

COMMON SENSE MANUAL

Second Edition

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CONTROLLER FEATURES

- up to 80 Crop Zones
- 4, 8, or 12 valve control
- up to 16 crops
- Manual Mode- waters according to a preset program at the touch of a key
- Auto Mode- automatic time-based watering
- Remote Mode- automatic environment driven irrigation controlled from a Boom Spooler or GO-1
- Daily Programming - direct jog capability
- Flexibility- Daily Delay Multipliers which allow you to modify the time between waterings/mistings to match changing environment conditions.

ORIENTATION

This section should help you get to know the basic hardware components of Boom control and programming: the keypad, the screen, and magnets.

KEYPAD

CSC Controller Module Keypad

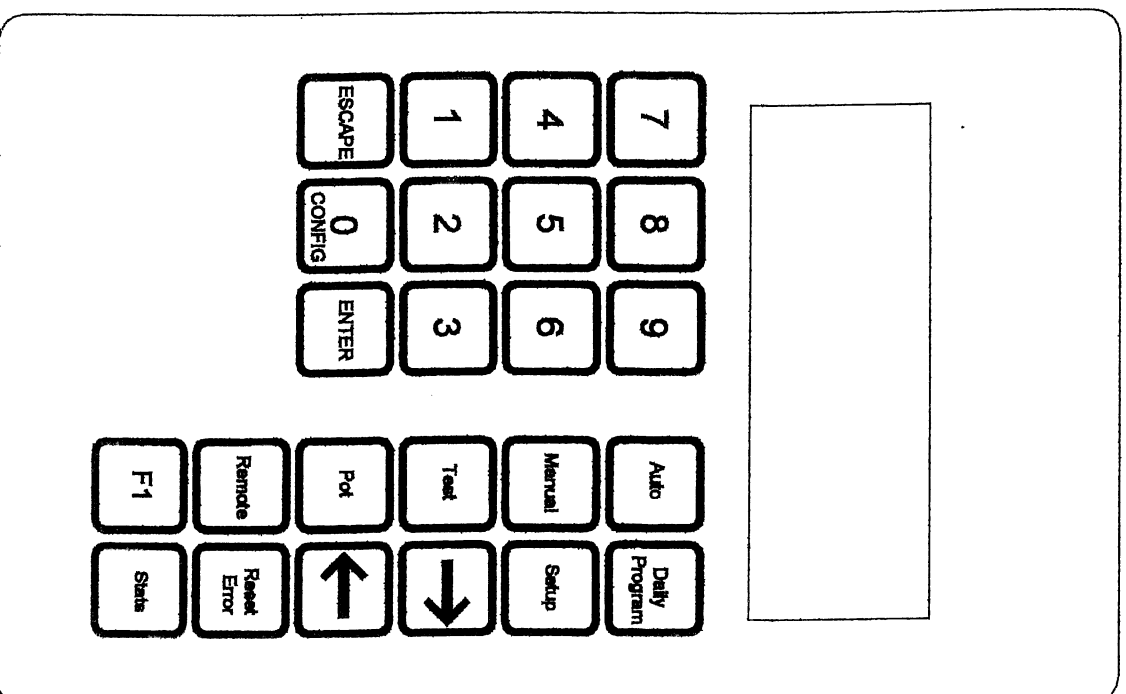


Figure 1—Common Sense Controller Module Keypad

Main Editing Keys

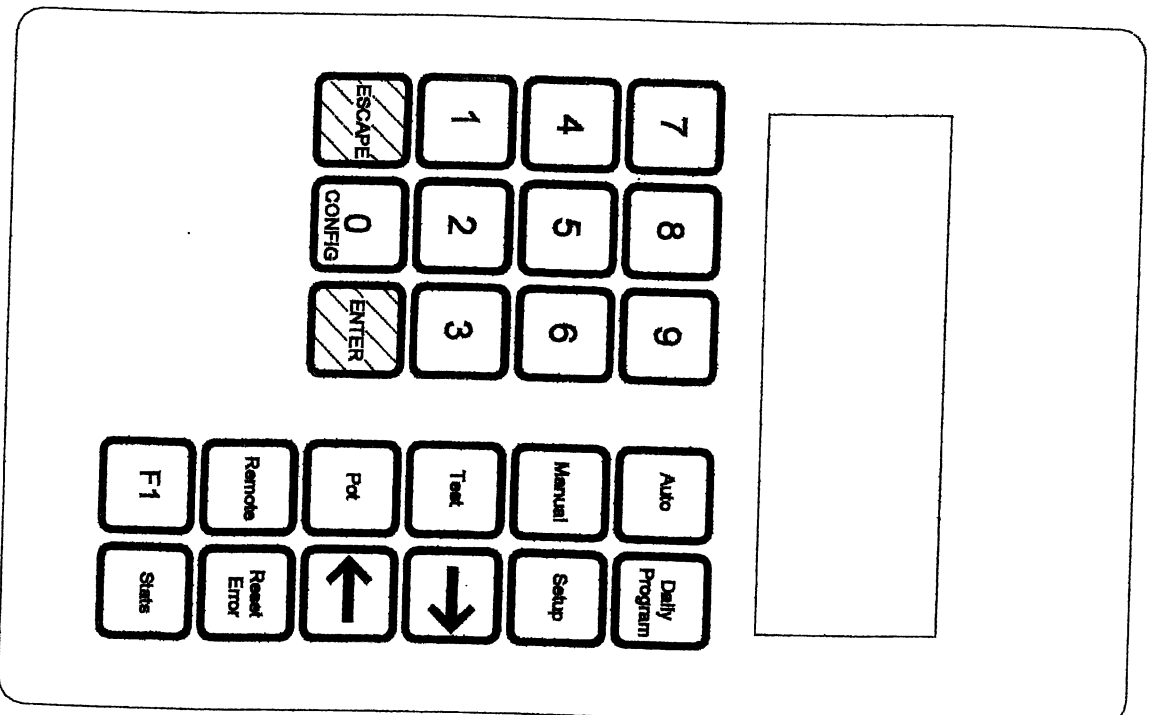


Figure 2—Main Editing Keys

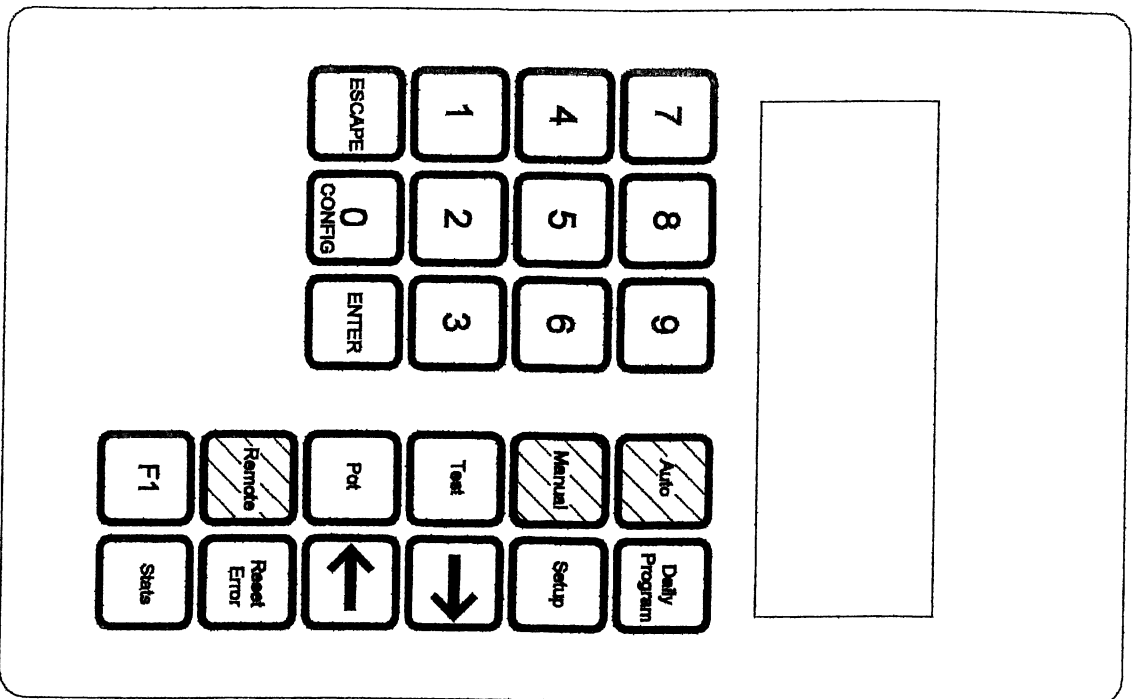


