Installation Guide
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Installing LightFactory

“For a moment, nothing happened. Then, after a second or so, nothing continued to happen.” Douglas Adams

This chapter tells you how to set up a PC to run LightFactory, how to install the software, set up any required hardware, and run LightFactory for use in any lighting situation.

Installation Prerequisites
Before installing LightFactory, you need to ensure your PC meets the following minimum specifications.

- Greater than 1GHz processor
- Minimum 1Gb Ram
- 300Mb of free hard drive space
- Minimum 1024 x 768 video display
- Windows 7 or higher Operating System

It is also highly recommended that you attach an optical mouse with a working scroll wheel.

To produce DMX output from LightFactory you must have installed some form of DMX hardware. See “Installing DMX Hardware” (Page 18) for more information on this topic.

Installation Procedure
Installing LightFactory is a simple process, and requires no special knowledge. The installation procedure is almost completely automated and self-explanatory. LightFactory can be obtained on CD or by downloading the product off our website.

Downloading LightFactory
To download the latest version of the software go to the LightFactory website, click on the download button on the first page.
Installing LightFactory
To install LightFactory:

1. Find the LightFactory_Setup.exe file you have downloaded from the internet or on the CD that comes with the product. If you are installing off a CD the file will be found in the root directory of the CD. Double click on the file and the opening page of the setup wizard will be displayed.

**Note:** If the User Account Control window appears, click on “Yes” to continue the installation.
2. Click on the “Next” button to begin the setup procedure. The License Agreement window appears:

3. Please read this license agreement carefully (a copy of this can be found at the front of this guide) before continuing with the installation.
4. If you accept the License Agreement, click on the “I Agree” button. If you do not accept the terms of the agreement, click “Cancel”. This will abort the installation.

Result: The **Select Installation Folder** window will be displayed.
5. Accept the default destination folder (recommended) or click the "Browse..." button to browse for a replacement folder. When you are satisfied with the displayed folder, click "Next" to continue.

Result: The **Start Menu Folder** window appears.
6. Accept the default destination start menu folder, select an existing folder from the list or type the name of the folder you want to use. When you are satisfied with the start menu folder, click "Install" to begin the install process.

Result: The **Copying Files** window appears and the wizard will begin installing LightFactory.

![LightFactory V2.19.0.178 Setup: Copying Files](image)

7. After all of the files have been copied, the installation will automatically load the fixture library. If LightFactory has been installed previously, the following dialog will appear.

![Fixture Library Update](image)

As shown above, you have three choices for the procedure. If you choose "Yes, Replace Library", the current library, including any user-modified files, will be copied to a back-up directory and the new library installed. If you
choose “Yes, Merge Library”, the current library will be backed-up, but user-modified files will be merged with the new library. If you choose “No, Keep Existing”, then no action is performed. See LightFactory User Guide and LightFactory Fixture Editor User Guide for more information on the fixture library.

8. Once complete click on the “Next” button to finish the install process.

Result: The Installation Complete window will appear.

![Installation Complete window](image)

9. Click “Close” to close the window to finish this installation process
Starting LightFactory
After the installation is complete, you can begin using the software. You can start LightFactory either from the Windows Start menu or from the icon that will have been placed on your desktop.

*From the Windows Start menu: Select the LightFactory V2 item.*

*or*

*From your desktop: Double-click on the LightFactory V2 icon.*

The LightFactory splash screen will appear and the software will begin to load.

During start-up the software will check for a valid registration code. If the software is not registered then the following dialog will be displayed.

![Unregistered System Screen](image)

**Unregistered System Screen**

If you wish to use the software unregistered (Software will function normally but DMX output will be suspended after 30 minutes), click on the “**Continue**” button or press enter on the keyboard. If you have a USB DMX device or USB license dongle that contains a valid registration and plug it in at this time, then the software continues the loading process and the registration contained on the device will be loaded and applied.

**Note:** If you plug the device in after the main window has been displayed, you will need to exit the software and restart it for the registration to be loaded.

To purchase the software on-line or find a local reseller of the software click on the “**Purchase**” button provided. You must be connected to the Internet as this will open your default web browser and redirect you to the LightFactory website. You can also purchase the software by going directly to the [website](#).

