



Color iControl Online Installation for Remote Desktop or Citrix Connections

Color iControl version 9.x and higher may be installed on a Windows Server 2003, 2008, or 2012 and, if properly configured and licensed, is enabled for multi-user operation using a Microsoft Remote Desktop or Citrix Connection.

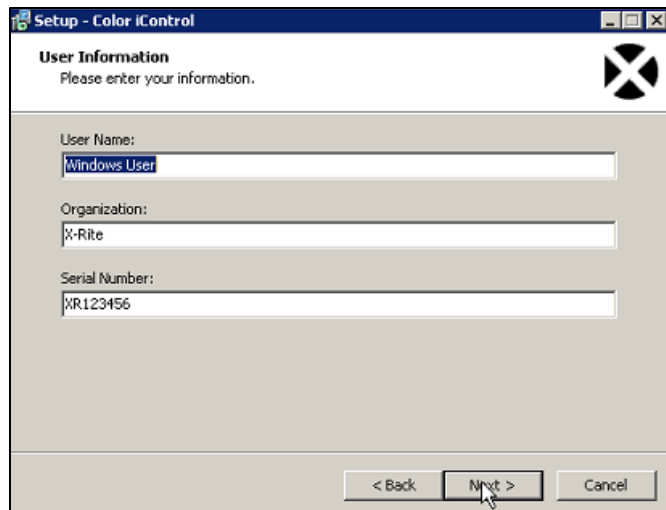
Color iControl is flexible in its configuration of file locations, use of desktops for settings and user permissions for the program and database data access. Please see the PDF entitled *Account Management in Color iControl* for details on desktops and user permissions. Please see the section *Color iControl Folders and Files* later in this document for details on files and folders used. By default, Color iControl uses a Microsoft Access database, but you can also choose to use a Microsoft SQL Server database. If you would like to use a Microsoft SQL Server database, please see the following section entitled *Color iControl v9 SQL Database Setup* for instructions. If you will be using USB devices, or the listed serial instruments below; please see the section below entitled *Color iControl Remote USB Client Guide* for details.

- SP62, SP64, 962, 964, 939, VeriColor Spectro (VS410)

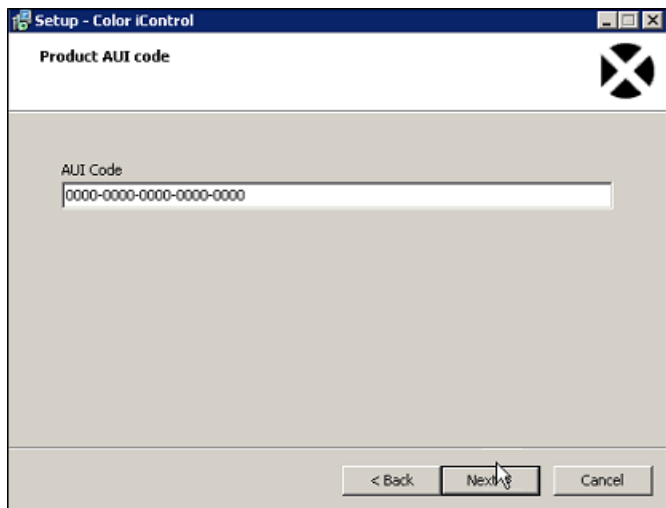
Installation of the online version of Color iControl requires an Administrator account, knowledge of Registry settings and REGEDIT, knowledge of creation and management of user accounts and groups, and knowledge of software installation procedures on Servers.

The procedure for installation uses the same CD or self-extracting image as the stand-alone application – but differs slightly in the install procedure ...installation steps are:

1. Install Software
 - a. Copy Installer to server, or run from CD
 - b. Navigate to installer file (**setup.exe** found in the *Application* folder if manually browsing the CD)
 - c. Right-click and choose “Run as administrator”
 - d. Follow installation prompts
 - e. Enter Customer Name, Company Name, and Serial Number when prompted, then click **Next**



- f. Enter AUI code when prompted, then click **Next**



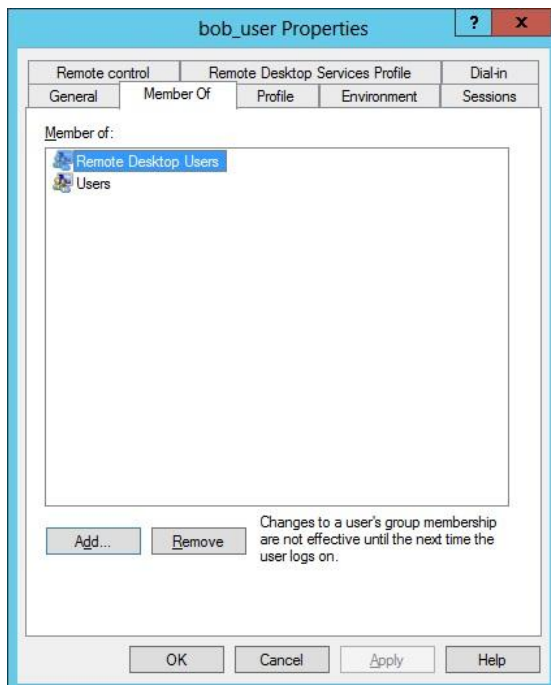
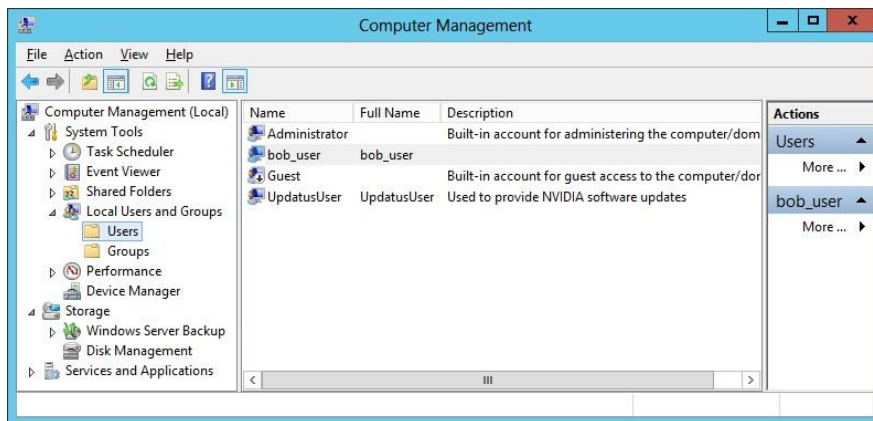
- g. Continue following the installation prompts and click **Finish** when done

2. Additional configuration

- a. After installation is complete but **before** running Color iControl software for the first time, the Administrator must run the batch file “C:\Program Files (x86)\X-Rite\Color_iControl\Terminal Server Configure.bat”.
- This batch file sets a registry setting for Remote Desktop Connection, and creates additional folders and files required for multi-user operation.
This batch file also creates a folder **C:\Color_iControl\Server** and places a default folder beneath it called “**default_user**”. The folder “**default_user**” **and its contents** must be **copied** to create new user folders for **each** user account that is going to access Color_iControl using a remote connection. This assumes that all data for each user will be separate. As mentioned in *Files and*