Press this key to save entered information and move to another screen



- 1) Press This Key to Exit a screen without saving anything.
- 2) Press This Key to exit a screen loop (a series of screens that keeps repeating). Press [ENTER] first to save information and move to a screen in the loop where you don't plan to enter anything, *then* press [EXIT] to leave the loop.

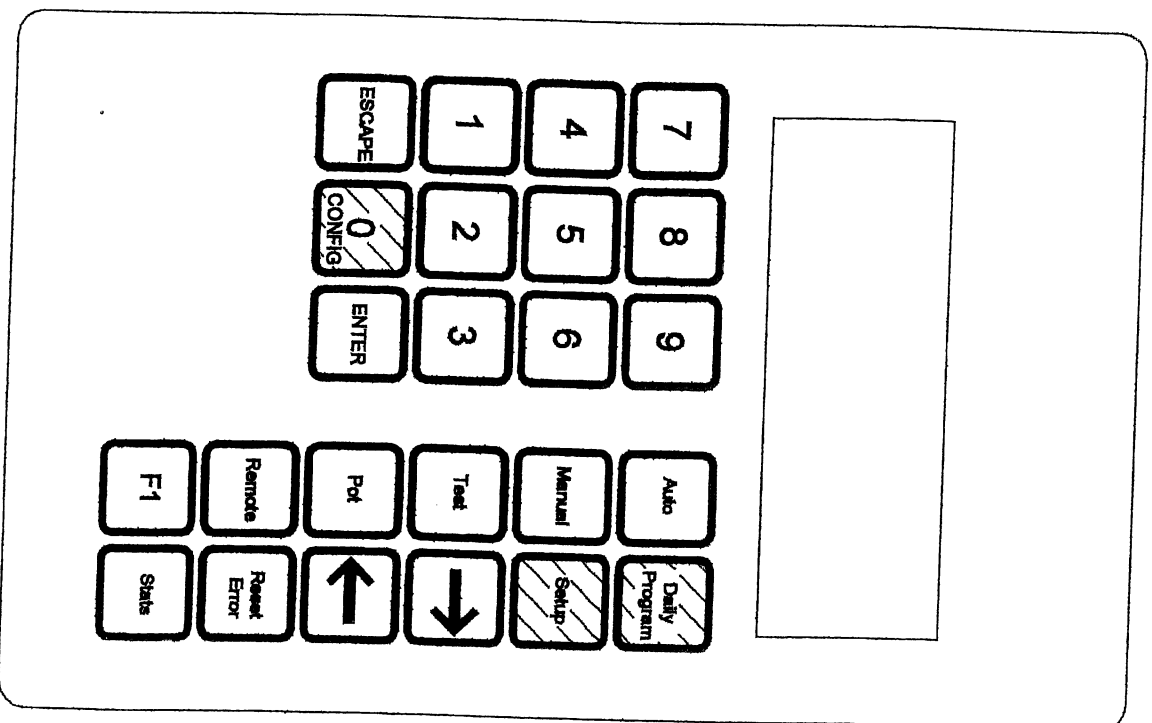
Main Mode Keys



Press one of these to enter the corresponding mode (mode roughly means method of operation).

