FHCS Remote-Q
Software User Guide version 5

Control your Intelligent Lectern ILS22M Presentation and Control System,
and presentations remotely…

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Introduction.

Congratulations with your purchase of the Intelligent Lectern System and the Remote-Q system control and presentation control software.
Each ILS system provides the presenter direct access to system embedded functions via the touch screen interface.

Remote-Q allows to:

- Monitor the ILS22 via ILStranslator. In this way ICT and A/V Presentation Support personnel always exactly know what the current state of the ILS22 is (with respect to available and enabled buttons, audio volume, presentation slide nr, pedestal height etc).

- Which functions are performed locally or externally.

- Which button was pressed by the presenter.

- Which messages were returned by attached intelligent controllers.

- Advance Slides on presenter request, forward or back.

- Adjust pedestal height for the next presenter automatically via the Remote-Q presentation setup, or manually via the pedestal adjustment.

- Get a warning when the presenter is running out of presentation time, either via the system beeper or a music file.

- Send 1 or 2 automated message to the presenter at preset % of allocated time slot. Also ad-hoc messages can be send, becoming visible on the lectern.

- Kill a process or application on the lectern, e.g. to stop the presenter, or start the ILS Sho-Q presentation software (again).

- Enable or disable buttons remotely so that the presenter can or can not use them. This includes (temporarily) disabling the touch screen.

- Adjust ILStranslator Setup parameters, such as all enable with one Room Control touch, select software audio mute, blink touch while in touchscreen off, etc

- Set up a scheme for upcoming presenters, including presenter or presentation name, number of slides, presentation duration and requested pedestal height in inches or cm's. Remote-Q will automatically adjust to these parameters when the new presenter is about to go 'on stage'.

- Load, Save or Print presentation setups for handout.

Remote-Q always represents an exact image of the ILS22 system situation, in terms of enabled and backlighted glass plate buttons as well as all ILStranslator parameter settings.
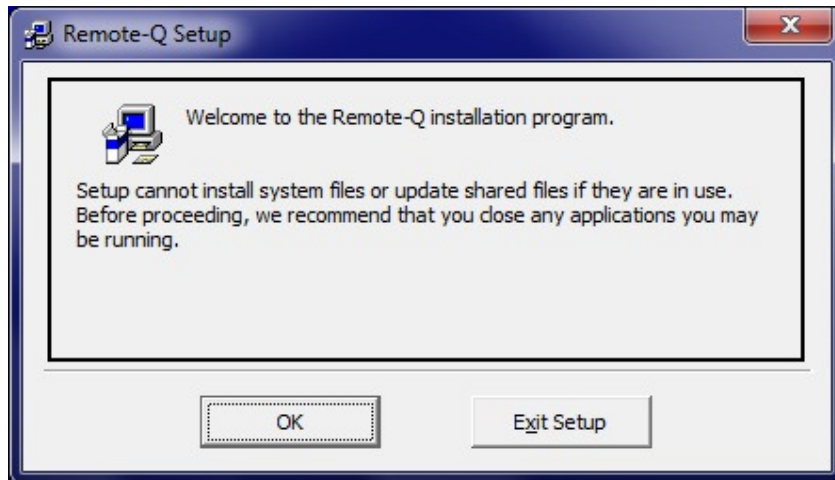
Installation.

Note: the following images were produced from a Win7 powered laptop, but also apply for XP, Win7 or Windows8. Current ILS22's are shipped with Win8.1

The software runs on any (old) PC with a RS232 connector or TCP/IP network adapter. Supported operating systems are Windows XP, Vista, Win7 and Windows8. A minimal amount of disk-space is required.

Remote-Q is licensed software. After installation, a license key is required.
Remote-Q can be downloaded from the ILS website, www.intelligentlecterns.com

After downloading the ZIP file, Unzip it into an empty directory/folder and run setup.exe. The following image will appear.
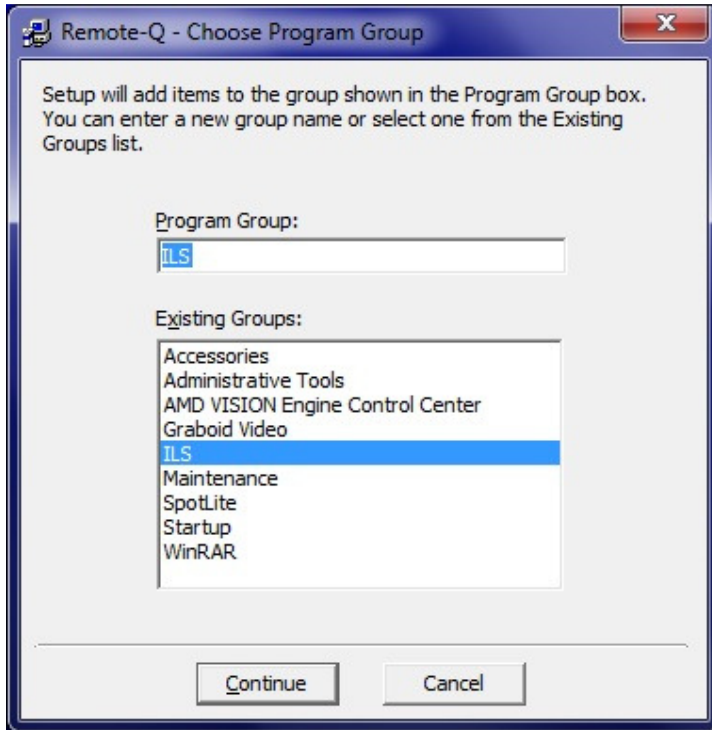

It is important that any running application is closed ! If not, you may experience the program is not working after installation.
Hit the OK button to go to the next form.
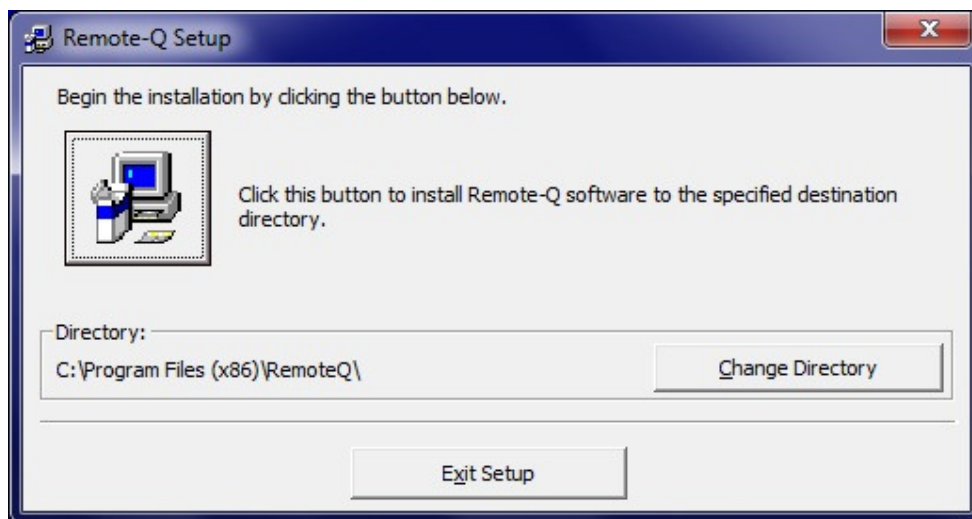
Change the Directory if you so desire or hit the Install Button to accept the default suggested program Directory.

Select the Program Group, default is ILS.

Setup will start copying files to the destination folder, but it could be there is a newer file on your system than being distributed. See below. Hit Yes to keep your newer file.
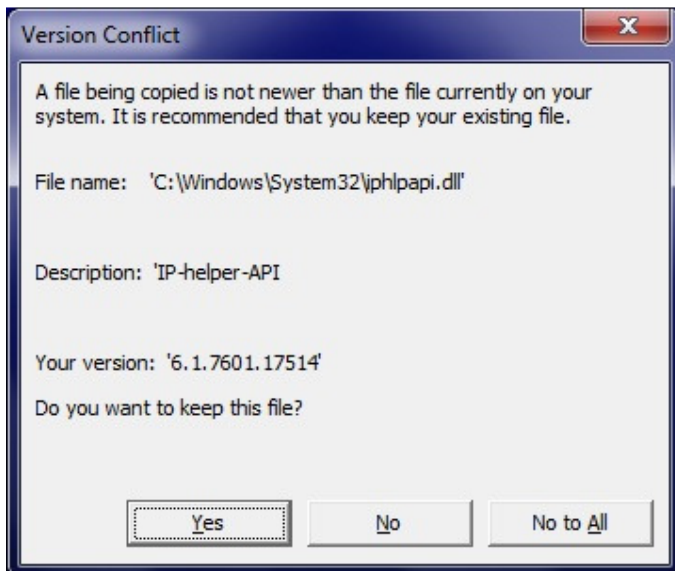
Note: Much older PC's may not have installed this iphlapi.dll file. That's why Remote-Q wants to make sure it's installed.
Once the installation is done (and the installation program confirmed a successful installation), use Windows/start and select Remote-Q from the programs/ILS/Remote-Q menu.

FHCS - License Agreement

FRITS HANDGRAAF CS.

SOFTWARE PROGRAM LICENSE AGREEMENT for FHCS_Remote-Q ®

IMPORTANT – READ CAREFULLY BEFORE ENTERING THE LICENSE KEY.

This is a legal agreement between you, the end user, and Frits Handgraaf CS (FHCS). Please read the following terms and conditions before using this so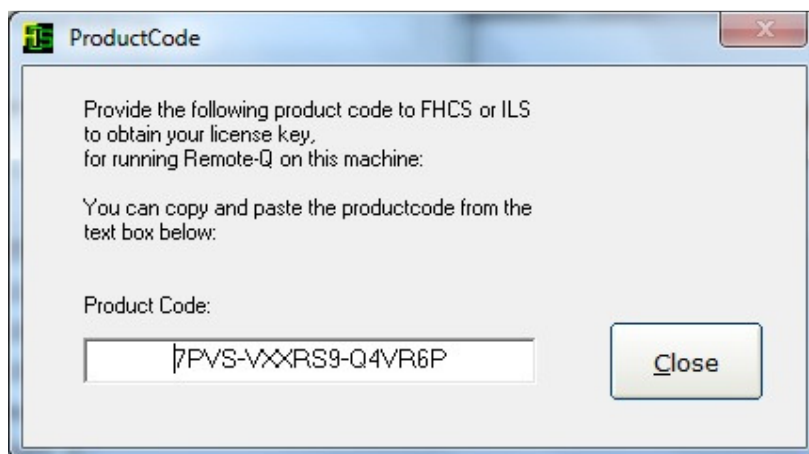ftware. In the event that you use this software, you are agreeing to be bound by the terms and conditions of this agreement. Should you not agree with these terms, do not use this software.

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NO WARRANTY: The SOFTWARE is provided "as is". FHCS does not warrant that the SOFTWARE will meet your requirements or that its operation will be uninterrupted or error-free

[I Agree]   [I do Not Agree]

When the program is first started, it will request you to agree with the license conditions shown in the scrollable text file. If you do agree, hit the 'I Agree' button and the program product-code will be shown. If you hit the 'I do Not Agree button', the program will terminate.

ProductCode

Provide the following product code to FHCS or ILS to obtain your license key, for running Remote-Q on this machine:

You can copy and paste the productcode from the text box below:

Product Code:

7PVS-VXXRS9-Q4VR6P   [Close]

If you did obtain a license key from ILS or FHCS, hit the OK button to Enter it. If you did not, hit the Cancel (right button) button. This will provide a product code as shown before.
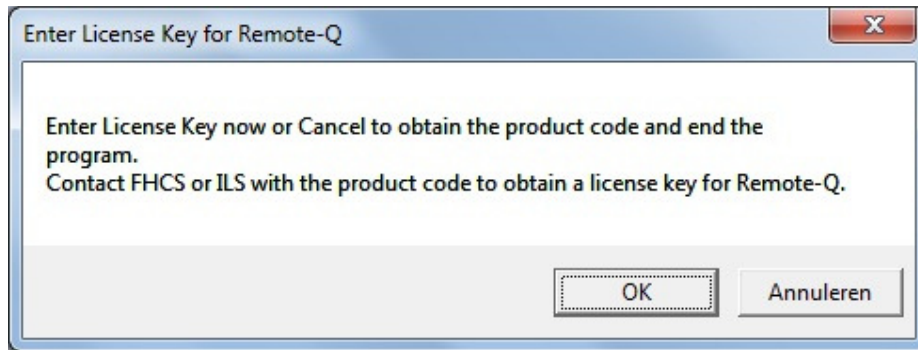
Once you obtained the license key, you are able to run Remote-Q after you entered the license key. This key is based upon internal PC characteristics.
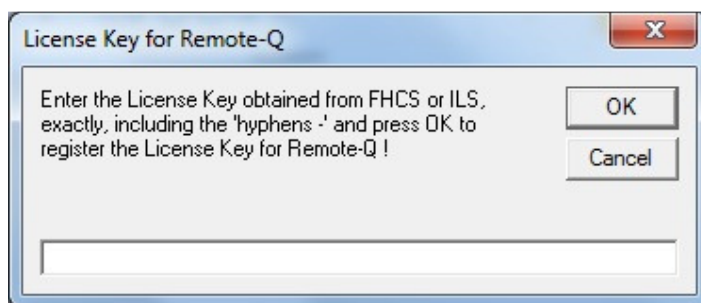
The license key provided has the following format:
ABCD-EFGH-IJKL-MNOP
a combination of characters (in capital) and numbers in a 4 * 4 structure with hyphens (-) between them. Enter the key including the hyphens exactly as obtained and you will be able to use the Remote-Q software.

Note: Your PC may have more than 1 network adapter. Make sure that the one you want to use for communication (over TCP/IP) is enabled when the product code is generated.

Note: Upgrading (changing your CPU, motherboard or hard disk drive, or your Windows operating system) may cause that the License Key is no more valid.

Remote-Q starting up.

The ILS22 Presentation and Control system can be setup any way you want via the ILS22Setup program and ILStranslator/Setup. That combination defines how the glass plate buttons on the ILS22 react, in other words which functions in the system software are being executed. See the ILS22Setup Software Guide and ILStarnslator Software Guide for details.

The below scheme shows how the ILS22, via ILStranslator, is communicating and executing functions.
The ILS22Setup wizard is used to determine which peripherals are under direct control of the ILS22, which peripherals are controlled via external intelligent controllers, which communications settings and command strings are used to address peripherals and controllers, and whether remote control (in this case via Remote-Q) is enabled. The ILS22Setup wizard is saving all this to the lectern system registry.
At start up, ILStranslator will read the registry. If ILS22Setup was not used, ILStranslator will use defaults. The Zytronic touch driver determines which glass plate buttons or headers were pressed and passes this on to ILStranslator. In turn, ILStranslator will 'translate' this to embedded system functions or pass it on to attached intelligent controllers. Note that COM4 is reserved to communicate with the system backlight and relays controller.
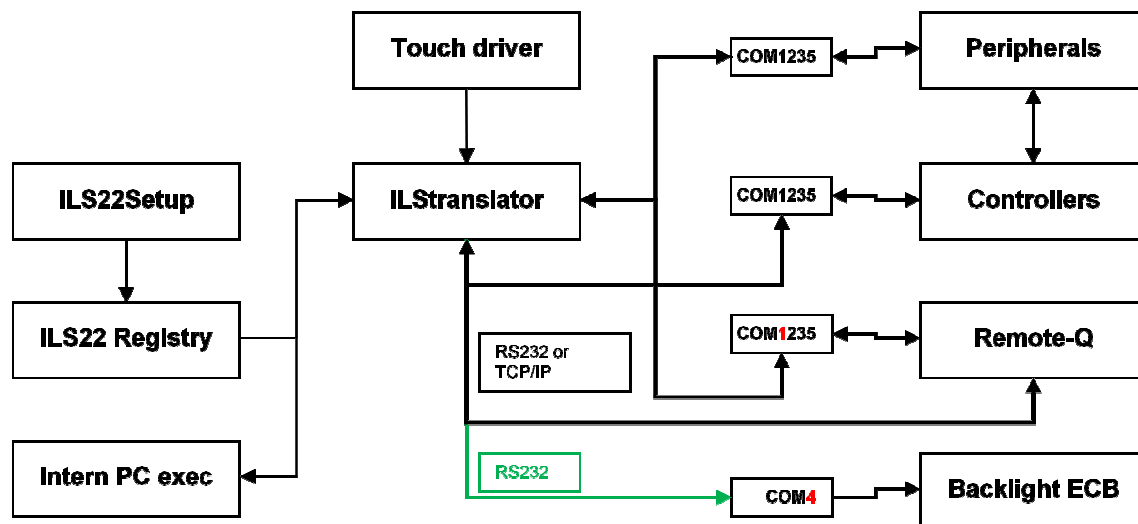

By default, and when ILS22Setup has not been used to change functionality of the ILS22, the ILS22 allows remote control over Com1, one of it's 4 RS232 serial communication ports. Default communication speed is set to 19200 Baud, 8 data-bits, 1 stop-bit, No parity, No flow control and No trailing characters. When first starting Remote-Q, make sure the communication parameters are correct.

