

## IntelliDoX How To: Configuring a BW Clip Prior to Activation

In instances where the BW Clip's Factory Default Configurations cannot accommodate a customer request for a specific detector configuration, a Safety Technology Distributor Sales Rep or Service Department can still meet their customer's needs by using an IntelliDoX in combination with Fleet Manager II software (v.4.0 or later) to configure a BW Clip while the detector is still in ship mode..

BW Clip's alarm setpoints can be configured during any time prior to the Activation Date on the detector's package. Configurable low alarm and high alarm settings for BW Clip sensors are:

- Set the low and high alarm settings.
  - H<sub>2</sub>S: 1.6 ppm – 20 ppm (1.6, 1.7, 1.8, 1.9, 2, 3, ... 20).  
(The only settings with tenths are 1.6 through 1.9.)
  - CO: 5 ppm – 200 ppm
  - O<sub>2</sub>: 18.0% – 25.0%
  - SO<sub>2</sub>: 2 ppm – 20 ppm

Other BW Clip settings can also be configured prior to a customer receiving their detectors. These configurable settings are:

- Display the current time on the detector.
- Display the actual time of a peak reading event.
- Display the gas reading during an alarm event.
- Set a bump test reminder schedule between one day and 180 days.
- Enable the Non-Compliance Indicator on the BW Clip after a gas exposure.

**Note:** Fleet Manager II software must be used to configure an IntelliDoX module's automated operations. When a BW Clip that is in ship-mode is inserted into the configured module, the IntelliDoX will automatically apply changes to the detector settings, and if selected, will bump test the detector.

When a BW Clip that is in Hibernation-mode is inserted into the configured module, the IntelliDoX will display the 'Detector Identification Screen' continuously until it times out (approx. 25 seconds). The detector settings will not be altered.

## IntelliDoX How To:

### Configure BW Clip Settings with IntelliDoX using Fleet Manager II software

Certain features, options and settings related to module or detector operations can be configured via Fleet Manager II software. This section contains general instructions for creating and transferring configuration files to IntelliDoX modules and configuring BW Clip detectors via Fleet Manager II software.

Throughout the entire operation life of the BW Clip, you can use Fleet Manager II to enable an IntelliDoX module to configure these BW Clip detector settings:

- Set the low and high alarm settings.
  - H<sub>2</sub>S: 1.6 ppm – 20 ppm (1.6, 1.7, 1.8, 1.9, 2, 3, ...).  
(The only settings with tenths are 1.6 through 1.9.)
  - CO: 5 ppm – 200 ppm
  - O<sub>2</sub>: 18.0% – 25.0%
  - SO<sub>2</sub>: 2 ppm – 20 ppm
- Display the current time on the detector.
- Display the actual time of a peak reading event.
- Display the gas reading during an alarm event.
- Set a bump test reminder schedule between one day and 180 days.
- Enable the Non-Compliance Indicator on the BW Clip after a gas exposure.

You can also use Fleet Manager II to configure automatic operations when a BW Clip detector is inserted into an IntelliDoX module:

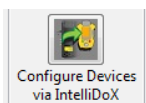
- Apply available detector firmware upgrades.
- Apply any specified changes to detector settings.
- Synchronize detector time and date.
- Bump test the detector upon insertion — with no need for the user to press a button.
- Enable FastBump, the accelerated bump test sequence.
- Enable Hibernation.

**Note:** IntelliDoX modules can be connected to a PC or a Network as a **Wired** connection using the integrated Ethernet port within the IntelliDoX to transfer Detector Configurations. Users can also save the detector configuration to a USB Flash Drive to manually transfer the configuration to a **Stand-Alone** IntelliDoX.

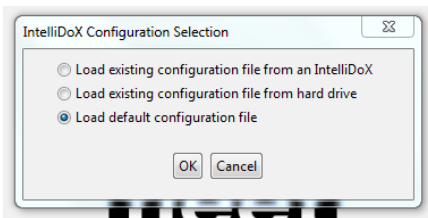
## Configure IntelliDoX and BW Clip Settings

Certain features, options and settings for the IntelliDoX module and/or compatible detectors can be configured through Fleet Manager II software. You must use Fleet Manager II software to create a configuration file that is compatible with the IntelliDoX. After the configuration file is created, transfer it to one or more modules, automatically through a wired Ethernet connection or manually by transferring the configuration file with a USB drive, to implement the new configuration settings.

