CLK350-2 Low Voltage, 7-Day Programmable, Single-Circuit Control Clock

The CLK350-2 single-circuit control clock is designed to provide 7-day, programmable, ON/OFF control for low-voltage DC and low-current (40VDC, 25mA maximum) field devices.

The CLK350-2 clock is typically used to schedule the temperature reset function on the A350R Electronic Temperature Reset Control or offset temperature function on the A419 Electronic Temperature Control with Display.

ON and OFF events can be programmed to occur on a single day of the week, multiple days of the week, or a combination of both.

Figure 1: CLK350-2 Low Voltage, 7-Day Programmable, Single-Circuit Control Clock

Features and Benefits

❑ **Single-day or Block Programming**	Permits versatility in programming; adapts to a wide range of scheduling needs
❑ **Daylight Saving Time Changeover Options**	Provides either automatic Daylight Saving time changeover every year, or one button manual Daylight Saving time changeover
❑ **Holiday Programming**	Allows for a special holiday or vacation program for one or multiple days
❑ **Liquid Crystal Display**	Clearly displays the time of day, day of week, and program ON/OFF status
❑ **Manual Override**	Overrides the programmed event control and maintains the controlled device On or Off, either temporarily or continuously
❑ **Internal Battery Backup**	Retains time/date settings and event programs upon loss of power for up to two weeks
❑ **Minute-to-minute Programming**	Allows load switching in precise time increments

Part No. 24-7664-141, Rev. B
Code No. LIT-930100

Application

The CLK350-2 Low Voltage, 7-Day Programmable, Single-Circuit Control Clock is designed to provide user-defined, time-of-day and day-of-week, ON/OFF scheduling for a variety of field devices that have a low DC voltage, and low current control circuit. (Maximum output load circuit rating is 40VDC, 25mA.)

The CLK350-2 control clock is typically used to provide ON/OFF scheduling of the temperature reset function on the A350R Electronic Temperature Reset Control or the temperature offset function on the A419 Electronic Temperature Control with Display.

IMPORTANT:	The CLK350-2 control clock is intended to control equipment under normal operating conditions. Where failure or malfunction of the CLK350-2 control clock could lead to an abnormal operating condition that could cause personal injury or damage to the equipment or other property, other devices (limit or safety controls) or systems (alarm or supervisory systems) intended to warn of, or protect against, failure or malfunction of the CLK350-2 control clock must be incorporated into and maintained as part of the control system.

Operation

The CLK350-2 control clock employs a polarity-sensitive, open-collector transistor output that energizes during programmed ON times and de-energizes during OFF times. During a programmed ON time, the transistor between the output terminals is on and the LCD displays the ON symbol (◉).

During a programmed OFF time, the transistor between the output terminals is off and the LCD displays the OFF symbol (◯).

Manual override allows the user to turn the electronic output ON or OFF (temporarily or continuously) without changing the stored programs.

In the event of a power loss, a built-in, lithium battery maintains the time of day, day of week and programmed event times for up to two weeks. During a power outage, the clock's output is OFF.

The CLK350-2 clock turns a field device ON and OFF according to a user-defined, time-of-day schedule. Two schedule types are available when programming:

- **block** programming, which allows a block of multiple days (up to seven) to be programmed with the same ON and OFF times
- **day-to-day** programming, which allows each day to be programmed independently.

The user can choose block programming, day-to-day programming, or a combination of both as long as the ON and OFF times do not overlap.

