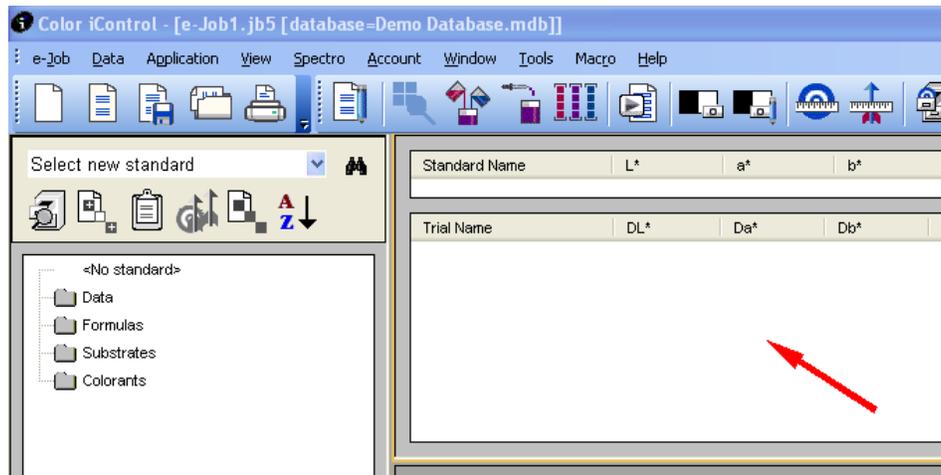




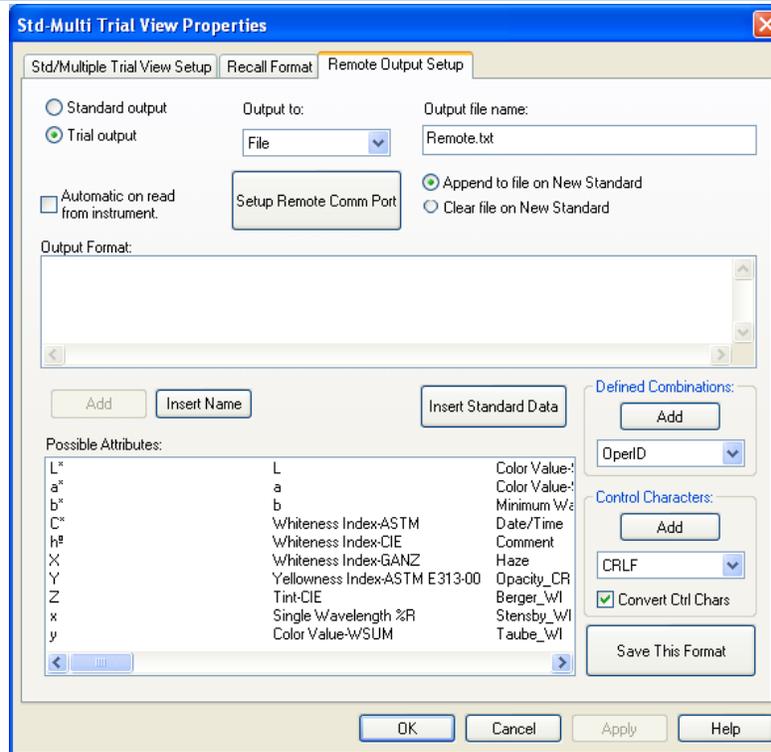
Color iQC / Color iMatch Remote Output Revision 1.0

Color iControl has the option of sending data to a serial communication port or to an ASCII text file. This “Remote Output” is generally used to export colorimetric data to a file which is then sent to a serial printer or imported into other programs such as inventory tracking systems or Excel for custom analysis.

Remote Output is configured from the Standard Multi-Trial view in QC:



Right Click and go to Properties. On the properties dialog there is a tab for Remote Output Setup:



Standard Output and Trial Output selection: This is used to setup the Output format section for each. The standard output is exported once for each standard that is measured or recalled from database. The standard output can be used to format a header for a printer or a special formatted report.

Output To: You have the option to direct the ASCII data to a serial communication port [COM1, COM2 etc.] or to a File.

