

PROGRAMMING GUIDE

CenCom Sapphire™



PC System Requirements

CenCom Sapphire™ UK is Whelen's newest evolution of the CenCom family of software. It allows you to program your CenCom Sapphire™ hardware, including programming your WeCan® compatible lightbar.

PC System requirements:

- Microsoft Windows XP, with SP2, Windows Vista, Windows 7 or Windows 8.
- 500MB of RAM (1GB recommended)
- 25MB of available hard disk space.
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Additional Prerequisites:

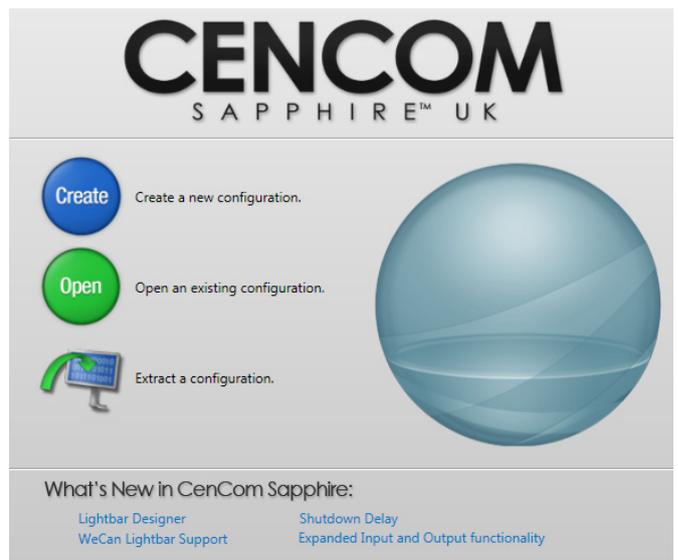
- Windows Installer 3.1
- .NET framework 3.5 (automatically checked during installation).

Software is available to download on our website www.woodwayengineering.co.uk. Search '**CenCom Sapphire**', click on the main **product**, scroll down to '**Attachments**' and there you'll be able to download the CenCom Sapphire UK Software.

Introduction

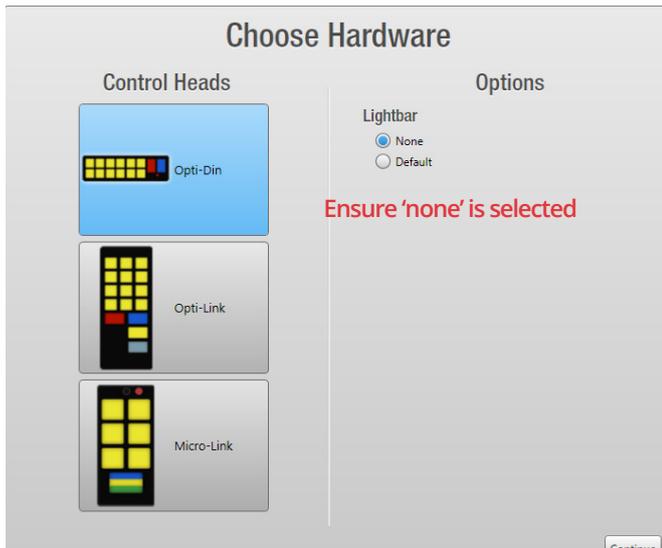
On opening the CenCom Sapphire™ UK programming software, the initial start up menu will be shown. You will be presented with the following options:

-  This can be selected if you wish to create a whole program for your CenCom Sapphire™ UK from the start.
-  This is used to open an already created and saved program file. Select this if there is already a program created and you just wish to alter it
-  This allows you to copy a program file direct from the CenCom Sapphire™ UK, and ensures the exact settings from that unit are used.



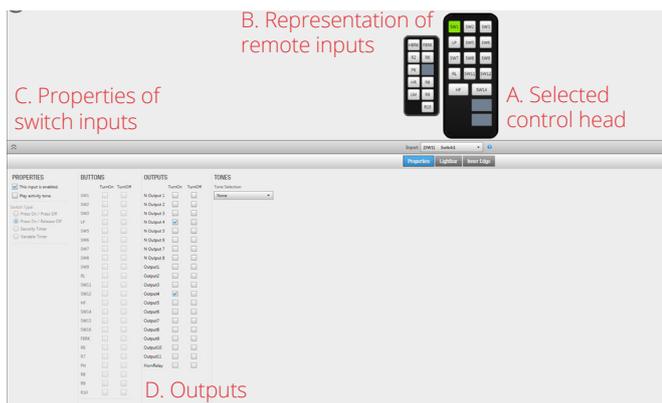
Creating a New Program

Select **create** to start a new program. From here you will need to select which switch panel you intend to use with your CenCom Sapphire™ UK unit.



