

## The ILS22G Lectern - User Set up guide.

status July 2009



ILS22G interactive lectern is a special product designed to use for presentations, in particular Powerpoint presentations using the Sho-Q presentation delivery program.

## Table of contents

Sho-Q / Preparing the ILS22G .....	1
SOTouch .....	2
Virtual keyboard .....	3
Communication ports and relays .....	4-7
Table 2 .....	5
Microphones / PC .....	8
Touchscreen .....	9
Buttons .....	10-13
Table 4 .....	13
ILS22 Setup .....	14-15
ILS22 Setup Wizard .....	16
Backlight controller .....	17
Comm port open delay.....	18
Remote control .....	19
Projector control .....	20-22
Pedestal control .....	23
Powerlift calibration.....	24 -26
ILS Translator setup .....	27-28
Links and contact information .....	29

## Congratulations with your ILS22G product.

If you received this product fully integrated and ready to go, launch sho-Q to start presenting.

### Sho-Q

To start using sho-Q, you must connect a projector or external display to the ILS22G (VGA connector with converter or DVI-D connector on the DVIH socket provided).

You can then start sho-Q presenter and insert presentations, either through setting them ready with sho-Q Planner, by using sho-Q presenter's browser (press Manage Presentations, add) or by inserting a USB memory stick with a Powerpoint presentation that has been exported with sho-Q Pre-processor.

Please refer to the sho-Q user manual.

With all presentations lined up on the sho-Q Presenter selector screen, one touch will start the presentation, simply pressing next or previous slide, or select from view all slides... staged slides and embedded videos are controlled with translucent buttons appearing within the current slide view frame, when needed. Better control of videos is offered when sho-Q's plug in for inserting video's and flash files has been used (any sho-Q program automatically inserts Windows Media Player in Powerpoint)

Sho-Q requires that MS PowerPoint or MS Office 2007 or 2003 has been installed.

Sho-Q is optionally expanded with a system to capture the presentation along with the video image of the presenter in a virtual studio setting, in order to project the combined image in large auditoria. This is a unique productivity solution as the XGA signal can stream real time over normal IP lines and be recorded at the same time.

### Preparing the ILS22G

Using the right brackets, the ILS22G plateau may have been installed on the Powerlift electrical lift and foot, on the ILS24 19" lectern cabinet, placed on any table or a custom designed podium.

On the front panel on the right of the DVD unit there is the power on button. After switching on the power, the ILS-logo in blue must appear on the top left. Do not touch the system until it has finished completely its set up, marked by the fact that the Room Control and Keyboard buttons are lit. Tap on the monitor field to see if the cursor is picking up your touch. (When not, see end of next chapter)

Display: the ILS22G includes a 22" wide screen format display with 1680x1050 display resolution. For better reading in the display panel has been placed "upside down" in the plateau, you may see it start up with a start up screen that is upside down. The display panel is connected through the LVDS internal connector to the processor for the best performance and control possible.

In case the display remains displaying upside down, then the INTEL GMA controller has been reset.

Open the display icon in the bottom right task bar tray and set the display at 180°

The operating system display settings must show the second display at its best resolution and set as extended desktop device. (Right-click anywhere on the display and choose properties from the drop down menu. Select the settings tab. Select 2nd monitor, set its resolution with the slide bar and tick the extended desktop mark)

## SOTouch

The ILS22G is equipped with a very advanced new patented acoustic touch detection system.

Because of this new technology, the design is remarkable: although the entire glass surface responds to touch technology, there is no need for a bezel. The ILS22G uses regular tempered glass of narrow specifications.

The edges remain clear all around, any spilled water or coffee, any dirty finger marks can be cleaned with a regular wipe and glass cleaner. Avoid pouring water over the top of the glass where it can seep between glass and aluminum top with XLR sockets. The system is not entirely water-proof!

The top of the glass has been treated with the finest grain, to avoid that the presenter is looking at his mirror image.

The ILS22G touch implementation uses 2 sensors and detects locations from interference signals generated when the glass is touched. The calibration process is simple and with this technology – after you are satisfied with the reach of the touch – you never need to calibrate again.

The touch works with your finger or any object, provided the touch will generate vibrations within the glass.

You can place an object, for example a book, on the surface and the touch calibration remains unaffected.

When you change the resolution of the native screen the calibration is usually not affected, but if the screen ratio is changed, you may need to re-start the program.

The touch system in static mode is ideally suited for operating the sho-Q Presentation delivery system.

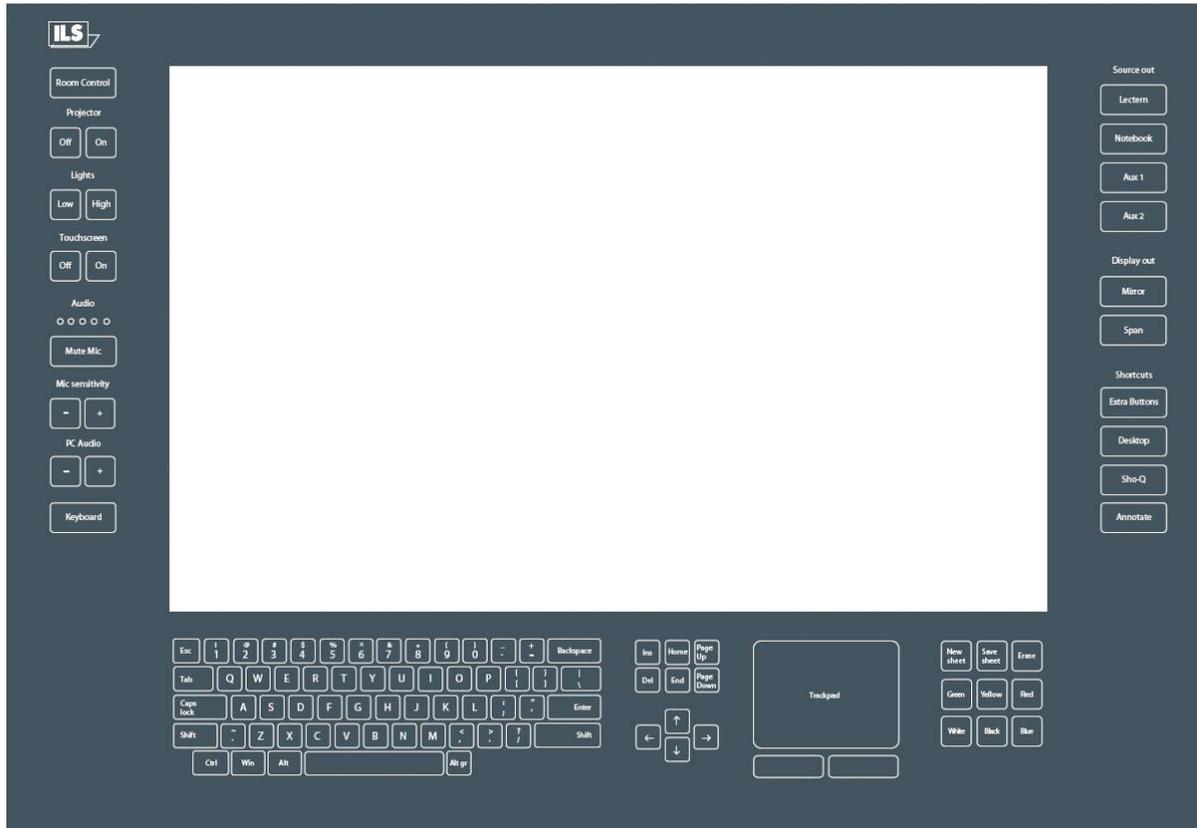
In static mode drag and drop features can be used as well.

We recommend that you use this mode in general operation, but for instant touch needs - such as in presentation delivery with PowerPoint or sho-Q - we suggest you disable the drag and drop feature.

This is done with a tick mark in the control panel of SO touch and eliminates the slight delay where the system is trying to understand if a touch is the beginning of a trail or just a touch.

Normally you receive the system with SOTouch pre-loaded

# Virtual keyboard



The bottom of the glass is printed with a mask and buttons.

On the left side you will find the room control commands, on the right side there are buttons for source selection and short-cuts. On the bottom area you'll see a keyboard, directional keys, a mouse pad, and an annotation pad.

When a keypad is activated the LED's behind the keypad are lit so that the keys become visible.

There are nine fields that can be individually programmed to be made visible.

Furthermore there are 5 level indicators that can be programmed, as well as signal areas for Projector, Touch, Mute and PC audio. (see diagram 1 on the next page)

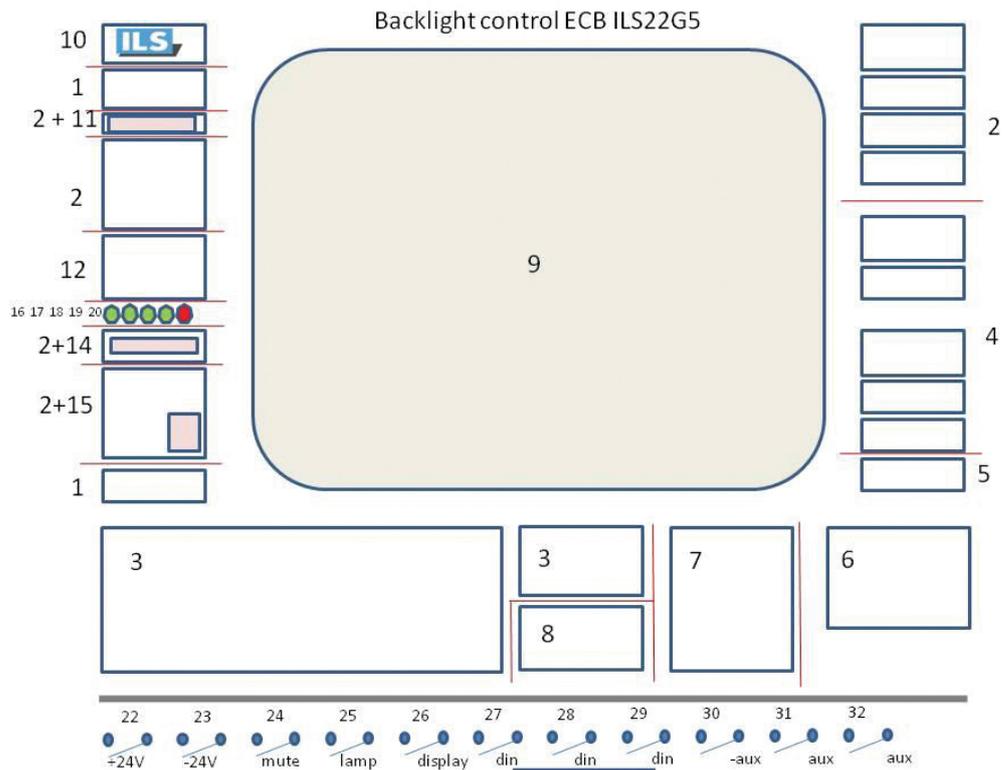


Diagram 1

In a normal setting almost all keys are invisible except for CONTROL and KEYBOARD (and ANNOTATION when this feature is included in future versions). If you tap on these keys the rest of the buttons will become visible. Tap again and they will extinguish and be insensitive to touch. Only lit buttons will respond to touch.

