

Please read all instructions before installing

RT-24  
Astronomical  
Time Clock  
Wall Switch



Display  
Lighted Switch  
ON/OFF button

SPECIFICATIONS

Voltage.....120/277VAC, 50/60Hz  
Load  
@120VAC.....0-800W tungsten or ballast, 1/6HP  
@277VAC.....0-1200W ballast, 1/6HP  
Environment.....Indoor Use Only  
Operating Temperature.....32° to 131° F (0° to 50° C)  
Humidity.....95% RH, non-condensing  
Tools Needed  
Insulated Screwdriver  
Wire Strippers

Pass & Seymour



Syracuse, NY 13221-4822

DESCRIPTION AND OPERATION

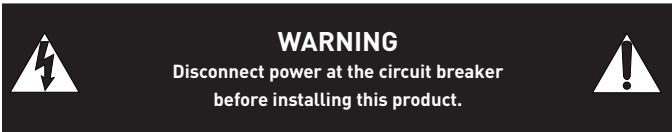
The RT-24 is an astronomic time clock that controls the connected light or fan either manually or through user programmed times.

Upon installation the user enters the correct longitude/latitude coordinates, date, and local time. [See SETUP.] This ensures that once the schedules are programmed, the load turns ON/OFF at the correct local times.

Lighted Switch

To help locate the switch button in a dark room, a green LED illuminates the ON/ OFF button while the controlled load is OFF. When the load is ON, the LED is OFF.

INSTALLATION & WIRING

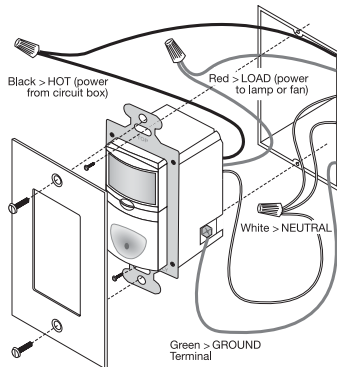


1. Prepare the switch box

After the power is turned OFF at the circuit breaker box, remove the existing wall plate and mounting screws. Pull the old switch from the wall box.

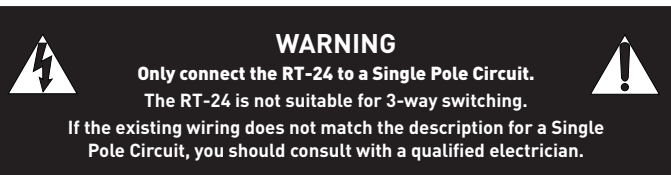
2. Identify the type of circuit

In a single pole circuit, two single wires connect to two screws on the existing switch. A ground wire may also be present and connected to a ground terminal on the old switch. A neutral wire should also be present in the wall box.



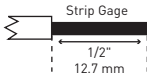
www.passandseymour.com

Call 800.223.4185 for Technical Support



3. Prepare the wires.

Tag the wires currently connected to the existing switch, so that they can be identified later. Disconnect the wires. Make sure the insulation is stripped off the wires to expose their copper cores to the length indicated by the "Strip Gage" (approximately ½ inch).



4. Wire the time switch.

Twist the existing wires together with the wire leads on the RT-24 as indicated in the table below. Cap them securely using the wire nuts provided.

Power wire from the circuit (hot)	to	Black wire on RT-24
Power wire from the lamp or fan (load)	to	Red wire on RT-24
Neutral wires from the circuit	to	White wire on RT-24
Ground wire from the circuit	to	Ground terminal on RT-24

5. Put the RT-24 in the wall box with the display positioned above the ON/OFF button.

Secure it to the wall box with the screws provided.

