

CENCOM  
**CORE**™



# CENCOM CORE™ POWERED BY WECANX™

Whelen is redefining control systems with CenCom Core. With the greatest configurability, speed, and expansion yet, CenCom Core is a system created to enhance officer safety with advanced automation and remote connectivity.



CenCom Core™ Powered By WeCanX™  
WHELEN ENGINEERING COMPANY, INC.



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CONNECTION MAP

CENCOM

CORE

POWERED BY

WE CAN X

J13

# ALL-NEW DESIGN

Every aspect of CenCom Core™ is engineered for performance and designed for vast configuration, allowing for access to every connector and fuse from the top of the box. CenCom Core is built to scale with your needs.



# W E C A N X™

WeCanX™ is the smartest and most powerful CAN-based communication system we've ever engineered. Providing true system synchronization, greater speed capabilities, expanded peripheral add-ons, and full support of diagnostics, WeCanX is designed for optimal situational awareness programming.


## WeCanX FEATURES

- Processes over 65,000 virtual inputs
- Supports any combination of 99 WeCanX devices, including support for multiple Whelen peripherals of the same type on the same vehicle
- All CANport signals are configurable as triggerable Events\*

*\*Our original WeCan only supports 8 CANport signals*



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# WHELEN COMMAND™

At the heart of CenCom Core™ is Whelen's newest software, Whelen Command. Featuring an advanced user interface, Command is engineered to streamline the entire programming process and quickly provide updates and new releases. Command can process over 65,000 virtual inputs.

Command features Situation-Based Integration and Events. With Situation-Based Integration, scene-specific functions can be created and automated, utilizing various vehicle components and signals. With Events, multiple user-defined rules can be created for specific situations and can be dependent on the state of your vehicle.



## HARDWARE SUPPORT

Core supports up to 99 WeCanX devices -the most ever in a Whelen control system. Connect lightbars, sirens, control heads, amplifiers, input and output expansion modules, Howler™

amplifiers, and Inner Edge® products. With Core, you can support multiple Whelen peripherals of the same type on the same vehicle.

### 17 TOTAL INPUTS

- 12 logic inputs
- 1 ignition power-up input
- 4 analog inputs

### 23 TOTAL OUTPUTS

- 2 15A outputs
- 4 10A outputs
- 16 2A outputs
- 1 dry contact relay
- Flashing outputs

# FIRMWARE UPDATES

CenCom Core™ supports remote firmware updates through USB-C with Whelen Command™ or over-the-air with The Whelen Cloud Platform™. All WeCanX™ devices support encrypted firmware updates.



# HIGH-SPEED CONNECTIONS

Core has extremely high-performance I/O. It features one ethernet connection, one WeCanX connection, two CANport™ OBDII interfaces, one USB-A port, one USB-C port, and one micro SD card. With a variety of interfaces, Core is ready for a variety of configurations.



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# VEHICLE-TO-VEHICLE SYNC

Automatically synchronize lights and tones on vehicles within close proximity to aid approaching motorists.





# WeCanX™ DEVICES

Now you can customize CenCom Core™ in ways never before possible in a control system.

WeCanX Legacy®, Liberty™ II, Freedom® IV and Cenator™ lightbars  
Inner Edge® FST™ & RST™  
External Amplifier  
External Howler™ Siren

Remote 8 or 16 Output Expansion Module  
Control Point & Input Expansion Module  
Traffic Advisor™ Module  
V2V Sync Module

## LIGHTBARS

WeCanX Legacy, Liberty II, Freedom IV and Cenator lightbars now support WeCanX with expanded control of individual lighthead in DUO™ and TRIO™ models and in lengths over 60”.

## INNER EDGE FST & RST

Inner Edge FST and RST models now support WeCanX with expanded control of individual lighthead in DUO and TRIO models.

## EXTERNAL AMPLIFIER

- Can be operated independently of other sirens
- Tones can be synchronous or asynchronous
- Public address
- Digital voice messages
- Variable intensity tones
- 4MB internal storage

## EXTERNAL HOWLER SIREN

- Can be operated independently of other sirens
  - Howler now plays its own tone rather than sensing and following an existing tone
- Tones can be synchronous or asynchronous
- 4MB internal storage
- Low-intensity mode

## REMOTE 8 OR 16 OUTPUT EXPANSION MODULE

- 4 programmable logic inputs
- Cruise mode
- Same functionality as existing remote modules

## CONTROL POINT & INPUT EXPANSION MODULE

- 16 active high inputs
- 2 analog inputs
- Diagnostic output
- Can be selected in WeCad™ as an option


## TRAFFIC ADVISOR MODULE

- Ground switched for Whelen capability
- 9 conductor
- Uses the current 12 position commercial Mate-N-Lok™ connector

## V2V (VEHICLE-TO-VEHICLE) SYNC MODULE

Synchronize lights and tones on an unlimited number of vehicles within any proximity.

- 10-30 VDC power supply
- Has diagnostic indicator

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# WeCanX™ CONTROL HEADS



Ergonomically designed for situational awareness, WeCanX control heads are completely configurable. Models support flashing indicator LEDs and can also run system

diagnostics. The new passthrough WeCanX connection on the back of the control heads contributes to less wiring and an easier install.



