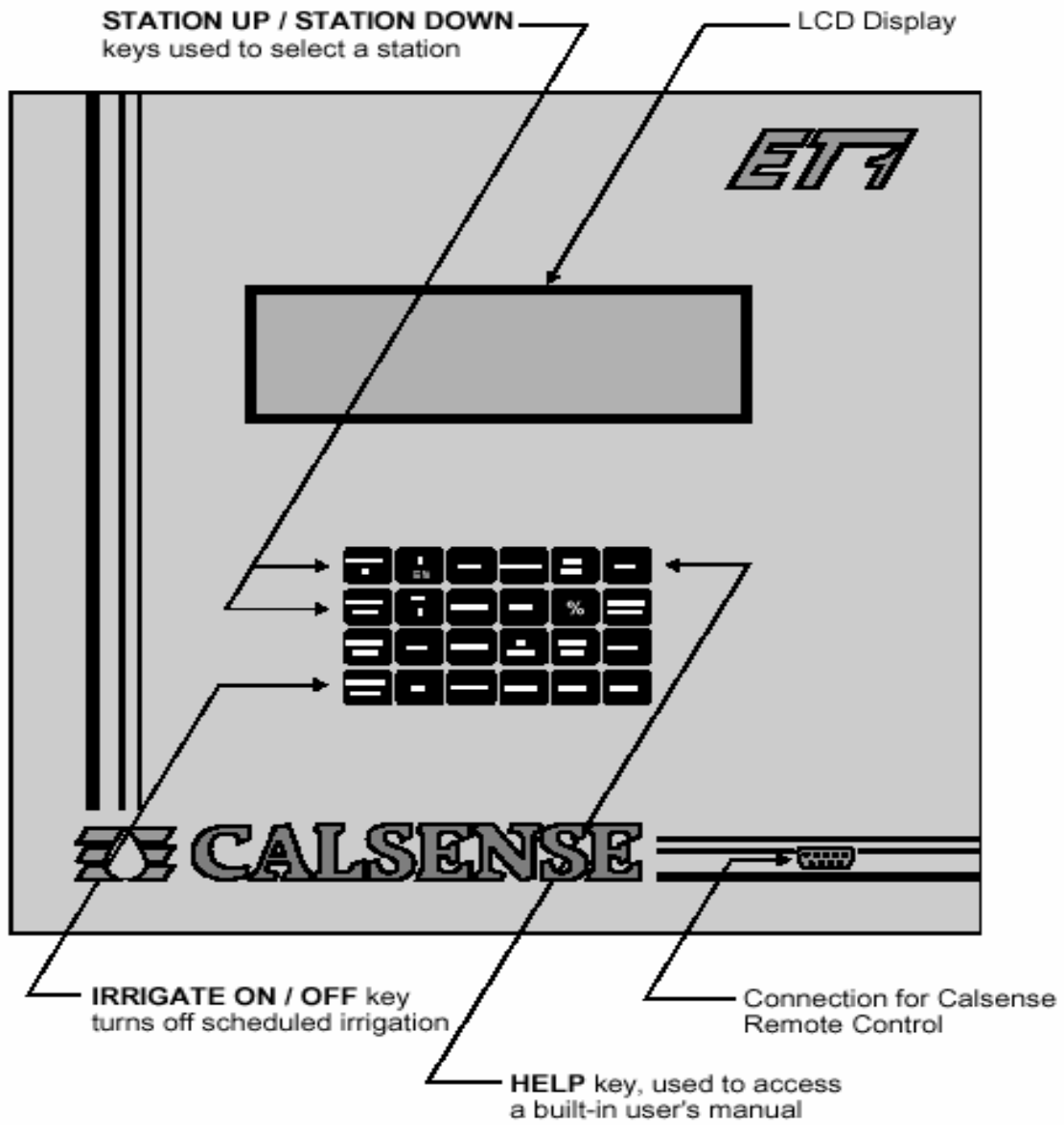


ET GAGE

ET1 ET GAGE SETUP



ET GAGE

ET 1 ET GAGE SET-UP

ET1 SETUP KEY SEQUENCE: After the Calsense ET Gage is installed, it must be enabled and options set in the controllers set-up program. Enter set-up using the following.

