

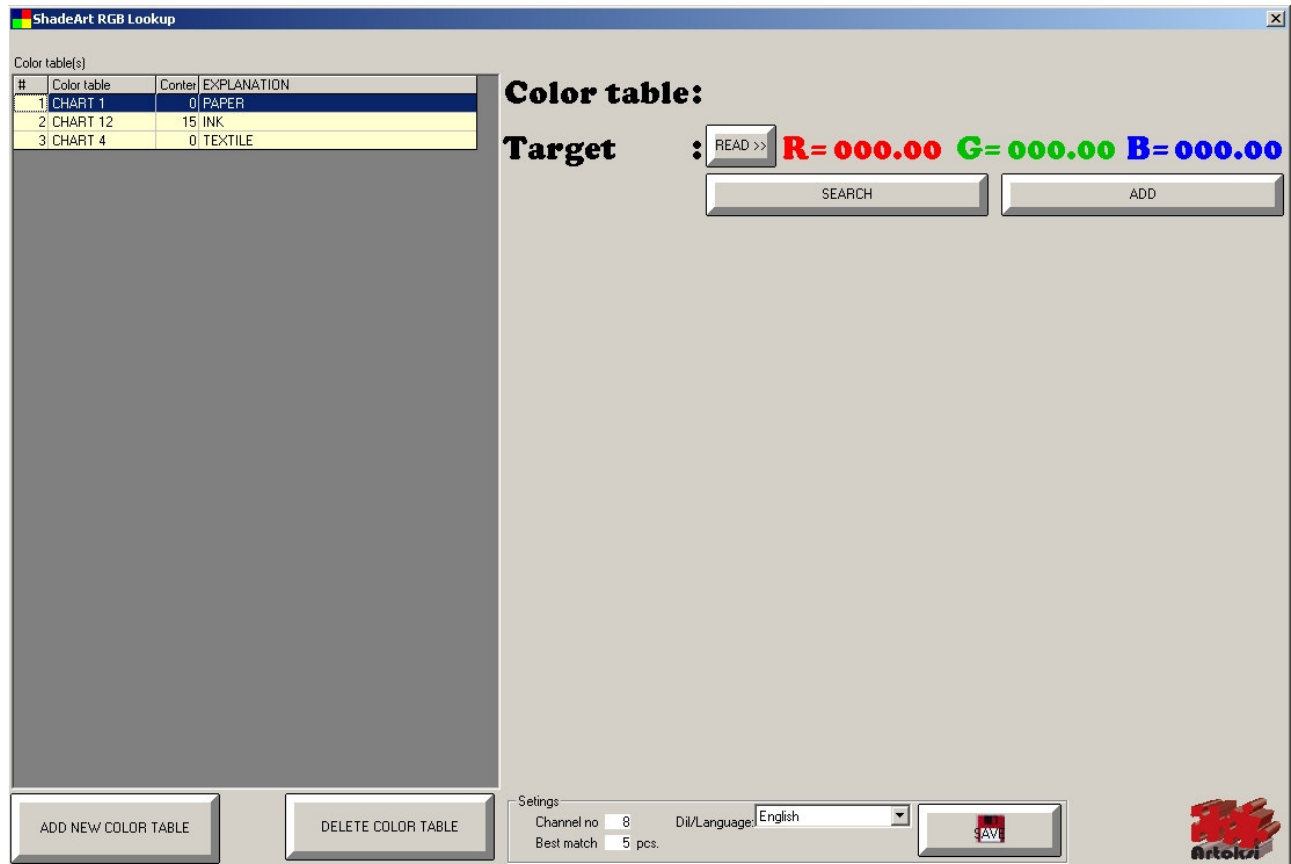


SHADEart

RGB Lookup

Find best matches of customer colors in seconds accurately

USER MANUAL



This manual explains the “ShadeArt RGB Plus” color measurement and comparing software

Before start:

Minimum computer requirements to run ShadeArt RGB Plus are as follows.

512 Mb RAM
50 Gb HardDisk
CD driver
Color monitor with 1280x1024 pikxel resolution
Video card with 1280x1024 pixel resolution
Windows Me, Xp, NT, 2000 operating system
1 free USB port
Keyboard
Mouse
Color printer

Dear customer,

We congratulate you for your choice to be a member of ‘ShadeArt family’. You can now start to overcome the color related problems one-step ahead. You are going to understand what we mean once you read this manual and you are proud of you.

Before starting to explain ShadeArt, we strongly remind to visit official web site www.artoksi.com of the owner of ShadeArt, ‘Artoksi Engineering Arts Center, periodically. This helps to catch new improvements which may your life easier.

Besides, we espacially take your notice to another state-of-art product which gets impressive feedbacks from all over the world. We call this product “Color Calculation Treasure”. This product lets the people to write a color matching software without knowing how to do. Interesting? We say, “do not think you can not succeed. Be independent!”. You can get detailed informations on our web site www.artoksi.com.

Finally, we wish to inform that, we always need your suggestions and friendship. We would be very glad if we could have any asistance on your achiveness.

Wellcome...

Best regards,



First step:

Installation of software is easy. All you need to do is to run “ShadeArt RGB Plus Setup.exe” from CD. This setup program is a standard Windows setup program which perfectly installs ShadeArt onto your computer.

After finishing to install ShadeArt, you need to complete two more steps.

The first step is to install the driver of the dongle which is given with the software package. ShadeArt never runs without dongle and its driver.

Second step is to install the device driver. This driver provides communication between the computer and PenColorArt device.

Job 1: Installing dongle drivers

In the directory in which you installed ShadeArt RGB plus (generally ‘C:\program files\.....’) has a file named “HINSTALL.EXE”. Run it by double clicking. It automatically installs all necessary drivers for dongle. You will need to plug in the dongle into any USB port of the computer everytime you run the ShadeArt.