Output File Name: If outputting to a file you can specify the name of the file and location. You can use mapped drive letters or UNC [network Universal Naming Convention] to specify a location. [Example \\computername\foldername\remote.txt]

Setup Remote Comm Port: If using the COM port you select Setup Remote Comm Port to set Baud rate, data bits, stop bits and parity.

Automatic on Read from Instrument: This option will send out the selected data to the com port or file as soon as it is measured from the instrument. Other option is to manually select Remote Output from the Standard Multi-Trial view right click menu or Aux Output which is discussed later.

Append to file on New Standard or Clear file on New Standard: These options give you the ability to add to an existing file even when the standard is changed or to clear out any existing data in a file when the standard is changed.

Output Format: This area is where you will construct the output of data for your standard, trial or both.



Insert Name: This will add “<name>” to the output format section. This will output the name of the trial or standard depending on if you are working in the Standard Output or Trial output.

Insert Standard Data: This is used when setting up the Trail output and will add <<stdinfo>> to the output format section. When changing or adding a new standard the standard data is output only once then the trail data will follow. If multiple system or multiple standards are being added to a single output file you may want some standard information on each line with the trail information. Any data such as the name and L*, a*, b* setup for the Standard Output will then be inserted for each trial data.

Add: This button will become active when an attribute is selected from the Possible Attributes section. You can add any of the data available in the Standard/ Multi Trial view such as DL*, Da* and Db*.

Defined Combinations: You have a drop down list of additional data available to export that is not in the Standard Multi Trial view:

OperID:	ID entered when starting Color iQC or iMatch. This is tagged on each measurement.
FileName:	Name of the Color iControl e-job being used during remote output.
Path:	The computer location / path of the Color iControl e-job.
Group 1, Group 2, Group 3:	Data from Group 1, 2 or 3.
PFtol: Pass/Fail Tolerance. L: C Ratio, P/F and Margin [2.00;1;P/F=1.00;10.00]	
MeasCond:	Condition of measurement such as reflectance, large area view, specular included.
Signature:	Digital signature of measurement.
SerialNum:	Serial number of spectrophotometer used to measure.
Model:	Type of spectrophotometer used to measure
SWL-EWL:	Starting wavelength and ending wavelength of measurement
SpectralData:	Spectral data
ExtSpectralData:	Extended spectral data such as over dark.
IIIObs1, IIIObs2, IIIObs3:	Illuminant and observer 1, 2 and 3.
BlockRange:	555 sort block range
LABtol:	L*a*b* tolerances [0.25; 0.19; 0.26]
LCHtol:	L*C*h tolerances [0.25; 0.19; 0.26]
TaperTol:	Taper tolerances, Standard, average, roll and range [1.00 1.00 0.50 5.00]
idL*, ida*, idb*:	Integer[no decimal points] DL*, Da*, Db* [-0.13 D, 0.12 R, 0.05 Y, would be -013, 012, 005]
TagLabel_xx:	Tag label 01 through 30
TagData_xx:	Tag data 01 through 30.

Control Characters: These can help format the data.

CRLF: Carriage return and line feed



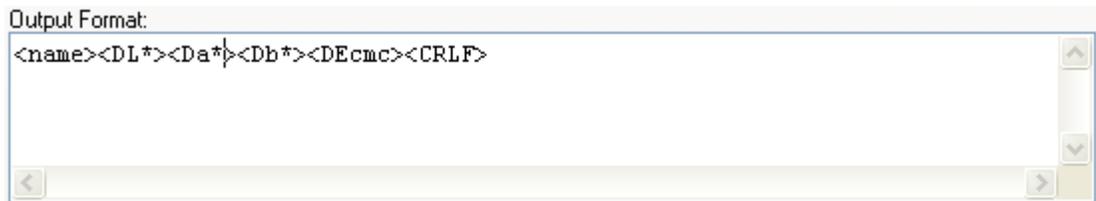
CR:	Carriage return
LF:	Line feed
TAB:	Tab
FF:	Form feed
ETX:	End of transmission
EOT:	End of tape
Bell:	Bell
ACK:	Acknowledge

Convert Ctrl Chars: This will convert the control characters text into the ASCII codes. Unchecked the control characters such as <CRLF> will be passed through for the end device like a serial printer to interpret.