Figurs 3—CSC Mode Keys

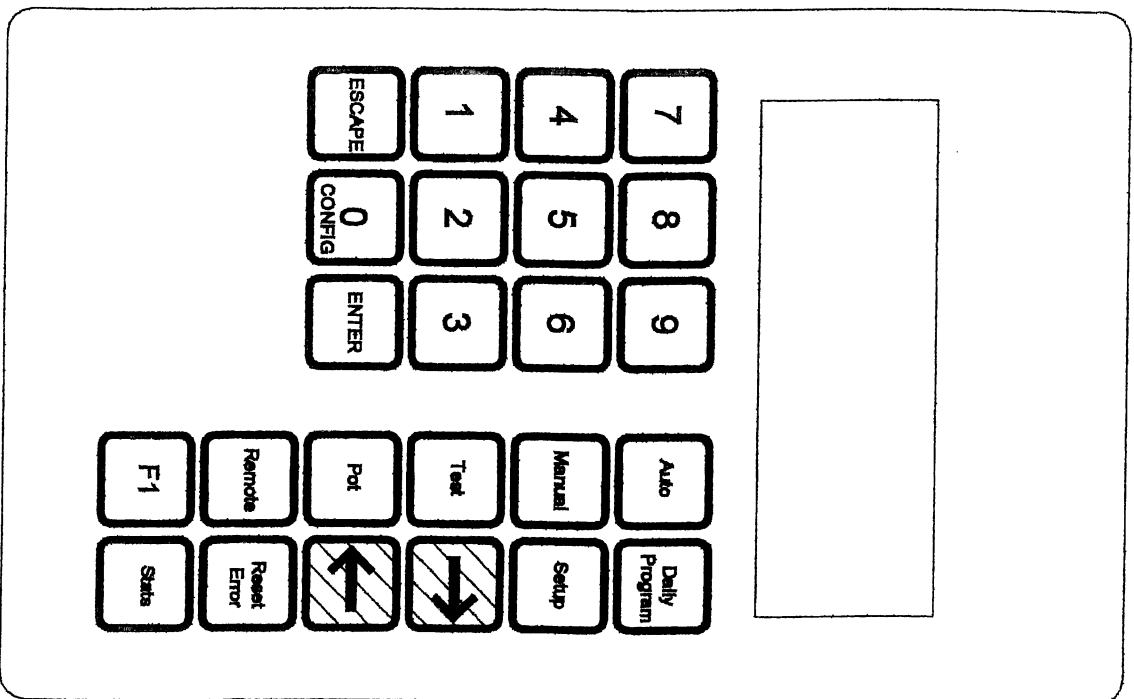
Menu Keys



First Press
the desired
Mode Key;
then press
one of
these Menu
Keys to
enter the
corresponding
menu for
that mode.
These
menus are
generally
different for
each mode.

