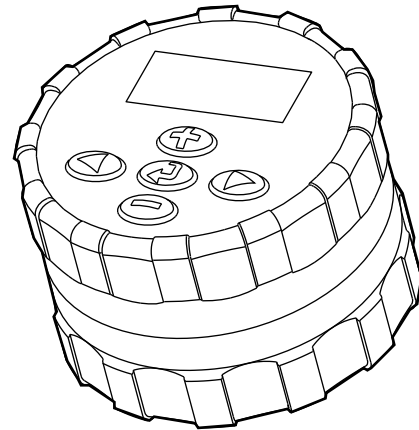


# SVC

- ENG Smart Valve Controller**  
Owner's manual and programming instructions
- ESP Programador Autónomo de Pila**  
Instrucciones de instalacion y manual del usuario
- FR Programmateur Autonome**  
Guide de l'utilisateur et Instructions d'installation
- IT Programmatore per Valvole Intelligente**  
Guida per l'utente ed istruzioni per l'installazione
- DE Das Intelligente Magnetventil-Steuergerät**  
Hinweise zur installation und bedienungsanleitung
- PRT Programador de Válvulas Inteligente**  
Guia do utilizador e instruções de instalação



**Hunter®**

**ENG**

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## SVC FEATURES

- Simple push button programming
- Operates up to four valves
- Large Liquid Crystal Display (LCD) with easy to understand icons
- Operates on a standard 9-volt alkaline battery
- Days-of-the-week water schedule
- Up to nine start times per day
- Run times from 1 minute to 4 hours
- Manual watering
- Low battery status shows status of life of battery
- Rain sensor (or other micro-switch sensor) compatible
- Multiple mounting options
- Non-volatile memory retains all program information

## SVC COMPONENTS

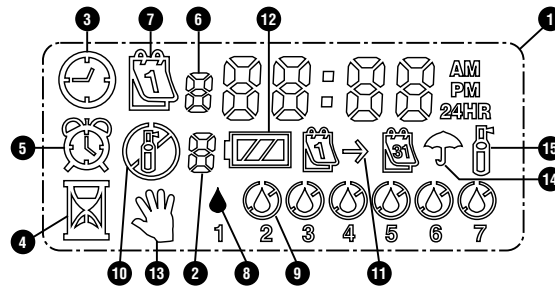
This section provides a brief overview of some of the components of the SVC. Each item will be discussed in further detail later. However, this section can be helpful in getting acquainted with the different options available.

### LCD Display

1. **Main Display** – Indicates all programmed information.
2. **Station Number** – Indicates the station number being programmed.
3. **Current Time/Day** – Icon indicates when current day and clock are being set.
4. **Run Times** – Icon indicates when Run Times are being set. Allows user to set run times from 1 minute to 4 hours.
5. **Start Times** – Icon indicates when Start Times are being set.
6. **Start Time Number** – Indicates the start time number from 1 to 9.
7. **Watering Days** – Allows the user to select individual days to water or a selected number of days between waterings (interval).

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ENG



8. **Rain Drop** – Indicates that watering will occur on a selected day.
9. **Crossed Rain Drop** – Indicates that watering will not occur on a selected day.
10. **System Off** – Indicates that watering is suspended.
11. **Calendar** – Indicates interval watering schedule is being programmed. Allows the user to program 1 to 31 days between waterings.
12. **Battery Status** – Indicates the remaining life of the battery in the SVC.
13. **Manual On/Off** – Icon indicates when manual watering is programmed. Allows the user to activate the station manually.

14. **Sensor Interrupted** – Icon indicates that the rain sensor has shut down the system.
15. **Watering** – Icon indicates that watering is occurring.

### Control Buttons

- **Button** – Increases the selected flashing display.
- ◀ **Button** – Decreases the selected flashing display.
- ⏏ **Button** – Selects programming function.
- ▶ **Button** – Advances the selected flashing display to the next item.
- ⏪ **Button** – Navigates the selected flashing display back to the previous item.

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## CONNECTING THE BATTERY

The SVC uses a standard 9-volt alkaline battery (not included) to operate the valve and program the controller. Under normal conditions the battery should provide at least one full year of service. Use of a 9-volt lithium battery will extend the service life of the SVC between battery changes (approximately 3 years).



**NOTE: The SVC has non-volatile memory which allows for the battery to be removed without losing any program information.**

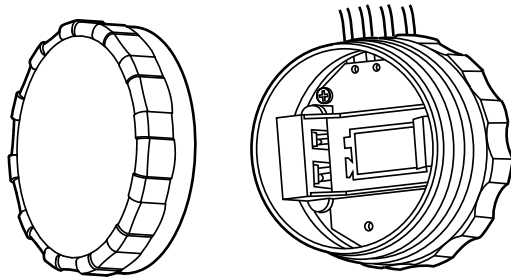
## To Install the Battery

1. Unscrew the rear half of the SVC body to gain access to the battery compartment.
2. Snap the battery into the battery holder (use a high quality 9 volt alkaline battery).



