Rain Master[®] iCentralTM: Frequently Asked Questions

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1. What is iCentral?

iCentral is the **World's First Internet Based Central Control Irrigation System**. By logging into iCentral, users may control, monitor, setup automatic weather-based irrigation scheduling and manage their irrigation needs via the internet.

2. What specific functions can iCentral perform?

> Command and control.

■ Users may enter, modify, or view irrigation schedules for any iCentral enabled Rain Master EagleTM and EagleTM Plus controller using the internet.

> Water conservation.

• iCentral monitors your local weather on a daily basis and automatically adjusts your controller's irrigation schedules based upon plant watering needs.

• iCentral monitors your local area rainfall and automatically performs a rain shutdown to your controller. Similarly, iCentral intelligently restores your system back to the automatic watering mode when irrigation is required.

> Timely maintenance.

• Automatically take appropriate corrective action if and when field anomalies occur (i.e. broken heads, pipes, faulty station wiring and flow problems).

■ Smart Alerts[™] provide immediate user notification via email/text to your cell phone, computer, or tablet. These notifications inform you where the problem is, what the problem is and at what time the problem was detected.

> Irrigation management tools.

• Command a manual rain shutdown or resumption of automatic watering from the internet.

- Start or stop irrigation of any station or program from the internet.
- Management reports
 - Water usage
 - System anomalies/alarms
 - Sensor and weather station reports
 - Irrigation schedule reports
 - Operator scheduling and usage reports

➤ Intelli-Sync[™] control.

• Your controller and iCentral allow programming changes to be performed either in the field or at iCentral. Intelligent synchronization (Intelli-Sync) processing notifies the user any time a field programming change has occurred at any controller. The iCentral user may then elect to accept or reject the field modifications.

• Intelli-sync ensures that your controller's date/time is always correct by accounting for daylight saving time transitions, or inadvertent date/time adjustments at the controller.

3. What do I need to use iCentral?

In order to use iCentral, you need a Rain Master Eagle or Eagle Plus controller and the corresponding iCentral communication card (iCard). The controller and iCard may be purchased together or the iCard may be added to any existing Eagle or Eagle Plus controller at any time. Once the installation is complete, proceed to the Rain Master website at <u>www.rainmaster.com</u> and click on the iCentral icon. The website guides you through initial user account creation, and directs you to "activate" your controller. Once service activation is complete, the power and benefits of iCentral is at your fingertips.

4. How exactly does iCentral save me money?

Rain Master's iCentral system saves money for installation contractors, maintenance contractors, and end users in several ways:

• Because iCentral uses wireless technology, installation costs are minimal. Costs associated with the complexities of phone line installation, and/or trenching for communications wires are non-existent with iCentral installations. A typical iCentral installation for a wall mount controller has three steps: (1) hang the controller on the wall (2) mount the small antenna to the enclosure (An enclosure knockout is provided) (3) wire the AC power, ground, and station wiring connections in the traditional fashion.

• End users benefit from iCentral water savings capabilities. Water savings occur when iCentral is setup to adjust irrigation schedules using daily weather data (i.e. evapotranspiration or ET information as well as rainfall). Typical water savings range from 20-35% depending on your current systems operating variables and your schedule adjustment practices.

• Maintenance contractors save money because minor adjustments and schedule changes can be made effortlessly from the office. Adjustments may include scheduling changes, rain shutdowns, and or manual irrigation cycles. Because control is provided through the internet, maintenance contractors may instantly respond to owners requests for field changes thereby negating the need for physical on-site visits.

• Maintenance contractors may elect to "lockout" field programming changes at the controller in order to ensure that schedules are not misprogrammed in the field. Mis-programmed controllers may result in damage to a landscape as well as being a potential source for customer dissatisfaction.

