

Multi-View Quick Start Guide

Ver: 0.04

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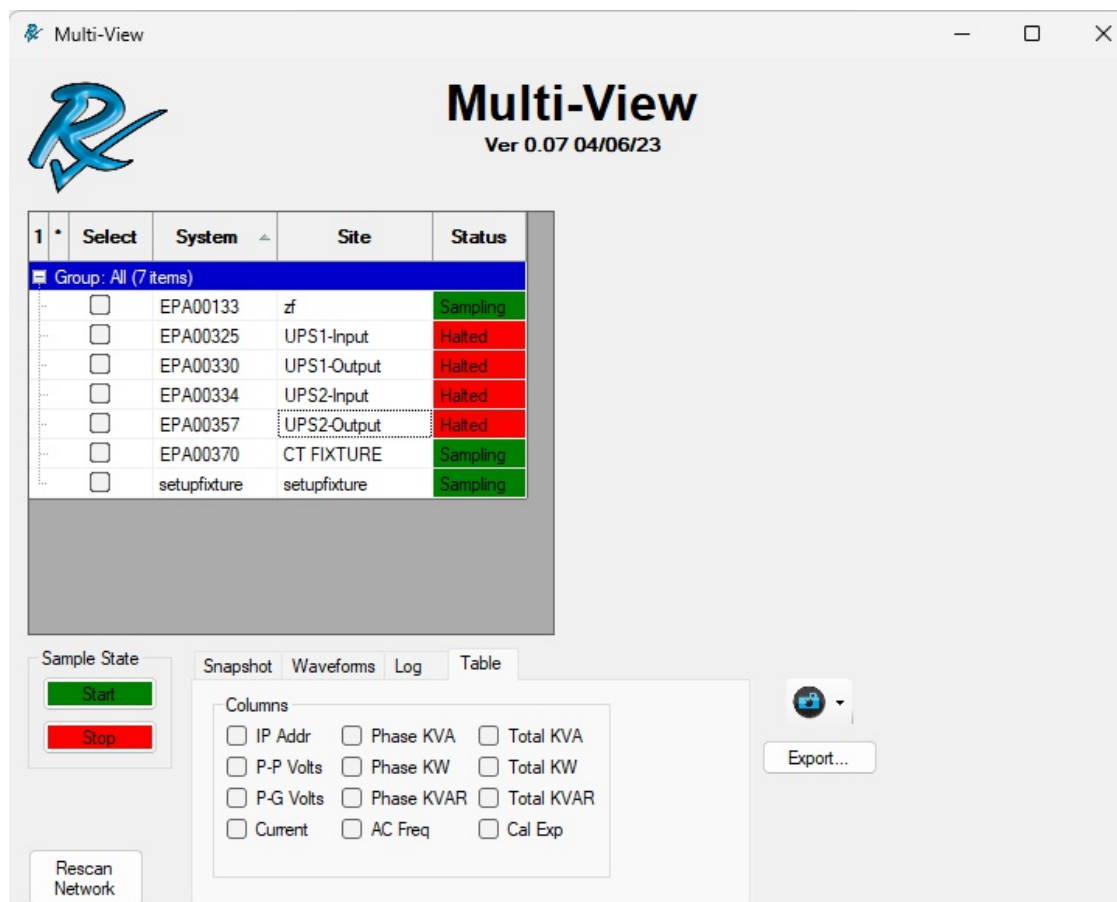
Main Screen - Scan Network

Multi-View on start-up auto scans the network to find all of the available Cx Monitors.

Make sure that the power monitors are connected to the network and have IP addresses.

See Cx Plus User Manual for instructions:

https://filemanager.rxms.com/downloads/instructions/CxPlus_User_Manual.pdf



↑

"Rescan Network":

Multi-View scans the network on startup and adds all the monitors it finds to the list.

Click **Rescan Network** to search for any monitors that have been added to the network.

Multi-View supports multiple network connections. If the computer has a WiFi and wired network it will find Cx Monitors on both.

Modify View

The Multi-View software can be modified to suit customers needs.

