

The Classic Interface:

The Classic Interface was created for two reasons:

1. To provide the user with an application in which to review dynamic, real time data from the system that has default display formats and requires absolutely no programming or display configuration. Once I/O points are configured and assigned to hardware locations, the Classic Interface will automatically post information regarding the status of these points.
2. To provide an instantly recognizable and familiar format of data display for those users who are upgrading from the DOS version of the software. The DOS program provided Dynamic Display Screens that were in the same basic format as these Classic Interface displays.

Loading the Classic Interface by clicking on the icon on the “ENERGY EXECUTIVE III”® Manager Toolbar produces the following window:

Control Point Name	State	Instruct	Operating Mode	Last Start	Last Stop	Scheduled Runtime	Unsched. Runtime	Alarm Status
Administrative Offices HVAC	Off	Stop	Scheduled	01:41 PM	01:45 PM	4:40	0:53	
Bathroom Hallway Lights	On	Go	Scheduled	08:07 AM		7:59	0:53	
Break Room Lights	On	Go	Scheduled	08:07 AM		7:59	0:53	
Common Office Lights	On	Go	Scheduled	08:07 AM		7:59	0:53	
Conference Room Lights	On	Go	Scheduled	08:07 AM		7:59	0:53	
Conference/Break Rooms AC	On	Go	Scheduled	03:23 PM		1:36		
Domestic Hot Water Heaters	Off	Stop	Unscheduled	07:00 AM	08:00 AM	0:59	0:01	
Engineering Office HVAC	On	Go	Scheduled	03:14 PM	10:05 AM	1:52	0:15	
Engineering Office Lights	On	Go	Scheduled	08:07 AM		7:59	0:53	
Judy/Zach Office Lights	On	Go	Scheduled	08:07 AM		7:59	0:53	
Lou/Ray Office Lights	On	Go	Scheduled	09:00 AM		7:59		
Outdoor Light	Off	Stop	Unscheduled					
Outside Air Damper	0.0%	0.0%						
Panel Shop Lights	On	Go	Scheduled	09:00 AM	09:00 AM	7:59	0:29	

No Active Alarms 12/9/98 5:37 PM

The Classic Interface window is arranged in a “Tab” format with each tab having a heading. Clicking on the heading of a tab will bring that tab to the foreground. Initially the Control Points tab will be in focus (see display above).

Control Points:

At the bottom right of the display is the date, and the time.

The columns on this form are:

1. **Control Point Name:** The name of the equipment being controlled.
2. **STATE:** The status of each piece of equipment being monitored (i.e. ``ON'`, ``OFF'`, ``HEAT'`, or ``COOL'`). In some cases this column reflects a real confirmation of the load running through some type of contact closure or analog reading from a sensor. Some points, however, may be configured to simply monitor the control relay status. For heat/cool relay points, the current state of these points will be noted in this column (``HEAT'` or ``COOL'`). In addition, if the point is controlled by a one-way, command only device with no feedback, or has not been configured for any type of confirmation, the screen will show a line through the ``STATE'` field (``----'`). If any of the control points are modulation type points (i.e. valves, dampers, etc.), rather than on/off, this column will display a percentage between 0 and 100% indicating the assumed relative position of the modulated unit. For instance, a damper that is being commanded to be half-open will show a position of 50%.
3. The third column is labeled ``INSTR'`, which stands for instruction. Below, on each line, will be represented the current command that the microcomputer is sending out to that remote point. There are several possibilities for the ``INST'` column commands:
 - GO - The point is being instructed to activate and the program expects it to do so. If the point does not come on and it is a two way confirmed point, a failure alarm will be issued.
 - STOP - The point is being instructed to de-activate and the program expects it to do so. If the point doesn't stop and it is a two way control and confirm point, an override alarm will be issued.
 - ENAB - The point is being enabled to run, but if it doesn't run, no alarm will be issued. Enable type points are loads that have other controllers besides the Elemco system. These other controls will directly affect the action of the load. The Elemco system merely allows it to run if necessary by enabling it.