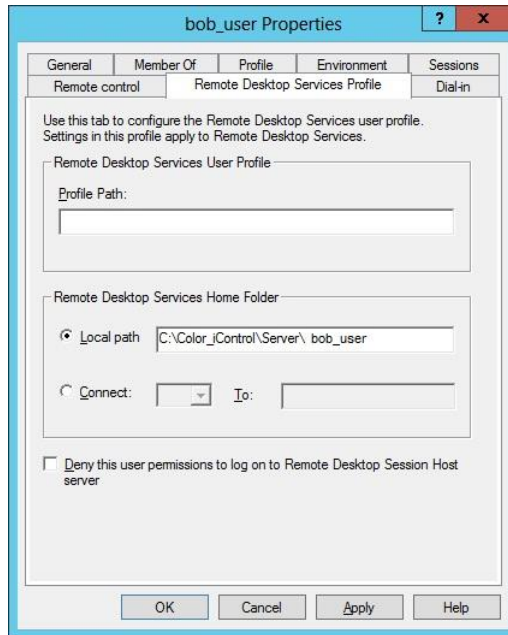
Folders for Color iQC-iMatch, all but the folder for Local System Settings may be shared. The batch file also runs the *Terminal_Server.reg* file. This makes an entry in HKEY_LOCAL_MACHINE for terminal server mode. It also sets the default system file location.

- b. The Administrator must create matching User Accounts/passwords on the Windows Server (or use domain accounts) that are enabled for terminal server logon and must also set those account environments up for any desired restrictions (such as local drive and printer mapping, automatic software startup, session limit, etc.).



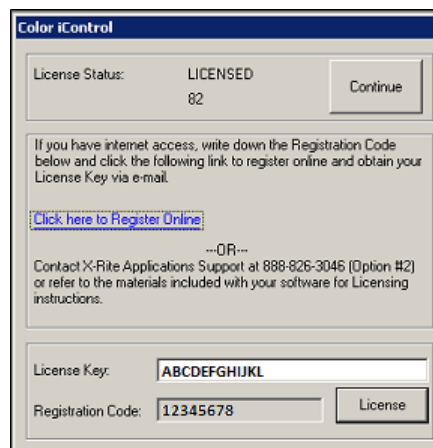
- c. If using the default installation the Administrator must set the Terminal Services Profile - Local Path of each user account to the appropriate folder created for each user (ex: "C:\Color_iControl\Server\User"). This is only needed to automate the user login and running the software the

first time. Once the user has run the software and the path settings will be made and the profile path can be changed.



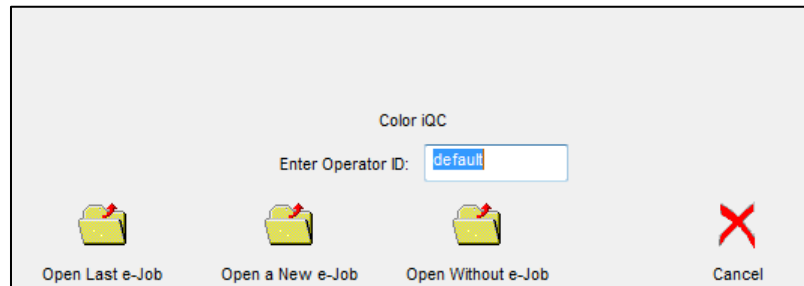
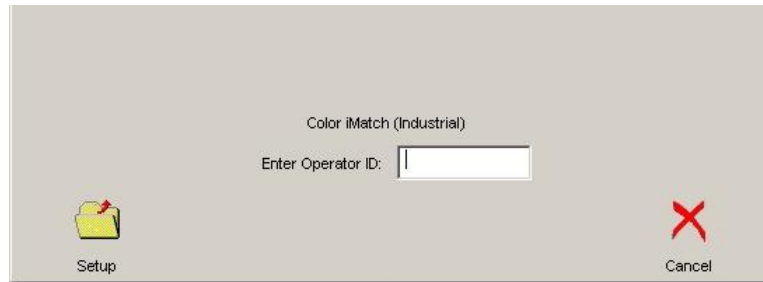
3. Licensing

- a. Someone with administrator privileges on the server must run the software the first time to license it
- b. Right-click the Color iControl icon and select “Run as administrator”
- c. The software will display a license screen with a “Registration Code”. This code is used to generate a “License Key”

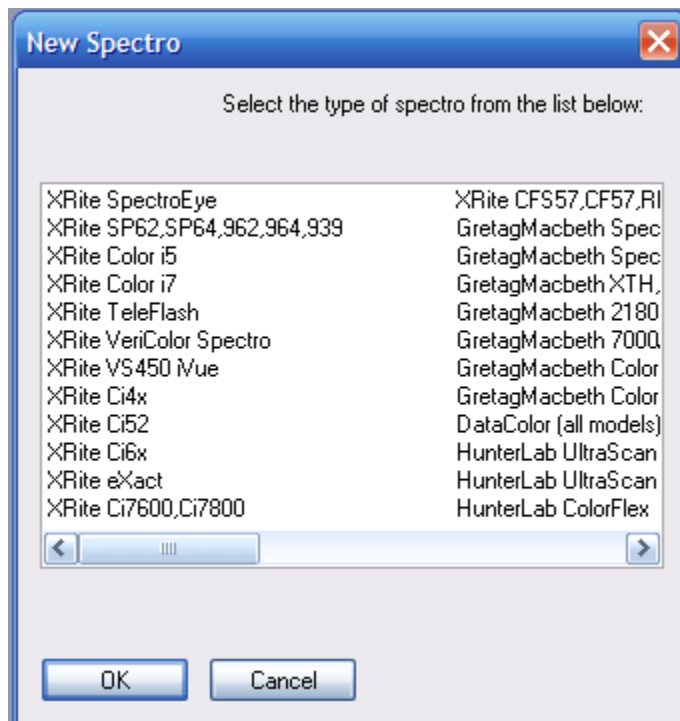


- d. Enter the “License Key” and click **License**
- e. Please note that the server version may not be run using a 30 day trial license as can the stand-alone version, it requires a full license.

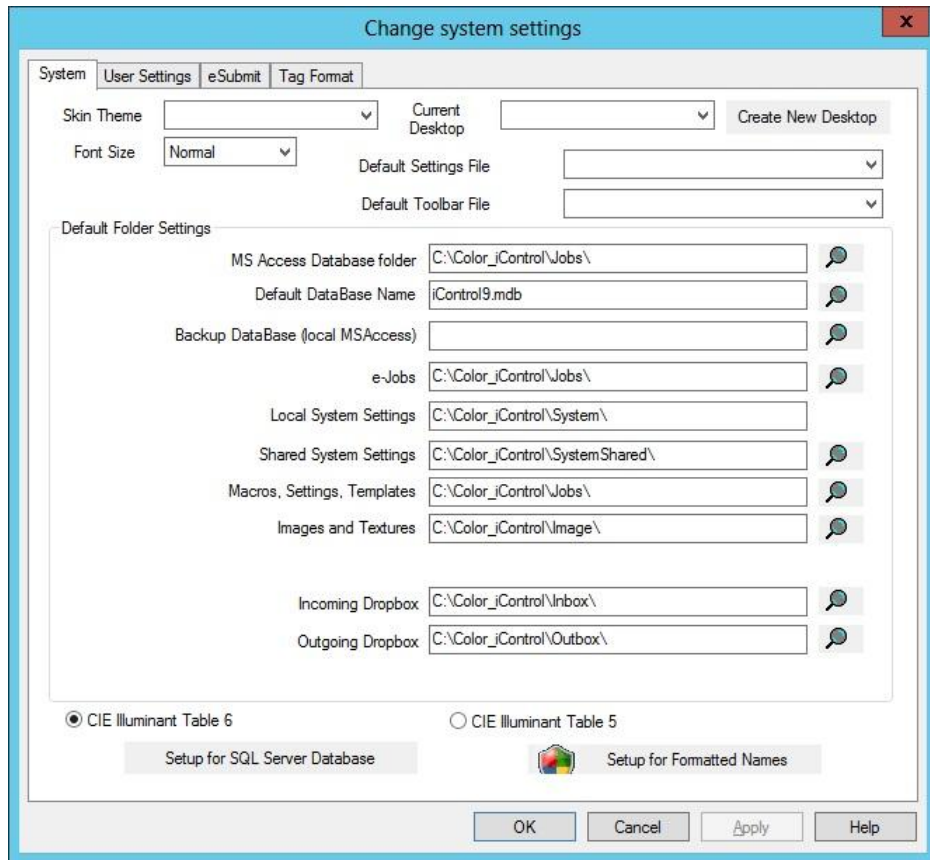
- f. If this is the first time the software has been launched for this particular user, you will need to click Setup, else Click on “Open Without e-job” icon



