INTERMATIC®

INSTALLATION AND OPERATING INSTRUCTIONS

Model SS5 Digital Security Timer with dimmer for incandescent lights controlled from one or more wall switch locations. Note special wiring is required for three or more switch applications.

FEATURES:
- Automatic or manual operation.
- Up to 4 ON/OFF/DIM setting pairs per day.
- LCD digital clock and readout.
- 15-minute "lights ON" interval setting.
- Energy saving dimmer.
- Can be used for flood (PAR) lamps.
- Variable setting automatically turns lights ON and OFF at different times for a "lived-in" look.
- 3-minute memory guard protects program against power failure.
- Default program feature simulates occupancy after extended power failure.
- For single pole (1 switch) or 3-way (2 switch) use.
- For incandescent light bulbs up to 500 watts and PAR lamps up to 150 watts; 120 volt, 60 Hz., A.C.

IMPORTANT NOTES BEFORE USING

This timer is designed to operate standard incandescent light bulbs ONLY. It requires a minimum lamp load totalling 40 watts. Timer can operate a maximum single lamp of 150 watts or a combination totalling 500 watts. The SS5 can be used with incandescent lights and flood (PAR) lamps. SS5 MUST NOT BE USED WITH FLUORESCENT LIGHTS OR HOUSEHOLD APPLIANCES, SUCH AS TV'S, STEREOS, ETC. Separate dimmers and photoelectric switches cannot be used in the same circuit with this timer.

Timer should be connected only to permanently wired light fixtures. DO NOT connect to a wall receptacle.

INSTALLATION OF SS5

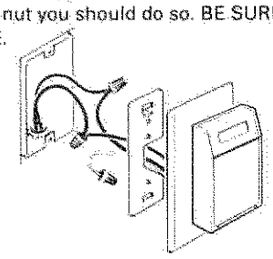
Your timer replaces a standard wall switch using the same wires that are connected to your existing wall switch. Your timer will not replace Despard type switches. You may use your existing wall (switch) plate regardless of whether it covers only the switch you are replacing or more than one switch. In an installation where there is more than one switch mounted behind your switch plate your other wall switch(s) need not be altered in any way.

INSTALLATION FOR SINGLE SWITCH APPLICATIONS

1. Be sure the light(s) being controlled by your wall switch is working. TURN OFF POWER by REMOVING FUSE or turning the CIRCUIT BREAKER OFF at the service panel.
2. Remove the switch plate and the existing wall switch. Remove the wires from the wall switch. If the old wall switch has a ground wire (normally connected to green hex head screw) fasten the wire securely to the metal wall box. Pull the remaining wires out of the wall box. Prepare the ends of the house wiring as shown in the diagram below.

Trim house bare wire to 7/16".

3. Thread the 3 wires of the timer through the hole in the switch plate. Connect one of the house wires to the black wire from the timer, using the wire nuts provided. Twist wire nut until it "LOCKS" securely. Do likewise with the other house wire and the blue wire from your timer. THE RED WIRE IS NOT USED for single wall switch applications. If the red wire is not capped with a wire nut you should do so. BE SURE THE WIRE NUTS ARE SECURE.

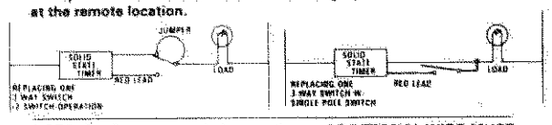


4. Mount switch plate adaptor to wall box with the word "TOP" facing out and up.
5. Tuck the switch wires into the wall box throught the opening in the adaptor plate. Mount your switch plate, using the TOP hole only, with one of the large screws provided.
6. Using the two long screws provided, mount the timer to the adaptor plate by passing the screws through the two holes in the timer front panel. Partially insert both screws to allow alignment of timer. Tighten both screws evenly. DO NOT overtighten. Move timer mode selector switch to "OFF" position.
7. Your timer is now ready for use. Return the power to your timer at the service panel, then refer to the detailed OPERATING INSTRUCTIONS.

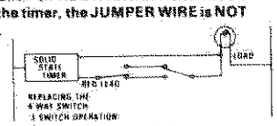
INSTALLATION FOR MULTISWITCH APPLICATIONS

READ THE FOLLOWING INSTRUCTIONS CAREFULLY AS MULTISWITCH APPLICATIONS USING THE ELECTRONIC TIMER ARE WIRED **DIFFERENTLY** THAN WHEN USING CONVENTIONAL TOGGLE SWITCHES. (SEE WIRING DIAGRAM AND NOTE FOR 3 OR MORE SWITCH APPLICATIONS).

NOTE: For new construction or to replace either a dimmer switch or a 3-way switch without screw terminals, a single pole switch can be used at the remote location.