ET1 SET-UP CHANGE KEY SEQUENCE: All Changes in Set-up are made using the following procedures:

ET1 SETUP KEY SEQUENCE

IRRIGATE
ON / OFF


Press **IRRIGATE ON /OFF** (if the controller is turned off, this is not necessary)

STATION
UP

Press **STATION UP.**

STATION
DOWN

Press **STATION DOWN.**



ON

Press **ON / UP ARROW**, the set-up program screen will appear

ENTER

Press the **ENTER** key until the ET GAGE SETUP screen appears (shown on next page). This is the first in a series of screens that will need to be programmed if an ET Gage is installed. Each screen is shown along with a description of the different options that can be set.

ET1 SETUP CHANGE SEQUENCE


ON

Press **ON / UP ARROW** to change a highlighted item.

CHANGE

Press **CHANGE** key to move the highlight to another item.

ENTER

Press **ENTER** when all changes have been made, and to move on to the next screen.

DAILY ET SECTION:

Scroll through the setting screens until you get to the Daily ET Section:

USE DAILY ET TO CALCULATE RUN –TIMES?: The default setting is NO. A YES setting will indicate that programs will use daily ET to irrigate. A NO setting indicates that programs will use minutes. (Figure 1).

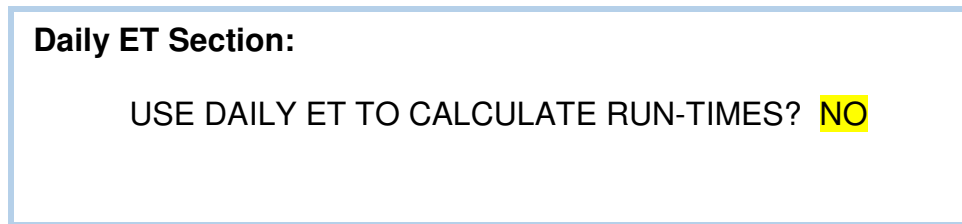
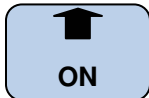



Figure 1

Note: If you plan to share weather to this controller the USE DAILY ET TO CALCULATE RUN-TIMES should be set to YES.

Use the  or  key to change the setting.

If YES is selected then the following option will appear on the screen.

CONTROLLER WIRED TO AN ET-GAGE?: The default setting is NO. A YES setting indicates that an ET Gage is in use and is connected to this controller. (Figure 2)

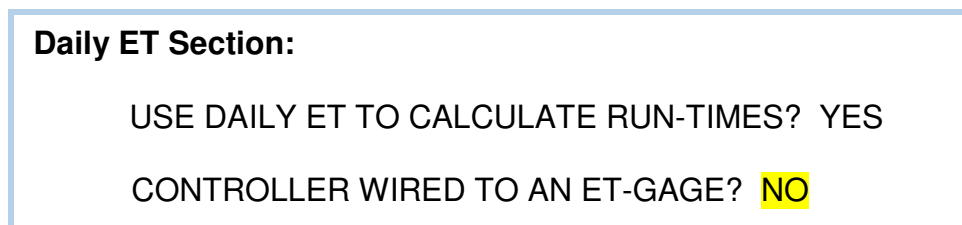
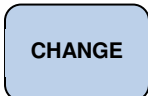




Figure 2

Press the  button to move to the next entry.

Use the  or  key to change the setting.

Press the



button to move to the next screen.

