Mechdyne

ENABLING DISCOVERY

Operations Guide

FIU.1

Contents

Introduction

This User's Guide describes the functionality and use of the Mechdyne developed graphical system interface. The graphical interface used with this control system allows for easy interaction with the overall systems many components.

This guide also provides general system care guidelines, basic troubleshooting tips, basic warranty information, and contact information for the Mechdyne Service Department.

Title Page

The Title Page is the default starting page. To begin using the system, press anywhere on the Title Page. This page is also shown when the Home button, (described later in this guide) is pressed, after the system has reset in the evening, or after waking the touch panel from sleep mode.

Figure 1-Title Page

BUTTON	FUNCTION
Main Page Button (Anywhere on the page)	Opens the Main User Page
Service Info Page Button (Mechdyne Logo)	Opens the Service Info Page

Service Information Page

The Service Information Page contains the contact information for Mechdyne.

Figure 2-Service Information Page

BUTTON	FUNCTION
Home Button	Opens the Title Page

Top Control Bar and Bottom Navigation Bar

The top and bottom bars are used for global controls of the system. Both of these bars are demonstrated in Figure 3, Figure 5, and Figure 6. From the top bar the user can turn all five projectors on or off. When turning the system off the user will be prompted to confirm that they want to turn the system off. The User can also choose to show or hide all of the projectors by hitting show or hide while the projectors are on. To the right of the controls there will be a title for the page that the user is currently on. To the right of that is the date. Finally the volume controls for the surround sound are furthest to the right.

The bottom bar is used for navigating the touch panel. The Home Icon on the left will take the user back to the title screen, while the Admin symbol on the right will allow the user to access the advanced settings of the touch panel. When on the Settings Page the Admin Symbol will become a Back Arrow. This will allow the user to return to the User Page. Between the two icons may be a set of tab buttons. The user can navigate between the subpages of a page with these buttons. The Bottom Navigation Bar is best displayed in Figure 4 and Figure 5.

Top Bar

Figure 3-Top Control Bar

STATE INDICATORS	FUNCTION
On/Off	Turns the System On/Off. The current state will be highlighted and underlined. The user will be prompted with a Confirm / Cancel prompt demonstrated below when turning off the projectors.
Show/Hide	Shows/Hides all projectors in the system. The current state will be highlighted and underlined.
Current Page/ Date	This indicates the page the user is currently on and the current date.
Surround Volume Mute	Toggles the mute state of the surround sound speakers.
Surround Volume -	Adjust the volume of the surround sound speakers to be quieter.
Surround Volume +	Adjust the volume of the surround sound speaker to be louder.

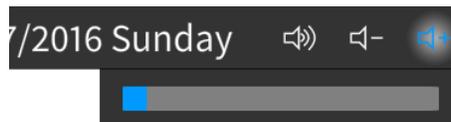Pressing the surround sound volume +/- buttons will bring up the volume gauge as shown in the following image.

Figure 4 - Surround Sound Volume

Top Control Bar: Display State Indicators

The following state indicators can appear beside the on/off and show/hide buttons (in the upper left corner of the screen) to alert users of special cases of power status:
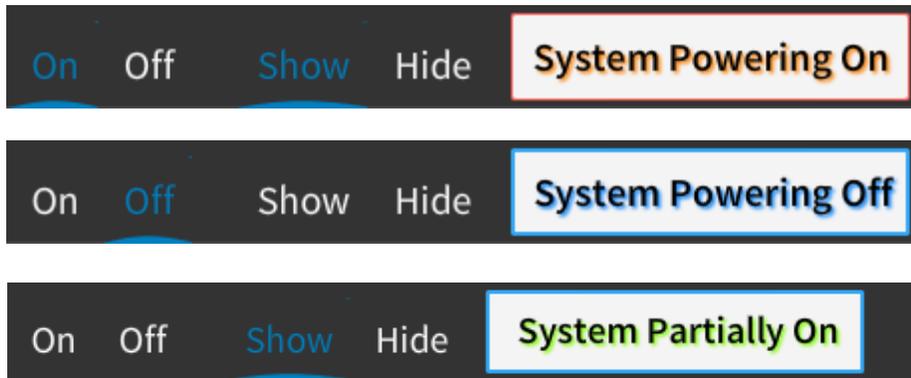
Figure 5 - System Power State Notifications