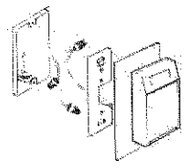


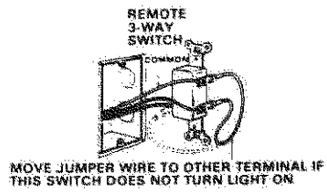
NOTE: For 3 or more switch operation an ADDITIONAL WIRE MUST BE ADDED between the load and the timer, the JUMPER WIRE is NOT REQUIRED for these applications.



NOTE: For switching from 4 or more locations 4-way switches may be wired between the (2) 3-way switches.

1. Select the switch you wish to replace with the timer, then follow steps #1 and #2 for single switch installation.





MOVE JUMPER WIRE TO OTHER TERMINAL IF THIS SWITCH DOES NOT TURN LIGHT ON

2. For two switch control, the jumper wire must be installed at one of the existing mechanical switches. This will be covered later under INSTALL JUMPER WIRE. Identify and remove wire (usually black) attached to "common" terminal of old switch. This terminal normally has a different color screw or may be identified by markings on the wire itself or the switch body. Feed the 3 timer wires through the hole in the switch plate. Connect this common wire to the black lead of the timer. Remove the other two wires and connect them to the red and blue timer wires, it does not matter which. Prepare house wires as shown in diagram after STEP 2 of single switch installation instructions. Use wire nuts provided for these connections. BE SURE THE WIRE NUTS ARE SECURE.
3. Follow steps #4 through #6 for single switch installation.
4. INSTALL JUMPER WIRE for TWO SWITCH applications ONLY AS FOLLOWS:

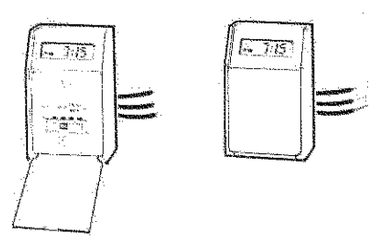
BE CERTAIN POWER IS OFF

- **Screw-type terminal switches:** Remove switch plate and screws from second 3-way switch, pull switch from wall box. Identify "common" terminal and loosen screw just enough to install one end of the jumper under the screw head. Retighten screw. Loosen screw at either of the two other terminals and install other end of jumper wire. Retighten screw.

  Reinstall switch and turn power back on. Turn timer on by moving the slide lever to AUTO position. The display should light and the controlled light should turn on. Try operating light using second (remote 3-way) switch. If light does not operate TURN POWER OFF at fuses or circuit breaker and remove the remote 3-way switch. Rewire the jumper to go from the "common" terminal to the other terminal. Reinstall switch and turn power back on. Both the remote switch and the timer should now be able to control the light.

- **Dimmer, illuminated or back wire pressure terminal switches:** Replace with a single pole non-dimmer switch. Identify "common" wire, attach it together with one of the other wires, under either screw terminal. Remaining wire should be attached under the other screw terminal. See screw terminal type switched for correct terminal.

5. Your timer is now ready for use. Return power to your timer at the service panel then refer to OPERATING INSTRUCTIONS.



PROGRAMMING AND OPERATING INSTRUCTIONS

Your timer has a display and two controls. The display functions as a digital clock and as a programming aid. The controls consist of a PUSHBUTTON and a MODE SELECTOR SLIDE SWITCH. Both are located behind the PUSHBUTTON/COVER (see illustration under #6 of multiswitch applications). When the PUSHBUTTON/COVER is closed, it becomes the PUSHBUTTON.

You must first set the clock and then set the times at which you desire to have the controlled light go on and off automatically. Each on or off time is called a "set point" and is entered using the same procedure as that used to set the clock.

Begin with MODE SELECTOR SWITCH in the OFF position for approximately ten seconds. Any previous settings will be discarded and the timer will be made ready to accept new set points.*

SET CLOCK

Move the MODE SELECTOR SWITCH to the CLOCK position. The controlled light will turn on. There are two types of PUSHBUTTON operations. The first is "push and hold". Doing this will cause the displayed time to "roll". It will continue to roll for as long as the PUSHBUTTON is held. This push and hold roll sequence may be repeated as often as desired.

You may expect that you can single step the display by tapping the PUSHBUTTON. In the CLOCK mode, a quick-push and release is understood by the timer to mean that the displayed time is the correct time. This is the final step in setting the clock. If you do this and the time is incorrect go to the PROG/MAN position momentarily, then return to the clock position and reset the time.

PROGRAM SET POINTS

Move the MODE SELECTOR SWITCH from the CLOCK position to the PROG/MAN position. The display is now ready for use in entering the time for each program set point.

There are eight set points possible (though you are not required to use them all). The set points must be entered in strict on-off sequence. You select the first "ON" time by rolling the display just as you did when you set the clock. The flashing colon and arrows define the tentative set point. If the time displayed matches your intention, you may establish it as a firm set point entry with a quick-push and release. The display will stop flashing momentarily thus acknowledging your entry. It will then resume flashing thus cueing you for the first "OFF set point". It is entered in exactly the same fashion as just described. As many as three more ON-OFF sequences may be thus entered.

