EPSON®

Home Theatre Projector

EMP-TW100
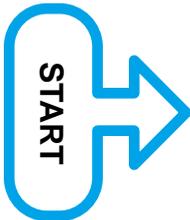
Setup Guide

1 **Before Using the Remote Control**

Inserting the Batteries and Battery Replacement Period

Using the Remote Control and Operating Range

2 **Setup**

Screen Size and Setting-up Distance

Setting-up Methods

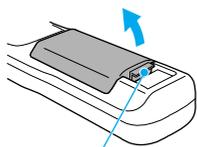**3** **Connecting to a Video Source**

4 **Connecting to a Computer**

Inserting the Batteries and Battery Replacement Period

The batteries are not inserted into the remote control at the time of purchase, and so you need to insert them before the remote control can be used.
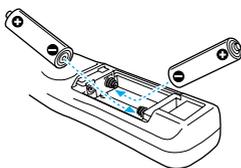
1 Remove the battery compartment cover.

While pressing the cover here, lift the cover up.

2 Insert the batteries.
Make sure the polarities of the batteries are correct.
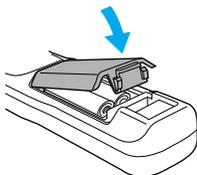
3 Replace the battery compartment cover.
After inserting the tab of the battery cover, push the cover down until it clicks into place.

If the remote control becomes slow in responding or if it stops working, the batteries may be spent. Replace the batteries with new ones.
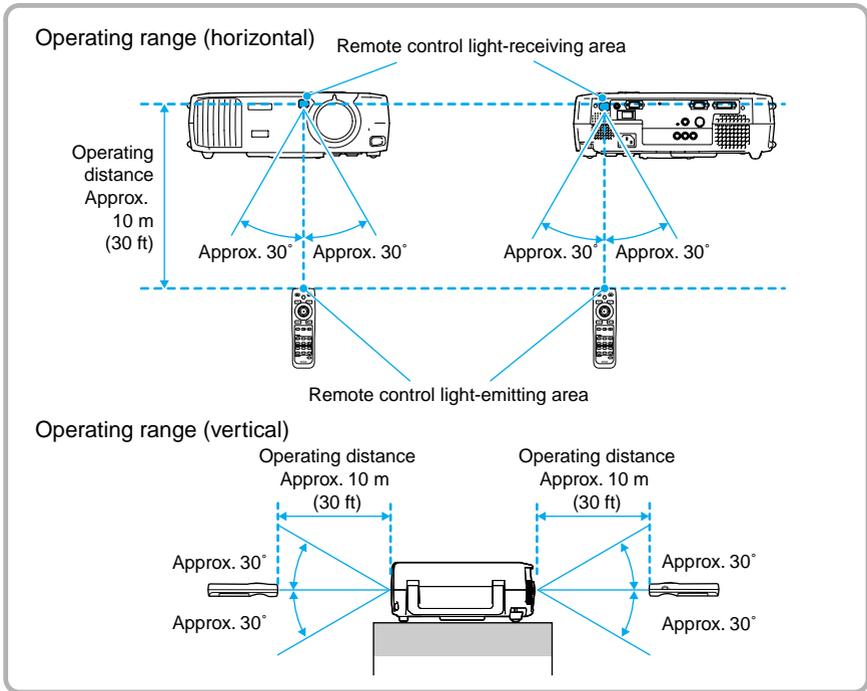
Use the following type of batteries as replacements.
   Alkaline dry cell LR6 (AA) x 2

Using the Remote Control and Operating Range

Point the remote control light-emitting area toward one of the remote control light-receiving area on the projector and operate the remote control buttons.
Use the remote control within the ranges indicated below. If the distance or angle between the remote control and the remote control light-receiving area is outside the normal operating range, the remote control may not work.

