

ILStranlator

User Guide version 3.0x

The program controlling your ILS22 glass-plate buttons



Where as the inner-side of the glass-plate functions as touch-screen 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.

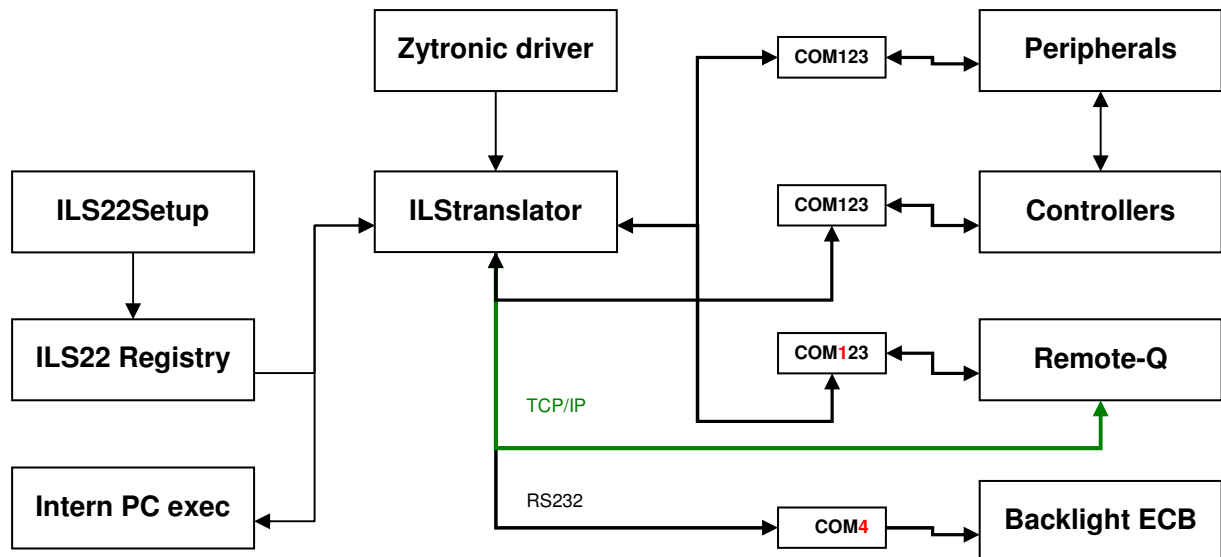
You will recognize on the left side room control commands, on the right side source selection and some short-cuts. On the bottom area are keyboard, directional keys, mouse pad and annotation pad. Only when the LED's behind the keys are lit, you can see the actual key pads. When the system initially starts-up, the Room Control, Mute Mic and Keyboard buttons are lighted and can be used.

ILStranlator is the program which converts (or 'translates') glass-plate button or header presses into action. The accompanying ILS22Setup program allows to define the system environment (is a projector connected, is the lectern taking care of microphone mute, are intelligent controllers connected etc.) and as such you can fine tune ILStranlator actions. See the ILS22Setup Guide for details.

ILStranlator.

ILStranlator is the name of the system program taking care of the glass plate buttons and headers.

The Zytronic touch driver is recognizing where (on which location) the glass plate was hit. The Projected Capacitive Technology (PCT) allows to use your finger as a stylus, reacting if it were a mouse. The Zytronic touch driver determines the location and based on that will forward a 'message' to ILStranlator. ILStranlator in turn will 'translate' this into functional execution. The below image shows how ILStranlator is embedded in the system:



Via Com1, Com2 or Com3, ILStranlator can directly control projectors or other peripherals, or pass control over to intelligent attached controllers, which in turn can control the environment. Use the ILS22Setup Wizard to define the system setup.

Com4 is used by ILStranlator to communicate with the backlight controller (turning LED's on/off) and internal relays. Note: can be adapted by ILS22Setup if you use an external PC.

When Remote-Q is used to assist the presenter and control/monitor the system remotely, Com1 is used for that purpose. Note: can be adapted by ILS22Setup. Remote-Q release 2.0x and higher will also allow support over TCP/IP.

Internal PC functions are under control of ILStranlator directly. Example: Keyboard on/off and annotation.

ILS22Setup is defining the system with respect to 'who is doing what', what is done by ILStranlator itself, what is done by external controllers, which command strings and com ports are used etc. See the ILS22Setup guide for more details.

ILS22Setup is saving system definitions to the registry. Each time ILStranlator is started, it will read the registry and adapt functionality accordingly. If ILS22Setup was NOT used (no registry values), ILStranlator will assume defaults. The remainder of this manual will describe ILStranlator and embedded default functionality.

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 pressed the keyboard backlight will come on indicating access possibility. Pressing the keyboard key again will disable the keyboard (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 hitting the start button in Windows XP and brings up the start menu. Hitting 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 other keys on the left (system control) and on the right (input/output control and additional functions). Which function buttons come available is depending 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. We propose this carousel to limit the number of buttons a presenter might have to deal with. Usually no more keys are visible than needed within the presentation. Typically after set-up, the presenter will only be confronted with 3 back-lit buttons: Control, Mute Mic and Keyboard. See table 1.

Note: Via Extra Buttons/ILStranlator Setup this can be changed to enable all buttons (except for the Annotation keys) or disable again with just one Room Control touch.

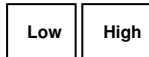
Projector

Off

On

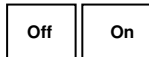
This key group is used to directly control an attached projector from the system. The On key will send a command string to turn the projector on, the Off key will shut the projector down. The Projector header can be pressed to send an inquiry command string, e.g. for requesting current lamp hours or 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 Creator, 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 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 and to not accidentally execute functions. When the touchscreen is disabled (hit the Off key), all other keys are disabled and the light behind the keys will blink in a 2 second sequence. The ONLY key accepted 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. Note: if you don't want it to blink you can adapt in ILStranlator/Setup (see later in this manual).

