1. A method of maintaining an ultra-violet air treatment system, comprising:

detecting an intensity of at least one ultraviolet light source at successive points in time during operation thereof in an air treatment system;

applying signals representing the intensity to a controller;

storing data responsive to the detected intensities in a data store;

the controller, at a first time, on a user output terminal, generating an indication that the at least one ultraviolet light source requires cleaning;

the controller, at a second time, on the user output terminal, generating an indication that the at least one ultraviolet light source requires replacement;

the controller receiving a maintenance indication, the maintenance indication being a signal indicating at least one of the completion of a cleaning of the ultraviolet light source and a replacement of the at least one ultraviolet light source;

wherein the generating an indication that the at least one ultraviolet light source requires cleaning is responsive to the maintenance indication and stored data responsive to the intensity of the at least one ultraviolet light source immediately after maintenance indication.

2. A method of maintaining an ultra-violet air treatment system, comprising:

detecting an intensity of at least one ultraviolet light source at successive points in time during operation thereof in an air treatment system;

applying signals representing the intensity to a controller;

storing data responsive to the detected intensities in a data store;

the controller, at a first time, on a user output terminal, generating an indication that the at least one ultraviolet light source requires cleaning;

the controller, at a second time, on the user output terminal, generating an indication that the at least one ultraviolet light source requires replacement;

the controller receiving a maintenance indication, the maintenance indication being a signal indicating at least one of the completion of a cleaning of the ultraviolet light source and a replacement of the at least one ultraviolet light source;

wherein the generating an indication that the at least one ultraviolet light source requires replacing is responsive to the maintenance indication and stored data responsive to the intensity of the at least one ultraviolet light source at multiple points in time such that the indication that the ultraviolet lamp requires replacing is generated if multiple maintenance indications have been received by the controller indicating cleaning of the at least one ultraviolet light source.

3. A method of maintaining an ultra-violet air treatment system, the system including a controller, the controller having at least one sensor and an output device, and being configured to perform a method comprising:

detecting an intensity of at least one ultraviolet light source at successive points in time;

receiving an indication that the at least one ultraviolet light source has just been cleaned;

when the detected intensity is above a first threshold upon a first detecting after a receiving, outputting no maintenance indication;

when the detected intensity is below the first threshold upon a first detecting after a receiving, outputting a maintenance indication indicating to replace the ultraviolet light source;

when the detected intensity is below a second threshold upon a detecting subsequent to a first detecting after a receiving, outputting a maintenance indication indicating to clean the ultraviolet light source.

4. The method of claim 3, wherein the first threshold corresponds to a lower intensity than the first threshold.

5. A method of maintaining an ultra-violet air treatment system, the system including a controller, the controller having at least one sensor and an output device, and being configured to perform a method comprising:

detecting an intensity of at least one ultraviolet light source at successive points in time;

receiving an indication that the at least one ultraviolet light source has just been cleaned;

when the detected intensity is above a threshold upon a first detecting after a receiving, outputting no maintenance indication;

when the detected intensity is below the threshold upon a first detecting after a receiving, outputting a maintenance indication indicating to replace the ultraviolet light source;

when the detected intensity is below the threshold upon a detecting subsequent to a first detecting after a receiving, outputting a maintenance indication indicating to clean the ultraviolet light source.

6. A method as in any of the above claims, wherein the at least one ultraviolet light sources includes multiple lamps in a ventilation plenum.

7. A method as in any of the above claims, wherein the at least one ultraviolet light sources includes multiple lamps in a chamber downstream of at least one kitchen exhaust hood.

8. A method as in any of the above claims, wherein the controller is a programmable digital controller.

9. A system including an exhaust hood and a controller adapted for performing any of the above-recited methods.

10. A controller configured for performing any of the above recited methods.

11. A computer readable medium having instructions recorded thereon for performing any of the above recited methods.

12. A method medium according to claim 11, wherein the air treatment system includes a kitchen exhaust system.

13. A controller according to claim 10, wherein the air treatment system includes a kitchen exhaust system.

14. A system according to claim 9, wherein the air treatment system includes a kitchen exhaust system.

15. A method according to any of claims 1 to 8, wherein the air treatment system includes a kitchen exhaust system.

16. A medium according to claim 11, wherein the maintenance indication includes an estimate of time until the maintenance is required.

17. A controller according to claim 10, wherein the maintenance indication includes an estimate of time until the maintenance is required.

18. A system according to claim 9, wherein the maintenance indication includes an estimate of time until the maintenance is required.

19. A method according to any of claims 1 to 8, wherein the maintenance indication includes an estimate of time until the maintenance is required.