- SHED - Is used to indicate that the remote point is currently being instructed to shed its load according to the system's present demand shedding parameters.
- CYCLE - Indicates that the point is currently being instructed to be duty cycled off.
- HEAT/
COOL - Used with heat/cool changeover relays, heat pumps, etc. Determines current instruction to point: heating or cooling.
- FREZE - Applies to a heating point where the outside air temperature is below the O/A freeze protection set point (see **'Set Point Editor/Freeze Protection'** option in the Parameter Editor). The outside air is very cold and the heating point is being told to activate for freeze protection purposes.
- OPEN/
CLOSE - For digitally controlled economizers and dampers. Either open or close the economizer.
- PHOTO - For lighting points with photocells. The lighting point is scheduled to be on, but the photocell determines that to be unnecessary. Therefore the lighting point is being shut off.

As in the column labeled **'STATE'**, if any of the control points are modulation type points, this column will display a percentage between 0 and 100% indicating the relative position of the modulated unit. For instance, a damper that is being commanded to be half-open will show an instruction of 50%.

If any of the points in the system are monitor only points, that is, points which are not controlled at all by the computer but simply monitored for status, there will be a line through the column labeled **'INSTR'** ('----').

4. **LAST START:** The last time each unit started running on the current day. If a unit has yet to run on a given day, then no start time will be listed.
5. **LAST STOP:** The last time each unit stopped running on the current day. As with the previous column, if a unit has not stopped running yet on a given day (perhaps because it never started), no stop time will be listed.
6. **SCHEDULED RUNTIME:** The accumulated hours and minutes each machine has run within the scheduled startup and shutdown times for the current day (see **'Schedules & Holidays'** option in the Parameter Editor).

7. **UNSCHEDULED RUNTIME:** The hours and minutes each machine has run that do not fall within the scheduled startup and shutdown times for the current day (see **'Schedules & Holidays'** option in the Parameter Editor). This usage is generally attributed to overrides (see **'Manual Overrides'** option in the Parameter Editor), maintaining set back temperatures during off hours or optimum start (see **'Set Point Editor/Unoccupied Set Points'** option in the Parameter Editor).

The runtimes for monitor only points (points which the computer does not control and therefore have no schedule) will be recorded as scheduled runtime.

Accumulated runtimes for two way control points or monitor only points are based on the amount of time the **'STATE'** has reported the load **'ON'**. Remember, in some cases this is a relay confirm and in other cases a real world sensor confirm. Runtimes for one way control points are based upon the **'INSTR'** given by the computer, since there is no feedback from the remote point.

8. **Alarm Status:** Many different types of alarms are monitored and reported by the Elemco system. Most alarms displayed on the Control Point Tab will be:

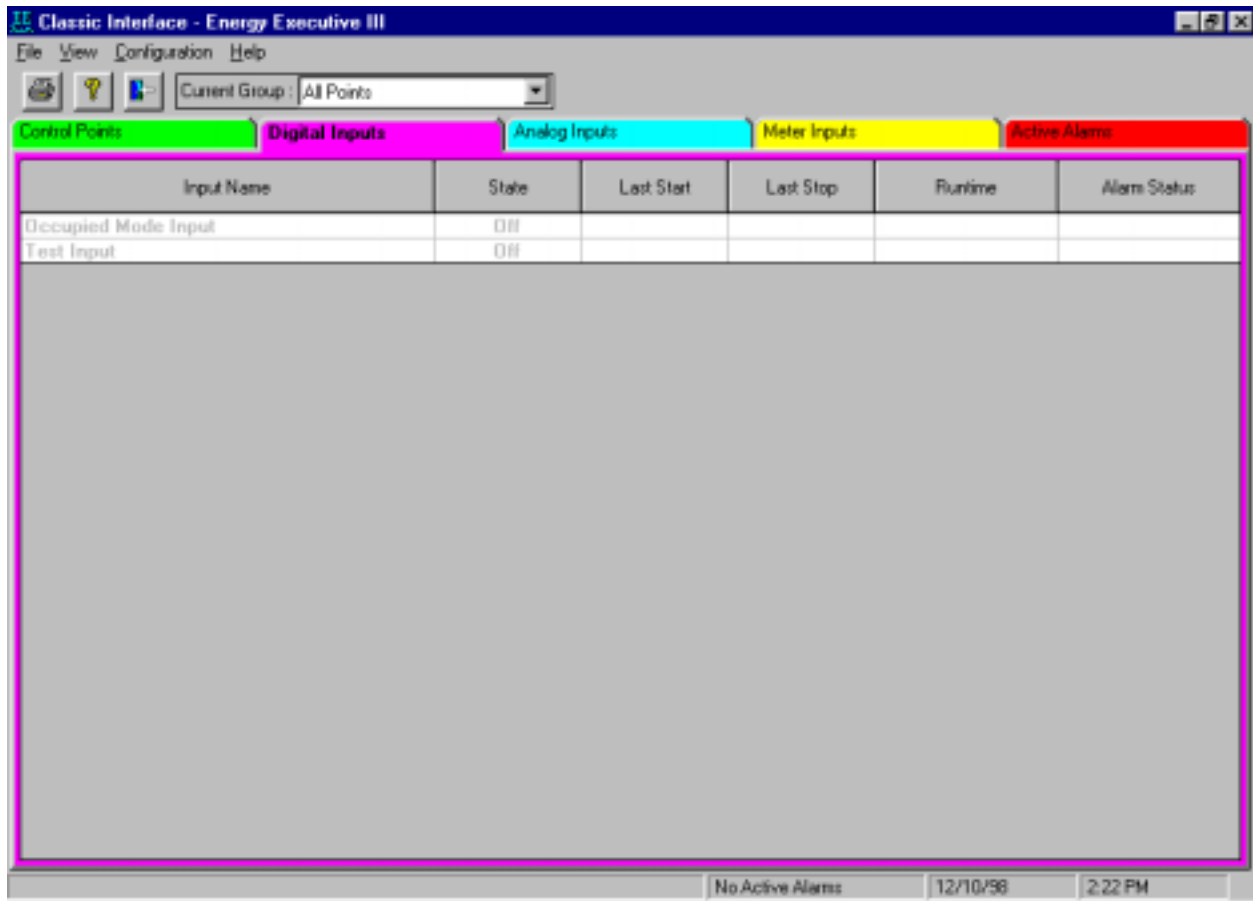
FAIL - The point is being instructed to Go, but did not activate.

OVRD - Override: The point is being instructed to Stop, but it is still activated.

A special type of alarm, called a **'no answer'** alarm is indicated by a **'NO RESP'** (no response) message being displayed. This alarm indicates that a two-way transceiver panel has stopped responding properly. This alarm message will be displayed next to all control and monitoring points connected to the panel in question. The last valid response from the panel is kept and shown as data.

Digital Inputs:

Selecting the Digital Inputs Tab produces a display similar to the following:



This tab is used to the display the status of monitor only digital inputs; i.e. digital inputs that are not used as confirmation of specific digital outputs. The columns on this form are:

1. **Input Name:** The name of the input being monitored.
2. **STATE:** The status of each input being monitored (i.e. `ON`/`OFF`, `HEAT`/`COOL` or “Open/Closed”).
3. **LAST START:** The last time each input changed state from “OFF” to “ON” on the current day
4. **LAST STOP:** The last time each input changed state from “ON” to “OFF” on the current day
5. **RUNTIME:** The accumulated hours and minutes each point has been in the “ON” state for the current day.

6. **Alarm Status:** Displays any active alarm for the point.

Analog Inputs:

Selecting the Analog Inputs Tab produces the following display:

Analog Input Name	Current Value	Units	Alarm Status
Bathroom Hallway Temp.	72.8	*F	
Break Room Temp.	71.7	*F	
Common Office Temp.	73.4	*F	
Conference Room Temp.	72.4	*F	
Conference/Break Enthalpy	25.9	BTU/lb.	
Conference/Break Humidity	46.1	%RH	
Engineering Office Back Temp.	74.4	*F	
Engineering Office Enthalpy	28.7	BTU/lb.	
Engineering Office Front Temp.	74.5	*F	
Engineering Office Humidity	54.9	%RH	
Front Office Enthalpy	35.0	BTU/lb.	
Front Office Humidity	89.6	%RH	
Judy's Office Temp	71.8	*F	
Lou & Ray's Office Temp.	70.4	*F	
Outside Air Humidity	31.9	%RH	
Outside Air Temp.	54.5	*F	
Panel Fabrication Shop	67.5	*F	
Zach's Office Temp.	71.3	*F	

This tab is used to the display the values of analog inputs; e.g. temperatures, pressures and amperages. The columns are:

1. **Analog Input Name:** The name of the input being monitored.
2. **Current Value:** The last valid reading from the sensor.
3. **Units:** The engineering units associated with the readings from that sensor.
4. **Alarm Status:** Displays any active alarm for the point. Most alarms displayed on this screen will be:

INVAL - The system is receiving a reading that is impossible for this device to measure (an invalid reading).