Note: The communication speed and Com port used can be changed via ILS22Setup for the ILS22. Use Remote-Q to setup the Com port and communication settings for the hosting PC.
Note: If you want to control the ILS22 over TCP/IP (LAN or WiFi), make sure to select the Option 'Keep the possibility to control remotely (Default)' in ILS22Setup and select the Allow remote access over TCP/IP option in the next ILS22Setup form. Also specify the ILStranslator TCP listening port (default is 65501). Communication over RS232 is default.

Following is the Main startup Window.
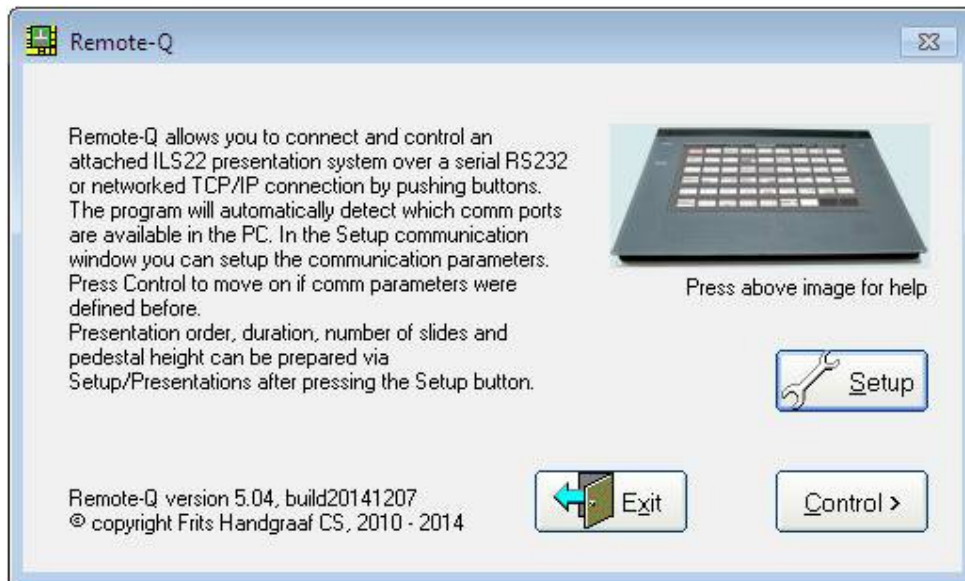
Hit the Exit button to exit the program, hit Control to get remote access or Setup to set the communication parameters or define Presentations. In this case, use Setup to make sure we can make a connection to the ILS22 and the ILStranslator system control software.

Note: If TCP/IP setup parameters are not valid or an earlier TCP/IP connection was closed, the Control button is disabled. Go to the Setup form to correct the situation.

Press the top-right image to obtain contact information and help.

After a first program start-up, your best choice is to go to Setup via the 'Setup' button (Alt-S) so that you can establish communication to ILStranslator (running on the ILS22).

Via the 'Exit' button (Alt-x) the program will end but it first stores communication and parameter info to the FHCS_Remote-Q registry.

Setup communication.
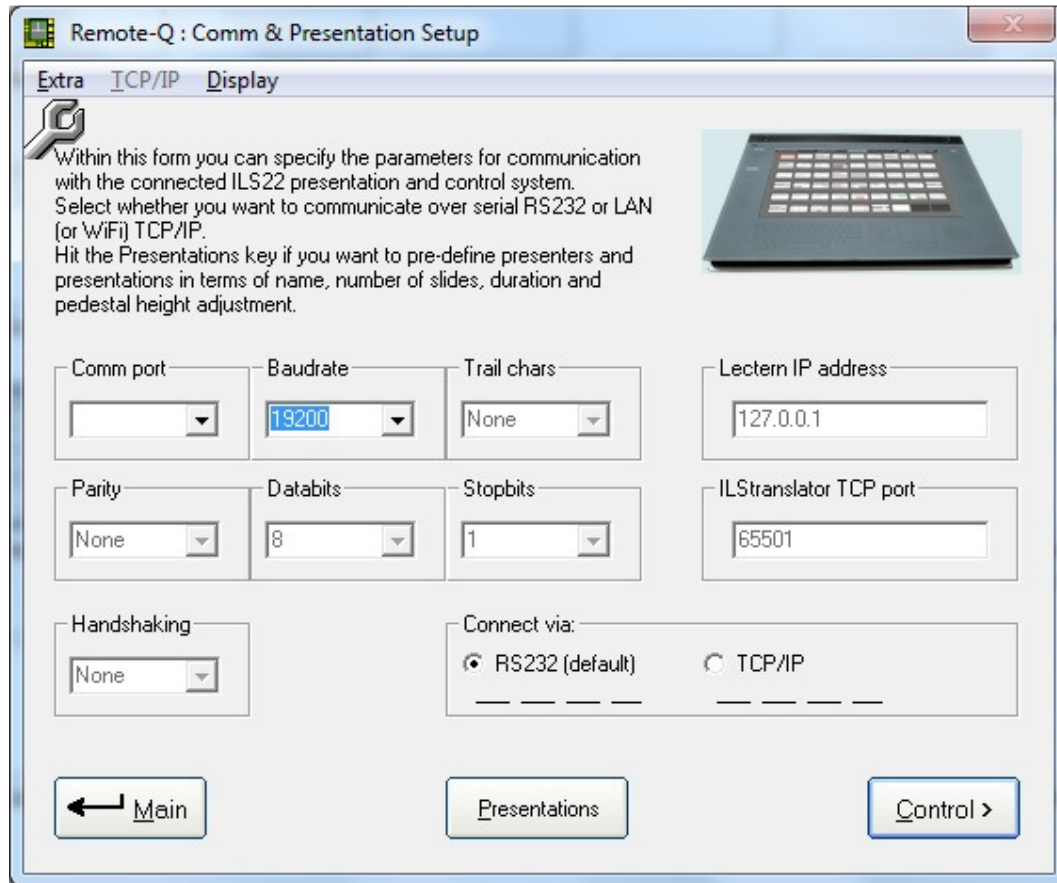
RS232

Remote-Q will automatically determine which RS232 comm ports are available in the PC. After that, you can change the Baudrate to correspond with the baudrate as setup with ILS22Setup. Default is 19200 but your system installer (via ILS22Setup) may have adjusted it to a higher rate. Note that only the Baudrate and the PC com port connecting to ILStranslator can be changed. Select another Comm port if you wish (only the available comm. ports are listed in the list box).

Note: In the laptop I used for making this documentation, there was no RS232 connector and as such no comm. ports are shown.
Note: If an earlier selected Comm port worked okay, but you want to change it anyway, select Change Comm in the Extra menu, which will verify available comm. ports again and allows you to change it.

When Remote-Q is run the first time, it assumes by default you want to communicate over a dedicated serial (RS232) connection.
If you press the Control button and a connection to the ILS22/ILStranslator can NOT be established, the Control Window will appear with unlighted buttons as shown in the No Connection chapter further in this document. Verify your connection.

Note: This also applies if the ILS22 was setup to communicate over TCP/IP and a connection can not be made.

TCP/IP

If you prefer to communicate over TCP/IP (LAN or WiFi) instead of over RS232 (and if so setup to allow TCP/IP control in ILS22Setup), select the Connect via TCP/IP option.
The default TCP listening port on ILStranslator is 65501, but you may have set it differently in ILS22Setup. The Lectern IP address by default is 127.0.0.1, but this is a 'fake address'. Adapt the ILStranslator TCP port to the value set in ILS22Setup, adapt the Lectern IP address to the IP address provided to the lectern (ILStranslator) via a DHCP server or the fixed address of the ILS22.

Note: the TCP listening port should be in the range 49152 – 65535.
Note: the Lectern IP address should be a valid one.
Note: a Firewall may be obstructing access to the IP address or the TCP port. Make sure the access to the IP address and TCP port is granted. You can use the 'ping IPaddress' command to verify communication between both systems. Verify with your ICT department.

When a first initial connection to the TCP port and IP address has not been made, a command button with caption Connect is visible below the ILStranslator TCP port frame. Make sure the TCP port number and IP address are correct and hit this button to make the first connection. Also make sure ILStranslator on the ILS22 is running. Via Extra Buttons on the ILS22, select Show. This will show whether ILStranslator is 'listening on the TCP port'.

Note: In ILStranslator you can also hit the State button to determine the status of the TCP/IP connection.
Note: In Remote-Q Setup Communications you can also Connect, see the status of the TCP/IP connection, or Close the TCP/IP connection via the TCP/IP menu commands. Use these menu commands to overcome an error condition (close the connection) or to establish a new connection.

No connection.

If a connection was NOT established, the Control Window will appear with grey and black buttons and headers.
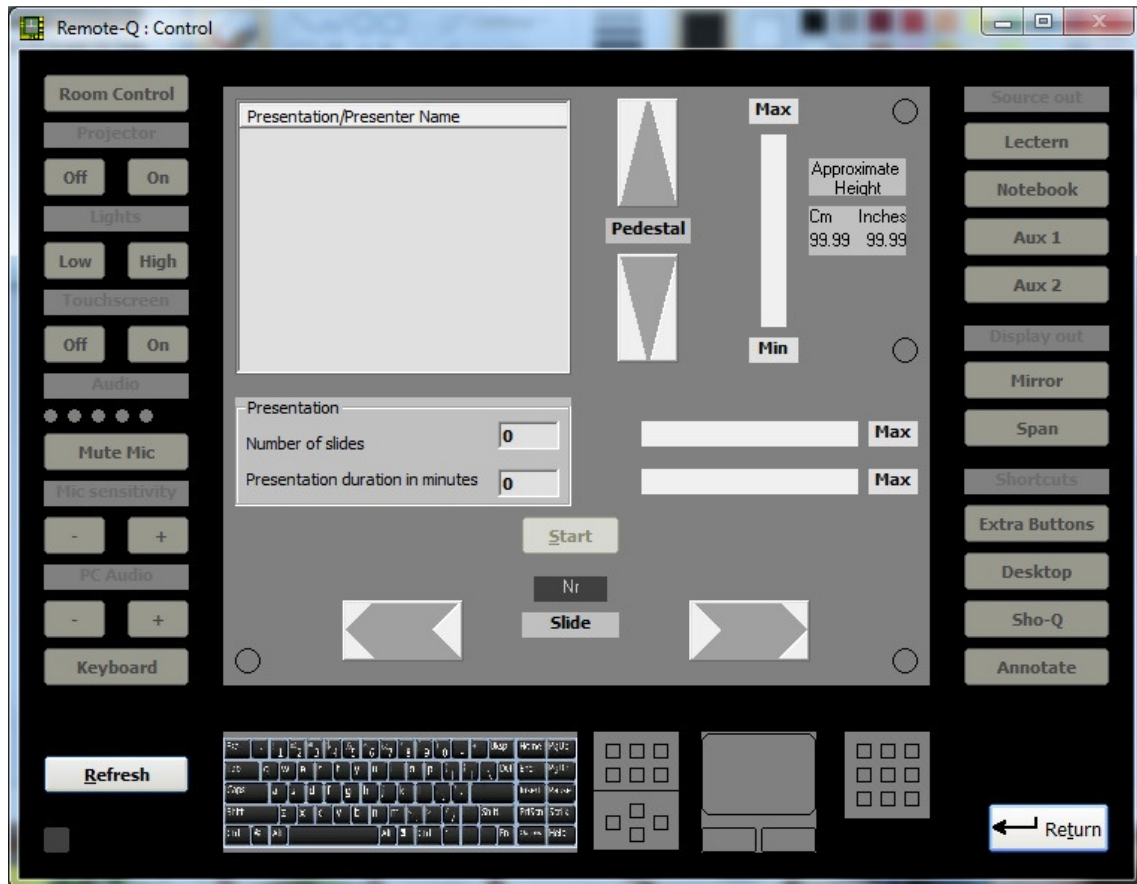
If the connection was NOT successful, also a warning message will appear on top of the Control Window.

If Remote-Q connected successfully (via the Control Button), the dashed black line under the RS232 option (in the Setup window) will change into a solid line.

Note: If Remote-Q connected successfully via a TCP/IP connection, the dashed or solid line (earlier connection worked) under the TCP/IP option will change into a solid line.

Note that the communication indicator in the bottom left is light green, indicating a command was send out, but no reply was received (if a reply is received the indicator is dark green).

Simply put, the cause of a No Connection failure is one of the following:
- ILStranslator is not running on the remote ILS22.
- The lectern is powered off.
- The com port selected on the PC is not valid or not working.
- The baudrate is not in accordance with what has been set with ILS22Setup.

- There is no physical wired or functional connection between your PC and the COM port of the ILS22.
- In ILS22Setup TCP/IP was selected instead of RS232.
- The TCP port is not in accordance with what was set with ILS22Setup.
- The IP address is wrong.
- The command delay or the read delay is set too low.

Under the Extra menu entry there are a couple of parameters you can set and which can improve communication with the ILS22:
- CommandDelay. This the delay used between 2 different commands being send to the ILS22. Default is 400 milliseconds (0.4 seconds).
- ReadDelay. This is de time delay the program is waiting for a response from the ILS22 after sending a command, and after which it reads the entire input buffer. Default is 400 milliseconds (0.4 seconds).
- StatusBytes. This is the minimum number of bytes to receive after a refresh (Control window Refresh button) or when first connection is established. Default is 700.

Note: Increase the command and read delays if the connection is okay but ILStranslator is not returning requested data. The 400 milliseconds are rough optimum for a 19200 baud RS232 connection.
Increase StatusBytes if not all requested status data is returned or error messages appear. If RS232 is used instead of TCP/IP you may need to increase to 1000.
Note: The Command and Read delay also influence the speed of communication over TCP/IP.

If you try to change from TCP/IP to RS232 or vice versa, a warning message will appear (in this case for trying to change from RS232 to TCP/IP).
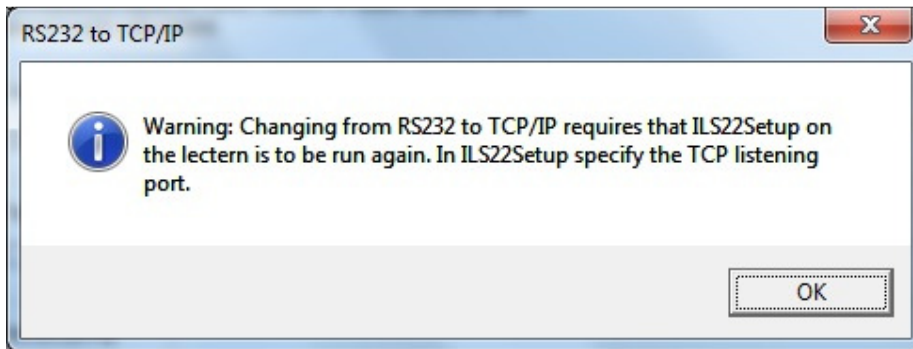

If ILStranslator was setup to allow control access over TCP/IP and you hit the Connect button under the ILStranslator TCP port, Remote-Q will try to verify whether the IP address complies with the standard and whether the TCP port is in the correct range, and than try to make a connection.
Note: In ILStranslator via Extra Buttons/Show you can verify whether ILStranslator is in Listening mode. If not, use the Close menu command to close the socket and to force ILStranslator into 'listening mode'.