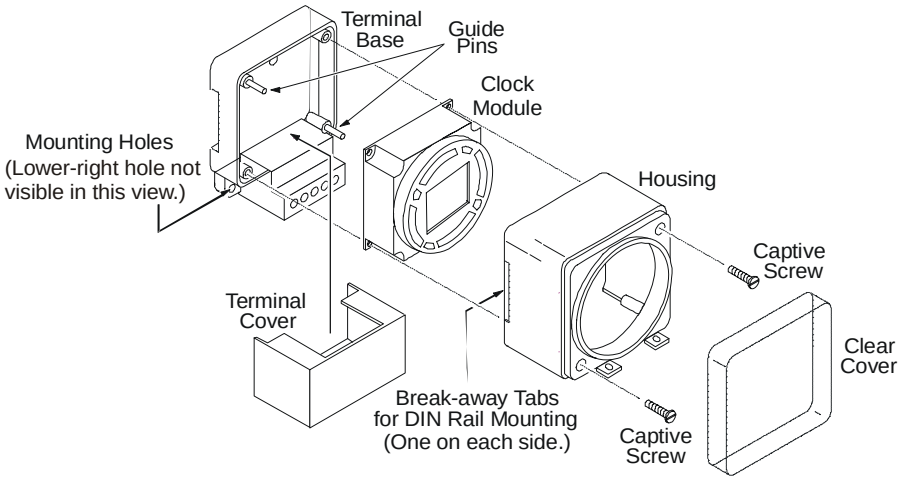


Figure 2: CLK350-2 Low Voltage, 7-Day Programmable, Single-Circuit Control Clock: Exploded View

Dimensions

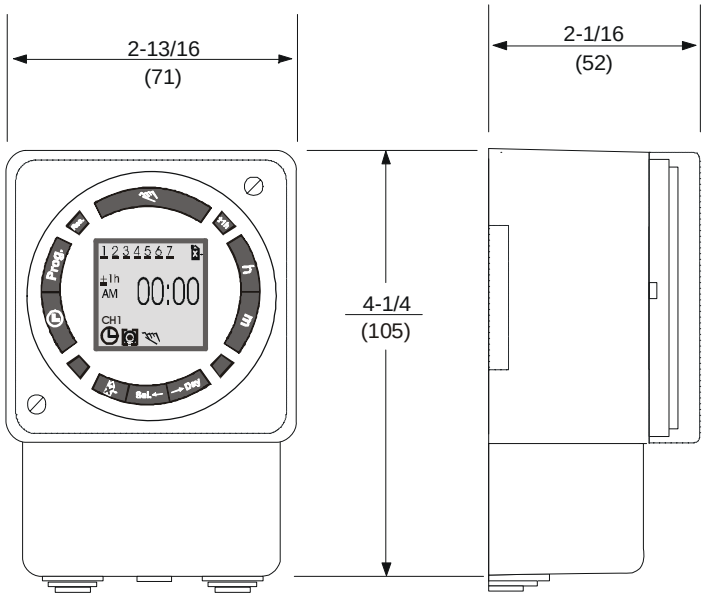


Figure 3: CLK350-2 Dimensions, Front View and Side View, in. (mm)

Installation

DIN Rail Mounting

Refer to Figure 2 and follow the instructions below to mount the clock on a standard 35 mm DIN rail.

IMPORTANT:	Do not DIN Rail mount the clock in locations where excessive vibrations are present.

1. Remove the clear cover from the front of the unit.
2. Using a 1/8 in. flat-blade screwdriver, loosen the two captive screws located in the upper right and lower left corners of the housing.
3. Remove the housing by pulling forward.
4. Using blunt-nosed pliers, remove the break-away tabs from the housing. (See Figure 4.)
5. Remove the terminal cover by pulling forward.
1. Snap the CLK350-2 clock onto the DIN rail.
2. Make wiring connections (See *Wiring* section). Remove the appropriate knockouts on the terminal cover for either conduit or wire entry. (See Figure 5.)
3. Replace the terminal cover and housing, tighten the captive screws, and replace the clear cover.

IMPORTANT:	In areas where high electrical noise is present, locate the clock at least five feet away from the noise source to avoid possible electrical interference.

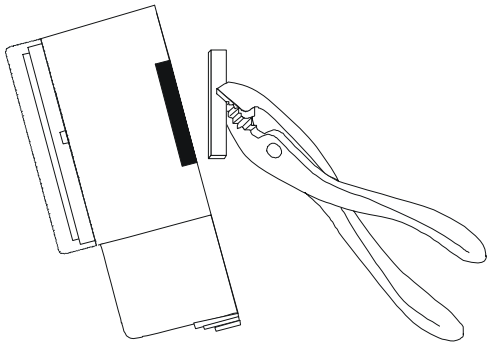


Figure 4: Removing the DIN Rail Break-away Tabs

Surface Mounting

The CLK350-2 clock is not position sensitive and may be mounted in any orientation. However, vertical mounting is recommended to facilitate programming the clock. Refer to Figure 2 and follow the instructions below to surface mount the clock.