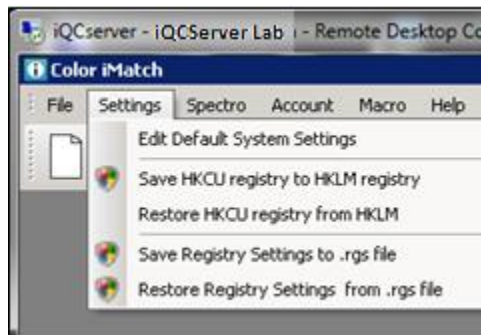
- g. You will then get a box to install your spectro. Click Cancel.



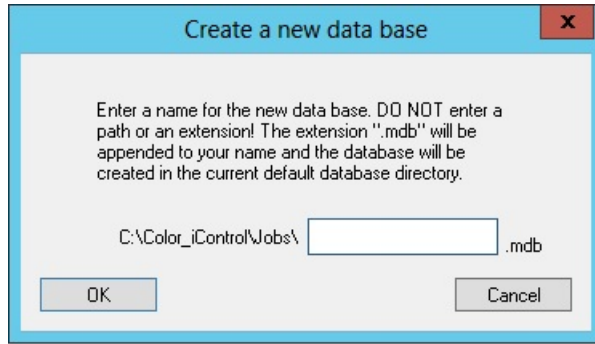
- h. You will then get the System Settings.



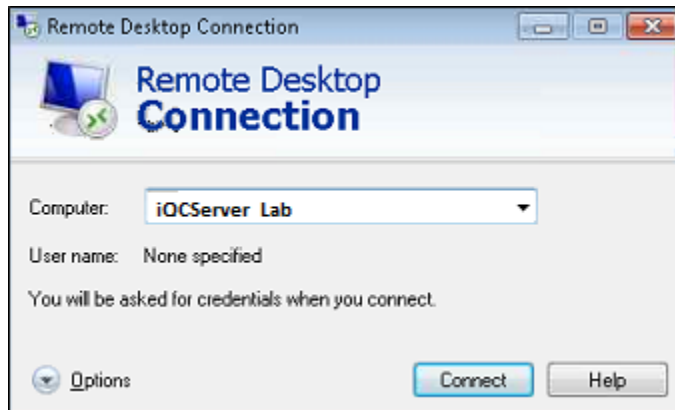
- i. If you don't get the above settings then Click on "Settings > Edit Default System Settings"



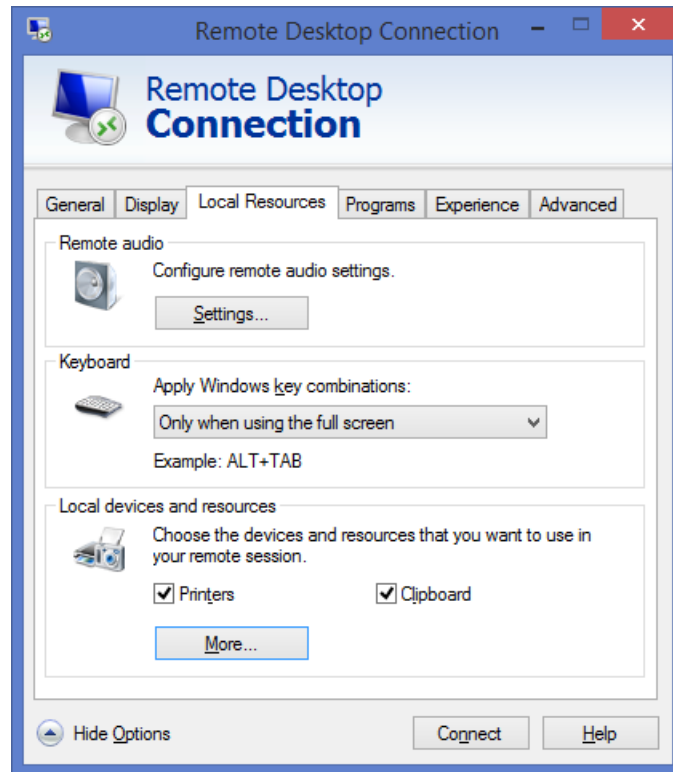
- j. Click on the "System" tab (if needed)
 - By default, the file locations will be pointing to the local folders:
C:\Color_iControl\FolderName\
- k. Change the paths to include "Server\default_user":
C:\Color_iControl\Server\default_user\FolderName\
- l. Change the path as well if user data is stored on another server
- m. After clicking **OK** you will get this dialog:



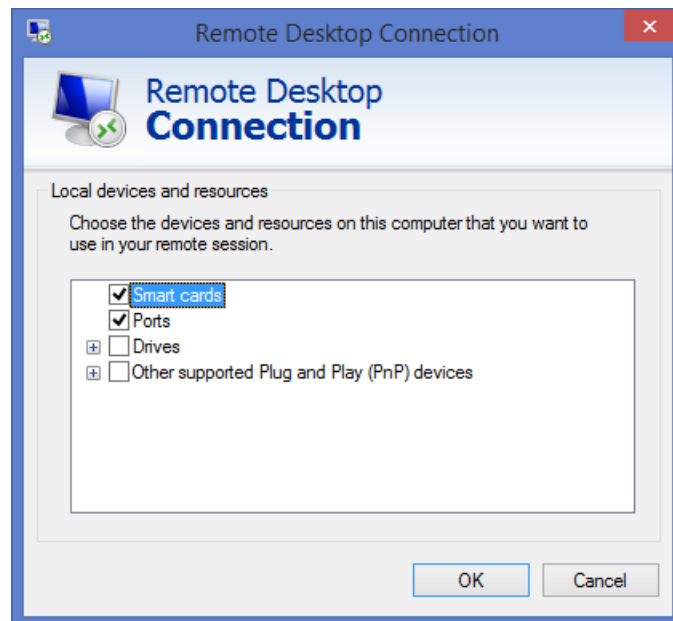
- n. After entering in a name for your new database, click **OK** through the next 2 dialogs and close the application. If you would like to use a Microsoft SQL Server database, click **Cancel** and see the section entitled *Color iControl v9 SQL Database Setup* for instructions.
4. Logon to the server with a client (via Remote Desktop)
 - a. Click **Start**
 - b. Begin entering “Remote Desktop Connection” in the search window
 - c. When “Remote Desktop Connection” appears under programs, click it to launch the connection utility
 - d. Enter the name of the server in the text field