**NOTE: The battery holder is designed so that the battery can only be inserted one way.**

3. Make sure no water is inside the battery compartment. Screw the SVC body halves together to seal the compartment.



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## ATTACHING SOLENOIDS

The SVC-100 is provided with a solenoid attached to the controller. The SVC-200 and SVC-400 multi-station controllers will operate up to 2 or 4 solenoids, respectively. Hunter DC solenoids (P/N 458200) can easily be installed on all Hunter Plastic Valves. For the SVC-200 & SVC-400, solenoids must be ordered separately.



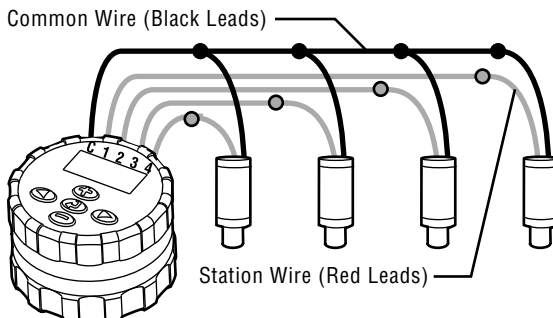
**NOTE: Must use DC Latching Solenoids. 24VAC Solenoids will not operate with the SVC.**

## To Wire DC Solenoids to the SVC

1. Attach the black leads from each solenoid to the single common wire (black lead) coming from the SVC. Secure all wire connections with waterproof connectors.
2. Attach one red wire from each solenoid to the corresponding station wire (red lead) from the SVC. The station numbers are identified on the face of the SVC. Secure all wire connections with waterproof connectors.



**NOTE: The maximum wire distance between the solenoid and SVC is 100 feet (18 gauge minimum wire size).**



The SVC can also operate non-Hunter DC latching solenoids. Below is a list of SVC compatible solenoids.

Model	Solenoid
Baccara	G75-0-1002
Bermad	S392-2
Nelson	8090
Rain Bird	TBOSPSOL

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## MOUNTING THE SVC

The SVC can easily be mounted on any Hunter plastic valve. A specially designed valve mounting clip makes installation a snap. A protective rubber cover is provided to prevent dirt from accumulating on the face of the SVC.

### To Mount the SVC to a Valve (Figure 1)

1. Unscrew the existing solenoid from the valve.
2. Screw the Hunter DC latching solenoid (P/N 458200) into the valve bonnet.
3. Attach the large end of the valve mounting clip to the middle of the SVC body.
4. Snap the small end of the valve mounting clip to the solenoid.

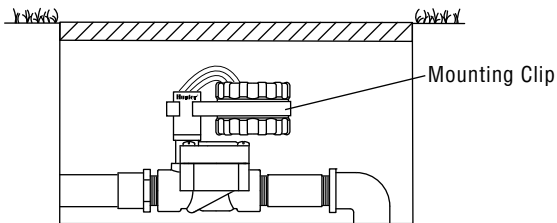


Figure 1

Along with the universal mounting clip, a mounting adapter is also provided with the SVC. This mounting adapter allows for alternate methods of mounting the controller either to the side of the valve box or stake mounted within the valve box.

### Valve Box Mounting Method (Figure 2)

1. Position the universal mounting adapter on the side of the valve box. Make sure that the bracket is positioned so that the controller will not interfere with the valve box cover when closed.
2. Drive two screws to secure the adapter to the side of the valve box.
3. Attach the SVC to the mounting clip and slide it on the end of the mounting adapter.

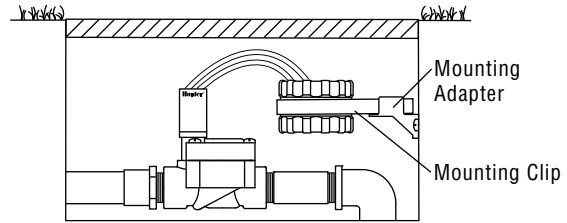


Figure 2

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### Stake Mounting Method (Figure 3)

The universal mounting adapter can also be used to stake mount the SVC.

1. Cut a section of ½" diameter plastic pipe.
2. Drive the pipe into the ground inside the valve box to the desired height of the controller.
3. Slip the mounting adapter on top of the pipe.
4. Attached the SVC to the mounting clip and slide onto the adapter.