• Both maintenance contractors and end users benefit from the 24 hour round the clock monitoring activity performed by iCentral. Your Eagle or Eagle Plus controller has the ability to respond to field anomalies, i.e. broken heads, pipes, and mainlines in an immediate fashion, thereby eliminating runoff, damage to landscapes, and potential lawsuits. Once a problem area

is detected, the controller takes the appropriate corrective action. Lastly a message is sent to your cell phone and/or email in order to inform the user/Maintenance contractor of the specific problem condition.

5. *What are the advantages of using the internet over conventional central control systems?*

➤ Affordable low-cost central. iCentral design utilizes one electronics card that plugs directly into your existing controller. With a minimum of components to purchase, your capital equipment expenditures are minimized.

> **Installation Simplicity**. Because iCentral utilizes existing infrastructures such as the internet and wireless carriers, your installation is simple and inexpensive. There are no phone lines to install, no hardwire to trench, no expensive hardware investments in radio communications networks, repeaters or radio site surveys. (refer to: "How exactly does iCentral save me money?")

➤ High reliability. Since the system components are minimal, there are fewer components to fail, less cables to get inadvertently unplugged, and greater system uptime.

> **No software required.** Because your central is internet based, there is no software to purchase or load. Software upgrades are no longer an issue. You receive the latest features and capabilities each time you logon the website.

> No software backups or lost irrigation schedules. No need to worry about software backups, crashes or lost irrigation schedules. Your irrigation schedules and all your account information is maintained indefinitely by iCentral. Your irrigation schedules are also resident at your controller in non-volatile memory.

> **No training required.** iCentral has been designed to be an intuitive learning experience. Simple screens with explanatory text ensure that you will be using your iCentral capability from the moment that you first "logon". Should you have a question, your Rain Master support team is a toll-free call away.

> Smart Alerts[™]. You receive irrigation maintenance notifications via text and/or email at the time that any system anomalies occur. These notifications inform you where the problem is, what the problem is, and at what time the problem was detected.

> **Unlimited access/availability**. Manage your irrigation system from work, home, or anywhere you have internet access.

> **No radio license required.** No need to worry about license fees, applications, availability of spectrum, and lengthy license turnaround time.

6. *I am apprehensive about using new technologies. How can I be assured that this really works?*

Rain Master has specialized in irrigation control systems since company inception in 1981. At Rain Master, control is our business. Through the years, Rain Master

has developed a reputation as *the* industry leader for innovative central control technology. iCentral is no exception.

7. What if I lose connectivity to the internet or the wireless service to my controller is temporarily interrupted or lost? Will my controller still irrigate?

Absolutely. Your controller is not dependent upon the internet or the wireless service to irrigate. All of the irrigation schedules are executed from the controller. The controller can continue to operate with its present schedule indefinitely. If you were using daily weather information sent via iCentral and communication were lost, the controller will utilize historic weather information from its non-volatile memory in order to intelligently irrigate your landscape. When service is restored the controller will automatically resume usage of the daily weather information sent via iCentral.

8. *I do not have much computer knowledge and I am concerned that I will not understand how to use iCentral. Is this technology difficult to learn?*

iCentral has been designed for the novice. The site has been designed so that no training is necessary. Navigation is simple and explanatory text accompanies each area that you traverse to.

When it comes to programming any "stand-alone" controller, virtually all manufacturers' controllers have a learning curve of some type. When using iCentral, the learning curve is virtually eliminated because the website operations are both intuitive and simple. All of the controller functions are actually much easier to use on the website than from the controller front panel.

If for some reason you have ANY questions, you can always call Rain Master Technical Support at (800-777-1477) and get your questions answered by factory trained personnel.

9. How much does iCentral cost?

iCentral was designed to be an affordable central system alternative for budget constrained irrigation contractors and end users who require the most fundamental central control capabilities without the complexity presented by larger more comprehensive systems. iCentral requires three components:

- The Rain Master Eagle or Eagle Plus controller. The controller is an intelligent water management timer that is competitively priced around the same price point as a typical "stand-alone" commercial timer.
- iCentral Communication Card (iCard). In order to communicate with the internet, an iCard must be added to the controller.