Once you have selected the switch panel you're using, ensure the **lightbar** option is set to **none** (you can upload a lightbar configuration separately, later on).

Once completed, click **continue**. Following on from this, the program's interface window will then be shown:



This window should show:

- A.** The selected control head (eg. Opti-Link)
- B.** A representation of the remote inputs (eg. R1, R2) for ease of programming
- C.** The properties of the switches and inputs (eg. Press On, Press Off)
- D.** The outputs that can be set to be activated or deactivated by them.

When the control head is selected, the default settings for this will be automatically loaded with outputs set to activate with preselected control head switches and remote inputs.

Clicking on a switch (e.g. SW1) on the control head or a remote input (R1) will allow you to view and alter any of the outputs set to activate or deactivate.

Select a switch (e.g. SW1) or input (e.g. R1), then simply select the outputs that you wish to turn on or off by selecting the tickbox.

Multiple outputs can be selected for each individual switch or input.

To deselect an output that you do not want to use then simply remove the tick from the box.

	TurnOn	TurnOff
N Output 1	<input type="checkbox"/>	<input type="checkbox"/>
N Output 2	<input type="checkbox"/>	<input type="checkbox"/>
N Output 3	<input type="checkbox"/>	<input type="checkbox"/>
N Output 4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
N Output 5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
N Output 6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
N Output 7	<input type="checkbox"/>	<input type="checkbox"/>
N Output 8	<input type="checkbox"/>	<input type="checkbox"/>
Output1	<input type="checkbox"/>	<input type="checkbox"/>
Output2	<input type="checkbox"/>	<input type="checkbox"/>
Output3	<input type="checkbox"/>	<input type="checkbox"/>

Programming Lightbar Functions

To program lightbar functions, you need to upload a **.bxr** WeCad file for the bar being used with the CenCom Sapphire™ UK unit.

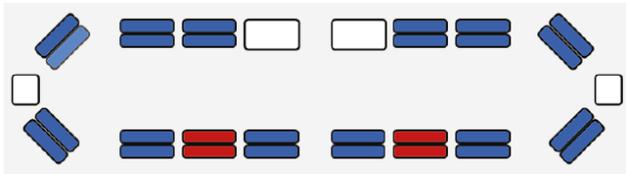
1. To upload the **.bxr** file, click on the **Lightbar** tab.



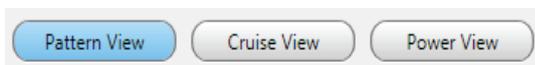
2. Click **Import Lightbar**. This will bring up Windows Explorer navigation pane. Navigate to where you have saved the **.bxr** file you would like to use. Select the file and click **open**.



3. Once uploaded, a representation of the lightbar will be shown on screen.



4. To set the lightbar, there are 3 different views that can be selected: **'Pattern View'**, **'Cruise View'** and **'Power View'**.



The **.bxr** file can be created using WeCAD software which is available from the Whelen website:

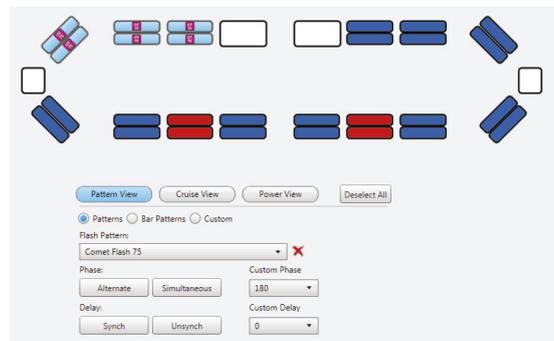
www.whelen.com/eng_apps/index.php

Pattern View

The **Pattern View** is used to set the flash patterns of the lightbar lighthoods that will be used during the normal operation of the bar and vehicle.

Each lighthouse can be programmed to activate by a control head switch or remote Input. The "Flash Pattern", "Phase" and "Delay" can be set for each lamp using drop down menus.

To set, simply select a control head switch or remote Input and select desired lighthoods you wish to activate (multiple lighthoods can be selected). To select, simply click on a lighthouse.