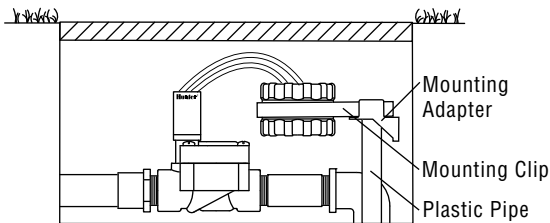


Figure 3

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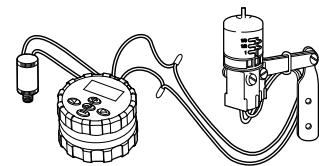
## CONNECTING A WEATHER SENSOR

A Hunter Mini-Clik® rain sensor can be connected to the SVC. The purpose of this sensor is to stop watering when weather conditions dictate.




**NOTE: When the Rain Sensor is interrupting the watering, the display will show the System Off icon (⊘), "OFF" and ☔ on the display.**







1. Cut the yellow wire loop attached to the SVC at approximately the middle of the loop.
2. Remove approximately ½" (13mm) of insulation from each wire. Attach one yellow wire to each of the wires of the weather sensor. You can mount the rain sensor up to 100 feet from the SVC controller (18 GA minimum wire size).
3. Secure wire connections with waterproof connectors.



Hunter Model Mini-Clik® 7



## PROGRAMMING

The SVC utilizes independent station programming. For each station being programmed, you need to program at least one Start Time, a Run Time, and Water Day(s). The  button allows you to quickly navigate among programming options.

The SVC display shows time and day when the  button is pressed. The  button allows you to easily navigate among programming options. During a short period of inactivity, the display will shut off to retain battery power. When programming, the flashing portion of the display can be changed by pressing the  or  buttons. To change something that is not flashing, press the  or  buttons until the desired item is flashing.










The SVC allows for up to 9 start times per day. Multiple start times permit morning, afternoon, and evening watering, perfect for the establishment of new lawns and thirsty annual flowers. Simply designate the days of the week you want to water. The SVC makes it easy.

### Setting the Date and Time




1. Press the  button until the Current Time/Day icon  is displayed.

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Hold either button down for 1 second to change times rapidly.

3. To add another start time to the station, press the  button. The start time icon and start time number will be flashing. Use the  or  buttons to change the start time number.
4. Press the  button. The start time will be flashing. Use the  or  buttons to change the start time.
5. To program start times for another station, press the  button. The station number will be flashing. Use the  or  buttons to select the next station (1 through 4). Repeat steps 3 and 4.



### Eliminating a Start Time












With the display in the watering Start Time mode, push the  or  buttons until you reach 12:00 AM (midnight). From here push the  button once to reach the OFF position.



**NOTE: If a station has all 9 start times turned off, then the station is off.**





### Setting the Run Time (Length of Watering)

1. Press the  button until the Run Time icon 




2. Hours will be flashing. Press the  or  button to change the hour shown on the display. Press the  to proceed to setting the minutes.
3. Minutes will be flashing. Use the  or  button to change the minutes shown on the display. Press the  to proceed to select AM, PM, or 24 hour time.
4. The time will be displayed, and the time of day flashing. Press the  or  button to select AM, PM, or 24 hour. Press the  to proceed to setting the day of the week.
5. The number 1 will be flashing at the bottom of the display, indicating the first day of the week. Press the  or  buttons to select the day of the week (1 through 7) corresponding to the day.

The time and day have now been set.








### Setting Watering Start Times

1. Push the  button until the Start Times icon  is displayed. A Start Time or "Off" will be flashing. The number directly to the left of the start time number (1 through 9) indicates the start time number. The number directly below the start time number indicates the station being programmed.
2. Use the  or  button to change the start time. (The start times advance in 5 minute increments.)




is displayed.

2. The display will show the last run time entered.
3. Use the  or  button to change the station run time on the display from 1 minute to 4 hours.
4. Press the  button to navigate to the next station number to be programmed.

### Setting Days to Water

1. Push the  button until the Water Days icon  is displayed. The station number will also be displayed.
2. The controller will display seven days of the week with a  icon or a  icon above the numbered day. The  icon would represent an "On" water day, while the  icon would represent an "Off" watering day.
3. Use the  button to navigate to the next station to be programmed.



### Selecting Specific Days of the Week to Water

1. With the  cursor on a specific day (the cursor always starts with day 1), press the  button to activate that day of the week to water. Press the  button to cancel watering for that day. After pressing a button the cursor automatically advances to the next day.
2. Repeat step 1 until all desired days have been selected.

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



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## PROGRAMMING (Continued)

The selected days will show with a  to indicate their status ON. The last  is the last watering day for the program.

### Selecting Interval Watering

With this option you can select interval watering from 1 to 31 days.