For operation and programming convenience the backlights are grouped by functional areas. (e.g. 2 for room control, 3 for keyboard, 4 for short cuts, 5/6 for annotation (for support in future system releases), 7 for the touch pad, 8 for directional keys.

## Communication ports and relays.

The ILS22 has 2 LAN ports, 4 COM ports (3 of which are on the outside) and 10 relays (in 3 plugs 8 are externally reachable)

Just like the backlight LED's, the relays are reached using the same protocol as for the backlight areas (see table 2)

In the I/O bay you will find 3 sockets, RPT 1, a DIN plug socket, RPT2, a stereo jack, RPT3, an RJ45 RPT1, DIN plug has pin 1 common and pin 2 or pin 3 to close the circuit.

This plug is intended for connecting to the electrical lift and operate the up & down control through the up and down arrow on the keyboard (when keyboard and annotate are not active).

The commands for this plug are reached through address 22 and 23 resp. (pin 1 ground, Pin 2 = relay 1 or function 22, Pin 3 = relay 2 or function 23 )

table 2

Commands backlight lector ILS

turn led on/off

Command:	\$xx_y?
Example:	\$02_2?
Meaning:	leds of field 2 are dimmed
	\$ start sign
	xx field number
	_ delimiter
y=	0 led off
	1 led on
	2 led dimmed
	? end of command

Fields

01	Room control / Keyboard button
02	Room control field*
03	Keyboard
04	Display out and Shortcut fields
05	Annotate button
06	Annotation keys
07	Touchpad
08	Arrow keys

09	
10	
11	Projector status red light
12	Touchscreen field
13	Touchscreen on (red)
14	Mute mic (red)
15	PC Audio + (red)
16	Audio L1
17	Audio L2
18	Audio L3
19	Audio L4
20	Audio L5
21	Arrow up/down (green)
22	Relay 1
23	Relay 2
24	Relay 3
25	Relay 4
26	Relay 5
27	Relay 6
28	Relay 7
29	Relay 8
30	Relay 9
31	Relay 10

Initialization

Change led dimmer frequency

Command:	\$F_xxx?
Example:	\$F_007?
Meaning:	Change the frequency of all the led dimmers to 20 Hz

\$	start sign
F	frequency
_	delimiter
xxx	value for frequency (0-255)
?	end of command

Frequency is calculated as follows:

$$\text{frequency} = 1 / ((xxx + 1) / 152)$$

$$xxx = 152 * (1/f) - 1 \quad f = \text{frequency}$$

Fill in the desired frequency 20 Hz

Value for xxx 7

real frequency due to rounding 19 Hz

Change duty cycle

Command:	\$Dxx_yyy?
Example:	\$D05_179?
Meaning:	Change the duty cycle of field 5 to 70%

\$	start sign
D	Duty Cycle
xx	field
_	delimiter
yyy	value for Duty Cycle
?	end of command

Fill in the desired Duty Cycle 70%

Value for yyy 179

Real Duty Cycle due to rounding 69.92188 %

RPT2, the stereo jack is issuing a +\or - 5 volt to switch the 2-way VGA switcher inside the ILS24G version with the cabinet that includes a 4-way and a 2-way Extron switcher (but may also be used for other purposes)



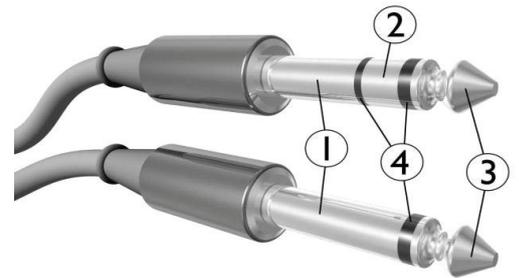
The RPT3 RJ45 has 4 circuits on its 8 connectors that are opened or closed by the relays for any need.

Do not apply more than 12 volts per pin pair!

The remaining 2 relays are for internal use (microphone mute switch and optional light switch)

Socket layouts:

1. Sleeve: usually ground
2. Ring: Right-hand channel for stereo signals, negative phase for balanced mono signals, power supply for power-requiring mono signal sources
3. Tip: Left-hand channel for stereo signals, positive phase for balanced mono signals, signal line for unbalanced mono signals
4. Insulating rings



3,5 mm jack plug stereo

1= white wire = ground

2= brown wire = ring

3= green wire = tip

relay no:

field protocol:

3,4

24 & 25

DIN plug 5 pins:

1= gray wire

2= yellow wire

1,2

4= pink wire

RJ 45 connector:

1= orange/white wire

2= orange wire

3= green/white wire

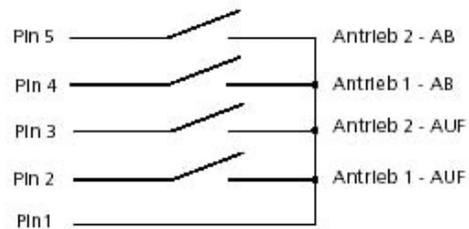
4= blue wire

5= blue/white wire

6= green wire

7= brown/white wire

8= brown wire



22 & 23

6,7,8,9

27,28,29,30

XLR5:  
 1= ground(shield)  
 2= switch ——— blue wire  
 3= negative signal ——— blue wire  
 4= switch ——— white wire  
 5= positive signal ——— white wire

relay no: field protocol:

5 26

5 26

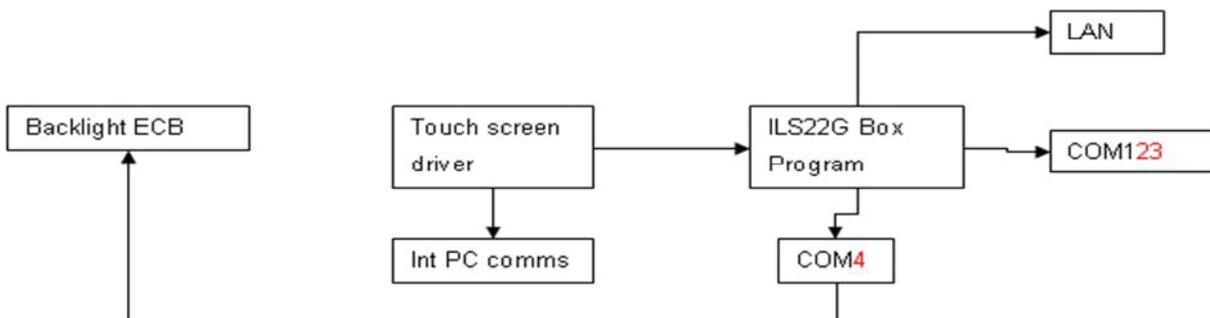
XLR3:  
 1= ground(shield)  
 2= positive signal ——— white wire  
 3= negative signal ——— blue wire

Note: Reserve on connector P4 are relay numbers 10 & 11 with respectively field protocols 31 and 32. Pin numbers P4 are 17, 18 (relay number 10); 19, 20 (relay number 11). All commands are issued through the COM4 port.

COM1, COM2 and COM3 are available to hook up RS232 controllable devices, such as projectors or the 4-way switcher inside the ILS24G 19" cabinet based version.



Next to the LAN network connector, the second LAN port can be used to connect to IP protocol driven control systems.



The flexibility in addressing and programming is endless.

However in our implementation we regarded mainly what functions are needed when one is standing behind the lectern. eg. 'Projector on' may trigger the projector to start, but you could also combine that with issuing commands to close the curtains, lower the screen and dim the lights.

Similarly the lights button is for having the lights up or dimmed, no matter how many bays of light switches are behind that. We do not claim to control every possible light setting. If that is required, use the "Extra Buttons"-button to open a room control application on the PC screen and use that to adjust the settings. This also applies if you require a local language keyboard; just program that link to an OSK under the "Extra Buttons"-button.

Depending customer requests ILS may program more keys and function keys under the extra buttons.

## Microphones

The ILS22G provides 2 sockets for microphones.



On the left you find an XLR5 connector to which our optional microphone is connected.

This option consists of a high quality Shure condenser microphone with pre-amplifier. Due to its modification it can be muted by touching the glass surface MUTE button on the left, and is thus brought under computer control (also possible from a remote PC...) the connector to the amplifier is the corresponding miniXLR4m in the I/O bay.



Mini XLR connections in the I/O bay...



The MUTE switch is executed by relay 5, field command 26.

On the right side is the XLR3 connector on which you place any microphone/phantom powered microphone with external pre-amp and amplifier. The mute button can still be used to address such a microphone system provided there is a way to connect over RS232, over IP, or through a relay.