Save This Format: You can save the setups for the remote output to an external file. This allows you to have multiple remote output setups and the ability to send this remote output setup to another Color iQC / iMatch for them to use.

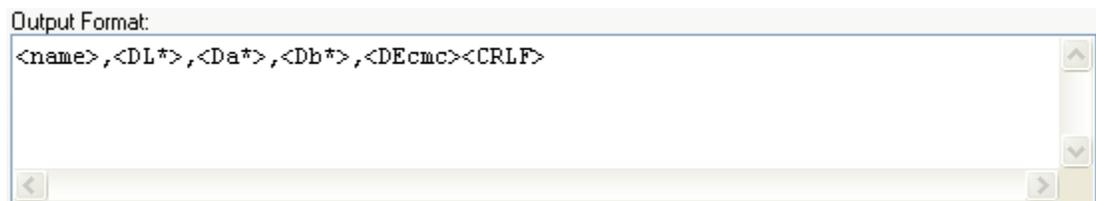
In the Output Format area you can add to this directly from your keyboard by clicking in box at the position you want to add something then type. Items between brackets < > will be decoded by the software at the time of export. Anything not in brackets will be passed directly out the export. Some examples follow.

The following will export the name of the trail, the DL*, Da*, Db*, DEcmc and return to the beginning of the next line for the next trial output. No user typing was added.



Exported:
 Blue Batch 1 -0.13 D 0.12 R 0.05 Y 0.16
 Blue Batch 2 -1.21 D 1.93 R -0.31 B 2.18
 Blue Batch 3 0.23 L -0.19 G -0.05 B 0.25

The following will export the name of the trail, the DL*, Da*, Db*, DEcmc and return to the beginning of the next line for the next trial output. Commas were added to have a delimited file for easy import into Excel.

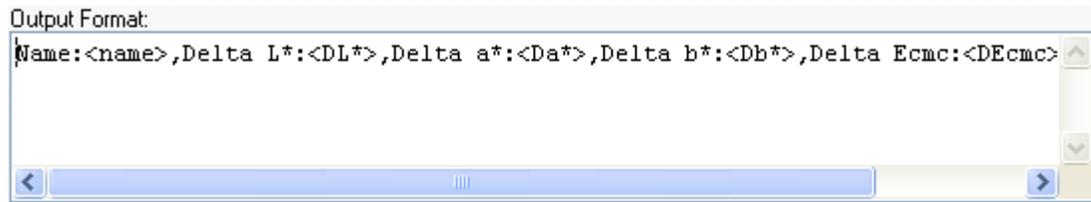


Exported:



```
Blue Batch 1      , -0.13 D, 0.12 R, 0.05 Y, 0.16
Blue Batch 2      , -1.21 D, 1.93 R, -0.31 B, 2.18
Blue Batch 3      , 0.23 L, -0.19 G, -0.05 B, 0.25
```

The following will export the name of the trail, the DL*, Da*, Db*, DEcmc and return to the beginning of the next line for the next trial output. Commas were added to have a delimited file for easy import into Excel. And text was added to describe the output.