• iCentral Service. Users must sign up for an iCentral Service Plan which includes 2-way wireless service and access to iCentral. Experience all the benefits of iCentral for as little as \$9.95 per month. An Ethernet option is also available for Eagle Plus only at \$4.00 per month.

Rain Master products may be purchased from your local distributor. To find your closest distributor, please visit <u>www.rainmaster.com</u>

10. *I* am a maintenance contractor and *I* intend to utilize iCentral on my customer accounts. What type of service contract am *I* obligated to sign up for?

iCentral does <u>not</u> require a term service contract. Users may elect to terminate service to one or more controllers at any time.

11. How does iCentral communicate with my controller?

➤ Wireless. iCentral communicates with the iCentral enabled Eagle or Eagle Plus controller by utilizing existing wireless networks throughout the United States. This keeps installation costs low while ensuring reliable communications are achieved.

Ethernet. iCentral communicates with the iCentral enabled Eagle Plus controller via customer hosted Ethernet connection to the controller.

12. How do I know if I have coverage at my location?

iCentral communications network is available throughout most areas across the United States utilizing existing wireless technology. If you would like to check wireless coverage, email the physical address of your controller to: <u>icentral.support@rainmaster.com</u>

13. What types of field problems (faults) can the controller detect and how will I be notified?

The controller with iCard will monitor for Wiring Faults, Mainline Flow limits, Unscheduled Flow, No Flow, and Upper Flow limit violation on a per station basis. You can configure iCentral to notify you in real time via email or text message. In addition to the text/email, the website will show an alarm icon indicating that field problems have been detected.

14. *iCentral can deliver site specific weather information to my controller. Where does this information come from?*

The daily weather information may come from a variety of sources depending on your location.

➤ Users anywhere in the United States may use Rain Master's ZipETTM service. The ZipET service will automatically deliver Zip Code specific evapotranspiration (ET) data to your controller on a daily basis. (refer to FAQ 15)

> You may purchase a Rain Master Weather Center and connect it to one of your controllers. iCentral will then read and distribute this data to any of your other controllers automatically.

> California users may get daily ET data from any of California's CIMIS weather stations. iCentral automatically downloads this information daily from CIMIS and re-distributes it to your controller.

15. What is ZipET[™] and how does it work?

ZipET is a revolutionary ET (evapotranspiration) data collection and dissemination service for iCentral customers. Using ZipET, users can get site specific daily ET weather data (based on Zip Code) delivered to any controller located within the United States. Using daily ET, your controller automatically adjusts irrigation watering schedules based on daily weather conditions so you only replace water that has been depleted from the soil.

Unlike other ET-based irrigation programs that require you to have water audit expertise or to be a soil scientist, ZipET only requires you to enter a 5-digit Zip Code. The rest is automated! Your irrigation schedules adjust everyday based upon receipt of this daily information.

So how does it work? iCentral receives reliable raw weather information on a daily basis from thousands of weather stations throughout the United States. The weather information is validated, and converted as necessary in order to generate industry accepted ET values. The ET values are interpolated by Zip Code using a three-dimensional surface regression model. Site specific ET information is then delivered to your controller based upon your designated iCentral weather setup criteria.

16. What sets Rain Master® apart from the others?

➤ Rain Master product focus has been in intelligent controllers and central irrigation control systems for nearly 40 years. Its success has been based upon innovative technology that sets it apart from its competitors. iCentral internet system (U.S. Patent 6,823,239) sets the new standard in irrigation technology.

> Rain Master is a company with a proven track record and a name that you can trust. Reliable, rugged commercial grade controllers provide you with years of trouble free service. Should you ever have any questions, please give us a call or contact your local sales representative.

> Rain Master prides itself in providing you the simplest ET based irrigation system in the market! Finally, an ET system that EVERYONE can use, understand and maintain.

