

IEC62368 Three Vertical Bar Signal

RDL-100 video signal generator

1 Overview

1.1 Product Profile

The product is used for the testing of digital TV, providing a test signal for television test experiments. The product can produce the video test signals for the CVBS, YPbPr and HDMI interfaces to meet the requirements of the TV test.

1.2 Application field:

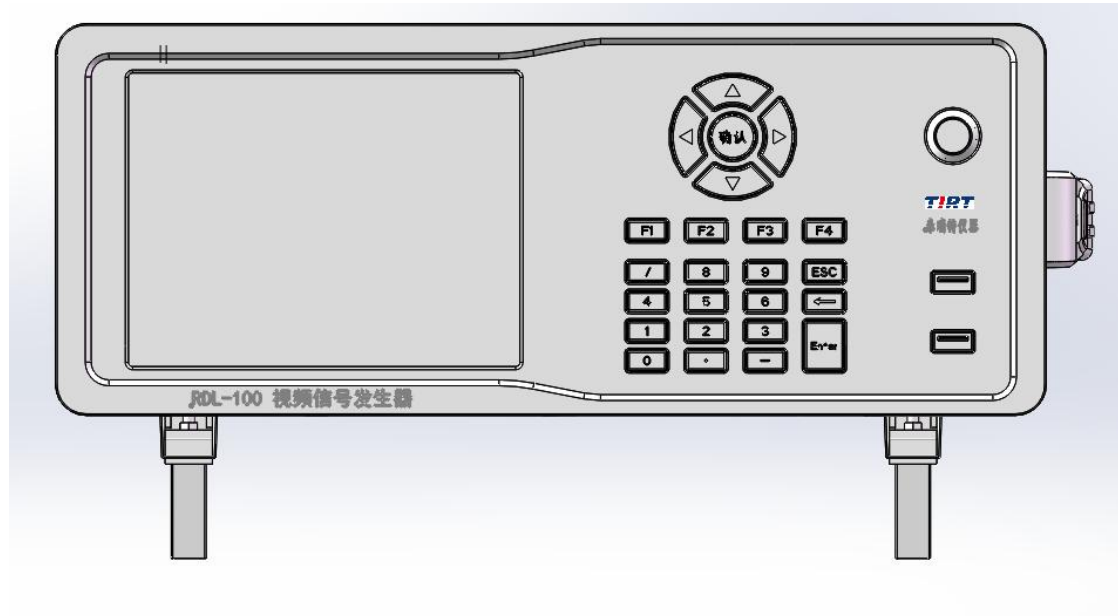
1. TV safety test experiment;
2. TV electromagnetic compatibility test experiment;
3. Other related test experiments of TV sets;

1.3 Functional Features:

- (1) It includes three interface types: CVBS, YPbPr and HDMI;
- (2) Support for PAL and NTSC calibration and clearing video format;
- (3) Support for 1280720p 50Hz, 1280720p 60Hz, 19201080i 50Hz, 19201080i 60Hz, 19201080p 25Hz, 19201080p 30Hz, 19201080p 50Hz, 19201080p 60Hz HD video formats;

(4) Support for ultra-HD (4K) video format of 3840 2160 25p and 3840 2160 30p;

2 Front panel description



① System display

Display the system control software interface, with a touch screen function, for setting the selection of the system signal, the video format, and the setting of the digital TV modulation signal parameters.

② key

It is composed of navigation keys (up and down, etc.), digital keyboard and function keys to facilitate users to operate and control the software.