Operating range (horizontal)   Remote control light-receiving area

Operating distance Approx. 10 m (30 ft)

Approx. 30˚   Approx. 30˚   Approx. 30˚   Approx. 30˚

Remote control light-emitting area

Operating range (vertical)

Operating distance Approx. 10 m (30 ft)   Operating distance Approx. 10 m (30 ft)

Approx. 30˚   Approx. 30˚

Approx. 30˚   Approx. 30˚
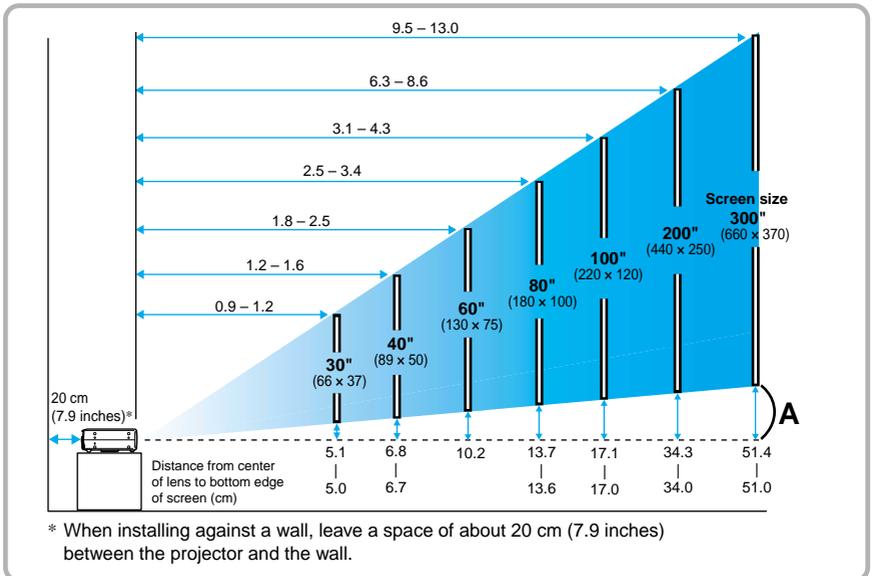
Screen Size and Setting-up Distance

The distance between the projector and the screen determines the actual image size.

Recommended distance : 0.9m - 13.0m (2.9 - 42.6 feet)

While referring to the table below, position the projector so that the images are projected at the optimum size.

Screen size (cm (feet))	Approximate projection distance* (m (feet))	Distance in Fig. A below (cm (feet))
30" (66 × 37 (2.1 × 1.2))	0.9 – 1.2 (2.9 – 3.9)	5.0 – 5.1 (0.16 – 0.17)
40" (89 × 50 (2.8 × 1.6))	1.2 – 1.6 (3.9 – 5.2)	6.7 – 6.8 (0.22 – 0.22)
60" (130 × 75 (4.2 × 2.4))	1.8 – 2.5 (5.9 – 8.2)	10.2 (0.33)
80" (180 × 100 (5.7 × 3.2))	2.5 – 3.4 (8.2 – 11.1)	13.6 – 13.7 (0.45 – 0.45)
100" (220 × 120 (7.2 × 4.1))	3.1 – 4.3 (10.1 – 14.1)	17.0 – 17.1 (0.56 – 0.56)
200" (440 × 250 (14.4 × 8.2))	6.3 – 8.6 (20.6 – 28.2)	34.0 – 34.3 (1.12 – 1.13)
300" (660 × 370 (21.6 × 12.1))	9.5 – 13.0 (31.1 – 42.6)	51.0 – 51.4 (1.67 – 1.69)

* Distance and dimensions should be used as a guide for installation. The actual distance will vary depending on projection conditions.

9.5 – 13.0

6.3 – 8.6

3.1 – 4.3

2.5 – 3.4

1.8 – 2.5

1.2 – 1.6

0.9 – 1.2

Screen size
300" (660 × 370)
200" (440 × 250)
100" (220 × 120)
80" (180 × 100)
60" (130 × 75)
40" (89 × 50)
30" (66 × 37)

20 cm (7.9 inches)*

Distance from center of lens to bottom edge of screen (cm)

| 5.1 | 6.8 | 10.2 | 13.7 | 17.1 | 34.3 | 51.4 | **A** |
| 5.0 | 6.7 | | 13.6 | 17.0 | 34.0 | 51.0 | |

* When installing against a wall, leave a space of about 20 cm (7.9 inches) between the projector and the wall.

- The projector's lens allows a zoom ratio of up to about 1.35. The image size at the maximum zoom setting is about 1.35 times bigger than the image size at the minimum zoom setting.
- The image size will be reduced when keystone correction is carried out.

Setting-up Methods

The projector supports the following five projection methods, allowing you to choose the best method for displaying your images.