20. A method of maintaining an ultra-violet air treatment system, comprising:

detecting light output from an ultraviolet light source at multiple points in time;

from a first trend in the data, the data representing multiple instances of the detecting, determining a required first maintenance action to elevate the light output from the light source and outputting an indication of the required maintenance action;

detecting a performance of the first maintenance action;

from a second trend in the data representing multiple instance of the detecting in combination with the detecting a performance of the first maintenance event, determining a required second maintenance action and

outputting an indication of a need for the second maintenance action responsively thereto.

21. The method of claim 20, wherein the detecting a performance includes detecting a change in light output indicating the completion of the first maintenance action.

22. The method of claim 20 or 21, wherein the first maintenance action includes cleaning the ultraviolet light source.

23. The method of claim 20, 21, or 22, wherein the second maintenance action includes replacing or repairing the ultraviolet light source.

24. The method of any of claims 20 to 23, wherein the outputting includes displaying a message on a user interface indicting, respectively, the need for the first and second maintenance actions.

25. The method of claim 20, wherein the detecting a performance includes receiving a user input indicating the completion of the first maintenance action.

26. A method of maintaining an ultra-violet air treatment system, comprising:

detecting light output from an ultraviolet light source at multiple points in time;

when the light output drops to a first level, outputting an indication that the ultraviolet light source needs to be cleaned;

in response to a detection that the ultraviolet light source has been cleaned and a detection of a light output below a second level at a time

approximately contemporaneous with the detection that the ultraviolet light source has been cleaned, outputting an indication that the ultraviolet light source needs to be changed.

27. The method of claim 26, wherein the outputting an indication that the ultraviolet light source needs to be changed is performed in response to a subsequent to the time approximately contemporaneous with the detection that the ultraviolet light source has been cleaned.

28. A method as in any of claims 26 to 29, wherein the at least one ultraviolet light sources includes multiple lamps in a ventilation plenum.

29. A method as in any of claims 26 to 29, wherein the at least one ultraviolet light sources includes multiple lamps in a chamber downstream of at least one kitchen exhaust hood.

30. A method as in any of claims 26 to 29, wherein the controller is a programmable digital controller.

31. A system including an exhaust hood and a controller adapted for performing the method of any of claims 26 to 30.

32. A controller configured for performing the method of any of claims 26 to 30.

33. A computer readable medium having instructions recorded thereon for performing the method of any of claims 26 to 30.

CLAIMS

1. A method of maintaining an ultra-violet air treatment system, comprising:

detecting an intensity of at least one ultraviolet light source at successive points in time during operation thereof in an air treatment system;

applying signals representing the intensity to a controller;

storing data responsive to the detected intensities in a data store;

the controller, at a first time, on a user output terminal, generating an indication that the at least one ultraviolet light source requires cleaning;

the controller, at a second time, on the user output terminal, generating an indication that the at least one ultraviolet light source requires replacement;

the controller receiving a maintenance indication, the maintenance indication being a signal indicating at least one of the completion of a cleaning of the ultraviolet light source and a replacement of the at least one ultraviolet light source;

wherein the generating an indication that the at least one ultraviolet light source requires cleaning is responsive to the maintenance indication and stored data responsive to the intensity of the at least one ultraviolet light source immediately after maintenance indication.

2. A method of maintaining an ultra-violet air treatment system, comprising:

detecting an intensity of at least one ultraviolet light source at successive points in time during operation thereof in an air treatment system;

applying signals representing the intensity to a controller;

storing data responsive to the detected intensities in a data store;

the controller, at a first time, on a user output terminal, generating an indication that the at least one ultraviolet light source requires cleaning;

the controller, at a second time, on the user output terminal, generating an indication that the at least one ultraviolet light source requires replacement;

the controller receiving a maintenance indication, the maintenance indication being a signal indicating at least one of the completion of a cleaning of the ultraviolet light source and a replacement of the at least one ultraviolet light source;

wherein the generating an indication that the at least one ultraviolet light source requires replacing is responsive to the maintenance indication and stored data responsive to the intensity of the at least one ultraviolet light source at multiple points in time such that the indication that the ultraviolet lamp requires replacing is

generated if multiple maintenance indications have been received by the controller indicating cleaning of the at least one ultraviolet light source.

3. A method as in any of the above claims, wherein the at least one ultraviolet light sources includes multiple lamps in a ventilation plenum.

4. A method as in any of the above claims, wherein the at least one ultraviolet light sources includes multiple lamps in a chamber downstream of at least one kitchen exhaust hood.

5. A method as in any of the above claims, wherein the controller is a programmable digital controller.

6. A method according to any one of claims 1 to 5, wherein the air treatment system includes a kitchen exhaust system.

7. A method according to any one of claim 1 to 6, wherein the maintenance indication includes an estimate of time until the maintenance is required.

8. A system including an exhaust hood and a controller adapted for performing any of the methods of claims 1 to 7.

9. A controller configured for performing any of the methods of claims 1 to 7.