## CCTL6

- 4 position slide switch
- 13 push buttons
- 7 position rotary knob



## CCTL7

- 4 position slide switch
- 21 push buttons



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# TECHNICAL SPECIFICATIONS

<b>SOFTWARE</b>	• Whelen Command™
<b>HARDWARE SUPPORT</b>	• Up to 99 WeCanX™ devices
<b>INPUTS</b>	• 12 logic inputs • 1 ignition power-up input • 4 analog inputs • 17 total inputs
<b>OUTPUTS</b>	• 2 15A outputs • 4 10A outputs • 16 2A outputs • 1 dry contact relay • 23 total outputs • Flashing outputs • Every output across the system can be synchronized
<b>CONNECTIONS</b>	• 1 ethernet connection • 1 WeCanX connection • 2 CANport™ • 1 USB-A host • 1 USB-C • 1 Micro SD card slot • 99 remote modules
<b>SENSORS</b>	• Battery voltage sensor • Temperature sensor • 3 axis accelerometer sensor
<b>DVI™ PATTERNS &amp; TONES</b> <i>DYNAMIC VARIABLE INTENSITY™ (PATENT-PENDING)</i>	• Gradually increase or decrease the output intensity within a flash pattern or tone.
<b>STONE SYNCHRONIZATION</b>	• Sync amplifiers and speakers together • Sync tones with lights (Patent-Pending)
<b>DIAGNOSTICS</b>	• Has diagnostic indicator
<b>CERTIFICATIONS</b>	• Meets all applicable SAE and California Title XIII requirements with various Whelen speakers
<b>WARRANTY</b>	• Five year warranty

## MODELS

<b>C399</b>	CenCom Core™ Amplifier Control Module
<b>CCTL5</b>	Handheld Control Head and Microphone
<b>CCTL6</b>	WeCanX™ Slide and Rotary Knob Control Head
<b>CCTL7</b>	WeCanX Slide and 21 Push Button Control Head
<b>CCTLMIC</b>	Microphone for CCTL6 and CCTL7 WeCanX Control Heads
<b>CEM8</b>	WeCanX 8 Output Expansion Module (4 input modules)
<b>CEM16</b>	WeCanX 16 Output Expansion Module (4 input modules)
<b>CTA</b>	WeCanX Traffic Advisor™ Module (Traffic Advisor purchased separately)
<b>CEXAMP</b>	WeCanX External Amplifier
<b>CHOWLER</b>	WeCanX Howler Siren
<b>CV2V</b>	WeCanX Vehicle-to-Vehicle Module (includes internal antenna)
<b>C399K1</b>	Installation Kit for C399 for the 2016-2019 Ford Interceptor Utility, Interceptor Sedan, and F-150, the 2018-2019 F-250/F-350/F-450/F-550, Expedition, and Transit, the 2017-2019 Ford Fusion, and the 2016-2017 Dodge Charger
<b>C399K2</b>	Installation Kit for C399 for the 2017-2019 Chevy Tahoe and Silverado 1500
<b>C399K3</b>	Installation Kit for C399 for the 2018-2019 Dodge Charger, Durango, and Ram 1500

CenCom Core is optimized for performance across the board. Here's how it compares to previous generations of Whelen control systems.

Programmable Inputs	Control Point	SmartLogic™	Sapphire™	HHS3200/4200	Carbide™	CanTrol®	CenCom Core™
Logic Inputs	18	8	5	3	5	9	12
Ignition Power Up Input	-	-	1	1	1	1	1
Analog Input	-	-	1	1	1	3	4
Total Inputs	18	8	7	5	7	13	17
<b>Outputs</b>							
20 Amp	-	-	4	-	2	-	-
15 Amp	-	-	-	-	-	-	2
10 Amp	-	-	4	-	7	8	4
5 Amp	-	8	-	-	-	-	-
2 Amp	-	-	-	-	-	32	16
1 Amp	-	-	-	-	7	-	-
250 mA	-	-	4	-	1	3	-
Dry Contact Relay	-	-	1	1	1	-	1
SPST Relay	-	-	-	8	-	-	-
Total Outputs	0	8	13	9	18	43	23
Max Input Current	-	40	80	80	80	80	80
Flashing Outputs	-	Yes	-	-	Yes	Yes	Yes
<b>Peripherals</b>							
Ethernet Connection	-	-	-	-	-	-	1
WeCanX™ Connection	-	-	-	-	-	-	1
CANport™	-	-	-	-	1	1	2
USB Type A Host	-	-	-	-	-	-	1
USB Type C Device	-	-	-	-	-	-	1
Micro SD Card	-	-	-	-	-	-	1
Flash Memory	-	-	-	-	-	-	Yes
Remote Modules	-	-	2	0 or 2	2	2	99
<b>Sensors</b>							
Battery Voltage Sensor	-	-	Yes	-	Yes	Yes	Yes
Temperature Sensor	-	-	-	-	-	CANTEMP	Yes
3 Axis Accelerometer Sensor	-	-	-	-	-	-	Yes

