440x900@60	No	Yes
1366x768@60	No	Yes
1400x1050@60	No	Yes
1680x1050@60	No	Yes
1920x1200@60	No	Yes

### 28.2 VP-425 Output Resolutions

NATIVE	640x480 (60)	800x600 (60)	1024x768 (60)
1280X800 (60)	1366x768 (60)	1440x900 (60)	1280x1024 (60)
1400x1050 (60)	1680x1050 (60)	1600x1200 (60)	1920x1200 (60)
1600X900(60)	480p (60)	576p(50)	720p(50/60)
1080i(50/60)	1080p(50/60)		

## 29 VP-424

The following are the **VP-424** input and output resolutions:

### 29.1 VP-424 Input Resolutions

Resolution/Refresh Rate	DVI	HDMI
480i/576i(NTSC/PAL)	No	Yes
480p/576p	Yes	Yes
720p@(60/50)	Yes	Yes
1080i@(60/50)	Yes	Yes
1080p@(60/50)	Yes	Yes
1080p@(24/25/30)	Yes	Yes
480p/576p-RGB	Yes	Yes
720p@(60/50)-RGB	Yes	Yes
1080i@(60/50)-RGB	Yes	Yes
1080p@(60/50)-RGB	Yes	Yes
1080p@(24/25/30)-RGB	Yes	Yes
640x480@(60/67/72/75/85)	Yes	Yes
1080x600@(56/60/72/75)	Yes	Yes
1024x768@(60/70/75)	Yes	Yes
1280x1024@(60/75)	Yes	Yes
1280X960	Yes	Yes
1600X900@60	Yes	Yes
1600X1200@60	Yes	Yes
1280x800@60	Yes	Yes
1440x900@60	Yes	Yes
1366x768@60	Yes	Yes
1400x1050@60	Yes	Yes
1680x1050@60	Yes	Yes
1920x1200@60	Yes	Yes

### 29.2 VP-424 Output Resolutions

NATIVE	640x480 (60)	800x600 (60)	1024x768 (60)
1280X800 (60)	1366x768 (60)	1440x900 (60)	1280x1024 (60)
1400x1050 (60)	1680x1050 (60)	1600x1200 (60)	1920x1200 (60)
1600X900(60)	480p (60)	576p(50)	720p(50/60)
1080i(50/60)	1080p(50/60)		



---

## 30 VP-423

The following are the **VP-423** input and output resolutions:

### 30.1 VP-423 Input Resolutions

720p@(60/50)	1080p@(60/50)	640x480@(60/72/75/85)
1080x600@(56/60/72/75/85)	1024x768@(60/70/75/85)	1280x1024@(60/75/85)
1600x1200@60	1680x1050@60	1920x1200@60(1920x1200)

### 30.2 VP-423 Output Resolutions

PC:

640x480 (60)	1280x1024 (60)	1920x1200 (60)	1080x600 (60)	1440x900 (60)
1280x720 (60)	1024x768 (60)	1400x1050 (60)	1920x1080 (60)	1280x768 (60)
1680x1050 (60)	1280x720 (50)	1366x768 (60)	1600x1200 (60)	1920x1080 (50)
1366x768 60	1600x1900			

HD:

720pRGB @ 50/60Hz	1080pRGB @ 50/60Hz)
-------------------	---------------------

## 31 VP-422

The following are the **VP-422** input and output resolutions:

### 31.1 VP-422 Input Resolutions

720p@(60/50)RGB	1080p@(60/50)RGB	640x480@(60/72/75/85)
1080x600@(56/60/72/75/85)	1024x768@(60/70/75/85)	1280x1024@(60/75/85)
1600x1200@60	1280x800@60	1440x900@60
1366x768@60	1400x1050@60	1680x1050@60
1920x1200@60		

### 31.2 VP-422 Output Resolutions

PC:

640x480 (60)	1080x600 (60)	1024x768 (60)
1366x768 (60)	1680x1050 (60)	1920x1200 (60)
1280x1024 (60)	1600x1200 (60)	1280x800 (60)
1440x900 (60)	1400x1050 (60)	1600x1900
1080pRGB		

