COLOR KINETICS

iCOLOR™ FRESCO
DMX ADDRESSING KIT

U s e r   G u i d e

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The iColor™ Fresco DMX Addressing Kit

The iColor™ Fresco DMX Addressing Kit includes all the hardware and software needed to easily assign DMX Base Addresses to iColor Fresco lights with a computer.

The Kit contains:

(1) Smart Jack 3 with USB cable

(1) Smart Jack Software CD

(1) Power/Data Adapter 2

(1) iColor Fresco DMX Programmer Software CD

(1) C-Series Power Supply

(1) RJ45 data cable

You supply iColor Fresco lights and a computer running Microsoft Windows 98 or 2000.

About DMX Base Addresses

Before you program your iColor Fresco fixtures, it is important to understand a few key points about DMX Base Addresses and how they relate to iColor Fresco.

- Each iColor Fresco fixture is made up of one or more segments: a one-foot fixture has one segment, a two-foot fixture has two segments, and a four-foot fixture has four segments. These segments are labeled on the iColor Fresco fixture.
- Each segment uses three channels, one each for the colors red, green, and, blue.
- A segment's Base Address indicates the first of three consecutive channels it uses.
- You can assign a unique DMX Base Address to each segment within a fixture, or give one address to an entire fixture.
- A DMX universe contains 512 DMX channels. Since each iColor Fresco segment uses three channels, one DMX universe can hold up to 170 individually addressed Fresco segments, (42 four-foot fixtures, 85 two-foot fixtures, or 170 one-foot fixtures.)

The following table shows a typical address scheme for three four-foot iColor Fresco fixtures:

	Fixture 1				**Fixture 2**				**Fixture 3**			
Segment Number	1	2	3	4	1	2	3	4	1	2	3	4
Base Address	1	4	7	10	13	16	19	22	25	28	31	34

Hardware Installation

Three Color Kinetics devices are required to link your computer to the iColor Fresco fixtures you want to address and test:

- Power/Data Adapter 2
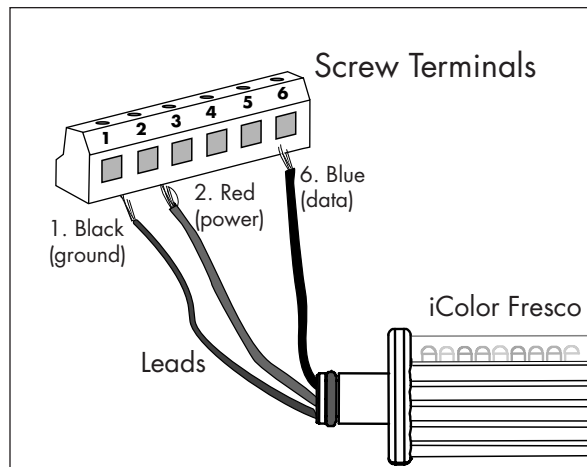- C-Series Power Supply
- Smart Jack 3

Note: You can also use an iMOPS Power Supply connected to a Smart Jack to address iColor Fresco fixtures with the iColor Fresco DMX Programmer.

Connecting the Power/Data Adapter 2 to iColor Fresco

Attach the BLACK, RED, and BLUE leads from the fixture to the Power/Data Adapter 2 as follows:

Terminal 1:   Black (ground)
Terminal 2:   Red (power)
Terminal 6:   Blue (data)

Figure 1. Connecting iColor Fresco to screw terminal block on Power/Data Adapter 2.

WARNING: Make sure the power is off before connecting or disconnecting the leads to the screw terminals.

Connecting the Power/Data Adapter 2
and the C-Series Power Supply

1. Plug one end of the RJ45 cable into the DMX jack on Smart Jack 3 and the other end into the Power/Data Adapter 2. (See Figure 2.)