Double Left Click on the column:

System: Launch Live-View

Column header: Sort by column

Data Section: Change significant digits for column

Select: Selects all the Monitors in that group

Right Click on the table:

Launch Live-View

Create a New Site

Create new group and add

Add to existing group

Remove from group

Double Left Click :
Open Live-View

The screenshot shows the Multi-View software interface. At the top, there's a title bar with the 'Multi-View' logo and version 'Ver 0.07 04/06/23'. Below the title bar is a table with columns: Select, System, IP Address, Site, Status, L1-L2 Volts, L2-L3 Volts, L3-L1 Volts, L1-G Volts, L2-G Volts, L3-G Volts, L1 Current, L2 Current, L3 Current, AC Freq, Total KVA, and Total KW. The table contains several rows of data, including entries for EPA00133, EPA00325, EPA00330, EPA00334, EPA00357, EPA00370, and setupfixture. Below the table is a control panel with buttons for 'Sample State' (Start, Stop), 'Rescan Network', and tabs for 'Snapshot', 'Waveforms', 'Log', and 'Table'. The 'Table' tab is selected, showing a list of columns with checkboxes for selection: IP Addr, P-P Volts, P-G Volts, Current, Phase KVA, Phase KW, Phase KVAR, AC Freq, Total KVA, Total KW, Total KVAR, and Cal Exp. An 'Export...' button is also visible.

Select which columns to display.

IP Addr - Network IP Address

P-P Volts - Phase-Phase Volts

P-G Volts - Phase-Ground Volts

Current

Phase Power - KVA/KW/KVAR

AC Freq

Total Power - KVA/KW/KVAR

Cal Exp - Calibration Expiration Date

Capture an image of the chart
to either the clipboard or a file.

Save the current contents of
the chart to a csv file.

Double-click the number to toggle
the number of digits displayed after
the decimal point for that column.

New Site

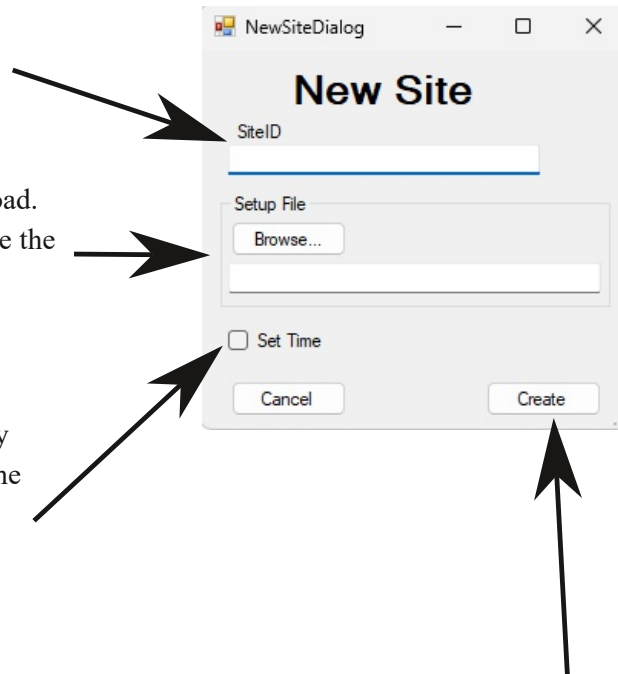
The Multi-View software allows the user to create a New Site on the monitor.

Right-Click on the row with the desired monitor and select **New Site** from the pop-up menu. The monitor must be in the "Halted" state or an error will appear.

Type in the name of the new **Site ID**

Select the **Setup File** to load. Leaving this blank will use the currently loaded setup.

Set Time will automatically synchronise the monitor time to the time on the PC.



Click **Create** to create the new site on the monitor, load the selected Setup File, and synchronise the clock on the monitor.

Add New Group

A Cx Monitor can be added into a group for control and display purposes. The power monitors will autocratically be added to the "ALL" group upon detection by the software. Power Monitors can be added to multiple groups.

To add a Cx Monitor to a new group:

1. Right Click on the data row of the power monitor you want to add.
2. Select "Add to New Group"
3. Type the name of the group you want to add.
4. The New group will be created and the Cx Monitor will be added to it.

