



INSTRUCTIONAL EQUIPMENT REQUEST

Due in Dean/Unit Head's Office on September 19, 2011 (FALL) and March 1, 2011 (SPRING)

The Definition of Instructional Equipment can be found in the California Community College's Budget and Accounting Manual. A copy of these definitions is on the PBC webpage:

<http://grapevine/pbc/InstructionalEquipment.php>

Name of Requestor:	David Everett / Tom Fuller
Division/Unit	MSEPS III Horticulture
Brief title of request (equipment or materials being requested must be similar, related or part of a system.)	Rainmaster Eagle Series Irrigation Controller

Request amount (unit cost and total cost including tax and shipping. Please include all costs including installation, modification to existing facilities to accommodate new equipment, etc.): This should come from the vendor quote.

Item(s) Cost	\$ 2639.07
Tax (0.0875)	\$ 230.92
Shipping	\$ N/A
Installation	\$ N/A
Facilities Modification	\$ N/A
Other	\$ _____
	\$ _____
Total Cost	\$ 2869.99

Attach copy of quote(s), estimate(s) and requisition(s):
(Must attach quote & requisition; absence of either will delay processing)

Brief description of specific equipment or materials requested and what they will be used for: (include the # pieces being requested; i.e.: 10 crayola crayons, sky blue, etc. in 250 words or less)

One-Rainmaster Eagle Series Irrigation Controller; 36 station capability; with remote control; This unit will bring the current Horticulture irrigation system out of the dark ages and into the present with modern technology. The controller will control water application in the Horticulture yard, shade room, greenhouse, and exterior plantings located inside and outside the perimeter of the Horticulture yard. The unit can be operated remotely which will allow "at the valve station" tests and adjustments. The controller will be used by the instructor to educate classes on the latest technology and the unit will of course, keep plants and student projects hydrated.

Is this in your Program Review? Yes No

As stated in the Horticulture program review, we are to continue to upgrade outdated equipment. Also mentioned in Program Review is the enhancement efforts of the horticulture yard(s). We have expanded the green belt in the existing horticulture yard with numerous new areas that require an advanced watering schedule.

Is it a replacement? Yes

Upgrade? Yes

New technology? Yes

Please explain?

The current irrigation control system is VERY dated technology-the best we can tell, the current controllers date back to the 1970's and at over 40 years old, is quite possibly a hazard to operate. The "analog" technology is not currently practiced with a large application such as the Horticulture yard. The controller will not only manage the huge responsibility of keeping plants alive but it will serve as a valuable educational component for all of the Horticulture classes. This controller is currently considered "industry standard".

We have expanded the green belt in the existing horticulture yard with numerous new areas that require an advanced watering schedule. This controller system will not only be critical as an advanced instructional tool but it will be extremely effective in keeping up with the various watering needs of the plantings horticulture yard, 2 greenhouses, shade room, citrus/fruit area and flower beds.

Following is the evaluation criteria; please see corresponding Instructional Equipment Rubric.

Instructional and Service Impact

How will this item have a positive impact on instruction and/or teaching and learning in the classroom? Is this for use by the Instructor or students, or both?

This piece of equipment will have an immense impact on instruction and teaching and learning in the classroom. Currently the Horticulture instructors are using VERY outdated equipment to instruct with. The equipment being used to instruct students with is no longer in production making instruction completely pointless. This is equipment the students and the instructor will be using.

Impact on Enrollment

Will the equipment impact enrollment, attract or increase the number of students participating in a course or program?

Knowing that the horticulture department is upgrading its instructional equipment will be a positive step towards impacting enrollments. Students today expect modern equipment to be used for instruction. I see a definite spike in enrollment-not due directly to this small piece of the upgrade puzzle but due to the program stepping into the present day with its instructional; equipment offerings.

Access

How does this item promote the principles of universal design, by providing opportunities for under-represented populations & accommodate students with diverse learning styles?

the handheld remote will be a key component to accessibility and universal design. Students can remain on the hardtop and not have to be in the mud/dirt etc; to be instructed on the use of this equipment.

Outcomes

How will this equipment enable or enhance SLOs? What are the consequences related to learning outcomes if request is not funded?

This controller w/remote will enhance our SLO's with more current ones. Not having this controller will bode poorly on the reputation of the Horticulture department and SLO's related to irrigation system management will be compromised. Also, outdated equipment now watches over the plants and student projects relative to SLO's. Dead plants=dead SLO's.