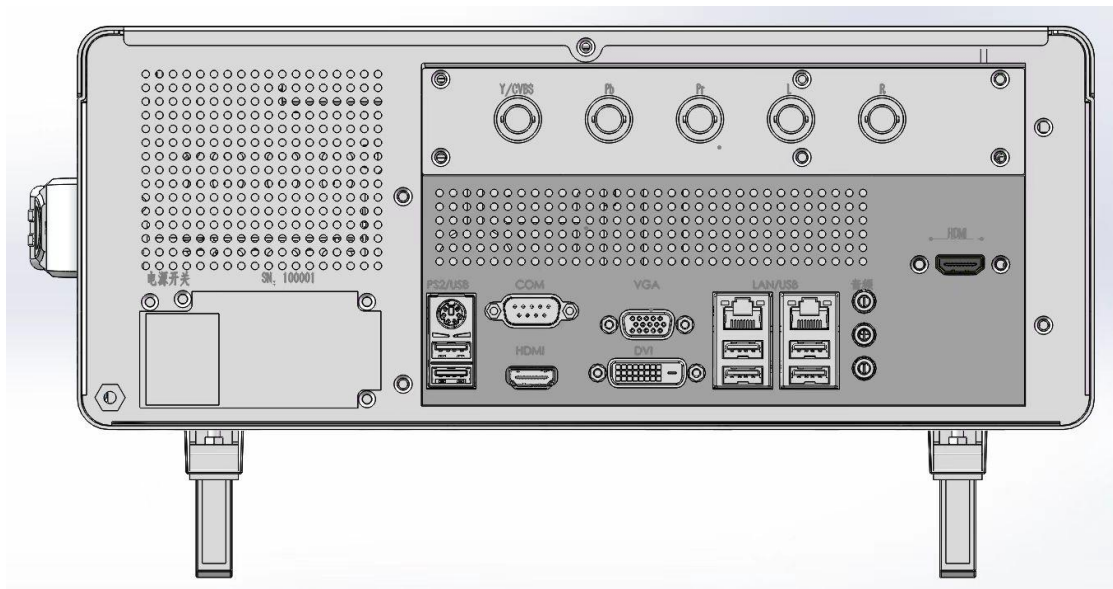
④ USB joggle

Easy for users to connect to the mouse, keyboard, U disk and other external devices.

⑤ power key

The control system switches and switches.

3 Rear panel description



① The Y / CVBS, Pb, and Pr interfaces

The output interface of analog TV composite signal and chromatic component signal, where Y / CVBS interface outputs composite signal (CVBS) when the signal formats are PAL and NTSC, and the luminance signal in chromatic signal (Y) in other formats.

② L, R joggle

Audio output interfaces, L and R represent the left and right channels, respectively.

③ HDMI joggle

Digital video signal output interface.

④ System peripherals interface

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Easy for users to connect to the monitor, mouse, keyboard, U disk and other external devices.

⑤ System power supply interface and switch

Connect and control the system power supply.

3 Technical indicators

interface type	project	scope	metric
CVBS	intensity level	(0~700) mV	$\pm (2\%X+6mV)$
	Color level	(0~885.1) mV	$\pm (2\%X+6mV)$
	chrominance phase	(0~360) °	$\pm 2^\circ$
YPbPr	Brightness signal output level (Y)	(0~700) mV	$\pm (2\%X+6mV)$
	Chromatic difference signal output level (Pb, Pr)	(-350~350) mV	$\pm (2\%X+6mV)$

Annex 1 Methods of system software

1. foreword

1.1. title

RDL-100 Video Signal Generator System Control Software V1.0 Operating Instructions.

1.2. Write the purpose

The purpose of this document is to introduce the operating instructions and operation steps of the RDL-100 video signal generator system control software V1.0 for easy user use.

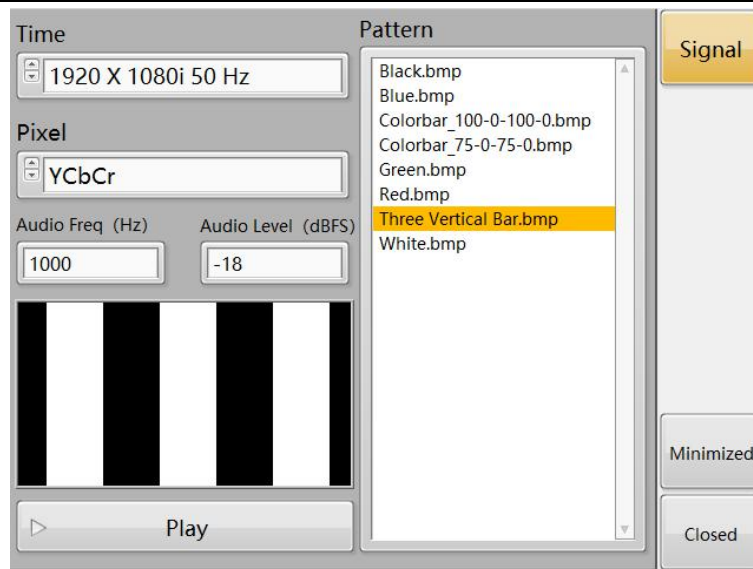
1.3. The program mainly controls and displays the interface

