



**James Instruments Inc.
R- Meter Mk III Complete System**

General Overview

The James Instruments R-Meter MK III utilizes the latest in eddy current sensing and micro-processor technology to accurately locate, determine depth, and estimate size of metal objects in concrete. The eddy current sensor is specifically designed to react to the outer surface of the metal object only. It is uninfluenced by small particles in the concrete, whether the concrete is fresh or hardened, dry or wet. Built in modes for rebar, conduit, copper pipe, and post tension cable facilitate the use of the R-Meter Mk III.

This allows the unit to locate both ferrous as well as non-ferrous metals in concrete. The latest in microprocessor technology not only conditions the sensor signal but provides the user with the size of steel reinforcing bar, depth of steel reinforcing, a map of cover and more.

The unit's easy to view display can provide the user with a complete structural analysis. An easy to use bar display and an audio headphone tone helps to quickly and accurately locate metal objects. Large easy to view numbers display an instantaneous estimate of cover. It will also display a map of cover throughout the structure. Further options will allow a cross-section of the concrete structure under test.

The R-Meter MK III was developed for real world application and every day durability in mind. It's rugged and splash resistant case allows the user to use the R-Meter Mk III in the field. It's small but very sturdy sensing probe can withstand test after test with little wear on the probe face.

The R-Meter Mk III enables the user to store his field data and later download it to a P.C. software. This P.C. software receives the data then allows the user to analysis it. A graphing tool allows the creation of a contour map.

Technical Specification

Sensor Dimensions: 5"L x 2.4" W x 1.6" H

Sensor Weight: 1lb

Instrument Dimensions: 10.625" L x 9.68" W x 4.875" H

Instrument Weight: 5.4 lbs

Complete System Weight: 10 lbs

Basic System Weight: 8 lbs

LCD Dimension: 3.5" L x 4.65" H

LCD Size: 320 x 240 pixels

Operating Temperature: -10 - 50 C

Standard Imperial Rebar Sizes: 3, 4, 5, 7, 9, 10, 11

Standard Metric Rebar Sizes: 10mm, 12mm, 20mm, 25mm, 30mm, 34mm

Standard Copper Pipe Sizes: .375, .500, .750, 1.00, 1.250

Standard Conduit Sizes: .750, 1.00, 1.250

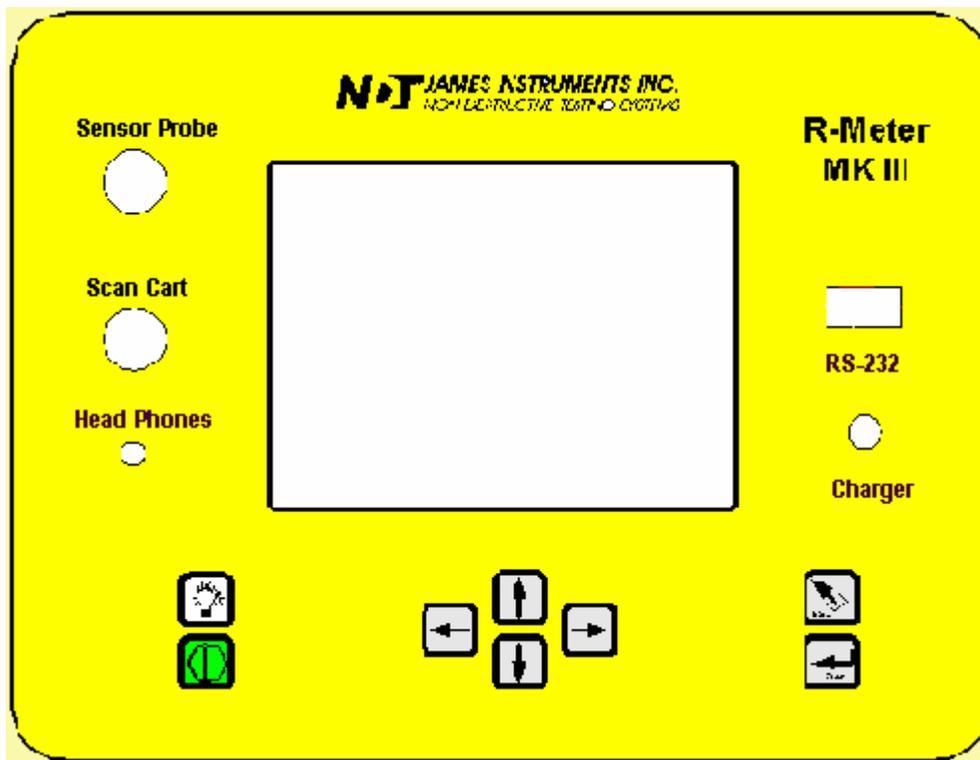
Power Source: 12v, 4-6hr continuous use

Data logger Unit

The data logger unit, which is a standard with the James Instruments R-Meter Mk III, is a sophisticated ruggedized field proven unit. The embedded microprocessor technology enables the end user to easily locate, determine cover, record, and analyze ferrous and non-ferrous metals.