If a successful TCP/IP connection was established, the Setup form will change:

Connect.
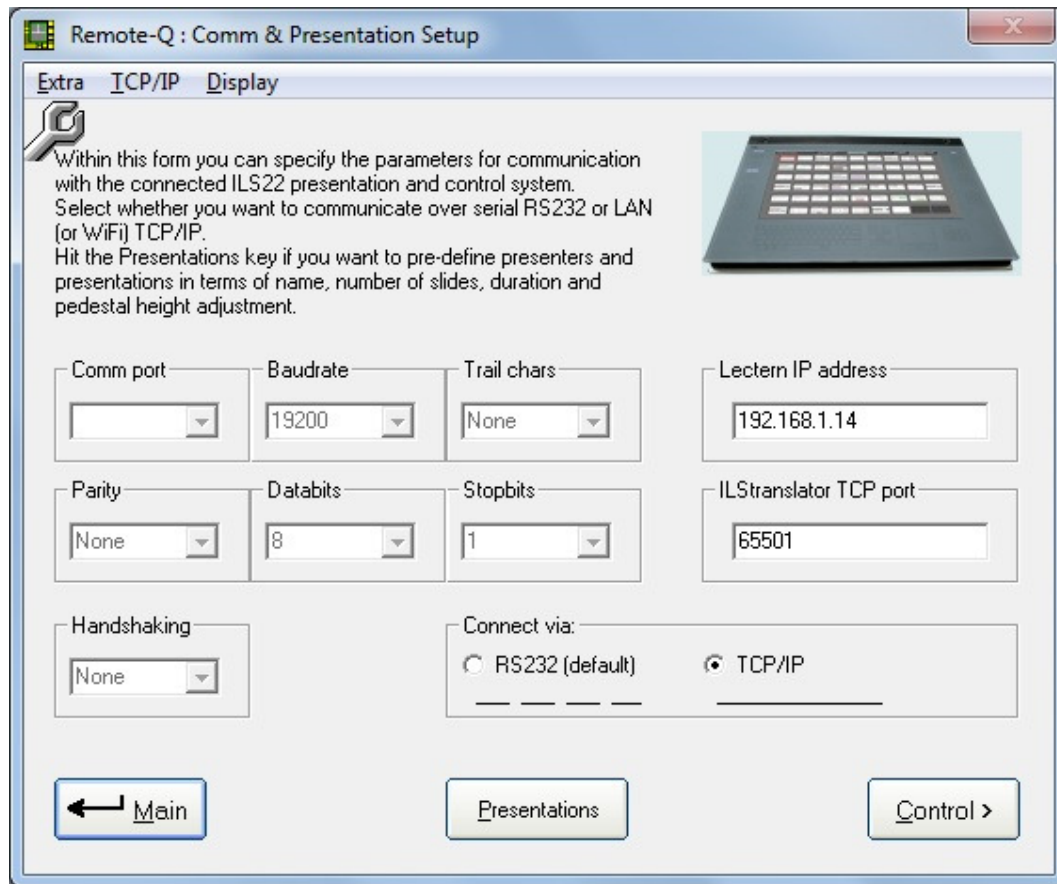
Note that the dashed line under the 'Connect via TCP/IP' option has changed to a solid line instead of a dashed one.

Note: If after hitting the Control button the required information is received (a successful connection is made), this line will go solid and the buttons and headers in the Control Window will be back-lighted. Also the communication indicator in the left corner of the Control Window will be dark green, indicating reply received.

The idea behind this concept (both for RS232 and TCP/IP) is that after a first successful connection, you do not require to setup communication parameters anymore, and you can use the Control button in the Main form to make a connection and control immediately.

What if Communication Parameters change?
-   If the serial RS232 comm. port on your PC is used (or going to be used) for other purposes, select Extra/Change Comm in the menu. This will verify available comm. ports again. Then select your new comm. port accordingly.
-   If the serial RS232 comm port on the ILS22 lectern is to be changed, run the ILS22Setup Wizard again.

- If the Lectern IP address has to be changed, make sure that you close a current connection via the TCP/IP Close command in the menu. Change the Lectern IP address in the textbox.
- If the ILStranslator TCP listening port needs to be changed, close a current connection via the TCP/IP Close command in the menu. Enter the new ILStranslator listening port , exit the program and restart. The new TCP port will be loaded.

Other commands in this Setup Communications and Presentations form.

Debug mode (under Display) allows to turn debug mode on or off. When set to on, a small window will appear next to the Setup and Control window allowing to monitor traffic between Remote-Q and the serial (RS232) or LAN/WiFi (TCP/IP) attached lectern.
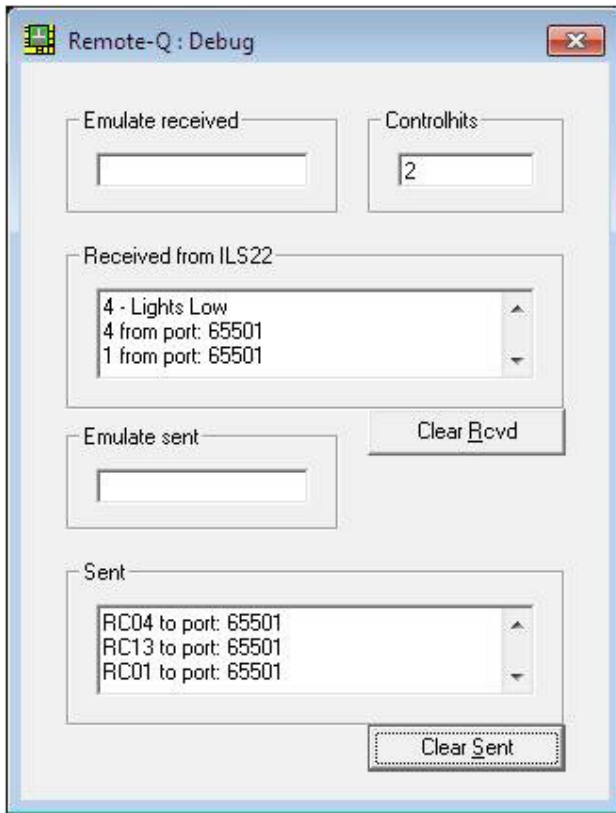
Auto max (under Display) allows to automatically maximize the Control window when showing up, so that you do not have to hit the max button in the Control window.

Use the Main command button to return to the startup Remote-Q main window.

Use the Presentations command button to pre-define presenters and presentation names including number of slides, duration of the presentation and requested automatic pedestal height adjustment (if the ILS22 is mounted on a PowerLift pedestal) when moving to the control mode.

Use the Control command button to bring up the Control Window.

After hitting the Control button, Remote-Q will interrogate the ILS22 to obtain the current status. A small message window will appear in which a progress bar will show the progress in obtaining the required data.
Once the required data is received, the control window will show up with an exact representation of the lighted and enabled glass plate buttons of the ILS22.

The only command button within this form (Comm & Presentation Setup) we have not described yet is the Presentations button.
How to setup presentations will be discussed later in this document.

Control the lectern.
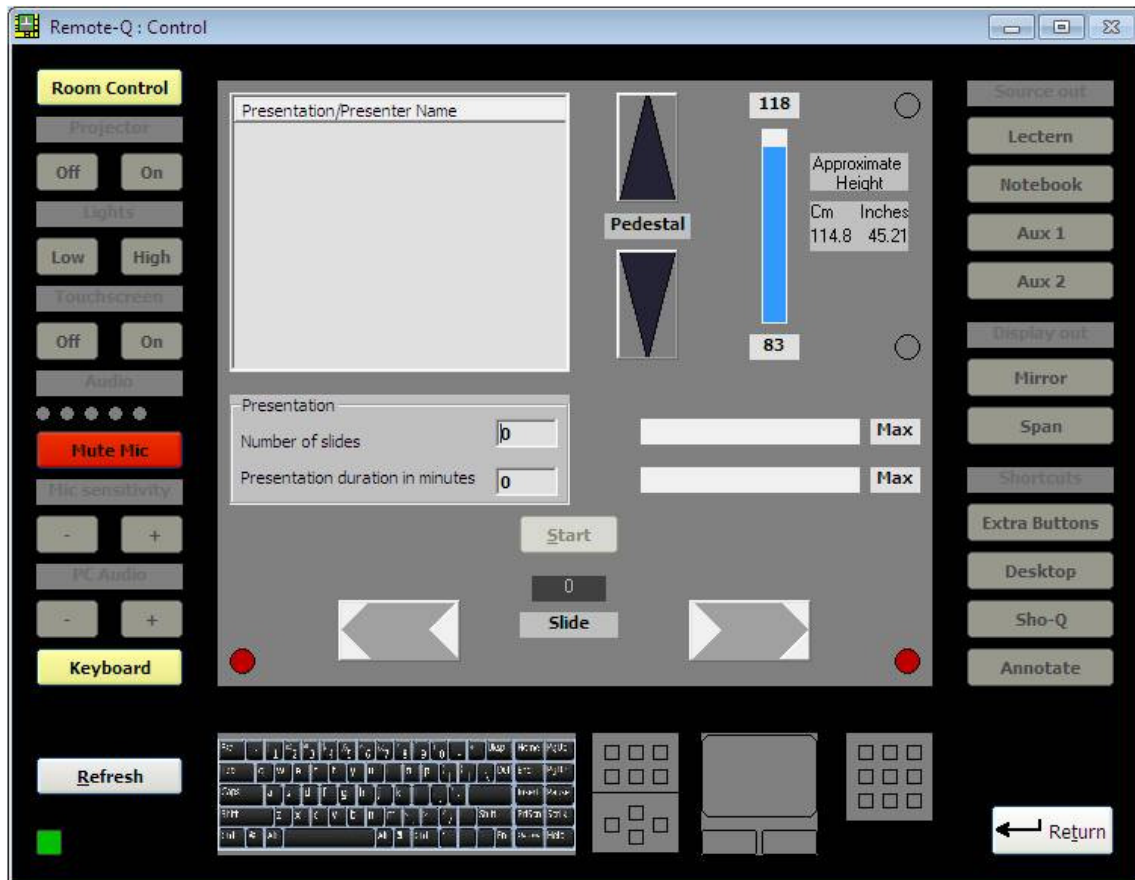
This image shows up when the ILStranslator and the ILS22 are (still) in their default start-up condition, no buttons were pressed yet.
The left, right and middle bottom sections of the window represent the ILS22 status.

The central part shows the status of presentations related parameters and settings. In the top right of the central section you can see that the lectern is mounted on a PowerLift pedestal, as the up/down buttons are enabled, and the current height is displayed. Pressing one of the buttons will bring the pedestal up or down. How many cm's/inches is depending on the setting via ILS22Setup (PedestalDelay establishes how many seconds the motor is active per step up/down). Top left of the central section shows which presentations/presenter names are defined in Setup/Presentations. As the ListView is empty, no presentations are defined (yet). The lower part of the central section is aimed to support presentations remotely. As no Number of slides nor duration in minutes is defined (yet), the buttons are disabled. We will discuss later in this manual how presentations can be defined here or how the timer can be started to keep track of timing.

The yellow coloured buttons show which glass plate functions are enabled. The ILS22 is backlighting the enabled buttons with white led's, Remote-Q uses yellow. The Mute Mic button in the ILS22 is backlighted with a red led, same here in Remote-Q.
From the image we see that the Room Control button, Keyboard button and the Mic Mute button functions are enabled. So you can use the Keyboard button to enable glass plate

keyboard and mouse track pad, mute/unmute the microphone if attached, via the Mute Mic button, and enable other glass plate buttons via the Control key (Room Control).

Note: The Room Control button can enable/disable functions in a carrousel type of way or enable/disable via a single button hit. This can be changed via ILStranslator/Setup. See later in this document.

The green rectangle in the left/bottom area is a communication indicator. When coloured light green it means a command was sent out to the ILS22 (ILStranslator). Dark green indicates a response was successfully received back.

The Return button is returning either to the Setup window form, or to the Presentations window if so set (in the presentation form).
If in doubt concerning the current status representation, or to verify that a change of settings via Remote-Q was received by ILStranslator, use the Refresh button (normally not required). This will obtain the current settings in the ILS22 again.
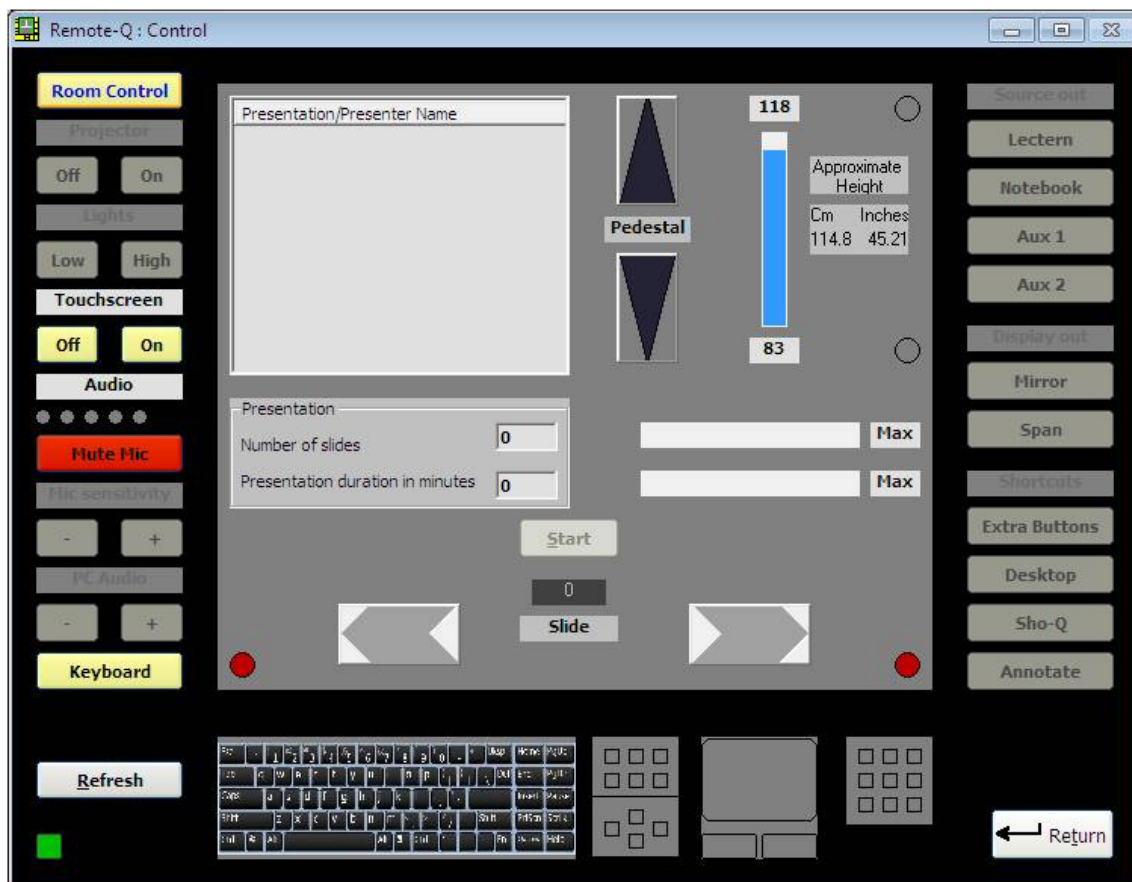
The above image represents the status after hitting the Room Control key once, either by the operator of Remote-Q or the presenter behind the lectern, with the Room Control mode set to carrousel (ILStranslator/Setup/Sequence). Note that the Touchscreen header is now enabled and the Off and On buttons below it are too. Also note that the Audio header function is enabled. In this example we hit it to obtain the ILS22 Audio volume setting, indicated by the 5 led's under the Audio header (in this case it's 80%). Hitting it again will not show current volume level.