The RDL-100 video signal generator system control software V1.0 is opened displays the main control and display interface in Figure 1, including 10 controls of Time, Pattern, Pixel, Audio Freq, Audio Level, Preview, Play, Signal, Minimized, and Closed.

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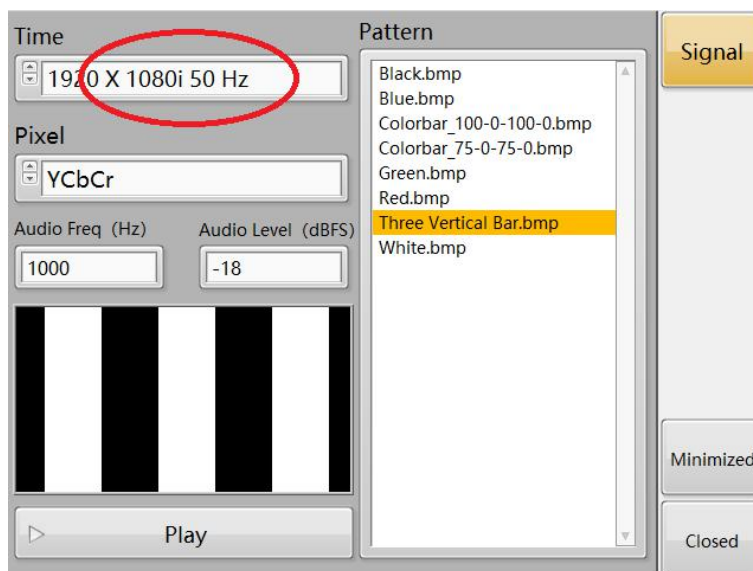
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graph 1

1.4. Time control

The control is shown in Figure 2 to display the video format for users to choose, and the interface is shown in Figure 3.