6. Attach the cover plate.

7. Restore power to the circuit.

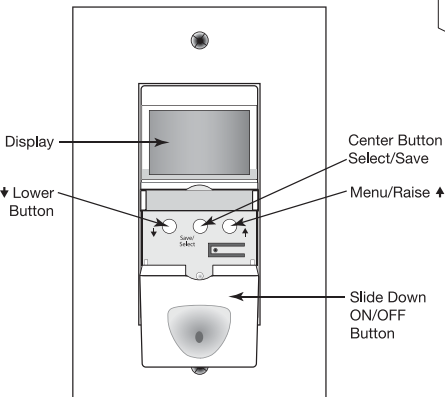
Turn on the breaker or replace the fuse.

SETUP

To access the programming buttons, place your finger or screwdriver behind the lip at the top of the ON/OFF button and pull it toward you. Slide the ON/OFF button down over the wallplate.

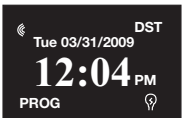
Buttons

The three programming buttons are used to set up the astronomic time switch according to the user's preferences and location.



RT-24 Menu Options

From the standard display, known as the "MAIN PAGE" press and release the ↑ button to enter SETUP menu.



Once in the SETUP menu if there is no activity for 10 minutes, the unit automatically exits out to the MAIN PAGE.

SET TIME AND DATE MENU

Within the SET TIME AND DATE menu you will enter the correct time, date and Daylight Savings Time (DST) start and end days.

Setting	Steps
TIME	
Hour	1. From the SETUP menu highlight SET TIME AND DATE and press the CENTER button. TIME should be highlighted. Press the CENTER button to highlight hour. 2. Press the ↓ button to decrease hour or the ↑ button to increase hour. 3. Press the CENTER button to save hour setting and move highlighted cursor to minute.
Minute	Follow step 2 above. Press the CENTER button to save time setting.
DATE	1. Press the ↓ button to highlight DATE.
Month	1. Press the CENTER button to highlight month. 2. Press the ↓ button to decrease the month or the ↑ button to increase the month. 3. Press the CENTER button to save month setting and move highlighted cursor to day.
Day	Follow step 2 above. Press the CENTER button to save day setting and move highlighted cursor to year.
Year	Follow step 2 above. Press the CENTER button to save year setting.
DAYLIGHT SAVINGS TIME (DST)	Factory Default Setting: DST ENABLED (The unit will automatically adjust for Daylight Savings Time). Press the ↓ button to highlight DST
DST	1. Press the CENTER button to highlight ENABLED. 2. Press the ↑ button to switch between ENABLED and DISABLED. 3. Press the CENTER button to save DST setting.
Start - Week (Input week when DST starts)	1. Press the ↓ button to highlight START. Press the CENTER button to highlight 1st. 2. Press the ↓ button to decrease the week of the month or the ↑ button to increase the week of the month. 3. Press the CENTER button to save the week and move highlighted cursor to the month.
Start - Month (Input month when DST starts)	Follow step 2 above. Press the CENTER button to save month.
End - Week	Press the ↓ to highlight End. Follow same steps for Start - Week.
End - Month	Follow same steps for START - Month.

To exit SET TIME AND DATE menu, press the ↓ button to highlight PREVIOUS menu. Press the CENTER button to select and return to the SETUP menu.

LOCATION MENU

Within the LOCATION menu you will be required to enter the local longitude/ latitude coordinates and time zone. If you do not know this information, you can use a search engine on the Internet. In the search field, type the words "longitude and latitude." It is necessary to enter the longitude and latitude in degrees. Then perform a second search for "time zone."

Setting	Steps
TIME ZONE	1. From the SETUP menu highlight LOCATION and press the CENTER button. TIME ZONE should be highlighted. Press the CENTER button to select the time zone. 2. Press the ↓ button to decrease the time zone. Press the ↑ button to increase the time zone. 3. Press the CENTER button to save time zone setting.
LONGITUDE	1. Press the ↓ button to highlight LONGITUDE. Press the CENTER button to select the longitude Follow step 2 above. Press the CENTER button to save longitude setting.
LATITUDE	1. Press the ↓ button to highlight LATITUDE. Press the CENTER button to select the latitude. Follow Step 2 above. Press the CENTER button to save latitude setting.