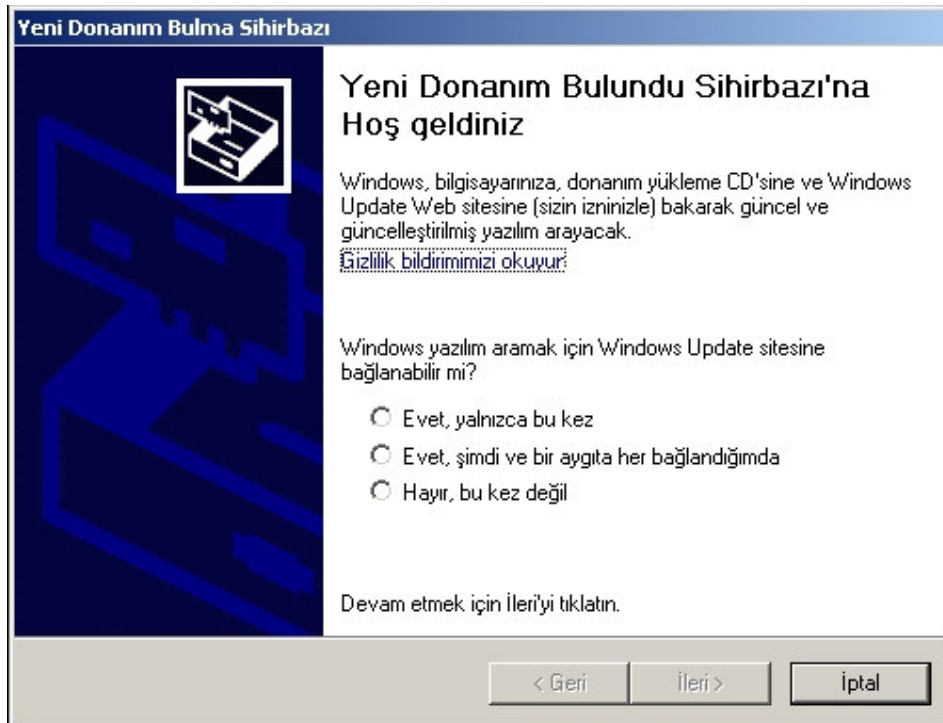
Job 2: Installing color measurement device driver

Caution! Do not turn on the device before installing device drivers first.

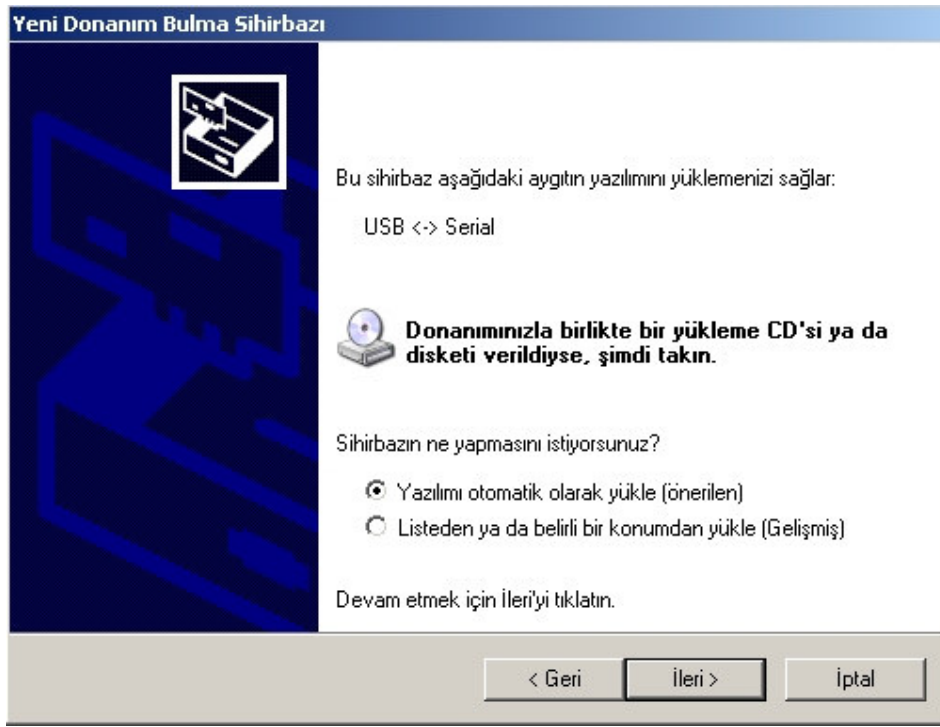
Step 1: Connect the device into any USB port of the computer. Never turn it on!

Step 2: Insert the ‘ShadeArt RGB Plus’ CD in CD driver.