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



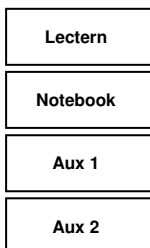
Increases/decreases the master volume of the build-in mixer. With these keys the presenter can locally adjust the volume output of the system. On a 0-100% basis, the audio level is indicated by the 5 LED's (4 green, 1 red) under the Audio group. See earlier in this document. The PC Audio header functions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

Note1: Although the master volume may be muted, the LED's still indicate the audio output volume level.

Note2: Via ILS22Setup one can define how and with which communication setting Audio volume is controlled by an external controller.

Note 3: You can verify the volume state and mute state via the build-in mixer (start/all programs/Accessories/Entertainment/Volume Control)

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

Mirror

Span

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. **See the Mirror/Span attached Appendix to learn how to adapt to your own system environment**, as, at delivery, we do not know your projector's resolution. The Appendix will show you to define Intel GMA 'Schemes'.

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

Shortcuts

Extra Buttons

Desktop

Sho-Q

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, the Desktop 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.

Annotate

The Annotate key activates the annotation keys in the bottom right part of the glass-plate. When lit, the New Sheet key is used to capture the current slide/image. After that a presenter can annotate the image with text and lines and free drawing. Via the Erase key these annotations can be removed again, via Save Sheet these annotations can be saved for distribution.

Note: By pressing h/H a help menu will become available showing available functions. See specific functions later in this document. The Window form will show the current settings in the caption.

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 touch screen off
2- Set-up mode	Projector group, Lights group, Mic sensitivity, PC Audio, Source out	
3- Expert mode	Shotcuts	
4- Annotate mode	Annotate	
5- Zero state	Room Control key, Keyboard key	System startup condition

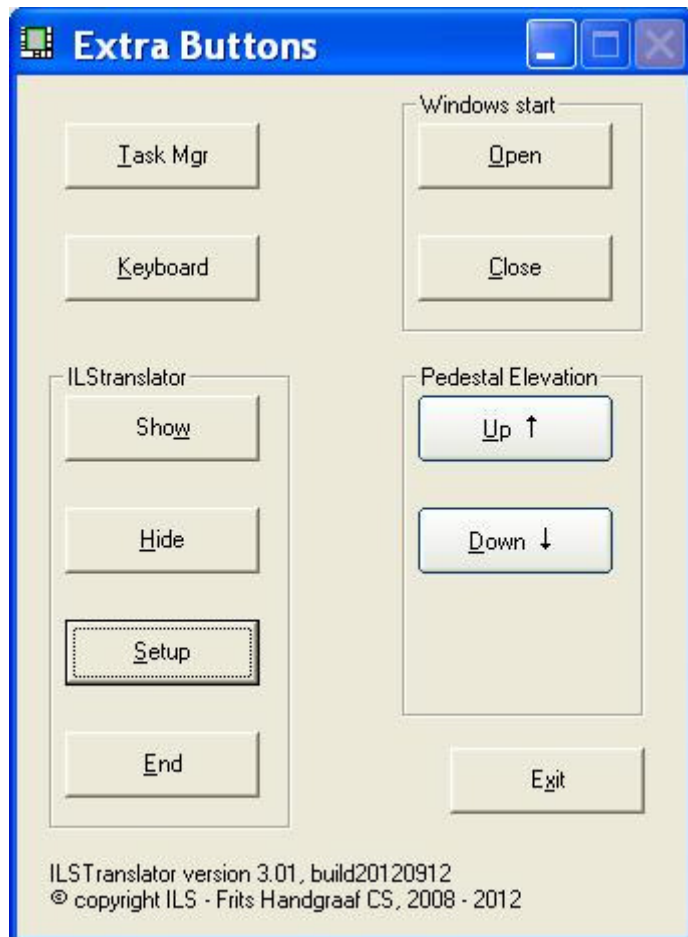
Table 1: Carousel

Number of Room Control presses	Activated groups of keys	Remarks
0- Zero state	Room Control key, Mute Mic, Keyboard key	System startup condition
1- Full action	All	Direct access to all keys except annotation subkeys
2- Back to Zero state		
With all at startup enabled, define in Setup	All	Direct access to all keys except annotation subkeys

Table 2: Enable all

ILStranlator/Setup.

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



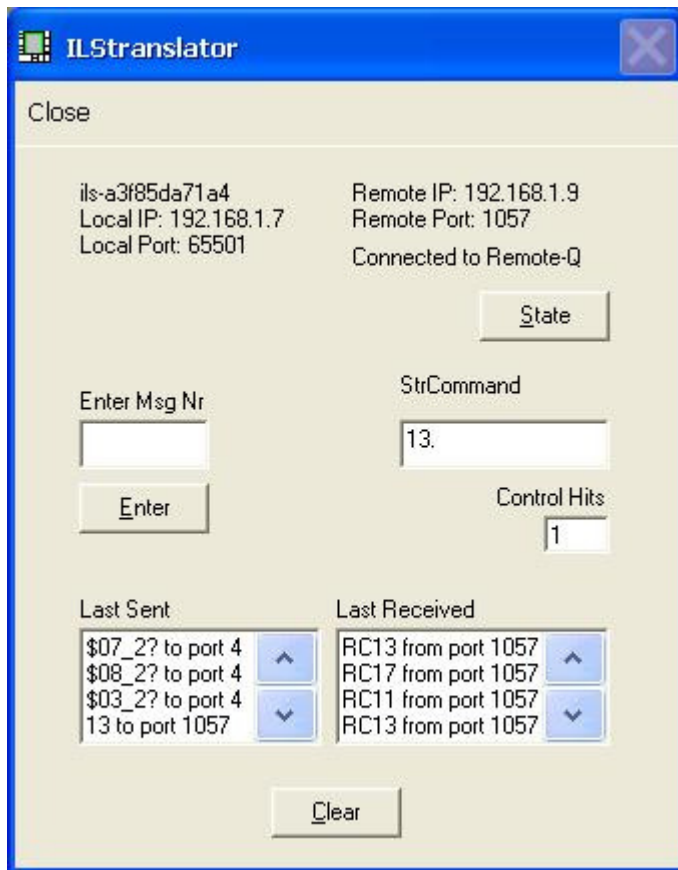
Task Mgr will bring up the Windows Task Manager (so that applications can be stopped or users can log off).