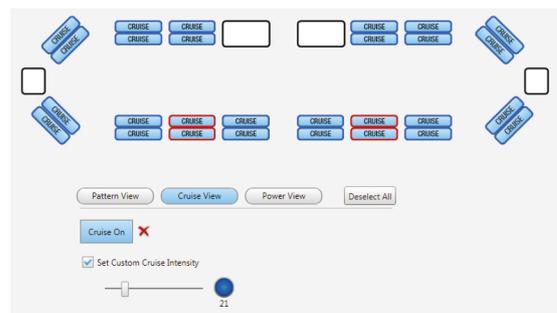


Cruise View

This is used to select the required lighthoods and light intensity used during **Cruise View** mode.

Select the desired control head switch or external input you wish to use to activate cruise mode. Then select the lighthoods you wish to have active and press **Cruise On**. The word **Cruise** will then appear in any of the selected lighthoods. Clicking **Set Custom Cruise Intensity** will bring up the on screen slider.

This is used to alter the intensity of the lighthoods during cruise operation.

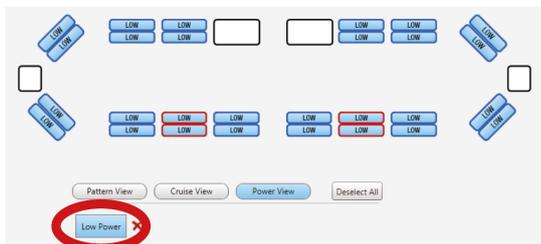


Power View (Low Power Setting)

The **Power View** is used to select the lighthoods required for low power mode.

Left click on the desired switch on the control head and select **“Low Power”** from the list. This will appear as LP on the control head.

Then select the lighthoods you wish to set to low power, once selected click the **Low Power** as show in the diagram.



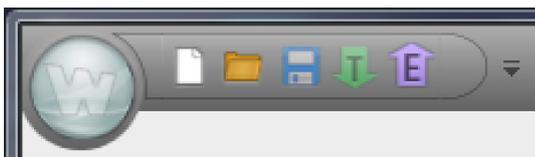
The word LOW will now appear inside the lighthoods you have previously selected.

Transferring Program to CenCom Unit

Before transferring to the CenCom unit, it is recommended you save your completed program.

To transfer your completed program to your CenCom Sapphire™ UK unit, it must be disconnected from any power source and connected to your computer using a USB type A – USB type B programming lead.

Once the CenCom Sapphire™ UK is connected, simply press the green Transfer icon in the top left corner of the screen:



A green status bar will then appear in the bottom right of the screen showing the transfer to the CenCom Sapphire™ UK:

Once this has finished, a window will appear prompting you to disconnect the CenCom Sapphire™ UK from the computer.



Congratulations. Your CenCom Sapphire™ UK is programmed and ready to use.

Default Settings

The CenCom Sapphire™ UK programming software has default settings applied when it is first opened. These include:

- The Default setting for Hands Free is Piercer
- When Siren is sounding, output 9 is automatically activated for use as Siren In Use
- The Run Lock is set for a default run time of 4 Hours
- When Run Lock is activated, outputs 6+7 are automatically activated remote Input 10 (R10) is default set as Airhorn
- Remote input 7 (R7) is default set for remote 999 activation
- Shut down delay is default set at 30 minutes

Certain outputs are also already set to activate or deactivate to certain control head switches and remote inputs.

For information on how to alter or remove these defaults as well as further expanded details on all sections covered within this Quick Start Guide, please contact us for the full programming guide.

Opti-Din Configuration Default Settings

SWITCH LEGEND		FUNCTION	OUTLETS	
1	360	All lightbar blues & tailgate blues	WeCan®	4 & N4
2	Front Blues	All lightbar front blues	WeCan®	
3	Low Power	Lightbar low power of all blues and reds	WeCan®	
4	Rear Blues	All lightbar rear blues and tailgate blues	WeCan®	4 & N4
5	Headlight	Vehicle headlight flash (separate flasher)	WeCan®	3
6	Rear Reds	Lightbar rear reds and tailgate reds	WeCan®	5 & N5
7	Left Alley	Left alley light	WeCan®	
8	Right Alley	Right alley light		
9	Run Lock	Vehicle run lock	4 Hrs	6 & 7 Default Hidden
10	Take Downs	Take downs, steady	WeCan®	
11	Grille Blues	Grille blues		2
12	Dash Light	Dash ION light		10
13	Siren Arm	Hands free		9 Default Hidden (IDR O/P)