The data logger's easy to view display can provide the user with a complete structural analysis instantaneously. Large bold easy to view numbers on the display makes the R-meter MK III very user friendly when estimating cover or bar size. A memory capacity of 8000 data points allows a large sum of data to be stores for later analysis.

The front panel of the data logger unit (pictured below) allows the end user to interface with the sensor probe, scancart, headphone, charger and a personal computer via a RS-232 port. A large viewing window protects the LCD display from possible damages that may occur during operation. Large control buttons on the front panel enables the user to easily scroll through menu options.



- **Power Key** - Momentarily push this key to turn on the unit. Pressing it again turns off the unit. The unit will power up displaying the main menu screen when powered up.
- **Back light Key** - Depressing this key the backlight of the display comes on. Depressing the key again turns the backlight off.
- **Enter Key** - Pressing this key allows you to choose main menu selections. The enter key also allows you to prepare the R-Meter MK III for operation.

- **Escape Key**- Pressing this key allows you to return to the main menu screen from any sub screen.
- **Up arrow Key** - This key is used to scroll through various settings and wave frames.
- **Down arrow Key** - This key is used to scroll through various settings and wave frames.
- **Right arrow key** - This key allows you to scroll through various settings.
- **Left arrow key**- This key allows you to scroll through various settings

Probe

The James Instruments R-Meter Mk III utilizes the latest in eddy current sensing technology to accurately locate, determine depth, and estimate size of metal objects in reinforced concrete structure. The eddy current probe has been specifically designed to react to the outer surface of the metal object only. The ability to determine cover, locate, and estimate bar size in both deep and short mode with a single probe makes the R-Meter MKIII sensing probe far more superior than any other commercially available rebar location systems.

The R-meter Mk III sensing probe is compact ,weighing only 1 lb and dimensioned at 5"x 2.4"x1.6" and still very tough and durable for field application. The sensing probe has been calibrated in our facility only for operation with the data logger unit it was purchased with. If a new sensor probe is needed it is recommended to send the complete unit for proper calibration. Not calibrating the sensor probe and the data logger unit together can cause unacceptable location, cover, and bar size readings. For further information regarding repair and calibration please contact our office.

Short /Deep mode

The R-meter Mk III facilitates analysis of rebar location, cover, and bar sizing by allowing the user to do measurements in a short mode or deep mode. The R-meter MkIII provides the user the ability to decide whether the system switches from deep and short mode automatically or manually, to do so follow the following direction. No switching of probes is required, as the single sensing probe operates efficiently in both modes.

When the system is initially turned on the automatic ranging is the default. To change this setting go to the locate /cover menu screen this is needed as this function can only be done in the locate/cover screen.

- Once in locate/ cover screen use the up or down arrow keys on the front panel to scroll the highlight to the locate option.
- While the highlight is on the **LOCATE** option press the left arrow key once.

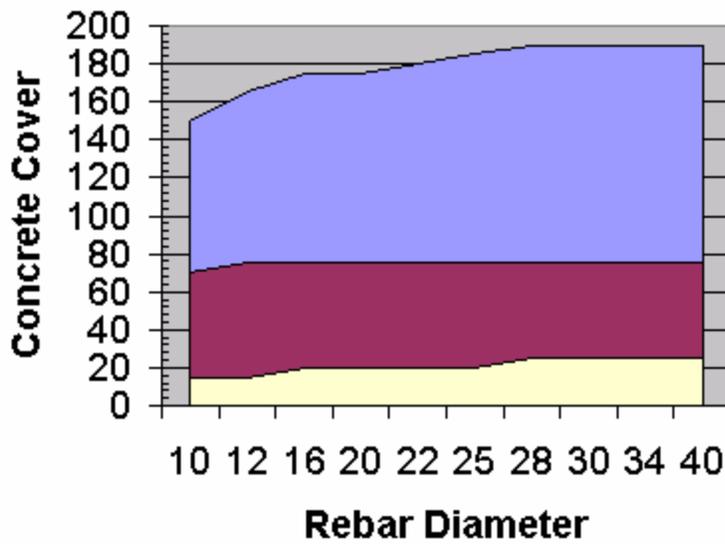
```
RS - LOCATE COVER -  
DEEP : [1205] 1.0"  
[          ]  
MATERIAL = REBAR  
Ø = 0.375" (#3)  
S (min) = 0.4  
  
BATTERY = XX %  
  
James Instruments 2/27/2003 10:00 AM
```

- The letters **RS** will appear on the upper left hand corner of the screen. The letters **RS** indicate that auto ranging is on.
- Do the same procedure to turn off auto ranging and have the ability to manually switch ranges.