Note: For a complete explanation of what each of the header buttons (and the associated buttons beneath it) are doing, please refer to the ILStranslator Software User Guide (which can be downloaded from the ILS web-site:
http://www.intelligentlecterns.com/lecterns/ils22/ils22.html
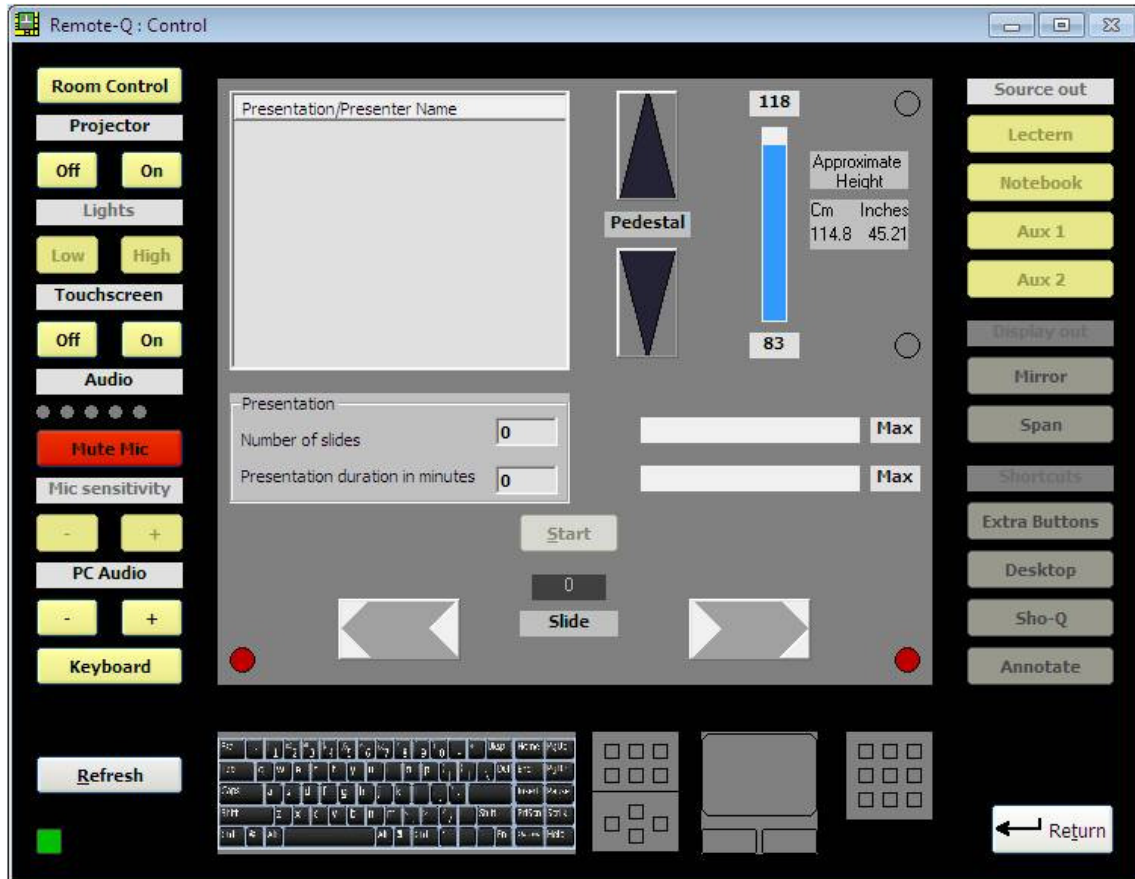
After hitting the Room Control button once more (2nd time), more button functions become available, as well as functions under the so called button headers (in this case Projector, Lights, Touchscreen, Mic sensitivity and PC Audio). Button headers become available for execution when enabled and coloured light grey/blue in Remote-Q (backlighted with white led's in the ILS22).
What button and button header functions are being executed is again depending on how they were setup for executing in ILS22Setup. See the ILS22 Software User Guide and the ILStranslator Software User Guide for more details. Here's a short explanation however.

Projector header. Can be programmed, for example to send a lamp hour status inquiry command.
Projector On. To power up an attached projector.
Projector Off. To power down an attached projector.

Lights header. Can be programmed to request current (room) light condition.
Lights Low. To dim current (room) light.
Lights High. To increase light.

Touch screen header. Used to enable/disable touchscreen on/off buttons.
Touchscreen Off. Disable the touchscreen.
Touchscreen On. Enable the touchscreen again.
Whether the keyboard and mouse are also disabled when touchscreen is off depends on ILStranslator/Setup settings.

Audio header. Shows/hides current system internal audio master volume via the led indicators. In this case the audio volume is 80% (4 full green led's, no red 5th led).

Mic sensitivity header. Can be programmed, for example to request current microphone volume.
Mic sensitivity - . Lower mic volume.
Mic sensitivity + . Increase mic volume.

PC Audio header. Mute/unmute build-in PC's master volume.
PC Audio + . Increase master volume.
PC Audio - . Decrease master volume.

Source out header. Can be programmed to send out requests to attached intelligent controller. Lectern, Notebook, Aux1, Aux2. Can be programmed to send a switch command to an attached intelligent controller. This is done in the ILS22Setup software, which is normally included with your ILS22 and can also be downloaded (upgrades) from the ILS web-site.

The following image shows what happens if the Room Control button is hit 3 times.
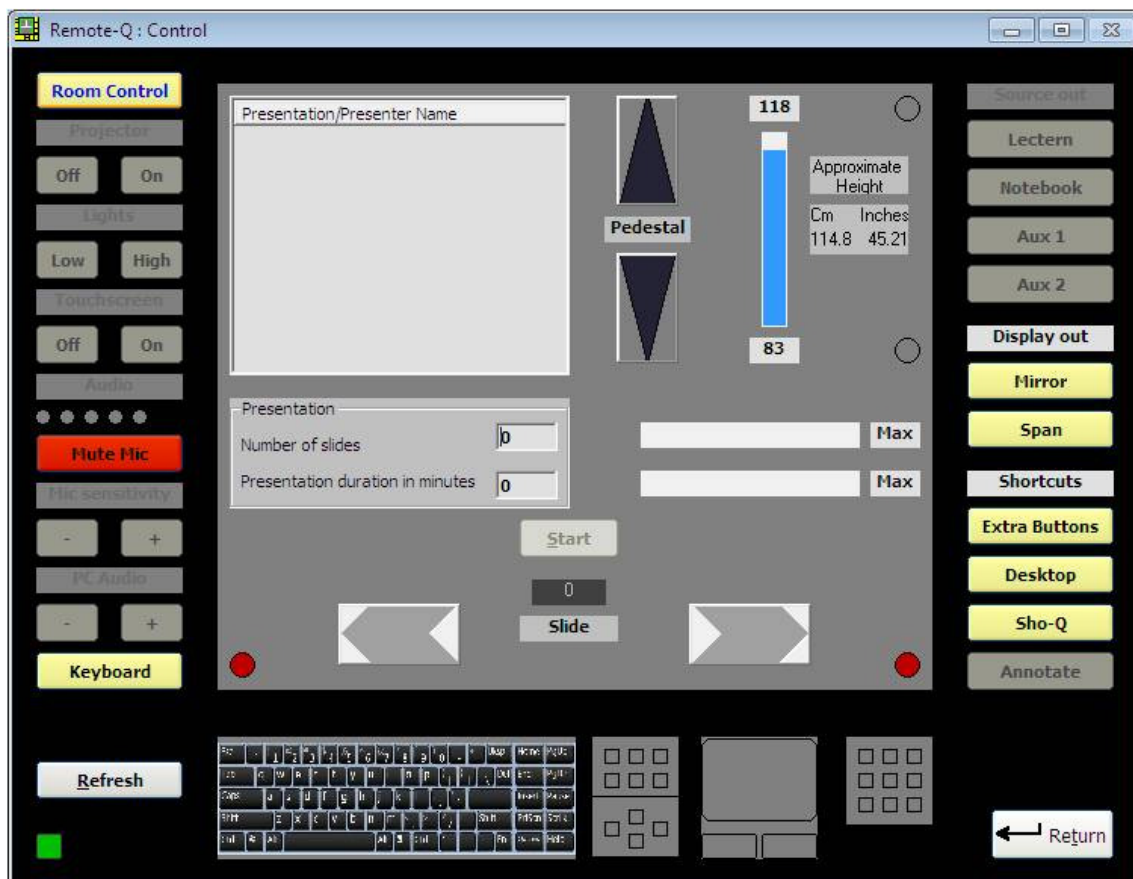
Shortcuts header. Will perform an Alt – Tab keystroke to move on to the next running application.

Extra Buttons. Will bring up a windows form with additional command buttons. See the next Chapter called Extra Buttons.

Desktop. Will minimize running applications into the taskbar, and will show the taskbar.

Sho-Q. Will start-up the ILS Sho-Q presentation program (if it is not already running). This program will interrogate (communicate with ILStranslator running on the ILS22 lectern) to find out whether Sho-Q was already started. If not, it will launch Sho-Q on the ILS22.

The following image shows what happens when the Room Control key is hit 4 times:
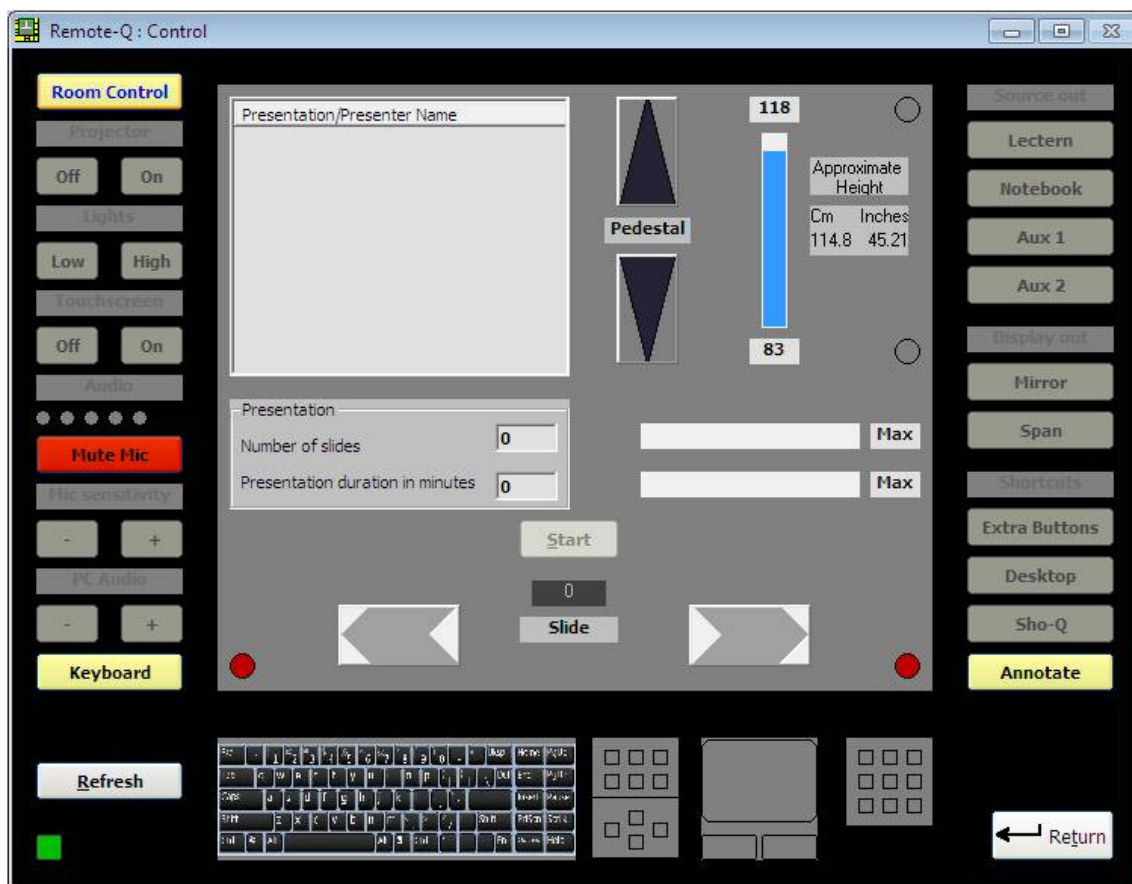
Annotate. Will enable the annotation keys on the ILS22. This will allow the presenter to capture (New Sheet), annotate current captured images, either PowerPoint, Excel, Word, Internet accessed resources or any other, and save it for distribution. The other way around, the Remote-Q operator will see if the annotation keys were enabled on the ILS22 (which is true for all presenter button hits).

When the Annotate button is pressed (either by the presenter behind the ILS22 or via the Remote-Q operator), the Annotate buttons are lit. These include New Sheet (capture current

image), red/green/blue/black/white to change the colour of the annotation pen, Save sheet (e.g. as bitmap file for distribution) etc.

Note: See the ILStranslator Software User Guide for full details about the ILStranslator embedded annotation functions. These include pen width, circle, rectangle, text etc.

However, if Sho-Q is running on the ILS22, the Annotate buttons (after a second or so) will be dimmed again and will inform (via ILStranslator) to Remote-Q that the Annotation buttons are disabled (in Remote-Q the frame will go dark again).
This is because Sho-Q has it's own annotation embedded functions.
If Sho-Q is NOT running, the following image will appear:
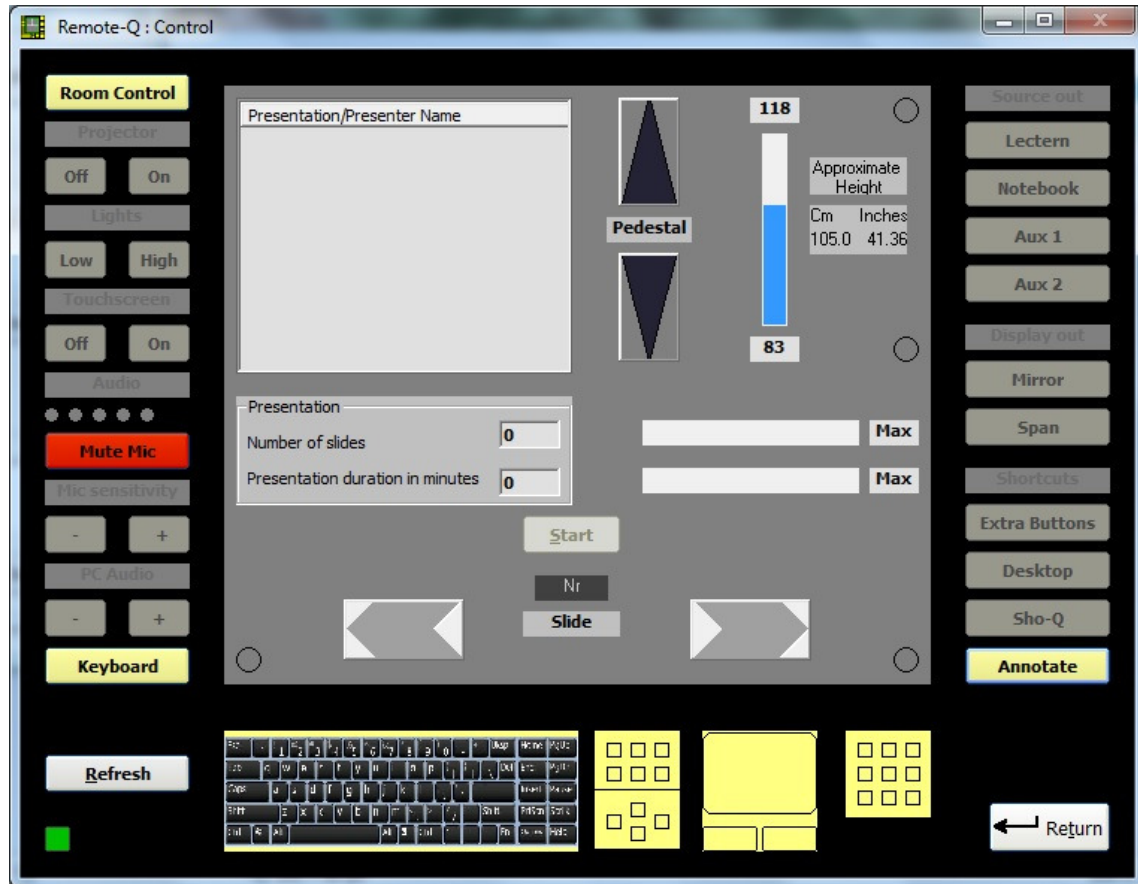
Note: Whereas the Remote-Q operator has total control over ILS22 and ILStranslator, he or she cannot make annotations (drawings, text) on the picture image selected by the ILS22 presenter.
Note that the presenter behind the lectern enabled the key board so that he or see can add text in the annotation.