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 the ILS22 up or down when mounted on an electrical pedestal. Note: If the Pedestal height was calibrated via the ILS22Setup program, the current height, measured from the presenter side, will be displayed and adapted after a change.

In the ILStranlator section, the Show 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. This is available for debugging when contacting ILS. Hit Hide to hide it again.



Note: By 'showing' the ILTranslator Main form you can also verify the connection status to external control programs. In this case, ILTranslator is connected to Remote-Q over TCP/IP. The State button in this form will show the state of the connection, with the menu Close command you can close the connection. The ILTranslator listening port, via ILS22Setup, was set to 65501.

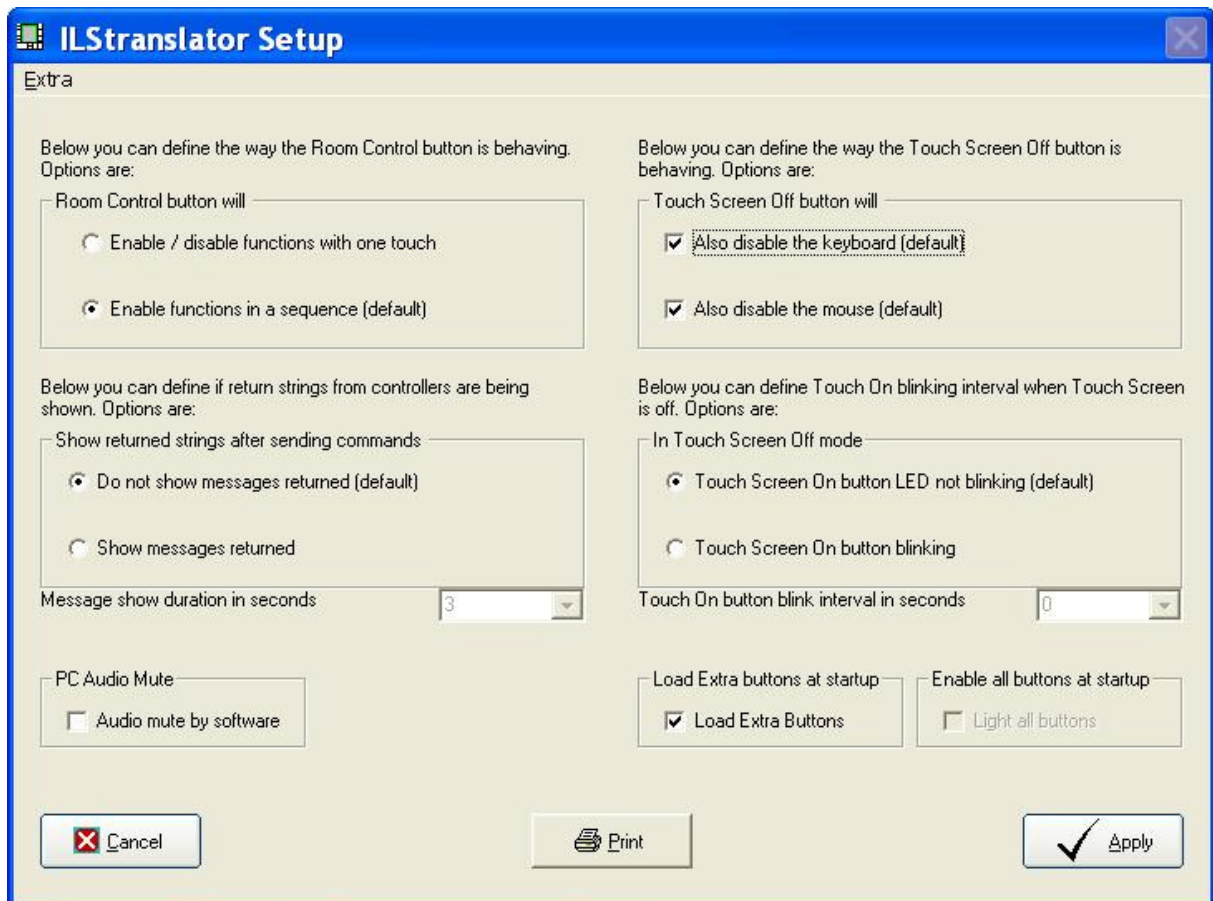
The minimize button will hide the Extra buttons form in the taskbar.

Exit will close the Extra buttons window.

Note: After closing the Extra buttons window, you can only bring it up again via the Extra Buttons button on the ILS22 glass-plate.

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 user interface behaviour functions.



Under Room Control button you can select whether all functions will be enabled/disabled with one touch or in a sequence.

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 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.

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. Select 0 seconds if you want to close the message manually.

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.

Check the Load Extra Buttons at startup will load the Extra buttons form and minimize it into the taskbar (hitting it in the taskbar will bring it up). This is useful when you want to have quick access to the pedestal up/down buttons or other buttons on the form.

When the Enable/Disable all functions with one touch option is selected, you can check Enable all buttons at startup. When ILStranlator 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.

The Cancel key will disregard any changes made.

The Print key will print the form to the default connected printer.

By hitting the Apply key (Alt-A), the changes will go into effect and the new settings will be saved to system registry.

Under the Extra (Alt-E) menu item you can:

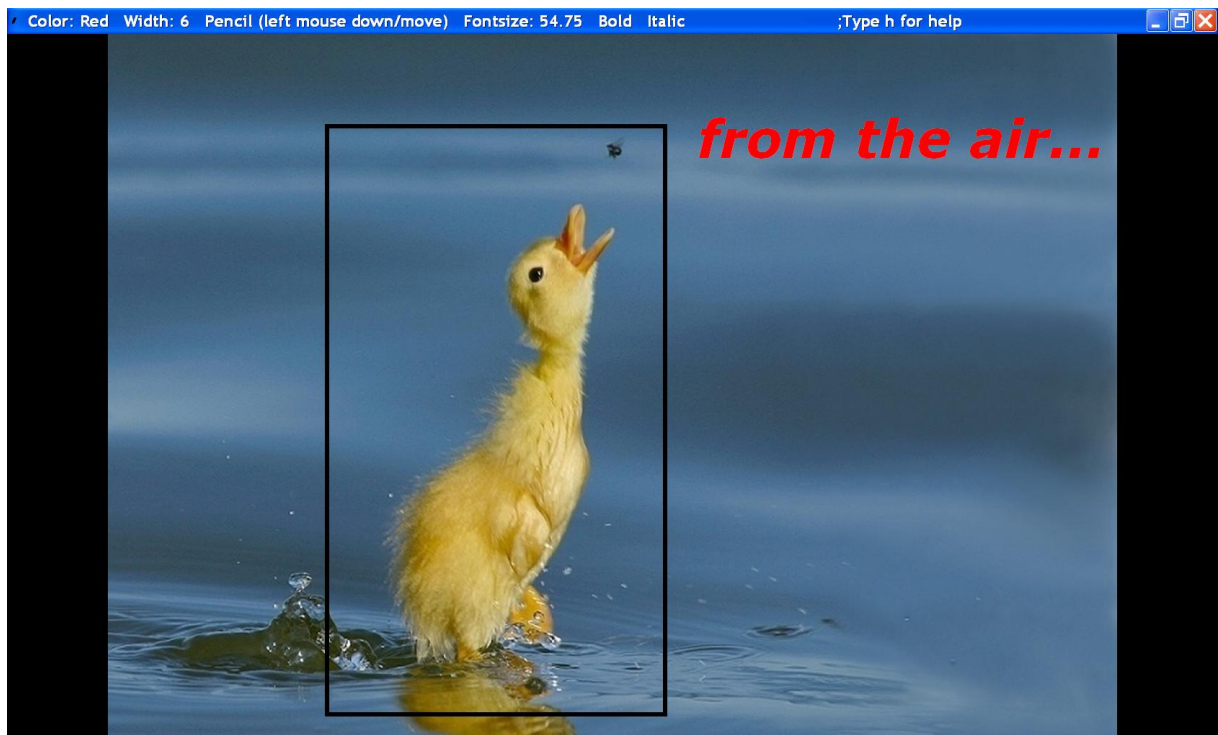
- Specify the Read Delay. The Read Delay (default is 1 second) specifies how long ILStranlator is waiting for attached external controllers, projector (if under direct control) and other devices, to respond to an inquiry or sent out command. After the Read Delay has expired, ILStranlator will show the response form for the duration being set. Increase the Read Delay if response requires a longer time to get through.
- This setting is also saved to registry.

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

ILTranslator Annotation functions.

When the Annotate button is lit (after 1 or 5 Room Control hits, depending on Enable/disable functions with one touch in ILTranslator/Setup) you can hit it to make the annotate sub-keys available (hitting it again will disable them again). Annotation sub-keys are:

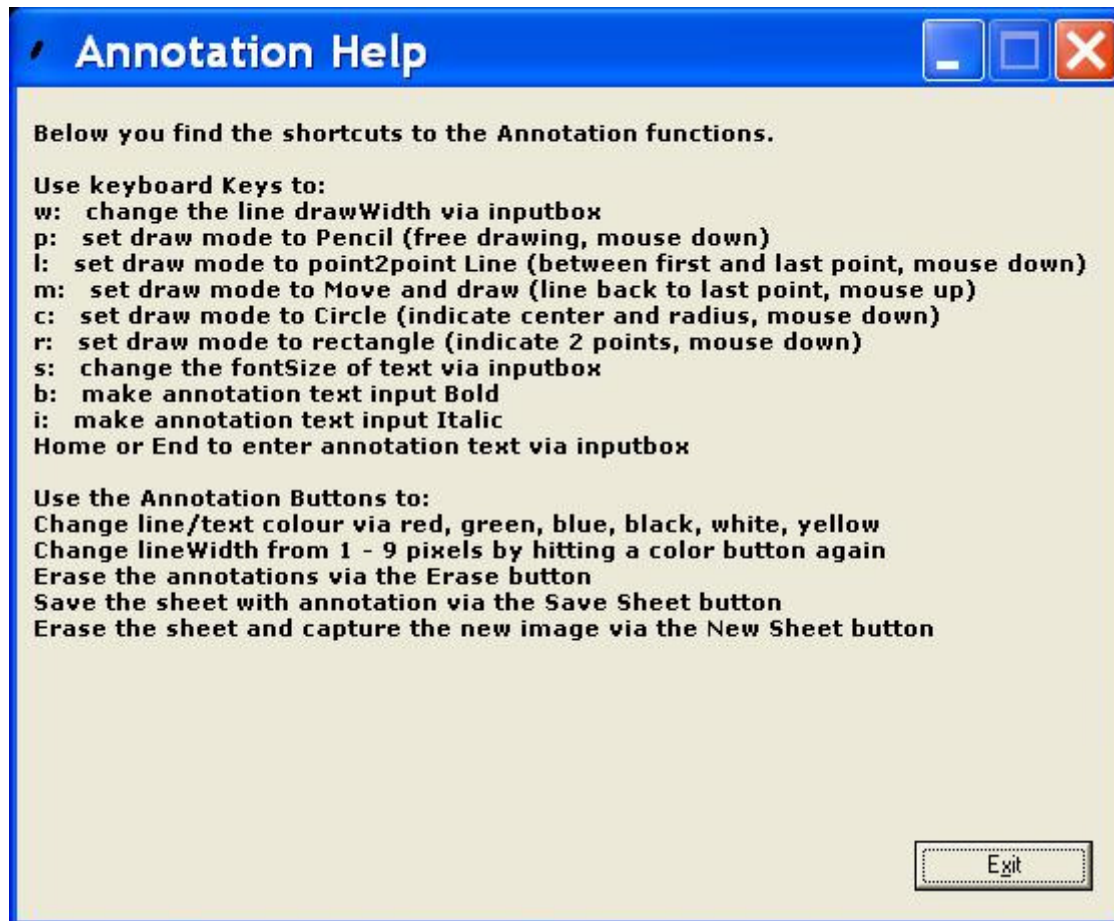
- New Sheet. Hit this key to capture the current system image (PowerPoint slide, Excel spreadsheet or whatever is displayed) into a new annotation window.
- Red, Green, Blue, Black, White, Yellow colour keys. Hit one of these keys to change the colour of the line to be drawn or the text to be displayed. Note: hitting a colour key after selection another time will increase the line width with 1 pixel on a 1 – 9 pixel wide basis.
- Erase Sheet. This key will erase all annotations.
- Save Sheet. This will bring up a dialog so you can specify where you want to save a bitmap of the annotated sheet. This can be used for hand-outs or distribution.