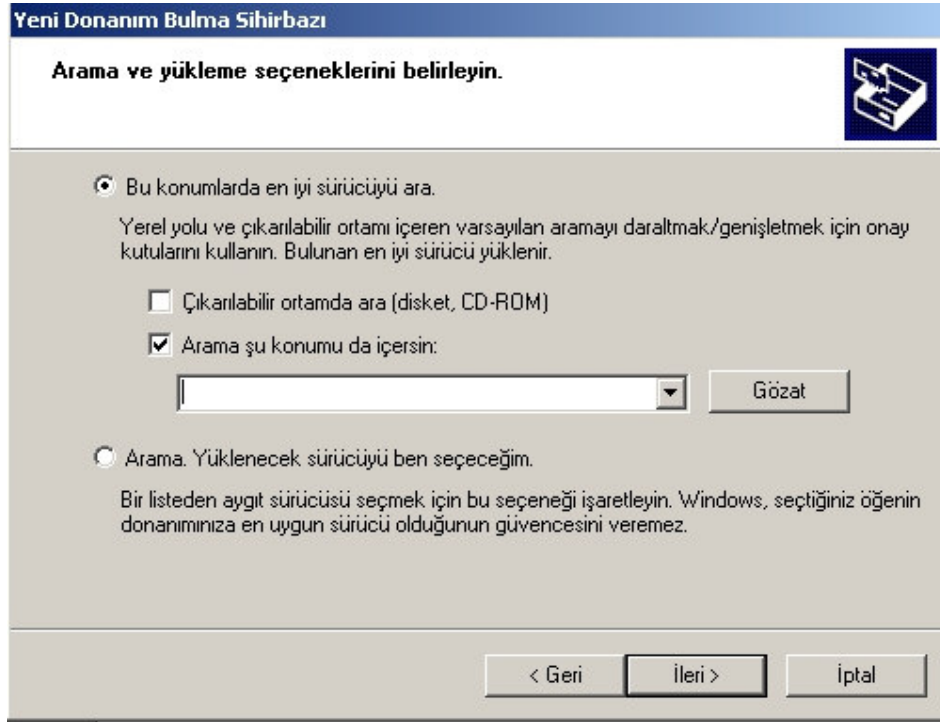
Step 3: New hardware found wizard will automatically launch and a window similar to below will be displayed



Select third option (No, not this time) and click “Next”. A new window similar to below will appear



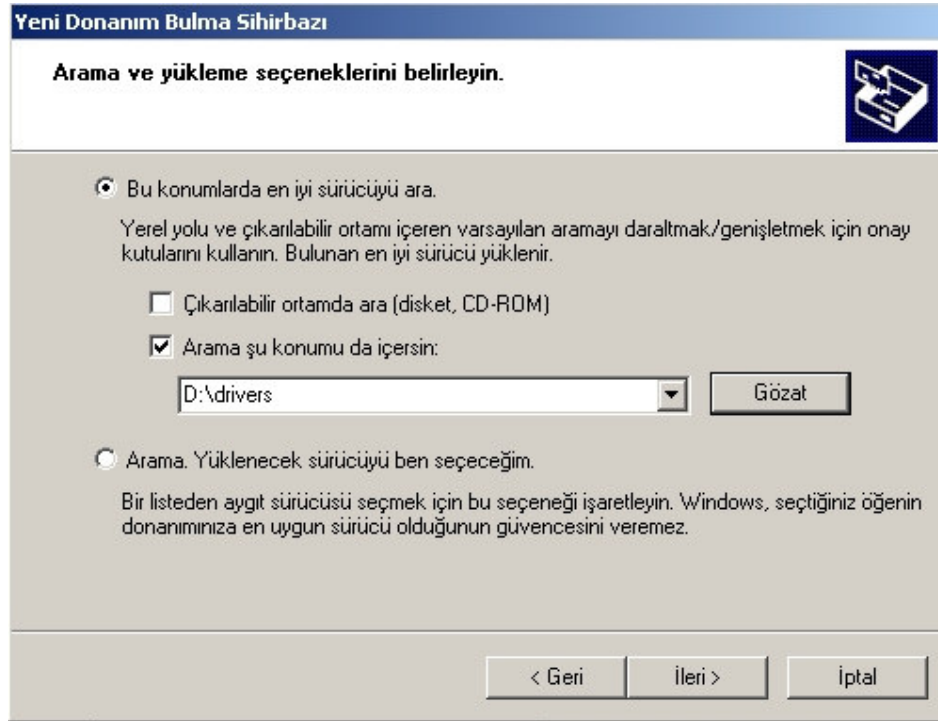
Select second option (Advanced) and click “Next”. You will get a new windows similar to below.



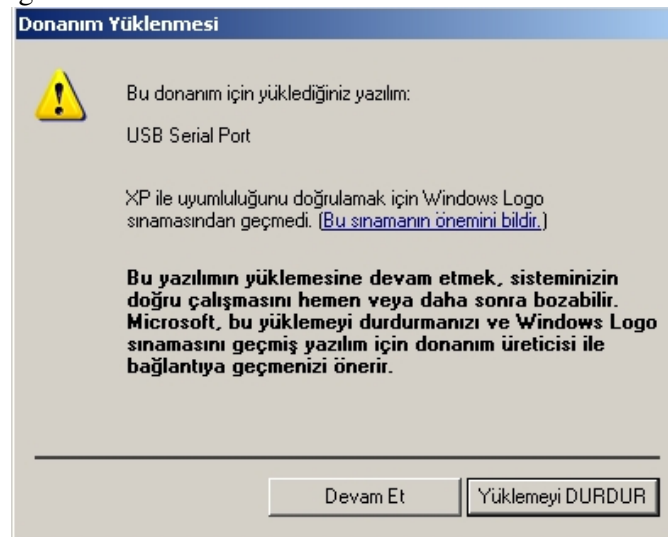
Select first option (Search best driver) and click “Browse”