To exit the LOCATION menu, press the ↓ button to highlight PREVIOUS MENU. Press the CENTER button to select and return to the SETUP menu.

PREFERENCES

The PREFERENCES menu allows the user to customize the unit's features including the time/date format, sound and flash.

Time format - choose between a 12-hour or 24-hour format

Date format - choose between MM/DD/YY or DD-MM-YY

Sound - When SOUND is enabled the RT-24 will beep every 5 seconds when the load is going to be turned OFF in less than a minute. It will also beep each time the user presses the ↑, the CENTER, or the ↓ button. A small ear icon will appear on the MAIN PAGE when sound is enabled.

Flash - When FLASH is enabled the RT-24 turns OFF the load for 1 second and then turns it back ON to warn the user that the load is turning OFF in 1 minute. When flash is enabled, a lightening bolt icon will appear on the MAIN PAGE.

Setting	Steps
TIME FORMAT	1. From the SETUP menu highlight PREFERENCES and press the CENTER button. TIME FMT should be highlighted. Press the CENTER button to select time format. 2. Press ↑ button to change format. 3. Press the CENTER button to save time format setting and to move highlighted cursor back to TIME FMT.
DATE FORMAT	1. Press the ↓ button to highlight DATE FMT. Press the CENTER button to select date format. Follow step 2 above. Press the CENTER button to save date format.
SOUND	1. Press the ↓ button to highlight SOUND. Press the CENTER button to select the sound setting. Follow step 2 above to enable or disable sound. Press the CENTER button to save setting.
FLASH	1. Press the ↓ button to highlight FLASH. Press the CENTER button to select the flash setting. Follow step 2 above to enable or disable flash. Press the CENTER button to save setting.

To exit the PREFERENCES menu, press the ↓ button to highlight PREVIOUS MENU. Press the CENTER button to select and return to the SETUP menu.

SCHEDULING

The RT-24 has 8 programs allowing the user flexibility in setting schedules to turn the connected load ON/OFF.

Setting	Steps
PROGRAM	1. From the SETUP menu highlight SCHEDULING and press the CENTER button. PROGRAM should be highlighted. Press the CENTER button to select program #. 2. Press the ↓ button to decrease the program and the ↑ button to increase the program #. 3. Press the CENTER button to save the program #.
Day(s) - Set the days of the week the lights will turn ON for that particular program	1. Press the ↓ button to highlight DAY(s). Press the CENTER button to select the days when the program will operate. 2. Press the ↑ to choose the day(s); choices include: - None (program is not in use). - All (program turns ON the connected load every day). - Mon - Fri (program turns ON the connected load Monday through Friday). - Weekends (program turns ON the connected load Saturday and Sunday). - Each individual day of the week (choose the day of the week that the connected load should turn ON). Press the CENTER button to save setting.
ON - Program the time the connected load turns ON	Press the ↓ button to highlight ON. Press the CENTER button to select what time the load will turn on. Follow step 2 above to set the ON time; choices include: - TIME (program a specific time to turn ON the load). - DUSK (program up to 99 minutes before or after dusk for the load to turn ON. Note: this is one of the reasons that it is important that the correct time zone, longitude/latitude coordinates are entered so that the time switch can determine when dawn and dusk will take place). - DAWN (program up to 99 minutes before or after dawn for the load to turn ON). Press the CENTER button to save setting.
OFF - Program the time the connected load turns OFF	Press the ↓ button to highlight OFF. Press the CENTER button to select what time the load will turn off. Follow Step 2 above to set the OFF time; choices are the same as for the ON time. Press the CENTER button to save setting.

Follow the same steps to set Programs 1-8.

To exit the SCHEDULING menu, press the ↓ button to highlight PREVIOUS menu. Press the CENTER button to select and return to the SETUP menu.

