

PLUS

Captureboard C-20 Series

PLUS C-20 Software

Software Operation Manual



We greatly appreciate your purchase of this PLUS Corporation product.

In order to take full advantage of the features of the “PLUS C-20 Software” software supplied with the Captureboard C-20, please read this software operation manual carefully before use. Be sure to keep the manual for future reference.

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Introduction

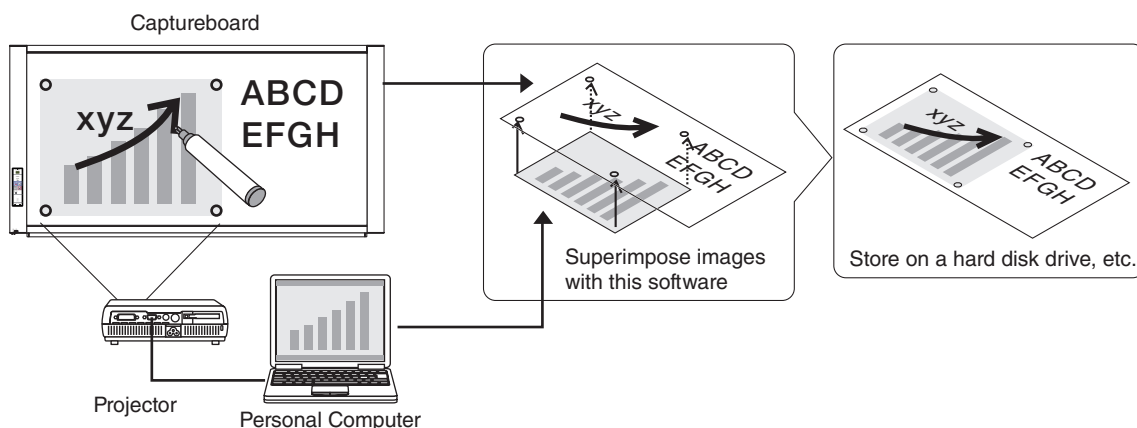
This manual is the PLUS C-20 Software's operation manual. For the captureboard's settings, see the C-20S/C-20W User's Manual.

What is PLUS C-20 Software?

PLUS C-20 Software allows the user to capture the captureboard's scanned data as an image then superimpose this over a projector's projected image on the computer and store this as image data.

There is also a function for positioning the projected image and the scanned data detecting the projection position marked on the sheet surface.

* In this manual, PLUS C-20 Software may be referred to as "this software" or "the software," and the captureboard may be referred to as "main unit," "this unit" or "the unit."



Notice

- This software is designed to store records of meetings. It may not reproduce and store accurate colors or image quality. Also note that the automatic capture data positioning function is not something that guarantees an accurate positioning operation.
- The "PLUS C-20 Software" is an application for combining screen images.
 - * Superimposing the scanned data over the projector's projected image is possible when used in combination with a captureboard.
- The combined data cannot be stored on the captureboard's (this unit's) network storage memory.

Operating Requirements

Supported OS:	Windows XP (Home Edition /Professional Edition Service Pack 3 or higher) / Windows Vista (32 bit version) /Windows 7 (32 bit/64 bit version)
Supported PC:	IBM PC/AT fully compatible computers that run the aforementioned OS
CPU:	1.2 GHz or greater
Memory:	Windows XP (256 MB or greater), Windows Vista (512 MB or greater), Windows 7 (2 GB or greater)
Connector:	USB port (type A), interface compatible with USB 2.0 High-Speed.
Available hard disk space:	40 MB or greater (not including space for storing images)
Display resolution:	800 x 600 pixels or greater
Peripheral devices:	CD-ROM drive, standard USB ports

Notice

- All operations are not guaranteed in the aforementioned operating environment.
- Macintosh is not supported.

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- Provided that you consent to the aforementioned matters, you shall be permitted to use the software for non-profit purposes for personal use and use within a company.
- When "this software" is mentioned, it refers not only to the executable file, but to all of the component files including Help and appended text.

◆ Support

We call support the provision of all kinds of information including answers to questions, requests, trouble reports, and other matters, and the scope of our support shall be limited to the functions and operation of this software.

Problems that arise in using this software cross many paths including those attributable to the personal computer, the OS, other application software, and other peripheral devices. Accordingly, we only support problems that are attributable to this software. Also, this software is subject to version upgrades without prior notice due to the technical advancement of hardware and software. The customer can receive and use upgraded versions of this software through a method determined by us. Note that version upgrades will be limited to customers who consent to the aforementioned conditions of use.