To enter a valid registration code received with purchase of the software click on the “**Register**” button. The following window will allow you to enter these details into the software.
Registration of the software is based on the “Generated Serial Number” and the “Registration Code”. Both of these numbers must match the information supplied for the registration to be valid. The serial number is a unique code generated by LightFactory and will be needed to obtain a valid registration. If you want to copy this number to the clipboard for entering into a web form simply click anywhere on the number.

Enter your registration details and click on the “OK” button to continue loading the software. A dialog will inform you if incorrect details have been entered and will allow three attempts to correct the mistake before returning you to the previous window.

Click on the “Cancel” button at any time to abort this process. The software will then start up in Demo mode and registration details can be entered through the System Properties in the Options menu once the software has started. If you have a USB DMX device or USB license dongle that contains a valid registration and plug it in at this time, then the software continues the loading process and the registration contained on the device will be loaded and applied.

For information about the “Hire” button and how you can rent a time limited registration, see Hire Software Online section.

After the software has loaded, the main window (Command Interface) will open. You are now ready to use the software. See the “Quick Start” section of the User Guide to begin finding your way around the software.

**Note:** The first time the software is started, the following window will appear. Read the descriptions of the modes and select the desired mode. First time users should choose “Basic Mode”.

![Welcome window](image)
**Note:** Since V2.19, the displays will be shown in the ‘dark styling’ mode by default rather than the ‘classic’ mode (dark text on white background). This is a user-selectable option that may be changed. See the User Guide for more information.

**Command Interface**

When the software starts the registration details are shown in the first few lines of the command interface. In the above example the software is registered to communicate with 104 DMX universes. If more DMX universes are connected than the registration allows, the system will simply ignore the additional universes.
Registration Options

LightFactory License Dongle

LightFactory licenses can be purchased as a hardware USB token called the LightFactory License Dongle. This is a small USB device that acts as a security token for the software and is also a memory device that can be used to store backups of your shows. If you purchased LightFactory in this way you will need to have the dongle plugged into the computer whenever you are running LightFactory and want to output DMX for more than 30 minutes.

If you have purchased the security device to add to an already registered system, LightFactory can automatically transfer your registration onto the device.

Connect the device to your computer and start LightFactory. During the startup procedure you will be prompted with this dialog:

Select “YES” and LightFactory will move your registration from the PC to the security dongle. Once this operation is done your software will be unregistered unless the device is connected.

You will only need to do this procedure once. If you do not want to do the transfer at this time click on the “No” button and your registration will remain on the PC.

WARNING! DO NOT format the memory stick or delete the hidden file “.lightfactory_registration” from the device. Formatting or deleting this file will remove the registration from the device and your LightFactory system will revert to Demo mode.
Manual Registration
Once the software is running you can access the registration information by clicking on the **Options** menu and selecting **Registration**.

![System Properties Window - Registration Page](image)

At any stage you can access the LightFactory web site by clicking on the **Purchase LightFactory Online**. You must be connected to the internet for this to work as this operation will open your web browser on your system. You can purchase a new license or upgrade an existing license.

To add or change the registration code on your system enter it into the box provided below the serial number. Click on the apply button to check that the code entered is correct. If at any time you make a mistake and want to retrieve the previous code click on the **Cancel** button at the bottom of the window and then re-open the system properties. Changes to the registration code will only be tested and saved when the **Apply** or **OK** button is pressed.

When the software is registered a green tick will appear on the picture in the top left of this window.
Registration of the software is based on the “Serial Number” and the “Registration Code”. When you are supplied with a registration code it will also have the matching serial number. If your registration code does not work check that the serial number on screen is the same as the one included with your registration code.

If you have entered a valid registration code a dialog will inform you that the system is now registered.

License Codes
If you received a “License Code” when you purchased the software it will need to be converted into a “Registration Code” to unlock the software. A license code is a onetime right to register your copy of LightFactory. Unlike a registration code the license is not linked to your serial number.

License codes use the format “nnnnnnnnnnn-cccccc-cccc” where “n” represents a number and “c” represents a character. If the supplied code does not have a serial number listed with it then you are likely to have a license code and must convert it to a registration to unlock the software.

You can convert a license code into a valid registration either online or using the “Convert License to Registration” option. Both options require a connection to the internet. If you are using a dialup connection, connect to the internet before continuing with the procedures below.

Note: Information collected during the registration process will be passed on to Dream Solutions Limited, Auckland, New Zealand. This information is treated strictly confidentially and will not be used for any purpose other than software security. Contact details will not be passed on to any other parties or used for marketing purposes. To read our complete privacy statement please visit www.lightfactory.net.