Extra buttons.
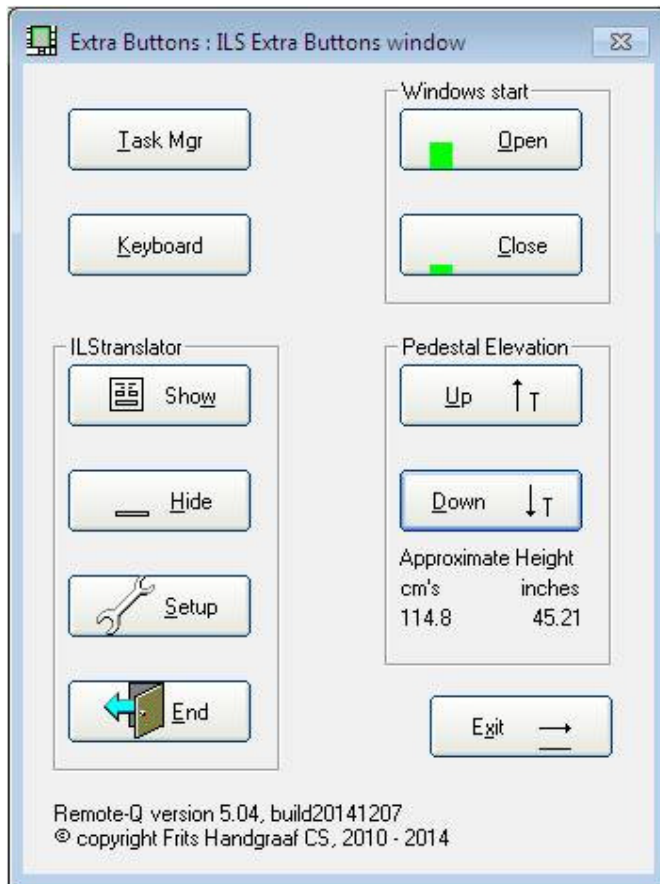
The Extra buttons provide additional functions next to the glass plate button and header functions. Most important one is Pedestal Elevation, Up or Down.

Note: Using this button will bring up the Extra buttons form on the lectern, and allows the Remote-Q operator to perform the same functions as can be done by the presenter. If the Extra Buttons window appears on the lectern, it will also appear in Remote-Q.
Note: Some applications may claim the total available pixel space on the lectern, or show themselves as topmost window. This, for example, is the case with Sho-Q. If the Extra Buttons window is hidden behind another application, simply hit the Extra Buttons key (either on the ILS22 glass plate or via Remote-Q) again. This will show Extra Buttons again on top of any other window.

Task Manager will show the task manager, allowing for another user to login, or to perform anything else, on the lectern (but not on the PC where Remote-Q is running).

Keyboard will bring up the lectern's OSK keyboard (On System Keyboard) allowing keyboard entries, e.g. when no keyboard is attached or if you want to use other language keyboard inputs on the lectern (the keyboard will NOT show up in Remote-Q).

Windows start Open will open the start menu, Close will close it again (but only on the lectern).

Under Pedestal Elevation there's an Up button to move the pedestal up, and a Down button to move the pedestal down.

Note: the elevation per button click is defined in ILS22Setup. Default is 2 seconds.

The approximate current height is displayed under the buttons. Pedestal elevation can also be controlled in the Control window (see later in this document).

In the ILStranslator section you can show a form which provides information (Show), Hide this form again, End ILStranslator or gain access to ILStranslator/Setup.

Note: If the ILS22 operator is showing or hiding the form, it will also be shown or hidden via Remote-Q. The other way around (Remote-Q operator) has the same effect on the ILS22.

Note: If you end ILStranslator, you can no longer control the lectern via Remote-Q, and ILStranslator on the lectern will be ended. The following message will appear:


Note: The other way around, Remote-Q will be informed that the ILS22 operator ended ILStranslator.

Note: ILStranslator can not be re-started via Remote-Q.

With the Setup button you can change parameters in ILStranslator. These are typically items which needs adjustments on the fly. The ILS22Setup application typically only has to be run once to define the system specifics.

ILStranslator Setup.
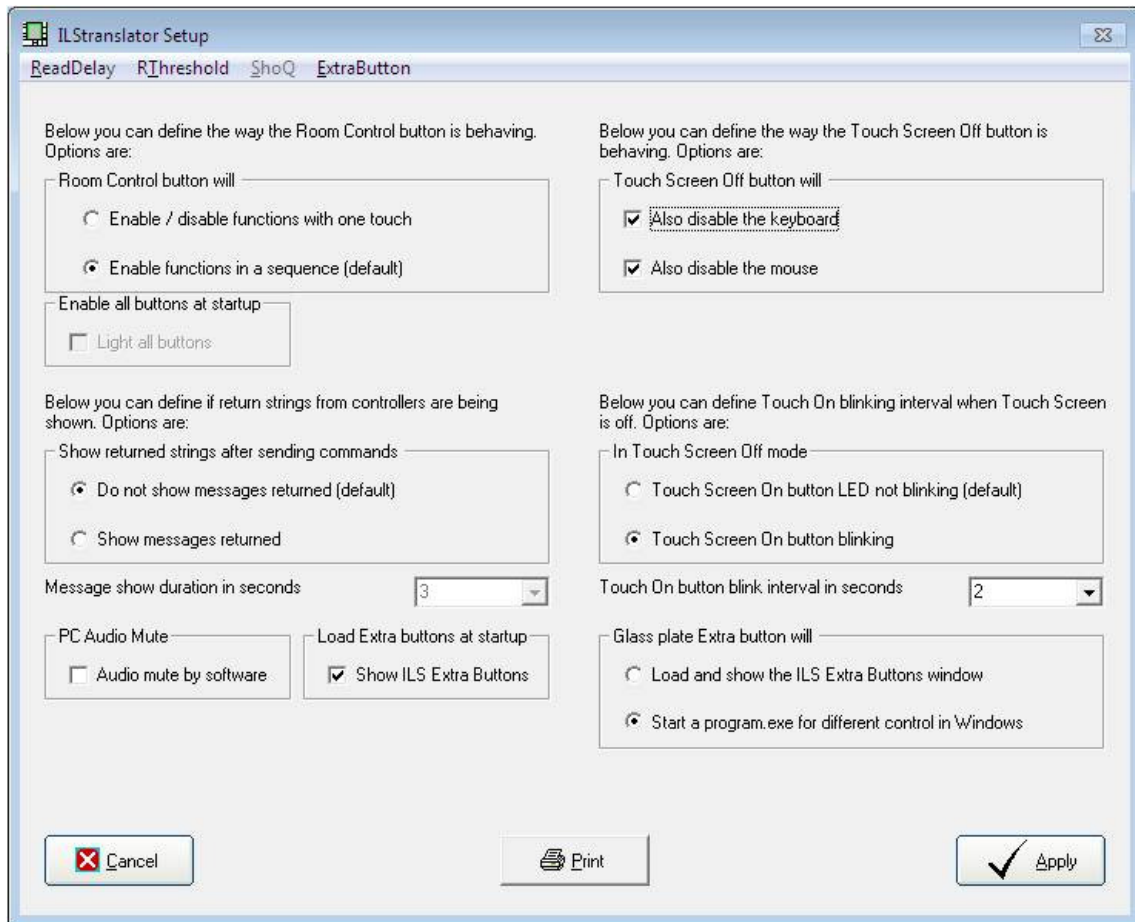
The (Room) Control button can be set to show the button and header functions in a carrousel (sequence) or all at once.

When the touch screen is (temporarily) turned off, check boxes are available to also disable the keyboard and mouse, preventing unwanted input.
Note: If you want the slide advance functionality in Remote-Q, do NOT disable both the keyboard AND the mouse.

If you do not want the Touch Screen On button to blink in touch off mode, select the first option. The second option allows to select or enter the blinking interval in seconds.

Depending on the configuration set up with ILS22Setup, attached intelligent controllers may send messages back, e.g. on a header request. Chose to show these messages on the lectern and via Remote-Q, for a duration in seconds as set (default is 5 seconds).

The lectern master volume can be muted by hardware or software. Check the audio mute by software if you want to mute in steps, e.g. if you want to fade audio.

Check the Load Extra Buttons at startup will load the Extra buttons form. This is useful when you want to have quick access to the pedestal up/down buttons or other buttons on the form.

Under 'Glass plate Extra button will' you can specify whether you want to bring up the 'ILS' Extra buttons window, or whether you want to start up a program, e.g. for control purposes in the Windows environment. If the latter option is selected, the menu item Extra Button on the lectern (not within Remote-Q) will be enabled. Via ILStranslator on the lectern you can than specify the program path and the name of the executable to be started after hitting the Extra button.

When the Enable/Disable all functions with one touch option is selected, you can check Enable all buttons at startup. When ILStranslator is starting it will backlight all buttons. This is useful when intelligent controllers are connected or when you want to startup the projector, dim room lights etc. An additional Room Control hit will continue the standard setup (sequence or all at once). Note: This functionality is typically useful for A/V support personnel who want to start-up the system and environment. Once all is setup, an extra Room Control tick prepares the system for the presenter.

Cancel will cancel the current operation and return focus to the extra buttons window. If any changes are made, the Apply button will communicate the new settings to the lectern, where they go into effect.

Under the RThreshold (Alt+T) you can specify the minimum bytes to be received, before starting the read delay, and reading the whole input buffer.

Under the ReadDelay (Alt+R) menu item you can specify the Read Delay. The Read Delay (default is 400 milliseconds) specifies how long ILStranslator is waiting for attached external controllers, projector (if under direct control) and other devices, to respond to an inquiry or sent out command. After the Read Delay has expired, ILStranslator will show the response form. Increase the read delay if a response requires a longer time to get through.

Settings changed in this ILStranslator/Setup form go into effect immediately after hitting the Apply key.
Note: Whereas ILS22Setup typically is run once to set system environments, ILStranslator/Setup allows to make quick changes to user requirements or desires.

Controlling presentations.
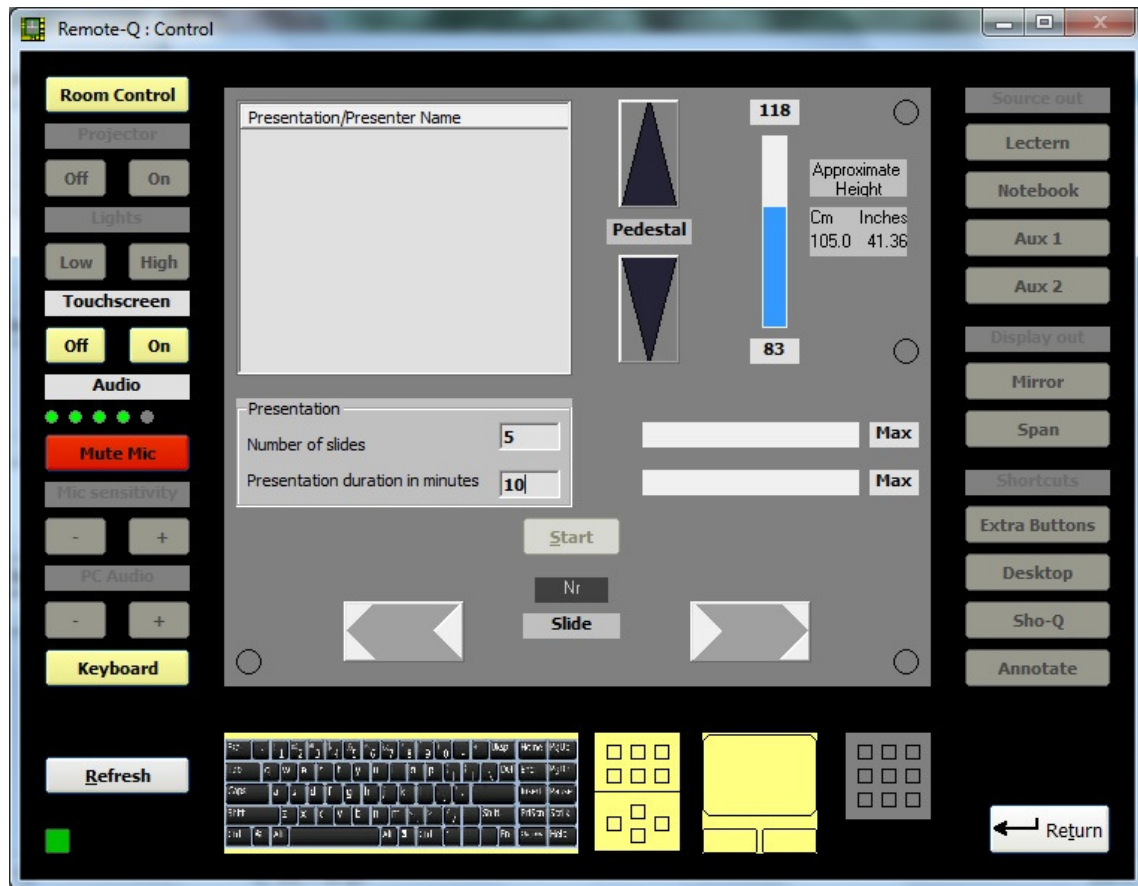
In the control window, Remote-Q allows to control presentation progress, keep an eye on elapsed time, advance slides forward or backward, start or end a presentation (in terms of resetting).

If presentation parameters were not setup via Remote-Q Setup Presentations, they can be entered ad-hoc in the control window.
Note: In this case, pedestal height will not be automatically adjusted. Manual adjustment from out Remote-Q however is available via the pedestal up/down buttons.

In the presentation frame, enter the Number of slides, the duration in minutes or both in the appropriate text box. An entry followed by Enter (hit Enter on the keyboard after typing) will enable the Start button.
Note: The Start button will also be enabled via the Slide button, provided the text boxes are not empty.