The screenshot shows the Multi-View software interface. At the top, it says "Multi-View Ver 0.07 04/06/23". Below this is a table with columns: Select, System, IP Address, Site, Status, L1-L2 Volts, L2-L3 Volts, L3-L1 Volts, L1-G Volts, L2-G Volts, L3-G Volts, L1 Current, L2 Current, L3 Current, AC Freq, Total KVA, and Total KW. The table contains several rows of data. A right-click context menu is open over one of the rows, with the option "Add to New Group" highlighted. An arrow points from the text "Right click on one of the rows" to this menu. Below the table, there are tabs for "Sample State", "Snapshot", "Waveforms", "Log", and "Table". The "Table" tab is selected. Below the tabs, there are checkboxes for various columns: IP Addr, P-P Volts, P-G Volts, Current, Phase KVA, Phase KW, Phase KVAR, AC Freq, Total KVA, Total KW, Total KVAR, and Cal Exp. An "Export..." button is also visible. At the bottom left, there are "Start" and "Stop" buttons, and a "Rescan Network" button. A "New..." dialog box is open in the foreground, with the title "Enter a New Group Name". The text "UPS1" is entered in the input field. An arrow points from the text "Enter group name" to the input field. The dialog box has "OK" and "Cancel" buttons.

Select	System	IP Address	Site	Status	L1-L2 Volts	L2-L3 Volts	L3-L1 Volts	L1-G Volts	L2-G Volts	L3-G Volts	L1 Current	L2 Current	L3 Current	AC Freq	Total KVA	Total KW
<input type="checkbox"/>	EPA00133	192.168.2.40	zf	Sampling	209.44	120.72	121.16	121.12	121.12	0.08	0.00	0.00	0.00	59.99	0.00	0.00
<input type="checkbox"/>	EPA00325	192.168.2.73	UPS1	Launch Live-View	0.01	0.02	0.01	0.01	0	0.02	1.61	0.91	0.40		0.00	0.00
<input type="checkbox"/>	EPA00330	192.168.2.75	UPS	New Site	0.01	0.02	0.02	0	0	0.01	1.19	0.92	1.17		0.00	0.00
<input type="checkbox"/>	EPA00334	192.168.2.92	UPS	Add to New Group	0.02	0.01	0.01	0.02	0	0.02	1.68	0.41	0.44		0.00	0.00
<input type="checkbox"/>	EPA00357	192.168.2.31	UPS		0.01	0.02	0.01	0.02	0	0.02	0.05	0.07	0.05		0.00	0.00
<input type="checkbox"/>	EPA00370	192.168.2.42	CT FIXTURE	Sampling	119.40	0.02	119.39	119.37	0	0.01	0.83	0.33	0.61	59.95	0.10	0.00
<input type="checkbox"/>	setupfixture	192.168.2.13	setupfixture	Sampling	209.04	209.53	210.07	120.94	121	121.23	0.37	0.32	0.16	59.99	0.10	0.00

Add Cx Monitor to existing Group

Power Monitors can be added to multiple groups.

To add a Cx Monitor to a existing group:

1. Right Click on the data row of the power monitor you want to add.
2. Select "Add to Group"
3. Select the group you want to add the power monitor to.
4. The Monitor is now added to the group.

Multi-View
Ver 0.07 04/06/23

Select	System	IP Address	Site	Status	L1-L2 Volts	L2-L3 Volts	L3-L1 Volts	L1-G Volts	L2-G Volts	L3-G Volts	L1 Current	L2 Current	L3 Current	AC Freq	Total KVA	Total KW
Group: All (7 items)																
<input type="checkbox"/>	EPA00370	192.168.2.42	CT FIXTURE	Running	119.41	0.02	119.44	119.43	0	0.01	1.27	0.26	0.58	59.98	0.33	0.01
<input type="checkbox"/>	setupfixture	192.168.2.13	setupfixture	Running	209.03	209.36	209.79	120.92	121	121.00	0.35	0.30	0.17	60.02	0.10	0.00
<input type="checkbox"/>	EPA00325	192.168.2.73	UPS1-Input	Running	0.01	0.02	0.02	0.01	0	0.02	0.72	1.42	1.64		0.00	0.00
<input type="checkbox"/>	EPA00330	192.168.2.75	UPS1-Output	Running	0.01	0.03	0.03	0.03	0	0.01	0.88	0.32	0.37		0.00	0.00
<input type="checkbox"/>	EPA00334	192.168.2.92	UPS2-Input	Running	0.01	0.01	0.01	0.02	0	0.02	0.06	0.78	1.62		0.00	0.00
<input type="checkbox"/>	EPA00357	192.168.2.31	UPS2-Output	Running	0.01	0.02	0.01	0.02	0	0.02	0.04	0.07	0.06		0.00	0.00
<input type="checkbox"/>	EPA00133	192.168.2.16		Running	120.30	120.72	120.94	120.90	121	0.08	0.00	0.00	0.00	60.01	0.00	0.00
Group: UPS1 (2 items)																
<input type="checkbox"/>	EPA00325	192.16		Running	0.01	0.02	0.02	0.01	0	0.02	0.72	1.42	1.64		0.00	0.00
<input type="checkbox"/>	EPA00330	192.16		Running	0.01	0.03	0.02	0.03	0	0.01	0.88	0.32	0.37		0.00	0.00
Group: UPS2 (2 items)																
<input type="checkbox"/>	EPA00334	192.168.2.92	UPS2-Input	Running	0.01	0.01	0.01	0.02	0	0.02	0.06	0.78	1.62		0.00	0.00
<input type="checkbox"/>	EPA00357	192.168.2.31	UPS2-Output	Running	0.01	0.02	0.01	0.02	0	0.02	0.04	0.07	0.06		0.00	0.00