- Note:** Before logging on to the server
- Click on **Options** or **Show Options** (depends on your version of RDP Connection Client) at the “Remote Desktop Connection” screen
 - Click the “Local Resources” tab



- Click the **More** button

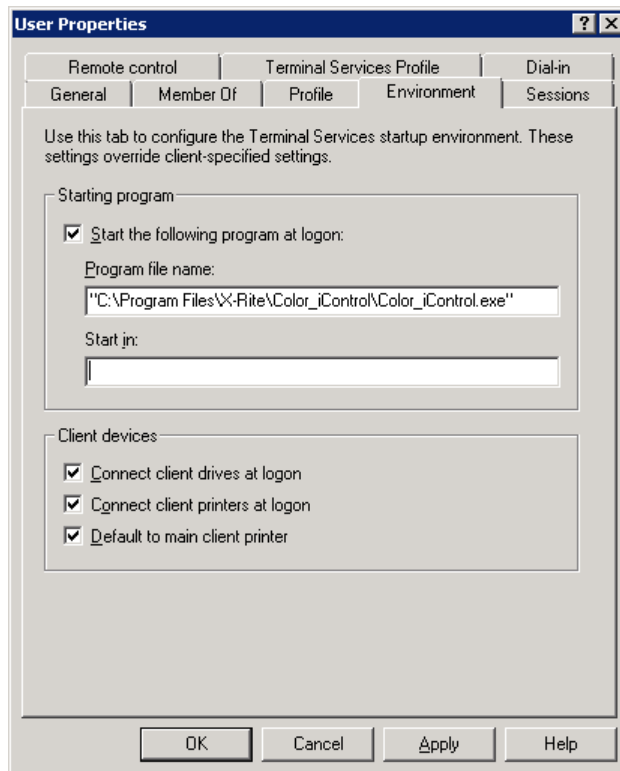


- Place a check in the “Ports” check box (if needed), but make sure the “Other supported Plug and Play (PnP) devices” checkbox is NOT checked
- Click **OK**

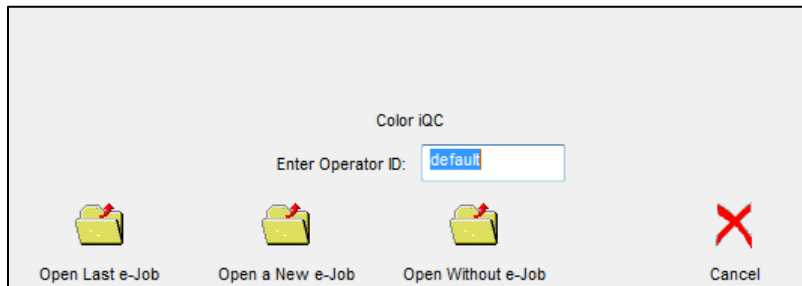
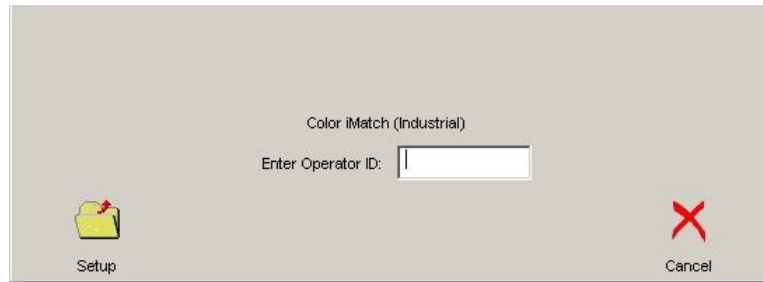
- e. Click **Connect**
 - *Note:* If logging in via Citrix, simply use your standard Citrix Receiver connection. Also, you must be running Citrix XenApp 5.0 or higher for making USB device connections.
- f. Enter “User name” and “Password”



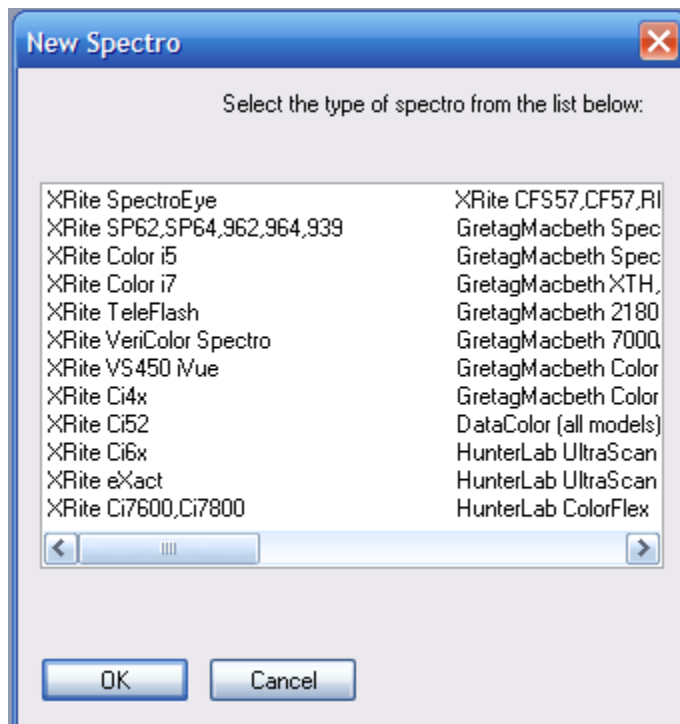
- g. Click **OK**
- h. The server desktop will appear.
 - *Note:* If you want the user to go directly into the application without seeing the server desktop, go to the Properties of that user and set the “Profile Path” accordingly on the Environment tab:



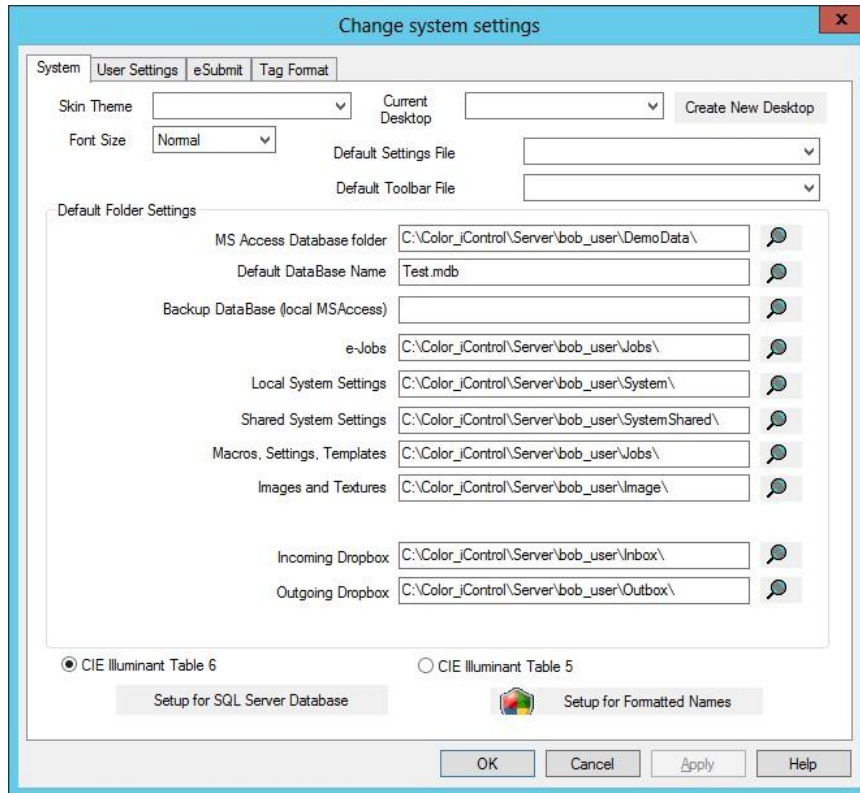
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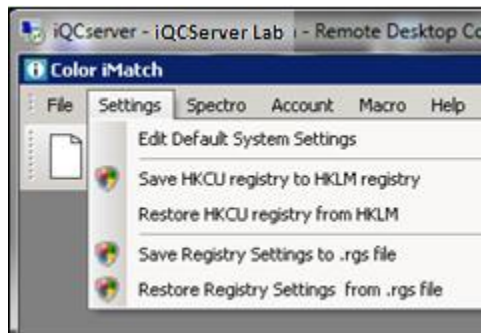
- j. You will get a box to install your spectro. Click Cancel.



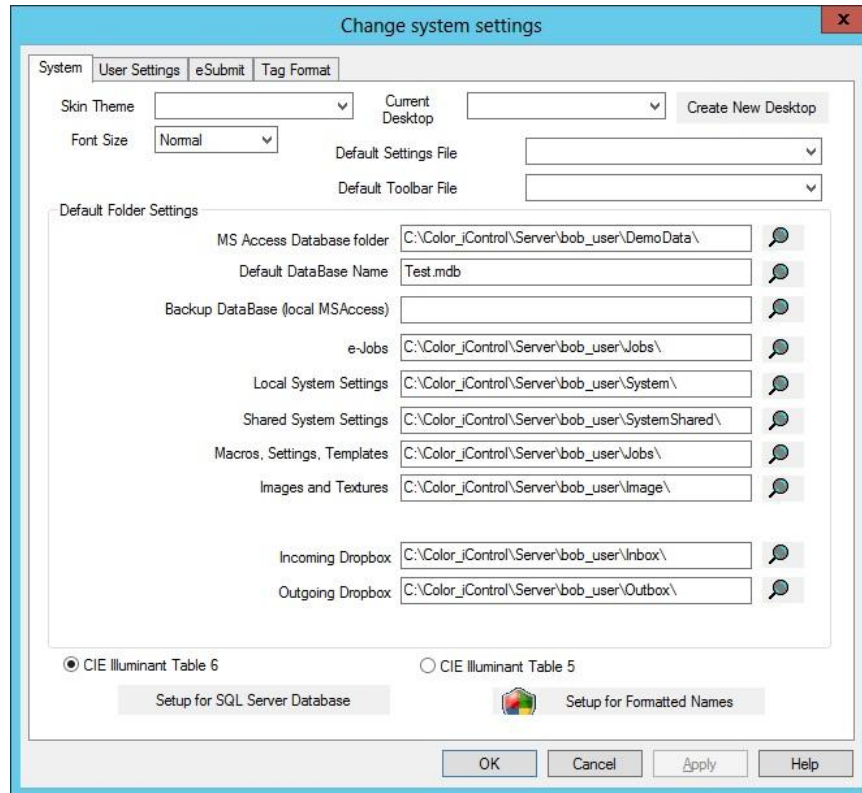
- k. You will then get the System Settings.



- I. If you don't get the above settings then Click on "Settings > Edit Default System Settings"



- m. Click on the "System" tab
 - By default, the file locations will be pointing to:
C:\Color_iControl\Server\user\FolderName\.
- n. Change "default_user", to the actual user name (if needed)
- o. Change the path as well if user data is stored on another server



5. Local Machine Configuration – for USB instruments or serial devices (SP62, SP64, 962, 964, 939, or VS410) using virtual channels instead of mapped COM ports.
 - a. On the server, navigate to:
C:\Program Files (x86)\X-Rite\Color_iControl\Support
 - b. For RDP connections, copy the application named “iQCRremoteUSB_RDPClient.exe”. For Citrix connections, copy the application named “iQCRremoteUSB_ICAClient.exe”.
 - c. Place the appropriate file on each of the local machines and run it by right clicking and selecting “Run as Administrator”
 - If this utility is not installed, you will get an error stating “Virtual Channel Server – Write Error: 1”
 - If multiple users will connect from the same client PC, the application named “iQCRremoteUSB_RDPClientUserAccess.exe” or “iQCRremoteUSB_ICAClientUserAccess.exe” (as appropriate) must be run by each user that will log in from that PC.

Color iControl Folder and File Locations

Color iControl has up to eleven folders definable for setting and user data files. Depending on each situation you may want to share files between systems or have data files located on a data server for regular backups. This document describes the files used by Color iControl and which folder they are or can be located in.

The System Settings for Color iControl version 8.x and higher show the current settings. You can use windows variables such as %USERNAME%, %TEMP%, UNC path such as [\\ComputerName\ShareFolder\](#) or mapped drives.

| Setting | Value |
|----------------------------------|---------------------------------|
| MS Access Database folder | C:\Color_iControl\Jobs\ |
| Default DataBase Name | iControl9.mdb |
| Backup DataBase (local MSAccess) | |
| e-Jobs | C:\Color_iControl\Jobs\ |
| Local System Settings | C:\Color_iControl\system\ |
| Shared System Settings | C:\Color_iControl\SystemShared\ |
| Macros, Settings, Templates | C:\Color_iControl\Jobs\ |
| Images and Textures | C:\Color_iControl\Image\ |
| Remote Formula Files | C:\Color_iControl\Jobs\ |
| Incoming Dropbox | C:\Color_iControl\Inbox\ |
| Outgoing Dropbox | C:\Color_iControl\Outbox\ |
| IFS Colorant Files | C:\Color_iControl\IFS\ |

MS Access Database Folder:

1. Microsoft Access Database file(s)(*.MDB): Color iControl installs with an access database. A database is used as a measurement backup location and search all data lookups. This database can be shared between systems. It is recommended that an access database be shared with up to 3 but no more than 5 systems. If additional sharing is needed please see Setting up an SQL Database under Color iQC or Color iMatch Common HelpDesk Questions on www.XRite.com

Default DataBase Name:

1. The name of the database to be connected to if the job file does not specify a database. To default to the SQL database the database name should be “ <SQL Server> ”.

Backup Database (local MSAccess)

1. The name and path of alternate MS Access database. If default database cannot be opened then the backup database will automatically be used until the default is available again. (can use UNC path. i.e. [\\ComputerName\ShareDrive\iControlBackup.mdb](#))

e-Jobs:

1. Color iControl job files (*.JB5) Binary files that have measurement data and settings. These are working files much like a Word Document.

Local System Settings: (should not be shared with other systems using a spectro. Could be shared with Management (non-spectro) systems.