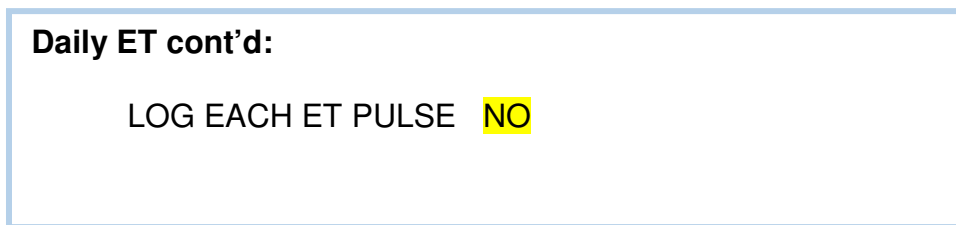
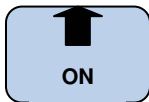


Figure 3

LOG EACH ET PULSE: The default is set to NO. Changing to the YES setting gives you the option of keeping a record of each ET Gage pulse sent to the controller. This information is located in the diagnostic log. This is helpful when first setting up the ET gage to make sure that it is working properly, but can be set to NO after you are sure the ET Gage is working properly. (Figure 3).

Use the



or



key to change the setting.

Press the



button to move to the next screen.

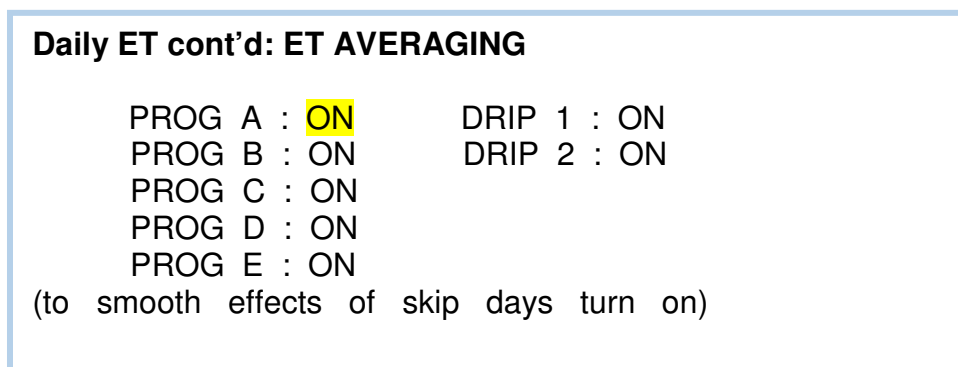



Figure 4

ET AVERAGING: The default setting is NO. A YES next to a program indicates ET averaging is enabled for that program. With ET averaging ON, the controller will not use each individual ET value in the ET table, instead it will use the average of the last 7 days of ET instead of the total of all the ET values. (Figure 4).



Press the  button to move to the next entry.

Use the  or  key to change the setting.

Press the  button to move to the next screen.

Daily ET cont'd: WATER WINDOW CONTROL


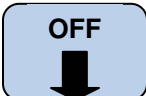
Set a limit on how much daily ET can be used. This determines the length of irrigation. The limit is relative to historical ET.


MAX. ET-GAGE VALUE is 150% of HISTORICAL

Figure 5

MAX ET GAGE VALUE IS % OF HISTORICAL: This setting controls the maximum allowable amount of ET that can be used to calculate station run times. The default is 150%, which means that if real time ET measured by the gage, exceeds 150% of historical ET, the controller will place an ET value in the ET Table equal to 150% of historical ET instead of the actual real time ET. This setting allows the user to control the maximum amount of total irrigation time for sites that have a limited water window. The water window is the time from when you can start irrigating to when you have to end irrigation.(Figure 5).

Note: Start and Stop times can be set to control irrigation run times.

Use the  or  key to change the setting.

Press the  button to move to the next screen.