2. Attach the BNC cable from the C-Series Power Supply to the jack on the Power/Data Adapter 2.

3. Plug the power cord from the C-Series Power Supply into an electrical outlet.

Connecting Smart Jack 3 to a Computer

1. Connect one end of the USB cable to the Smart Jack 3 USB port. (See Figure 2.)

2. Connect the other end to the computer's USB port.

   Note: The first time you connect Smart Jack 3 to a computer, you'll need to install the device driver on your computer so it can talk to Smart Jack 3. See Installing the Smart Jack 3 Device Driver on page 4.
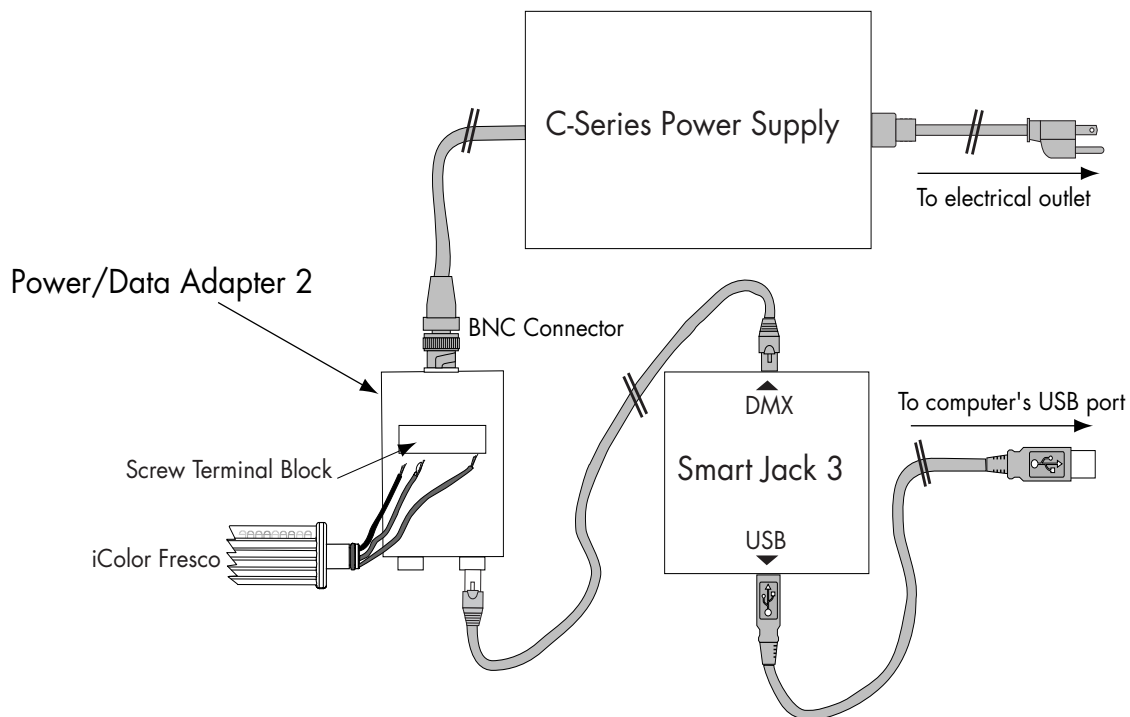

Figure 2. Connecting iColor Fresco to your computer with Smart Jack 3, the Power/Data Adapter 2, and the C-Series Power Supply.

Software Installation

You install two software applications on the computer:

- Smart Jack 3 device driver
- iColor Fresco DMX Programmer

Installing the Smart Jack 3 Device Driver

The first time you connect Smart Jack 3 to the computer, the Windows operating system automatically launches the Add New Hardware Wizard for the required device driver. The driver is named USB DMX Interface and is located on the Smart Jack Software CD.

1. Connect one end of the USB cable to the Smart Jack 3 USB port, and the other end to your computer's USB port.

   Windows detects Smart Jack 3 and launches the Add New Hardware Wizard.

2. Insert the Smart Jack Software CD into the computer's CD-ROM drive.

3. In the Add New Hardware Wizard, click **Next** to begin installing the device driver.

4. Select "Search for the best driver for your device. (Recommended)", and click **Next**.

5. Select CD-ROM drive, (deselect all other options,) and click **Next**.

6. When Windows locates the USB DMX Interface, click **Next** to install the driver.

7. When Windows finishes installing the driver, click **Finish**.

Installing iColor Fresco DMX Programmer

1. On the iColor Fresco DMX Programmer CD-ROM, double-click **InstallFrescoDMXProgrammer.exe**.

2. Install Anywhere guides you through the installation process and places a shortcut in the **Start** menu.

Using iColor Fresco DMX Programmer

iColor Fresco DMX Programmer is a utility application that sets and tests DMX Base Addresses on iColor Fresco fixtures.