Note: If you are using the web site to register the software you will need to know the serial number generated by the software. This number can be found in the registration tab of the system properties or in the about screen under the help menu.

If you are using the built in conversion process outlined below you will not need the serial number information.
To use the built in conversion facility click on the “Convert License to Registration” button (Third button from the top).

Convert License Window

The window titled “Register Software” will appear. Enter your details into the fields provided and click on the “Register Software” button. The fields in bold are mandatory and must be completed to register the software.

We recommend that you keep the “Print registration code” check box active to print a record of the resulting registration code. This will print on your default printer.

When the conversion is successful the window will close and the registration code will be automatically entered into the correct fields of the previous window.

Hire Software Online

LightFactory provides the ability to use an unregistered version of the product for a limited runtime. This can be useful if you want to try the software on a real show before purchasing or if you only need a lighting controller for limited application.

The LightFactory hire system allows you to purchase runtime in 12, 24, 48, and 120 hour blocks.

Note: The runtime is counted only when the software is running. If you close down LightFactory the time remaining will still be available the next time you start the software. If for example you still have 6 hours runtime remaining and you do not use the software for a week then when you start it up the 6 hours will still be available.

You must have access to an internet connection to purchase runtime blocks.

Runtime can be topped up before your time has expired.

To hire LightFactory and purchase a block of runtime, click on the button “Hire Software Online” in the registration tab of the system properties. You can also access the hire dialog from the unregistered dialog screen when the software starts. The following dialog will appear with further instructions for obtaining a runtime unlock code.

If you are connected to the Internet on this PC then you can click on the “Purchase unlock code now” button to be redirected to an online sales form. The unlock serial number will be passed automatically to the web page.
If you are not connected to the internet on this PC and want to purchase the unlock code from a different PC you will need to note down the current unlock serial number displayed in red on this window. Once you have noted the serial number you can enter this on the LightFactory website.

LightFactory Hire

Once you have completed the purchase you will receive an unlock code that must be entered into the “Unlock Code” field provided. Entering a valid code will then add the purchased amount of time to the software.

**Transferring a registration to another PC**
The registration code generated to activate DMX output in LightFactory uses the generated serial number to authenticate the system. The serial number is an internal number created when the software is first started.

*Note:* This is not the serial number of your PC and only an arbitrary number generated for the purpose of registering LightFactory.

To use the software on another computer you will need a new registration code as the PC will have generated a different serial number. The current PC must also be disabled as only one system can operate per license.

To allow you to run the software on other PCs, LightFactory provides the ability to transfer a registration from one PC to another. This process will generate the new code and disable the old in one simple process.

Once the software is running click on the **Options** menu and select **System Properties**. Click on the “**Registration**” tab and click on the button labelled “**Transfer registration to new PC**”
Registration Transfer

In the box provided you must enter the generated serial number of the PC to which you want to transfer the registration.

Once you are sure you have entered the correct serial number from the other system click on the “Proceed” button to generate a new registration code.

After the system has generated a new registration code it will create a new serial number for this system and the old registration code will no longer be valid.

Enter the new registration code into the LightFactory system matching the serial number you just entered. To aid with this process you can click on the button “Save registration to file” or “Print” (if you have a printer connected).

**Generating a new serial number**

In a very rare case you may be required to generate a new internal serial number for the registration system. You should only do this if you have been asked to by LightFactory support staff as generating a new serial number on a registered system will de-register the software.

If you have been asked to create a new serial number by our support staff, click on the button “Generate a new serial number”. A confirmation will appear warning you that the system will become unregistered. Click on the “Yes” button to proceed and a new serial code will be set in the system.

**Transfer registration to hardware**

In some cases it may not be desirable for the registration to be locked to the PC where LightFactory has been installed. You may want to work between several PCs but only require one to be registered at a time. To facilitate this LightFactory provides the ability to move your registration to the any of the supported USB to DMX hardware (except the Enttec Open USB DMX).

Note: The software does not currently support moving the registration to any other hardware. Once the registration has been moved to the hardware it is not reversible and you will need the USB interface connected to validate your system.

If you have several devices then only one will hold your registration. It is recommended that you mark this device for future reference.