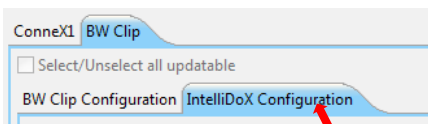
1. Start Fleet Manager II software, and then log in as an administrator.
2. Select **Configure Devices via IntelliDoX** on the Devices menu. The **IntelliDoX Configuration Selection** dialog box is displayed.



3. Select a configuration file and click OK.



4. Select the IntelliDoX Configuration tab.



5. Modify the Automated IntelliDoX Operations features. Select **Apply the latest changes to detector settings** and **Synchronize detector time and date**.

Automated IntelliDoX Operations:	
Select what IntelliDoX does automatically each time a gas detector is inserted into a dock module:	Enabled
Apply available detector firmware upgrades	<input type="checkbox"/>
Apply the latest changes to detector settings	<input checked="" type="checkbox"/>
Synchronize detector time and date	<input checked="" type="checkbox"/>
Bump test the detector	<input checked="" type="checkbox"/>
Allow fast bump test (accelerated sequence - see operator manuals)	<input type="checkbox"/>

NOTE: Synchronize in order to schedule bump test reminders, view the detector's clock and call up the time of the last gas peak.

6. Select the BW Clip Configuration tab. Modify the available detector features, options and settings as required. Select the Sensor Configuration of the BW Clip H2S Alarm Settings to **Updatable** button, then change the Low Alarm to 5.0 ppm and High alarm to 10.0 ppm.

**Sensor Configuration**

H2S CO SO2 O2

**Hydrogen Sulfide (H2S)**

**Alarm Settings**  
Min. 1.6 ppm - max. 20.0 ppm

Updatable:

Low Alarm 5.0 ppm ☒

High Alarm 10.0 ppm ☒

**Manual Sensor Zero:**

Enabled: Updatable:

Zero sensor by 5-sec button press: ☐ ☐

7. Once you've completed configuring the settings for your BW Clip detectors click **Save to IntelliDoX**.

Save to IntelliDoX Load IntelliDoX Configuration Save To File Bootloader Set IntelliDoX Time Reset Password Reset All to Default

8. The **IntelliDoX Selection** dialog box is displayed. Select one or more IntelliDoX modules, and then click OK.

**IntelliDoX Selection**

Serial Number	Location	Type
5345DOX01150300004	Dean_DX_01	BW Clip
5345DOX01150300002	Dean_DX_02	BW Clip

OK Close Refresh

## Configure IntelliDoX Automated Operations

Certain features, options and settings for the IntelliDoX module and/or compatible detectors can be configured through Fleet Manager II software. After a configuration is created, transfer it to one or more modules automatically through a wired Ethernet connection or manually by transferring the configuration file with a USB drive to implement the new detector configuration settings.

There are two methodologies to change BW Clip configurations. One that just changes the detector configuration. Another changes the detector configuration *and* bump tests the detector. This latter methodology is recommended as it records the bump test results of the detector which also allows a bump test certificate to be generated recording the new alarm settings of the detector as the BW Clip Factory Calibration Certificate will no longer match the detector that it is shipped with.

- A. Modify the Automated IntelliDoX Operations features to **only** change detector settings. This setting allows users to streamline their BW Clip configuration by saving gas and time.

Deselect **Bump test the detector** and select **Apply the latest changes to detector settings**. Make any further configurations you require of the BW Clip detector then Save this configuration to the IntelliDoX module. Insert a BW Clip into the module to automatically have changes made to the detector settings.

**Automated IntelliDoX Operations:**

Select what IntelliDoX does automatically each time a gas detector is inserted into a dock module: Enabled

Apply available detector firmware upgrades	<input type="checkbox"/>
Apply the latest changes to detector settings	<input checked="" type="checkbox"/>
Synchronize detector time and date	<input type="checkbox"/>
Bump test the detector	<input type="checkbox"/>
Allow fast bump test (accelerated sequence - see operator manuals)	<input type="checkbox"/>

NOTE: Synchronize in order to schedule bump test reminders, view the detector's clock and call up the time of the last gas peak.



minutes.

Detectors can be removed once the **What do you need to do** screen is displayed (left). Press the **Check Button** if you want to Bump Test the detector and record the test in Fleet Manager II.