STATE INDICATORS	FUNCTION
Projectors are Warming Up	Informs the user that at least one of the projectors are warming up.
Projectors are Cooling Down	Informs the user that at least one of the projectors are cooling down.
System Partially Powered	Informs the user that at least one of the projectors are off. Either of the power buttons that appear behind this warning can still be selected.

Bottom Bar

Figure 6 - Bottom Navigation Bar (User Page)

Figure 7 - Bottom Navigation Bar (Admin Page)

STATE INDICATORS	FUNCTION
Home Button	Takes the user to the Title Screen.
Admin / Back Button	Takes the user to either the Admin Page or the User Page
Subpage Tabs	Allows the user to navigate the different Subpages on a Page

Top Control Bar: Power Off Confirmation

The following page will appear when system power 'Off' button is pressed. This gives the user an opportunity to cancel the power off if it was pressed in error.

⚠ Confirm System Power Off

You are about to turn off the system.
Press Confirm to turn off the system or press Cancel to cancel.

⏻ Confirm | ⊘ Cancel

Figure 8 - System Power Off Confirmation

BUTTON	FUNCTION
Confirm	Continues the system power off process and dismisses the popup
Cancel	Cancels the system power off process and dismisses the popup

User Page

The User Page is divided into two sections or subpages. The Displays subpage has controls and status for the projectors. The Video Conferencing subpage has controls for the conference audio and the video camera.

Display Page

The Displays Page allows the user to turn On/Off or Show/Hide each projector in the room. The User can also see the status of each projector and the total lamp hours of each projector.

Figure 9 - User Page (Displays)

BUTTON	FUNCTION
Projector Select Check Box	Selects corresponding projector. If the projector isn't selected "Power On", "Power Off", "Show", "Hide" buttons will not affect its state.
Select All/ Deselect All	Selects all or Deselects all projectors.
Power On/ Power Off	Powers on/off selected projectors. This status will be reflected in the Status Column. Selecting Power Off will bring up a prompt to confirm or cancel.
Show / Hide	Shows or Hides selected projectors. This status will be reflected in the Status Column.
Status Column	Shows the current Status of the projector.
Lamp Hours	Shows the Lamp Hours of the projector.

Video Conference Page

The Video Conferencing page has controls for the call volume and microphone mute. The camera can be moved around and zoom adjusted. There are also four available presets to be recalled or saved.
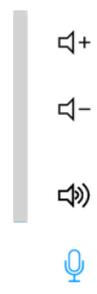
Figure 10 - Video Conferencing Page

BUTTON	FUNCTION
Call Volume +	Adjusts the audio from the video conferencing speakers to be louder in the room.
Call Volume -	Adjust the audio from the video conferencing speakers to be quieter in the room.
Call Volume Mute	Toggles the mute state on/off of the audio from the video conferencing speakers.
Call Microphone Mute	Toggle the mute state on/off of the microphones in the room.
Camera +	Zooms the camera in.
Camera -	Zooms the camera out.
Camera Up, Down, Left, Right	Adjust the cameras pan and tilt in the direction that is pressed.

User Page: Power Off Confirmation Popup

Figure 11 - Power Off Confirmation

BUTTON	FUNCTION
Cancel	Cancels the request to power off a projector.
Confirm	Powers off the selected projector.

Settings Page

The Settings Page can be accessed by selecting the Admin icon in the bottom right of the User Page. From this page the user can access the Auto Shut Down Settings and the License Page.

Figure 12 - Settings Subpage Tabs

BUTTON	FUNCTION
Auto Shut Down	Brings up the Auto Shut Down settings
License	Brings up the License settings.