Total Cost of Ownership (This is an attempt to identify what the ongoing costs of purchasing this equipment will be to the institution)

- a) What is the lifespan of the equipment? 5 years? 10 years? 20 years?**
- b) Is there sufficient current/planned space available for the storage and use of this equipment? If so, where will it be housed? If not, is there a proposed location and are there any costs associated with installation or modifications to the space?**
- c) Are there operating costs and how will they be covered by the department?**
- d) What will be required to maintain the equipment, such as regular servicing or upkeep? Who will perform maintenance, and what will the estimated costs be?**

ZERO cost of ownership.

lifespan? heck, poorly made equipment (that we are utilizing now) has lasted 40 years. This unit could easily go that long

This unit has a designated place hanging on the wall

No costs associated with installation or modifications to the space. It will be installed by the instructors.

ZERO operating costs.

ZERO maintenance or upkeep.

Visibility/Profile within Community

Is this a “flagship” item that will bring recognition/notoriety to the College or raise the stature of the program? Will it attract students and/or enhance the image of the College in the community because of its rare, one-of-a-kind status?

Flagship? Doubtful but it would be a shining star among all the outdated equipment currently in place in the department. Word gets out that we are instructing using this unit would look very good to industry professionals. This is a professional level controller that students looking to have a career in Horticulture would eventually be using in the field. (literally)

Commitment to Sustainability

How does this equipment exceed basic sustainability goals and encourage renewable resources at the College? Is the design/operation of this item in keeping with the College's commitment to sustainable practices?

Sustainability would be what the controller would be sustaining: the plants invested in that are growing in the Hort yard, both greenhouses, shade room and flower beds. It is also a water SAVING device!!

Health, Safety & Security

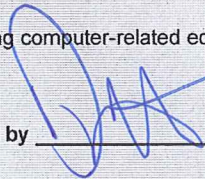
Does this equipment address any health, safety & security concerns? If so, please explain below.

NONE

Signatures (required)

(If requesting computer-related equipment/software, LPC IT Department Review is **required**.)

Requested by _____



Dean/
Unit Head _____



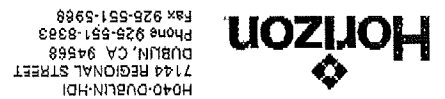
IT Department Signature _____

Vice President _____



LPC VP Business/President _____

LPC Business Office Use (Account Number) _____



Quotation

QUOTE #	1T003507
LOCATION	H040
DATE	03/12/12
PAGE	1 of 1

BILL TO
 H24218
 CHABOT-LAS POSITAS COMM COLL
 5020 FRANKLIN DR
 PLEASANTON, CA 94588
 Phone 925-485-5221
 Fax 925-485-5271

SHIP TO
 LPC VITICULTURE
 Customer Pick-Up,
 Fax 925-485-5271

QUOTE DATE	03/12/12	EXPIRE DATE	04/11/12	REQUIRED DATE	REFERENCE NUMBER	DAVID EVERETT	PAYMENT TERMS	NET 25TH PROX
WRITTEN BY	H040 KAI WALTERS(H040)			CONTACT	DAVID	SHIP VIA	PICK UP	
FREIGHT TERMS	COLLECT (IN/OUTBOUND)			JOB NUMBER	LPC	SALES REP	H040/	

PRODUCT/DESCRIPTION	QUANTITY	PRICE	U/M	EXTENSION
RIR-58-1032	1	1616.42	EA	1,616.42
RME36EG RAINMASTER EAGLE 365TA				
RIR-58-1022	1	1023.65	EA	1,023.65
PROMAX RAINMASTER REMOTE SET RAINMASTER CONTROL				

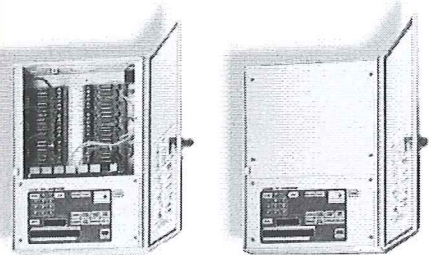
MERCHANDISE TOTAL	2,639.07	HANDLING	0.00	MISC CHARGE	0.00	TAX	230.92	FREIGHT	0.00	QUOTE TOTAL	2,869.99
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Accepted:
 By: _____
 Date: _____

4700

RAIN MASTER CONTROLLERS

IRRIGATION



RME Sentar Series Controller

Primary Application

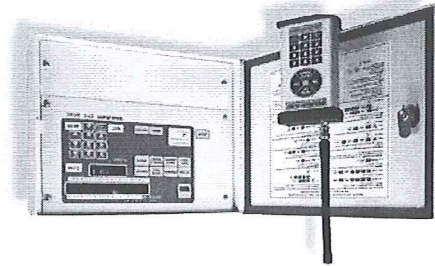
The next generation...four independent programs capable of running concurrently with five independent start times per program.