HIGH - A high analog value alarm.

LOW - A low analog value alarm.

NO RESP - A communication failure with remote transceiver or panel.

Meter Inputs:

Selecting the Meter Inputs Tab produces the following display:

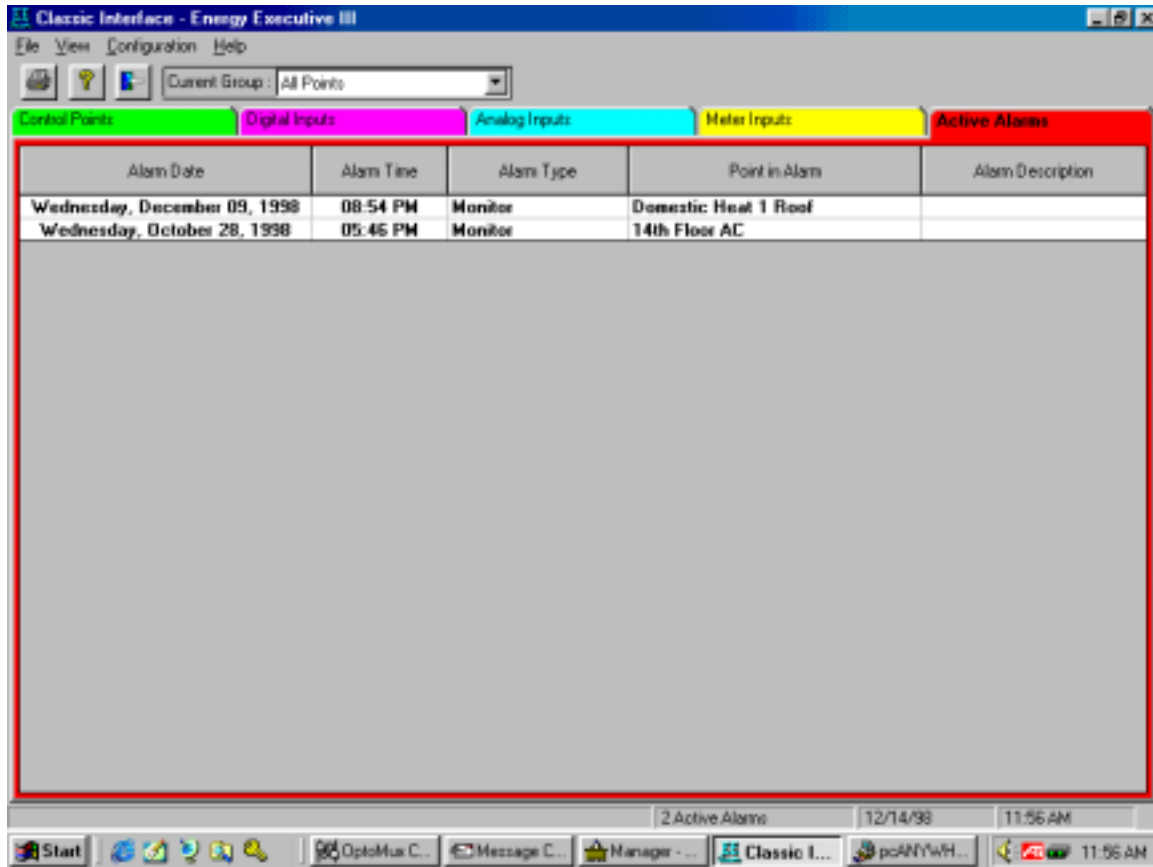
Meter Input Name	Present Demand	Trend Demand	Peak Time	10 Days Consumption	15 Days Consumption	30 Days Consumption	Units	Alarm Status
1 Electric Meter	2284.7	2287.2	11:54 AM	14448	89456	89456	kWh	
10 23FL SILVER LD 30323	9.1	9.2	11:41 AM	44	350	350	kWh	
11 8FL CBC HILD 6099-0001	8.5	8.8	11:41 AM	67	544	544	kWh	
12 29FL REUTERS LO 11	7.6	7.6	11:52 AM	71	593	593	kWh	
13 29FL REUTERS HI 12	21.1	21.3	10:20 AM	197	1693	1693	kWh	
14 5FL BBC HI VOLT 349341	72.1	72.6	11:47 AM	361.52	2457	2457	kWh	
15 6FL BBC LO VOLT 349886	14.0	14.0	11:55 AM	95.4	720	720	kWh	
16 7FL BBC LO VOLT 349894	10.2	10.4	11:16 AM	59.6	419	419	kWh	
2 EXCEL 47 ST 2000	24.1	24.4	11:37 AM	137	1273	1273	kWh	
2 Lead Hotels 5517	63.4	63.4	11:54 AM	540	4464	4464	kWh	
2 Lead Hotels 5736	0.0	0.0		0	0	0	kWh	
3 EXCEL 47 ST 3000	5.3	5.5	11:25 AM	47	382	382	kWh	
37 Spare 5688	24.1	24.1	10:09 AM	3420	3708	3708	kWh	
37 Spare 5691	15.2	105.3	07:59 AM	72	324	324	kWh	
37 Spare 6375	0.0	0.0		1	3	3	kWh	
37 Spare 6377	0.0	0.0		18	54	54	kWh	
37 Spare 6378	11.7	48.7	07:11 AM	54	270	270	kWh	
37 Spare 6391	6.9	6.9	11:20 AM	36	216	216	kWh	
38 Siler 6374	12.9	12.9	11:05 AM	54	342	342	kWh	
38 Siler 6387	12.0	12.0	11:35 AM	72	585	585	kWh	
38 Siler 6390	0.0	0.0		0	0	0	kWh	
38 Siler 6576	0.0	0.0		0	0	0	kWh	
39 Siler 6376	0.0	0.0		0	0	0	kWh	
4 EXCEL 47 ST 4000	4.6	4.7	10:11 AM	19	180	180	kWh	
5 EXCEL 46 ST 5000	3.1	3.4	09:25 AM	11	73	73	kWh	
6 EXCEL 46 ST 6000	38.1	38.6	08:57 AM	27	67	67	kWh	