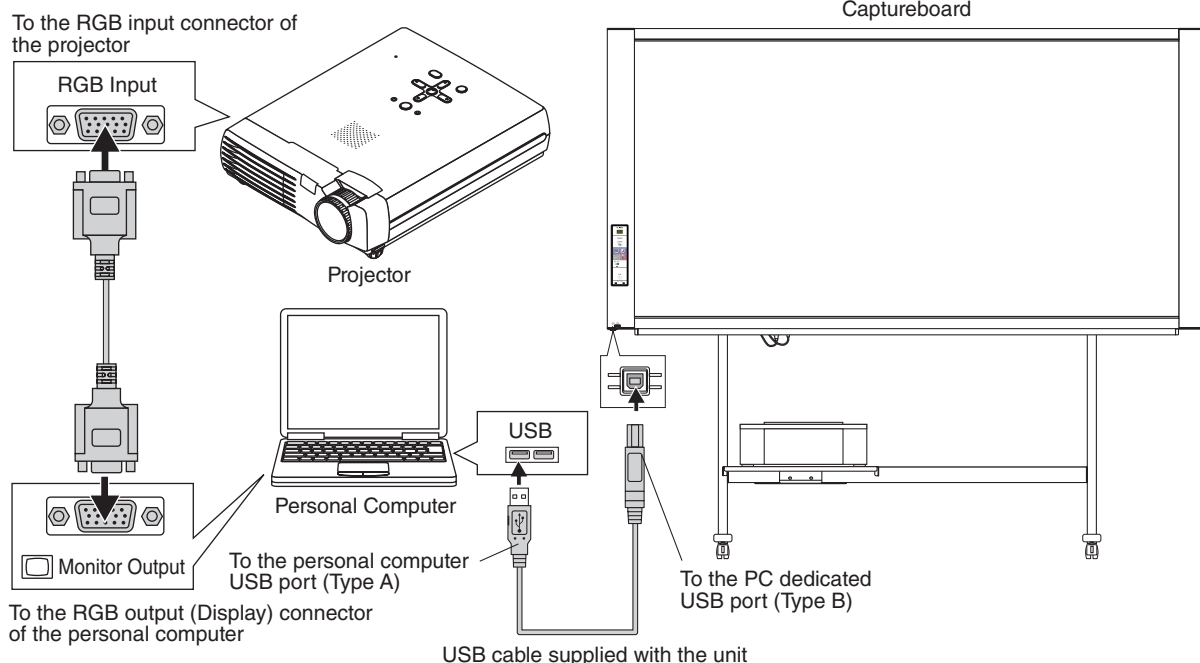
* Upon downloading this software from the PLUS Corporation Web site, or installing it from the CD-ROM, the customer is deemed to have consented to each of the terms.

Connection to the Computer

The Captureboard must be connected with a computer in order to use this software.

Notice

- Do not connect this machine to the personal computer before installing the software.
- Do not connect more than one Captureboard to one personal computer.
- To print from the computer using the printer connected to the captureboard, be sure to install the printer driver on the computer.



Note

This is a representative example of personal computer and projector connections. Please see the manuals of your personal computer and projector for details.

Description of the included CD-ROM's menu screen (C-20 setup launcher)

The menu screen is displayed automatically when the included CD-ROM is inserted into the computer's CD-ROM drive.

• Installation of software

When clicked, the installer is launched and the "PLUS C-20 Software" is installed.

• User's Manual

When clicked, the User's manual (in PDF format) opens.

• Software Manual

When clicked, the PLUS C-20 Software software's operating instructions (in PDF format) open.

• Acrobat Reader

This is an application for viewing files in PDF format.

If the PDF files cannot be opened, click "Acrobat Reader" on the menu and follow the instructions on the screen to install.

* Browse CD

Click this to view the contents of the CD-ROM using the computer's Explorer application.

* Copyright & Usage

Click this to open the copyright, usage conditions and other information.



Installation of the Software

When “Install Software” on the included CD-ROM’s menu is clicked, the “PLUS C-20 Software” is installed.

Check Prior to Installation

1. Check whether your personal computer meets requirements of the operating environment. (See page E-3)
2. Check that your personal computer is not currently connected to this machine via USB.
3. At the time of installation, install with a Computer Administrator rights (account).
4. Close all other applications that are running.

Installation of the PLUS C-20 Software

1 Insert the supplied CD-ROM into the CD-ROM drive of the personal computer.

The menu screen will be displayed automatically.