In the example above you can see that current annotation settings are displayed in the top of the form. Color is red, line width is 6 pixels, draw mode is free-hand (pencil), annotation text font size is 54.75, entered text will be displayed in bold and Italic.

While in annotation mode, settings can be altered via key-board entries. Make changes to these settings before adding annotations.

H or h will bring up a help form:



W – change the line width in pixels higher than 9 pixels.

P - Draw mode is pencil, free draw. Keep the left mouse button down (or your fingernail or other acoustic generating pointer down) and draw as desired. Releasing will end free drawing.

L – With left mouse/fingernail down, will draw a starting point and a line end point when releasing. As the Zytronic driver may recognize a mouse-up when not moving, this will draw a line automatically after fractional second of not moving.

M- You only have to hit a point on the sheet. Mouse/fingernail up will draw a line to the last point remembered. As the Zytronic driver needs to recognize there is no movement, it may take a fractional second before the line is drawn.

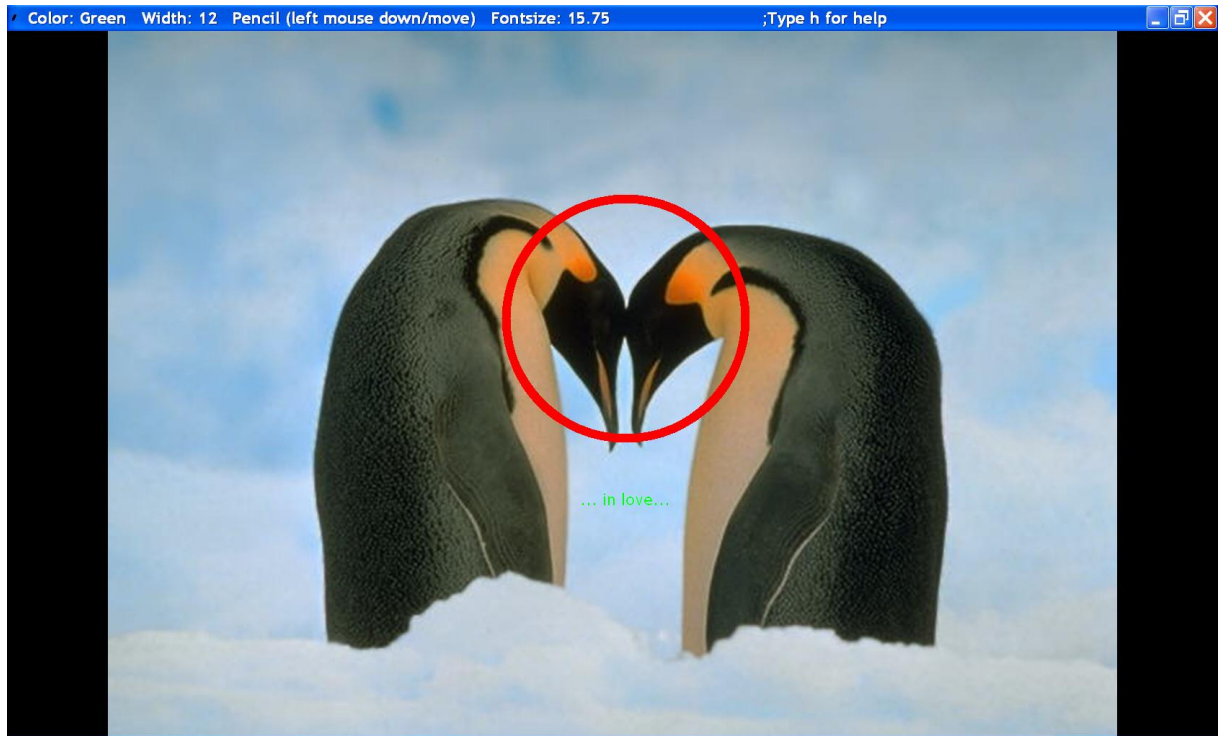
C – Circle. Mouse/fingernail down will define the centre point. While moving keep the mouse down. Mouse up will determine the radius and the circle will be drawn.

R – Rectangle. A rectangle will be drawn based on 2 points. Mouse down will define the first one. Keep mouse/fingernail down while moving to the second point. Mouse up will define the second point and draw the rectangle.

The Home or End key will bring up an input-box so you can enter text. Hit S for font-size, B for bold or I for Italics to change before the text input. After entering and hitting OK, indicate the place where you want to place it via a mouse down/up. After text placement, draw mode will go back to pencil, so that Move and Draw know the last point.

Note: Starting the Annotation mode in Move and Draw mode will draw the first line to the first remembered point which is 0,0 in the top left. Use pencil or point2point to prevent this.

Below is another example showing a circle and some text..



Note: After you're done with the Annotation, hitting the Annotate button will minimize the annotated window into the taskbar. This is a quick way to return to the application (e.g. Excel, PowerPoint etc) from which the image was annotated, and continue with that application.

Appendix: **Span and Mirror.**

When delivered to you, the Span and Mirror buttons are pre-defined with key macro's for the embedded Intel GMA graphical user interface (GMA stands for graphics media accelerator). These key macro's refer to earlier defined so called 'Schemes', called 1Mirror and 2Span (scheme names may differ) for changing to Mirror (duplicate image on external device) or to Span (extended desktop). Depending on the resolution capabilities of your connected projector or your presentation display, this may require changes. Standard resolution for the internal display is 1680 * 1050 under 180 degrees rotation, for the external display 1680 * 1050 under 0 degrees rotation.

Note: The internal display is rotated 180 degrees for a better presenter viewing angle on the LCD.