After setting up the projector, refer to the *User's Guide* for details on turning on the power and adjusting settings such as the screen size. ("Basic Operations" in *User's Guide*)

> ⚠ Be sure to read the separate *Safety Instructions/ World-Wide Warranty Terms* before setting up the projector.
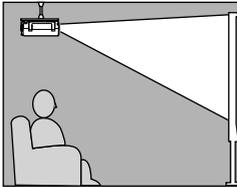
Front projection
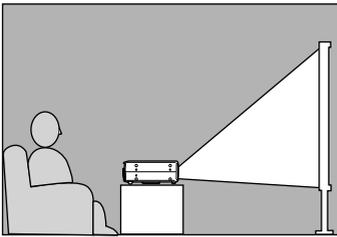
Projecting from locations such as the top of a cabinet with the projector turned upside-down
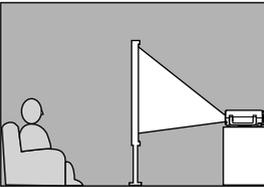When installing the projector upside down, set the Projection command in the Settings environment setting menu to "Front/Ceiling". ("Settings" menu in *User's Guide*)
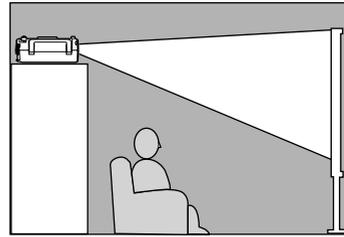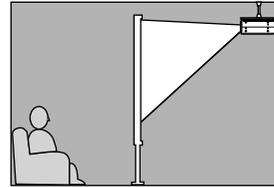
Front/ceiling projection

Rear projection using a translucent screen

Rear projection onto a translucent screen with the projector installed to the ceiling

* A special method of installation is required in order to suspend the projector from the ceiling. Please contact the place of purchase if you would like to use this installation method.

* When installing to the ceiling or projecting from behind the screen, set the Projection command in the Settings environment setting menu to match the method of projection being used.
("Settings" menu in *User's Guide*)
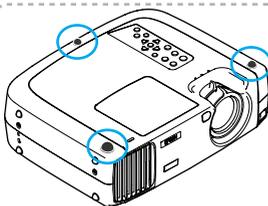
Rubber stands
(Attach in
3 places)

When turning the projector upside down, attach the rubber stands that are included.
This can prevent the control panel from directly touching the installation surface.
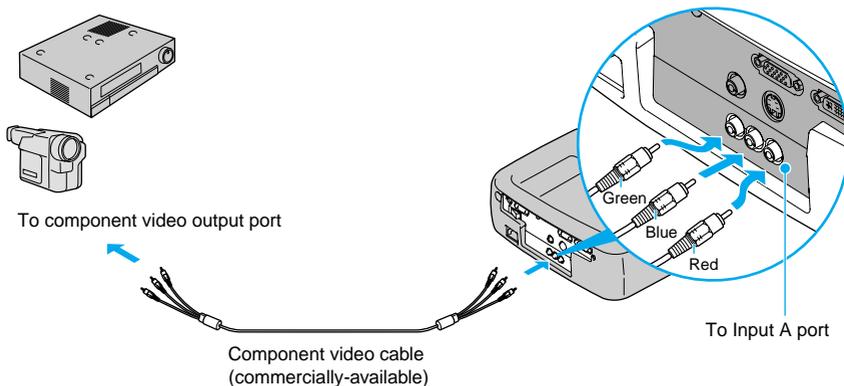
● Turn off the power for both the projector and the video source before connecting them. If the power for either device is on at the time of connection, damage may result.
● Check the shapes of the cable connectors and the device ports before making the connections. If you try to force a connector to fit a device port with a different shape or number of terminals, a malfunction or damage to the connector or port may result.

Refer to the Optional Accessories appendix in the separate *User's Guide* for details of the optional cables.