After the Start button is hit, the timer is enabled and the caption changes to 'End'.
In the progress bar next to the duration in minutes, the bar will show left to go time in the Max label. After 75% of the allocated time slot, the label will colour orange, and red after 99%.
*Note: These are the default settings but can be changed via the alarm parameters in the Presentations Form.*

The progress bar is updated each ½ minute. After allocated time has elapsed, the label will show the number of minutes overdue (in red).
After the Start button is hit, also the slide advance/slide backward buttons are enabled.
The slide progress bar shows the slide progress, the label the number of slides left to go.
The slide label between the slide advance buttons shows the number of the current slide.
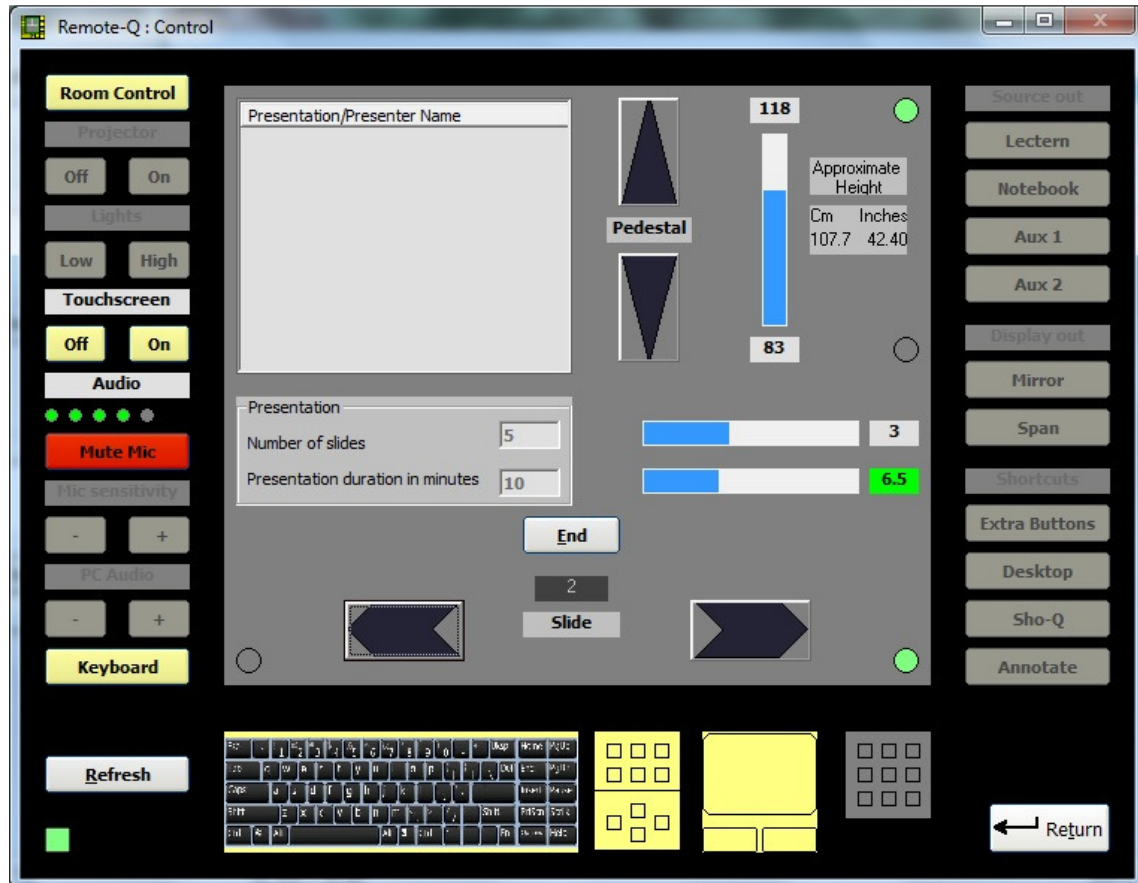
The above screenshot shows:
- Current slide number is number 2.
- Slide was advanced to next (as opposed to previous), indicated by the light green circle to the right of the advance button.
- There are still 3 slides to be presented.
- There are still roughly 6.5 minutes to go.
- The pedestal was elevated up (indicated by the little green circle next to the pedestal up button).

Hit the End button to reset the presentation parameters and the progress bar's settings. Now a new presentation can be defined.

If there are a number of consecutive presentations, you can define them upfront (and save or load) via Setup/Presentations. They will be presented in the top left presentation/presenter name listview for easy selection.

Setting up presentations and Alarms.

Selecting Setup in the Main menu, followed by Presentations in the Comm & Presentation Setup window, will bring up the Presentation Setup window.

Note: If a successful connection to ILStranslator (running on the ILS22) is NOT made yet, the Programs and Message menu's will be invisible and the following message will show up:
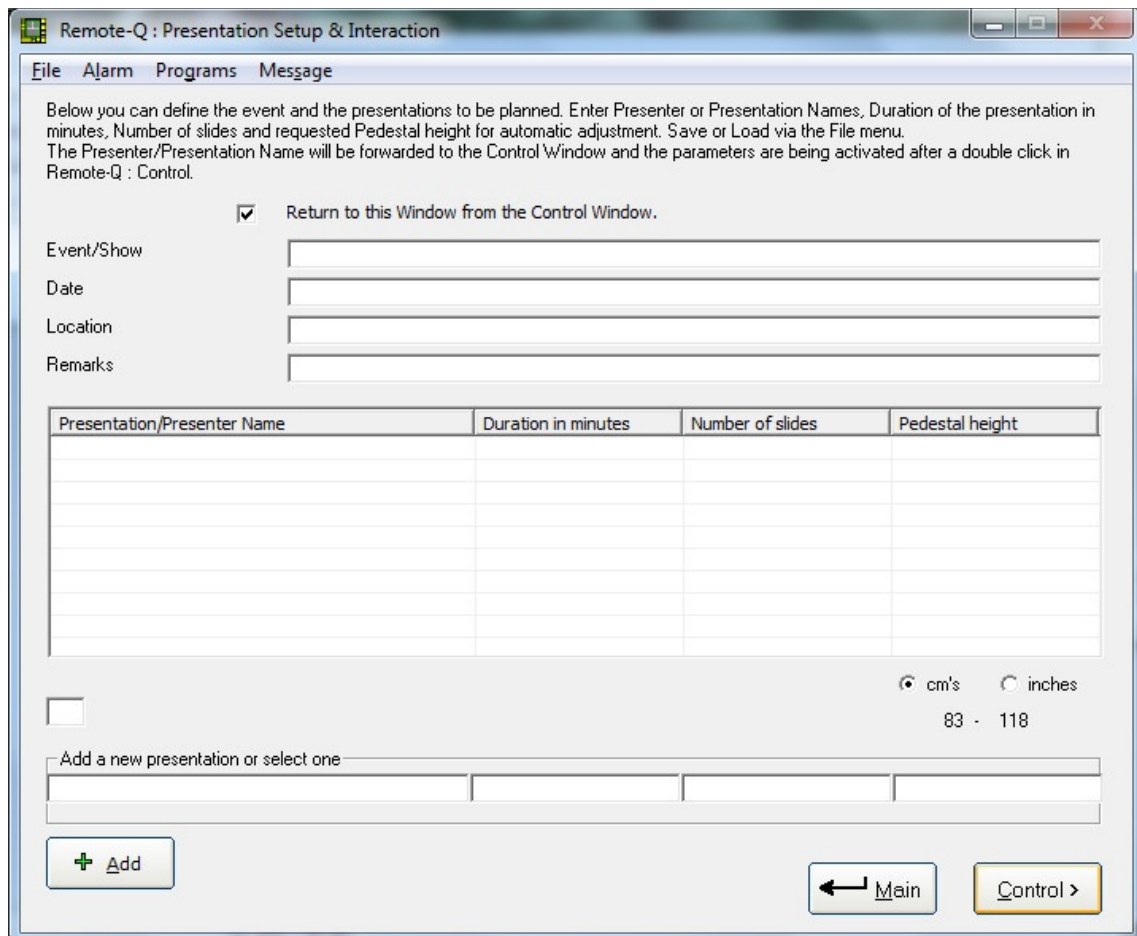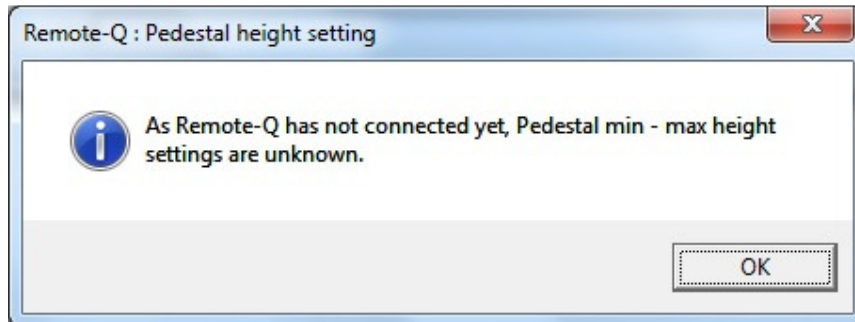
If you want to send an ad-hoc message, select Message from the menu:

Fill in your message and hit OK to send it to the lectern.
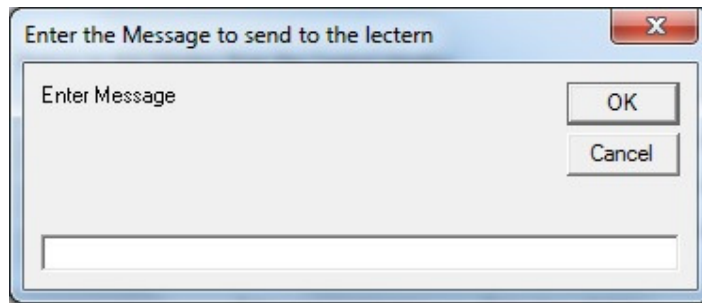
The top of the Presentation Setup form allows to enter information concerning upcoming presentations. This could be events like shows, training or a general presentation day. The other fields which can be used are Date, Location and Remarks (for general text).
These fields are text fields so simply enter the text in here. Tab will bring you to the next field.

In the bottom row fields you can enter the information required in the Control Window: Presentation/Presenter Name, Duration in minutes, Number of slides and requested Pedestal height. Enter the text in the bottom row fields. You can use Tab to move to the next field.
Chose one of the height options (cm's or inches) before adding the entry to the listview. (There might be international mixed presenters measuring either in inches or cm's).
Note: The pedestal height is at the side of the presenter. Practical experience learns to best position the pedestal to the height between floor and a presenter elbow.
Note2: Pedestal elevation goes in steps of seconds the PowerLift motor is in function. This is defined in ILS22Setup. Default is 2 seconds of movement.
Hit the Add button, once the bottom row fields are filled, to add them to the listview above.

The below screenshot shows an example.

Note that the second presenter's Pedestal Height request has not been filled in yet (0 cm's). Selecting a presenter in the listview will bring up a form like this:
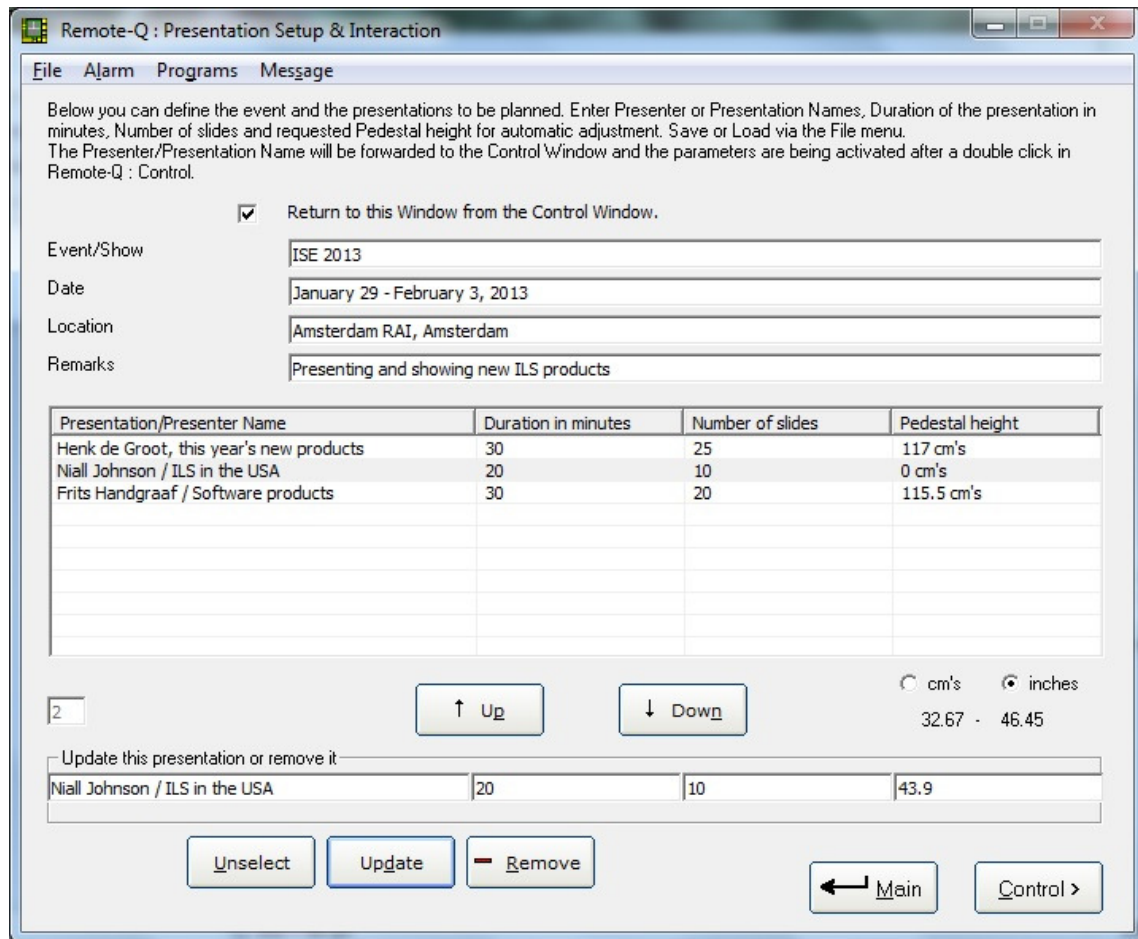
Above the second record was selected. Note that the Add button is made invisible.

A selected record can be:
- Updated. Change the bottom row fields and hit the Update button to replace the content in the listview.
- Removed. Hit the Remove button and it will disappear.
- Moved up or down. If the order of presentations is changed, use this method to quickly adapt the ranking.
- Unselect. Hitting the Unselect button will unselect the record, make the Up, Down, Unselect, Update and Remove buttons invisible, empty the bottom row fields and show the Add button again.

Note that in the Pedestal height field you can select either cm's or inches, by clicking the appropriate option.
The listview shows how the requested pedestal height is stored.

If the check box is checked, the Main command button caption in the Control window will change to Return and allows to return directly to this window. This is handy if you quickly want to change something in the presentation setup.
Via the menu File entry you can Save, Load or Print the presentation setup.

Save will bring up a common dialog window which allows selection of folder/directory and requesting a file name. The file will be saved as a tab delimited text file (extension .txt).

Above is a representation of a saved presentation setup file.
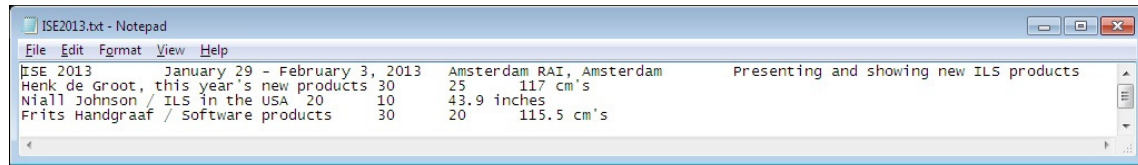Note that the first line is holding the event fields separated by tab's. The following lines hold the presentation setup fields, also separated by tab's.

Note: Following this definition, presentation setup files can also be created with programs such as Notepad or Excel (save as tab separated txt file).

Load will bring up a common dialog window which allows you to select a presentation setup file to be loaded.

Print will copy the screen and print out to the systems default printer. This way you have a paper copy handout or referral document.

Exit will return to the Remote-Q Main Window. This also applies to the Main button.

Via the menu Alarm entry you can setup an audio alarm to sound when a preset percentage of allocated time for a presentation or presenter has been reached. Typically, a first warning sound is generated when a presentation time is nearing the end, and a second when the presentation time is close by or done.
The alarm audio is generated by the PC's internal speaker, via a low and a high frequency tone with a preset duration.

Note: Requires an internal speaker or 'beeper'.

Alternatively you can select a music file to be played and in this way get the indication that the presentation is nearing the end or has past the allocated time slot

See the following screenshot.

In the presentation control window, the timer progress bar label will colour orange after 75% of the allocated time is reached (default is 75%) and red after 99%.

In this form you can define how the presentation timer alarm parameters are set. Specify after which percentage of time the colour indication changes, and whether an audio alarm is used.

Below you can define whether you do or do not want not to send Text warning messages to the presenter on the lectern, based upon the time slot allocated, and the percentage of time elapsed.

Presentation timer warning in percentage of allocated time slot

Orange after % of allocated time slot   (default = 75)   `75`

Red after % of allocated time slot   (default = 99)   `99`

Message to send after percentage of allocated time slot

☑ Warning1 as defined under Messages

☑ Warning2 as defined under Messages

Audio alarm sound

● YES, do provide an audio warning to me (default)

○ NO, do not provide an audio warning to me

Automatic Text message warnings to presenter

● YES, do send warning messages to the presenter

○ NO, do not send automatic warning messages (default)

Audio alarrm low and high fequency

Audio low Hz frequency   (default = 2500)   `2500`

Audio high Hz frequency   (default = 3600)   `3600`

Frequency duration in milliseconds (default = 1000)   `1000`

Alarm repeat at 75%   (default = 1):   `1`

Alarm repeat at 99%   (default = 2):   `2`

Messages

Warning1:   `Dear presenter, 75% of your time has expired !`

Warning2:   `Dear presenter, We kindly request you to finalize your presentation as 99 % of your time has expired !`

☑ Play a file instead   🎵 Test   Play: C:\Users\Public\Music\Sample Music\Kalimba.mp3

❌ Cancel   ✓ Apply

An audio warning will be launched for the Remote-Q operator (Audio alarm sound option is set to True). Instead of using the internal PC beeper, in this example it was opted to Play a file instead. Use the menu File entry (Alt F) to select the music file you want to play.
Via the Test button you can test your setup
Note: you can change the frequencies and duration of the frequency in the appropriate textboxes. They will be enabled for access if the 'Play a file instead' check is removed.