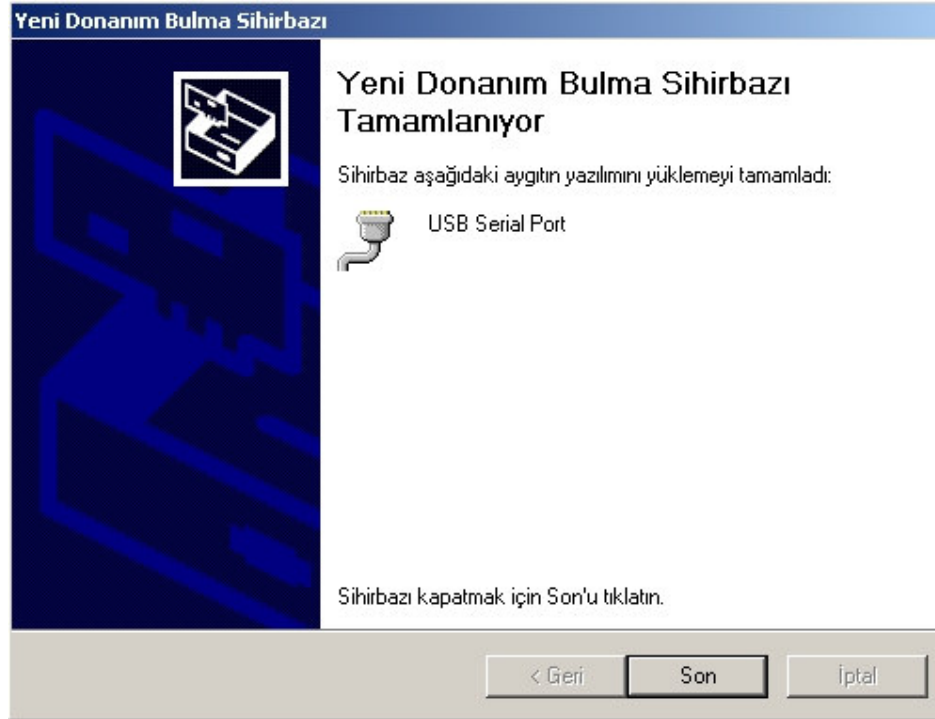
Find "Drivers" directory in this windows and clicl it and click "Ok" button.



Click "Next". You will get a new windows similar to below.



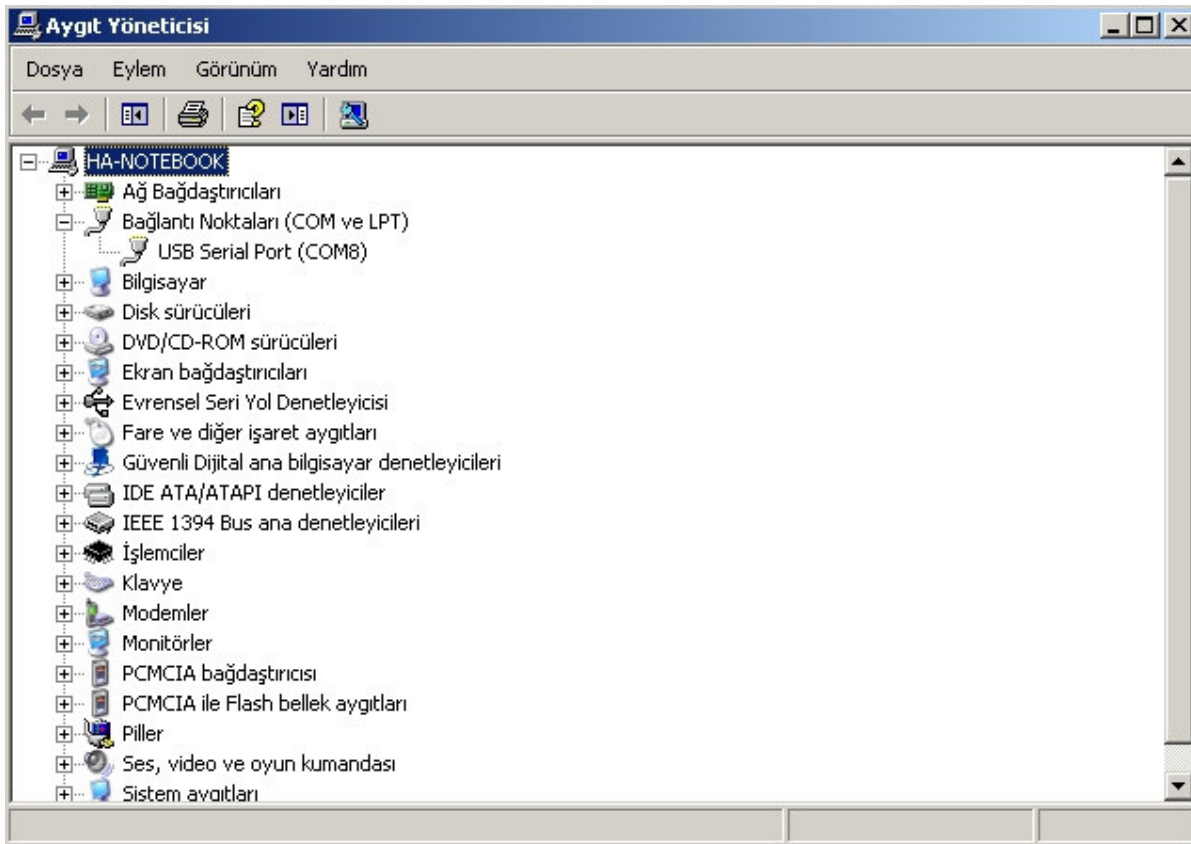
Click “continue” button.



Click “Finish”.

Depending on the version of the windows you use, it may be necessary to perform the steps above ones more. In this case, re-perform those steps ones more.

In order to test that everything is well done you can follow below procedure. Right click to “My Computer” icon and select “Hardware” and select “Device manager”.