INPUTS	SWITCH/ FUNCTION	OPERATIONS	POLARITY OF INPUT		OUTPUT
R1	Handbrake STRVU	Turns run lock off and turns siren test volume reduction if wired in	Negative		8 On (if run lock active, this turns off 6&7)
R2	Tailgate switch	Turning on and off of tailgate blues/reds	Live	Press on release off	N4 & N5
R3	Delayed outputs for sockets or radios etc.	Using the CenCom™ shutdown delay timer keeps these circuits alive once the ignition has been turned off for the delay period set	Negative		1 On
R4	Horn Ring	Siren tone activation and tone change	Live		
R5	Foot brake	Turns run lock off	Live		(If Runlock active, this turns off 6 & 7)
R6	Run Lock	Activates Runlock on Outputs 6 & 7	Live	4 Hrs	6 & 7 Default Hidden
R7	Remote 999	Remote 999	Live		
R8	Input 8	No Preset	Negative		
R9	Input 9	No Preset	Negative		
R10	Air horn		Negative		

Opti-Link Configuration Default Settings

SWITCH LEGEND		FUNCTION	OUTLETS	
1	360	All lightbar blues & tailgate blues	WeCan®	4 & N4
2	Front Blues	All lightbar front blues	WeCan®	
3	Rear Blues	All lightbar rear blues and tailgate blues	WeCan®	4 & N4
4	Low Power	Lightbar low power of all blues and reds	WeCan®	
5	Headlight	Vehicle headlight flash (separate flasher)		3
6	Rear Reds	Lightbar rear reds and tailgate reds	WeCan®	5 & N5
7	Left Alley	Left alley light	WeCan®	
8	Take Downs	Take downs, steady	WeCan®	
9	Right Alley	Right Alley Light	WeCan®	
10	Run Lock	Vehicle run lock	4 Hrs	6 & 7 Default Hidden
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R1	Handbrake STRVU	Turns run lock off and turns siren test volume reduction if wired in	Negative	Press on release off	8 On (if run lock active, this turns off 6&7)
R2	Tailgate switch	Turning on and off of tailgate blues/reds	Live		N4 & N5 Off
R3	Delayed outputs	The delay timer keeps circuits alive once the ignition is off for the delay period set.	Negative		1 On
R4	Horn	Siren tone activation and tone change	Live		
R5	Foot brake	Turns run lock off	Live		(If Runlock active, this turns off 6 & 7)
R6	Input 6	No preset	Live		
R7	Remote 999	Remote 999	Live		
R8	Input 8		Negative		
R9	Input 9		Negative		
R10	Air horn		Negative		

Micro-Link Configuration Default Settings

SWITCH LEGEND		FUNCTION	OUTLETS	
1	Siren Arm & Front Blues including L-bar	Grille/Fend , Lightbar Blues & Siren Arm	WeCan®	2 9 Default hidden (IDR O/P)
2	Rear Blues	All lightbar rear blues and tailgate blues	WeCan®	4 & N4
3	Head Light Flash	Vehicle headlight flash (separate flasher)	WeCan®	3
4	Rear Reds	Lightbar rear reds & tailgate reds	WeCan®	5 & N5
5	Left Alley	Left Alley Light		10
6	Right Alley	Right Alley Light	WeCan®	11

INPUTS	SWITCH/FUNCTION	OPERATIONS	POLARITY OF INPUT		OUTPUT
R1	Handbrake STRVU	Turns run lock off and turns siren test volume reduction if wired in	Negative		8 On (if runlock active, this turns off 6&7)
R2	Tailgate switch	Turning on and off of tailgate blues/reds	Live		N4 & N5 Off
R3	Delayed outputs for sockets or radios etc.	Using the CenCom™ shutdown delay timer keeps these circuits alive once the ignition has been turned off for the delay period set	Negative	Press on release off	1 On
R4	Horn Ring	Siren tone activation and tone change	Live		
R5	Foot brake	Turns run lock off	Live		(If Runlock active, this turns off 6 & 7)
R6	Run Lock	Activates Runlock on ourputs 6 & 7	Live	4 Hrs	6 & 7 Default Hidden
R7	Remote 999	Remote 999	Live		
R8	Input 8	No Preset	Negative		
R9	Input 9	No Preset	Negative		
R10	Air horn		Negative		

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ISO 9001:2015 Certified



5 Year Warranty