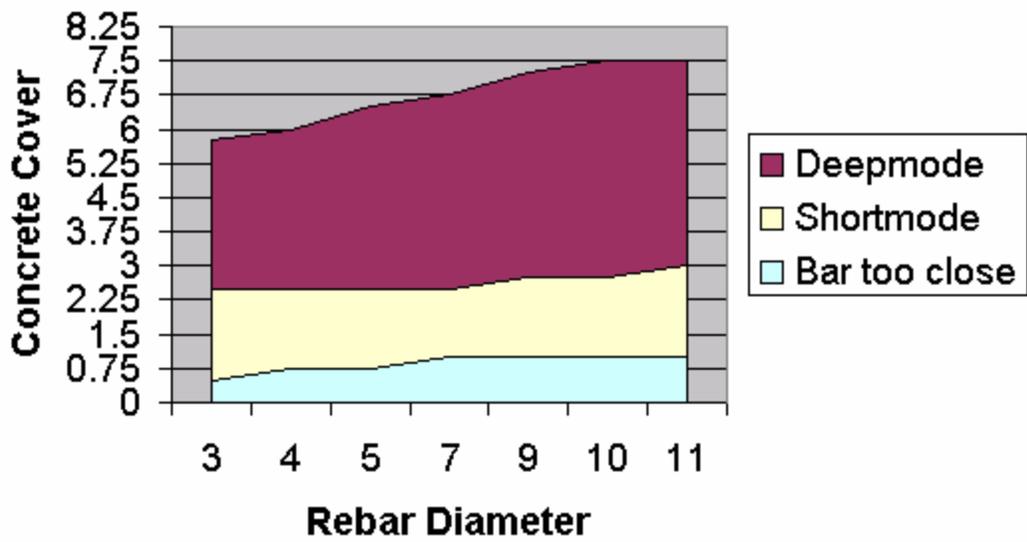
Short mode: Ideal when reinforcement cover ranges form .5" to 3.0". Locating, determining cover and bar size can all be measured while in this mode. An error of $\pm .125$ must be accounted for during measurement of metal bar or pipe location.

Deep mode: Ideal when reinforcement cover ranges from 2.75" to 8". Locating, determining cover and bar size can all be measured while in this mode. An error of $\pm .125$ must be accounted for during measurement of metal bar or pipe location.

Metric rebars ranges



Imperial Rebar Ranges



Locating Ferrous and non-Ferrous metals

The R-meter MK III using the latest in eddy current sensing and microprocessing technology is ideal for locating ferrous and non-ferrous metals. Metals that can be located with ease are the following

- Imperial and Metric reinforcement bars
- Standard copper pipe
- Standard conduit pipe
- Post tension cable

The R-meter MkIII allows the user to locate metals by using two options on the LCD display.

Option 1

A bar displays on the top of the location screen enables the user to determine when the center of the metal bar/pipe has been detected. When this bar display reaches the center of the metal bar/pipe it will be have incremented to its highest point, once the sensing probe has passed the center of the metal bar/pipe the bar display will increment down.

Option 2

This option consists of a numerical output displayed on the location screen. The range of this number is 0 to 4095. As the probe moves toward the rebar/pipe the number will increase, when the probe is over the center of the rebar /pipe you will see the largest number displayed. As you move the probe away from the center of the rebar/pipe the number will start to decrease.

This technique can also be useful in determining whether a short or deep mode is necessary for proper location, cover, and sizing analysis should be used.

Determining Cover

The R-Meter MkIII allows the operator to easily determine concrete cover of rebar. Since the R-Meter MkIII utilizes eddy current technology cover is determined with even more accuracy than predecessor, because of the eddy current technology only the bar/pipe is located and no small particles of metals in the concrete can influence the measurement. Such as flyash.

The following steps allow for proper cover measurements

Step 1: The first thing to do is to choose either English or Metric modes on the system menu screen.

Step 2: Choosing whether short or deep mode range is necessary for your operation. This can be done on the locate/cover screen, for a more detailed explanation link to short mode / deep mode ranges.