Sample State: Start Stop

Snapshot Waveforms Log Table

Columns: ☒ IP Addr ☐ Phase KVA ☒ Total KVA ☒ P-P Volts ☐ Phase KW ☒ Total KW ☒ P-G Volts ☐ Phase KVAR ☐ Total KVAR ☒ Current ☒ AC Freq ☐ Cal Exp

Export...

Rescan Network

Right click on one of the rows

The sum of the Cx Monitors data in a group show up in the group row.

Remove Cx Monitor from existing Group

The group will disappear when all of the power monitors are removed from it.

To remove a Cx Monitor from a group:

1. Right Click on the data row of the power monitor you want to add.
2. Select "Remove From Group"
3. The monitor will be removed from the group.

The screenshot shows the Multi-View software interface. At the top, there's a title bar with the 'Multi-View' logo and version 'Ver 0.07 04/06/23'. Below the title bar is a table with columns: Select, System, IP Address, Site, Status, L1-L2 Volts, L2-L3 Volts, L3-L1 Volts, L1-G Volts, L2-G Volts, L3-G Volts, L1 Current, L2 Current, L3 Current, AC Freq, Total KVA, and Total KW. The table is divided into three groups: 'Group: All (7 items)', 'Group: UPS1 (2 items)', and 'Group: UPS2 (2 items)'. A right-click context menu is open over the 'Remove From Group' option. The menu options are: Launch Live-View, New Site, Remove From Group, Add to New Group, and Add to Group. The 'Remove From Group' option is highlighted. Below the table, there are buttons for 'Sample State', 'Snapshot', 'Waveforms', 'Log', and 'Table'. There are also checkboxes for 'Columns' and 'Export...'. The 'Columns' section includes checkboxes for IP Addr, Phase KVA, Total KVA, P-P Volts, Phase KW, Total KW, P-G Volts, Phase KVAR, Total KVAR, Current, AC Freq, and Cal Exp.

Select	System	IP Address	Site	Status	L1-L2 Volts	L2-L3 Volts	L3-L1 Volts	L1-G Volts	L2-G Volts	L3-G Volts	L1 Current	L2 Current	L3 Current	AC Freq	Total KVA	Total KW
Group: All (7 items)																
<input type="checkbox"/>	EPA00370	192.168.2.42	CT FIXTURE	Sampling	119.63	0.02	119.56	119.56	0	0.02	0.45	0.99	0.54	59.96	0.13	0.01
<input type="checkbox"/>	setupfixture	192.168.2.13	setupfixture	Sampling	209.13	209.57	210.27	121.05	121	121.34	0.35	0.31	0.17	59.98	0.10	0.00
<input type="checkbox"/>	EPA00325	192.168.2.73	UPS1-Input	Sampling	0.02	0.02	0.02	0.01	0	0.02	0.58	0.16	0.22		0.00	0.00
<input type="checkbox"/>	EPA00330	192.168.2.75	UPS1-Output	Sampling	0.01	0.03	0.02	0.02	0	0.01	2.23	1.70	0.40		0.00	0.00
<input type="checkbox"/>	EPA00334	192.168.2.92	UPS2-Input	Sampling	0.02	0.01	0.01	0.02	0	0.02	1.59	2.85	1.00		0.00	0.00
<input type="checkbox"/>	EPA00357	192.168.2.31	UPS2-Output	Sampling	0.02	0.02	0.01	0.02	0	0.02	0.04	0.07	0.05		0.00	0.00
<input type="checkbox"/>	EPA00133	192.168.2.40	zf	Sampling	209.37	120.71	121.21	121.17	121	0.08	0.00	0.00	0.00	59.98	0.00	0.00
Group: UPS1 (2 items)																
<input type="checkbox"/>	EPA00325	192.168.2.73	UPS1-Input	Sampling	0.02	0.02	0.02	0.01	0	0.02	0.58	0.16	0.22		0.00	0.00
<input type="checkbox"/>	EPA00330	192.168.2.75	UPS1-Output	Sampling	0.01	0.03	0.02	0.02	0	0.01	2.23	1.70	0.40		0.00	0.00
Group: UPS2 (2 items)																
<input type="checkbox"/>	EPA00334	192.168.2.92	UPS2-Input	Sampling	0.02	0.01	0.01	0.02	0	0.02	1.59	2.85	1.00		0.00	0.00
<input type="checkbox"/>	EPA00357	192.168.2.31	UPS2-Output	Sampling	0.02	0.02	0.01	0.02	0	0.02	0.04	0.07	0.05		0.00	0.00