## PC

The internal PC power is based on an industrial motherboard with INTEL945 series board with Core2Duo processor. This is a special board to provide the 4 COM ports and dual LAN with LVDS to the monitor and DVH for flexible connection of display devices. On the front of the ILS22G you find 4 additional USB ports (and 4 in the I/O bay), a multi format DVD player and the ON/OFF switch (hold 4 seconds before switching off to prevent accidental switching)

The system comes with the Microsoft XP Professional 32-bit Operating System.

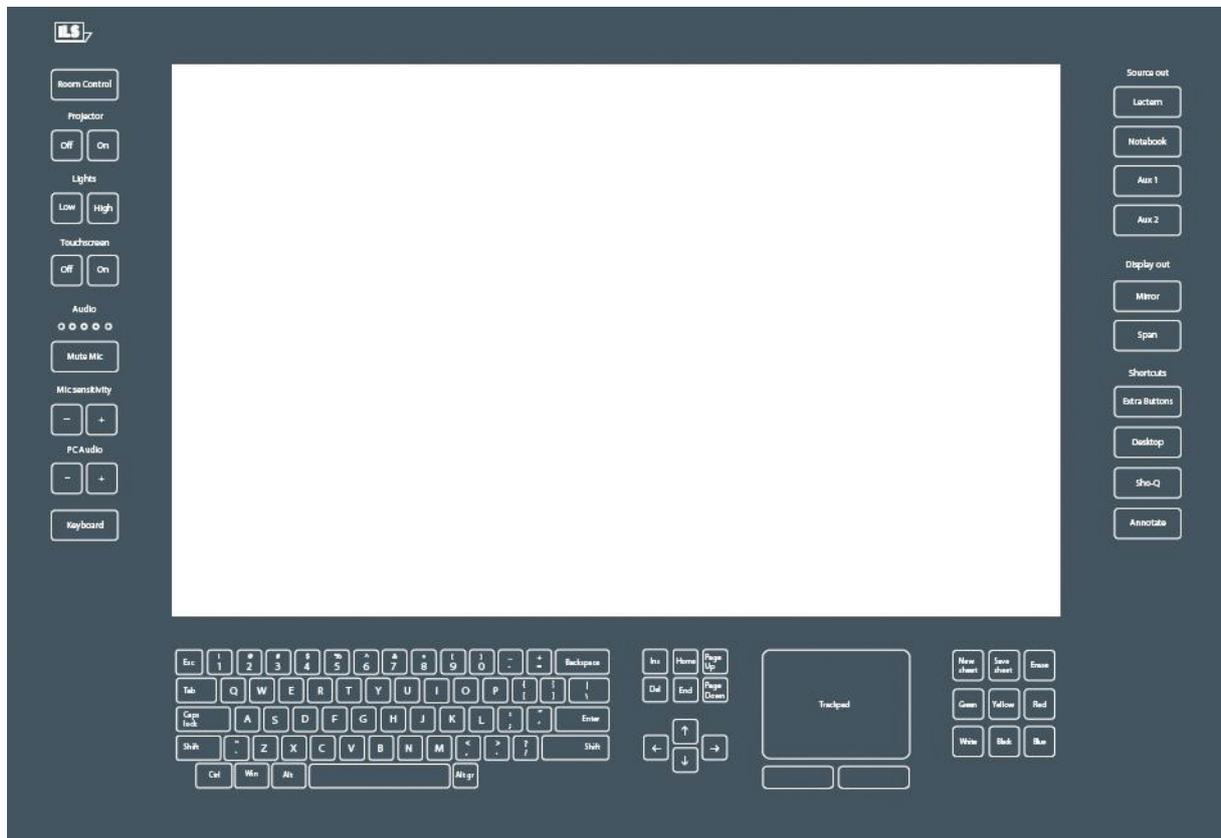
Optionally MS Office2007 will be added, but usually this is expected to be supplied and loaded by the client.

Sho-Q comes pre-loaded with the license key provided. If sho-Q Presenter is downloaded from [www.sho-q.com](http://www.sho-q.com) and installed by the client a "Sho-Q Evaluation Copy" banner will be visible on the output.

Instructions are provided in the software on how to obtain the license key to remove the banner in the output.

For further details, we refer you to the sho-Q user reference manual.

When you install your own MS Office software, please re-install sho-Q Presenter in order to insert the sho-Q plugins for MS PowerPoint.



Whereas the inner-side of the glass-plate functions as touchscreen for the LCD and the operating system, the outer sides (left, bottom and top) contain engraved headers and buttons for additional functions, and the integrated keyboard. These functions are available to the presenter if they are visible with the backlight turned on.

When the system initially starts-up, the Room Control, Mute Mic and Keyboard buttons are lit and can be used. When starting-up the lectern PC, please wait for the system to start up and do not touch the screen until these keys are lit.

To familiarize the user with the possible functions, ILS has provided a *default* driver set. You can adapt the program to suit your specific installation by adding or changing the pre-defined functions. With this version we have the modules available, and can quickly do that programming for you upon request.

ILS also offers a user definable driver set via *ILS22Setup*.

When you start up the system for the first time, this will provide you with an easy way to define the way buttons are going to be used. You can simply insert the communication codes via a *Setup Wizard*.

See the ILS22Setup Section for details.

## The Buttons.

keyboard

This key is located at the left bottom of the plate. Press this key to activate the keyboard buttons at the bottom of the plate. This is useful when you need to enter a filename or other text in an application.

When you press this button, the keyboard backlight will come on and the keys will respond to touch.

Pressing the keyboard button again will disable the keyboard (the lights will go out).

Note 1: Via Extra Buttons/ILStranlator Setup one can define whether the keyboard and/or mouse functionality should remain active if the Touchscreen buttons are turned off.

Note 2: The key marked Win, functions like pressing the start button in Windows XP and brings up the start menu. Pressing it again will hide it.

Note 3: although a touch keyboard is not meant for regular writing of prose, users that require a local language keyboard may bring up an on-screen keyboard from the accessibility folder of the PC, this can be started from the keyboard button or extra buttons-function if you so desire.

room control

This key, located at the top left, is used to activate or de-activate keys on the left (system control) and on the right (input/output control and additional functions). Which function buttons become available depends on the number of times the key is pressed in a 1 to 5 sequence. See table 4 for an overview.

The 5th press turns the system back to its original state. This way the number of buttons a presenter might have to deal with is limited. Usually only the keys that are needed within a presentation will be visible. Typically after setup, the presenter will only be confronted with 3 back-lit buttons: Control, Mute Mic and Keyboard.

Projector

off

on

This key group is used to directly control an attached projector from the system. The On key will send a command string to turn the projector on, the Off key will shut the projector down. The Projector header can be pressed to send an inquiry command string, e.g. for requesting current lamp hours or power query. The command strings can be send over a serial (RS232) connection. Alternatively, strings can be send to a serial attached intelligent controller, such as from EZcontrol, Extron, AMX or Crestron. In the standard version, these keys are NOT defined, as they are dependent on manufacturer and model. However, this can be set via the also supplied ILS22Setup program.

## Lights



This group of keys is aimed to control the room lighting conditions. If an intelligent room controller is attached (RS232) the keys can be programmed to send a command string to the controller. The Lights header can be used for another function, e.g. screen down for the projector. In the standard version, these keys are NOT defined. However, this can be set via ILS22Setup.

## Touchscreen



After a 1st press on Room Control, these functions become available. In some cases, it might be required to turn the glass-plate buttons off, e.g. when a presenter wants to present from paper on top of the glass without risking accidentally executing functions. When the touchscreen is disabled (press the Off key), all other keys are disabled and the light behind the keys will blink in a 2 second sequence. The ONLY key that will respond in this mode is the On key. The Touchscreen header can be pressed (functions as a toggle) to turn the light behind on or off.

## Audio



The audio group consists of a header and 5 led's (4 green, 1 red), which can emit light in two stages, e.g. light green and darker, light red and darker, indicating the master audio level of the build-in mixer. The master volume is indicated in a range from 0 to max, e.g. all off or all on (including the red LED) on a 0-100% basis. A setting of 50% results in first 2 green led's full on, 3rd LED light green. The Audio header functions as a toggle to show or hide the volume setting.

Note: The audio volume can be adapted under the PC Audio group, see further in this document.

Note: When the Touchscreen is OFF, the LED's in earlier versions, get another meaning. The red LED indicates that the internal (Shure) microphone is muted, the green LED next to it indicates the mic is not muted. See next paragraph.

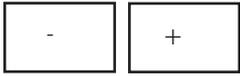
Note: A blinking red LED indicates the PC Audio master volume is muted. See the PC Audio group description below.



The Mute Mic key is to mute/un-mute the so called Internal microphone connected to the top left socket (as opposed to a loop-through microphone connected in the top right socket). When pressed the backlight will blink to indicate the microphone is muted. Press again to un-mute. The microphone control functions are re-programmed to address an external amplifier controller when the XLR sockets are connecting microphones straight to an external amplifier without a local pre-amp in the microphone foot for local on/off control.

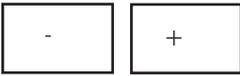
How the Mute Mic button is functioning is set via ILS22Setup.

### Mic sensitivity



Intended to increase or decrease the internal microphone level or bias setting. In the standard version, these keys are NOT defined. The Mic sensitivity header functions as a toggle, showing or hiding the master volume setting (see also next paragraph). Via ILS22Setup one can define how and with which communication setting Microphone volume is controlled by an external controller.

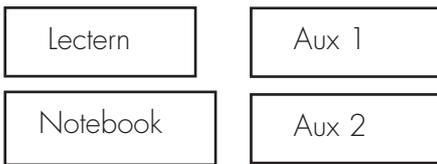
### PC Audio



Increases/decreases the master volume of the build-in mixer. With these keys the presenter can locally adjust the volume output of the system. On a 0-100% basis, the audio level is indicated by the 5 LED's (4 green, 1 red) under the Audio group. See earlier in this document. The PC Audio header functions as a master volume mute/un-mute toggle. When pressed the master volume is muted. The muted state is indicated by a blinking red LED under the Audio group. Press again to un-mute.

