



What you never thought possible.™

ICC (IRRIInet Control Center) for Windows[®] **Features & Benefits**

- **Year 2000 compliant**
Assures continued operation after December 31, 1999.
- **Operates on your choice of these operating systems: Windows'95, Windows'98, or Windows NT.**
Select the operating system with which you are familiar.
- **Support for more than one project per central—you can open different central files that allow you to run more than one FIU.**
Technicians can carry their customers' databases on their computer and switch projects as needed to assist in training and troubleshooting. System administrators with more than one FIU based system can switch between systems (including over a Local Area Network connection) as they supervise operations.
- **Software requires a unique “Key” to register – Software may be freely distributed for demonstration and training purposes. When it is to be connected to an FIU contact Motorola for a unique registration key. This will ensure that Motorola maintains an accurate end user database.**
Improved support to the end user.
- **Five password levels with unique log-on names for every user allows you to track who did what when.**
Improved accountability means better control of your system.
- **True Windows user interface—the access to various functions is “flat”, no more nested menus to crawl through trying to find the right item to run. Right-click mouse actions supported.**
You probably already know how to use various Windows programs. ICC provides a consistent interface that utilizes many of the Windows standards allowing you to easily learn how to use the software system.
- **One screen shows you everything at a glance—the graphic map, the events log and the outline of how your system is organized (like Windows “explore” function) grouping field units into areas, areas into the system.**
"One picture is worth a thousand words." Presentation of information in a clear manner saves you time on the job.
- **If you are working in another Windows application (e.g., writing a memo in Word) alarm events will force a pop-up screen to notify you of a new event.**
ICC continues to work in the background as you perform operations with other Windows software products. You don't miss important events coming to the ICC and you don't have to keep switching back to ICC to check up on your system, the pop-up takes care of business for you.
- **Export function of any report supported to allow sharing of information with other Microsoft Excel software (e.g., export the water accumulation record).**
Manipulate the basic data, adding costs per unit, drawing graphs, etc.

- **NETWORKING: Client-Server installations are supported allowing you to run your system over a network—any NOS (network operating system) that Windows supports.**
This means you can set the FIU up connected to a personal computer that is located on one node of a network and use other personal computers located at other nodes to view the activities and make changes (all password access controlled). The system adapts to your management structure; you don't have to modify your organization to fit the software system. Future support for communicating across the Internet (TCP/IP protocol) will be available in IRRInet-XL.
- **Interrogation of individual “points” (i.e., down to the individual input or output) streamlines the communication load on the radio or wireline channel to the field units. You can even have a different interrogation frequency when the object (field unit, area, single output etc.) is displayed on the graphic window (this allows more frequent update of the information when it is on-screen).**
Customize the frequency of data updates to match your requirements.
- **Switch language on-line supported, including help files. One user may be more comfortable using English, the next person may prefer Spanish—simple to switch, no reloading software.**
Adapts to each user's needs.
- **Using the Windows “Print Manager”, all printers that are Windows compatible may be used with the ICC system.**
Your system stays current with technology-- just load the new printer driver into Windows!
- **Every table allows a report to be printed.**
You don't use "print screen"; instead, you generate a report that can be printed. Making hard copy of your data entries is convenient and provides a good backup.
- **You can build the system definitions either from “scratch” at the keyboard of the computer or you can use the Upload Wizard to pull the data in from field units that have already been programmed.**
Converting older MIR5000C systems is easy using the wizard, just upload the data out of the field units. Saves time. Adding a new field unit? You can program it in the field and upload, or create the programs and definitions in the central and download--your choice.
- **Graphic maps may either be "fixed" or "user" created.**
Start with the fixed mode, where each field unit's main lines and valves are displayed schematically and develop your own "user" maps as time allows. You can switch back and forth while online with the software.
- **When creating your own maps, you have the ability to:**
 - ◆ **Create screens, import graphic files (bitmap, jpeg, etc.),**
 - ◆ **place navigation buttons on a screen (zoom to another screen function),**
 - ◆ **place inputs or outputs on top of the map (show the valves and sensors, all or selected ones),**
 - ◆ **place icons representing Areas and Field Units on top of the map**
 - ◆ **create and edit label fields on top of the map***Powerful "user" graphic tools help you easily customize the ICC software to your unique system design.*
- **ICC supports the MIR5000f-AC field units (first released in 1985), the IRRInet field units, and the upcoming new generation field unit, IRRInet-XL.**
Backward compatibility ensures you get the most from the investment you made in Motorola field units.
- **Closed loop conditions are supported by ICC.**
Powerful IF-THEN conditions provide automated control of your system in easy to understand format.