Once you have moved the registration to the hardware the software will revert to demo mode (30 minute DMX output) unless the hardware is connected.

If you are unsure about this feature please contact our support staff to answer any questions.
Once you have clicked on the button to move the registration a warning box will prompt you to confirm the operation. You will need to click on the check box “I have read and understand the conditions of this transfer” before proceeding.

**Clear Hardware Registration**

If you have transferred a registration to hardware and later purchase an upgrade to add additional DMX universes, you will need to clear the current registration on the device in order to transfer the new registration. To do this click on the button “Clear Hardware Registration” and the following dialog will appear:

![System Properties dialog]

As stated in the dialog, clicking “Yes” will remove the registration from the device and your system will be unregistered until a new code is entered.

**Note:** This option is normally greyed-out and cannot be selected unless a device containing a valid registration code is connect to the PC. Please note that this is an irreversible process and should be used only if you have a new code to reregister your system.
Installing DMX Hardware

**DMXKing ultraDMX**
All of the DMXKing USB to DMX devices use the same drivers and installation process.

ultraDMX RDM Pro       ultraDMX Micro

If you are installing the device on Windows 7 or Windows 8 and are connected to the internet then the installation process should complete automatically. If the install fails for any reason follow the manual driver installation instructions.

**Manual Driver Installation**
To manually install the drivers download the driver file from the LightFactory web site.

1. Run the program “CDM20828.exe” before connecting any of the USB Pro devices. The install will notify you when the install is complete.
2. Connect the USB-DMX Pro Interface to a free USB Port.
3. Your computer should immediately indicate that it has found some new hardware and the installation process should start automatically. If this does not occur then use the Windows “Add new hardware” or “Computer Manager” (Windows XP) option in the control panel to manually install the drivers.
Enttec USB DMX Pro Dongle
The Enttec USB to DMX devices all use the same device drivers as the DMXKing hardware described above. Follow the same procedure for manual driver installation if the device is not installed automatically by Windows.
Cooper Controls USB DMX interface

The Cooper Controls interface is a compact USB to DMX device with all of the electronics embedded inside the XLR casing.

The LightFactory installation will pre-install all of the drivers necessary to operate this device. To install simply connect the device to your PC. You will see a Windows notification to say that new hardware has been found and that Windows is installing this for you. Follow any onscreen instructions and wait for a message to indicate that the hardware installation was successful before running LightFactory.

ArtNet DMX on Ethernet
No special installation is required to communicate with ArtNet DMX on Ethernet or DMX Dongle2 devices. You must have a working Ethernet device to use this protocol.

Enttec DMX on Ethernet
No special installation is required to communicate with Enttec DMX on Ethernet (ESP) devices other than a working Ethernet interface on your computer.

Pathport DMX on Ethernet
No special installation is required to communicate with Pathway DMX on Ethernet (Pathport) devices other than a working Ethernet interface on your computer.

Streaming ACN (sACN E1.31)
No special installation is required to communicate with sACN devices other than a working Ethernet interface on your computer.

ColorKinetics KiNet
No special installation is required to communicate with KiNet devices other than a working Ethernet interface on your computer.
Optional Hardware Installation

ENTTEC Wings
The Program, Playback and Shortcut wings are the perfect add-ons for LightFactory. The wings are Ethernet-based and many devices can be connected letting the user customize the layout as desired.

No special driver installation is required to communicate with the wing devices other than a working Ethernet interface on your computer.

First, you need to connect your wing and the computer running LightFactory. If you have an available Ethernet port on your computer, you can connect your Wing directly to your computer using a cross-over patch lead. If your Ethernet port is already in use, or you are using more than one Wing, you will need to connect the computer and the Wing/s to an Ethernet Hub or Switch using a standard Ethernet patch cable. Do not use power over Ethernet hubs or switches.

Once you've connected the Wing and the computer the Link LED should light up immediately. If not, check that the Ethernet cable you've used is the correct type (i.e. cross over or straight through) and is in good working order, and the computer and hub/switch are functioning correctly.

You may see the Activity LED blinking occasionally if there is activity on the Ethernet network.

Make sure the wing is connected correctly and powered up, start LightFactory and go to the Options->Hardware Interfaces.

Hardware Interfaces, Enttec/Cooper Controls
The above screen will display the connected wings and any relevant information.