Tests have been performed that indicate a rate of 5 BW Clips per minute can be reconfigured using this setting. Approximately 50 BW Clips can be reconfigured in 10

- B. Modify the Automated IntelliDoX Operations features to change to detector settings *and* Bump Test the detector. This should take approximately 45 seconds per detector using this setting.

**Automated IntelliDoX Operations:**

Select what IntelliDoX does automatically each time a gas detector is inserted into a dock module:

	Enabled
Apply available detector firmware upgrades	<input type="checkbox"/>
Apply the latest changes to detector settings	<input checked="" type="checkbox"/>
Synchronize detector time and date	<input type="checkbox"/>
Bump test the detector	<input checked="" type="checkbox"/>
Allow fast bump test (accelerated sequence - see operator manuals)	<input type="checkbox"/>

NOTE: Synchronize in order to schedule bump test reminders, view the detector's clock and call up the time of the last gas peak.

This event is recorded as a Bump Test in Fleet Manager **Logs / Results View** recording:

- Detector Details (Test Date, Sensor Type, Serial Number, Firmware Version, etc.)
- Functional Results (Test Results – Audio, Visual and Sensor)
- Sensor Settings (Low Alarm Set Point and High Alarm Setpoint)

To view the Bump Test, first import the data from the IntelliDoX module. Below is the Bump Test Results as viewed in Fleet Manager II:

▶ GasAlertClip Extreme

▶ IntelliDoX

▲ BW Clip

Event Logs

Bump/Cal Results

▶ MicroDock

Test Date Time ▲	Serial Number	Test	Test Result
2015-04-14 09:31:00	5220BWC01145100529	Bump Test	Pass
2015-04-14 09:30:11	5220BWC01145100524	Bump Test	Pass
2015-04-14 09:26:49	5220BWC01145100531	Bump Test	Pass
2015-04-14 09:21:05	5220BWC01145100477	Bump Test	Pass
2015-04-14 09:08:20	5220BWC01145100513	Bump Test	Pass
2015-04-14 09:01:41	5220BWC01145100513	Bump Test	Pass
2015-04-13 17:51:27	5220BWC01150801931	Bump Test	Pass

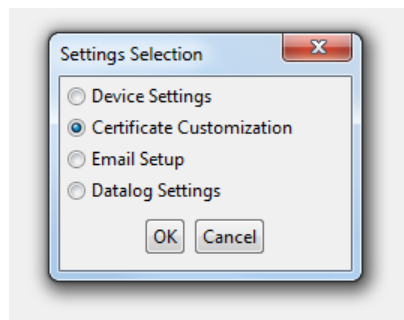
REMEMBER: Once a detector is configured during ship mode, the detector will no longer match the Factory Calibration Certificate that is shipped with the detector. A Bump Test Certificate can be generated in Fleet manager II to show the new configuration set points.

See **IntelliDoX How To: Customizing Bump Test Certificates** for instructions on how to customize Bump Test Certificates that show updated BW Clip Alarm Settings.

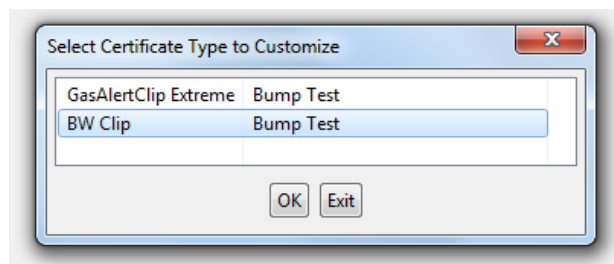
## IntelliDoX How To: Customizing Bump Test Certificates

By default, the Fleet Manager Certificate does not show a detectors alarm settings. Users will need to customize Bump Test Certificates to show the Low Alarm and High Alarm setpoints and other settings by making changes in Certificate Customization. The following instructions describe the steps to generate a bump test certificate that show the BW Clip alarm settings.

1. Start Fleet Manager II and login as an administrator.
2. From the Administration toolbar, select Settings.
3. Select Certificate Customization. The Select Certificate Type to Customize dialog box is displayed.