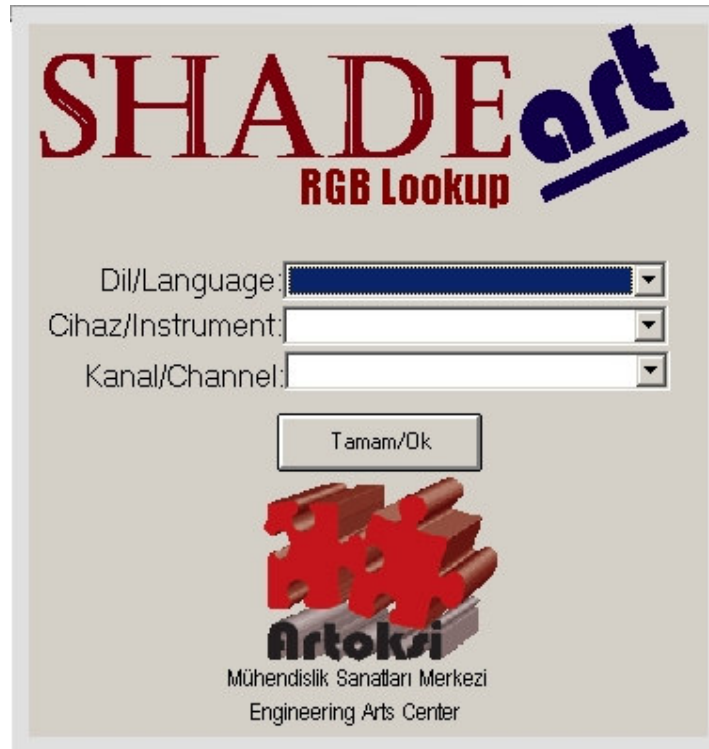


In this windows, there should be no warning sign (Exclamation or question mark) at the item of “Communication ports (COM ve LPT)” in the device list. You should also see item like “USB Serial Port” or “USB HighSpeed Serial Port” benzeri bir ifade görmelisiniz. This refers installation is well done.

P.S: That item has also a suffix in pharantesis showing the serial channel number. In the sample screen above it is (COM8). Number 8 is the communicatrion channel number which will be used by ShadeArt to communicate with the device ‘PenColorArt’. Find your own channel number and keep in your mind this number. You will need it later.

Using ShadeArt RGB Lookup

When you first run ShadeArt, you are going to encounter following screen. This screen will appear only once when you run ShadeArt first. It will not be showed up at later running.



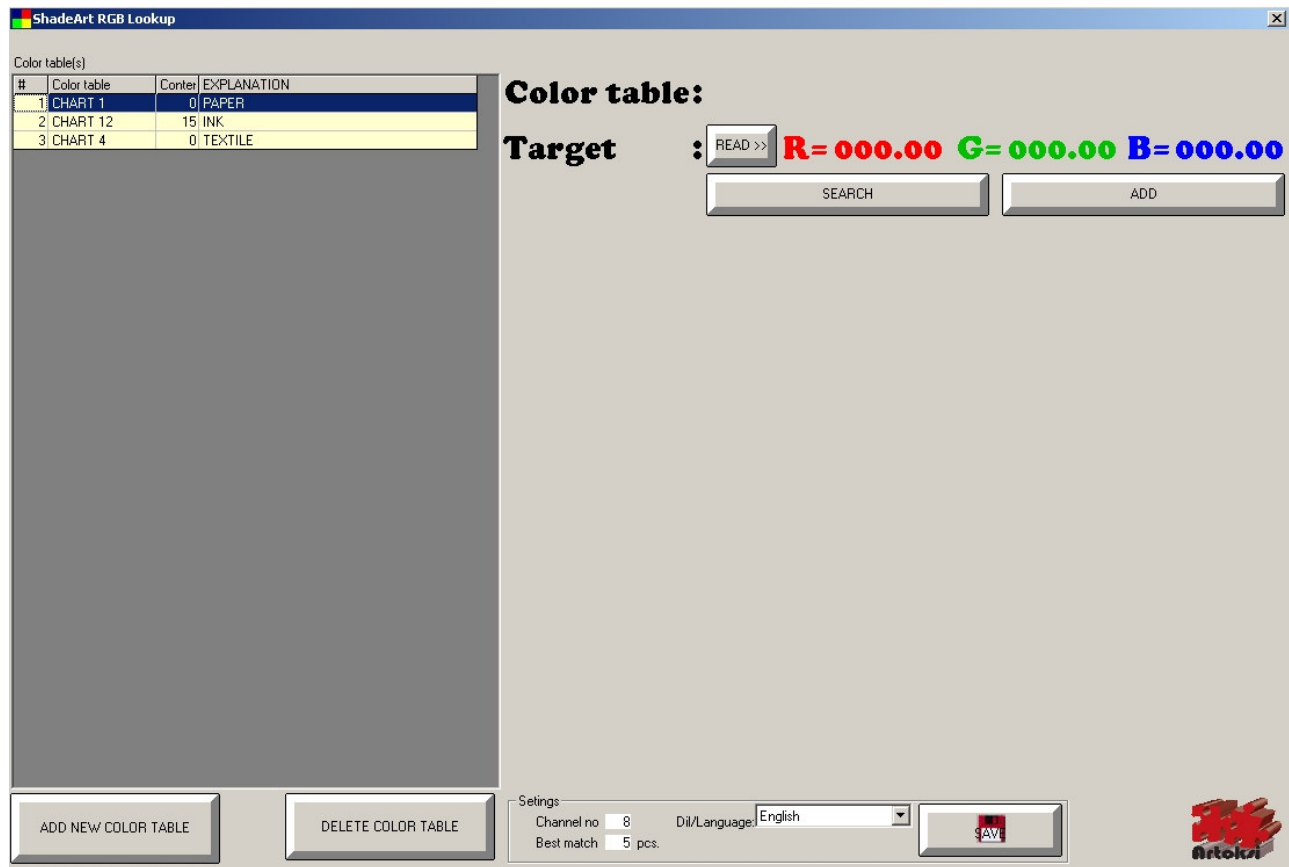
Select the language you wish to use and the modal of the color measurement device and communication port number and click “Ok”

The rest of this manual has been prepared according to language is set to “English”.