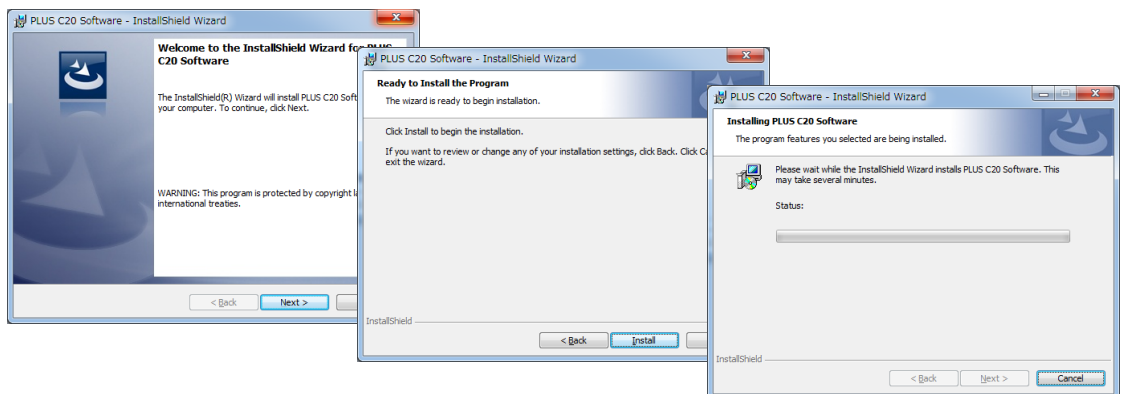
If the menu screen is not displayed automatically, double click CD-ROM icon and then “autorun.exe”.

2 Click “Installation of Software”

The installer will start.



3 Follow the instructions of the installer and start the installation.



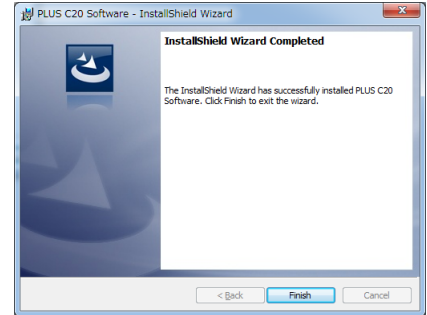
4

Click “Finish”.

The “Installer Information Dialog Box” will be displayed.

Click “Yes” and restart the personal computer.

- * When “Print from captureboard printer” in the capture-board’s “CB Setup” is set to “Enable”
When the computer and captureboard (this unit) are connected, you are asked to install the printer driver.
Use the CD-ROM included with the printer, etc., to install the printer driver on the computer.



Uninstallation of the PLUS C-20 Software

1

Selecting [Start] → [Control Panel] will display the Control Panel screen.

Check that your personal computer and the Captureboard are not currently connected by USB.

2

Double click “Add or Remove Programs or Applications” (this will differ depending on the OS) to display the “Add or Remove Programs Properties” screen.

3

Select PLUS C-20 Software among the list displayed and click [Change / Remove] to display the Add or Remove wizard screen.


4

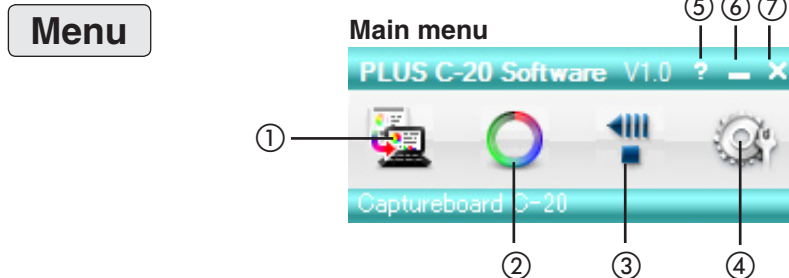
Selecting the [Remove] radio button of the wizard and clicking [Next] will start the uninstallation.

Note

- When using Windows Vista/Windows 7, each time the uninstaller is started, the User Account Control dialog box is displayed. Select “Continue” and continue with the uninstallation.

Menu Screen Names and Functions

When the captureboard and a computer on which the dedicated “PLUS C-20 Software” is installed are connected and the “PLUS C-20 Software” icon on the desktop () is double-clicked, the main menu appears.



① Combine button

The sheet surface is scanned and a screen showing the combined projected image and hand-drawn image is displayed.

② Mark button

Switches the display of the positioning ○ marks of the projection image.
Each click switches between “Display” and “Hide.”
The default setting is “Display.”

③ Feed/Stop button

Scrolls the sheet one page to the left.

④ Setup button

Click this to display the settings screen.

Capture Settings:

These settings are used when creating superimposed images.

(1) Select image for projection:

Selects the number of the monitor that is connected to the projector.

The default setting is “Display 1.” This software automatically searches for the number of connected monitors.

