

# CORE CONTROL SYSTEMS



**WHELEN**

# CENCOM CORE<sup>®</sup> POWERED BY WECANX<sup>®</sup>

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.

CONNECTION MAP

J13

CENCOM  
**CORE** POWERED BY  
WECANX



# 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.



**CORE**

**CORE**

**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

- 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*

# 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 hundreds of 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

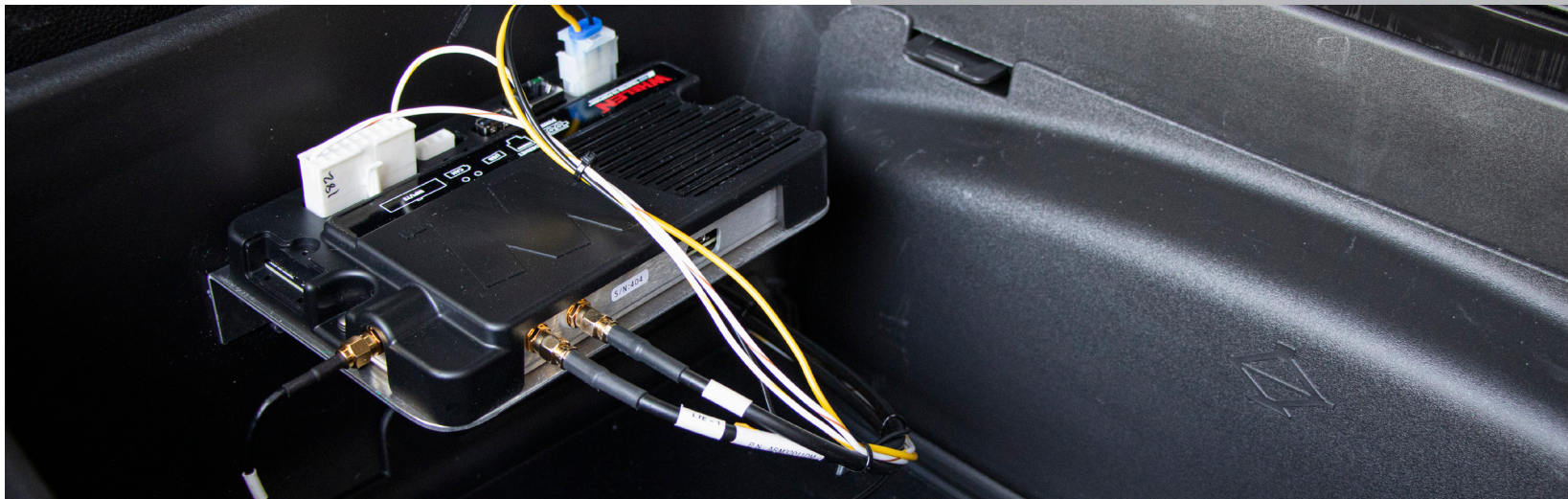


### 8 TOTAL INPUTS

- 1 ignition power-up input
- 3 digital inputs
- 4 analog inputs

# 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. With a variety of interfaces, Core is ready for a variety of configurations.



# CENCOM CORE-R™

Core-R™ is a vehicle control system engineered to enhance first responder and motorist safety with complete configurability, advanced automation, and remote connectivity.

- Seamlessly integrates with the Whelen Command® software and can support remote firmware updates through the Whelen Cloud Platform®.
- Vehicle-to-Vehicle Sync and DVI™ patterns better convey information to approaching motorists
- Small footprint: 5.76" x 5.46" x 1.11"
- Simple install: Two screws, top access connectors
- Modular design to mount in many different places
- Supports remote firmware updates through USB-C with Whelen Command or over-the-air with The Whelen Cloud Platform®
- Command can process over 65,000 virtual inputs
- High Current Remote Expansion Module integrates scene-lights into WeCanX® system control
  - Operates high current lightheades such as scene lights, eight 75 watt or four 150 watt Pioneer™ lightheades
  - 4 outputs at 15 amps each
- Meets all applicable SAE and California Title XIII requirements with various Whelen speakers
- Processes over 65,000 virtual inputs

# VEHICLE-TO-VEHICLE SYNC

A calm scene is a safe scene with V2V sync. Automatically synchronize lights and tones on vehicles within any proximity to aid approaching motorists.





# WeCanX<sup>®</sup> DEVICES

Now you can customize CenCom Core<sup>®</sup> in ways never before possible in a control system.