VIEWING SETTINGS

Once the RT-24 has been completely set up, it is possible to see the various programs without needing to enter the SETUP menu. From the MAIN PAGE press and hold the ON/OFF button. After 5 seconds the display changes to show the sunrise and sunset time. Continue to press and hold the ON/OFF button. The display will cycle through the 8 programs. Once the RT-24 has completed this cycle, it will continue to cycle through the programs as long as the button is being pressed.

MANUAL-ON

When the lights are turned ON manually, the word MANUAL appears on the bottom left corner of the display. The load stays ON until it is manually turned OFF or until a scheduled program turns the load off. For example, if the load was scheduled to be turned OFF at a set time, such as 10:00 PM, and it was manually turned ON before 10:00, then at 10:00 the load automatically turns OFF and the program number that turned it OFF will replace MANUAL on the display.

TROUBLESHOOTING

Lighted switch is OFF, no load response to ON/OFF button press:

- Make certain that the circuit breaker is on and functioning.

Lighted switch is ON, no load response to ON/OFF button press:

- Check the light bulb and/or motor switch on the fan mechanism.

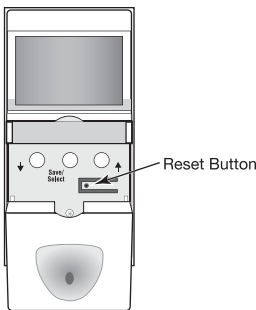
If load does not respond properly after following troubleshooting, turn OFF power to the circuit then check wire connections or call technical support.

POWER FAILURE

In the event of a loss of power to the RT-24, the unit will maintain the correct time, location and settings for 72 hours.

PRODUCT RESET

The RT-24 has a reset button located under the ON/OFF button. If the unit has lost power for an extended period of time (more than 72 hours) and the unit appears to be functioning abnormally (the display is not on or lights are not turning ON/OFF according to the appropriate schedule), it may be necessary to reset the unit. Press and release the reset button. The display will reset so that the Watt Stopper logo appears as it does upon initial power up. At this point, the user will be able to set the date, time and location and reset the programs.

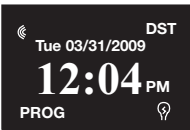


APPENDIX: NAVIGATION, USER OPTIONS & PROGRAMMING

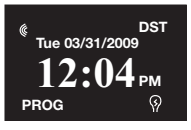
When first powered up, the Pass & Seymour logo appears.



Standard display, aka: MAIN PAGE when the RT-24 is powered and running:

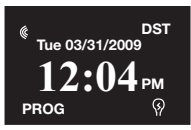


Press and hold the ↓ button to see sunset, sunrise, software version and date:



RT-24 MENU OPTIONS

From the MAIN PAGE, press and release the ↑ button to enter SETUP menu.



Press the ↓ button to move to desired SETUP function.



General Notes: Once in SETUP menu, the ↓ button moves to the previous menu or decreases the value, the ↑ button moves to next menu or increases the value. The CENTER button confirms the selected variable.

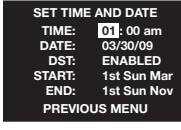
SET TIME AND DATE

Setting the TIME

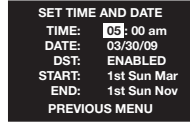
Press the CENTER button to highlight TIME.



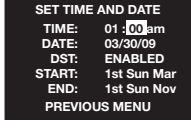
Press the CENTER button to highlight the hour.



Press the ↓ or the ↑ button to decrease or increase the hour.



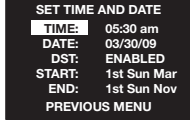
Once the hour is set, press the CENTER button to highlight minutes.



Press the ↓ or the ↑ button to decrease or increase the minutes.



Once the minutes are set, press the CENTER button to save the setting.



Setting the DATE

Press the ↓ button to highlight DATE.



Press the CENTER button to highlight the month.



Press the ↓ or the ↑ button to change the month.



Press the CENTER button to move to day.