Settings Page: Auto Shut Down Subpage

This page allows users to control what time the system will automatically shut down.
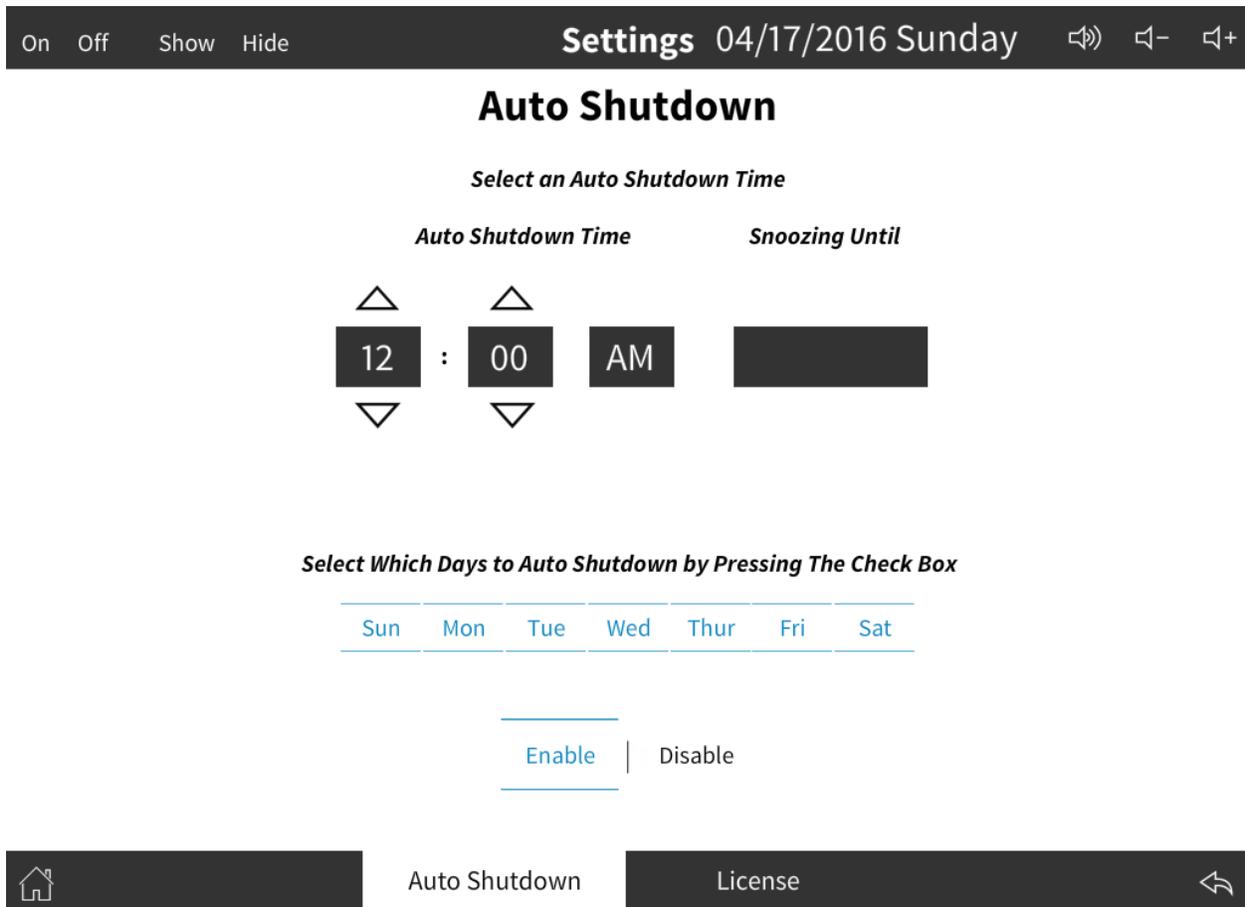
Figure 13 - Auto Shut Down Page

BUTTON	FUNCTION
Up/ Down Hours Arrows	Decreases/increases the hours of the time Auto Shut Down will occur.
Up/ Down Minutes Arrows	Decreases/increases the minutes of the time Auto Shut Down will occur.
Enable	Enables the Auto Shut Down of the system.
Disable	Disables the Auto Shut Down of the system.
Sun – Sat Day Buttons	Enables/Disables the Auto Shut Down for that day.