If you enter a set point using a "double quick-push" instead of a quick-push release, that point becomes a "variable" set point. A variable set point results in an ON or OFF occurrence which is randomly either 10 minutes early or 10 minutes late with respect to the set point time actually entered.

The entry of a fixed set point is confirmed by a brief non-flashing display of selected time with ON or OFF showing arrow, immediately after the quick push. A variable set point entry is confirmed as above but with the addition of the variable (VAR) arrow showing after a double quick push.

Once program entry is complete, you cannot further alter the program without starting over even if you did not use all of the available set points. In this regard, the timer considers program entry to be complete when any of three events occurs; the MODE SELECTOR SWITCH is moved to the AUTOMATIC position, all eight set points have veen used, or more than five minutes elapse without additional set point entry.

The program cannot be altered without first initializing the timer by moving the MODE SELECTOR SWITCH to the OFF position for at least ten seconds, although the clock time can be changed whenever necessary. For example, to accommodate the change from standard to daylight saving time, the MODE SELECTOR SWITCH can be moved to the CLOCK position and the time can be reset without altering the set points. to review your program refer to **PUSHBUTTON** instructions to follow.

AUTOMATIC OR MANUAL OPERATION

The MODE SELECTOR SWITCH is used to select the desired mode. The primary difference between these two operating modes is that in the AUTOMATIC mode, the controlled light responds to both the PUSHBUTTON and the programmed set points. In the MANUAL Mode, the controlled light responds only to your manual operation of the PUSHBUTTON.
If the colon is flashing, the timer is in the MANUAL mode; if the colon is steady, the timer is in the AUTOMATIC mode.

The PUSHBUTTON gets the same results in either the MANUAL or AUTOMATIC mode. A quick-push and release changes the state of the controlled light going from off to on or vice-versa. A double quick-push initiates a 15 minute ON period after which the controlled light turns off. This is indicated by the ON arrow flashing during the 15-minute interval. A "tripple quick-push" indicates a review cycle during which the entire day's set points are automatically displayed in the sequence that they were entered. After all entered setpoints have been automatically displayed, current time of day will show on display. A push and hold activates light level selection (i.e. dimmer operation). Your choice is made as you release the PUSHBUTTON

OPERATION AFTER AN EXTENDED POWER OUTAGE

If power is removed from the timer for more than a few minutes its setpoint and clock information will be lost, timer must then be reprogrammed once power is restored.

If power is restored to timer after a long outage and selector switch is in "AUTO" position, timer will follow a built-in default program as follows:

ON	OFF
8:00 A.M.	9:00 A.M.
2:00 P.M.	3:00 P.M.
8:00 P.M.	9:00 P.M.
2:00 A.M.	3:00 A.M.

All setpoints are fixed, not variable. The clock will start at 8:00 A.M. at the moment of restoration of power. The display will continue to flash to indicate that an extended power outage has occured until timer is reprogrammed.

PROGRAMMING AND OPERATING INSTRUCTION SUMMARY FOR THE SS5 DIGITAL SECURITY TIMER

1. To use timer, you must set the clock and enter set points.
2. Sequence begins by moving MODE SELECTOR SWITCH from OFF position (after at least 10 seconds in OFF) to clock position.*
3. Clock is then set by rolling the display with a "push and hold" PUSHBUTTON operation and by entering the displayed time using a quick-push and release "PUSHBUTTON" operation. (Both colon and AM/PM arrow cease to flash).
4. Program set point entry is enabled by moving the MODE SELECTOR SWITCH from CLOCK position to PROG/MAN position*.
5. Each set point time is entered using the same procedure as was used to set the clock (step #3); by rolling display with "push and hold" pushbutton operation and by entering the displayed time with either a single quick-push for fixed ON/OFF times or a "double-quick push" for variable ON/OFF times. (The display ceases to flash momentarily subsequent to each set point entry.)
6. Once programmed, the timer may be used either in the MANUAL or AUTOMATIC MODE. (Color flashed in MANUAL Mode only.)
7. In MANUAL and AUTOMATIC modes, PUSHBUTTON can be used to produce any one of the 4 responses:
   a. A "quick-push and release" changes the state of the controlled light.
   b. A "double quick-push" initiates a 15 minute ON interval
   c. A "triple quick push" initiates an automatic program review cycle. (Each set point is displayed in sequence.)
   d. A "push and hold" results in alternating dimmer levels.

*Occasionally, you will see an illegible readout on the display, instead of the blinking 8:00 AM signal. As stated above, simply clear the device by turning switch to OFF for 10 seconds. The controlled light is deliberately kept on during clock setting, program entry, or during the review sequence. This is so that you can see the display during these activities.

SERVICE CENTER / SERVICE CENTRE / CENTRE DE SERVICE
INTERMATIC INCORPORATED, INTERMATIC PLAZA
SPRING GROVE, IL 60081-9698 (815) 675-7000
http://www.intermatic.com

158SS7787

PRINTED IN U.S.A.