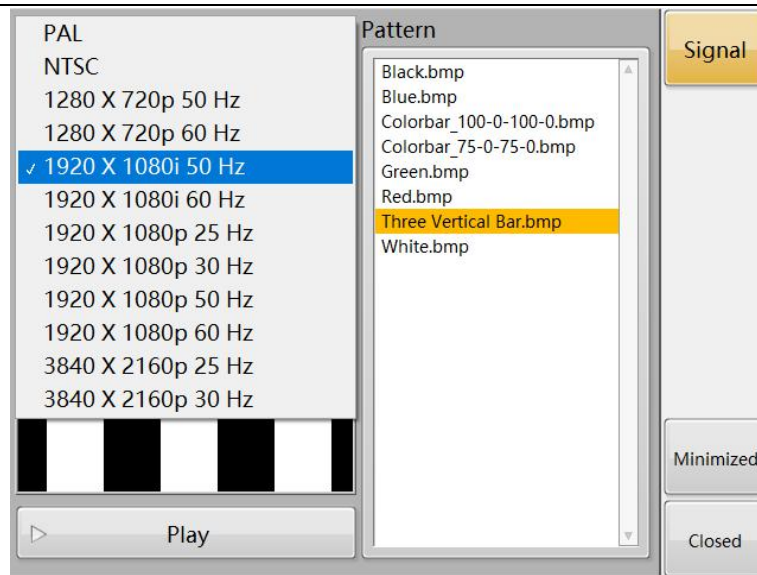


graph 2

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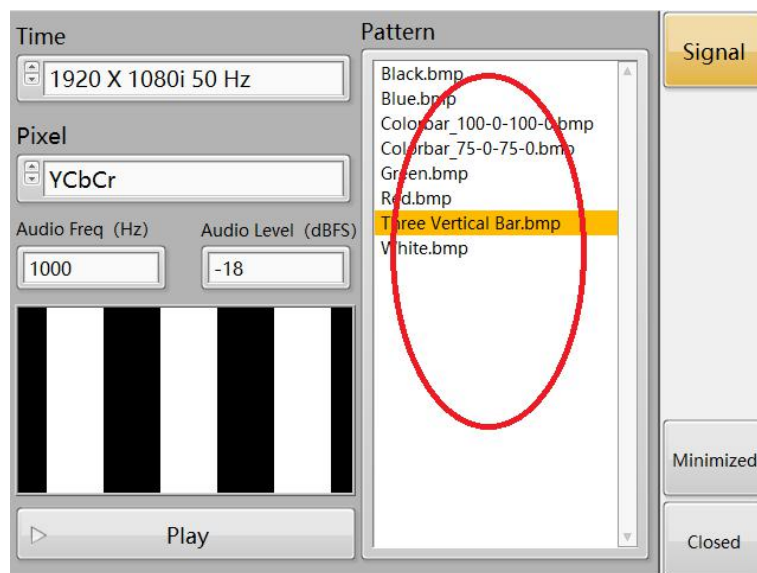
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graph 3

1.5. The Pattern control

The control in FIG. 4 serves to display the video test signal for the user to choose.



graph 4

1.6. Pixel control

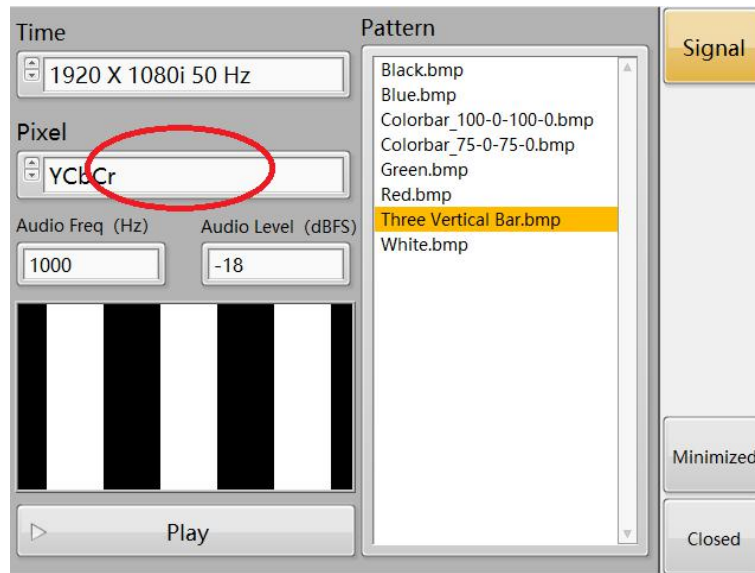
The control is shown in FIG. 5, which is to display the pixel sampling mode for

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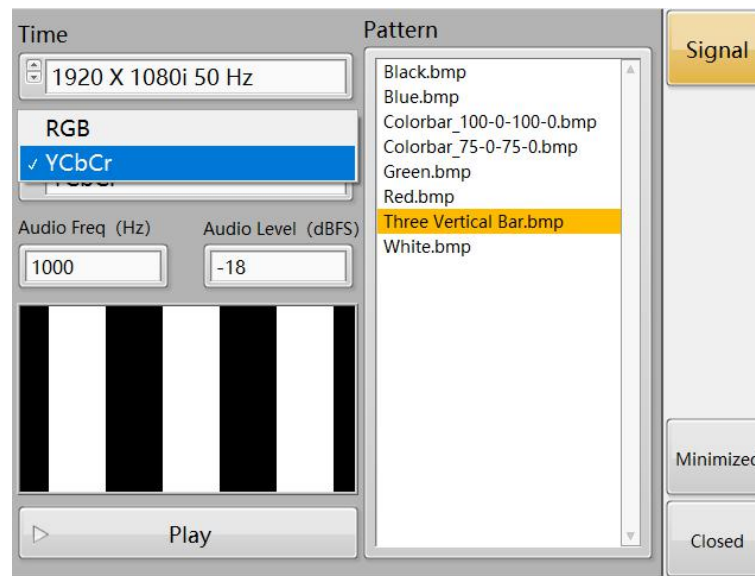
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users to select, and click the interface in FIG. 6.