Step 3: Using the down arrow key scroll the highlight 4 lines down to the bar diameter category. Once this line is highlighted use the right or left arrow keys to choose the bar diameter.

```
-   LOCATE COVER   - - -  
DEEP  : [ 1205 ]  1.0"  
[          ]  
MATERIAL = REBAR  
Ø    = 0.375 "    (#3)  
S ( min ) = 0.4  
  
BATTERY = XX %  
  
James Instruments   2/27/2003   10:00 AM
```

Step 4: Now pass the sensing probe on the surface of the structure until the smallest cover is displayed on the right hand corner of the screen.

```
-   LOCATE COVER   - - -  
DEEP  : [ 1205 ]  1.0"  
[          ]  
MATERIAL = REBAR  
Ø    = 0.375 "    (#3)  
S ( min ) = 0.4  
  
BATTERY = XX %  
  
James Instruments   2/27/2003   10:00 AM
```


Determine Bar Size

The bar diameter can be easily determined with the R-Meter MkIII with out the prior knowledge of cover. This is possible by taking two reading one at surface of the structure and another at the same location but .750 inches away. A .750 spacer is provided with the system a long with a locating template that helps keep the exact location of the first reading when doing the second reading with the .750 spacer.

The following steps allow for proper bar sizing measurements

Step 1: Press ESC once in the Locate Cover screen.

Step 2: Once in the Main menu screen use the up or down arrow keys to navigate the highlight to the **Locate** category.

Step 3: Using the right arrow key on the front panel choose **Size** and press enter.

```
--      Main Menu      ---
Locate: Size
Cover Map Menu
System Menu
Upload Menu

Battery = 100%

James Instruments  03/12/2004  10:00 AM
```

Step 4: In the **BAR SIZE** screen choose which range (short or deep) you will be operating in, this is done by pressing the right arrow key. The system will alternate ranges each time the key is depressed.

Step 5: Using the sensor probe locate the center of the rebar by either using the bar display or the numerical output. Once the center has been determined press enter.

```
-----  BAR SIZE  -----
PRESS ←  KEY
SHORT [ 400 ]

[ ██████████ ]
BATTERY = XX %

James Instruments  2/27/2003  10:00 AM
```

Step 6: The R-Meter Mk III will now read **ADD BLOCK - PRESS ENT** on the top line.

```
----- BAR SIZE -----  
· ADD BLOCK - PRESS ←  
SHORT [680]  
1: [ 400 ]  
  
[ ██████████ ]  
BATTERY = XX %  
James Instruments 2/27/2003 10:00 AM
```

Step 7: At this point the locating template needs to be applied over the sensor probe. Keeping the locating template positioned exactly where the sensing probe (center of the bar) is very important. Remove the sensing probe and place the 3/4 inch spacer in the center of the locating template. Now place the sensing probe over the 3/4 inch spacer.