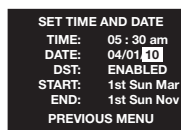
Press the ↓ or the ↑ button to change the day.



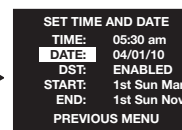
Press the CENTER button to move to year.



Press the ↓ or the ↑ button to change the year.



Once the DATE values are set, press the CENTER button to save the setting.

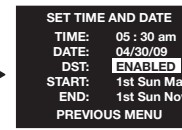


Setting the DST (DAYLIGHT SAVINGS TIME)

Press the ↓ button to move to highlight DST.



Press the CENTER button to highlight ENABLED.



Press the ↓ or the ↑ button to choose ENABLED or DISABLED.

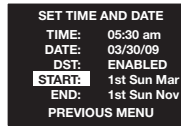


Once DST is enabled or disabled, press the CENTER button to save the setting.

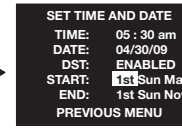


Setting the DST START DATE

Press the ↓ button to move to highlight START.



Press the CENTER button to move to Week in the month.



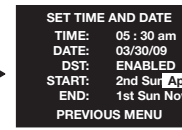
Press the ↓ or the ↑ button to choose the week.



Once the week is selected, Press the CENTER button to highlight month.



Press the ↓ or the ↑ button to choose the month.



Once the month is set, press the CENTER button to save the setting.



Setting the DST END DATE

Repeat the same process as setting the DST start date for setting the DST end date.

Once the DST end date is set, press the ↓ button to highlight PREVIOUS menu.

Press CENTER button to return to the SETUP menu.

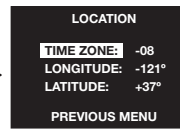
LOCATION

Setting the TIME ZONE

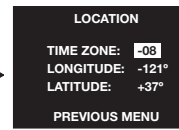
Press the ↓ button to highlight LOCATION.



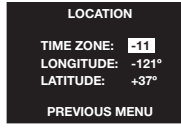
Press the CENTER button to highlight TIME ZONE.



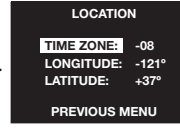
Press the CENTER button to highlight time zone values.



Press the ↓ or the ↑ button to decrease or increase the value.



Once time zone is set, press the CENTER button to save the setting.

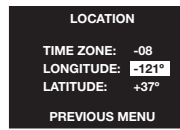


Setting the LONGITUDE

Press the ↓ button to highlight LONGITUDE.



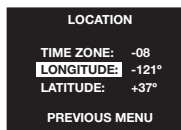
Press the CENTER button to highlight Longitude values.



Press the ↓ or the ↑ button to decrease or increase the value.



Once Longitude is set, press the CENTER button to save the setting.



Setting the LATITUDE

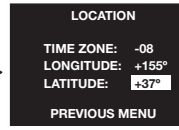
Press the ↓ button to highlight LATITUDE.



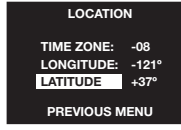
Press the CENTER button to highlight Latitude values.



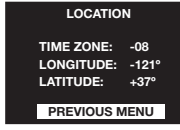
Press the ↓ or the ↑ button to decrease or increase the value.



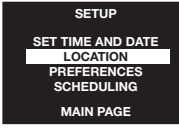
Once Latitude is set, press the CENTER button to save the setting.



Press the ↓ button to highlight PREVIOUS menu.



Once PREVIOUS menu is highlighted press the CENTER button to return to SETUP menu.



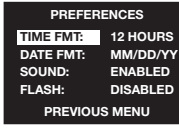
PREFERENCES

Setting the TIME FORMAT

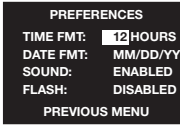
Press the ↓ button to highlight PREFERENCES.



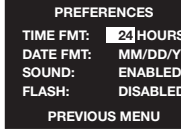
Press the CENTER button to highlight TIME FMT.