Right click on one of the rows

Snapshots

Cx Monitors can have multiple snapshots taken with field notes added to each one with the snapshot tab.

To take a group snapshot

1. Use the **Select** check box or Double-click the check box in the **Select** column to select/deselect all the monitors in the group.
2. Select the **Snapshot** tab
3. Enter the Field Note
4. Click the **Get** button. "Complete" will appear with count of monitors data collected

The screenshot shows the Multi-View software interface. At the top, there's a title bar with the Rx logo and the text "Multi-View Ver 0.07 04/06/23". Below this is a table with columns: Select, System, IP Address, Site, Status, L1-L2 Volts, L2-L3 Volts, L3-L1 Volts, L1-G Volts, L2-G Volts, L3-G Volts, L1 Current, L2 Current, L3 Current, AC Freq, Total KVA, and Total KW. The table is divided into three groups: "Group: All (7 items)", "Group: UPS1 (2 items)", and "Group: UPS2 (2 items)". Each group has a "Select" checkbox. Below the table, there's a "Sample State" section with "Start" and "Stop" buttons. To the right, there's a "Snapshot" tab with a "Get" button, a "Field Note" text area containing "50% Load", and an "Export..." button. The "Get" button is highlighted with a red box, and the "Field Note" text area is highlighted with a red box. An arrow points from the "Get" button to the "Field Note" text area.

Select	System	IP Address	Site	Status	L1-L2 Volts	L2-L3 Volts	L3-L1 Volts	L1-G Volts	L2-G Volts	L3-G Volts	L1 Current	L2 Current	L3 Current	AC Freq	Total KVA	Total KW
Group: All (7 items)																
<input type="checkbox"/>	EPA00370	192.168.2.42	CT FIXTURE	Sampling	119.48	0.02	119.63	119.47	0	0.01	0.46	1.86	0.19	59.98	0.06	0.00
<input type="checkbox"/>	setupfixture	192.168.2.13	setupfixture	Sampling	208.08	208.24	209.04	120.44	120	120.57	0.36	0.33	0.14	60.03	0.10	0.01
<input type="checkbox"/>	EPA00325	192.168.2.73	UPS1-Input	Sampling	0.02	0.03	0.02	0.01	0	0.02	0.25	0.19	0.34		0.00	0.00
<input type="checkbox"/>	EPA00330	192.168.2.75	UPS1-Output	Sampling	0.01	0.03	0.02	0.02	0	0.01	0.17	1.68	2.64		0.00	0.00
<input type="checkbox"/>	EPA00334	192.168.2.92	UPS2-Input	Sampling	0.02	0.01	0.01	0.02	0	0.02	1.39	2.19	0.39		0.00	0.00
<input type="checkbox"/>	EPA00357	192.168.2.31	UPS2-Output	Sampling	0.02	0.02	0.01	0.01	0	0.03	0.05	0.08	0.06		0.00	0.00
<input type="checkbox"/>	EPA00133	192.168.2.40	zf	Sampling	208.11	119.98	120.50	120.45	120	0.08	0.00	0.00	0.00	60.03	0.00	0.00
Group: UPS1 (2 items)																
<input checked="" type="checkbox"/>	EPA00325	192.168.2.73	UPS1-Input	Sampling	0.02	0.03	0.02	0.01	0	0.02	0.25	0.19	0.34		0.00	0.00
<input checked="" type="checkbox"/>	EPA00330	192.168.2.75	UPS1-Output	Sampling	0.01	0.03	0.02	0.02	0	0.01	0.17	1.68	2.64		0.00	0.00
Group: UPS2 (2 items)																
<input checked="" type="checkbox"/>	EPA00334	192.168.2.92	UPS2-Input	Sampling	0.02	0.01	0.01	0.02	0	0.02	1.39	2.19	0.39		0.00	0.00
<input checked="" type="checkbox"/>	EPA00357	192.168.2.31	UPS2-Output	Sampling	0.02	0.02	0.01	0.01	0	0.03	0.05	0.08	0.06		0.00	0.00