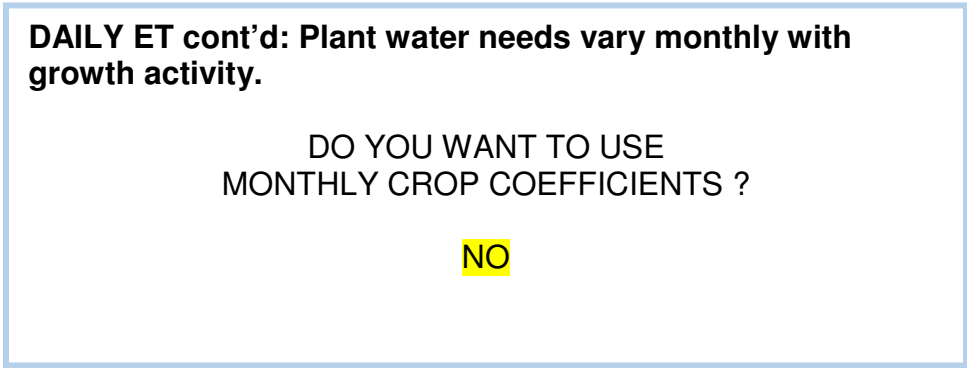




Figure 6

DO YOU WANT TO USE MONTHLY CROP COEFFICIENTS ?: This setting is used to adjust ET for a specific type of crop at different periods throughout the year. If you do not want ET to be modified, leave the selection set at NO.

Use the  or  key to change the setting.

Press the  button to move to the next screen.

ADJUST THE 12 MONTHLY FACTORS

PROG A :

J1.00	F1.00	M1.00	A1.00	M1.00	J1.00
J1.00	A1.00	S1.00	O1.00	N1.00	D1.00

PROG B :

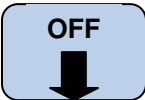
J1.00	F1.00	M1.00	A1.00	M1.00	J1.00
J1.00	A1.00	S1.00	O1.00	N1.00	D1.00


Figure 7

ADJUST THE 12 MONTHLY FACTORS: This will allow you the option of entering crop coefficient values for each month of the year, on each program in the controller. You must be familiar with crop coefficients to use this feature. (Figure 7).

Note: To access current Crop coefficient numbers contact your local Department of Water Resources.

Press the  button to move to the next entry.

Use the  or  key to change the setting.

Press the  button to move to the next screen.

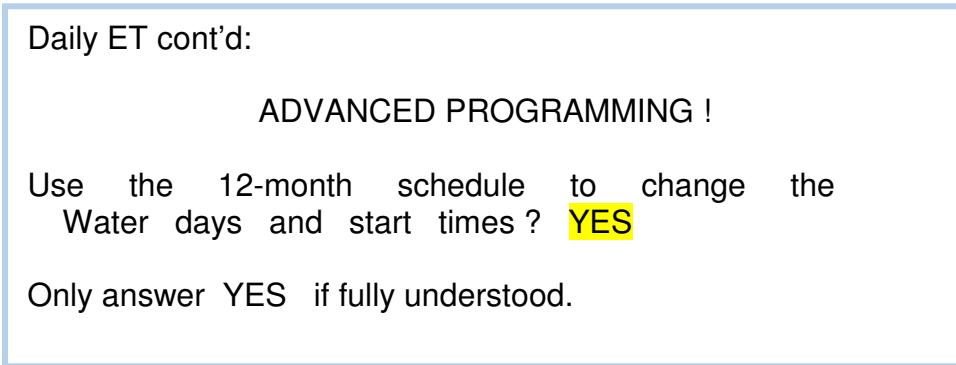
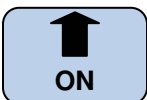
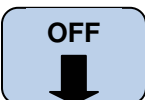




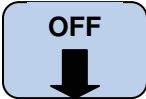
Figure 8


USE THE 12 MONTH SCHEDULE TO CHANGE THE WATER DAYS AND START TIMES ?: The twelve month schedule feature allows you to pre-program an irrigation schedule for each month of the year. Each month can be programmed with different Start Times, Water Days and Number of Days in Schedule. Also each station's Total Minutes, Minutes per cycle and Soak in Time setting can be different for each month of the year.