(2) Select color for positioning:

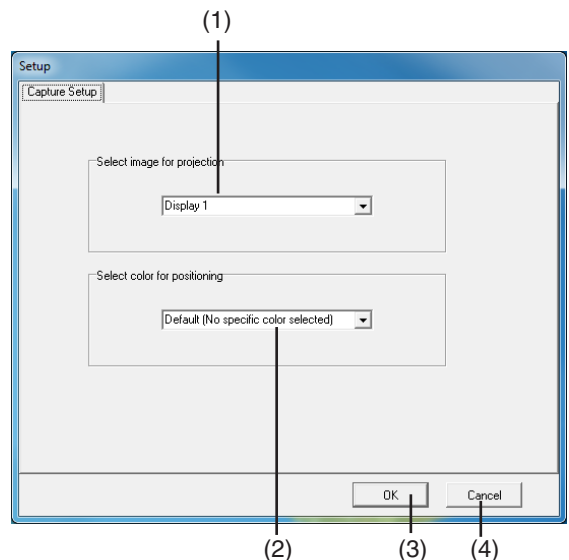
Selects the color of the ○ mark that detects the position of the projection image of the projector.
Select from among No specific color selected, Red, Green, Blue, Black. The default setting is “No specific color selected.”

(3) OK

The setting is entered and the window closes.

(4) Cancel

The settings screen closes, without saving the settings.



Menu Screen Names and Functions

⑤ ? (Help)

Click this to display the operating instructions.

⑥ — (Minimize)

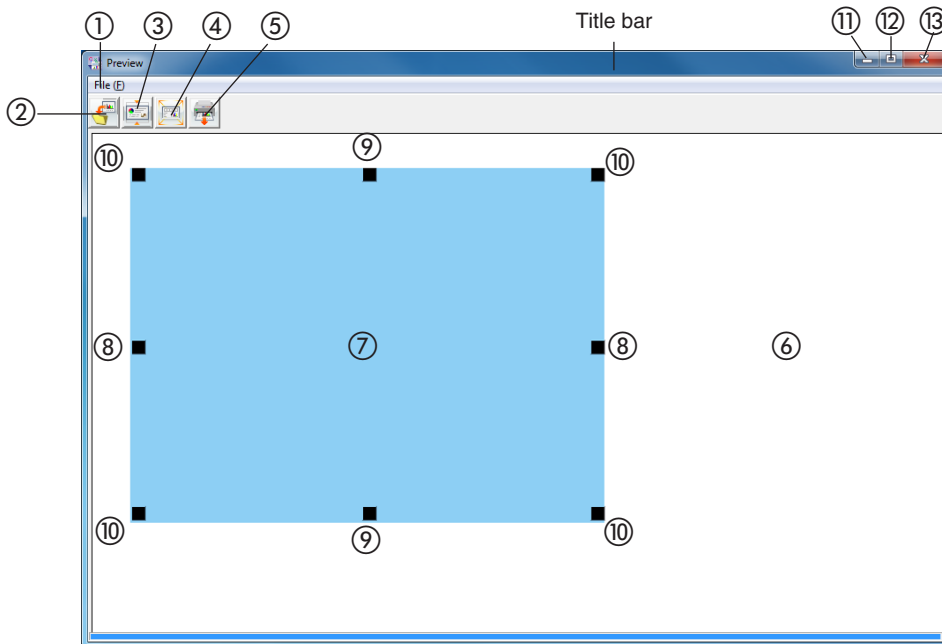
Click this to minimize the menu screen, displaying it as an icon on the task bar.

⑦ ✕ (Close)

Click this to exit the program.



Superimposed Image Display Screen



(This illustration shows the superimposed image display screen for model C-20S.)

① File Menu

Save (S): Overwrites and saves using the current name.

Save as (A): Saves with a different name or to a different location.

Print (P): Prints using the printer that is connected to the personal computer.

② Save Button

Saves when there is save data. Opens the saved screen when there is no saved data.
The default setting is "Display".






③ Aspect Button

Switches the horizontal ratio of the superimposed image. Each press switches between "Image having same ratio as the sheet surface" and "Image that is 3/4 size horizontally." (Available only with Model C-20W.)

At time of saving, the image will be saved at the selected ratio.

The default setting is "Image having same ratio as the sheet surface".

Menu Screen Names and Functions

- ④  **Full Screen Display Button**
Provides a full screen display of the superimposed image. Clicking on the screen will return to the original window size.
* Using the full screen display is convenient when projecting a superimposed image with the projector.
The default setting is "Window size".
- ⑤  **Print Button**
Printing is performed on the printer connected to the computer or captureboard.
- ⑥ **Captureboard Capture Screen**
Execution of the scan operation displays the handwritten image data of the captured sheet surface.
- ⑦ **Personal Computer Capture Screen**
Pointers (⑧ to ⑩) of the personal computer screen that is projected by the projector are displayed by left clicking on the personal computer capture screen ⑦ and hidden by right clicking.
Drag the pointers to finely adjust the size and distortion.
To move the position, drag a part other than the pointers.
- ⑧ **Horizontal Size Pointer**
Corrects the size in the horizontal direction.
- ⑨ **Vertical Size Pointer**
Corrects the size in the vertical direction.
- ⑩ **Affine Pointer**
Corrects images that are diagonally distorted.
- ⑪  **(Minimize)**
Minimizes the superimposed image display screen, and the short title bar is displayed at the upper left of the task bar. In addition, clicking the minimize icon of the main menu when it is displayed with window size also results in the superimposed image display screen being displayed as an icon on the task bar.
- ⑫  **(Maximize)**
Each click switches the image display screen (window) between a maximized display or a display at the original size.
- ⑬  **(Close)**
Closes the superimposed image display screen.
Closing the superimposed image without saving it will cause the superimposed image to be lost.