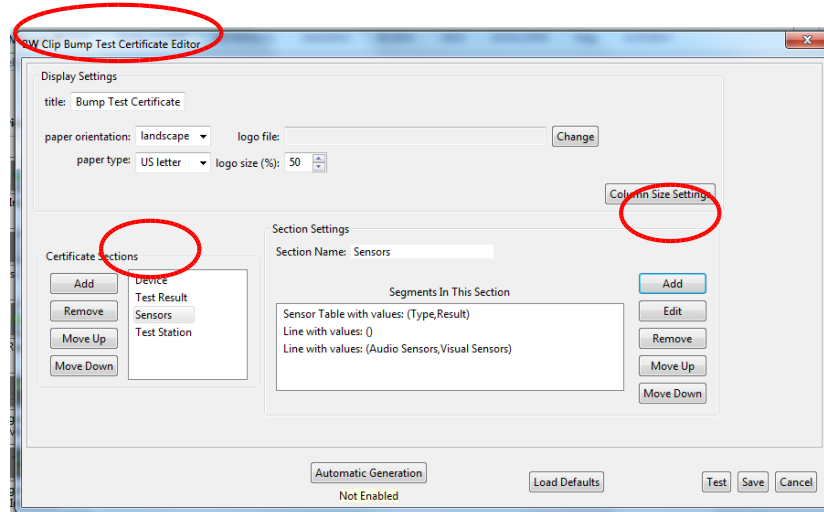


4. Select **BW Clip Bump Test** to customize the certificate. The **Certificate Editor** dialog box is displayed.

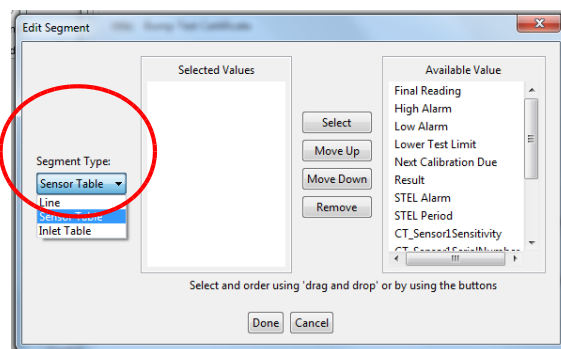


5. Edit the Display Settings within the Bump Test Certificate Editor:

- a. Customize the title for the report
- b. Select **Sensors** in the **Certificate Sections**
- c. Select **Add** in the **Section Settings**

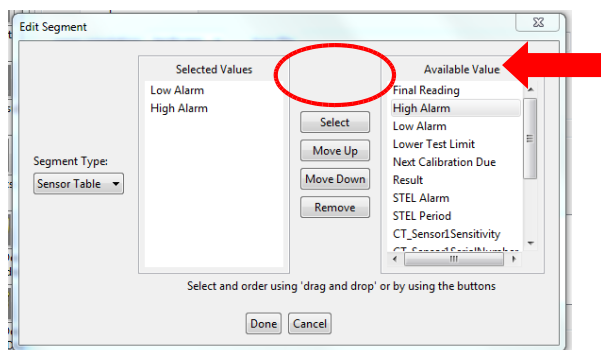


6. Select **Sensor Table** in the **Segment Type** menu.





7. Select **Low Alarm** then **High Alarm** to move these **Available Values** to the **Selected Values**



8. Select **Done** to confirm this Edit Segment. Then **Save** in the **Bump Test Certificate Editor**.
9. Now when a Bump Test Certificate is generated, the Low Alarm and High Alarm settings are clearly displayed.

**Bump Test Certificate**  
2015-04-14 09:31:00

**Device**  
Serial Number: 5220BWC01145100529  
Detector Type: BW Clip  
Manufacturer: BW Technologies

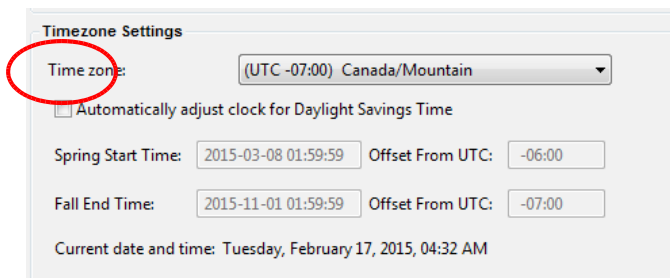
**Test Result** Pass

**Sensors**  
Type: CO  
Result: Pass  
Acoustic Alarm: Pass Visual Alarm: Pass  
Sensor 1 Low Alarm: 25.0 Sensor 1 High Alarm: 100.0