1. Check tile job (*.jb5): If enabled, during calibration the software will prompt for a calibration check tile. The name of the tile will be *NameOfSpectro_serialNumber_x.jb5* (x will be the calibration mode number in the software) See Check Tile – How to setup under Color iQC or Color iMatch Common HelpDesk Questions on www.XRite.com
2. Default_1024.ST5 or Default_800.ST5: The default job settings files. Can specify another settings file to be used for “New e-Job”.
3. Desktops (*.ini): Software settings file(s) that include the setup for folder paths, default database name, default e-Job settings file and default toolbar file.
4. XRSensors.Archive: this file holds spectrophotometer installation and calibration settings.
5. Toolbar file(s)(*.tlb_archive): User customizable toolbar file.

Shared System Settings:

1. Format Files (*.fmt): e-Submit and tagging format files.
2. Proxy.archive: Color iControl account file holds account group name, password and database security.
3. Query files (*.query): Saved database tag search filters.
4. Remote Formula Format (*.rfo): Formula output setup files. i.e. dispenser setup.
5. Remout Output Format (*.rof): Data export setup file to text file or COM port. See **Data Export – How to setup under Color iQC or Color iMatch Common HelpDesk Questions** on www.XRite.com
6. Remote Output to Database format (*.rod): Data export setup file to Access, MS SQL or My Sequal database.
7. Skin Themes (*.cjstyles): Files to change the look of skin of the software.
8. Synth.archive: File used in Color iControl to generate a spectral curve from entered colorimetric data.
9. Design template files (*.Ci6xdesign): Ci64 job design templates.
10. Colorant Rules (*.rules): Colorant rules used in Color iMatch formulations.

Macros Settings and Templates:

1. Macros (*.macro): Macros are mini procedure files that can be setup to step operators through simple repetitive things like Open e-Job, Calibrate, Read Standard, Read Trial, Print Report, then Close e-Job.
2. Settings files (*.st5): e-Job settings files.
3. Templates (*.jt5): e-Job Templates.

Images:

1. Texture files (*.bmp): Bitmap images of textures or substrates to be used in the onscreen color rendition view.

2. Logo Bitmap (*.bmp): Bitmap files that can be added to the top printed report. To add company logo

Remote Formula Files: (Only appears on Color iMatch formulation systems)

1. Location the software will create the formula outputs defined.

Incoming Dropbox:

1. Files to be imported into Color iQC or Color iMatch. Can include CxF, MIF, QTX files.

Outgoing Dropbox:

1. Files being exported from Color iQC or Color iMatch. Can export CxF, MIF, QTX files.

IFS Colorant Files: (Only appears on Color iMatch Industrial formulation systems)

1. IFS Files (*.ifs; *.samples): Industrial formulation colorant collection and sample measurement files.

| File | Primary location | Alternate location |
|----------------------------|-----------------------------|---------------------------|
| XRSensors.archive | Local System Settings | None |
| Proxy.archive | Shared System Settings | None |
| Synth.archive | Local System Settings | None |
| Desktops (.ini) | Local System Settings | Shared System Settings |
| Settings files (.st5) | Macros, Settings, Templates | Anywhere |
| Templates (.jt5) | Macros, Settings, Templates | Anywhere |
| Jobs (.jb5) | eJobs | Anywhere |
| Macros (.macro) | Macros, Settings, Templates | None |
| Temp files (.tmp etc) | <Users Windows Temp> | None |
| IFS files (.ifs, .samples) | IFS Colorant Files | None |
| Databases (.mdb) | MS Access Database Folder | Anywhere as Temp |
| connect | | |
| Toolbars (.tlb_archive) | Local System Settings | Shared System Settings |
| Format files (.fmt) | Local System Settings | Shared System Settings |
| RemoteOutputFormat (.rof) | Shared System Settings | None |
| RemoteFormulaFormat (.rfo) | Shared System Settings | None |
| RemoteToDatabase (.rod) | Shared System Settings | None |
| Skins (.cstyles) | Shared System Settings | None |
| Check Tile file (.blank) | Local System Settings | None |
| Logo Bitmaps (.bmp) | Images | None |
| DesignTemplates (.design) | Shared System Settings | None |
| Queries (.query) | Shared System Settings | None |
| Stylesheets (.xsl) | Shared System Settings | None |
| Formulation Rules (.rule) | Shared System Settings | None |

Color iControl v9 - SQL Database Setup

Color iControl is designed to use Microsoft Access database, a MicroSoft SQL Server database, or both. Color iControl includes a default MS Access database with ability to create additional MS Access databases if needed. Color iControl can be configured to use a customer supplied SQL Server 2005, 2008, or 2012 database. To use a SQL Server database in Color iControl you will need to do the following after installation.

1. In the Program Files application support folder (C:\Program Files\X-Rite\Color_iControl\Support) are 3 SQL script files to be run with SQL Server Manager Studio or equivalent.
2. **iControl9_DBTableCreate.sql** is used to create the tables and indices for a new blank database.
3. **iControl9_DBTableUpgrade7.0.sql** is ONLY used to upgrade an existing 7.x or 8.x database to the latest version.
4. **iControl9_DBMakeIndexForExistingDatabase.sql** is ONLY used if you have created an SQL Server database from an existing Access database (which does not import indices for fast searching).
5. Have the database administrator create a new blank Color iControl SQL database on the server. You may name the database however you want – but the administrator will need to modify the above SQL script file to use the correct database name (default name is **iControl9**). Modify the script file with notepad and change the name in brackets in the following line **USE [iControl9]** to use the database name you want.
6. Select the new database from the SQL Server Management Studio application, open the sql script file **iControl9_DBTableCreate.sql**, and execute this script to create the tables and indices in this new database needed for use by Color iControl.
7. Make sure the administrator has provided security access for all Color iControl users, either by using Windows Authentication (the preferred method), or by creating SQL Server users as appropriate and granting them specific access rights as required.
8. SQL native client access software (provided with SQL Server) needs to be installed on all computers that are running Color iControl. The SQL Native Client version does NOT have to be the same version as the SQL Server it is accessing, but you must specify that native client connection type in the SQL Server settings for Color iControl on that computer.
9. Color iControl will detect that SQL client software is installed on the computer and will have a button on the System Settings page in Color iControl. This setting will need the computer name that has the SQL server, name of the SQL

database to use, and (if SQL Server authentication is used) a user login and password for access into the SQL database. Leave username and password blank for Windows Authentication (Figure 1). You will also have to specify the client connection type based on which SQL native client is used to access the database. Note there is a different connection type for SQL Server express versus SQL Server.