1. Remove the clear cover from the housing.
2. Using a small flat-blade screwdriver, loosen the two captive screws located in the upper right and lower left corners of the housing.
3. Remove the housing by pulling forward.
4. Remove the terminal cover by pulling forward.
5. Remove clock module from the terminal base by firmly grasping it on both sides and pulling the module forward (without twisting it).
6. Place the terminal base against the desired mounting surface, and, using the base as a template, mark the three mounting holes. Drill three 1/16 in. holes for No.6 screws.
7. Center the terminal base to the mounting surface using the three holes and fasten the unit securely with the No.6 screws (provided). If necessary, use the drywall anchors provided.
8. Make wiring connections. (See *Wiring* section.) Remove the appropriate knockouts on the terminal cover for conduit entry. (See Figure 5.)
4. Replace the clock module, terminal cover, and housing. Tighten the captive screws, and replace the clear cover.

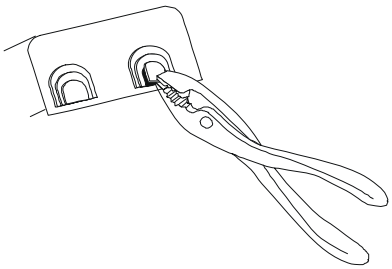


Figure 5: Removing the Knockouts for Conduit or Wire Entry

Wiring

> ⚠ WARNING: **Risk of Electrical Shock.** Disconnect power supply before making wire connections to avoid possible electrical shock or damage to equipment.

Select a power source: either the Y350R power module (only with the A350R control) or a separate 24 VAC transformer.

> IMPORTANT: The CLK350-2 clock can be affected by electrical spikes and other line noise. It is recommended that the clock be powered from a voltage source that has no switching devices or inductive loads connected.

Wire the clock using 16 to 24 AWG wire. Refer to Table 1 and the appropriate wiring diagram in the figures below. All wiring should conform to the National Electrical Code and local regulations.

Before applying power, make sure installation and wire connections are according to job specifications. Then power up the clock and proceed to the *Setting the Time, Day, and Daylight Saving Time* section.

> ⚠ CAUTION: **Equipment Damage Hazard.** The switching output on the CLK350 is rated for 1 to 25 mA at 1.5 to 40 VDC. Proper polarity through the output switch must be maintained. (See Table 1.) Exceeding the clock or control input or output voltage or output current ratings voids the warranty.

Note: When first applying power, it takes several minutes for the battery to charge. If the LCD does not come on after a few minutes, press the **Res.** key (with a pen point).

Table 1: Terminal Designations for Wiring the CLK350-2 with the A350R and the A419

CLK350-2 Terminal Number	CLK350-2 Terminal Description	Corresponding A350R Terminal	Corresponding A419 Terminal/Connection
1	+ Supply Power Input	24 VAC	Separate 24VAC Supply Transformer
2	– Supply Power Common	COM	Separate 24VAC Supply Transformer
3	(+) Switched Output	CLK IN	BIN (+)
4	(-) Output Common	COM	COM (-)

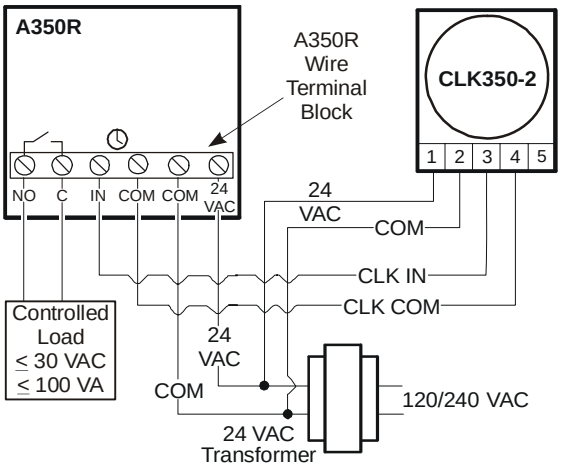


Figure 6: A350R Temperature Control (with a 24 VAC Transformer Power Supply) Using a CLK350-2 Clock to Schedule the Reset Function