1. With the  cursor on day 7, press the  button until the   interval watering icon and the two calendars appear on the display.
2. Press the  or  button to select the number of days between watering days (1 to 31). This is called the interval.

The controller will water the next Start Time and will then water at the interval programmed.

### Programming Stations to Operate Together (SVC-200 & SVC-400)



The SVC-200 and SVC-400 allow for automatic watering of multiple valves at the same time. Up to four stations can operate at the same time. If more than one station has the

same start time, they will operate together (they must also be programmed with the same water day). For example, if Station 1 and 2 both have been programmed with start times of 8:00 am, they will both turn on and run at the same time.

The SVC allows for start time stacking which is helpful when system capacity is not adequate to support the operation of multiple valves at the same time. Let's assume a scenario in which Station 1 is programmed to start at 8:00 AM and run for 15 minutes, and Station 2 is programmed to start at 8:10 AM and run for 15 minutes. Station 1 watering run time overlaps Station 2 start time. The SVC will wait until Station 1 completes watering until it starts Station 2. In this scenario, Station 2 will start at 8:15 am.



### System Off

This function permits the user to shut the system off for an indefinite period of time.

1. Press the mode button  until the  Crossed Sprinkler icon is displayed.
2. Wait 4 seconds and "Off" will appear on the display. The SVC is now in the System Off mode and will remain off until it is turned back on again.





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### To Activate the Controller from the System Off Mode

1. Press the mode button  once. The display will wake up in the System Off mode.
2. Press the mode button  again and "Off" will disappear from the display. The display will show the current time. Your controller is now on and will water automatically based upon the current program.

### Programmable Rain Off








This feature permits the user to stop all programmed waterings for a designated period from 1 to 7 days. At the end of the programmable rain off period, the controller will resume normal automatic operation.

1. Press the  button until the  System Off icon is displayed. Wait 4 seconds and "Off" will appear on the display.
2. Press the  button and a 1 will be displayed. The 1 will be blinking at this point.
3. Press the  button as many times as needed to set the number of days off desired (up to 7). The SVC will wait the number of days selected and then reactivate automatic watering.

### Manual Watering

The SVC features a simple one touch manual start. One or more stations can be programmed to run manually at the same time.

#### To Activate a Manual Watering:

1. Press the  button once to display the current time of day.
2. Press and hold the  button for two seconds to display the  Manual Watering icon. The station number will also be displayed.
3. Use the  or  button to adjust the manual water run time from 1 minute to 4 hours.
4. Release the buttons and the controller will count down 10 seconds before activating the manual cycle.
5. The  flashing sprinkler icon will appear on the display when watering is occurring.
6. To activate another station, use the  button to select the station you would like to manually water, repeat steps 3 and 4.




**Note:** While manual watering is occurring the display will briefly display the station number and the time watering remaining for each station that is operating. The manual

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## PROGRAMMING (Continued)

water run time can be increased or decreased for any time that the station is displayed.




### To Suspend Manual Watering to All Stations Operating

1. Press the  button until the  System Off icon is displayed. Wait 4 seconds and "OFF" will appear on the display. All stations will turn off.
2. Press the  button again and the current time and day will be displayed. The SVC will now water based upon the current program.

### To Suspend Manual Watering to Individual Stations Operating

1. Press the  button and the display will show each of the stations operating manually.
2. When the station number appears for the station that you would like to suspend manual watering, press the  button once. The time remaining displayed will change to "Off" and the station will turn off.
3. Repeat steps 1 and 2 to suspend watering for additional stations.

## BATTERY LIFE INDICATOR

The battery life status icon  is a quick way to determine the remaining life of the installed battery without having to remove the battery from the controller. A battery life status icon will appear along with the time and day on the display. A fully charged battery will show all three segment of the battery dark . As the battery is expended, the segments will appear as outlines .

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## TROUBLESHOOTING GUIDE

PROBLEM	CAUSES	SOLUTIONS
There is no display.	Display is off. Battery is dead.	Press any button for 1 second. Replace the battery.
Display indicates watering but none is occurring.	No water pressure. Faulty solenoid. Incompatible solenoid.	Turn on main system supply. Replace solenoid. Must use Hunter DC Latching Solenoid (P/N 458200) or other compatible DC latching solenoid.
Automatic irrigation does not start at start time.	Controller in System Off mode.  AM/PM of time of day not set correctly. AM/PM of start time not set correctly.	Verify that controller is programmed for automatic watering. Correct AM/PM of time of day. Correct AM/PM of start time.
Rain sensor does not suspend watering.	Rain sensor defective or miswired.	Verify proper operation of the rain sensor and wire connections (see page 10).
Controller waters more than one time.	Too many start times have been entered (up to 9 start times per day).	Each station start time activates a station run time. Set only one start time for once per day watering.

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