On the right side of the form you can specify whether, and which text messages are to be send to the presenter. They will appear in a textbox in a form on top of any running application on the lectern.
This way you can inform the presenter.

Note: The presenter has to acknowledge the receipt of the message (by pressing the Close button) before he or she can continue the presentation. If not, ILStranslator will unload the message form, so that Remote-Q regains access, after 10 seconds.
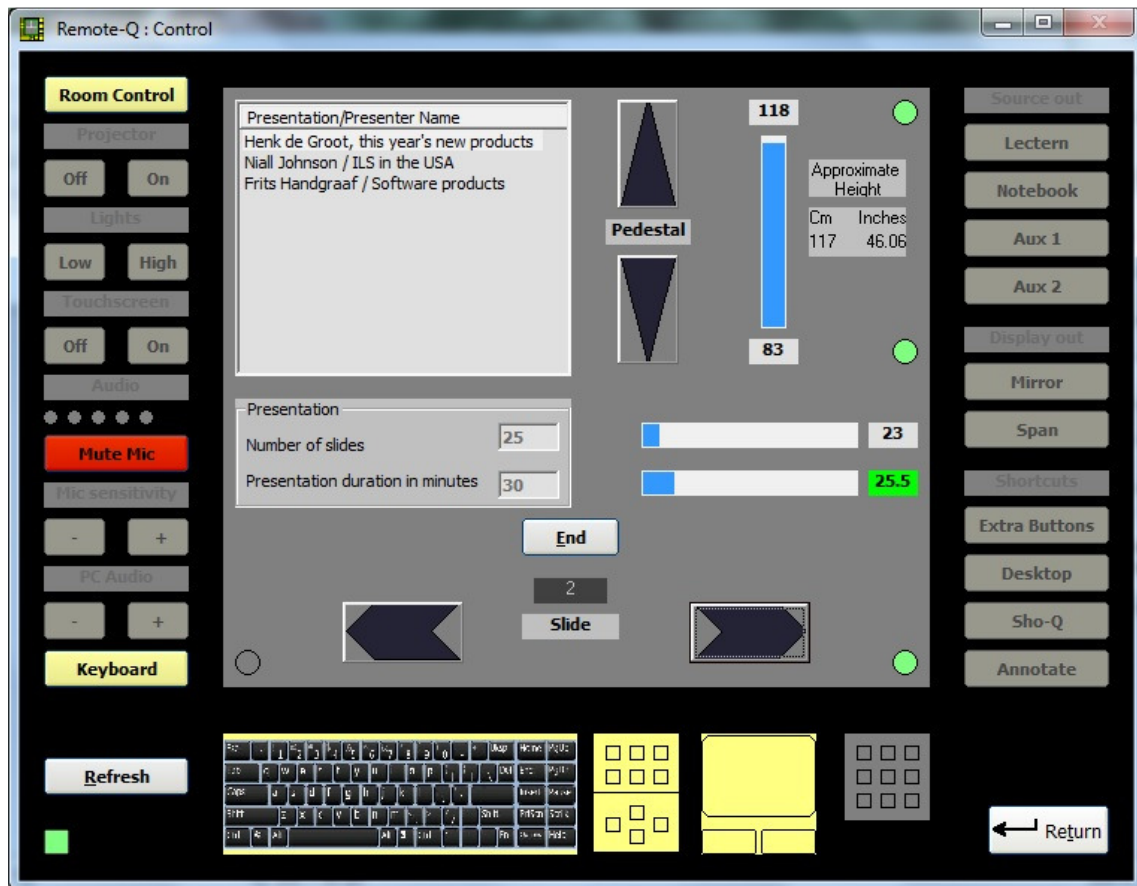
Selecting presentations.

The Control button will empty the listview in the Control window, and fill it up with the list of Presentation/Presenter names. The Control window will come up with the listview populated.

While in the Control window, double-clicking one of the presentation/presenter name records (you would typically start with the first entry) will:

- fill the presentation Duration in minutes field.
- fill the Number of slides field.
- if PowerLift (pedestal) mounted, automatically adjust system elevation to the requested height by the Presentation/Presenter name as defined in Setup/Presentations. If the pedestal is elevated, you temporarily will see the elevation direction circles colour orange, as indication the elevation is in progress and as warning not to hit the elevation buttons.
- Enable the Start button. Note that you still have to hit the Start button to start the presentation timer and to enable the slide advance buttons.

Once the presentation is done, and you have hit the End button in the Control window, the selected Presentation/Presenter name will be removed from the listview. Select the next Presentation/Presenter name (double-click) to continue with the next presentation.

Using this method assures little time is spent in changing over from one to the next presentation. The pedestal height is automatically adjusted, presentation duration and number of slides loaded and Start button enabled. Once the presenter is there, the Remote-Q operator can start the timer, advance slides on behalf of the presenter and keep an eye on timing.

The following screenshot shows how the data is loaded and executed after selecting a presentation/presenter name via double (left) mouse click, and advancing slides.

Note: The 1st record in the Presentation/Presenter Name listview was double-clicked and selected, duration in minutes was filled in, Number of slides was filled in, pedestal height was automatically set to the nearest possible.

In the timeslot, 25.5 minutes are left. The 2nd slide is being presented and there are 23 to go.

While ILStranslator and the lectern are in the process of adjusting the pedestal height, both the pedestal up and down indicators will colour orange. Once the requested height has been reached, these indicators will colour light green, as shown in this screenshot.
If a manual pedestal up or down adjustment is performed, the direction is indicated.

If the slide backward button is pressed, the left slide indicator will colour light green.

Killing Applications or Processes.

Once a successful connection has been made, the Presentation Setup form will display 2 more menu entries, called Programs and Message.

Via Message you can generate an ad hoc message to be send to the lectern, e.g. to assist the presenter.

Via Programs, a new form will be brought up.

In the following screenshot, the Programs command button was pressed to obtain a list of running applications on the lectern.
Hitting the Applications command button will fill the list with running Applications on the lectern.
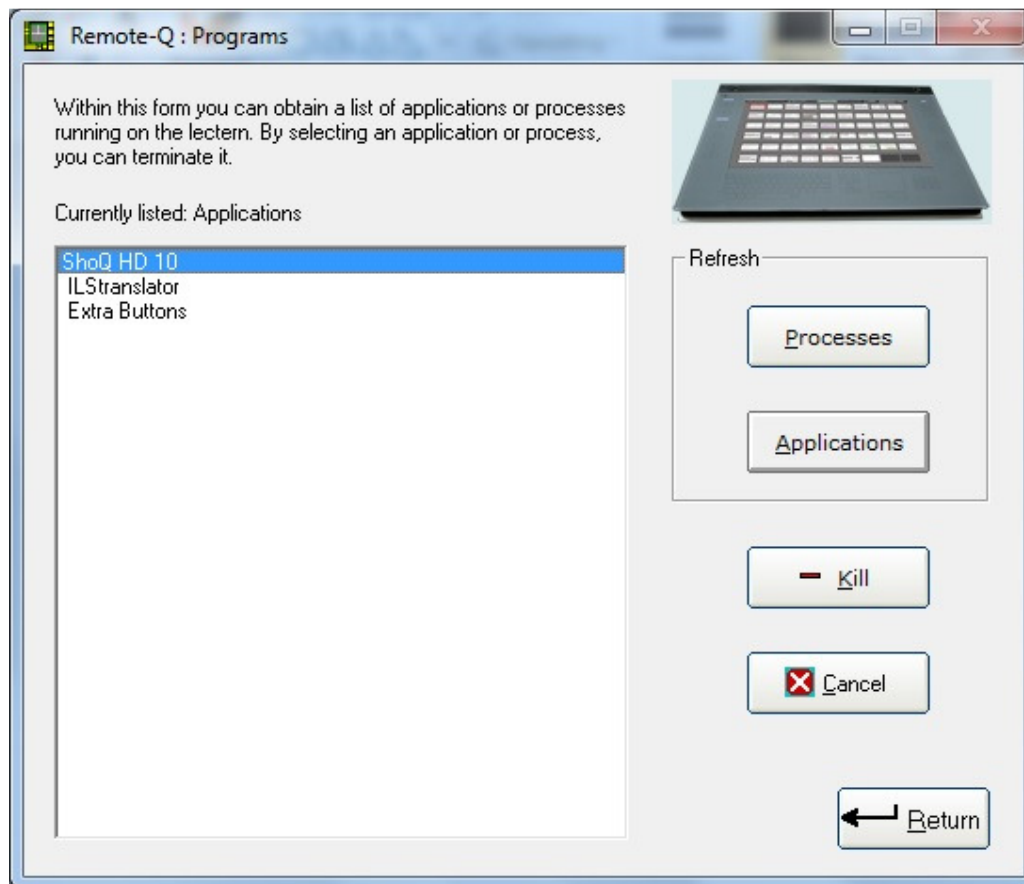
If you select a listed process or application (use the left mouse button and click once), the Kill command button will be enabled, allowing a process or application running on the lectern to be terminated. This is an ultimate method to stop the presentation software or other program the presenter is using.

Note: In some cases you may have to kill a process first before you can terminate an application.

Hit Cancel to un-select a process or application.

Note: Killing a process or terminating an application is similar to using the Windows task manager on the lectern. This functionality was build into Remote-Q to remotely kill a process or terminate an application left running by a previous presenter, thereby helping preparing for the next presenter.
Note: Other than Sho-Q, Remote-Q can not start applications on behalf of the presenter.

The below screenshot shows Processes being run. Here again you can select one and Kill it.
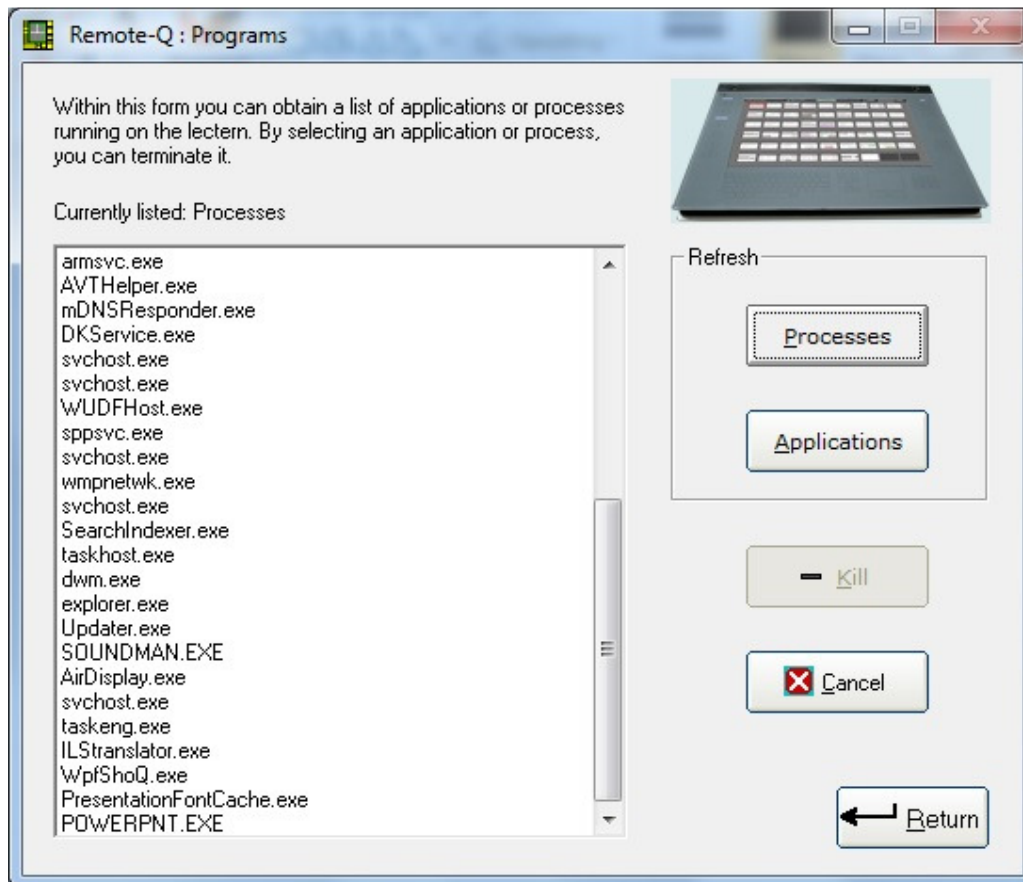
Elevating the pedestal.

Presenters can elevate the pedestal (up or down) in 2 different ways. The first method was explained in the chapter Extra Buttons (page 23). The ILS Extra Buttons window has a button for moving up and a button for moving down.
As the ILS Extra Buttons window can only be brought up when the Extra Buttons (glass-plate) button is backlighted, this is not always handy or logical to the presenter.

The second method is by disabling the keyboard on the ILS22M, either via a presenter Keyboard press, or via Remote-Q.
Either disabled via the glass-plate or via Remote-Q, the following image appears on the Remote-Q PC:
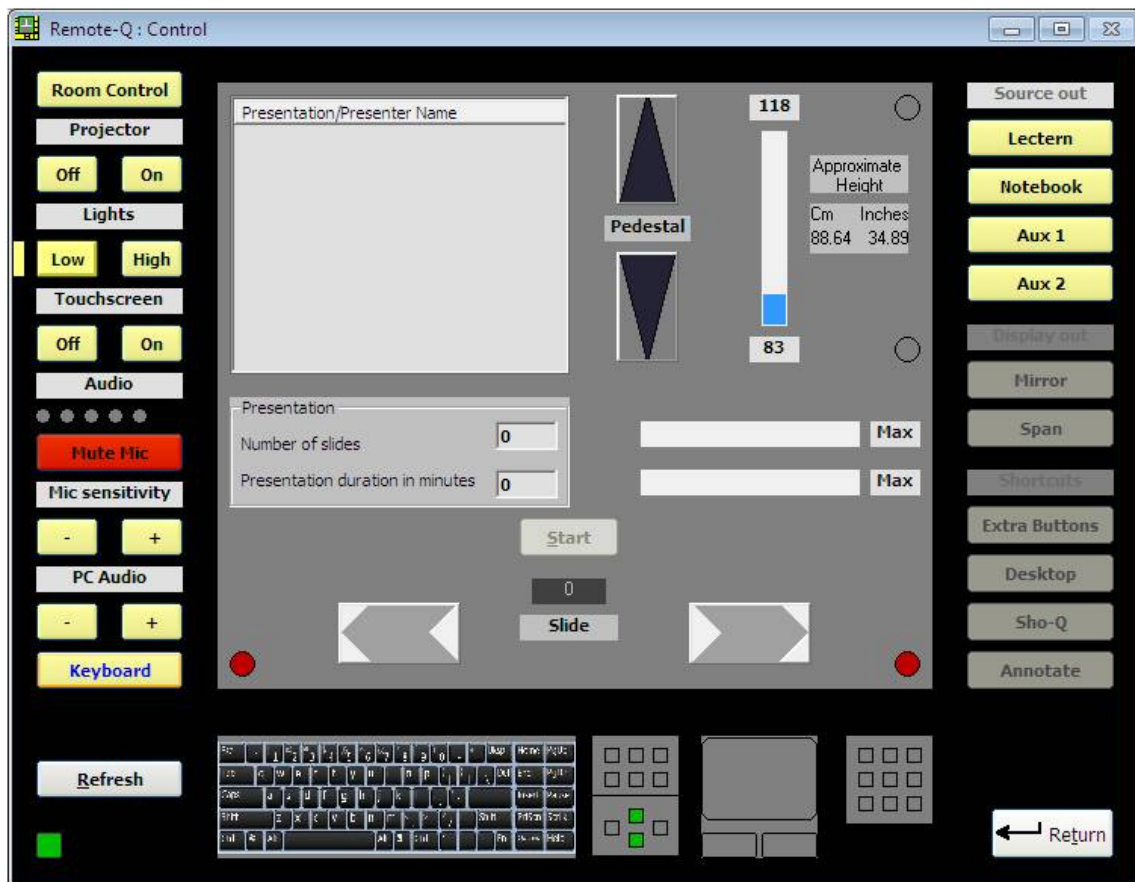
Note that the keyboard backlight is off, indicating the keyboard is disabled. Specifically note that the up and down arrows are now green back lighted, both on the lectern and as here indicated via Remote-Q. The presenter can now press and hold the arrow up key to move the pedestal up, until released again. Same applies for the arrow down key.
Once the key is released, Remote-Q will be informed with the new set height.