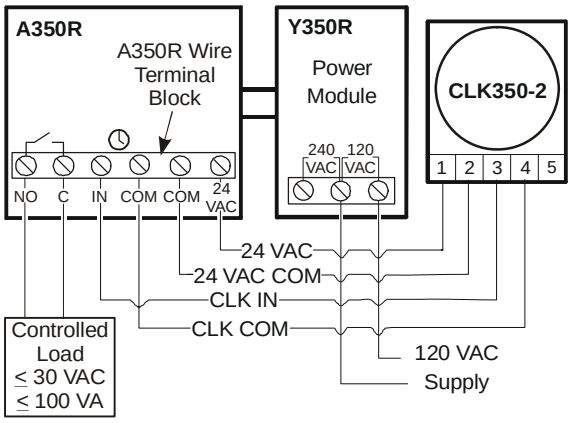


Figure 7: A350R Temperature Reset Control (with a Y350R Power Module) Using a CLK350-2 Clock to Schedule the Reset Function

Notes: Power from the Y350R power module is supplied to the A350R control through a 5-pin connector. Use the 24 VAC and COM terminals on the A350R control to power the CLK350-2 clock. (See Figure 7.)

When used with the A419GBF-1 control (24 VAC model), the CLK350-2 clock must be powered by a 24 VAC power supply transformer that is separate from the A419GBF-1 control power supply.

Refer to *A350R Electronic Temperature Reset Control (with Relay)* Product/Technical Bulletin *LIT-930033* and *A419 Electronic Temperature Control with Display* Product/Technical Bulletin *LIT-125188* for additional information on installing, wiring, setting up, and operating these temperature controls.

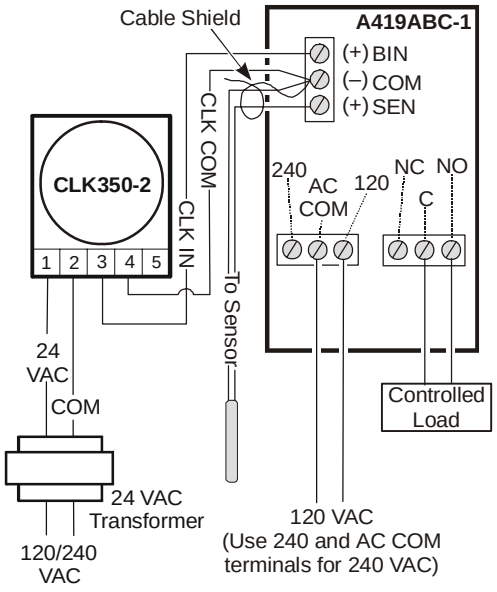


Figure 8: A419ABC-1 (120/240 VAC Model) Temperature Control Using a CLK350-2 Clock to Schedule the Offset Temperature Function

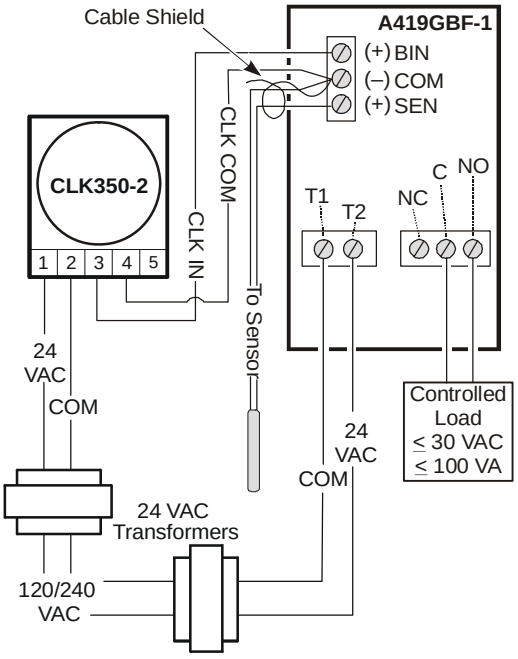


Figure 9: A419GBF-1 (24 VAC Model) Temperature Control Using a CLK350-2 Clock (with a Separate 24 VAC Power Supply) to Schedule the Offset Temperature Function

Display Elements and Programming Key Functions

Day Field displays numbers that represent the days of the week. (1 is Monday, 2 is Tuesday, 3 is Wednesday, etc.)
In the Run mode, the current day of the week is displayed in the Day field.
In the Programming mode all days of the week are displayed and you omit days that you do not want a scheduled event to occur.
The Day field is also used to guide you through setting Automatic Daylight-Saving Time changeover.

Daylight-Saving Time Symbol indicates when the clock is operating in Daylight-Saving time

AM/PM Symbol indicates whether time in Time field is am or pm. The AM/PM symbol field is blank when the clock is set to military time.