E model Features:
 • Programmable overlap protection allowing programs to be run in a stacked mode or concurrently
 • Field wire fault detection identifies field wire shorts and automatically shuts down the offending station and moves on to the next station
 • Built-in remote control capability
 • Programable watering days based on a 7 day, skip by day, with up to 30 days between watering

SE-T model Features:

- Non-volatile memory maintains programs indefinitely while timekeeper circuit keeps time during power outages; no batteries required
- Heavy-duty membrane keypad offers visual and audio function keys on the control panel
- Specialized controller power supervisor circuit prevents lockups due to power surges and brownouts
- Capable of resuming any program in progress upon power restoration
- Electronic overload protection with automatic reset; no fuses or circuit breakers

ITEM	DESCRIPTION
47000520	RM6E SENTAR 6 ST 4 PGM CONTROL
47000540	RM12E SENTAR 12 ST 4 PGM CNTRL
47000550	RM18E SENTAR 18 ST 4 PGM CNTRL
47000560	RM24E SENTAR 24 ST 4 PGM CNTRL
47000570	RM30E SENTAR 30 ST 4 PGM CNTRL
47000580	RM36E SENTAR 36 ST 4 PGM CNTRL
47000590	RMPEd1 R/MASTER PED RM/RME/SE
47000620	RM6E-6SE-T SENTAR 6ST W/SURGE
47000640	RM6E-12SE-T SENTAR 12ST W/SURGE
47000650	RM6E-18SE-T SENTAR 18ST W/SURGE
47000660	RM6E-24SE-T SENTAR 24ST W/SURGE
47000670	RM6E-30SE-T SENTAR 30ST W/SURGE
47000680	RM6E-36SE-T SENTAR 36ST W/SURGE



RME Eagle Series Controller

Primary Application

Powerful satellite controller offering water-saving features, including automatic or manual ET adjustment, electrical and water-flow alarm capabilities in an extremely affordable package.

Features:

- Automatic historical ET adjustments
- Automatic daily ET adjustments (via optional Internet control)
- Efficient configurations of 6, 12, 18, 24, 30, and 36 stations
- 4 independent programs with 5 start times each
- Cycle-and-Soak or conventional programs compatible with existing RME products
- Selectable master valve and pump on a per-program basis
- Power outage protection
- Shown with remote control

ITEM	DESCRIPTION
47000720	RM6E-6EG EAGLE 6STA CONTROLLER
47000740	RM6E-12EG EAGLE 12STA CONTROLLER
47000750	RM6E-18EG EAGLE 18STA CONTROLLER
47000760	RM6E-24EG EAGLE 24STA CONTROLLER
47000770	RM6E-30EG EAGLE 30STA CONTROLLER
47000780	RM6E-36EG EAGLE 36STA CONTROLLER



Pro-Max Remote Control

Primary Application

The easiest remote to use in the industry with dedicated feature keys to allow most functions to be performed with a single key operation.

Features:

- Pro Max-U can be used with any manufacturer's 24 volt controller
- Independent control of master valve or pump
- Single or multi-station capabilities for testing system hydraulics
- Uses three mechanisms to ensure interference-free communication: Digital filtering, Factory set receiver access codes, and VHF FM communications
- Fits in shirt pocket

ITEM	DESCRIPTION
47000860	PRO MAX-UA UNIVERSAL R/M REMOT
47000870	PRO MAX RAIN MASTER ONLY REMOT
47000875	B-PM BATTERY FOR PROMAX REMOTE
47000880	BP1 BATTERY PACK FOR RME CNTRL
47000970	BP3 BATTERY PACK RT5 TRANSMITT
47000975	12PC PERM CONNECTOR FOR PROMAX
47000980	24PC PERM CONNECTOR FOR PROMAX
47000990	32PC PERM CONNECTOR FOR PROMAX
47001000	32TC TEMP CONNECTOR FOR PROMAX
47001010	32EX EXT FOR PC/TC CONNECTORS
47001020	PM-SER99 36IN REMOTE CABLE