Figure 4—CSC Menu Keys

Arrow Keys

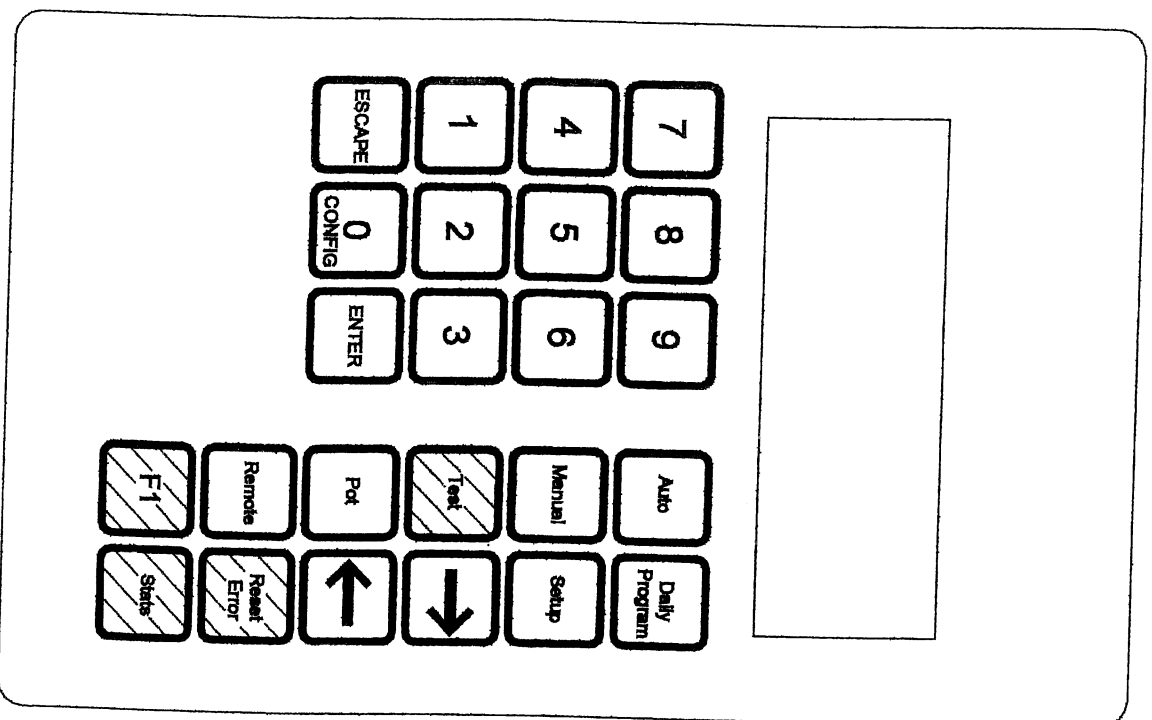


Use these
Keys to:

- 1) Move between fields in a screen.
- 2) Show additional Information that doesn't initially fit on the screen.

Figure 5--CSC Arrow Keys

Miscellaneous Keys



Press this key to access the 'Test Mode' (actually a menu of procedures for testing your boom equipment).



Press This key to access the screen where valve delay (the amount of time between when the magnet sensor senses a magnet and the valves turn on to water the plants) is determined.



Press this key to clear an alarm and allow the boom to continue working.



Shows a journal of what the boom has done since you last cleared the stats, *and* what the boom is doing at this moment.

Figure 6—Misc Keys

MAGNETS AND MAGNET READERS

Magnets are used as boundary markers for zones, and as out-of-range markers. All of the magnets which delineate zones are located on one rail, to be read by the forward and reverse sensors on the corresponding side of the boom. The out-of-bounds magnets are located at the ends of the bay on the other rail, and the boom has a sensor just for them.

SCREENS

The screens are very basic, generally containing few software components.

There is the menu type, containing only menu options denoted by numbers which are accessible only through pressing those numbers:

- 1) STATISTICS
- 2) CROP STATUS
- 3) ERRORS
- 4) CLR STATS/ERRORS

Figure 7—Stats- Central Menu

Then there is the type which has no menu or options but instead contains labeled data-entry 'fields'

```
START CROP ZONE: 01
END CROP ZONE: 01
VALVES      34
TOT ZONES: 02 CROP: 01
```

Figure 8—Crop 01 Edit Location Screen

- Besides data-entry fields, these may exhibit three types of information on their bottom lines:
- Software Location information- tells which crop one is editing/displaying (see above bottom right).
- Configuration information- tells, for instance, how many zones the boom is configured to have (See above bottom left & below bottom right).
- Directions- relevant pointers on what to do in a particular screen (See below middle two lines).

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CROP : 02
ENTER CROP # TO
EDIT
TOTAL CROPS : 02

```

Figure 9—the ‘Choose a Crop to Edit’ Screen

TUTORIALS

These tutorials are intended to help you acquire a knowledge of the basic skills necessary for everyday operation of this equipment.

TUTORIAL 1: GETTING ACQUAINTED WITH THE BOOM/USER INTERFACE

This Tutorial is designed to help you get a feeling for how the keys interact with the screen, and how screens are structured.

Press any “Mode” button (Manual, Auto, or Remote- it doesn’t matter) and then press



to access the Configuration Menu (Config menu).