Note: Although the master volume may be muted, the LED's still indicate the audio output volume level.

### Source out



This group of keys is intended to select the output source, whether the Lectern System, an external connected notebook PC or Auxiliary devices such as DVD player or other devices. Lectern is used by default. If an intelligent external switch controller is connected (via RS232), command strings can be send to the controller. In the standard version, these keys are NOT defined, as they are dependent on manufacturer and model.

Note: Functional behaviour of the keys is defined via ILS22Setup.

### Display out



This group of keys sets up the external display or projector. Mirror will show the same image as on the system display, Span will extend the system desktop to the connected projector or external display. In the current version, these keys are NOT defined. The Display out header key will bring up the embedded graphics controller interface, so that extended desktop or mirror can be set up manually.

(Procedure details: to switch settings you must first assign the same resolution of the external graphics display port to the internal monitor. After applying that, you can make the switch AND set or reset the screen orientation; the internal monitor is set to 180° rotation)

The Display out header key will bring up the embedded graphics controller interface, so that extended desktop or mirror can be set up manually.

(Procedure details: to switch settings you must first assign the same resolution of the external graphics display port to the internal monitor. After applying the setting, you can make the switch AND set or reset the screen orientation; the internal monitor is set to 180° rotation)

shortcuts



The shortcuts group provides a quick manner to activate additional functions. The Extra Buttons key will bring up a window on the LCD screen with additional touch buttons. The Desktop key will show the desktop by minimizing all windows into the taskbar.

Note: When Sho-Q Presenter software is running, this key will bring up the taskbar.

The Sho-Q key will start up Sho-Q Presenter software. Although normally Sho-Q is started with system startup (via a shortcut in the start menu), this key can be used if Sho-Q was stopped and needs to be started up again.

The Shortcuts header key emulates an Alt + Tab keyboard entry to quickly jump from one program window to the next one.



The Annotate key activates the annotation keys in the bottom right part of the glass-plate. In the standard version, these keys are NOT defined. An implementation is planned once a software update is made available for the touch technology to include drag & drop capability.

Functions becoming available and being activated after a number of Room Control key presses, when using the default set up:

Number of Room Control presses	Activated group of keys	Remarks
0 zero state	Room control key, Mute mic, Keyboard key	System startup condition
1 limited action	Touchscreen group, Audio group	Ability to turn Touchscreen off
2 setup mode	Projector group, Lights group, Mic sensitivity, PC Audio, Source out	
3 expert mode	Shortcuts	
4 future mode	Annotate	
5 zero state	Room Control key, Keyboard key	System startup condition

Table 4

## ILS22Setup

The program to configure your ILS22 with ease.

### Introduction.

As the name of the program suggests, ILS22Setup gives the end-user the opportunity to program the behaviour of the ILS22 with respect to the control functions. The control functions are located to the left, bottom and right of the system LCD screen, and they are engraved on the glass plate.

Simply put, the ILS22 glass-plate buttons and headers can be used by the presenter, end-user or supporting technicians to execute commands directly (e.g. startup the Sho-Q Presenter package), enable or disable keyboard entries, increase or decrease system audio volume output etc. By pressing the Touch Screen Off button one can temporarily disable all these keys (until the On button is pressed). This is handy when presenters use the surface for other purposes than presenting.

The ILS22 and embedded functions in general can control:

- An attached projector. Power On, Power Off, or definable commands for example inquiring power status or lamp hours.
- Room light condition. Turn light higher or lower.
- Audio volume. Higher or lower or mute.
- Microphone volume, mute/un-mute.
- Display out selection, either Lectern itself or attached devices such as Notebook or auxiliary.
- Electrical pedestal elevation up/down.

All of these functions depend on the embedded system software driver which is called ILStranlator, and the setup as defined through ILS22Setup.

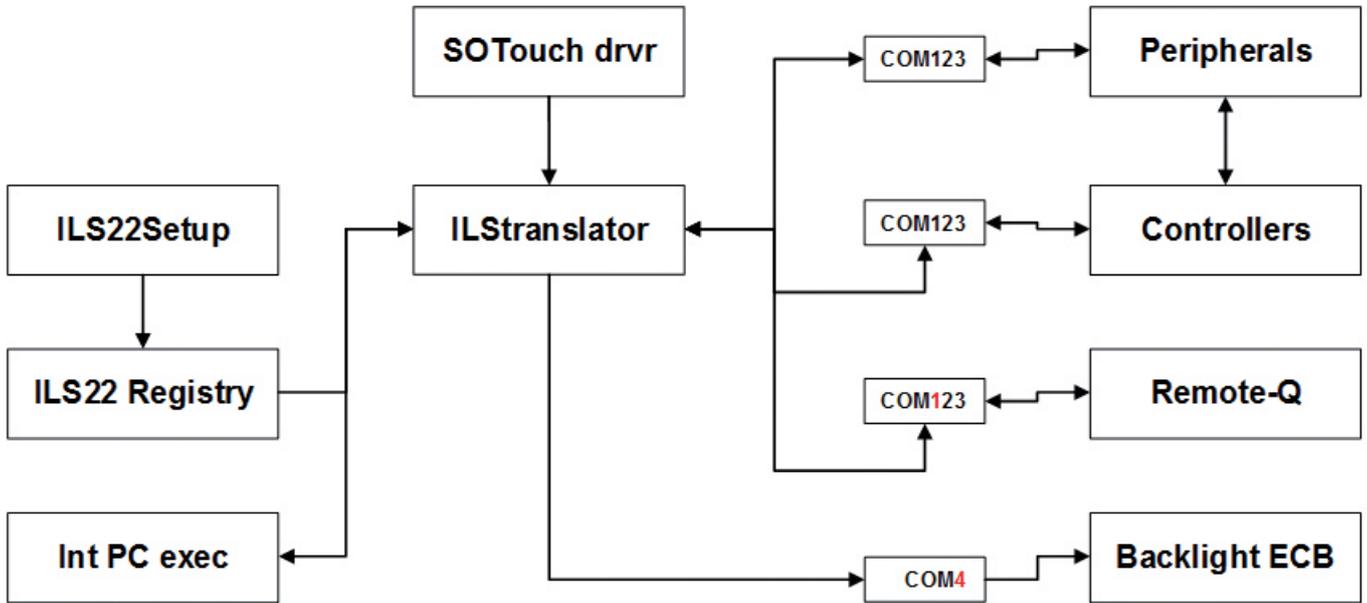
There are 3 possibilities per control function:

- The ILS22 will do it. Internal software in ILStranlator, internal relays and direct communication (RS232) to external devices are under direct control of the ILS22.
- The ILS22 has nothing to do with it. Glass-plate touches have no effect, external devices and circuitry is used.
- The ILS22 is setup as an intermediate or user-interface. Glass-plate touches will be translated into commands to external intelligent controllers which will perform the requested action.

ILS22Setup makes the lectern a hybrid system. You can choose and match according to local conditions and requirements:

- Select which device is taking the action.
- Define communication parameters.
- Which keys are programmed for action.
- Enter the ASCII command strings you want for external control.
- Which relays in the system are used.

The following schematics show how all components work together :



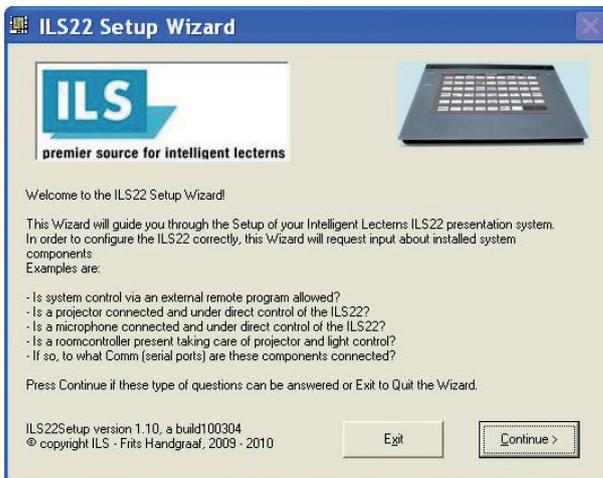
The ILS22Setup wizard is used to determine which peripherals are under direct control of the ILS22, which peripherals are controlled via external intelligent controllers, which communications settings and command strings are used to address peripherals and controllers, and whether remote control (for instance via Remote-Q or other controllers) is enabled. The ILS22Setup wizard is saving all this to the lectern system's registry.

At start up, ILStranlator will read the registry. If ILS22Setup was not used during installation, ILStranlator will use the default values. The SOTouch driver determines which glass plate buttons or header were pressed, and passes this on to ILStranlator. In turn, ILStranlator will 'translate' this to embedded system functions or pass it on to attached intelligent controllers, or react to external controller supplied commands.

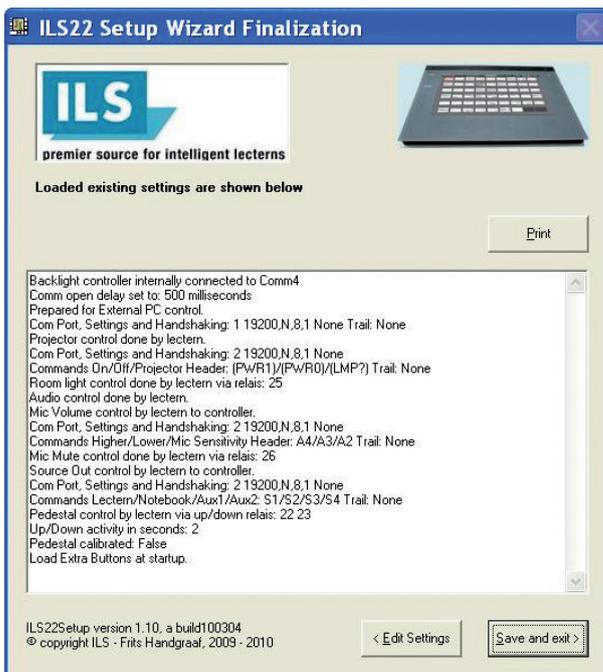
The ILS22Setup Wizard will guide you through the possibilities. Each form will show what the default factory setting is.