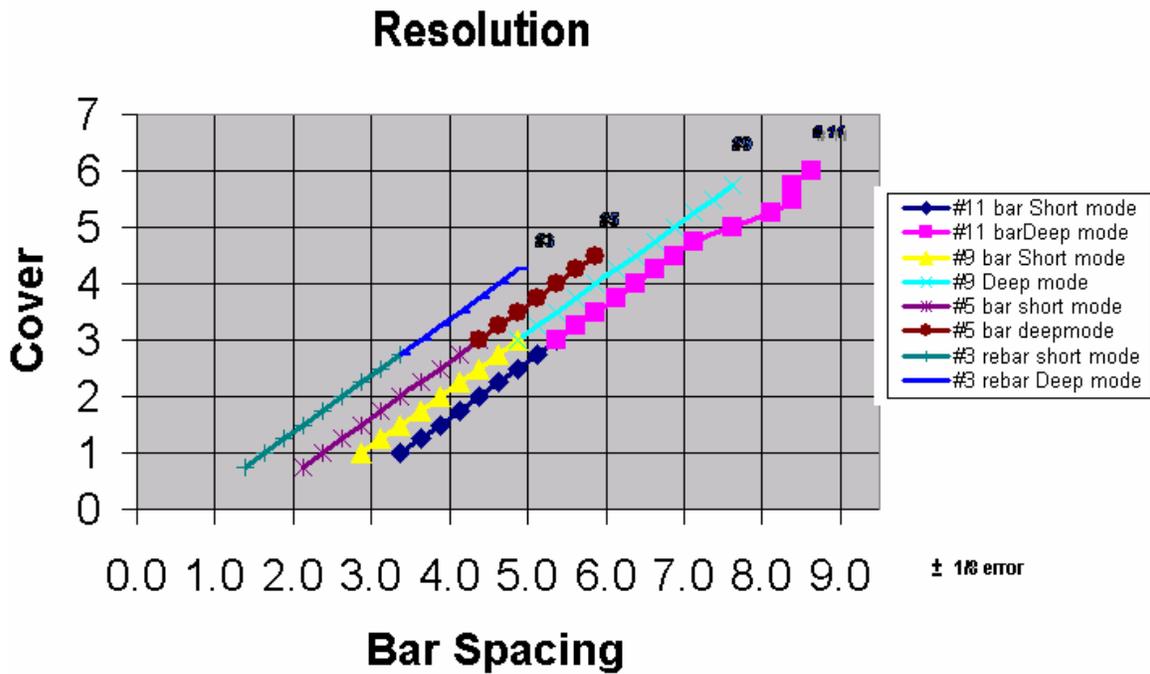
Step8: press enter

The R-Meter MkIII will now display the estimated diameter of the rebar which was measured. The R-Meter MK III can accurately determine bar size up to 4.5" (115mm) in the deep range.

```
----- BAR SIZE -----  
· PRESS ← TO REPEAT  
SHORT [680]  
1: [ 400 ] 2: [ 680 ]  
Diameter: 0.375"  
[ ██████████ ]  
BATTERY = XX %  
James Instruments 2/27/2003 10:00 AM
```

Pitch & Resolution

Measurements can often be influenced by neighboring parallel bar. The graphs below shows the min spacing to it's corresponding bar.



Utilizing Cover Map function

The James Instruments R-Meter Mk III has incorporated a user friendly cover map to further assist in field analysis. The cover map mode allows the user to mark the cover and location of a rebar on a grid. The grid lines are numerically numbered with the Y axis starting at 1 from left to right. The X axis is also numerically numbered with number 1 starting at the top of the grid.

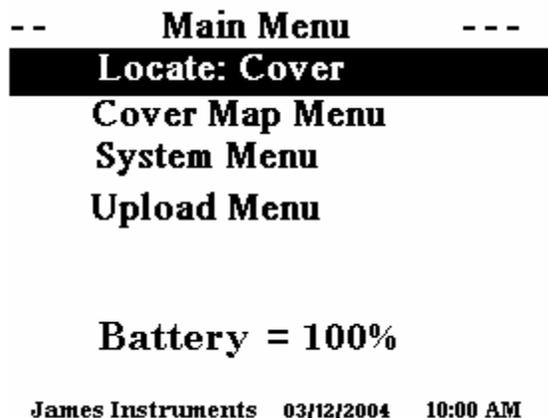
The Three symbols below have been selected to allow the user to distinguish the status of the current reading. A full shaded box represents that the cover has exceeded that of the selected S min. The S min is the selected minimum cover you have told the R-Meter MkIII to detect. A box with 3 thick shaded lines means that the cover is within range of the selected S min. A box with 3 thin inner lines means that the R-Meter Mk III has not detected a bar/tube.

Cover Map Symbols



Please follow this procedure to correctly prepare the R-Meter Mk III for Cover Map operations.

Step 1: Press the escape key on the front panel to get to the Main Menu screen.



Step 2: Navigate the highlighted cursor using the up or down arrow keys to **COVER MAP MENU** option and press enter.

Step 3: Choose whether you would like to **INSTALL NEW MAP** or **VIEW OLD MAP** by highlighting one and pressing enter.

- COVER MAP MENU - -

INSTALL NEW MAP
VIEW OLD MAP

BATTERY = 87 %

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Step 4: If **view a map** is chosen please proceed to step 4B, if not please follow the instruction directly below for installation of a new map.

Step 4A:

- 1) The R-Meter Mk III automatically generates a map number.

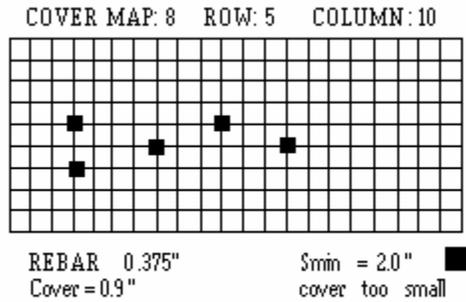
- COVER MAP MENU - -

INSTALL NEW MAP
VIEW OLD MAP

BATTERY = 87 %

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- 2) Under the Material categorie line choose the material under investigation.
(rebar, conduit, copper)
- 3) Choose the diameter of the material under investigation.
- 4) Choose the S min (minimum cover)
- 5) Choose the detection range **DEEP or SHORT** that cover analysis will be done in.
- 6) Press enter
- 7) The screen now displays the cover map grid.



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Step 4B:

- 1) After choosing to view old map a **REVIEW COVER MAP** menu screen will appear.
- 2) The system does not allow adjustment of previous set parameters.
- 3) The only function that can be changed is that of which map to view.

```

- REVIEW COVER MAP -
MAP NUMBER = 8
MATERIAL = REBAR
Ø = 0.375" (#3)
S (min) = XX"
RANGE IS (SHORT OR DEEP)
BATTERY = 87%

```

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- 4) Choose the map number to view and press enter.
- 5) The screen now displays the cover map grid with previously saved data. New data can be saved into the gridded map along with the older data.