Channel Indicator: The CLK350 Time Clock has only one channel indicated by **CH1**.

Run Mode Symbol indicates when the clock is in normal run operation.

Holiday Symbol indicates when the clock is running the Holiday program.

Time Field: In the Run mode the Time field displays the current time of day in either AM/PM or military time.
In the Programming mode, the Time field is used to set the time of day when an event is scheduled to occur.
The Time field is also used to establish days, months, and years when setting Automatic Daylight-Saving Time changeover.

ON/OFF Symbol indicates if the clock's switch is closed (ON = ⦿) or open (OFF = ∩). The square brackets indicate that the automatic event schedule is overridden and the switch is set to be continuously ON ([⦿]) or OFF ([∩]).

Temporary Manual Override ON Symbol indicates if the temporary manual override function is on and automatic control is overridden until the next scheduled event is initiated. If the symbol is absent, the temporary manual override function is off.

Figure 10: Display Elements and What They Indicate

ON/OFF Selection Key: In the Programming mode, press to select an ON or OFF event. **I**n the Run mode, press to select temporary or continuous (Fixed) ON or OFF manual override.

Reset Key: Press **Res.** to completely clear the clock memory of all programs, time of day and date, and reset the clock for reprogramming. (This is a recessed key, press with a pen point.)

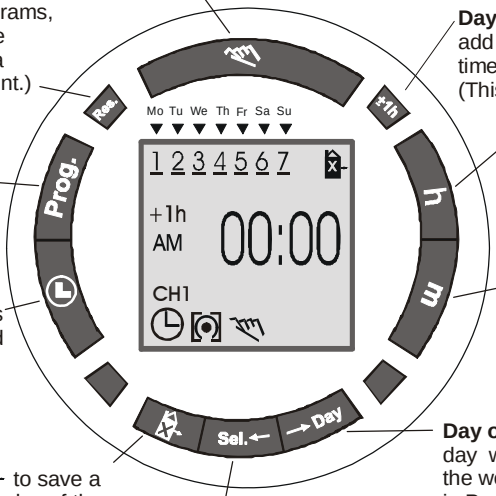
Daylight-Saving Change Key: Press **+1h** to add or subtract one hour from the displayed time to adjust for daylight-saving time changes. (This is a recessed key, press with a pen point.)

Program Mode Key: Press **Prog.** to go to Programming mode.

Hours Key: Press **h** to set the hour of the day in AM/PM or military time. This key is also used in other programming procedures. (See *Programming the CLK350-2 Clock.*)

- Set Time/Auto Run Mode Key: Press and hold to set the day of the week, and time of day. Also press this key to return the clock to Automatic Run mode.

Minutes Key: Press **m** to set the minutes of the hour in AM/PM or military time. This key is also used in other programming procedures. (See *Programming the CLK350-2 Clock.*)



Day of the Week Key: Press **Day** to set current day when setting up clock, or to **select** days of the week to be omitted from programmed events in Programming mode. (See *Programming the CLK350-2 Clock.*)

Holiday Program Key: Press to save a Holiday program or to establish a day of the week as a holiday.

Select Key: Press **Sel.** to **omit** the day(s) of the week that were selected with the Day of the Week key.

Figure 11: Programming Keys and Their Functions

Setting the Time, Day, and Daylight Saving Time

IMPORTANT:	Before setting the time and day, and programming the clock for the first time (or when re-setting up the clock for a new application), press the Reset key (**Res.**) to clear **all** data from the clock memory.

Setting the Time of Day and Day

After resetting the CLK350-2 clock, set the clock for the current time-of-day and day by first setting the display for AM/PM or military time.

To set the digital clock for AM/PM or military time display:

1. Press and hold the **h** key, then press the **±1h** key. AM/PM time is selected when AM and 12:00 appears on the display in the Time field.
2. Press the **±1h** key again to select military time. (00:00 appears on the display, and AM/PM is **not** displayed when military time is selected.)

To set current time of day and day:

1. Press and hold the key then,
2. If Daylight Saving time is in effect, press the **±1h** key once. The **+1h** symbol appears on the display to the left of the Time field. (See Figure 10.)
3. While holding down the key, press the **h** key to advance to the current hour. (Holding the **h** key for longer than 2 seconds advances the hours rapidly.)
4. While holding down the key, press the **m** key to advance to the current minute. (Holding the **m** key for longer than 2 seconds advances the minutes rapidly.)
5. While holding down the key, press the **day** key repeatedly to advance to the number in the Day field for the current day of the week. (1 is Monday, 2 is Tuesday, etc.)