Once you entered desired information and click “Ok” button, it will be saved for later use and a welcome screen will appear.



Clicking any place on this window will take you to main windows as follows.



Let's explain how to use this window.

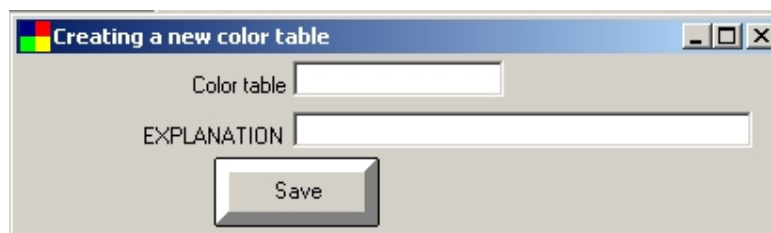
The yellow list at the left side shows all color charts you created. This list is in alphabetical order according to second column "Color Table Name". The first column show the number, second column shows "Color Table Name", third column shows number of of records (colors) in that color table and fourth column shows notes (paper, Fabric etc). Of course, this list is empty when you first install the software.

Two buttons at the bottom of the list is used to create a new color table and delete a color table created.

The right side of the windows shows "current active color table name" and RGB values of the measured color. Three buttons at this part of window are for "Measuring a color" (READ button), "Searching the measured color in current active color table" (SEARCH button) and "adding the measured color into current active color table" (ADD button).

CREATING A NEW COLOR TABLE:

You can create a new color table simply. Just click on "ADD NEW COLOR TABLE" button at the bottom of the window. Pressing this butoon will take you to following screen.



Just simply fill the blanks and click "SAVE" button. That's all! You will be back to previous screen and the new color table with zero records will be shown in the color table list automatically.

DELETING AN EXISTING COLOR TABLE:

Select the color table you wish to delete by clicking the row containing it and click “DELETE COLOR TABLE” button at the bottom. You will be requested for a final confirmation. Answering YES to this question will delete selected color table with all records (colors) in it.

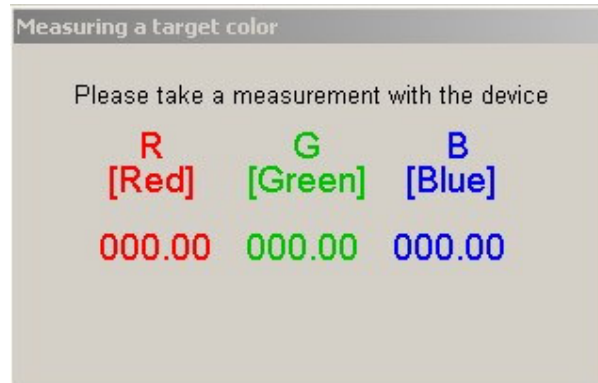
Caution! This action can not be irreversible.

SETTING A COLOR TABLE AS ACTIVE COLOR TABLE:

Saving or searching a color always takes place in “Active Color Table”. To Make a color table as active just click the row including the color table you wish to make active. The selected color table name will be shown at the “Color table” field at the right side.

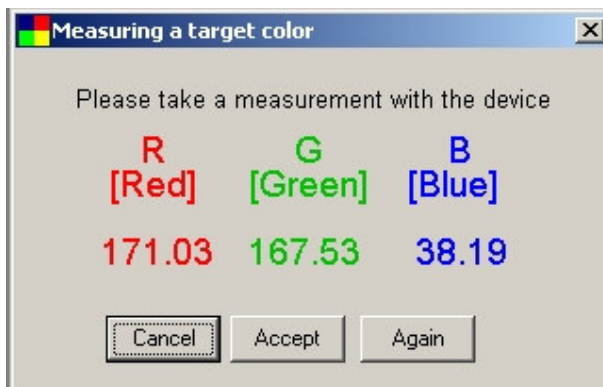
MEASURING A COLOR:

Use “READ” button at the right side of the “Target” field. Following screen will appear once you click the “READ” button



Press measuring button on the device. For more information about the device please download “PenColorArt Use Manual” from our web site www.artoksi.com . As soon as you press measuring button, the results (RGB values) will be automatically retrieved and displayed by the software. That’s all.