Each iColor Fresco fixture contains one, two, or four segments, depending on the size of the fixture. You can assign a unique DMX Base Address to each segment within a fixture, or give one address to an entire fixture.

Starting iColor Fresco DMX Programmer

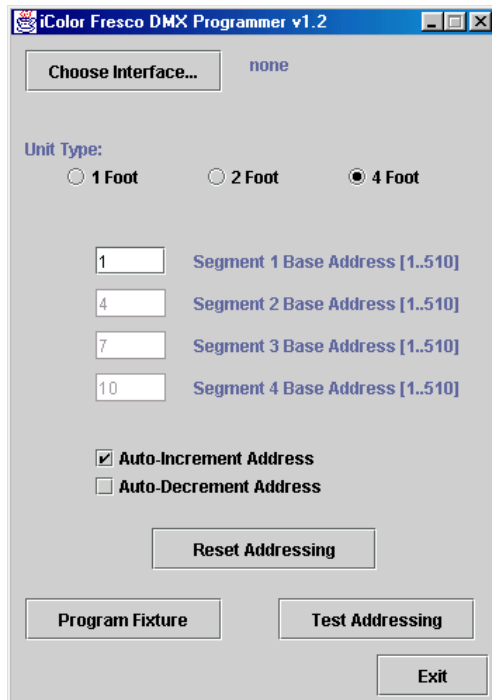From the Windows **Start** menu, choose Programs > Color Kinetics > Fresco.

Figure 3. iColor Fresco DMX Programmer

Addressing Segments

1. Click the **Choose Interface...** button. Choose your device from the list, and click **OK**. (For example, if you are using a Smart Jack 3, choose Smart Jack 3 USB.)

2. Choose the **Unit Type**. Unit Type refers to the type of iColor Fresco being addressed: a 1-foot fixture, a 2-foot fixture, or a 4-foot fixture.

    Each fixture is made up of one or more segments: a 1-foot fixture has one segment, a 2-foot fixture has two segments, and a 4-foot fixture has four segments. These segments are labeled on the iColor Fresco fixture.

3. Enter a Base Address for the first segment.

    Each segment of iColor Fresco uses three DMX channels, one each for the colors red, green, and blue. The Base Address indicates the first of 3 consecutive channels for that particular segment. (For example, a segment set to Base Address 1 receives DMX channels 1, 2, and 3.)

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4. Enter Base Addresses for all remaining segments in the fixture.
   – Select the **Auto-Increment Address** option to automatically assign the next available Base Address to each segment. Each segment uses 3 channels, so each succeeding segment's Base Address increments by 3.
   – De-select the **Auto-Increment Address** option to enter non-sequential Base addresses.

      Note: Failure to allow each segment a separate channel for red, green, and blue can cause overlapping and unwanted effects.

5. Click the **Reset Addressing** button. This erases each segment's current Base Address, and prepares it to receive a new one.

   All segments flash red, then go into Standby mode to indicate that they are ready to receive new Base Addresses. In Standby mode, all LEDs are on at low intensity.

   Note: After resetting, if any segments remain off instead of going into Standby mode, you need to turn the fixture off and then on again before proceeding. To do this, disconnect power either at the power supply or at the Power/Data Adapter 2, then connect power again. When the fixture turns back on, all segments are in Standby mode.

6. Click the **Program Fixture** button to assign the Base Addresses you entered.

   All segments turn red, then each segment turns off in sequential order. When programming is complete, the fixture goes into Standby mode (all LEDs on at low intensity.)

   Note: After programming, if any segments remain off instead of going into Standby mode, you need to turn the fixture off and then on again before proceeding. To do this, disconnect power either at the power supply or at the Power/Data Adapter 2, then connect power again. When the fixture turns back on, all segments are in Standby mode.

Testing DMX Base Addresses

Click the **Test Addressing** button to make sure the iColor Fresco fixture has been programmed correctly. During testing, each segment flashes through Red, Green, and Blue sequentially starting with segment 1.

Troubleshooting DMX Base Addresses

If any segments flash out of order or fail to flash all three colors during testing, check the following:

• Make sure the Base Addresses that are entered for each segment are the same Base Addresses that were used to program the fixture.

• Make sure each segment's Base Address allows for three consecutive channels. For example, if two segments are programmed with Base Addresses 1 and 2 respectively, their channels will overlap, causing unwanted effects. The best way to avoid this is to use the **Auto-Increment Address** option.