Sample State: Start (green), Stop (red)

Snapshot Waveforms Log Table

Get Complete - 4 Monitors

Field Note: 50% Load

Export...

After a **Get** snapshot, a "Complete" status will be displayed along with the number of monitors that captured the snapshot.

QUICK TIP:

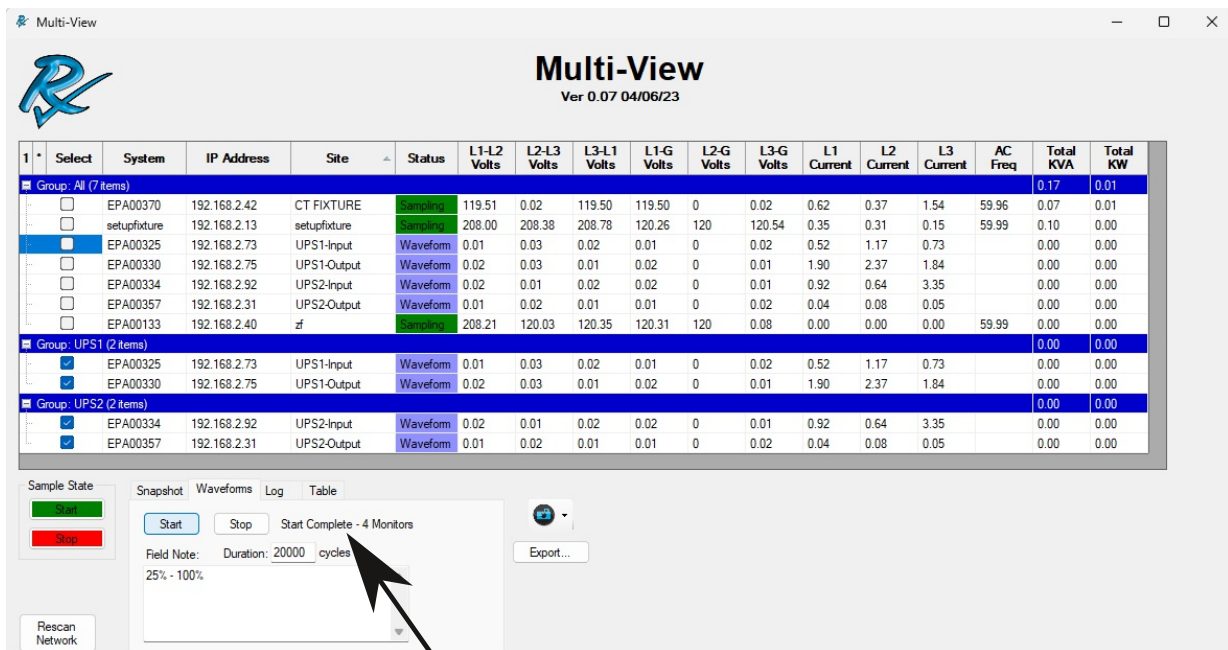
Double click on a row in the "Select" column to select all of the monitors in that group.

Waveforms

Cx Monitors can have multiple waveform captures taken with field notes added to each one with the **Waveforms** tab.

To take a waveform capture

1. Use the **Select** check box or Double-click the check box in the **Select** column to select/deselect all the monitors in the group.
2. Select the **Waveforms** tab
3. Enter the **Duration** in cycles (10-20000)
4. Enter the **Field Note**
5. Click the **Start** button to start a Waveform Capture.
6. "Start Complete" will appear with the number of monitors
7. Monitor Status will change to "Waveform" while the waveform capture is active.
8. Click **Stop** to end the waveform capture.
9. "Stop Complete" will appear with the number of monitors stopped



After a **Start** or **Stop**, a "Complete" status will appear along with the number of monitors started or stopped.

Log

A command log is stored in memory that can be saved for access later with time stamps and commands issued to the Cx Monitors.