Auto Shut Down Subpage: Warning Popup

This page appears five minutes before the Auto Shut Down time. The page's purpose is to warn users that the system will be shut down shortly. The user can either Snooze the Auto Shut Down or Disable it all together.

⚠ **Auto Shutdown Warning**

The displays will power off shortly.

Time remaining before auto-shutdown:

00:41

Select an option to continue.

🕐 Snooze 1 Hour | 🕐 Snooze 2 Hours | ⊘ Disable Today

Figure 14 - Auto Shut Down Warning

BUTTON	FUNCTION
Snooze 1 Hour	Snooze the Auto Shut Down 1 hour.
Snooze 2 Hours	Snoozes the Auto Shut Down 2 hours.
Disable Today	Disables the Auto Shut Down today.

Control System License

For continued operation, each Mechdyne provided system requires a license. Licensing information is located on the Control System Menu, in the "Licensing" tab, see Figure 5.

Users can acquire either a temporary license or a permanent license. A unique registration seed is required to acquire either one of these licenses. The registration seed number is displayed on the License Status Page (see next page.)

Each Mechdyne system is installed with a 30 day temporary license. The user will have 30 days before another license is required. The user will be reminded at 30 days, 15 days, and one day before the date their license will expire. When the temporary license expires, users will not be able to access the control system functionality.

Full and temporary licenses can be obtained by contacting the Mechdyne Technical Services Team. The contact information can be found at the end of this manual or on the License Status Page.

Both temporary and permanent licenses can be entered in advance from the "Enter License" button on License Status Page in the System Menu. Taking action to request another temporary license or a permanent license in a timely manner will assure users have no interruptions in usage.

The following section will show users how to successfully enter a new temporary or permanent license, and show various license information screens associated with the licensing process.

License Status Page

The License Status Page shows users how many days until the temporary license expires and the registration seed ID needed to acquire a new temporary or permanent license. To apply for either a temporary or permanent license, users start on this page. The contact information listed on this page is needed to request a new license.
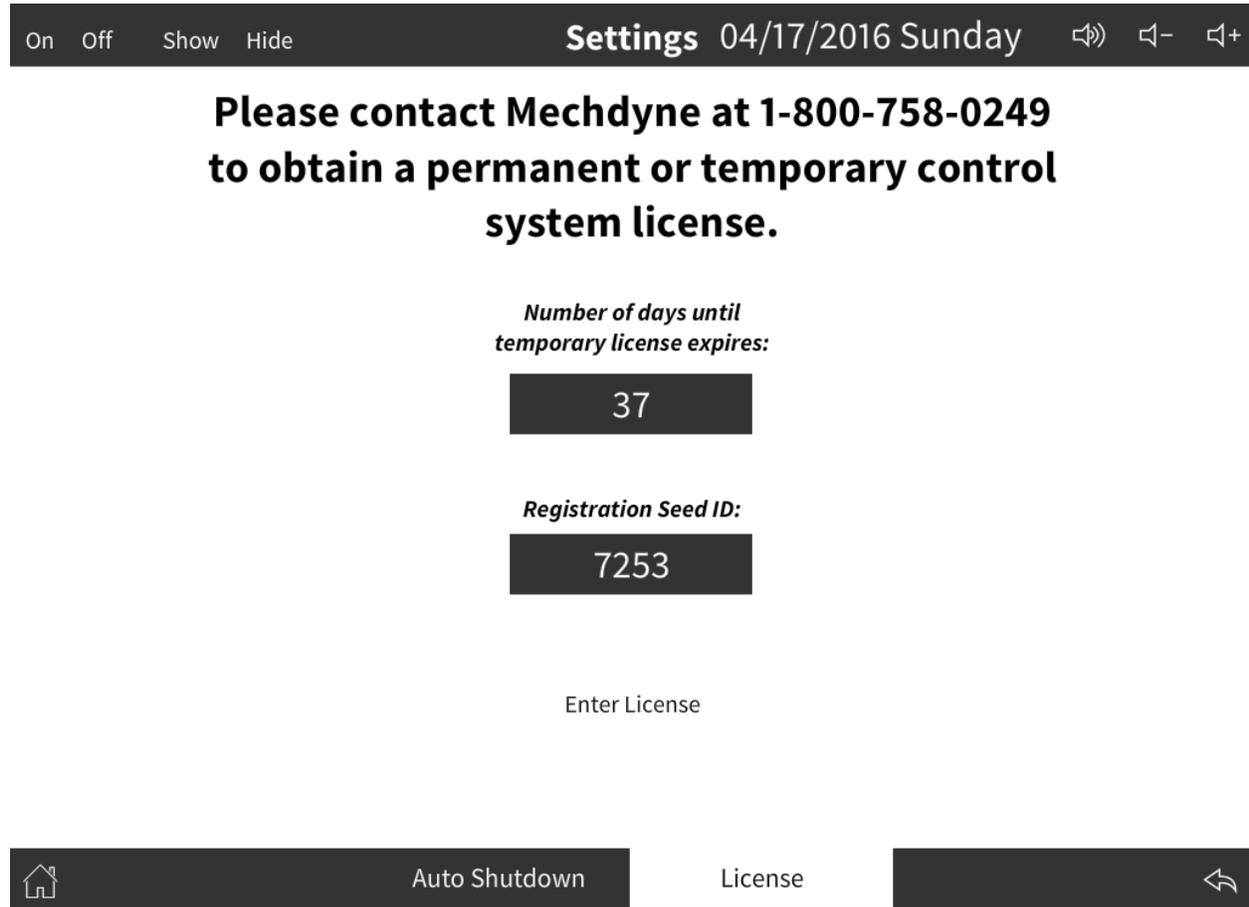
Figure 15 - License Page

