

AV Source scenario

A playback scenario is a sequence of steps separated with ','

```
F:N:P,P,...:C; F:N:P,P,...:C; ...
```

where

F - a video frame number, can be either a single digit (e.g. '1' to state frame [#1](#)) or range (e.g. '0-59' to state 60 frames, all parameters specified are applied to all frames);

N - repetitions of this step;

P,P,P - comma separated numbers of packets, can be a single digit (e.g. '0'), a set of digits (e.g. '0,1,2') and none (e.g. '::');

C - color format and color depth as following:

The 0 byte - color format

```
0 = RGB;
1 = YCbCr 4:4:4;
2 = YCbCr 4:2:2;
3 = YCbCr 4:2:0;
```

The 1st byte - color depth (bits per color), for RGB and YCbCr 4:4:4:

```
0 = 6 bits;
1 = 8 bits;
2 = 10 bits;
3 = 12 bits;
4 = 16 bits;
```

Calculation formula is: **bits_value * 256 + color_format_value**.

For example, YCbCr 4:4:4, 10 bits is $2 * 256 + 1 = 513$

Frame and packet numbers are zero-based.

Pre-calculated values for all color formats:

RGB:

```
6bpc = 0
8bpc = 256
10bpc = 512
12bpc = 768
16bpc = 1024
```

YUV 4:4:4:

```
8bpc = 257
10bpc = 513
12bpc = 769
16bpc = 1025
```

YUV 4:2:2:

```
8bpc = 258
```

```
10bpc = 514  
12bpc = 770  
16bpc = 1026
```

```
YUV 4:2:0:  
8bpc = 259  
10bpc = 515  
12bpc = 771  
16bpc = 1027
```

Sync Pulse

Only for HDMI playback: adding 'p' prefix to a scenario step asserts HPD pulse on HDMI RX (not TX) connector of UCD-323.

For example

```
0:59::256;p1:1::256;
```