10. Once the SQL database is setup the name will show up in the drop down list of available databases to use under system settings and in the job settings general tab. You can choose the SQL database for use for this job file. (Figure 2) If you would like the database to be the default database set the “Default Database Name” to <SQL Server> (Figure 3)

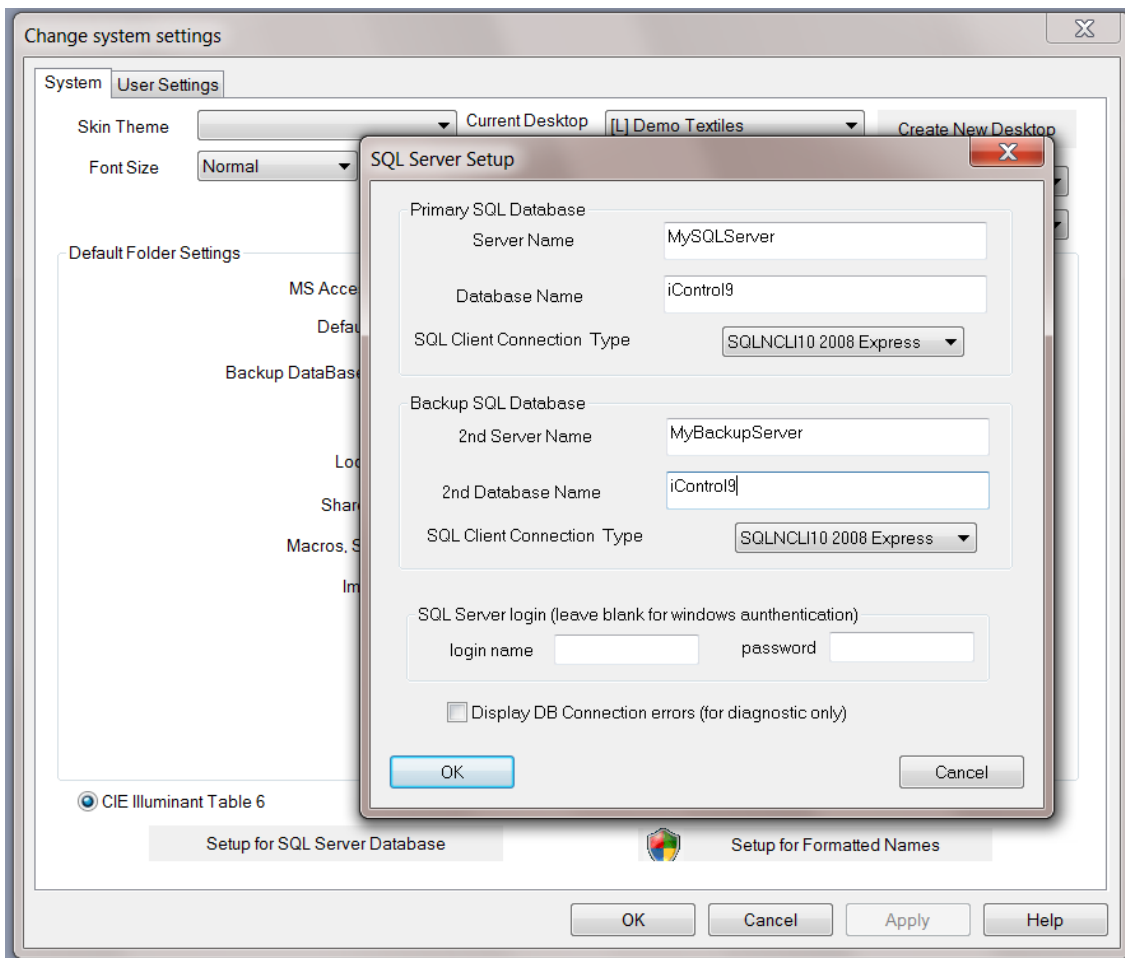


Figure 1

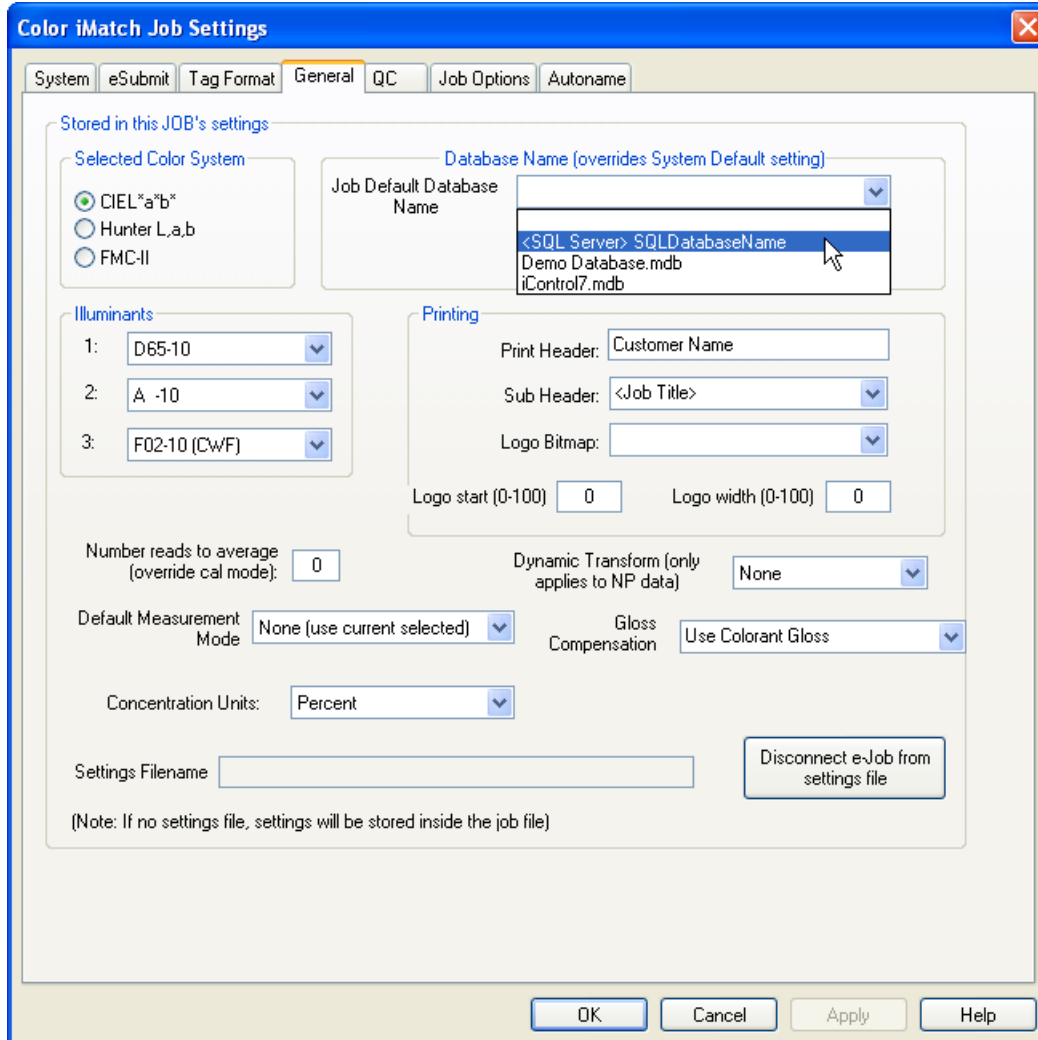


Figure 2

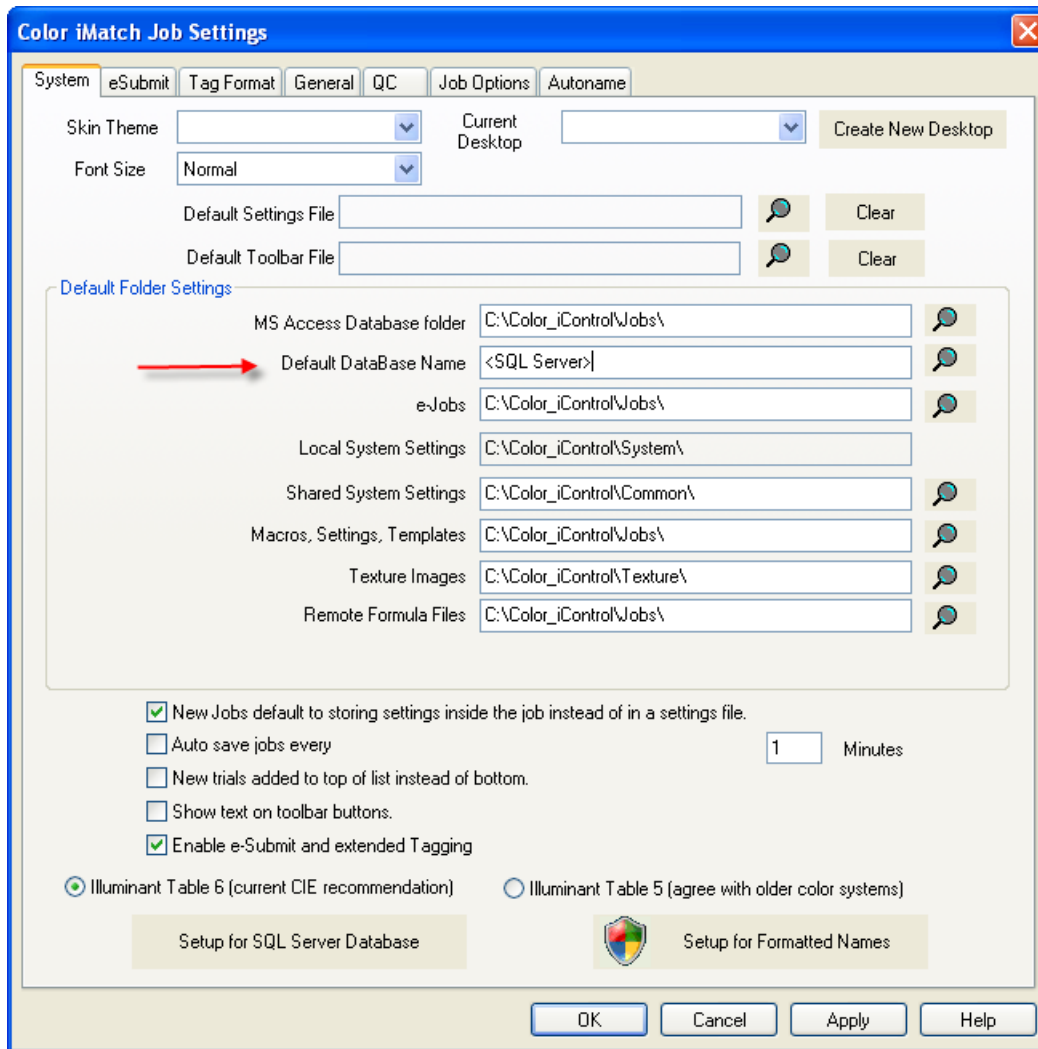
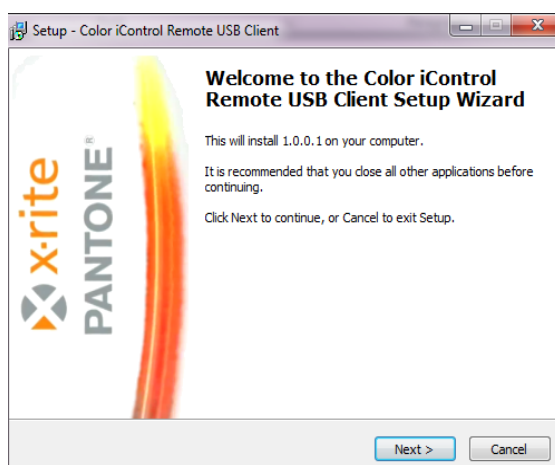


Figure 3

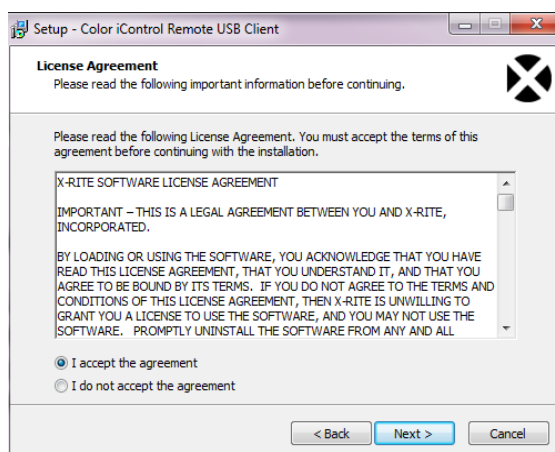
Color iControl Remote USB Client Guide

Installation

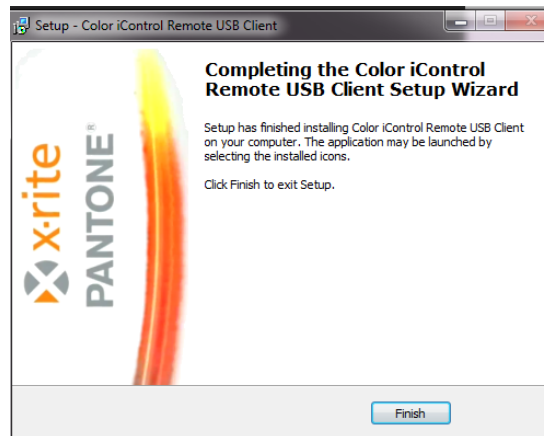
1. Login to the CLIENT PC with full local administrator permissions
2. If client is running with Remote Desktop Protocol (RDP)
 - a. Insert CD and use Windows Explorer to double click the installation executable file **\\Support\iQCRemoteUSB_RDPClient.exe**
3. If client is running with Citrix Presentation Manager (ICA)
 - a. Insert CD and use Windows Explorer to double click the installation executable file **\\Support\iQCRemoteUSB_ICAClient.exe**
4. Run the installation executable. Click *Next* to continue:



5. Select *I accept the agreement* on the license agreement and click *Next* to continue:



6. Once installation is completed click the *Finish* button:



7. For any **additional** Color iControl Remote USB users, log in with each user credentials, double click the installation executable file **\\Support\iQCRemoteUSB_RDPClientUserAccess.exe** (or **iQCRemoteUSB_ICAClientUserAccess.exe** if running with Citrix), then repeat steps 3 - 5

Getting Started

1. Once Color iControl Remote USB Client is installed on your system, you may access the server using your normal logon process. After logging on, run Color iControl as you normally would. The application detects that you are running as a remote session, and access to any supported USB spectro is automatically routed to the remote USB device through your RDP [or Citrix] connection.
2. **Note: For Remote Desktop Protocol (RDP) systems**, the Client Installer places a local shortcut (see below) to run Color iControl on the local client desktop. Using this shortcut to connect to the server and run Color iControl launches a private copy of RDP version 7.1 . Running with RDP version 8.0 or higher may cause loss of periodic disconnects of the RDP session when using instrument functions which take 10 seconds or longer. Using RDP 7.1 prevents this issue.
3. Connect to the server by clicking on the desktop icon. The initial time you use the icon you should choose "options" and enter your specific connection details.