## The ILS22Setup Wizard.

The ILS22Setup program when first started, will show up as a XP-like Microsoft Wizard.



If ILS22Setup was executed before and parameters were saved to the system registry, the following form comes up:



In order to change the Setup, press Edit Settings (Alt-E).

The wizard is self-explanatory, but we will continue with some examples.

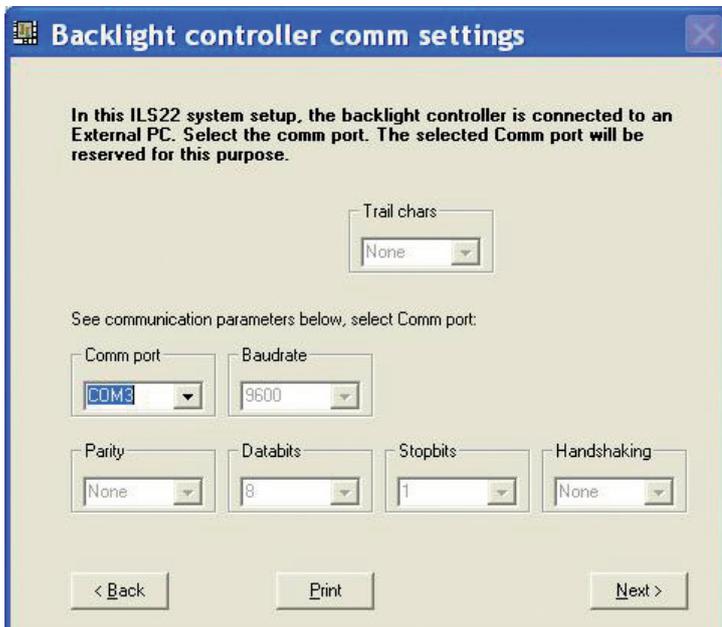
Note: Moving the mouse pointer over a button, option, check box or text entry field will bring up related tool-tip-text.

## Backlight controller



When the ILS22 is delivered in a standard setup, an internal PC is used to control the system and the backlight and relays controller. The internal PC has 4 serial comm ports, of which COM4 is used to communicate with the backlight controller (see above scheme). In situations where an external PC is used, ILStranlator needs to know to which serial port will be used to address the backlight controller inside the ILS22.

Note that only the serial port can be changed. The other communication parameters are fixed.



## Comm Port open delay

Whether or not the backlight and relays controller is connected to the internal or to an external PC, the comm. ports needs some time after an open comm port command.



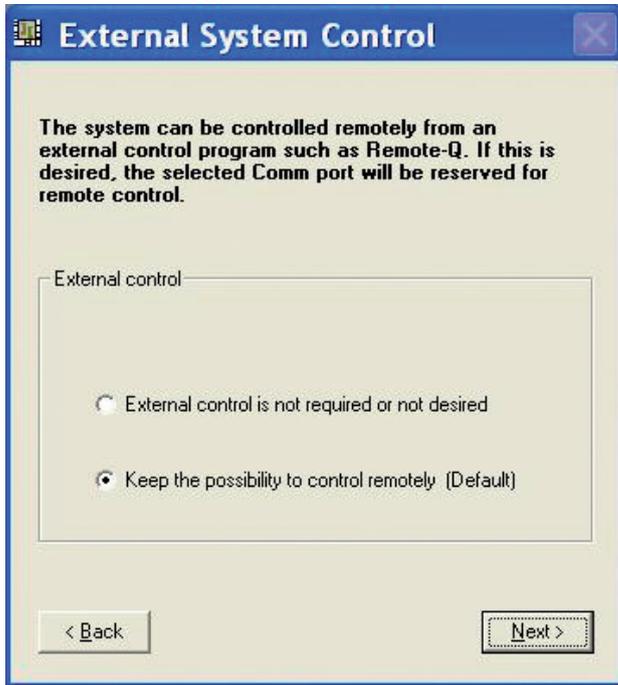
The screenshot shows a window titled "Comm Open delay" with a close button in the top right corner. The main text reads: "Whether the backlight controller is connected to the internal or an external PC, opening a comm port requires some delay. Increase the delay if the ports do not open, or decrease to startup ILStranlator faster." Below this text is a label "Comm open delay" above a text box containing the value "500". Underneath the text box, it says "Default: 1000 milliseconds". At the bottom left is a button labeled "< Back" and at the bottom right is a button labeled "Next >".

In the above form you can specify the number of milliseconds to wait before the comm. port gets active after opening it. If the internal PC is used, comm. ports may open successfully in just 250 milliseconds. With an external PC it may take longer. This entry allows to fine tune the system and has an impact on the ILStranlator start-up time.

## Remote control.

If you want ILStranslator to also listen and allow control besides the direct glass plate buttons, keep that possibility open by selecting the second option.

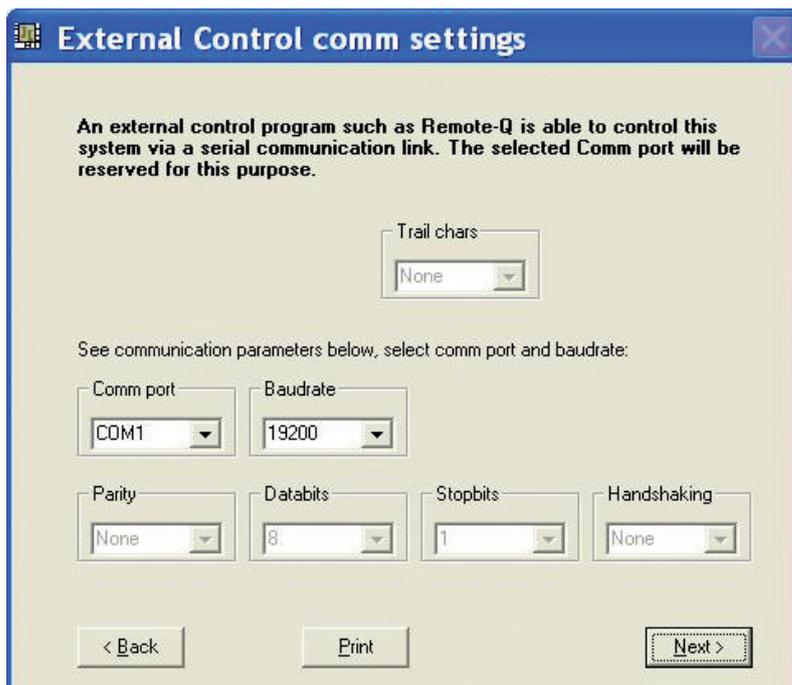
Note: Select the second option if you also obtained Remote-Q.



Select which Comm port on the ILS22 you want to use and the Baudrate to operate at.

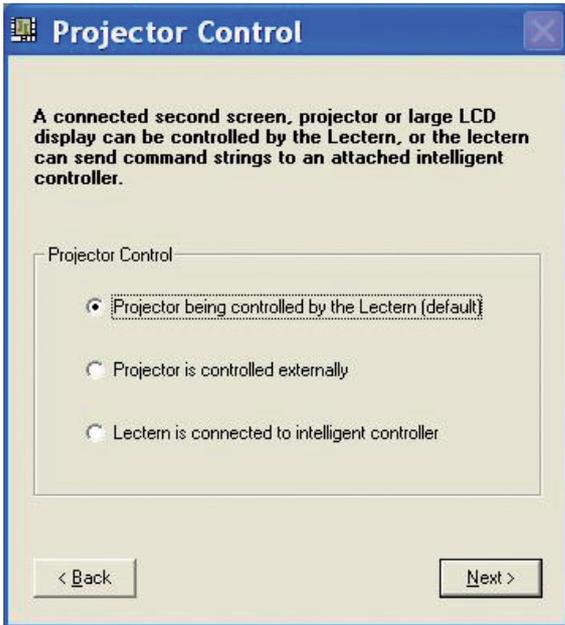
The default value is 19200 baud, but here you can increase that depending on your remote control hardware capabilities.

Note: With a modern PC or laptop you should be able to successfully communicate at 115200 baud or higher.



## Projector control.

The projector control form allows selecting which device is controlling the projector concerning power on, power off or inquiry.



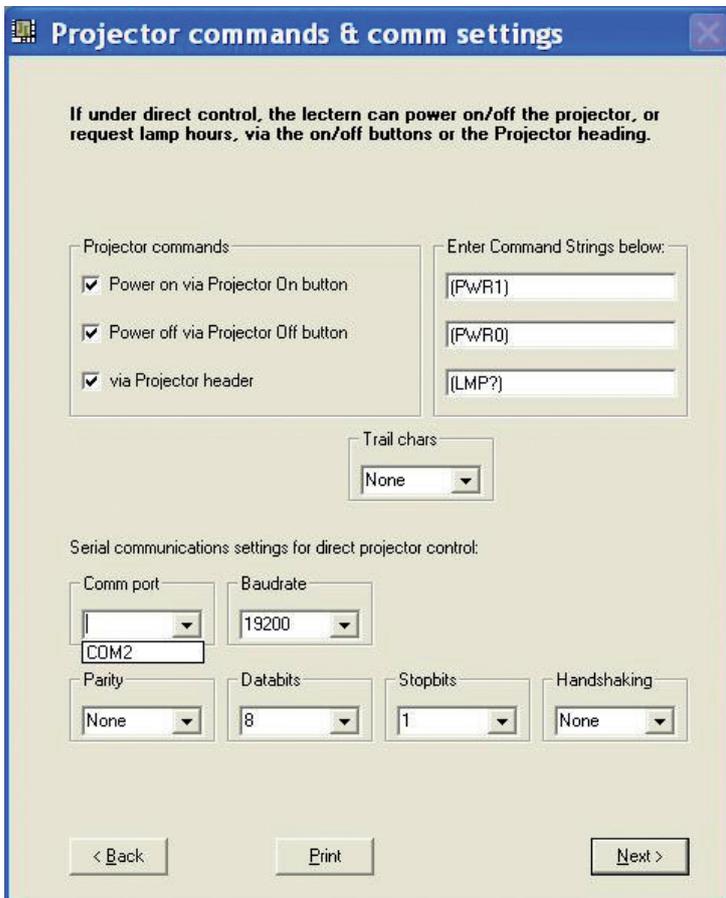
The screenshot shows a dialog box titled "Projector Control". It contains a text area with the following text: "A connected second screen, projector or large LCD display can be controlled by the Lectern, or the lectern can send command strings to an attached intelligent controller." Below this text is a group box labeled "Projector Control" containing three radio button options: "Projector being controlled by the Lectern (default)", "Projector is controlled externally", and "Lectern is connected to intelligent controller". At the bottom of the dialog are two buttons: "< Back" and "Next >".