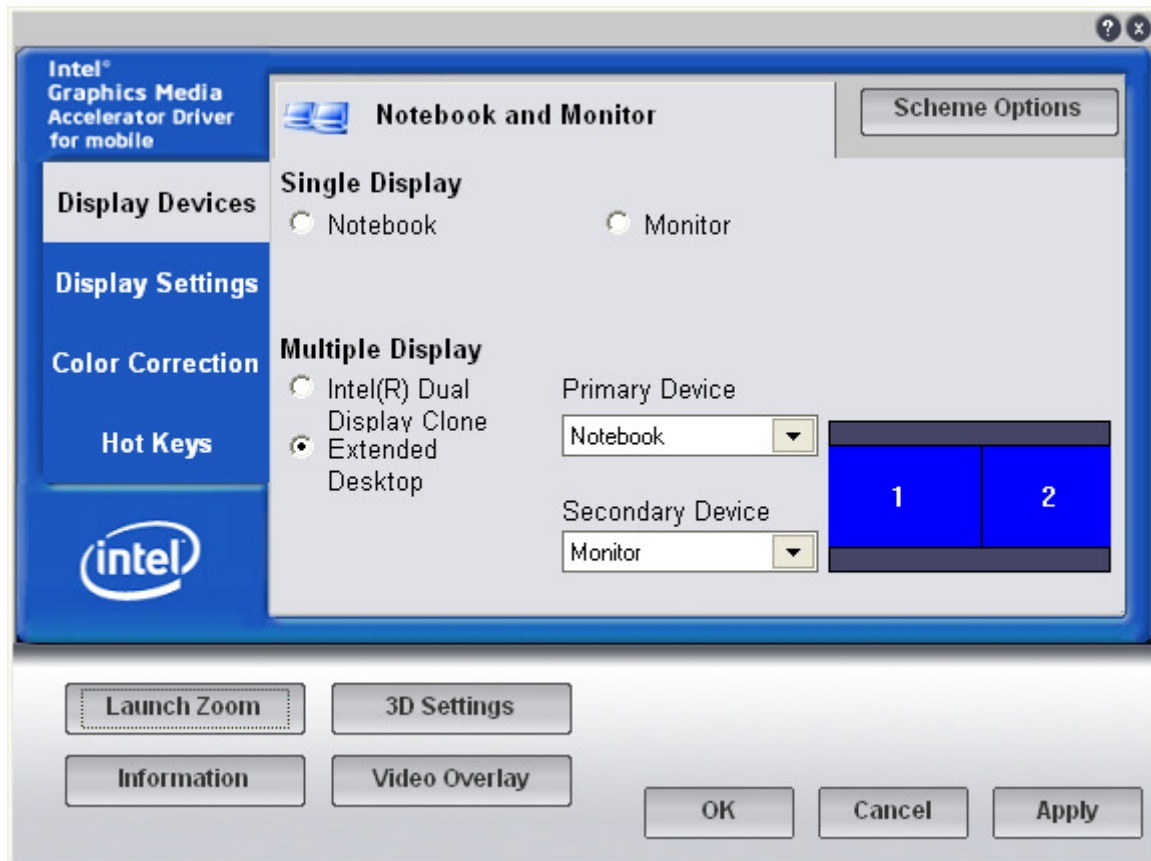
The Intel GMA driver GUI allows to setup Schemes to accommodate resolutions, rotations and more.

How to setup Schemes with the embedded Intel GMA driver.

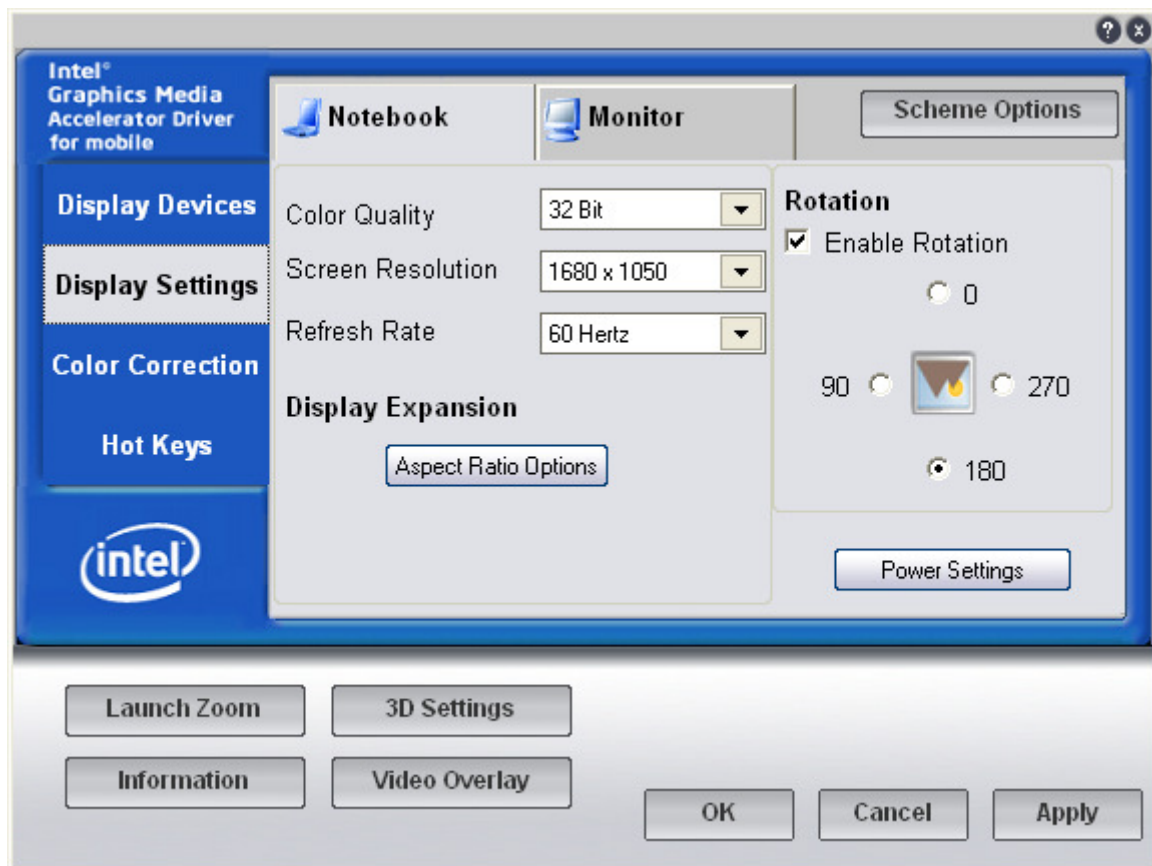
The Intel GMA driver GUI can be launched in 4 different ways:

- Hit the Room Control button until the Display Out header (above the Mirror and Span buttons) lights up. Hit the Display Out header.
- Right mouse click the desktop, then select Graphic Properties.
- Enter Ctrl-Alt-F12 from the keyboard.
- Start/Control Panel, then select Intel GMA Driver.