Projecting Component Video Images

If connecting using a component video cable (commercially-available)

To component video output port

Green
Blue
Red

To Input A port

Component video cable
(commercially-available)

If connecting using a component video cable (optional)

To Input B port

To component video output port

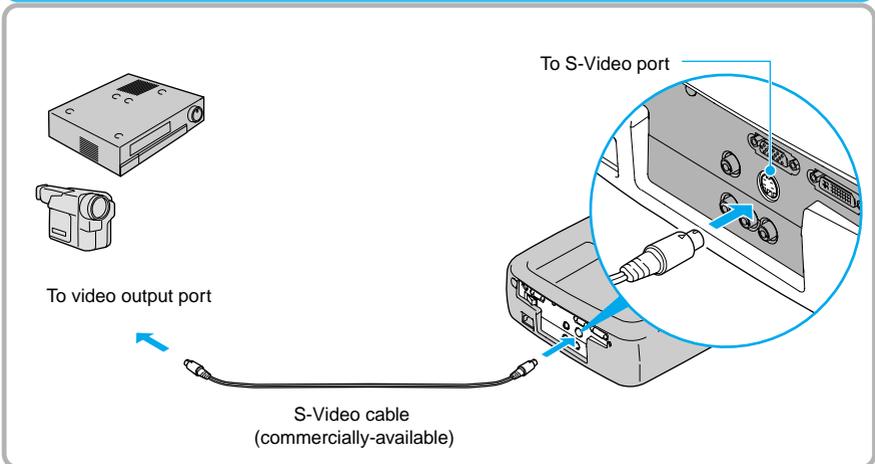Component video cable (optional)
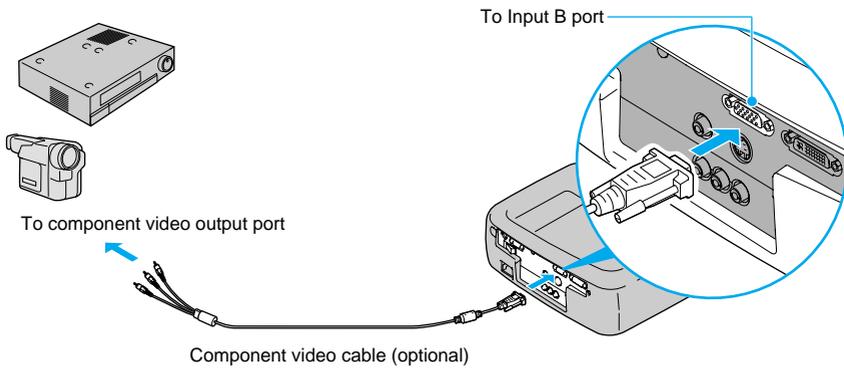
Make the connections, and then change the Input A or Input B command in the Advanced environment setting menu to "YCbCr" or "YPbPr" to match the input signal.("Advanced" menu in *User's Guide*)
For HDTV (750p or 1125i), "YPbPr" will be selected regardless of the above setting.
For SDTV(525i,625i), "YCbCr" will be selected regardless of the above setting.

5

Projecting Composite Video Images

To Video port (yellow)

To video output port
(yellow)

RCA video cable (yellow)
(commercially-available)
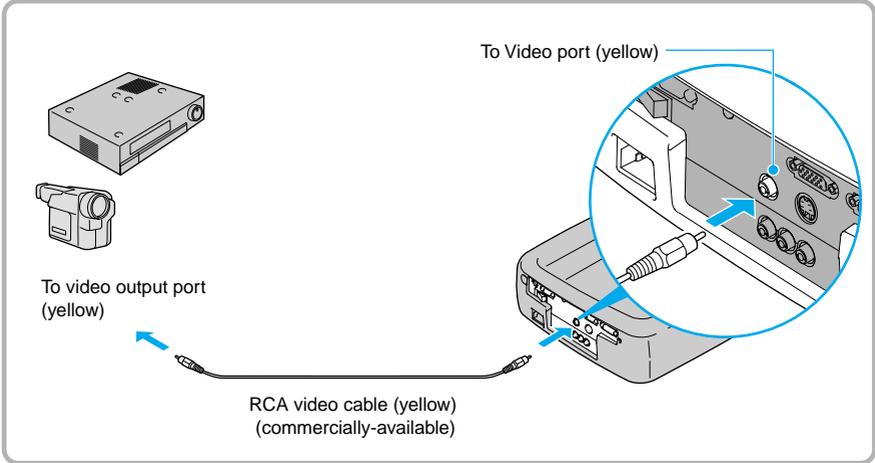
Projecting S-Video Images

To S-Video port

To video output port

S-Video cable
(commercially-available)

Depending on the combination of the VCR and the video cassette used for the playback, the color of the projected images may flicker or the correct color may not be displayed. In this case, select "Advanced" and set "Progressive" to OFF for improving the playback quality.
("Advanced" menu in *User's Guide*)