Caution: To use 12-Month mode requires support from you as a user. You must understand the mode and be prepared to enter water days, start times, and irrigation amount for each month of the year.

Use the  or  key to change the setting.

Press the  button to move to the next screen.

Use the  or  key to change the setting.

Press the  button to move to the next screen.

CHOOSE YOUR COUNTY: Historical ET is used as a back-up to real-time daily-ET, or it can be used as the source data to drive the program. In either case, you would want to use historical ET for the area you are located in. The ET1 stores historical information for counties in California, and numerous cities within each of those counties. Select the area that most closely represents your location. You can also choose to enter your own ET numbers. If you have selected your own numbers, you will be allowed to edit the numbers under each month. (Figure 10 and Figure 11).

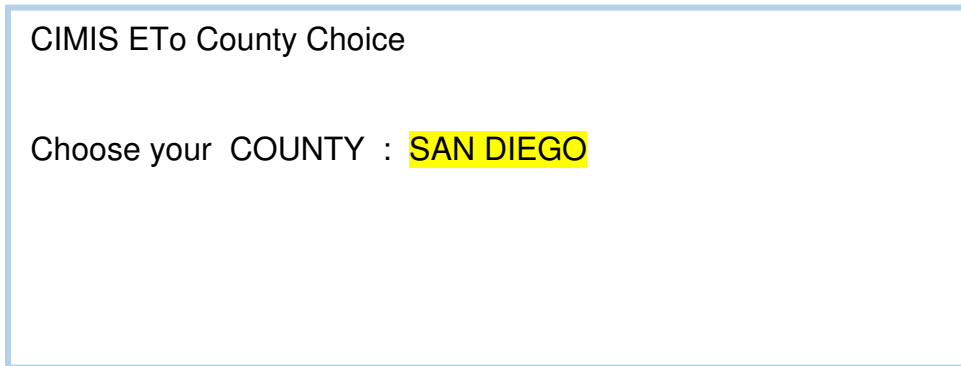
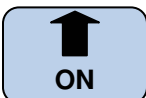



Figure 10

Use the  or  key to change the setting.

Press the  button to move to the next screen.

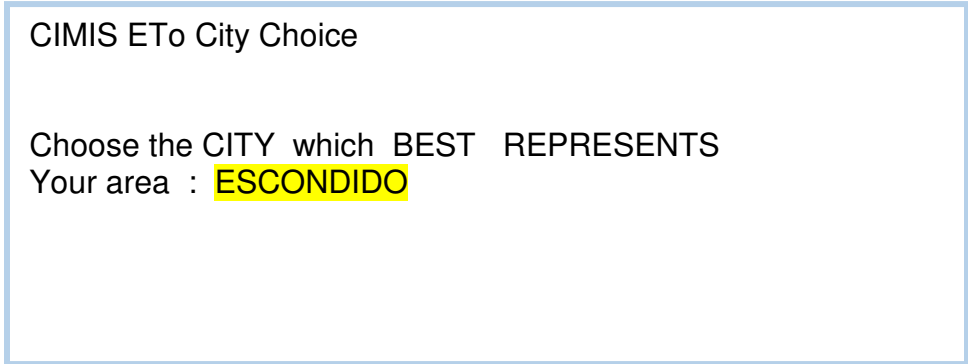


Figure 11

Use the  or  key to change the setting.

Press the  button to move to the next screen.

ETo (inches / month) for your location: You can also choose to enter your own ET numbers. If you have selected your own numbers, you will be allowed to edit the numbers under each month.(Figure 12).

ETo (inches / month) for your location:

JAN	FEB	MAR	APR	MAY	JUN
2.1	2.8	3.8	4.7	5.6	6.7
JLY	AUG	SEP	OCT	NOV	DEC
6.8	6.5	5.4	3.8	2.5	2.0

Figure 12



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