Select the first option if the projector is under direct control of the lectern.

Select the second option if the lectern has nothing to do with it, e.g. the projector functions are under direct control of a supplier supplied IR remote or a controller board room interface.

Select the third option if the lectern has to send out a command string to a connected intelligent controller.

Selecting option 1 or option 3 allows you to enter the communication parameters as shown in the following picture.



The screenshot shows a dialog box titled "Projector commands & comm settings". It contains a text area with the following text: "If under direct control, the lectern can power on/off the projector, or request lamp hours, via the on/off buttons or the Projector heading." Below this text are two main sections. The first section, "Projector commands", has three checked checkboxes: "Power on via Projector On button", "Power off via Projector Off button", and "via Projector header". To the right of this section is a group box labeled "Enter Command Strings below:" containing three text input fields with the values "[Pw/R1]", "[Pw/R0]", and "[LMP?]", each with a small "X" button to its right. Below these fields is a "Trail chars" dropdown menu set to "None". The second section, "Serial communications settings for direct projector control:", contains several dropdown menus: "Comm port" (set to "COM2"), "Baudrate" (set to "19200"), "Parity" (set to "None"), "Databits" (set to "8"), "Stopbits" (set to "1"), and "Handshaking" (set to "None"). At the bottom of the dialog are three buttons: "< Back", "Print", and "Next >".

Note that COM3 and COM1 were already reserved for Backlight controller communication and for remote control in this special configuration. If no remote control was desired (keep the option open), both COM1 and COM2 would be available.

In the standard ILS22Setup with internal PC, communication to the backlight controller is via the internal PC COM4 port, leaving COM1, COM2 and COM3 available for other connections.

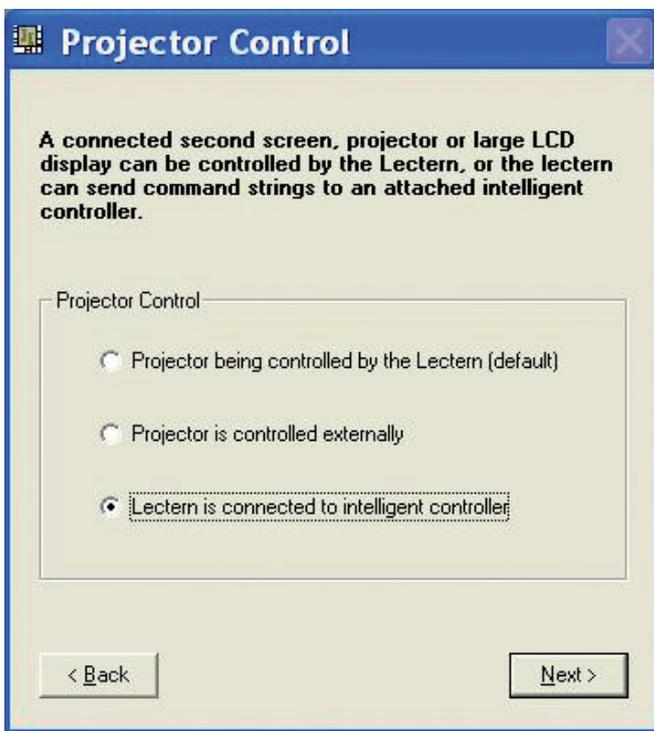
The check boxes allow specifying whether the glass plate buttons are activated (check the box) or not activated (un-check the box).

In the Command string text boxes you can enter the ASCII strings to be send out to the projector to perform the function. In this example, the InFocus CLI command structure is used. (PWVR1) ,enter as text without quotes, will power up InFocus projectors, (PWVRO) will shut it down. A (LMP?) inquiry via the header will request lamp hours.

Some protocols require a trailing character to indicate the end of the command. Select under Trail chars (the InFocus projectors require none).

The bottom half allows to specify the communication setting. Select the Comm port to be used on the ILS22, baud rate, parity, number of data bits, number of stop bits and communication handshaking. People familiar with Windows embedded Hyperterminal should recognize the choices.

Instead of being under direct control, the ILS22 can be set up to control projectors via an attached controller capable of receiving command strings over a serial RS232 communication line.



This form is representative for the remainder of this user guide:

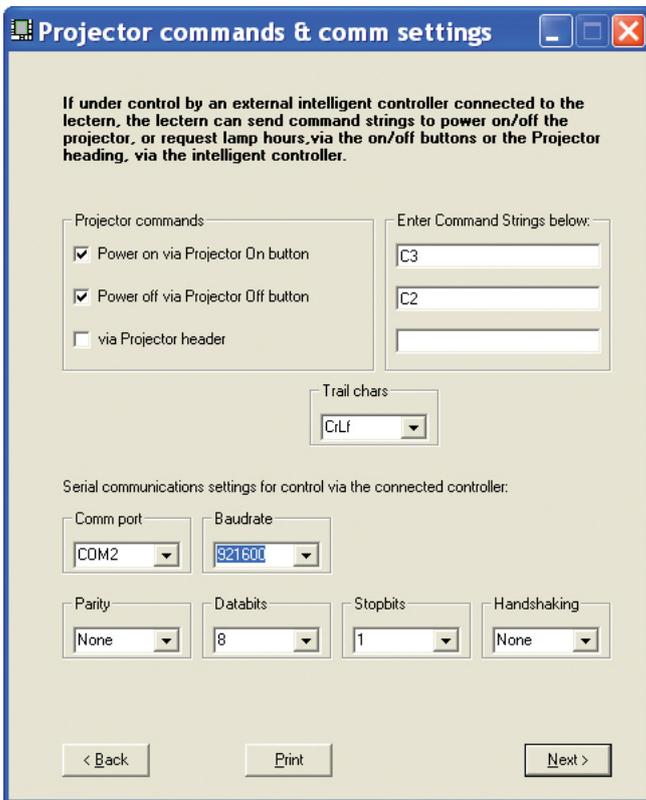
- Either control is directly via the ILS22 Lectern (actually via ILStranlator)
- Control is performed via external circuitry (externally)
- Control is performed with ILStranlator functioning as a user interface to an attached intelligent controller

If attached to an intelligent controller, and ILTranslator is functioning as a user interface, you can specify which buttons are active, which commands to send and where to send them to.

The next item to configure is Projector control via an attached intelligent controller, this also applies to:

- Room light control (Lights)
- Mute Mic control (Mute Mic)
- Mic Volume control (Mic sensitivity)
- Master Volume control (PC Audio)
- Switch control (Source out)

If all of these functions you specify are to be done without interaction with ILTranslator, or ILTranslator as user interface, choose the second option which directs commands to be performed or controlled 'externally'. In that case, ILTranslator will not backlight these buttons.



In the String command text boxes you can define which ASCII text string is sent to the attached controller. The controller will receive these commands and translate them into action for the projector connected to the controller.

In this example the intelligent controller will, after pressing the Power on button on the ILS22 glass-plate, receive the string 'C3', without the quotes as indication to power on the projector.

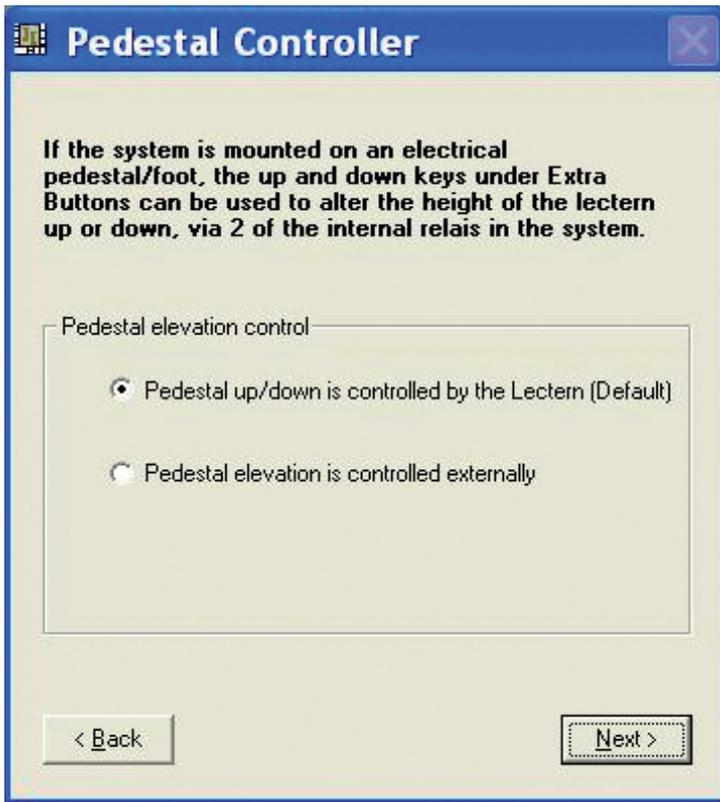
The controller will translate that into the correct command and perform the task of powering on.



In this example the check box for the Projector header is unchecked, so no action will be taken after pressing the projector header on the ILS22 glass-plate.

## Pedestal control.

If the ILS22 is mounted on an electrical pedestal (the ILS Powerlift), it can be elevated up or down .