To view the log

1. Select the **Log** tab
2. Click **Save** to save the current log entries
3. Click **View** to open the saved log file. It will use whatever program you have associated with .txt files. If you have none, you will be prompted to select one.
4. Click **Clear** to remove the current in memory log entries.

Multi-View
Ver 0.07 04/06/23

Select	System	IP Address	Site	Status	L1-L2 Volts	L2-L3 Volts	L3-L1 Volts	L1-G Volts	L2-G Volts	L3-G Volts	L1 Current	L2 Current	L3 Current	AC Freq	Total KVA	Total KW
Group: All (7 items)																
<input type="checkbox"/>	EPA00370	192.168.2.42	CT FIXTURE	Sampling	119.56	0.02	119.55	119.55	0	0.02	0.12	1.44	1.00	59.98	0.01	0.00
<input type="checkbox"/>	setupfixture	192.168.2.13	setupfixture	Sampling	208.24	208.88	209.31	120.44	120	120.87	0.35	0.33	0.15	59.99	0.10	0.00
<input checked="" type="checkbox"/>	EPA00325	192.168.2.73	UPS1-Input	Sampling	0.01	0.02	0.02	0.01	0	0.02	1.12	0.40	1.32		0.00	0.00
<input type="checkbox"/>	EPA00330	192.168.2.75	UPS1-Output	Sampling	0.01	0.03	0.01	0.02	0	0.01	2.16	0.64	0.11		0.00	0.00
<input type="checkbox"/>	EPA00334	192.168.2.92	UPS2-Input	Sampling	0.02	0.01	0.01	0.02	0	0.01	0.74	0.71	0.55		0.00	0.00
<input type="checkbox"/>	EPA00357	192.168.2.31	UPS2-Output	Sampling	0.02	0.02	0.01	0.01	0	0.02	0.06	0.08	0.04		0.00	0.00
<input type="checkbox"/>	EPA00133	192.168.2.40	zf	Sampling	208.77	120.30	120.75	120.73	120	0.08	0.00	0.00	0.00	59.99	0.00	0.00
Group: UPS1 (2 items)																
<input checked="" type="checkbox"/>	EPA00325	192.168.2.73	UPS1-Input	Sampling	0.01	0.02	0.02	0.01	0	0.02	1.12	0.40	1.32		0.00	0.00
<input checked="" type="checkbox"/>	EPA00330	192.168.2.75	UPS1-Output	Sampling	0.01	0.03	0.01	0.02	0	0.01	2.16	0.64	0.11		0.00	0.00
Group: UPS2 (2 items)																
<input checked="" type="checkbox"/>	EPA00334	192.168.2.92	UPS2-Input	Sampling	0.02	0.01	0.01	0.02	0	0.01	0.74	0.71	0.55		0.00	0.00
<input checked="" type="checkbox"/>	EPA00357	192.168.2.31	UPS2-Output	Sampling	0.02	0.02	0.01	0.01	0	0.02	0.06	0.08	0.04		0.00	0.00

Sample State: Start (green), Stop (red)

Snapshot Waveforms Log Table

Save View Clear

Export...

Rescan Network

Log File Format:

Date, Command, Field Note, (List of monitors)

Be sure to **Save** the current log entries before attempting to **View** them.

```
test.txt - Notepad
File Edit Format View Help
Mar 02, 21 09:28:23 Snapshot, , EPA00247
Mar 02, 21 09:28:27 Snapshot, , EPA00221, EPA00268, EPA00307, EPA00235
Mar 02, 21 09:28:32 Snapshot, , EPA00307, EPA00221
Mar 02, 21 09:36:31 Start, EPA00221, EPA00235
Mar 02, 21 09:44:05 Snapshot, , EPA00235
Mar 02, 21 09:44:09 Snapshot, , EPA00235, EPA00221
Mar 02, 21 09:44:13 Snapshot, UPS1, EPA00235, EPA00221
Mar 02, 21 09:54:26 Snapshot, UPS2, EPA00307, EPA00247
Mar 02, 21 09:55:58 Waveform Start, 0-25%, EPA00307, EPA00247
Mar 02, 21 09:56:03 Waveform Stop, 0-25%, EPA00307, EPA00247
Mar 02, 21 09:56:09 Waveform Start, 0-25%, EPA00307, EPA00247
Mar 02, 21 09:56:16 Waveform Stop, 0-25%, EPA00307, EPA00247
```