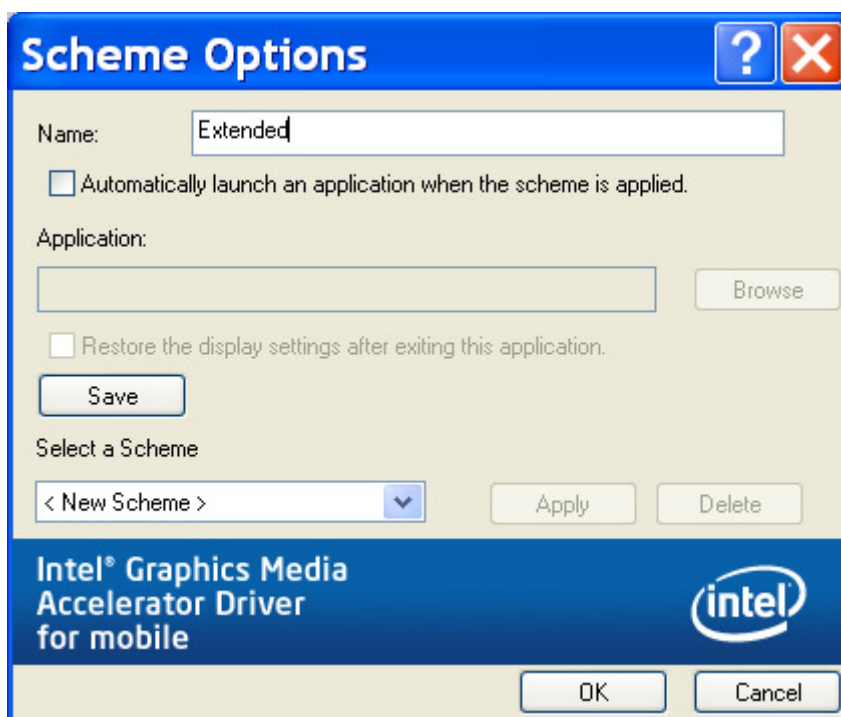
The Intel GMA driver graphical user interface will appear in the top left corner.



Hit Display Settings if you want to alter the ILS22 resolution/rotation (Notebook). Default value is 1680 * 1050, 180 degrees rotated. Hit Monitor if you want to adapt the external monitor/projector resolution/rotation. In this case resolution settings are for Extended Desktop (Span).



Once definitions are set, hit the Scheme Options command button to bring up the next form.



Enter the name to apply for the Scheme, in this example this is 'Extended'. Hitting the Save command button will save the Scheme to the registry. Note that via Select a Scheme you can restore an earlier saved Scheme. In the same way, create and save a scheme for Intel® Dual Display Clone.

In Clone mode, resolutions of the ILS22 and external monitor/projector are assumed to be the same. Therefore, verify if the external monitor can handle a resolution of 1680 * 1050. If not, try to keep the resolution as high as possible, e.g. 1400 * 1050 or alike, for both. In Clone mode, the ILS22 will be set to the resolution of the attached 'Monitor', normally a projector.

Note1: For switching between Extended and Dual Display Clone mode, ALWAYS use the method of selecting another Scheme. Selecting the Dual Display Clone option directly in the GUI will result into a system reboot due to an error in the GMA driver. We have made Intel aware of this, but the fault has yet not been corrected.

Note2: The ILS22 setting is always with an 180 degrees rotation. This to make the viewing angle for the presenter better. In setting up the Extended Scheme, you may find the cursor on the extended desktop upside down, rotated 180 degrees as well. Adapt the rotation of the monitor to 0 degrees and save the Scheme again.

IMPORTANT.

The Intel driver will sort the names of the schemes in alphabetical order. The key macro in ILStranlator for Mirror will **always select the first listed scheme**. Therefore make sure the mirror scheme is the first in the list, e.g. name and save it as for instance "1Mirror". The key macro for Span will **always select the second listed scheme**. Therefore make sure the span scheme is the second in the list, e.g. name and save it as for instance "2Span". Hitting the Mirror or Span buttons may provide unwanted results if the changed Mirror scheme is not first in the list or the changed Span scheme is not the second.

Appendix: **Related Documentation.**

This User Guide is aimed to explain the functionality of the engraved glass plate buttons and provides a quick introduction of overall embedded standard functions. If ILS22Setup is NOT executed, these explained functions are assumed by default. For example, ILStranlator allows a remote PC program to communicate on a 19200 baud rate condition (8 data bits, 1 stop bit, no parity, no flow control). ILStranlator will NOT show pedestal height if not calibrated via ILS22Setup.