**Pedestal Controller**

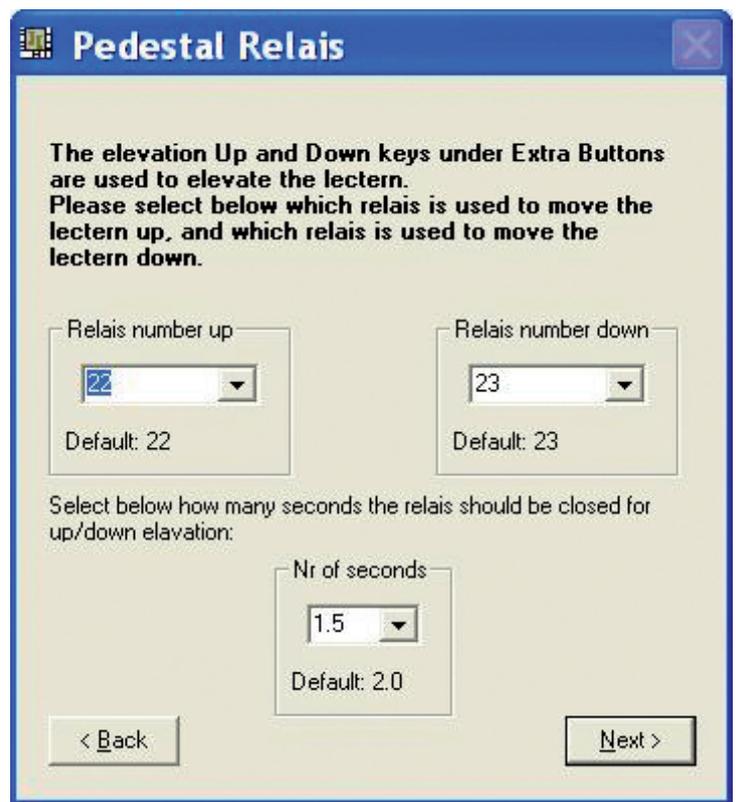
If the system is mounted on an electrical pedestal/foot, the up and down keys under Extra Buttons can be used to alter the height of the lectern up or down, via 2 of the internal relais in the system.

Pedestal elevation control

Pedestal up/down is controlled by the Lectern (Default)

Pedestal elevation is controlled externally

< Back      Next >



**Pedestal Relais**

The elevation Up and Down keys under Extra Buttons are used to elevate the lectern. Please select below which relais is used to move the lectern up, and which relais is used to move the lectern down.

Relais number up: 22 (Default: 22)

Relais number down: 23 (Default: 23)

Select below how many seconds the relais should be closed for up/down elavation:

Nr of seconds: 1.5 (Default: 2.0)

< Back      Next >

The ILS22 has build-in relays for control functions.

By default, relays 22 and relays 23 are reserved for driving the motor in the optional electrical pedestal from ILS (supplied with the ILS22G).

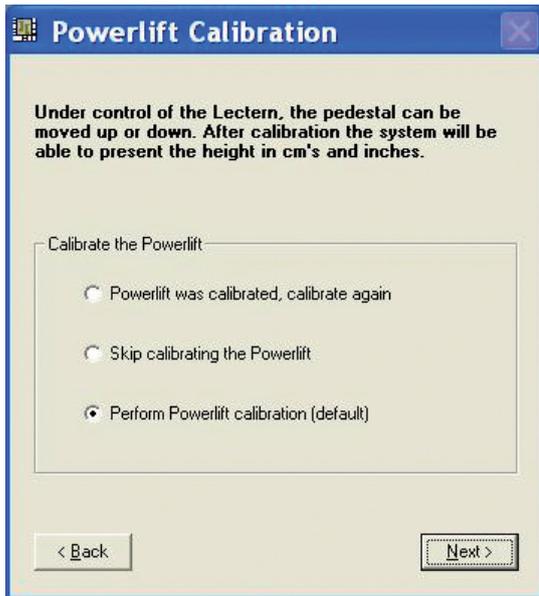
One can define the number of seconds the relays will be closed (number of seconds for up/down movement). Default is 2 seconds.

If under direct control of the lectern (ILStranlator), the following form will show up.

Via Powerlift Calibration you can specify ('Mark') the lowest setting, which in turn will be used to provide a calculated indication in ILStranlator (and Remote-Q) what the current height is calculated in cm's and inches.

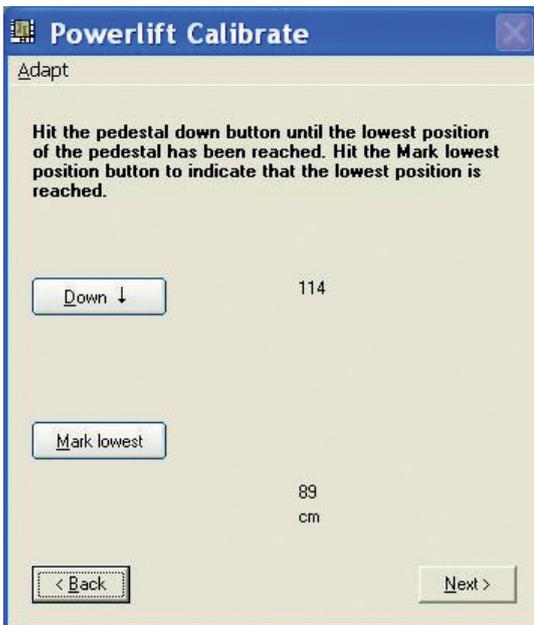
This calculated indication is shown in ILStranlator/Extra Buttons.

## Powerlift Calibration



Select the first or third option to calibrate the Powerlift.

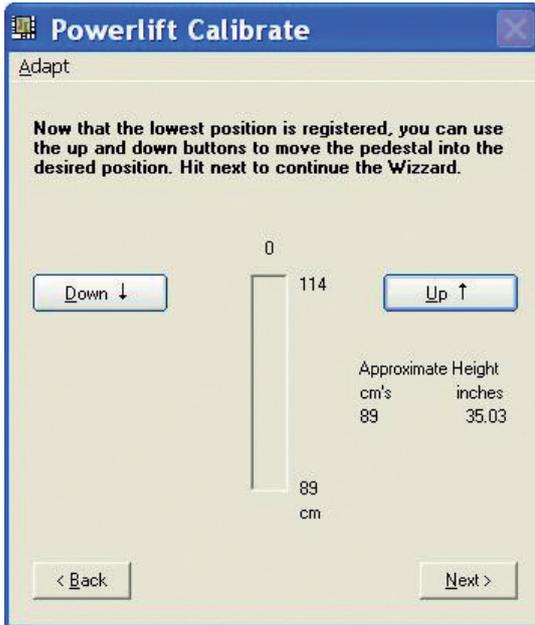
After verifying that the comm port to the backlight/relays controller is free for communication, the following form will show up (if not, a window will appear where you can to stop ILStranlator or an other program that is communicating over the comm port):



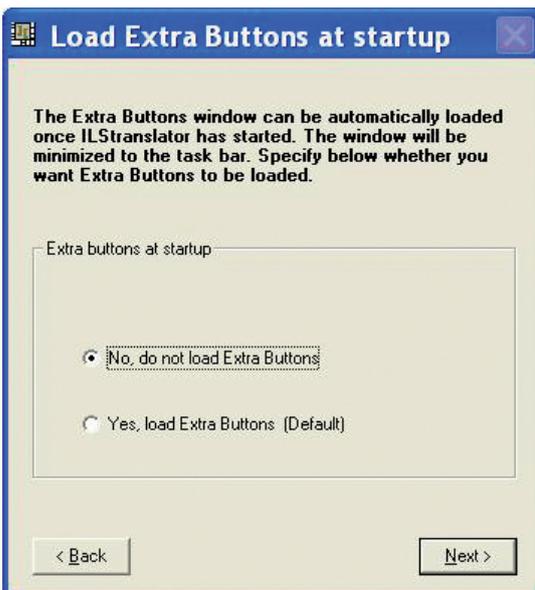
The form shows the approximate lowest and highest position measured in centimeters (in this case 89 cm as the lowest setting, and 114 cm as highest). The positions are measured at the front (Presenter side) from ground up to the top of the pedestal.

Note: There might be later Powerlift engines which go lower or higher, or have a different rise-time from lowest to highest measured in seconds (current Powerlift installations go from 89 cm at the lowest setting, to the highest setting at 114 cm in roughly 17.5 seconds). If in doubt, use Alt\_A or the menu Adapt entry to change your findings.