- **Event messages may be customized by the user and new events defined that relate to the system.**
Events form the foundation of a reporting system that is used to notify you of system failures alarms and other situations that you may define as critical and "need to know". Express the information in your own words so it makes the most sense. Information knowledge is your edge in water management!
- **Message paging is supported, sending alphanumeric messages to your pager.** *(This will be added to the system as an option after the first release.)*
Messages are automatically generated from the Events list or you may send a user-written message to any user carrying an alphanumeric pager. You can leave the office but not leave behind current knowledge of how your system is running.
- **Hand held remote control will operate via the telephone modem in the personal computer. You will use any device that allows you "call" the central (PCS, iDEN or analog cellular handset, interconnect on your two-way portable radio, pay telephone, whatever). Voice prompting from the central computer will lead you through the operation, including a security password.** *(This will be added to the system as an option after the first release.)*
Take control of your system with you in the field. This feature will also be backward compatible to the "Bramco" decoder feature originally developed for the MIR5000C central.
- **Flow Prediction may be used to analyze the demand on the hydraulic design.**
Analysis of the hydraulic demand can help you better balance the programs, smooth out the flow curve, and improve energy efficiencies when using pumps.
- **Enhanced graph plotting utilities are included in ICC.**
Consistent with the idea of clear and concise graphic presentation of system information, ICC has a very powerful graph generation "engine". You may perform calculations on up to three inputs to derive a single graph plot (e.g., sum 3 different water meters to draw a single flow curve over time). You may also choose to overlay multiple data sources onto the same graph plot (e.g., overlay flow and pressure on the same plot).
- **Network Protection is provided in ICC.**
Water distribution networks may be defined to allow comparison of flow rates coming from "IN" meters and "OUT" meters. Theoretically, if the sum of the "IN" meters' flows is greater than the sum of all "OUT" meters' flows there is a leak somewhere in the system. Network Protection allows you to define at what point an alarm is generated and may further be linked to a shut down of the entire system. This protects against catastrophic failures in the distribution pipelines.
- **Sensor Measurements may be taken by ICC.**
Interface any transducer to the field unit, converting the transducer output to a pulse rate input. The ICC software provides either a linear or non-linear conversion of the raw pulse rate input to user-defined engineering units (e.g., if you are measuring pressure the ICC displays "PSI" or "atmosphere" (metric) units and the actual numeric value matches the gauge reading in the field).
- **ICC provides comprehensive Irrigation Programming screens, including simultaneous display of time to run, quantity to run and irrigation depth (inches or millimeters of water to apply).**
Managing your water in time, quantity or depth of irrigation is available--change one parameter and the other two recalculate to show the effects of your changes.
- **Define multiple crop types in ICC and adjust water factor percentage to each type.**
This reaches across field unit boundaries, attaching to the main line of any field unit. Use this to prioritize different main lines according to your needs. High priority may receive more water than Low priority areas. Tag each main line ahead of time with the "High" or "Low" type, then modify the water factor adjustment through the season by simply changing two factors. The changes are

broadcast to the field units and they respond according to the previously defined type tagged to each mainline.

- **Offline programming for field units provides a backup of the data in the field.**
You can create multiple variations of programs for each field unit at the PC and download any one on demand or through the Closed Loop Condition table (IF date=4-July THEN send program #1 to unit#1).

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