In the event you see a warning on the screen, this is due to the fact the IP ranges of your computer and the wing do not match. This means for example that the wing would have an IP of 10.7.81.161 and your computer 192.168.0.23. In this case both devices are not on the same subnet and cannot talk to each other properly.

You can either change the IP of the wing to be in the same subnet as the computer, or change the IP of the computer to be in the same subnet as the wing.

For example if the wing has an IP of 10.7.81.161, you would set the computer to IP 10.7.81.1 with a net mask of 255.255.255.0

You can check your computer’s IP address by clicking on the ‘Start’ icon, then type `cmd (enter)`. This will open a command window, then type: `ipconfig` and press enter.

![ipconfig shell command output](image)

**Configuring the wing**

You might need to configure the wing to match the IP settings with the IP settings of your computer. To configure the wing, you can use any web browser such as Internet Explorer or Firefox.

Type in the address of the node in the address bar like this: `http://10.5.2.6` where 10.5.2.6 is the IP address of the Wing. By default, the IP address is 10.x.y.z where x, y and z are the last 3 bytes (the MAC address is in hexadecimal) of MAC/Serial number.

E.g.: For a MAC of 010203040506 the IP would be: 10.4.5.6. You can also find the IP address on the label of the shipping box of the Wing.

It should also appear automatically in the ‘Hardware Interfaces’ window in LightFactory if it is connected properly.

Once the address is typed into your favorite web browser the main page will appear:

Status Page: The main page is the status page; it displays general information about the wing.

DHCP Enable: Ticking this box will enable DHCP configuration of the IP address. You must have a DHCP server running on your network for this to work. If not, the node will wait for 60 seconds for a response then use the pre-configured IP address. During the DHCP timeout no DMX is sent or received.

IP: This is the IP address that is used if DHCP is disabled.
Saving your settings
When you make a change to any setting, make sure you click on the update setting button on the bottom of the page. The change will take effect immediately but is not saved in non-volatile memory. To save the changes permanently click on the SAVE link in the menu.

Using the wing
The wings are automatically configured by light factory:

- Playback wing, fader 1 on the wing is linked to fader 1 in light factory.
- Shortcut wing, button 1 is linked to shortcut 1 in light factory.
- The program wing will display the LightFactory command interface.

In addition, there are some other configuration options that can be set:

- **Match page to on-screen submasters** – Check this option to force the on screen submasters to automatically change page with the page control on the wing. By default the on-screen submasters are independent of the wing.

- **Wing playbacks must return to the current position to take affect after a page change** – Use this option to avoid unexpected jumps in stage output after changing the page on the wing. Normally if a submaster is moved after a page change the output will take effect immediately. With this option on the effect of the submaster will not be applied until the physical slider is returned to the current value of the submaster.

- **Auto assign submasters with playbacks** – A playback generally refers to the play, back and pause buttons above each slider on the playback wing. Turn this option on to automatically connect the slider beneath the buttons to the same playback.

- **Display 60 shortcuts on screen to match shortcut wing** – The LightFactory shortcut window will default to display 100 shortcuts on screen per page. As the shortcut wing only has 60 buttons per page it may be convenient to reduce the on-screen display to match the wing. With this option on the shortcut window will display 6 rows by 10 columns of shortcuts per page.

- **Encoder Fine/Coarse Movement** – Use the spin edits at the bottom of this tab to define the amount of movement made by turning the encoders on the program wing. The default movement is the coarse value while the fine movement is used when the shift key is held down on the wing.
**Elation MIDIcon**
The Elation MIDIcon device uses the MIDI standard to communicate with LightFactory. As soon as the device is connected and the drivers are installed (automatic under Windows 7 & 8), the device will be available to use with LightFactory.

To enable the device so that LightFactory will respond to the hardware tick the “Enable MIDIcon control” check box.

Note that because the MIDIcon communicates with MIDI messages this option will turn on all MIDI triggers that are configured in the “External triggers” window. If you have not setup any MIDI triggers then you will not need to worry about this. If you do have MIDI triggers configured you may need to check that the messages sent from the MIDIcon do not conflict with your settings.

By default the device name will automatically be populated in the device combo if the MIDIcon is installed correctly. If you do not see the device listed in the drop down combo then please check that the drivers are installed correctly and restart LightFactory.