Projecting RGB Video Images

To A-RGB/D-RGB DVI-I port

To RGB output port

Digital video cable DVI-D/DVI-D
(optional)
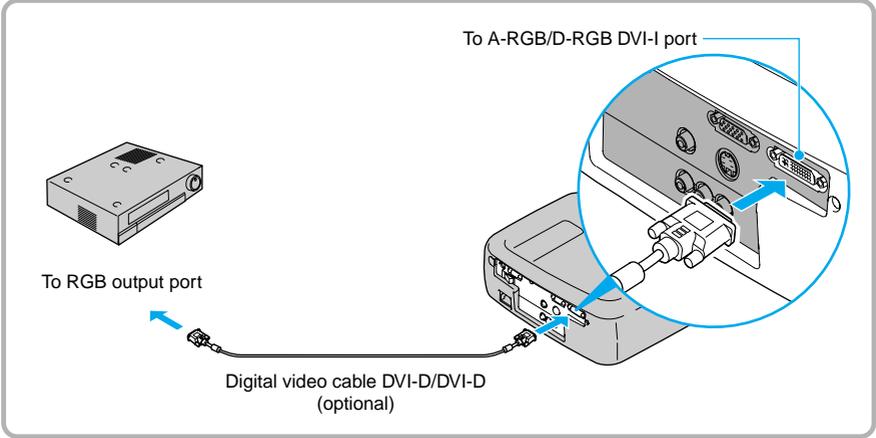
For a RGB connection, a commercially available adapter or converter cable might be required.

7

⚠ ● Turn off the power for both the projector and the computer before connecting them. If the power for either device is on at the time of connection, damage may result.
● Check the shapes of the cable connectors and the device ports before making the connections. If you try to force a connector to fit a device port with a different shape or number of terminals, damage to the connector or port may result.

The projector cannot be connected to some types of computer, or projection of images may not be possible even if actual connection is possible. Make sure that the computer you intend to use satisfies the conditions given below.

Condition 1: The computer must have a image signal output port.

Check that the computer has a port such as an RGB port, monitor port or CRT port which can output image signals. If the computer has a built-in monitor, or if using a laptop computer, it may not be possible to connect the computer to the projector, or alternatively you may need to purchase a separate external output port. Refer to the documentation for your computer under a heading such as "Connecting an external monitor" or similar for further details.

Condition 2: The display resolution and frequency of the connected computer must be within the range specified in the "List of Supported Signal Resolutions" "List of Supported Signal Resolutions" (p.9)

Some computers may have functions for changing the output resolution. Refer to the documentation for the computer and change the setting to within a range given in the list of supported resolutions.

- You may need to purchase a separate adapter to connect the computer to the projector, depending on the shape of the computer's monitor port. Refer to the documentation for the computer for details.
- The commercially available adapter set is required in order to connect the projector to a Macintosh computer.

To A-RGB/D-RGB DVI-I port

To monitor port

Digital video cable DVI-D/DVI-D
or
DVI analog cable
(optional)
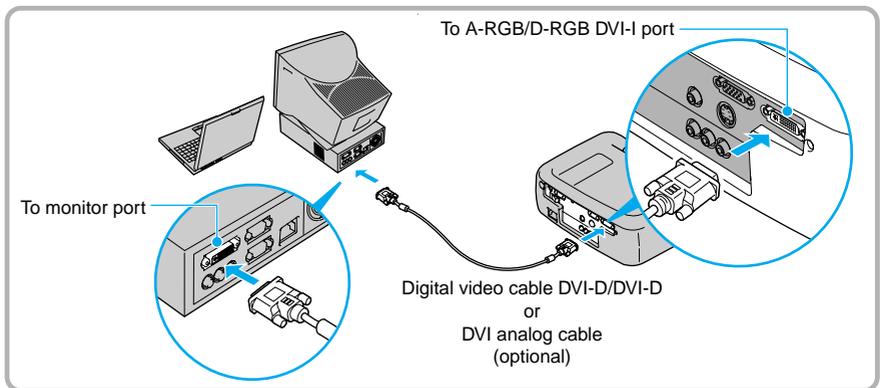
Do not bind the power cord together with the DVI-D/DVI-D digital video cables or DVI analog cable, otherwise it may cause interference in the projected images or operating errors.