Basic Operation

An example is given of a method for performing a presentation in which a projector projects images onto this machine, and the record is saved on a personal computer.

Before starting the operation, connect the various pieces of equipment and turn them on.

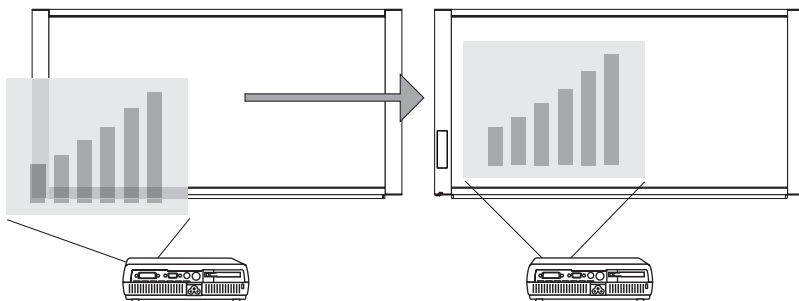
Superimposing captured images

1

Project the image of the personal computer from the projector

- ① Operate the personal computer and prepare the documents that will be projected with the projector.
- ② Adjust the size, display position, and other factors of the projector image.

Please see your projector manual for information about operation.



Note

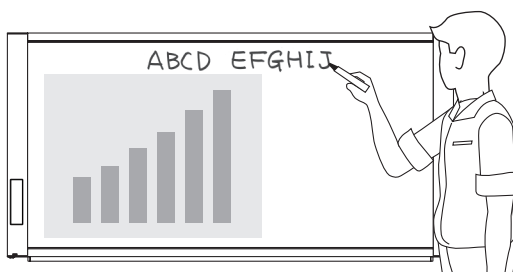
- A full screen display (in which the image is displayed to fill the screen without the display of tool bars, etc.) is recommended for the projection image from the personal computer. When not in a full screen display, tool bars and other items are superimposed. Please see the manual for your personal computer or the application software that you are using for details.
- When the screen of a personal computer is not projected from the projector, or the screen of a personal computer has disappeared, change the settings of the external output of the personal computer.
In Windows, the switchover can usually be accomplished by holding down the [Fn] function key and pressing one of the [F1] to [F12] keys. The [F1] to [F12] keys will differ depending on the manufacturer of the personal computer.
For Windows 7, when the "P" key is pressed while pressing the Windows key, the screen switches from the settings menu to the external output (monitor output). Please see the Help menu of your personal computer for details.
- An attempt to superimpose with a projection image that has used the digital enlargement function of the projector will not result in an enlarged image.
- Set up the projector so that it is level to prevent a projection image that is on an angle. When the projection image is on an angle, the size or position of the superimposed image might be improper. (Adjustment will be possible with this software.)
- Project the image so that it falls within the capture range of the Captureboard.
- Please project the image at a size that is 2/3 of the vertical size of the board surface or larger.
- The size and position of the superimposed image may be off if the projector's auto keystone (auto trapezoidal distortion correction) value is high.

2

Making a Presentation

Use the dedicated markers to write or draw diagrams on the sheet surface (including the projected area).


When saving the superimposed image as meeting records, do not write or draw diagrams in the four corners of the projection screen. The four corners will later be used for drawing position detection ○ marks.



3

Save the Superimposed Image of the Projection Image and the Sheet Surface on the Personal Computer

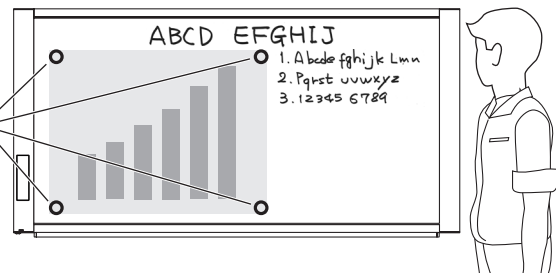
Connect the captureboard with the computer on which “PLUS C-20 Software” is installed using a USB cable (see page E-5).


When the “PLUS C-20 Software” icon on the desktop () is double-clicked, the PLUS C-20 Software's main menu appears on the computer.



Positioning Marks

○ marks (by default: positioning marks with no specified color) appear in the four corners of the projector's projected image.





To change the color of the ○ mark, click the  (settings) button on the main menu.