BUTTON	FUNCTION
Number Of Days	This is the total number of remaining days until the system license expires. When the license expires, users will not be able to access the control system functionality.
Registration Seed ID	This number is required to request a new license. Without this ID, Mechdyne will not be able to generate the appropriate license key.
Enter License	This button takes users to the next screen in the license application process

The following screen shows what the License Status Section looks like when a license has been successfully entered and the system is fully licensed.
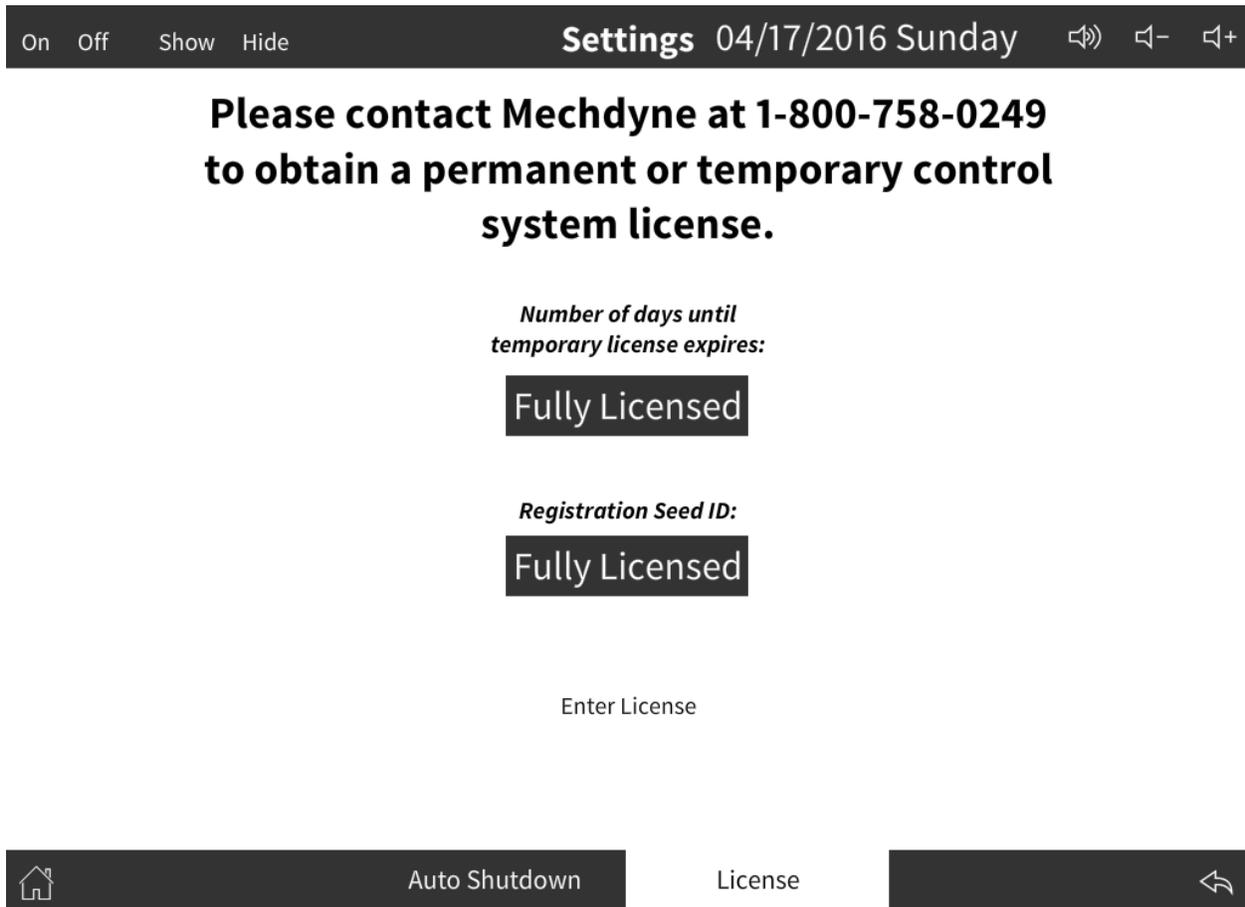
Figure 16 - License Page (When Fully Licensed)

License Entry Popup

The following screen appears after the 'Enter License' button has been pressed. This page allows users to enter the system license information, which must obtained from Mechdyne by calling the Technical Service Team phone number on the License Status Page, see Figure 13.