Note: If the day numbers are flashing, the day of week was not set. The time clock cannot be programmed unless the day of week is set.

Changing Daylight Saving Time Manually

In the Spring when Daylight Savings time is scheduled to changeover, press the **±1h** key once to advance the clock display one hour. The **+1h** symbol appears to the left of the Time field. (See Figure 10.) Press the **±1h** key once again in the Fall to set the clock to standard time. (The **+1h** symbol disappears.)

Setting Automatic Daylight Savings Time Changeover

Setting the Daylight Saving time to changeover automatically is optional, but you only need to set this function once and the clock will automatically changeover on the first Sunday in April and the last Sunday in October every year until the year 2079.

To set automatic Daylight Saving time changeover:

1. Press and hold the **±1h** key and press the **Day** key once. A **1** appears in the Day field at the top of the LCD, and a flashing **12:31** (December 31st) appears in the Time field AM/PM mode. In Military Time mode **31:12** appears flashing. Release the **±1h** key.
2. Enter the current date (in the AM/PM mode) by pressing the **m** key to advance to the current day of the month, then press the **h** key to advance to the number for the current month. (In the Military Time mode use the **h** key to advance the days and the **m** key to advance the months.)
3. When the current date is entered, press the **±1h** key once. A **2** appears in the Day field at the top of the display, and **1995** appears in the Time field.
4. Press the **m** key repeatedly to enter the current year. (If you overshoot the current year, press and hold the **m** key down to scroll to 2079 and back to 1995.)
5. When the current year is entered, press the **±1h** key once, a **3** appears in the Day field, and **AU** appears in the Time field. (AU sets the European daylight saving dates.)
6. Press the **m** key once, **cHA** appears in the Time field. (If the **m** key is inadvertently pressed twice and **HA** appears, press the **m** key two more times until **cHA** appears.)

7. When **cHA** is entered, press the **±1h** key once, a **4** appears in the Day field, and **03:30** appears in the Time field in the AM/PM mode, which indicates March 30. **30:03** appears in Military Time mode. (Other dates in late March may appear, instead of March 30.)
8. Enter the date for the spring time change (in the AM/PM mode) for the current year by pressing the **h** key once to advance to month **04** (April). Then press the **m** to advance to the date of the first Sunday in April of the current year. (In the Military Time mode, use the **h** key to advance the days and the **m** key to advance the months.) Refer to *Daylight Saving Time Changeover Dates* listed below.
9. When the date for the current year's spring time change is entered, press the **±1h** key once, a **5** appears in the Day field and the month and day for the fall time change (for the current year) appears in the Time field.
10. Press the ⏲ to save the previous settings and enter the Run mode.

Daylight Saving Time Changeover Dates

2000 April 2 – October 29	2004 April 4 – October 31
2001 April 1 – October 28	2005 April 3 – October 30
2002 April 7 – October 27	2006 April 2 – October 29
2003 April 6 – October 26	

Programming the CLK350-2 Clock

All **programs** established on the CLK350-2 clock consist of:

- An ON **or** OFF command
- A time of day (hour and minute)
- A single day selection or a block selection of multiple days of the week

A discrete program is required for each ON event and for each OFF event, except for events that are programmed to occur on multiple days at the same time of day.

Up to 42 programs may be set on the CLK350-2 clock.

It is helpful to write out the program schedules before entering the program into the time clock. Use the schedule form provided to plan and write out the desired program schedule. See Table 2.

IMPORTANT:	If the Day field is flashing, the time-of-day and/or day-of-week have not been set and saved properly. The current time-of-day and day-of-week must be set before entering programs into the time clock. See *Setting the Time, Day, and Daylight Saving Time*.

Programming Event ON/OFF

To create a program, first select the programmed event to be ON or OFF. To select ON or OFF events:

1. Press the **Prog.** key (only) once, and the Start Programming display appears. (See Figure 12.)

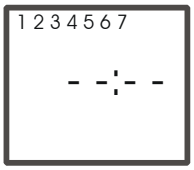


Figure 12: Start Programming Display

2. Press the ☝ key once to create an ON event, and the ON symbol ◉ appears.
3. Or press the ☝ key twice to create an OFF event, and the OFF symbol ◯ appears.