graph 5



graph 6

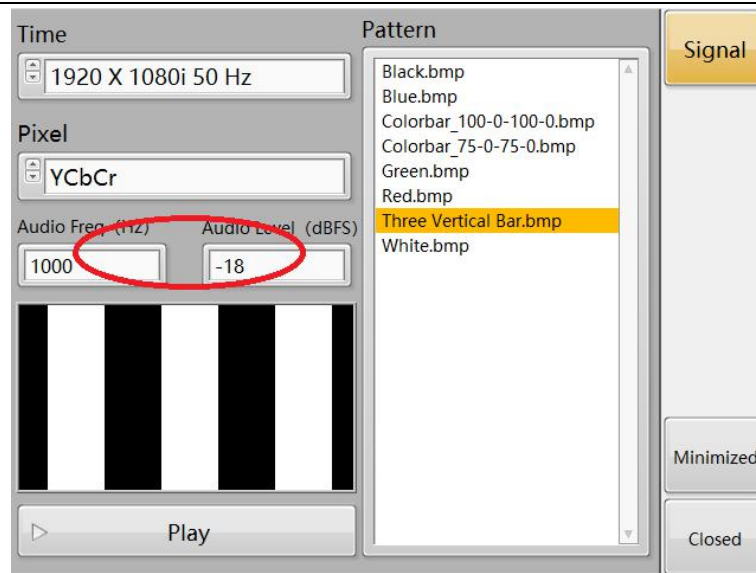
1.7. The Audio Freq and the Audio Level controls

The control is shown in FIG. 7 to set the frequency and level of the accompaniment.

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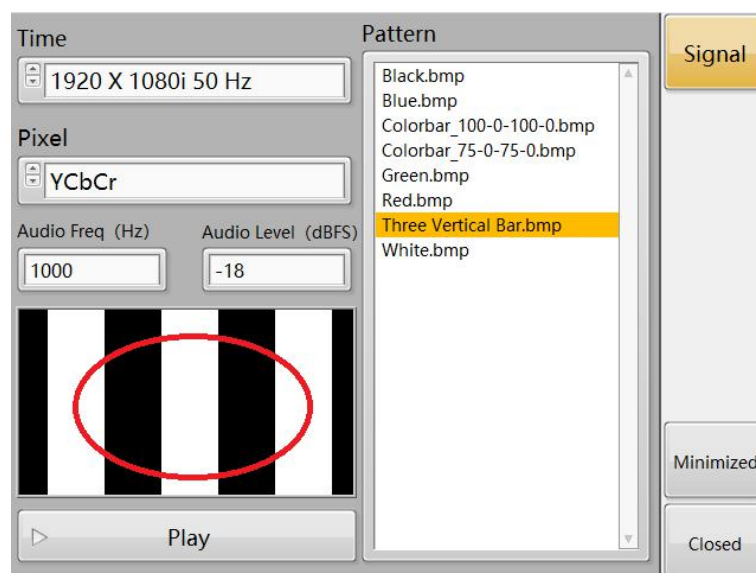
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graph 7

1.8. The Preview control

The control is shown in FIG. 8 to preview the selected video signal for the user reference.