List of Supported Signal Resolutions

Component Video

Units: dots

Signal	Resolution	Aspect				
		Normal (Default)	Squeeze	Zoom	Through	Squeeze Through
SDTV(525i, 60Hz) (D1)	640 × 480 640 × 360 (When zoomed)	960 × 720 (4:3 aspect)	1280 × 720 (16:9 aspect)	1280 × 720 (16:9 aspect)	590 × 442 (4:3 aspect)	786 × 442 (16:9 aspect)
SDTV(625i, 50Hz)	768 × 576 768 × 432 (When zoomed)	960 × 720 (4:3 aspect)	1280 × 720 (16:9 aspect)	1280 × 720 (16:9 aspect)	700 × 525 (4:3 aspect)	934 × 525 (16:9 aspect)
SDTV(525p) (D2)	640 × 480 640 × 360 (When zoomed)	960 × 720 (4:3 aspect)	1280 × 720 (16:9 aspect)	1280 × 720 (16:9 aspect)	590 × 442 (4:3 aspect)	786 × 442 (16:9 aspect)
HDTV(750p)16:9 (D4)	1280 × 720	1280 × 720 (16:9 aspect)	–	–	1178 × 664 (16:9 aspect)	–
HDTV(1125i)16:9 (D3)	1920 × 1080	1280 × 720 (16:9 aspect)	–	–	886 × 498 (16:9 aspect)	–

Composite Video/S-Video

Units: dots

Signal	Resolution	Aspect				
		Normal (Default)	Squeeze	Zoom	Through	Squeeze Through
TV(NTSC)	640 × 480 640 × 360 (When zoomed)	960 × 720 (4:3 aspect)	1280 × 720 (16:9 aspect)	1280 × 720 (16:9 aspect)	590 × 442 (4:3 aspect)	786 × 442 (16:9 aspect)
TV(PAL, SECAM)	768 × 576 768 × 432 (When zoomed)	960 × 720 (4:3 aspect)	1280 × 720 (16:9 aspect)	1280 × 720 (16:9 aspect)	700 × 525 (4:3 aspect)	934 × 525 (16:9 aspect)

RGB Video/Computer

Units: dots

Signal	Resolution	Aspect		
		Normal (Default)	Zoom	Through
PC98	640 × 400	1152 × 720	1280 × 720	640 × 400
EGA	640 × 350	1280 × 700	1280 × 700	640 × 350
VGA60*, SDTV(525p)	640 × 480 640 × 360 (When zoomed)	960 × 720	1280 × 720	640 × 480
VESA 72/75/85, iMac*1	640 × 480 640 × 360 (When zoomed)	960 × 720	1280 × 720	640 × 480
SVGA 56/60*/72/75/85/, iMac*1	800 × 600 800 × 450 (When zoomed)	960 × 720	1280 × 720	800 × 600
XGA 43i/60*/70/75/85, iMac*1	1024 × 768 1024 × 576 (When zoomed)	960 × 720	1280 × 720	–
1152 × 864 70/75/85	1152 × 864 1152 × 648 (When zoomed)	960 × 720	1280 × 720	–
QVGA 60*/75/85	1280 × 960 1280 × 720 (When zoomed)	960 × 720	1280 × 720	–
SXGA 43i/60*/75/85	1280 × 1024 1280 × 720 (When zoomed)	900 × 720	1280 × 720	–
MAC13"	640 × 480	960 × 720	1280 × 720	640 × 480
MAC16"	832 × 624	960 × 720	1280 × 720	832 × 624
MAC19"	1024 × 768	960 × 720	1280 × 720	–
MAC21"	1152 × 870	954 × 720	1280 × 720	–
SDTV (525i, 60Hz)	640 × 480 640 × 360 (When zoomed)	960 × 720	1280 × 720	590 × 442
SDTV (625i, 50Hz)	768 × 576 768 × 432 (When zoomed)	960 × 720	1280 × 720	700 × 525
SDTV (625p)	768 × 576 768 × 432 (When zoomed)	960 × 720	1280 × 720	700 × 525
HDTV (750p*)	1280 × 720	1280 × 720	–	1280 × 720*2
HDTV (1125i, 1125p)	1920 × 1080	1280 × 720	–	886 × 498

* indicates resolutions that are compatible with both analog and digital formats.
*1 This connection is not possible for models which are not equipped with a VGA output port.
*2 Images are displayed at a zoom ratio of 100%.

It may also be possible to project signals with specifications that are not listed above. However, not all projector functions may be available for such signals