![Hardware Interfaces, MIDIcon](image)

**Setup Options**

- **Enable MIDIcon control** – This is the primary on/off switch for the device. If this is not enabled then the messages from the MIDIcon will not be passed to LightFactory. As soon as this option is enabled the MIDI system in LightFactory will be turned on and any configured MIDI triggers will become active.

- **Device** – The device selection should not require changing. LightFactory will automatically select the MIDIcon if it is available.

- **Match page to on-screen submasters** – Check this option to force the on screen submasters to automatically change page with the page control on the wing. By default the on-screen submasters are independent of the wing.

- **Wing playbacks must return to the current position to take affect after a page change** – use this option to avoid unexpected jumps in stage output after changing the page on the wing. Normally if a submaster is moved
after a page change the output will take effect immediately. With this option on the effect of the submaster will not be applied until the physical slider to returned to the current value of the submaster.

- **Blackout button to toggle state** – In the middle of the MIDIcon wing is a blackout button connected to the “master” fader. LightFactory will automatically link this to the grand master in the software. If this option is on then the blackout button will toggle its state with each press. When the option is off the blackout state will only be maintained when the key is held down.

- **Encoder Fine/Coarse Movement** – Use the spin edits to define the amount of movement made by turning the encoders on the program wing. The default movement is the coarse value while the fine movement is used when the shift key is held down on the wing.

- **Encoder Page Up/Down shortcuts** – The MIDIcon does not provide dedicated page buttons for controlling the 3 encoders on the device. You can change the encoder page on the fixture control window or by assigning shortcuts to this function.

- **Special Keys** – The S1, S2, S3, S4, S5 and S6 keys are situated along the top of the MIDIcon device. These can be assigned to a number of special functions such as opening the various windows in LightFactory. By default these buttons are mapped to the first 6 windows on the main command interface.

- **PADs** – The MIDIcon also provides 12 dedicated touch pads below the encoders. These pads can be mapped to specific shortcuts in LightFactory using the “Touch Pad” grid. By default the 12 pads are mapped to the first 12 shortcuts.
**ELC sideKICK & sideKICK too**

The ELC sideKICK is a USB fader wing that includes DMX input and output ports. Once the hardware is connected and the drivers loaded use the configuration tab to select the desired options. This device will also show up in the DMX input/output tab of the system properties.

![Hardware Interfaces, ELC sideKICK](image)

**Setup Options**

- **Use buttons 21-30 as shortcuts (off = flash)** – If this option is checked then the buttons along the bottom of the sideKICK can be used as additional shortcut keys. If turned off then the buttons 21-30 will act as flash buttons for the sliders directly above them.

- **Use store button as master GO button** – When checked the store button can be used as a cue GO for the main cue list editor window.

- **Page buttons to control** – Use the drop down combo to assign the appropriate action for the page up and down buttons on the right hand side of the wing.
**CueServer**

CueServer from Interactive Technologies is an Ethernet-based lighting control solution for stand-alone architectural and show control. LightFactory is now able to directly integrate with these products by exporting a cue list directly to the device. The CueServer tab will allow you to select the cue list you want to upload and the actions you want for each of the buttons. LightFactory will then take care of creating the necessary resources containing your show data and upload it in one operation. Depending on the model, LightFactory can send DMX Universe 1 to CueServer. Go to the Interactive Technologies [website](#) for more information on configuration options.

![CueServer](image)

When this window is opened LightFactory will automatically search for CueServers connected on the network. You can select the CueServer you want to send a show file to by selecting it from the drop down combo box at the top of this window. Detailed information about the selected CueServer will be shown on the right including its version number, model and serial number.

Use the “Cue List Name” selection to set the cue list you want to load onto the device.

The CueServer has 8 buttons on the front of the device that can be set to either advance the cue list or load to a specific cue. Use the selection box to set the action you want for each of the buttons. If the “Load Cue” option is selected a second drop down box will be shown for you to select the cue you want.

Click on the “Save” button to upload the cue list you have selected into the CueServer. If your show file contains a lot of effects then this may take a while as each effect is rendered.
XKeys
X-keys provides a clearly labeled, physical input for shortcuts and special functions so you don't have to think about them.

Insert the included disk in your CD ROM drive and follow the instructions to install X-keys Macro Works Software. This software is required to program and operate the X-keys USB device. Please view the Readme file on the installation disk for the latest notes on installation and operation of the software.

Should you encounter difficulty installing any of the X-keys products, please check the troubleshooting guide on the XKeys website.