Programming Event Time of Day

After setting an ON or OFF event, set the time of day (hours and minutes) that the event occurs.

To set hours and minutes (and AM or PM in AM/PM mode):

1. Press the **h** key to scroll to the desired event hour time. (Make sure to scroll to the desired AM or PM hours in AM/PM mode.)
2. Press the **m** key to scroll to the desired minutes.

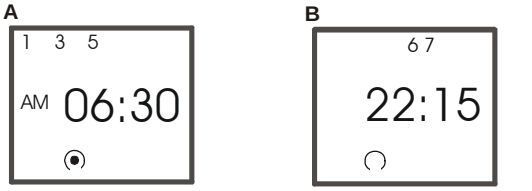
Programming the Days of the Week

After setting the time of day at which the event occurs, select the day or days of the week on which you want the event to occur.

The **Day** and **Sel.** keys are used to **omit** days of the week that an event is **not** to occur on. If the event is to occur every day of the week, ignore the **Day** and **Sel.** keys.

To select and display the day or days of the week on which the event is to occur:

1. Press the **Day** key to move the flashing line under the first number of the day of the week you want to **omit** from the program. (1 is Monday, 2 is Tuesday, 3 is Wednesday, etc.)
2. Press the **Sel.** key to **omit** the day.The line and the selected number start flashing.
3. Press the **Day** key and the previously selected day number disappears and the flashing line moves to the next day number position.
4. Repeat steps 1 and 2 to omit additional days of the week. (See Figure 13 for examples of programmed-event screens.)
5. When the (remaining) selected day or days of the week are displayed, press the **Prog.** key once to save the Program (Event Schedule) and return to the Start Programming display.
6. Press the key to return to the Run mode. (Or wait 1 minute for the clock to automatically revert to the Run mode.)



The A clock display is in AM/PM mode and is scheduled for an On event at 6:30 am on Monday, Wednesday and Friday.

The B clock display is in Military Time mode and is scheduled for an Off event at 10:15 pm on Saturday and Sunday.

Figure 13: Examples of Programmed Events

IMPORTANT:	If an ON event time is programmed and is scheduled to occur earlier than the current time, press the key to turn the output switch ON. The clock does not “look back” to determine if the output should be ON or OFF.

IMPORTANT:	If the ON/OFF symbol is flashing and the program cannot be saved, ON or OFF was not selected and entered as part of the program. ON or OFF must be selected. (See *Programming Event ON/OFF*.)

Changing A Program

Select and display the program you want to change by pressing the **Prog.** key repeatedly. When the desired program is displayed, use the **Sel.** and **Day** keys to omit days or to add days that were previously omitted. Use the **h** and **m** keys to change the program’s time (hours and minutes).

Press the **Prog.** to save the changed program and go to a new Start Programming display or press the key to save the changed program and return to Run mode.

Deleting Programs

To delete a single program:

1. Press the **Prog.** key (repeatedly) until the desired program is displayed.
2. Press the **m** key to **:59** and press once more to blank out the minutes positions in the Time field.
3. Press the **h** key to **11PM** (or **23:** in military time mode) and press once to blank out the hours position in the Time field.
4. Press the key and the display flashes for several seconds and then returns to the Run mode.
5. Repeat Steps 1 through 4 for each program you want to delete.

To delete all programs:

Press the **Res.** key (with a pen) to delete **all** the clock data, including all programs, the time of day, and daylight saving information.

Holiday Program

A Holiday program schedule may be created to use on holidays or vacation periods where the regular scheduled programs are not needed. More than one ON or OFF time may be scheduled for the Holiday program.

1. Press the **Prog.** key (repeatedly) to go to a blank Start Programming display. (See Figure 12.)
2. Entered the first desired program for the holiday according to the instructions in *Programming the CLK350-2 Clock.* (Start at Step 2 of *Programming Event ON/OFF*. Do not press **Prog.** key again as stated in step 1. Also, days are not programmed in Holiday program.)
3. Press the key once.
4. Enter any additional programs as above.
5. Press the key to save programs and enter the Run Mode.