From “Select position detection color”, select a marker color that is not used to draw on the sheet surface.

See “Capture Settings” on page E-18.



When the ○ marks are not displayed, click the  button of the menu. Each click of the  button toggles between display and hide.

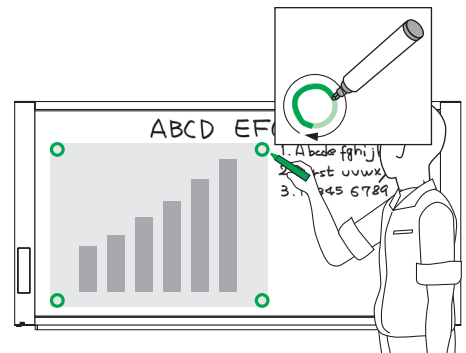
4

Trace with a Marker Having the Same Color as the ○ marks of the Projected Four Corners

Properly draw the ○ marks in the color of the projected marks.

Note

- This software uses the ○ marks drawn on the sheet surface to position the projection image and the sheet surface. Blurry or broken ○ marks might not be recognized.
- Do not write or draw diagrams near the ○ marks.
- When an image with extreme keystone distortion is projected as is, it may not be possible to recognize the ○ marks.
- When the ○ marks are not drawn, the projection image will be superimposed at the upper left.
- Content that has been drawn at the periphery of the sheet might not be captured. Please see “Effective Reading Size” in your Captureboard manual for details.
- Animation cannot be captured as a personal computer capture image.



5

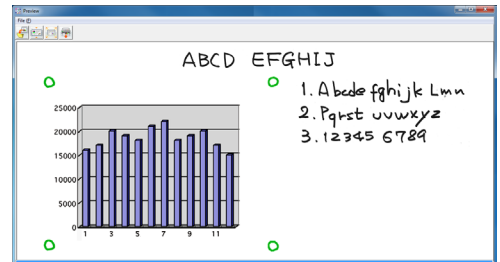
Click the (combine) button on the main menu.

The sheet surface of the Captureboard will be scrolled, the capture will start and be completed.

Then the hand written and drawn image will be transferred to the personal computer.

In a little while the superimposed image display will appear.

When the personal computer capture image and the Captureboard capture image are shifted on the superimposed image display screen, see "Fine Adjustment of the Captured Image" on Page E-15.



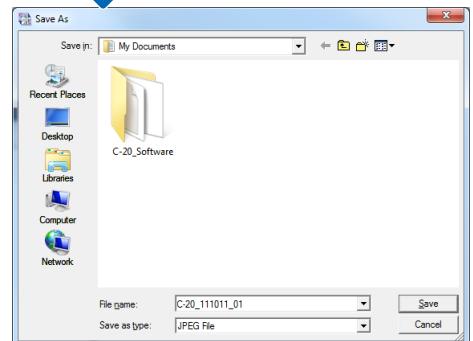
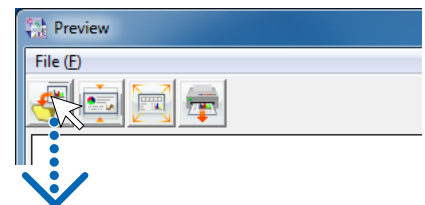
Note

- When "Header/Footer" is set to "On" in "CB Setup", the header/footer information is displayed on the combined image. In this case, this information is saved and printed. For the above setting, see the captureboard's user's manual.

6

Click (Save) to Save

- When saving for the first time, clicking the save button will display the personal computer [Save as] box. Select "Save location" "File type", enter the file name, then click the [Save] button.
 - Select the file type ("PNG", "JPG" or "PDF") using the ▼ button.
 - A file name consisting of the model name, date and serial number (ex. C-20_111011_01) is displayed automatically. Change it if necessary.
 - If a file with the same name already exists, the old file is overwritten.
 - To create a new folder, click [Create new folder] or click the icon, enter the folder name in the newly created folder, then click [Open].
- Next, select the file type, enter the file name, then click [Save].
- [Save] or [Save as] can be selected from [File] of the menu bar.



This permits the saving of the superimposed image of the hand written and drawn image on the Captureboard and the projector projection image.


Using this saved image, a meeting report or document can be created.

Continued on next page

7

Printing



Printing is performed by the printer that is connected to the personal computer.

- ① When the  (print) button is clicked, the printer settings screen opens.
 - ② When the [Print (P)] button the printer settings screen is clicked, the selected image is printed.
Clicking the [Detailed Settings] button for settings.
This screen will differ depending on the printer.
- * Printing is also possible by selecting [Print (P)] from [Files (F)] on the menu bar.