This tab is used to the display the values of consumption meter inputs; e.g. kWh, Gallons, CF, BTU, etc. The columns are:

1. **Meter Input Name:** The name of the input being monitored.
2. **Present Demand:** The rate of use of the metered substance. The demand is calculated based on the type of demand interval established for this point in the meter setup in the Configuration Editor.
3. **Peak Demand:** The highest rate of use of the metered substance this month. Once again the peak demand is calculated based on the type of demand interval and demand logic established for this point in the meter setup in the Configuration Editor.
4. **Peak Time:** The time at which the Peak Demand in the previous column was recorded.
5. **Day's Usage:** This number represents the accumulated input consumption for each meter on the current day.
6. **Month's Usage:** This number represents the accumulated input consumption to date for each meter during the current month.
7. **Year's Usage:** This number represents the accumulated input consumption to date for each meter during the current year. This reading is cleared at midnight on December 31.
8. **Units:** All readings are listed along with the appropriate units, as applicable (i.e. `KWH', etc.). These units are setup in the Configuration Editor.
9. **Alarm Status:** Displays any active alarm for the point. Most alarms displayed on this screen will be:
 - HIGH - A high demand value alarm.
 - LOW - A low demand value alarm.
 - NO RESP - A communication failure with remote transceiver or panel.

Active Alarms:

Selecting the Active Alarms Tab produces the following display:



This tab is used to display information about any currently active alarms in the system. The columns are:

1. **Alarm Date:** The date on which the alarm became active.
2. **Alarm Time:** The time at which the alarm became active.
3. **Alarm Type:** The type of alarm.
4. **Point in Alarm:** The user defined name of the point that caused the alarm.
5. **Alarm Description:** The user defined description field (if any has been entered) that gives pertinent information about that particular alarm.