Implementing the Holiday Program

You may select which day of the week the holiday is to begin on, up to six days before the holiday. The holiday may be programmed to continue 1 to 99 (consecutive) days. The regular scheduled events are inactive during the Holiday program. To implement the Holiday program:

1. Press the key once. **Ho** appears in the Minutes field.
2. Press the **Day** key to advance to the desired day of the week (for the holiday to start).
3. Press the **Sel.** key once to select one day. Press the **Sel.** repeatedly to maintain the holiday program for multiple days. **d** appears in the Hour field and the number of days the Holiday program will run appears in the Minutes field.

Note: If the **Sel.** key is held down, the days will scroll rapidly to 99 and then back to 1.

4. Press the key to save the settings and enter the Run mode. The symbol is displayed above the time field until the Holiday program is completed.

To review the Holiday program, press the key once. The holiday start day and number of days the Holiday program is active are displayed. Press the key to return to Run mode.

To delete implementing the Holiday program before the program starts, press the key twice, and the symbol disappears from the display.

On the day the Holiday program is selected to begin the program is implemented, and the symbol is displayed, as well as the number of days remaining in the holiday period. To cancel the Holiday program, and return to the regular programmed schedule, press the key once.

Reviewing Programs

To review all of the programs:

1. Press the **Prog.** key repeatedly and the programs appear in the order they were entered. After all the existing programs have been reviewed, the blank Start Programming display appears (see Figure 12) allowing you to enter additional programs.
2. Press the **Prog.** key again to display the number of free event programs available (such as **Fr 38** if four programs have been entered).
3. Press the key to return to the Run mode.

Overriding the Programmed Schedule

The clock's current event status (ON or OFF) may be overridden, either temporarily or continuously.

Temporary Override

While in the Run mode, press the key once to reverse the event output (ON to OFF or OFF to ON).The symbol appears on the display to the right of the ON/OFF symbol and the symbol disappears. At the next scheduled event, the clock reverts to automatic operation.

Fixed Override

While in the Run mode, press the key twice to turn the output ON continuously. The **[◉]** (Fixed ON) symbol appears, or press the key three times to turn the output OFF continuously, the **[○]** (Fixed OFF) symbol appears.

To terminate a fixed override, press the key repeatedly until the symbol appears in the lower left corner of the display.

Battery Reserve

In the event of a power failure, a built-in, lithium battery maintains the time of day, day of week, daylight settings, and event programs for up to two weeks. When the clock is using battery power, the output is OFF. The non-replaceable battery is charged while the clock is powered.

Ordering Information

The CLK350-2 is not field repairable. To order a replacement control clock contact the nearest Johnson Controls branch office or authorized distributor and request Product Code No. CLK350-2C.

Repairs and Replacement

Do not attempt to make field repairs on the CLK350-2 clock. If the control is not functioning properly, contact your local Johnson Controls/PENN representive for a replacement.

Table 2: Clock Event Schedule Form

Program Number	ON/OFF	Hour (h)	Minutes (m)	Days of Week	Holiday Program
***1**	ON	6 AM	30	Monday, Wednesday, Friday	No

* This program is shown on Display A in Figure 13.

Specifications

Product	CLK350-2 Low Voltage, 7-Day Programmable, Single-Circuit Control Clock
Supply Power Rating	20 to 30 VAC/DC; 2 VA@ 24 VAC, 1W @ 24VDC, Class 2
Output Type	Open Collector Transistor
Output Load Rating	1-25 mA @ 1.5 to 40 VDC
Clock Accuracy	± 4 minutes per year (5 seconds per week) @ 68.0°F (20°C)
Battery Backup	Lithium Battery saves clock settings for up to two weeks
Programs	42 unique programmed events (ON and/or OFF) may be entered into the clock memory. If each event is scheduled to occur 7 days per week, 294 switch events occur.
Wire Gauge	16 to 24 AWG (22 recommended)
Mounting	Surface or DIN Rail
Ambient Operating Conditions	0 to 140°F (-18 to 60°C)
Maximum RH Conditions	85% RH @ 85°F (Non-condensing)
Agency Listing	UL and Canadian UL Recognized: (as Grasslin Model No. FM/1 digi 42) File E83486
FCC Compliance	Part 15, Class A
Dimensions (H x W x D)	4-1/4 x 2-13/16 x 2-1/16 in. (105 x 70 x 52 mm)
Shipping Weight	7.3 oz (206 g)

The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the local Johnson Controls/PENN Application Engineering at (414) 274-5535. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

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