graph 8

1.9. Play control

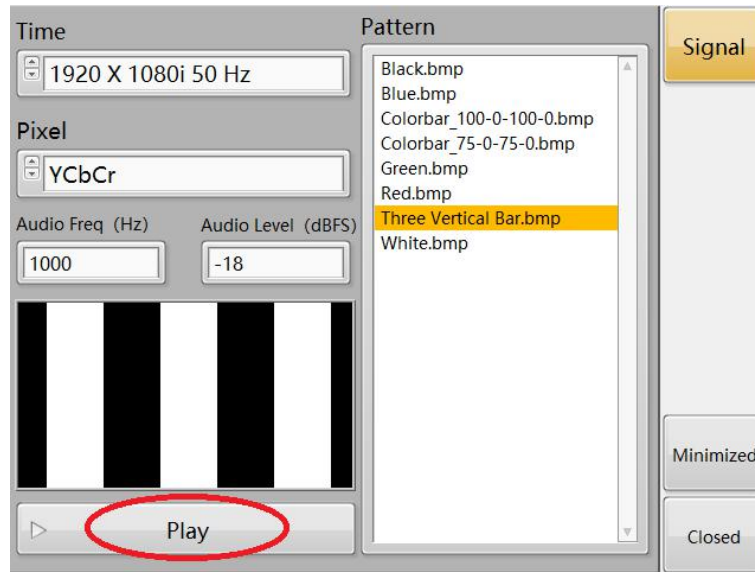
The control is used in FIG. 9 to play and stop playing the video signal. When the

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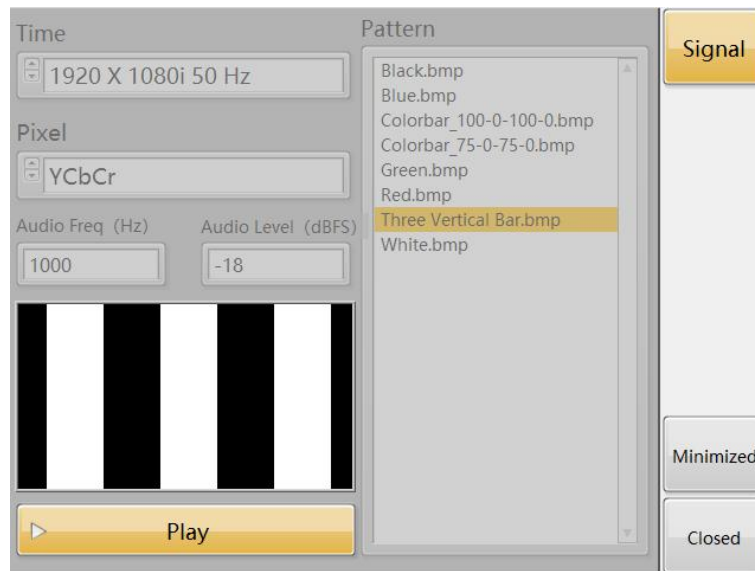
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button is playing the video signal, stop playing the video signal when the button is extinguished. When playing the video signal, the Time, Pattern, Pixel, Audio Freq and Audio Level controls are prohibited, and the interface is shown in FIG. 10.



graph 9



graph 10

1.10. The Signal, Minimized, and Closed controls

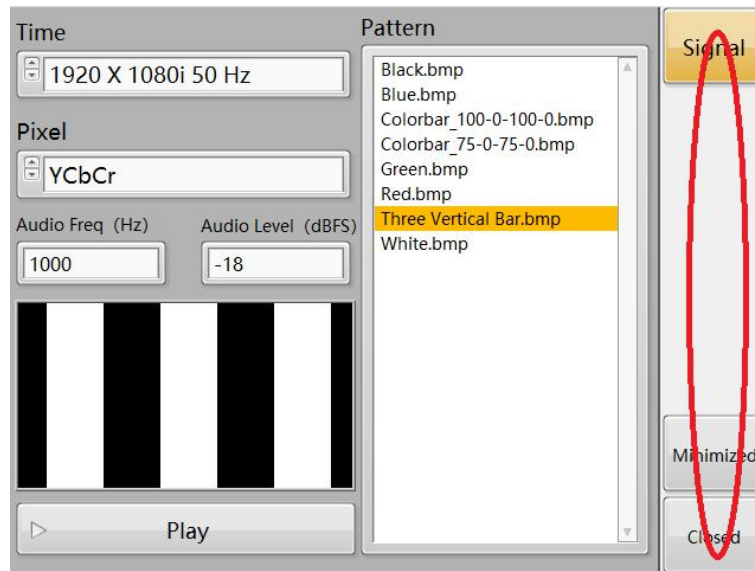
The control appears in Figure 11. The Signal control has no substantive effect, and the Minimized and Closed controls function to minimize the interface and close

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the software, respectively.



graph 11