Step 5: Utilizing the Up or Down arrow keys on the front panel chose the location for your first mark.

Step 6: Pass the sensing probe over the area being investigated; the blinking cursor will turn into one of the three cover symbols.

Step 7: Pressing the enter key will save that symbol onto the screen and memory along with location information which is on the bottom of the screen. This information will appear for this particular point on the upload screen of the PC software.

System Menu

The system setup option on the main menu screen allows you to make modifications to system configurations. Once in the system setup sub menu modification can be made to the following

- Display
- Language
- Units
- Clock menu
- Erase Memory
- Battery operation

- Pressing the escape key takes you back to the main menu screen.

Erase Memory

To erase store memory from the R-Meter MK III follow these steps

- Press the up or down key until you get to the system setup menu option. Press Enter. The Setup Menu sub screen should appear.

SETUP MENU

- Scroll through the Setup menu using the up or down arrow key. Select the Erase Memory option by pressing Enter. The display should read the following.

ERASE MEMORY

- Press enter once a message telling you to press enter again should appear.

PRESS ENTER AGAIN

- Pressing enter a second time will erase all stored memory in the R-Meter MK III system
- Pressing the Escape key will return you to the Main Menu Screen.

Display Cursor

To change the visibility of the display cursor follow these steps

- Press the up or down key until you get to the system setup menu option. Press Enter. The Setup Menu sub screen should appear.

-- SYSTEM MENU ---

DISPLAY = BLACK LINES

LANGUAGE = ENGLISH

UNITS = IMPERIAL

CLOCK MENU

ERASE MEMORY

BATTERY OPERATION

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- Scroll through the Setup menu using the up or down arrow key. Select the Display option by pressing enter. The display should read the following.

DISPLAY=

- Pressing the left or right arrow keys will give the option to choose Black Lines or White Lines.

-- SETUP MENU ---

DISPLAY = WHITE LINE

LANGUAGE = ENGLISH

UPLOAD MENU

CLOCK MENU

ERASE MEMORY

BATTERY OPERATION

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Pressing the Escape key will return you to the Main Menu Screen.

Language Options

To choose which Language the R-Meter MK III will be operating in follow these steps

- Press the up or down key until you get to the system setup menu option. Press Enter. The Setup Menu sub screen should appear.

```
-- SYSTEM MENU ---  
DISPLAY = BLACK LINES  
LANGUAGE = ENGLISH  
UNITS = IMPERIAL  
CLOCK MENU  
ERASE MEMORY  
BATTERY OPERATION
```

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- Scroll through the Setup menu using the up or down arrow key. Select the Language menu option by pressing enter. The display should read the following.

LANGUAGE=

- Use the left or right arrow keys to choose English or Spanish as the language that your R-Meter MK III operates in.
- Pressing the Escape key will return you to the Main Menu Screen.

Measuring Units

English and Metric units are available for the user to choose from.

The following steps allow the user to choose the measuring unit he wants to operate in.

Step 1: In the main menu screen use the up or down arrow keys on the front panel to navigate down to the system set_up category.

Step 2: Press enter.

Step 3: In the system set up screen use the up or down arrow keys on the front panel to navigate down to the **UNIT** category.

```
-- SYSTEM MENU ---  
DISPLAY = BLACK LINES  
LANGUAGE = ENGLISH  
UNITS = IMPERIAL  
CLOCK MENU  
ERASE MEMORY  
BATTERY OPERATION
```

```
James Instruments 2/27/2003 10:00 AM
```

Step 4: Use the right arrow key to choose either Imperial (English) or metric measuring units.

Step 5: Press the ESC key to go back to the main menu screen and continue measurements.

Clock Menu

To change date and time please follow these steps

- Press the up or down key until you get to the system setup menu option. Press Enter. The Setup Menu sub screen should appear.

```
--  SYSTEM MENU  ---  
DISPLAY = BLACK LINES  
LANGUAGE = ENGLISH  
UNITS = IMPERIAL  
CLOCK MENU  
ERASE MEMORY  
BATTERY OPERATION
```

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- Scroll through the Setup menu using the up or down arrow key. Select the Clock Menu option by pressing enter. The display should read the following.

```
HOUR = [ 1 PM ]  
MINUTE = [ 0 ]  
MONTH = [ 10 ]  
DATE = [ 12 ]  
YEAR = [ 2003 ]  
Save Changes
```

James Instruments 2/27/2003 10:00 AM

- Pressing the left or right arrow key will increment the digits on the display.
- Use the up and down key to select each hour and date options.
- Scroll to the save changes option using the up or down arrow key.