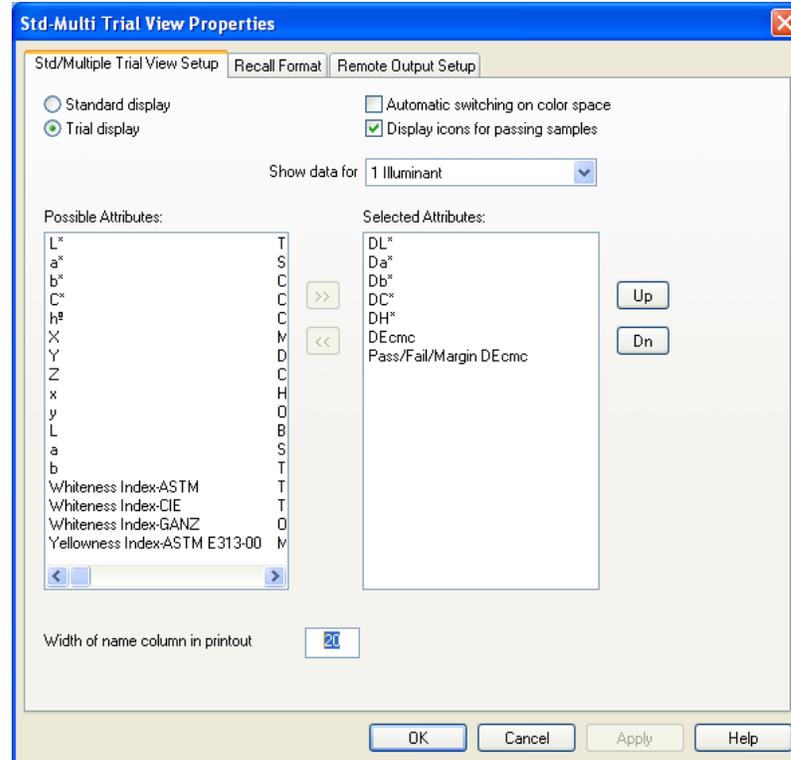


Exported:

```
Name:Blue Batch 1      ,Delta L*: -0.13 D,Delta a*: 0.12 R,Delta b*: 0.05 Y,Delta
Ecmc: 0.16
Name:Blue Batch 2      ,Delta L*: -1.21 D,Delta a*: 1.93 R,Delta b*: -0.31 B,Delta
Ecmc: 2.18
Name:Blue Batch 3      ,Delta L*: 0.23 L,Delta a*: -0.19 G,Delta b*: -0.05 B,Delta
Ecmc: 0.25
```

The remote output setup is saved with the e-Job or settings file. You can recall a saved remote output setup by going the properties of the Standard Multi-Trial view and going to the tab Recall Format.

Note: The name of standards and trials can be up to 55 characters in length. Color iControl defaults to exporting only the first 20 characters. If needed you can increase this to the maximum of 55 by going to the settings of the Standard Multi-Trial view and on the setup tab you can change the Width of name column on Printout.



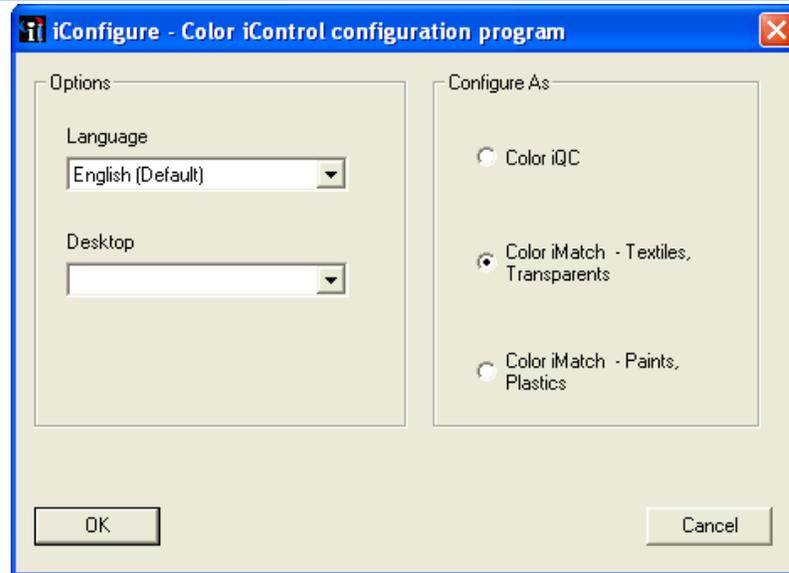
Once you have the remote output setup in the standard multi-trial view you can manually export by right clicking in the Standard Multi-Trial view and choosing Remote Output. It will export data from all trials shown in views. You will get a message that remote output has finished.

Another way to export is to use the Aux Output feature. Under the Tools menu is Aux. Output. This stands for Auxiliary output. It will use the remote output setup defined in the Standard Multi-Trial view but you have the option of having a separate file name and location along with a launching program. You can also customize your toolbar and add the Aux. Output button to make this a one click feature.