At the bottom of this windows, you will see three buttons appeared

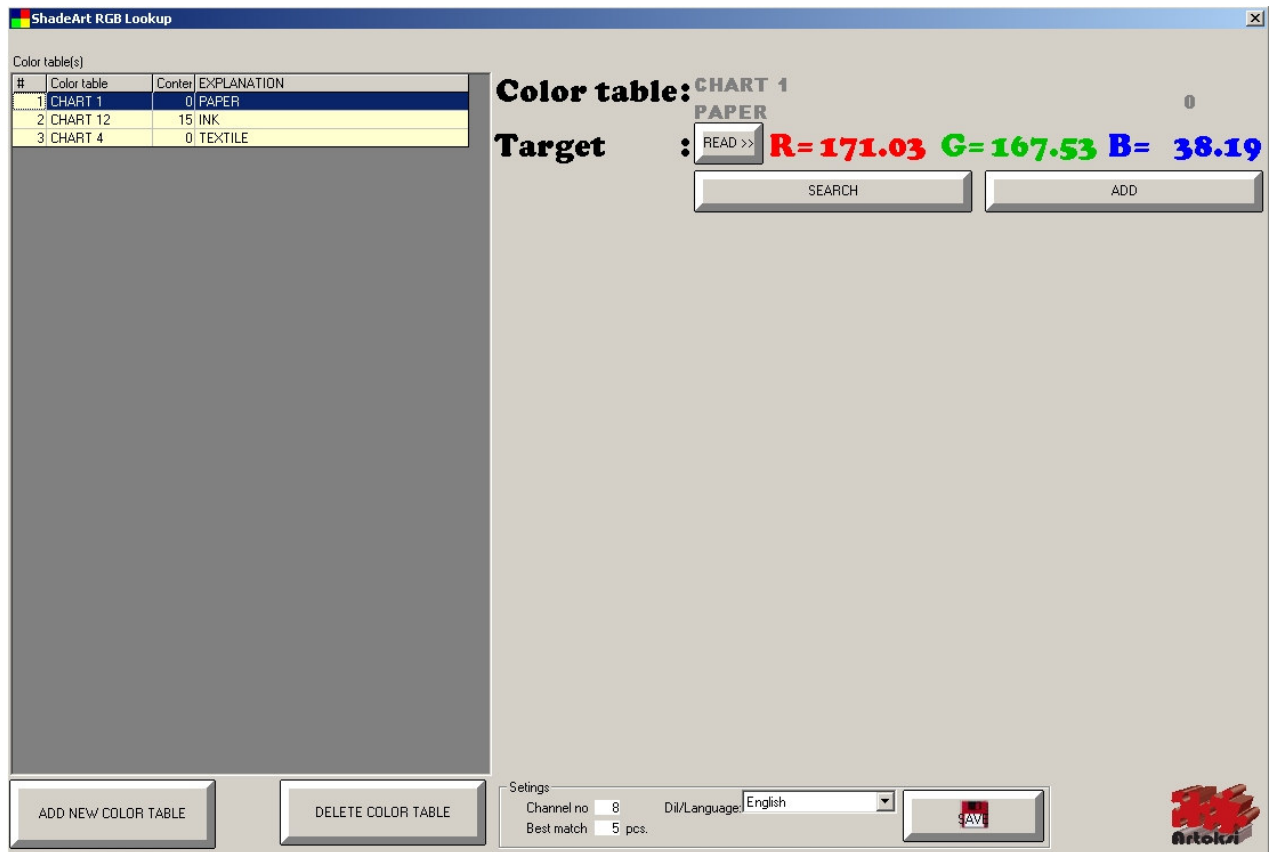


If you want to cancel the measurement and get back to main windows click “Cancel” button. Then the RGB values will be omitted.

If you want to use these RGB values then click “Accept” button. This transfers the values to main windows.

If you want to remeasure the color then click “Again” button. The window will wait you to press the measurement button of the device and replace new values with the old ones.

At this point, click “Accept” button. The RGB values will be transferred to “Target” area in main window as shown below.



After the measuring the color, there are two options you can do. These are;

- Searching a color table contents to find closest colors to the measured color (Target)
- Adding the measured color into a color table.

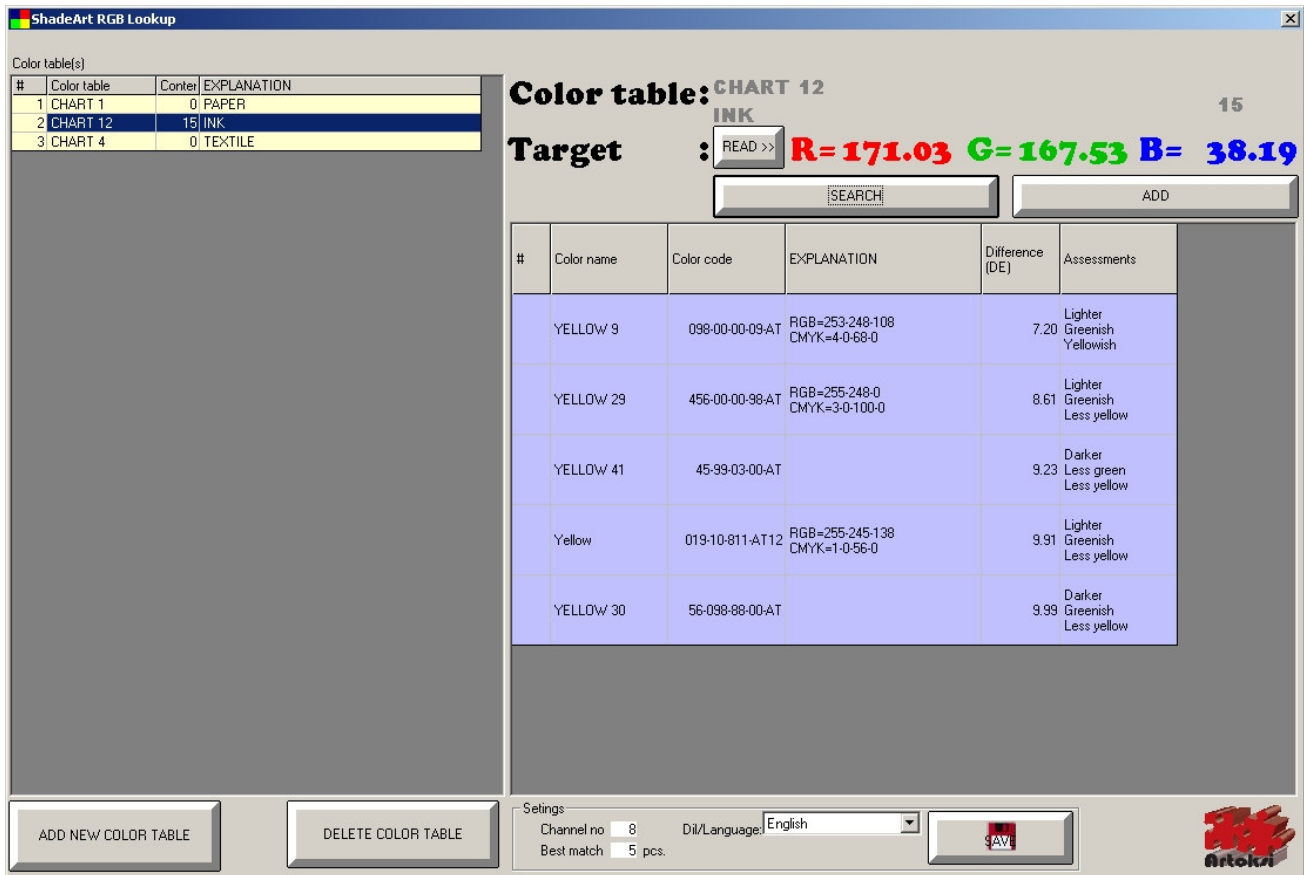
SEARCHING CLOSEST COLORS TO THE MEASURED COLOR.