In order to adapt the ILS22 specifically to your requirements, refer to the following documents:

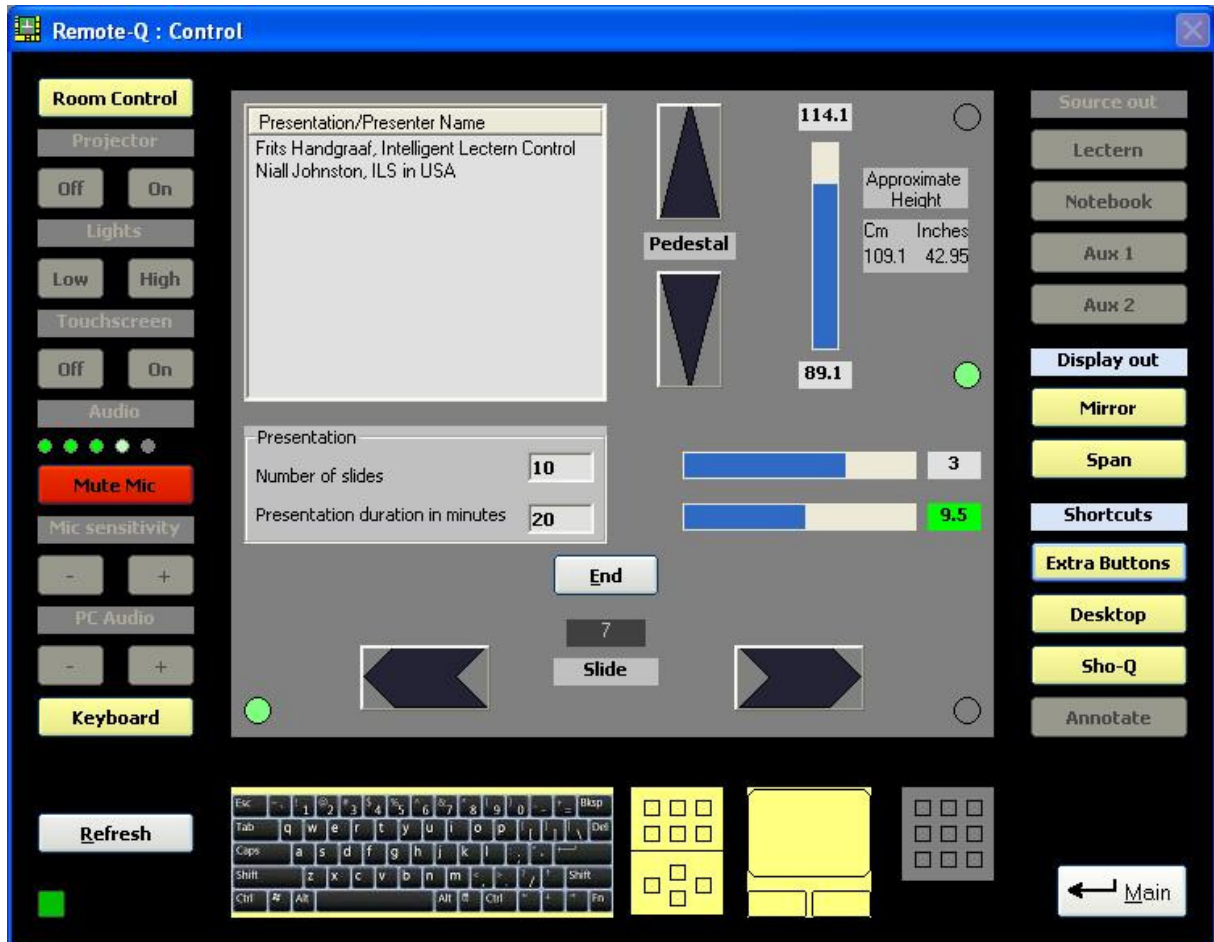
- ILS22Setup Guide. This guide will explain how the ILS22Setup program Wizzard adapts the ILS22 behaviour to end-user or presenter, VAR's (Value Added Resellers) or ICT Support people requirements. Via ILS22Setup you can define usage of external controllers, whether the ILS22 is used as a user interface to these controllers, or whether all of this is separately controlled. You can mix and match between what the ILS22 is responsible for, and what responsibility is taking over elsewhere.
- ILS22 Installation Guide. This guide also explains the embedded communication possibilities to internal relays, extended communication possibilities (RS232/LAN) and connection of microphone's and other peripherals.
- ILS22 Programming Guide. This guide will explain the protocol and command set for an external controller or PC program, to control the ILS22 over a RS232 communication line or via LAN. If VAR's or System Integrators want to develop their own version of ILStranlator, it shows how to program the back-light controller for the led lighted buttons behind the glass-plate and embedded relays.

Note: This guide as well as the ILS22Setup Guide are included with the distribution package and stored in the ILStranlator and ILS22Setup program folders respectively.

Appendix: **Optional: Remote-Q**

Available via ILS is a remote PC based program called Remote-Q.

Remote-Q runs on any older Windows XP, Vista or (newer) Windows-7 PC with minimum system specifications. Runs also via the ILS-15 with touch screen interface button experience.



Remote-Q allows to:

- Monitor the ILS22 via ILTranslator. In this way A/V 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.
- Whether the lectern is in mirror or span mode (after presenter or Remote-Q change)
- Which button was pressed by the presenter.
- 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.
- Start a timer monitoring the presenter allocated time slot in minutes.

- Get a warning when the presenter is running out of presentation time.
- Send a message to the presenter (any).
- Enable or disable buttons remotely so that the presenter can or can not use them. This includes (temporarily) disabling the touch screen.
- Adjust ILStranlator Setup parameters, such as all enable with one Room Control touch or enable drag and drop for Annotation.
- 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, including automatic pedestal adjustment.

Conclusion.

The ILS22 system can be configured according to your needs and beyond. Without ILS22Setup, most functions which can be performed by the ILS22 itself are performed by default. Use ILS22Setup to change it the way you want.

The ILS22 is a hybrid system. Typically you run the ILS22Setup Wizzard once to define all system and environmental variables.

Via ILStranlator/Setup, you quickly adapt to presenter's wishes.

Use Remote-Q if you want to provide back-up support, monitor presentations, advance slides on presenter requests, hit buttons or headers with identical results as done locally behind the lectern, quickly adapt ILStranlator/Setup variables, check which processes and applications are running on the ILS22 and Kill processes or applications if required remotely.

And if you want special adaptations for you own system usage or system setup, the tech support team and programmers at ILS can help you out...

Contact.

For latest information on ILS22 or ILStranlator, check www.intelligentlecterns.com , or for e-mail contact, e-mail to frits.handgraaf@intelligentlecterns.com or henk.degroot@intelligentlecterns.com