Note: Whereas the presenter can elevate the pedestal up or down using this method, this can not be done via Remote-Q. Within Remote-Q, use the Pedestal up/down buttons.
Note: After enabling the keyboard again (hit the Keyboard button), the up/down arrow keys function as 'normal' again.

LED reading lamp.

The latest ILS22 series (ILS22M) can support a LED reading lamp which can be mounted in the second XLR connector. This is the XLR socket on the right hand side from the presenter.

Note: Extreme caution has to be taken before installing a LED reading lamp in this socket, as it can also be used for a 48V powered second microphone. Exchanging a LED reading lamp for a mic or vice versa can cause severe internal electrical damage, violating warranty. Consult the ILS22Setup software user guide and the ILStranslator software user guide first, or contact ILS when in doubt.
Note: Before installing a LED reading lamp, end ILStranslator and apply changes in ILS22Setup first.

The LED reading lamp is turning on after hitting the Lights Low button:
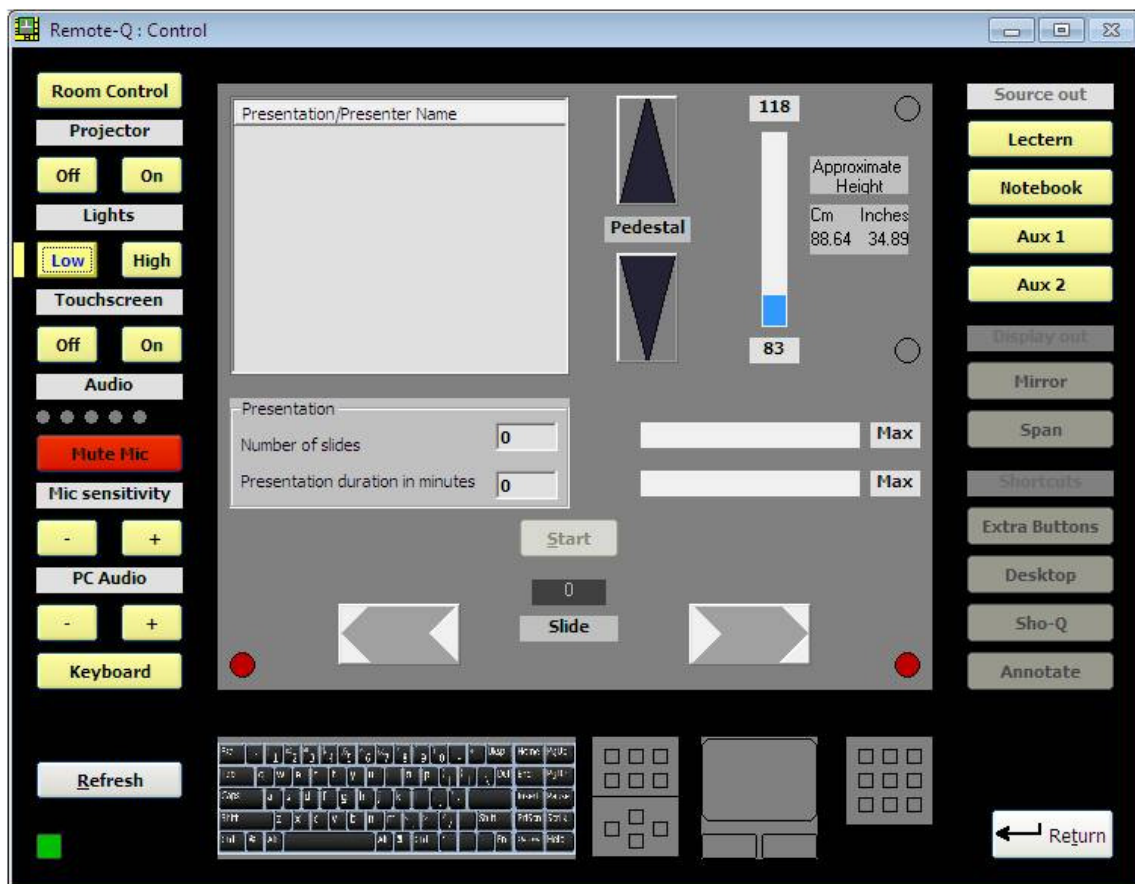
Note that to the left of the Lights Low button the Remote-Q operator now sees a yellow colored indicator.
Note: There is no indicator on the ILS22 glass-plate.

The Lights Low and High buttons are meant to decrease or increase room lightning, either via a relay in the ILS22 or via a connected intelligent controller.
Hitting the High button will turn the LED reading lamp off.
Note: Only use a LED reading lamp supplied by ILS !

Conclusion.

Remote-Q is designed to support presenters via a remote connection to the ILS22 Presentation and Control System.

Presenters can move away from the ILS22 system and request A/V presentation support personnel located in a room nearby to assist them, e.g. when they mix with the audience, to:
- advance to the next slide in their presentation (or go slides back).
- give a warning when presentation time is running out.
- change volume setting or mute their microphone.
- start up a connected projector or increase room light on request.
- end the presentation and introduce the next presenter.
- and much more…

A/V presentation support personnel, via Remote-Q, always have a one-to-one overview of what the presenter behind the ILS22 system is actually seeing and what functions are available to him or her:
- which glass plate buttons and headers are enabled.
- how the system will react when a button or header is pressed.
- make corrections and adapt the situation when required.
- do anything else without presenter required action.
- And much more…

Marketing and A/V support personnel can setup presentation parameters, including Presentation/presenter name, number of slides, duration and requested pedestal height, to streamline presentations:
- automatically adjust to the new presenter.
- adjust last minute changes.
- keep track of elapsed time, number of slides and intervene when necessary.

The presenter (him or herself) is confident, less stressed, knowing that A/V support personnel, via Remote-Q, is able to re-act immediately, without phone-calls, human required presence behind the lectern or cable changes. The pedestal is adjusted to his/her requested height, and he/she is supported…

So, in that extend:
- the Company organizing presentations is supported.
- A/V presentation support personnel is supported.
- the presenter is supported.

And as customer of ILS, you are supported…

The Remote-Q software user guide is written by Frits Handgraaf.
Version 5, December 2014

Questions and answers.

Q: Why would I select a control connection over serial RS232 and not over LAN TCP/IP ?
A: There are a number of reasons:
- The ILS22 is equipped with 4 RS232 connections (1 inside, 3 externally) and developed with connectivity to external devices in mind. System installers can attach intelligent controllers for different purposes, e.g. projector control, room light control, master and microphone volume control, source switching etc. Most of these controllers have RS232 interfaces. (Use ILS22Setup to define controllers and commands to send).
- ICT departments may opt to NOT attach the lectern system to the local area network (for whatever reason).
- If a network goes down, you loose control capabilities. The dedicated line connection between the lectern (ILStranslator) and Remote-Q assures direct control from a simple PC or touch based system.

Q: Is the length of the RS232 connection limited to 50 feet (15 meter) ?
A: "Cable length is one of the most discussed items in **RS232** world. The standard has a clear answer, the maximum cable length is **50** feet, or the cable length equal to a capacitance of **2500 pF**. The latter rule is often forgotten. This means that using a cable with low capacitance allows you to span longer distances without going beyond the limitations of the standard. If for example **UTP CAT-5** cable is used with a typical capacitance of **17 pF/ft**, the maximum allowed cable length is **147** feet."

Q: What is the pin-layout required in this direct connection ?
A: Basically required is a so called null-modem cable, also called 'cross-over cable'. Connect transmit on one end to receive on the other and vice versa (these are pin 2 and 3) and signal earth to each other (pin 5). So:
2 - 3
3 - 2
5 - 5
As no hardware handshaking is required for the communication, these are the only 3 pins, from the 9, required.

Q: To which RS232 connector on the lectern do I have to connect ?
A: This depends on how it was setup with the ILS22Setup wizard (this is a separate program which comes with the lectern). Default is COM1, the RS232 connector next to the DVI connector. COM2 and COM3 are on the opposite side in the connector bay.

Q: Which COM port do I have to select in the PC on which Remote-Q is installed ?
A: Remote-Q will check which COM ports are available in the COM1 – COM9 range. From the available comm ports in the drop-down list, select the one you want to use on your PC.

Q: Which baudrate setting do I have to select in Remote-Q for my PC ?
A: The baudrate setting has to match with the baudrate setting in the lectern. The baudrate setting in the ILS22 is defined with the ILS22Setup wizard. If not changed, use the default which is 19200 baud.

Q: Can I verify in the registry what the communication settings are ?
A: If you startup ILS22Setup in the lectern, it will give an overview of all communication settings (to controllers and to an attached PC) and command strings being setup, on the very first page. You can also verify or change settings directly via regedit. Location is This Computer\HKEY_CURRENT_USER\SOFTWARE\VB and VBA Program Settings\ILS22Setup\Public\strPCComm

Q: How can I optimize speed between lectern (ILStranslator) and Remote-Q ?
A: In the Remote-Q Setup window, select Extra from the menu. Adapt ReadDelay and or CommandDelay to lower values. What are the best settings is hard to say and depending on the line condition and your PC hardware. We have been working with delays as low as 0.1 second. Also, communication speed (baudrate) is of influence, but setting the baudrate higher might require increasing ReadDelay and CommandDelay. In our tests a baudrate of 115200 and read/command delays of 0.1 seconds worked smoothly. See the last Appendix in this guide: Optimizing communication speed.

Q: What if I want to use a TCP/IP (wired LAN or WiFi) connection instead of RS232 ?
A: When Remote-Q is first started, go to the Setup form and select the TCP/IP option, specify the correct IP address and TCP listening port on the lectern (as specified with the ILS22Setup Wizard). Then use the Connect button to connect. (Note: Do not use the Control button).

Q: After I ended ILStranslator via Remote-Q, how can I connect again via TCP/IP ?
A: Ending ILStranslator will close the TCP/IP socket. Startup ILStranslator. In the Remote-Q Setup communications form, select Connect in the TCP/IP menu.

Q: What if I want to use TCP/IP access instead of earlier successful RS232 connections or vice versa ?
A: When Remote-Q is starting up first time, it is assuming RS232 access is default. Once a first successful connection is made over RS232, Remote-Q will attempt to connect over RS232 all the next times it is starting up. Same applies when a first successful connection over TCP/IP was made.
Stop ILStranslator on the lectern, and run ILS22Setup. Opt for TCP/IP or RS232. Specify the TCP listening port or the ILS22 RS232 comm port and baudrate.
Start ILStranslator again. ILStranslator will now go into TCP listening mode or convert back to RS232.
Within the Remote-Q Setup Communications form, opt for RS232 or for TCP/IP. Specify the correct ILStranslator TCP/IP address if you want to connect via TCP/IP. Opt for RS232 if you want to connect via RS232 and specify correct comm. port and baudrate. Go back to Main and Exit. This will overwrite earlier registry values. Start Remote-Q again.

Q: While in RS232 connection mode, I am getting connection error messages. Why ?
A: If ILStranslator was stopped on the lectern, Remote-Q can no longer communicate. Also verify the RS232 cable connection, the selected comm. port on your PC and the baudrate.

Q: While in TCP/IP (LAN) connection mode, I am getting connection error messages. Why ?
A: It might be that the LAN cable is disconnected. In that case ILStranslator and Remote-Q both will think they are still connected. Via Remote-Q Comm Setup verify the status of the socket (State), Close if in error or indication that it is connected. On the lectern (ILStranslator), Close the connection. Once the connection is closed, ILStranslator will go back to 'listening mode'. Start up Remote-Q again.

Q: The screenshots show decimal with a "." decimal separator. Kan we also use "," ?
A: The ILS22 system is configured to use a "." as decimal separator, and store the information to registry this way. If you change regional settings to a "," that should work too.

Q: In the Control window, both slide advance buttons (next/previous) are disabled and the slide direction indicators are both coloured red. Why can I not advance slides ?
A: This is brought up by the software to indicate that both the keyboard and mouse on the lectern are disabled. In this mode nor keyboard nor mouse presses are passed on to the presentation software. Change ILStranslator Setup to keep the keyboard or mouse enabled while the touch screen is turned off.

Q: Changing from Mirror mode (same image on lectern as on projector) to Span (extended desktop) and vice versa, is not working. Why ?
A: There are a number of possible reasons:
- Sho-Q requires the lectern to be in Span mode. ILStranslator prohibits to change from Span to Mirror when Sho-Q is running.
- If a PowerPoint Slide Show presentation was started in Span mode, PowerPoint prohibits to change back.
- If no external second monitor or projector is connected, the Intel GUI will show up requesting external monitor settings, basically indicating it can not go into Mirror or Span mode with a second monitor missing (not connected).

Q: Trying to activate the ILS22 Annotation functions is not working. Why ?
A: If Sho-Q is running on the lectern, the presenter can use the embedded Sho-Q annotation function. In this case, ILStranslator is prohibiting Annotation functions. Via Remote-Q and the Programs menu function (in Setup/Presentations) you can verify if Sho-Q is running.

Q: Is Remote-Q compatible with earlier versions of ILStranslator ?
A: See the ILS website to check compatibility between ILStranslator, ILS22Setup and Remote-Q and download newest versions if required.
Remote-Q version 3.06 is compatible with ILStranslator version 3.05 (and up) and ILS22Setup 3.06.

Q: Where can I find more information ?
A: See www.intelligentlecterns.com

Appendix: Optimizing communication speed.

Communication speed is dependent on a number of factors, including medium (cable LAN or WiFi, RS232 cable), distance, LAN traffic etc. By adapting 2 parameters in the Setup Window, one can optimize the speed between Remote-Q (on the PC) and ILStranslator (on the lectern). These parameters are called CommandDelay and ReadDelay.
Command delay is the delay after sending a command before the next command is sent.
Read delay is the delay after first characters from the lectern have been received and before reading the entire input buffer:

First characters   Read entire
received   input buffer

|——————————————————————|
            Time >
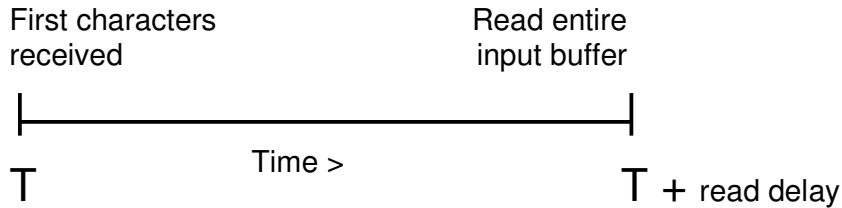
T   T + read delay

If ReadDelay is set too low, the input may not be complete. This will result in an error 13 report.
If ReadDelay is set too high, it will take longer to update or refresh the status.
Below table shows optimized settings with an old laptop running Windows 2000 and with an RS232 connection.
With a newer laptop (XP) and a WiFi (via 802.11g) connection, a read delay as low as 50 milliseconds worked.

Baud Rate	Command delay (milliseconds)	Read delay (milliseconds)
9600	600	600
19200	400	400
38400	250	250
57600	200	200
115200	100	100
TCP/IP (WiFi)	50	50

Default for both Command and Read Delay is 400 milliseconds. Adapt these setting for optimal results.

For latest documentation, refer to www.intelligentlecterns.com

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End of this Software User Guide…