The Mechdyne Service Team will provide users with the information that is required to enter on this screen.
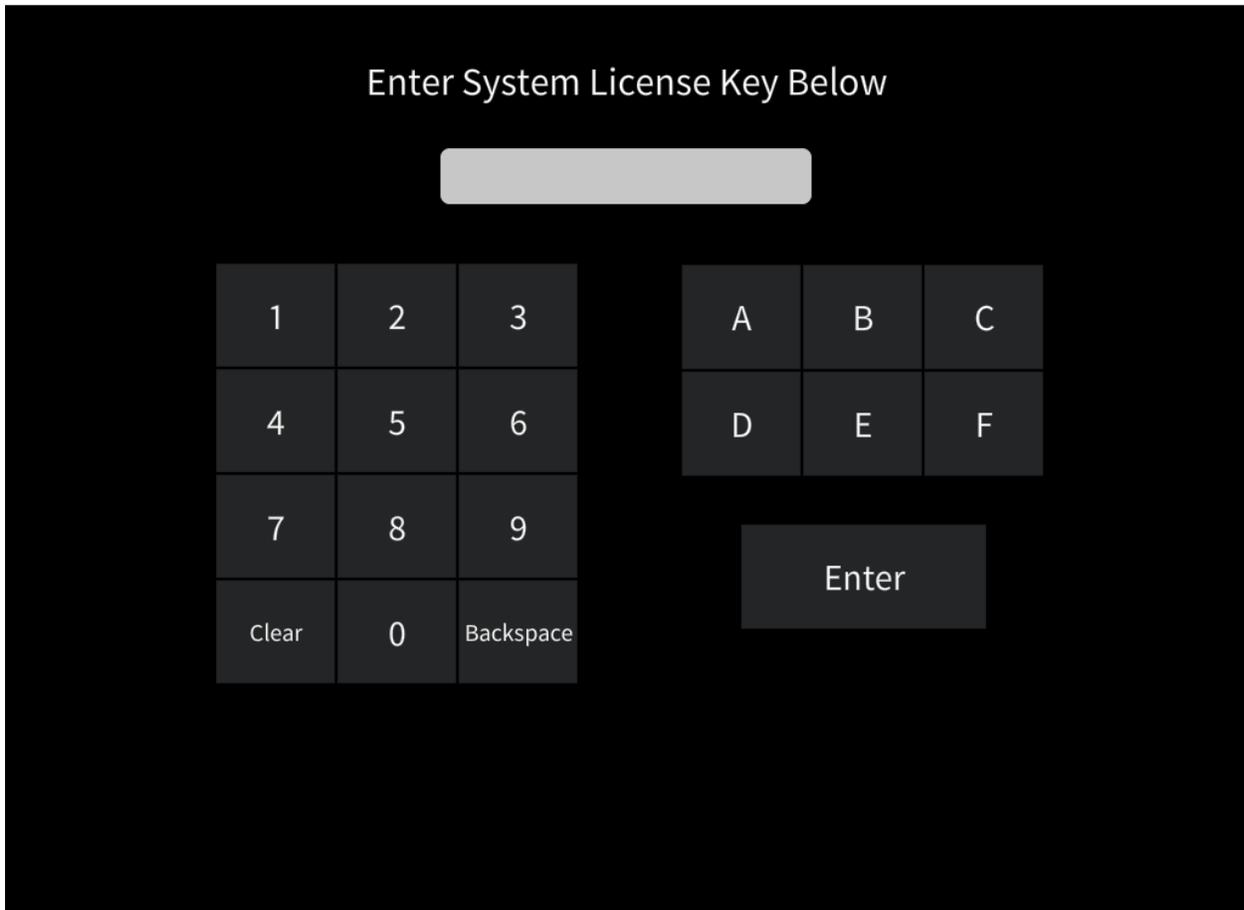
Figure 17 - License Entry

BUTTON	FUNCTION
Text Box	Enter new license information in this box using the information provided by the Mechdyne Service Team
0-9, A-F, Backspace	Used to enter the provided license information
Enter	Submits the entered information

License Expiration and Other Warning Popups

The following screen appears at 30, 15, and one day before the system's temporary license for the control system expires. Pressing the "Continue" button at this time will allow for continued usage of the control system, until the next reminder date as described above. Pressing 'Enter License' will take users to the License Status Page, as seen in Figure 13.

Figure 18 - License Warning

The following screen appears when an invalid license has been entered from the License Entry page.   Press the 'Continue' button to return to the License Entry Page.

⚠ **Invalid System License**

The license you entered was not a valid system license.

Please enter the license again.

If you continue to see this message, contact Mechdyne for more information.

Continue

Figure 19 - Invalid License

![Mechdyne - Enabling Discovery logo]

The following screen appears when a temporary license has been entered correctly.   Press the 'Continue' button to resume normal control system operation.

🕐 **Successful Temporary License**

This is a Temporary License that provides access to the system for 30 days.

Please contact Mechdyne for permanent access requirements.

Continue

Figure 20 - Successful Temporary License

The following screen appears when a permanent license has been entered.   Press the 'Continue' button to resume normal control system operation. At this point no reminders will ever be displayed regarding system licenses.

🔓 **Successful Permanent License**

Thank you for entering the Permanent License Key.

You now have full system access and will not be prompted for a license again.

Please contact our Customer Service Team with any further questions.

Continue

Figure 21 - Successful Permanent License

The following screen appears when a temporary license has expired. Access to normal control system operation will be suspended until a permanent or temporary license is entered into the system.

System License Expired

This page has appeared because the temporary license for this system has expired.