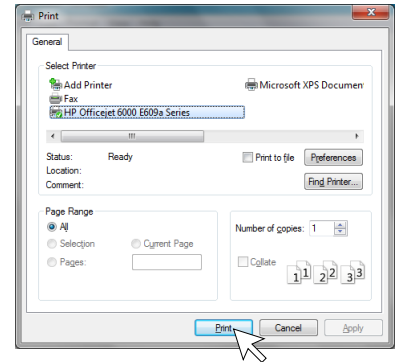
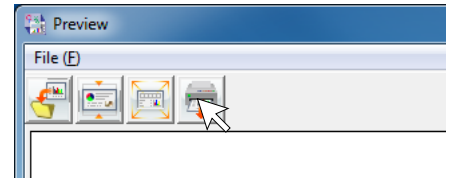
Note

The combined image can be printed directly using the captureboard and the printer connected to the captureboard. To use the printer connected to the captureboard, install the printer driver included with the printer on the computer.

Notice


If the "Color Print  and "B/W Print  buttons on the captureboard are pressed during printing from the computer, printing on the captureboard is given priority.

* The printing data may remain on the computer.




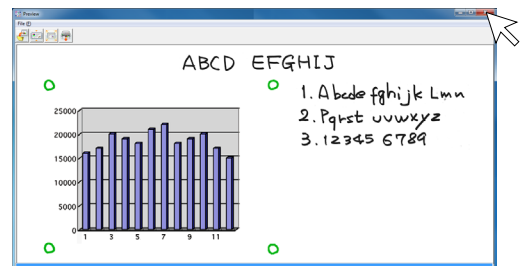
8

Closing


Clicking  (Close) will close the superimposed image display screen.

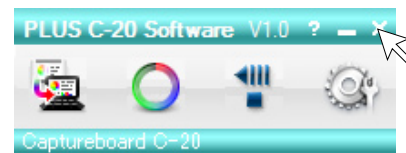
Closing the superimposed image without saving it will result in the loss of the image.

To capture at the next sheet surface, press the  (Scroll/Stop) button to scroll the sheet, then start from step 4.



Closing this Software

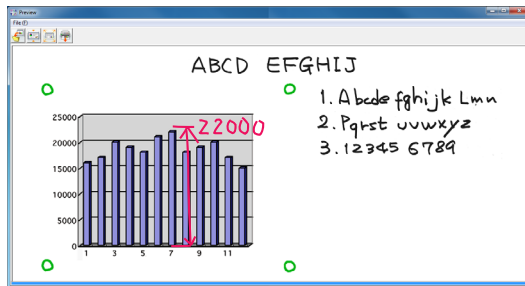
Clicking  (Close) of the main menu will close this software.



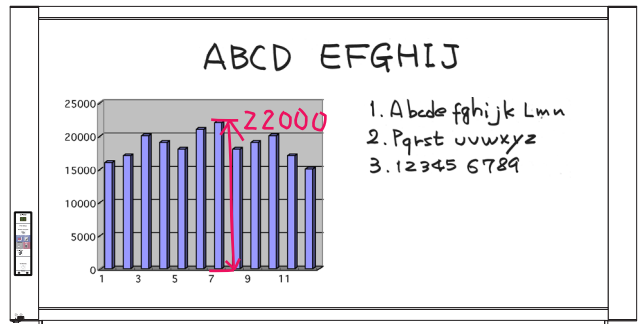
Basic Operation

Fine Adjustment of the Captured Image

When the positions of the personal computer captured image and the Captureboard capture image (such as writings and drawn on the board surface) differ on the Superimposed Image Display Screen, this function changes the position or size of the personal computer captured image on the Superimposed Image Display Screen.



Superimposed Image Display Screen



Model C-20W captureboard

Adjusting the Display Position of the Image

Drag the personal computer captured image to the target position.

Adjusting the Image Size or Distortion

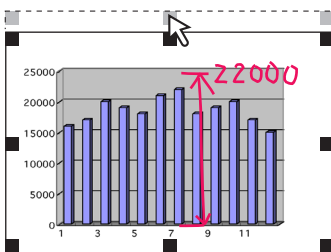
A left click on the personal computer capture image will display the pointers (in 8 locations).

Drag the pointers and adjust.

Right click to delete the pointers.

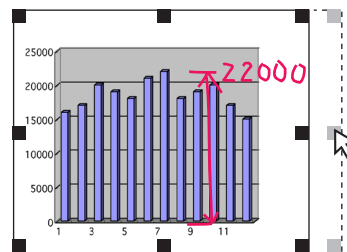
To stretch vertically

Drag the center top or bottom pointer.



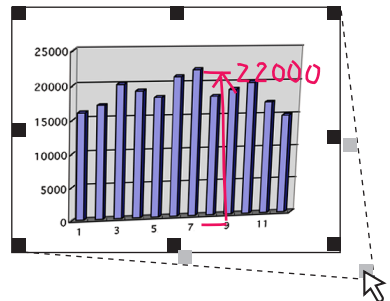
To stretch horizontally

Drag the center left or right pointer.