HD:

480p	576p	720p @50/60Hz
1080p @50/60Hz	1080i @50/60Hz	

## 32 VP-421

The following are the **VP-421** input and output resolutions:

### 32.1 VP-421 Input Resolutions

720p@(60/50)RGB	1080p@(60/50)RGB	640x480@(60/72/75/85)
1080x600@(56/60/72/75/85)	1024x768@(60/70/75/85)	1280x1024@(60/75/85)
1600x1200@60	1280x800@60	1440x900@60
1366x768@60	1400x1050@60	1680x1050@60
1920x1200@60		

### 32.2 VP-421 Output Resolutions

PC:

640x480 (60)	1080x600 (60)	1024x768 (60)
1280x800 (60)	1280x1024 (60)	1600x1200 (60)
1366x768 (60)	1400x1050 (60)	1440x900 (60)
1680x1050 (60)	1920x1200 (60)	

Component:

480p	576p	720p @50/60Hz
1080p @50/60Hz	1080i @50/60Hz	

---

## 33 VP-420

The following are the **VP-420** input and output resolutions:

### 33.1 VP-420 Input Resolutions

720p@(60/50)RGB	1080p@(60/50)RGB	640x480@(60/72/75/85)
1080x600@(56/60/72/75/85)	1024x768@(60/70/75/85)	1280x1024@(60/75/85)
1600x1200@60	1280x800@60	1440x900@60
1366x768@60	1400x1050@60	1680x1050@60
1920x1200@60		

### 33.2 VP-420 Output Resolutions

PC:

640x480 (60)	1080x600 (60)	1024x768 (60)	1280x800 (60)
1280x1024 (60)	1600x1200 (60)	1366x768 (60)	1400x1050 (60)
1440x900 (60)	1680x1050 (60)	1920x1200 (60)	

---

## 34 VP-419xl

The following are the **VP-419xl** input and output resolutions:

### 34.1 VP-419xl Input Resolution

CV and s-Video:

NTSC	N4.43	PAL
PAL-M	PAL-N	SECAM

Y, Pb, Pr:

480p	576p	720p (50)
720p (60)	1080i (50)	1080i (60)

### 34.2 VP-419xl Output Resolution

PC:

640x480 (60)	1080x600 (60)	1024x768 (60)	1280x1024 (60)
1600x1200 (60)	1366x768 (60)	1440x900 (60)	1680x1050 (60)

Y, Pb, Pr:

480p	576p	720p (50)	720p (60)
1080i (50)	1080i (60)	1080p (50)	1080p (60)

---

## 35 VP-417

The following are the **VP-417** input and output resolutions:

### 35.1 VP-417 Input Resolution

Y/C and CV: NTSC + PAL

### 35.2 VP-417 Output Resolution

PC:

Native	1440x900	1280x1024
1400x1050	1680x1050	1600x1200
1920x1200RB		

DVI:

1440x900	1280x1024	1400x1050
1680x1050	1600x1200	1920x1200RB
480p	576p	720p @50/60Hz
1080p @50/60Hz	1080i @50/60Hz	

---

## 36 VP-413xl

The following are the **VP-413xl** output resolutions:

### 36.1 VP-413xl Output Resolution

PC:

640 x 480	800 x 600	1024 x 768	1366 x 768
1280x1024	1600x1200	1920x1200	

---

## 37 VP-410

The following are the **VP-410** input and output resolutions:

### 37.1 VP-410 Input Resolution

CV: NTSC

### 37.2 VP-410 Output Resolution

HDMI:

480p	576p	720p @50/60Hz
1080p @50/60Hz	1080i @50/60Hz	



---

## 38 VP-409

### 38.1 VP-409 Input Resolution

Y/C and CV: NTSC + PAL

### 38.2 VP-409 Output Resolution

PC:

Native	1440x900	1280x1024
1400x1050	1680x1050	1600x1200
1920x1200RB		