In order to continue using this system, please enter the Permanent License Key received from Mechdyne after full payment of the system.

11 E. Church Street, 4th Floor
Marshalltown, IA 50158
Phone: 641-754-4649
www.mechdyne.com

For service contact:
service@mechdyne.com
Phone: 800-758-0249 (24 Hr)
www.mechdyneservice.com

Registration Seed ID:

216

Enter License

Figure 22 - License Expired

Troubleshooting Tips

The following troubleshooting tips may help with some of the most common minor system difficulties. If you require further assistance with these or any other system issues, please contact the Mechdyne Service Team.

No images are appearing on the screen:
- Make sure the projectors are powered on
- Make sure the projectors are not shuttered
- Make sure the source has the correct resolution and refresh rate settings

Touch panel doesn't respond.
- Power Cycle the touch panel by turning off the Ipad
- Power Cycle the network router found in the equipment rack
- Power Cycle the Controller in the Rack by pulling the power and plugging it back in.

Power Cycle Procedure

The equipment in this system is designed to run 24 hours a day, 7 days a week. In the event of scheduled maintenance or an unexpected loss of power there is a preferred way to power on the equipment to reduce the likelihood of problems or damage to the equipment.

Crestron CP3 controllers do not have power switches; they run continuously at low power consumption.
Exxact computers have front-facing soft power buttons.
Samsung LCD monitor have front-facing soft power buttons.
Panasonic projectors have top-facing soft power buttons, as well as control via the touch panel.
ART tracking PCs have Front Facing Power buttons.
Integra audio receivers can be powered off from a soft front facing power button.
Vaddio audio bridges must be powered off by a recessed power button on the front.
Biamp Tesira DSPs must be unplugged to be powered off.

Power Up Procedure
1. Plug in all components, plug in all main power lines to the equipment racks, and switch on any circuit breakers
2. Power up Crestron controller (this should be automatic)
3. Power up Tesira DSP(this should be automatic)
4. Power up Vaddio audio bridge
5. Power up Integra receiver
6. Power up PCs
7. Power up projectors (if desired)
8. ART tracking PCs can be powered up at any time.

Power Down Procedure
1. Power down PCs via front facing power button
2. Power down tracking controller via front facing power button
3. Power down projectors PC via the OFF button on the touch panel
4. Power down Vaddio audio bridge
5. Power down Integra receiver
6. If so desired any components can now be unplugged, power removed from the equipment racks, and circuit breakers switched off
7. Monitor can be powered down at any time.

Standard Warranty

Mechdyne warrants that for a period of one year from the date of delivery, the products will operate substantially in accordance with specifications published by the manufacturers of equipment utilized as part of the total solution (provided upon request). During the first 90 days of the one year warranty, Mechdyne will provide customer on-site repair for products too large to ship back to Mechdyne for repair.

Projector lamps, batteries, bulbs and media are warranted for a maximum of 90 days.

At the end of the 90-day on-site warranty period, customers must return products to Mechdyne for depot repair during the remaining nine months of the first year warranty. For products too large to ship, customers may purchase an Extended On-Site Warranty or have repair work performed on a Time and Materials basis. The warranty for the software does not include software updates or upgrades made available during the warranty period. These can be obtained through the purchase of an annual software maintenance agreement or by individual purchase when required.

All warranty coverage is void if failure of the product(s) is due to an unauthorized modification, misuse, lack of normal maintenance or use in combination with equipment, devices or software not specified in Mechdyne's published specifications. Any item (hardware or software) that is repaired or replaced during the warranty period will be warranted for the remainder of the original product warranty period. Mechdyne should be promptly notified of any suspected defects in hardware, hardware operation or software.

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Service and Support Contact Information

Standard Mechdyne service office hours are 8 AM–5 PM Eastern Standard Time.

Service Team: mailto:service@mechdyne.com
service@mechdyne.com
24hr Number: +1-800-758-0249

Service & Maintenance Website:
http://www.mechdyneservice.com

Mechdyne Corp Main Office:
Office   (641) 754-4649
Fax   (641) 754-4650

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