To stretch diagonally

Drag the pointers of the four corners.



Note

This software creates on the personal computer a superimposed image of the image transferred to the personal computer (that was hand written and drawn on the sheet surface of the Captureboard) and the personal computer screen (which is the screen output for projection by the projector).

When the keystone distortion (horizontal distortion/vertical distortion) of the image projected by the projector is adjusted, it will be slightly smaller than the output screen from the personal computer screen. (The size of the image changes depending on the degree of distortion compensation.) This is a result of the compensation characteristics of the projector. As a result, the position matching or image size will differ slightly. The position adjustment or the image size adjustment are used to correct this condition.

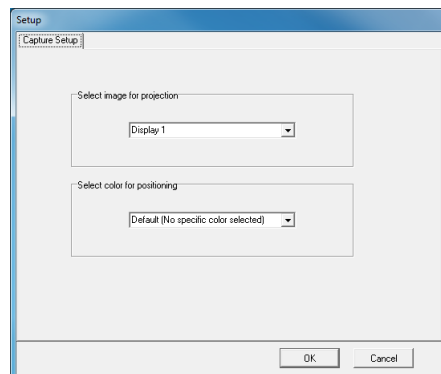
Capture Settings

These settings perform the selection of the monitor that is connected to the projector and the selection of the mark color used for position detection.

1

Click the (Settings) button of the Menu

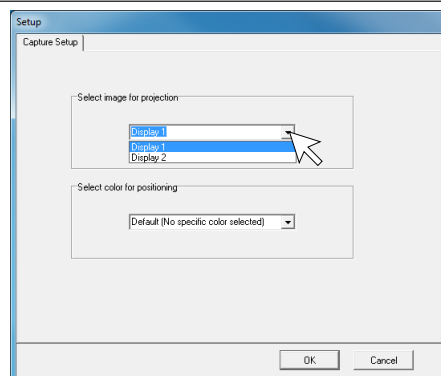
The settings screen will open.



2

Select the Number of the Monitor that Is Connected to the Projector that Projects to the Captureboard

This is set when a personal computer that can accept the connection of multiple monitors and a projector are connected. There is no need for this setting when there is only one monitor. Clicking [▼] of the [Select image for projection] column will display a list. Click the desired monitor number from this list. This software automatically searches for the number of connected monitors.



Note

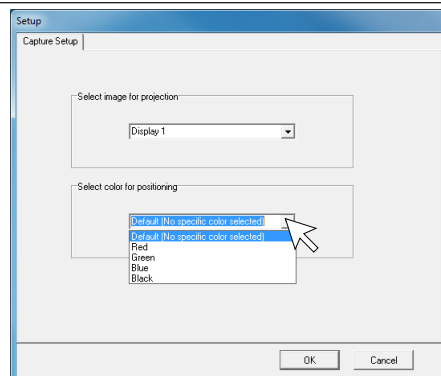
When the number of the monitor is not known, click “Screen Properties” → “Settings” → “Identification” on the personal computer and check the number of the monitor that is connected to the projector.

3

Change the Setting of the ○ Mark Color Used for Display Position Detection of the Projected Image of the Projector

Clicking [▼] of the [Select color for positioning] column will display a list.

Click the target color from among No specific color selected, Red, Green, Blue, Black.



Note

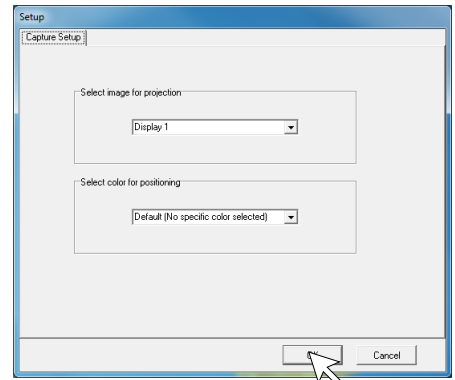
- When “No specific color selected” has been selected, an arbitrary marker color from among the four colors of red, green, blue, and black can be used for drawing the positioning mark. Recognition is judged solely by the shape of the ○ mark that has been drawn with the marker. Writing or drawing a diagram that resembles the ○ mark may result in a position of the projection screen that cannot be properly recognized.
- When one color has been selected from among “Red, Green, Blue, Black”, the same marker color as the selected color can be used for drawing the positioning marks. Recognition is judged by the color and shape of the ○ mark that has been drawn with the marker. Using the same color marker for writing or drawing a diagram that resembles the ○ mark may result in a position of the projection screen that cannot be properly recognized.

4

Finalizing

Click [OK] button to set.

The main menu reappears if [Cancel] button is clicked.



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ISO 14001 certification.

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