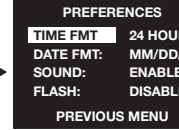
Press the CENTER button to highlight the time setting.



Press the ↓ or the ↑ button to switch between 12 hours and 24 hours.

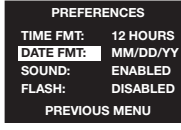


Once time format is set, press the CENTER button to save the setting.

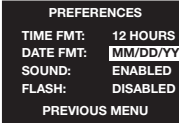


Setting the DATE FORMAT

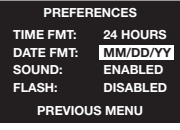
Press the ↓ button to highlight DATE FMT.



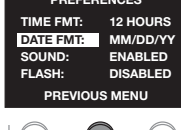
Press the CENTER button to highlight month setting.



Press the ↓ or the ↑ button to choose the month setting.

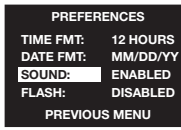


Once month format is set, press the CENTER button to save the setting.

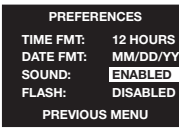


Setting the SOUND

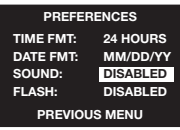
Press the ↓ button to highlight SOUND.



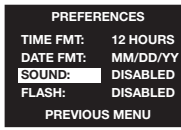
Press the CENTER button to highlight ENABLED.



Press the ↓ or the ↑ button to choose ENABLED or DISABLED.

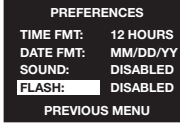


Once sound preference is set, press the CENTER button to save the setting.

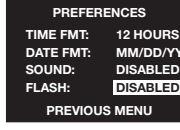


Setting the FLASH

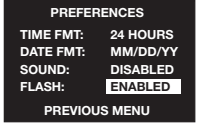
Press the ↓ button to highlight FLASH.



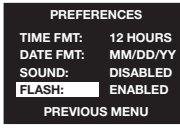
Press the CENTER button to highlight DISABLED.



Press the ↓ or the ↑ button to choose ENABLED or DISABLED.



Once flash preference is set, press the CENTER button to save the setting.



Press the ↓ button to highlight PREVIOUS MENU.



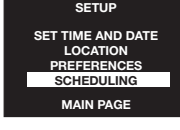
Once PREVIOUS MENU is highlighted press the CENTER button to return to SETUP menu.



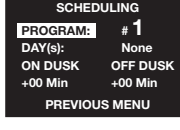
SCHEDULE

Setting the PROGRAM

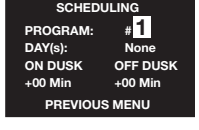
Press the ↓ button to highlight SCHEDULING.



Press the CENTER button to enter the PROGRAM menu.



Press the CENTER button to highlight the program #.



Press the ↓ or the ↑ button to decrease or increase program #.



Once the program # is set, press the CENTER button to save the setting.

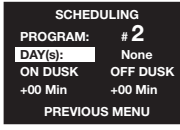


There are 8 different programs that can be set.

Setting the DAY(s)

This refers to the days of the week when the program will be initiated

Press the ↓ button to highlight DAY(s)



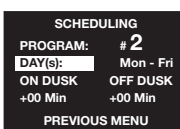
Press the CENTER button to highlight the day(s) options.



Press the ↓ or the ↑ button to choose the day(s) options.



Press CENTER button to save the setting.



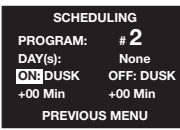
Options include:

None, All, Mon - Fri, Weekends, Sun, Mon, Tue, Wed, Thu, Fri, Sat.

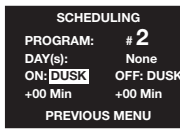
Setting ON/OFF

This sets when the program will come on. The options for this setting are DUSK, DAWN, or TIME. The DAWN or DUSK option will program the number of minutes before or after dawn or dusk that program should take effect.