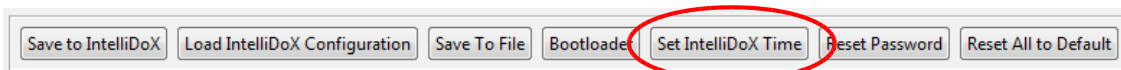
**Test Station**  
Dock Serial Number: 5345DOX01150300002 Dock Location: Dean\_DX\_01  
Concentration: 50.0 CH4, 18.0% O2, 25.0ppm H2S, 100.0ppm CO  
Inlet 1: Closed  
Inlet 2: Closed  
Inlet 3: Closed  
Inlet 4: Closed  
Notes: ---

## IntelliDoX How To: Setting IntelliDoX Time

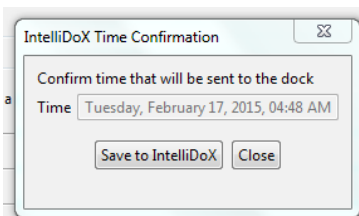
1. Under **Timezone Settings**, click on the **Time zone selector**. Select your time zone from the drop down menu. Verify that the **Current date and time** displayed under Timezone settings is correct. The date is synchronized with the PC on which Fleet Manager II software is installed. If the date is incorrect, change the date on the PC. If the time is incorrect, click on the **Time zone selector** to select a different time zone. You may also use Fleet Manager II to configure module and detector clocks to automatically adjust for daylight savings time.



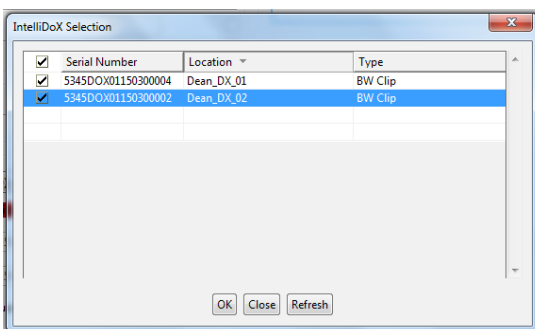
2. When the correct date and time are displayed, click **Set IntelliDoX Time**.



3. The IntelliDoX Time Confirmation dialog box is displayed.



4. Click **Save to IntelliDoX** button. The **IntelliDoX Selection** dialog box is displayed. Select one or more IntelliDoX modules, and then click OK.

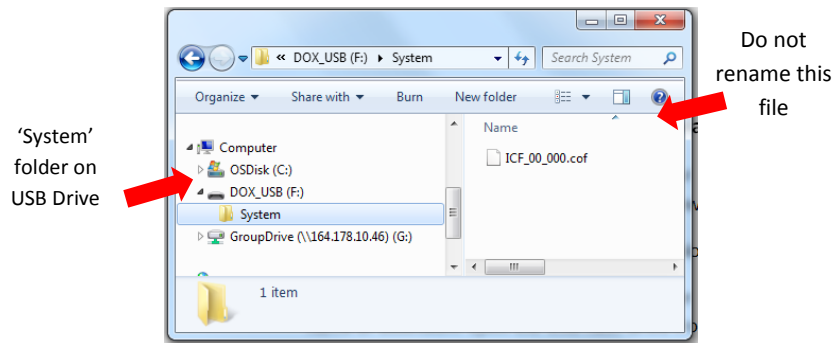


Serial Number	Location	Type
534SDOX01150300004	Dean_DX_01	BW Clip
534SDOX01150300002	Dean_DX_02	BW Clip



## IntelliDoX How To: Transferring the Configuration File to a Module via USB Flash Drive

1. Insert a USB flash drive into a USB port on your PC. Use Windows Explorer or My Computer to open the USB flash drive, and then create a new folder named **System**.
2. Click **Save to File**. The **Save Settings to File** dialog box is displayed.
3. Save the configuration file to the **System** folder on the USB flash drive.  
**Do not change the file name or extension.** Eject the USB flash drive from the PC.



4. Insert the USB flash drive into the USB port on the module. The **USB File Copy Utility** menu is displayed. Press [Up Arrow] or [Down Arrow] to select **Copy to dock** and then press [Check Button] to continue.
5. The LCD changes to yellow. A progress bar and alternating **Do not remove stick** and **USB transfer in progress** messages are displayed while the file is transferred.
6. After the transfer is successfully completed, the LCD changes to blue and the USB File Copy Utility menu is displayed. Press [Up Arrow] or [Down Arrow] to select Exit and then press [Check Button] to continue.
7. The LCD changes to green. Remove the USB flash drive from the port when prompted.