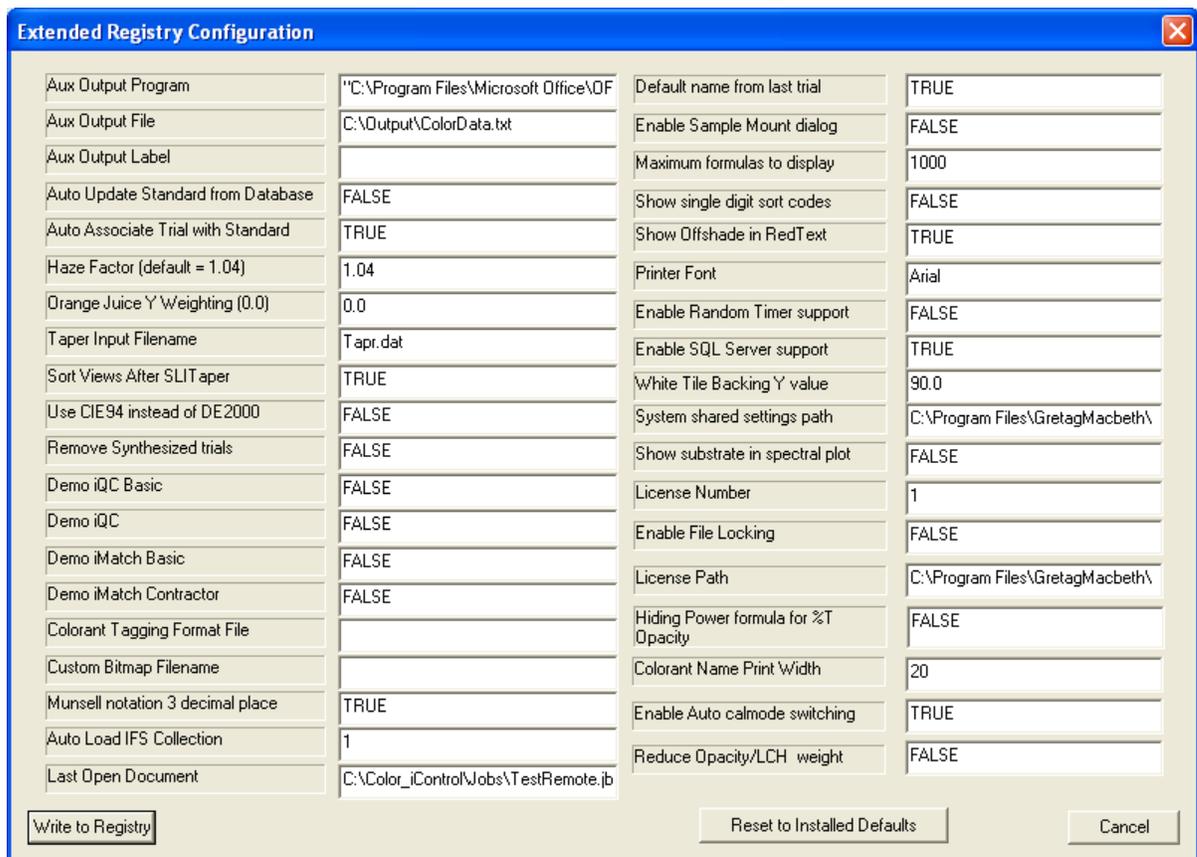
Example:

I can set Aux Output to create a file C:\Output\ColorData.txt. Then have MS Word run and open this file. So with one click of Aux Output button MS Word would open and I will have the exported data in a document.

To setup the file, path and program to use with Aux Output you will need to shut down Color iControl. Then go to your Windows start menu, Programs, GretagMacbeth, Color iControl then run iConfigure. Depending on your system if you have formulation or not you may not have all the options below.



Right click twice in the area between the OK and Cancel button. You will have extended registry configuration appear. In the Aux Output Program put the path and file name of the program to use. You need to put the path in quotes "".



If using Microsoft Word it may look like this:



"C:\Program Files\Microsoft Office\OFFICE11\WinWord.exe"

Then in the Aux Output File you can enter in the path and file name to use. The path can be a mapped network drive or UNC location [Such as C:\Output\ColorData.txt].

In the example above a file ColorData.txt will be created in a folder C:\Output\ and then Microsoft Word will start and open this file.

Other examples are user written programs or batch files that can run and extract the data from the ASCII file.