HOUR = [1 PM]
MINUTE = [0]
MONTH = [10]
DATE = [12]
YEAR = [2003]

Save Changes

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Pressing the enter key will store the date and time and return you to the Main menu screen

Battery

A 15V rechargeable battery is included in the R-Meter MK III. At full charge the main menu will display **BATTERY=100%**. Monitoring of the battery can be done by entering the battery operation mode in the system menu screen.

```
-- SYSTEM MENU ---  
DISPLAY = BLACK LINES  
LANGUAGE = ENGLISH  
UNITS = IMPERIAL  
CLOCK MENU  
ERASE MEMORY  
BATTERY OPERATION
```

James Instruments 2/27/2003 10:00 AM

In this mode the charge and discharge of the battery can be monitored. The system is operational when the charger is supplying power except when in the following screens.

- Locate cover
- Bar size
- Cover map

It is recommended to charge the unit before any lengthy field test is done. By hitting enter the battery and charger register are cleared and your battery percentage will reset to its actual reading.

```
-- BATTERY STATUS ---  
DISCHARGE CTR = XXXX  
DISCHARGE TMR =XXXXX  
CHARGE CTR = 0  
CHARGE TMR = 0  
PERCENT= 100%  
Hit ENT to Clear reg
```

James Instruments 2/27/2003 10:00 AM

Battery running time is at 4-hour minimum for a continuous field test. Replacing or repair of battery should be done by trained James Instruments technician and should be sent to our repair department for service.

Upload Data

The upload function of the R-meter Mk III is available for all models except the basic model R-C-3000. Please detail whether you require upload capabilities at time of order.

Please follow the steps below in order to upload the data stored in the data logging unit to a P.C.

- Connect the unit to the correct serial port of the P.C. using the supplied serial cable.
- Press the up or down key until you get to the upload menu option. Press Enter. The upload sub screen should appear.

```
--      Main Menu      ---  
Locate: Statistics  
Cover Map Menu  
System Menu  
Upload Menu
```

Battery = 100%

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Scroll through the upload sub menu using the up or down arrow key. Select which upload menu function you would like to perform by pressing Enter. The display should read the following

```
NO RECORDS  
NO RECORDS  
UPLOAD COVER MAP      1  
UPLOAD COVER MAPS  
  
---- RUN COM TEST ----
```

BATTERY TEST = XX %

UPLOAD SCAN MAP (only with upgraded model R-C-3075)
UPLOAD ALL SCAN MAPS (only with upgraded model R-C-3075)

- Use the up or down arrow key to select an upload. Pressing the left or right arrow key you can select which number of test data you want uploaded. Pressing Enter the upload process will begin.
- Go to the P.C software and press the download icon. P.C. software will display “waiting for data”.

- Go to the R-Meter Mk III and press the enter key.
- During Test upload the displays reads

“Upload In Progress”

- Once the upload has been completed the display will read " Upload complete"
- Pressing the Escape key will return you to the Main Menu screen.

Tools

- **Upload (Ctrl+U)**

This command is used to upload data from data logger unit to the CPU.

For Proper upload of data to a P.C. please follow these steps

- Open the R-Meter Mk III software ("R-Meter MK III" will appear on the upper left corner) on the P.C.
- Connect P.C and R-Meter Mk III by the RS - 232 serial ports.
- On the R-Meter MK III scroll down to the Upload menu
- Press enter.
- Choose which stored data test you want to download.
- Go to the R-Meter Mk III software (needs to be installed on P.C.) click on the upload icon or press CTRL + U.
- R-Meter Mk III software will ask you to "Please start upload".
- At this moment press the enter key on the R-Meter Mk III (R-Meter MK III software waits 50 seconds for the upload information.) If no data is received after 50 seconds a "No data received" sub screen will appear.
- Data will appear on the screen after all data has been transferred.
- Save data in desired folder.

- **Ports**

This command allows setting the correct (RS-232) com port. It can be com1 through com 4.

The default setting is com 1.

- **Graph (Ctrl+T)**

Allows the user to graph the data into a contour map for easy analysis. The graph shows the data points converted into a sine wave by its time domain.

Trouble Shooting

The James Instruments R-Meter Mk III built in trouble shooting diagnostics helps the user identify problems with the system. This is a beneficial tool for the user that may help resolve the problem with out the need of send the system in for repair. The trouble shooting diagnostics are the "**Run com test**", "**Sensor Cable Problem**" and "**Sensor board Problem**". Follow the steps below to properly diagnose any of the 3 problems.