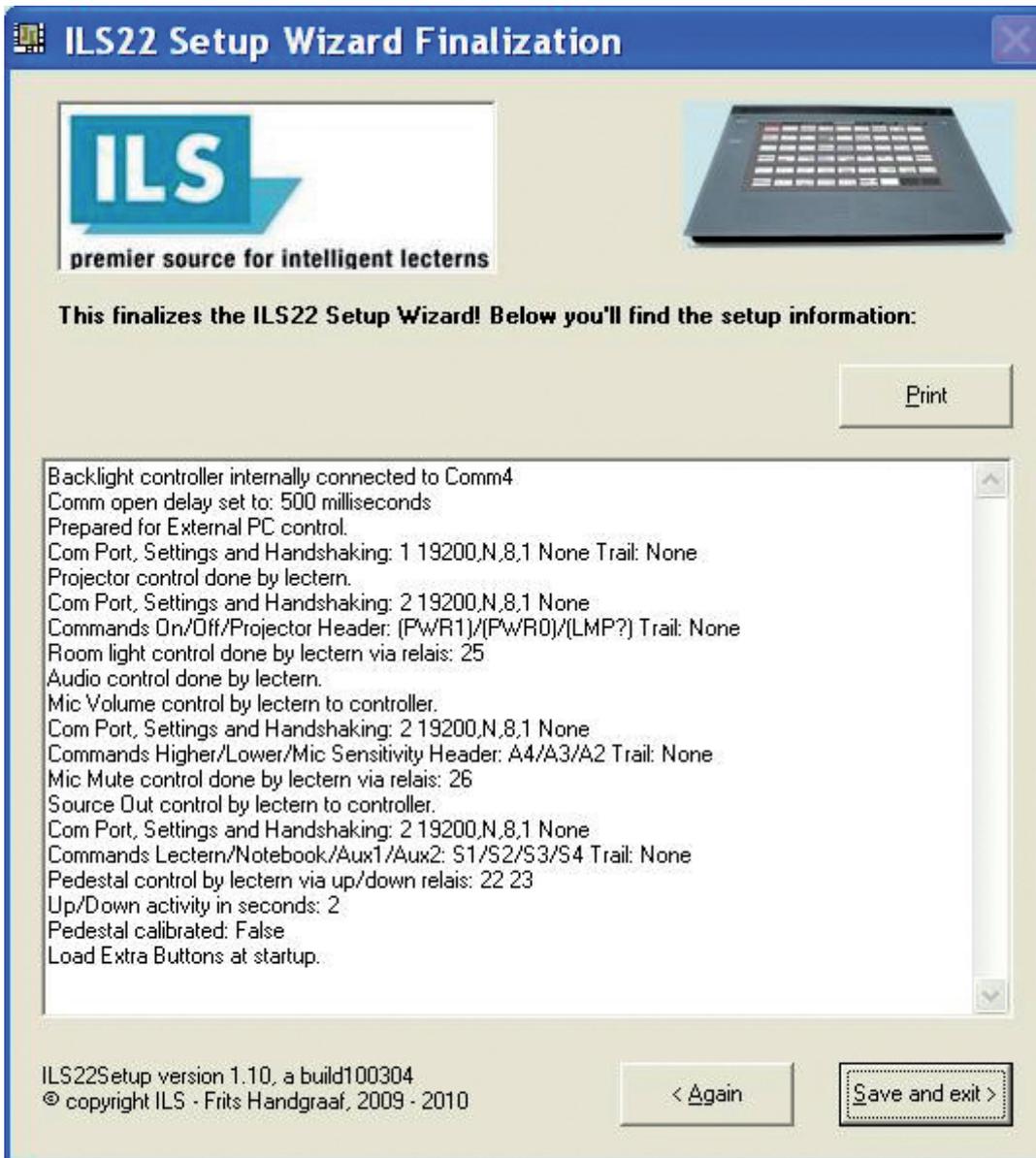
If you are presenting at the ILS22 lectern, you can press the Down button in this ILS22Setup wizard until the motor stops and the lectern can't go any lower. Based on the measured lowest position, you can adjust lowest, highest and rise-time values. Press the Mark lowest button and the following form will come up to allow you to adjust to an initial height.



Press the Down or Up buttons to elevate the pedestal into a required default position. The approximate height values will be adjusted accordingly.



Press the Next button to continue.



At the end of the wizard, an overview of the settings you entered will be provided.

Press the Save and exit button to save the settings to system registry.

If you would like to adjust the settings Press the Again button to restart the Wizard.

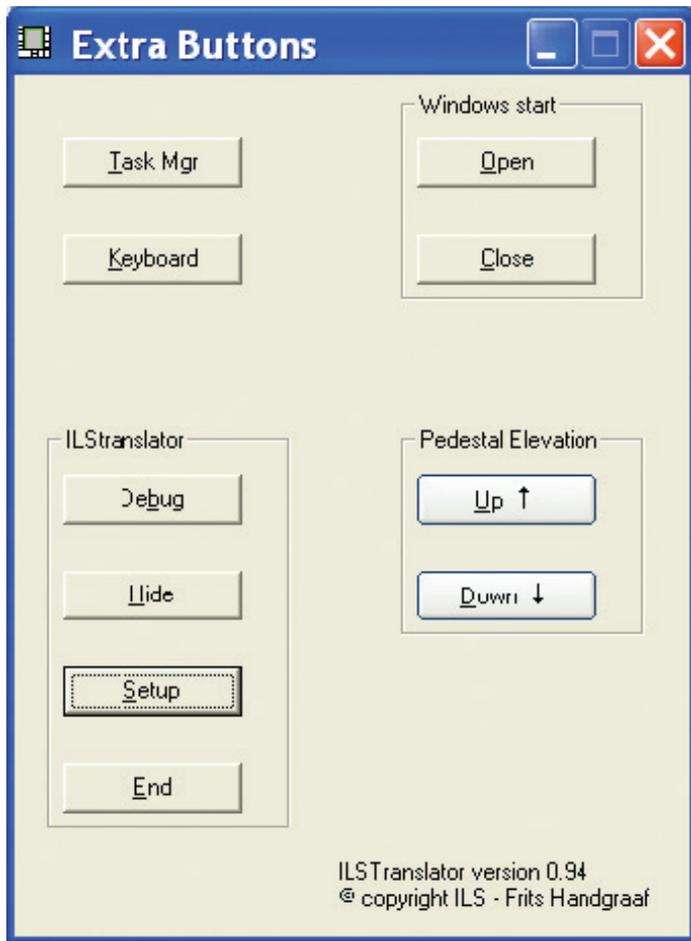
When ILStranlator is started up, it will read the ILS22Setup settings from the registry and act accordingly.

Note: Within ILStranlator, these settings can not be changed. Therefore, restart ILStranlator if changes were made in ILS22Setup, and you want them to take effect.

Note: To configure the ILS according to your preferences, you only need to run the ILS22Setup Wizard once

## ILTranslator Setup.

Via the Extra button (when lighted on the glass-plate) a Windows form will pop up with extra functions and control possibilities.



Task Mgr will bring up the Windows Task Manager (so that applications can be stopped or users can log off).  
Keyboard will bring up the embedded software keyboard for local language requirements.

Windows start Open and Close will open/close the Windows start menu.

Pedestal elevation will move ILS22 up or down when mounted on an electrical pedestal.

In the ILTranslator section, the Debug button will bring up a small form which allows tracking of instructions received and strings sent to the internal backlight controller or externally connected devices.

Hide will hide the Extra buttons form in the taskbar.

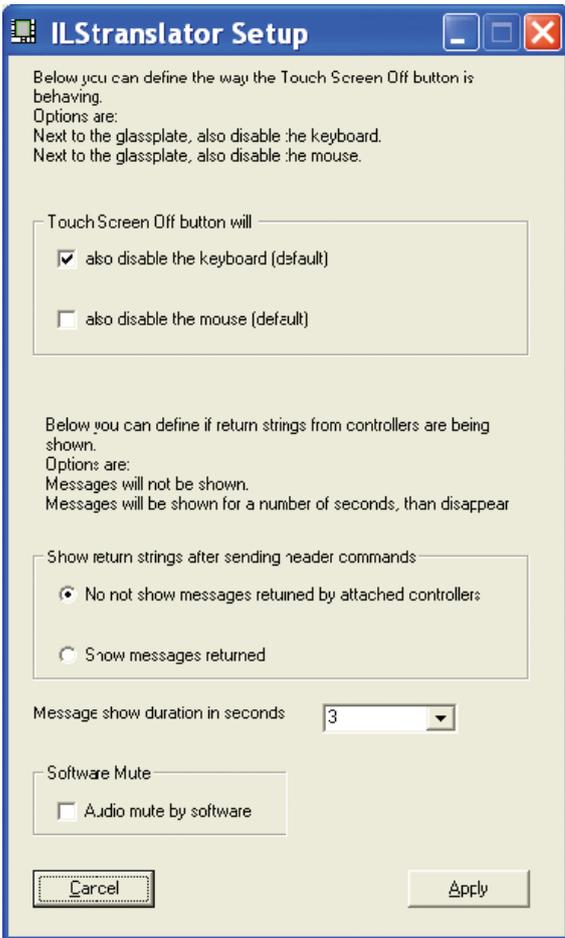
End will end the ILTranslator program and turn all back lighted buttons on the glass-plate off.

After ending ILTranslator, the glass-plate buttons can no longer be used.

The Setup button will bring up a new Windows form which allows altering some of the system behaviour functions.

If a user chooses to turn the Touch screen off, none of the glass-plate buttons will be lit nor will any of the buttons function, except for the Touch screen On button. This key will blink to indicate the touch screen is off.

To prevent any keyboard action from an attached (external USB) keyboard or (external USB) mouse interrupting presentations, e.g. if the surface is used for paper presentations, Windows mouse and keyboard functions can be disabled by checking the boxes. Do not disable the mouse if you want to advance slides in Sho-Q presenter.



If an external controller or other device (e.g. projector) is connected to the system, users may want to see (temporarily) the reply of such devices on a command string sent. The duration set will define how long the reply will remain visible.

Check the Audio mute by software box if you do not want to use the mute function of the hardware mixer or if you are experiencing un-mute problems. In presentations using audio, this has the effect of sliding the master volume back to 0 in discrete steps. This is useful for fading down audio in presentations. Un-muting will bring the original volume back on.

Note: Audio mute is performed by the PC Audio header if set so in ILS22Setup.

By hitting the Apply key (Alt-A), the changes will go into effect and the new settings will be saved to system registry. When ILStranlator is started up, these settings will be read and active.

ILStranlator Remote commands overview.

Please refer to our WEB site for the latest overview published in an Excel spreadsheet.

## For other detailed information consult:

Sho-Q user reference manual, for latest status, see [www.sho-q.com](http://www.sho-q.com)

SO touch reference manual, for the technology see [www.sensitive-object.com](http://www.sensitive-object.com)

ILS22 software releases [www.intelligentlecternsystems.com](http://www.intelligentlecternsystems.com)

IL22 remote commands overview [www.intelligentlecterns.com](http://www.intelligentlecterns.com)

ILS22 user guide updates [www.intelligentlecternsystems.com](http://www.intelligentlecternsystems.com)

Below is an artist impression of ILS22 Remote-Q program, which allows to control the ILS22 from a remote PC or ILS15. This program is optionally available.

Contact [enquiry@intelligentlecterns](mailto:enquiry@intelligentlecterns)