The only thing you need to do is to click “SEARCH” button. The measured color will be compared with all contents of the active color table and closest colors will be displayed in an order in a list as follows.

Remember that, searching will be performed in active color table. Be sure you are working with the correct color table.

In the following sample, you see 5 colors in the list that are closest to measured color (target) shown with RGB values as RGB=171.03, 167.53,38.19

This list is always sorted according to 5th column “Difference (DE)”. The sorting order is ascending. This means that to first row is the best matched color to the measured one. DE, abbreviation of DeltaE”, has been calculated with the international standart CIEL*a*b* color space and D65 (daylight) and observer 10 degree.



Let's explain the columns of this searching result list (Light blue list).

Column 1: Line number

Column 2: Color name of the color found in active color table.

Column 3: Color code of the color found in active color table.

Column 4: Informations (for example RGB, CMYK values and/or recipe etc) about the color found in active color table.

Column 5: A value showing how much the color found is close to target. Zero represents perfect match. The more closer to zero the more closer to target color. Technically, this value is DeltaE value calculated for D65 (daylight) and 10 degree observer

Column 6: Assesments (comments) about the differences between the color found and the target color. This is very usefull to understand the direction of differences. For example, Redder/Less red, Bluer/Less blue, Yellower/Les yellow, Greener/Less green, lighter, darker etc.

The settings area at the bottom of this list has three types of informations. "Channel no" is the communication port number to communicate with the device. "Language" is for selecting the language you wish. As in the case of all ShadeArt software family, this member can also talk in any language. Turkish and English are intantly ready. fOr other languages select "User". You need to modify a file, "abc.mdb" before selecting this option. You will find extra information about this process at the end of this manual. "Best match x pcs." is an parameter to filter the "searching results list". The parameter "x" in this field represents how many item will be list maximum. If searching process returns colors more then this parameter, the first best x ones will be displayed. For example, at the above screen this parameter is 5 and the list has only 5 items although the active color table has 15 items in it. This 5 items are the best matched ones to the target (measured color) .

This list is always sorted according to the 5th column, "Difference (DE)", column in ascending order. This means that the first row is always represents the best matched color to the taget (measured) color.

ADDING A COLOR INTO A COLOR TABLE:

After a measurement is taken as described above, click "ADD" button. Once you click this button a new window will be appeared as foolows.

The screenshot shows a window titled "Adding a color into color table". It has a standard Windows-style title bar with minimize, maximize, and close buttons. Below the title bar, there are four input fields: "Color table" (containing "CHART 12"), "Color name", "Color code", and "Recipe/Explanation" (a large text area). At the bottom of the window is a "Save" button.

The explanation of the fields are as follows.

Color table: The name of the color table. It is automatically filled with the active color table. This field can not be modified.

Color name: The name of the color you measured. If the name is used before then you will be warned and duplicate name is not allowed.

Color code : The code of the color you measured. If the code is used before then you will be warned and duplicate name is not allowed.

Recipe/Explanation: Any text explanation (for example RGB values, CMYK values or recipe etc) about the color you will add.

Once you filled these fields, press "SAVE" button, the measured color will be added into the active color table.

TECHNICAL INFORMATION:

What is RGB and CMYK?

RGB is the abbreviation of three words, Red-Green-Blue, that represents an internationally accepted standard to identify the colors numerically.

Each part (R, G and B) can be within 0-255. The bigger value the lighter color. For example R=0, G=0 and B=0 represents absolute black and R=255, G=255 and B=255 represents absolute white.

CMYK is an another standard to represent the colors numerically. This is well known especially in printing industry. CMYK is an abbreviation of four words, C for Cyan, M for Magenta, Y for Yellow and K for Black.

What is DeltaE (dE)?

This is a value to represent the difference between two colors. After a serious calculation each color is converted a value which is known CIEL*a*b* method. Once this calculation is made then the difference between to color calculated easily. The difference is called as DeltaE. DeltaE=0 means perfect match (identical) of two color.

In CIEL*a*b* method the calculation is made according to some paramaters. This are light sources and observer degree. In this software, the dE difference calculation is made according to D65 (daylight) light

source and 10 degree observer.

ShadeArt has two languages embedded. On the other hand, ShadeArt can talk with any language. If you need such a case, you must select language as “User” and the fill user column of the “Access file named “abc.mdb”. This file is located in the directory you installed ShadeArt. It is strongly recommended to bak up this file before making any modifications in it.

Our company, Artoksi Engineering Arts Center, is being improving the products day by day. So, it is adviced to visit our web site www.artoksi.com from time to time. You may find something new which makes your life more comfortable.