Run Com Test

Step 1: Go to the Main Menu screen

Step 2: Navigate the highlight to the **Upload Menu** option and press enter.

```
--      Main Menu      ---
Locate: Statistics
Cover Map Menu
System Menu
Upload Menu
```

Battery = 100%

James Instruments 03/12/2004 10:00 AM

Step 3: In the Upload Menu screen navigate highlight down to the **Run Com Test** option.

```
NO RECORDS
NO RECORDS
UPLOAD COVER MAP      1
UPLOAD COVER MAPS
---- RUN COM TEST ----
```

BATTERY TEST = XX %

[

Step 4: Place the test Rs232 connector on the front panels RS232 port.

Step 5: Press enter

Step 6: The R-Meter will run its RS 232 port test and display its outcome.

The following results may mean the following conditions.

Fail -- Check com loop= There may be the possibility of an internal malfunction with the Rs232 port or the test RS232 connector. Please call our offices for repair options.

NO RECORDS
NO RECORDS
UPLOAD COVER MAP 1
UPLOAD COVER MAPS
FAIL --- CHECK COM LOOP

BATTERY TEST = XX %

Pass= The internal RS232 connection is okay, Possible Rs232 or Computer port problem.

NO RECORDS
NO RECORDS
UPLOAD COVER MAP 1
UPLOAD COVER MAPS
COM PORT TESTS OK

BATTERY = XX %

General Instruction to Assist in Uploading

If 'unknown' problems persist in occurring as you attempt to upload data from your instrument to the P.C., please try the following:

1. Try a different P.C. Often P.C. have conflicts with serial ports which are undetected as the serial port is not used. This can typically be remedied by trying a different brand P.C. Sometimes two different brands fail for this reason.
2. Attach the serial cable to the P.C. before powering the instrument. This can help with a lot of strange ground problems and aid with proper handshake protocol between P.C. and the external Rs232.
3. Jumper pins 4 and 5 of the serial connector and run the serial port test. This verifies that the instrument is working properly.

Sensor Cable Problem

Step 1: Check cable connection between sensor and front panel.

Step 2: Check cable connectors. If one pin has been bent or pushed in the sensor cable problem will appear.

Step 3: Check sensor and front panel connector. If one pin has been bent or pushed in the sensor cable problem will appear.

If steps 1 thru 3 do not correct the problem please contact our office for assistance and possible repair options.

Sensor Board Problem

Please Contact our Office for repair options.

R-METER MK III

R-C-3000 BASIC UNIT includes the following Main Unit, Probe, 8ft Cable, Sizing Template, Charger, and Headphones.

R-C-3050 BASIC UNIT WITH SOFTWARE includes the following Main Unit, Probe, 8ft Cable, Sizing Template, Chargers, Headphones, RS-232 Cable, and Basic Software.

R-C-3075 SCAN CART UPGRADE includes the following Scan Cart, 2 Extension Rods 12ft Cable, Scanning Software. Turns your Basic Unit into a complete unit

R-C-3100 COMPLETE UNIT includes the following Main Unit, Probe, 8ft & 12ft Cable, Scan Cart, Headphones, Charger, Complete Software, RS-232 Cable, Sizing Template, 2 Extension Rods.

SALES NUMBERS:

R-C-3010 Main Unit

R-C-3015 Probe

R-C-3020 Scan Cart

R-C-3025 Extension Rod

R-C-3030 8ft Cable

R-C-3031 12ft Cable

R-C-3035 Headphones

R-C-3040 Sizing Template

R-C-3045 Charger

R-C-3051 Basic Software

R-C-3052 Scanning Software

R-C-3055 RS-232 Cable

Contact Information

James Instruments
3727 N. Kedzie Ave
Chicago, IL 60618

Phone: 773 463-6565
Toll Free: 800 426-6500
Fax: 773 463-0009

E-Mail: info@ndtjames.com
Web site: www.ndtjames.com

Repair Policy

United States | Canada | International

STEP 1: Ship the instrument in a box that meets UPS, Fed Ex, and standard shipping regulations. Enclose a note describing the problem you are having and name and phone number of the person to contact in your organization.

STEP 2: The instrument will be evaluated within one week of receipt. The contact person will be contacted with an estimate with the cost of the repair.

STEP 3: Upon receipt of your authorization of repair and payment terms, delivery time will be 2 weeks from that day.

If you need the repair back sooner than this, you have the option of paying an express service fee of 10 percent of the purchase price of said instrument plus the repair cost.

With this service, you can receive the instrument back within 3 working days.

Obsolete equipment will have an express charge of \$375.00 plus the cost of the repair.

International repair shipments must contain a commercial invoice listing the instrument being returned and must contain the words:

Country of manufacture: USA

Instrument being returned to manufacturer for repair – no value for customs, value for carriage only

Ship the complete system to:

James Instruments, Inc.

3727 North Kedzie Avenue

Chicago, IL 60618

Attn: Repairs