Press the ↓ button to highlight ON.



Press the CENTER button to highlight the DUSK options.

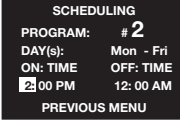


Press the ↓ or the ↑ button to choose DUSK, DAWN, or TIME.

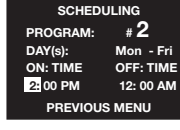


To set the time:

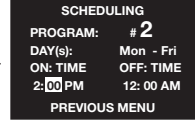
Press the CENTER button to highlight the hour.



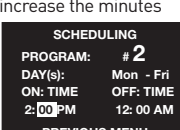
Press the ↓ or the ↑ button to decrease or increase the hour



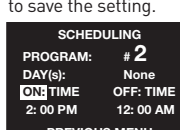
Press the CENTER button to move to the minutes.



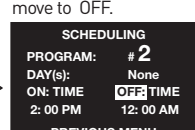
Press the ↓ or the ↑ button to decrease or increase the minutes



Once the time is set, press the CENTER button to save the setting.



Press the CENTER button to move to OFF.

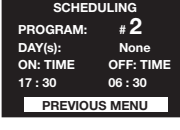


Follow the same steps for setting the OFF options as you did for setting the ON options.

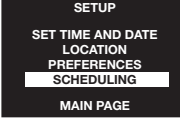
The same process is used for setting the DAWN and DUSK options that was used for setting the TIME option.

Navigating Back to the MAIN PAGE

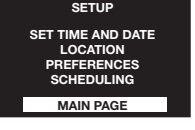
Press the ↓ button to highlight PREVIOUS MENU.



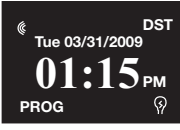
Press the CENTER button to return to SETUP menu.



Press the ↓ button to highlight MAIN PAGE.



Press the CENTER button to return to the MAIN PAGE.



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Pass & Seymour/Legrand warranties its products to be free of defects in materials and workmanship for a period of five (5) years. There are no obligations or liabilities on the part of Pass & Seymour/Legrand for consequential damages arising out of, or in connection with, the use or performance of this product or other indirect damages with respect to loss of property, revenue or profit, or cost of removal, installation or reinstallation.

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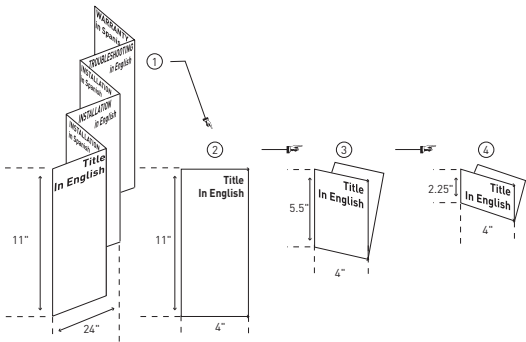
REV	DESCRIPTION	INT:	REV. DATE	APPROVED
1	340897 12252	MCL	8/18/09	

**TITLE BOX PAGE ONLY.**  
**DO NOT MAKE FILM • DO NOT PRINT**

**MATERIAL:** White 16lb (60g/m sq)  
 Uncoated, prefer recycled stock

**FLAT (cut) SIZE:** 24"W x 11" H

**FOLDED SIZE:** 4"W x 2.75" H



<b>DRAWN BY</b>	M Loughlin	<b>Pass &amp; Seymour</b>   <b>legrand®</b> SYRACUSE, NEW YORK		
<b>PLM</b>				
<b>MARCOM</b>		Title: RT-24 Installation Instructions		
<b>ENGINEERING</b>				
<b>QA</b>				
<b>TITLE BOX PG</b>	SCALE 1:1	<b>Drawing #:</b> 340897 12252	<b>Orig. Drawing Date:</b> 4 AUG 09 <b>Revision Date:</b> 8/18/09	<b>REV. #:</b> 2