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

## LIGHTBARS

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

## EXTERNAL AMPLIFIER

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

## REMOTE 8 OR 16 OUTPUT EXPANSION MODULE

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

## TRAFFIC ADVISOR MODULE

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

## CONTROL POINT

- Diagnostic output
- Can be selected in WeCad<sup>™</sup> as an option

Remote 8 or 16 Output Expansion Module  
Core Control Point  
Traffic Advisor<sup>™</sup> Module  
V2V Sync Module  
High Current Remote Expansion Module

## INNER EDGE FST & RST

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

## 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
- Low-intensity mode

## HIGH CURRENT REMOTE EXPANSION MODULE

- Integrate scenelights into WeCanX system control. Outputs can flash, dim, or gradually increase or decrease the light intensity of scenelights, further calming a scene.
- Operates high current lighthoods such as scenelights, eight 75 watt or four 150 watt Pioneer<sup>™</sup> lighthoods
- 4 outputs at 15 amps each

## 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

 **WARNING:** These products may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit [whelen.com/regulatory](http://whelen.com/regulatory).

CenCom Core<sup>®</sup> Powered By WeCanX<sup>®</sup>  
WHELEN ENGINEERING COMPANY, INC.

**WHELEN** 8

# WeCanX<sup>®</sup> 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

## CCTL5

- Handheld 5 position
- 9 push-buttons
- Microphone extension cable



## CCTL7

- 4 position slide switch
- 21 push-buttons

# 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>CCTLHARN</b>	Control head harness kit, for use with any non-primary control head
<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 Synchronization Module (includes internal antenna)
<b>CCP</b>	Control point for use with WeCanX devices when NOT using CenCom Core or Core-R®
<b>CEM4HC</b>	WeCanX High current Remote Expansion Module, 4-15 amp output
<b>C399K1</b>	Installation Kit for C399 for 2016-2019 Ford Interceptor Utility, 2020-2021 Ford Interceptor Utility used with Factory Option 61B, 2016-2020 Ford F-150, 2018-2019 Ford, F-250/350/450/550, Expedition and Transit 150/250/350, 2017-2019 Ford Fusion (All Models), 2020 Ford Fusion Hybrid and 2016-2017 Dodge Charger
<b>C399K2</b>	Installation Kit for C399 for Chevy, 2017-2020 Tahoe, 2017-2018 Silverado 1500, 2019-2021 Silverado 1500 (New Body Style), 2017-2019 Silverado 2500/3500, 2019-2021 Colorado 1500, 2019 Impala, 2018-2020 Suburban
<b>C399K3</b>	Installation Kit for C399 for 2018-2021 Ram Classic 1500, 2019-2021 Ram 1500, and 2018-2021 Dodge Charger and Durango
<b>C399K4</b>	Installation Kit for C399 for the 2020-2021 Ford Utility
<b>C399K5</b>	Installation Kit for C399 for the 2020-2021 Ford Transit, Super Duty, and Expedition
<b>C399K6</b>	Installation Kit for C399 for the 2021 Chevy Tahoe and Suburban
<b>C399K7</b>	Installation Kit for C399 for the 2021 Ford F-150

# CORE™ TECHNICAL SPECIFICATIONS

## SOFTWARE

- Whelen™ Command®

## HARDWARE SUPPORT

- Up to 99 WeCanX® devices

## INPUTS

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

## OUTPUTS

- 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

## CONNECTIONS

- 1 Ethernet connection
- 1 WeCanX connection
- CANport™
- 1 USB-A host
- 1 USB-C
- Supports up to 99 remote modules

## SENSORS

- Battery voltage sensor

## DVI™ PATTERNS & TONES

*DYNAMIC VARIABLE INTENSITY™*

- Gradually increase or decrease the output intensity within a flash pattern or tone.

## tone Synchronization

- Sync amplifiers and speakers together
- Sync tones with lights (Patent-Pending)

## DIAGNOSTICS

- Has diagnostic indicator

## CERTIFICATIONS

- Meets all applicable SAE and California Title XIII requirements with various Whelen speakers

## WARRANTY

- Five year warranty

# CORE-R™ TECHNICAL SPECIFICATIONS

## SOFTWARE

- Whelen Command®

## HARDWARE SUPPORT

- Up to 99 WeCanX® devices

## INPUTS

- 1 ignition power-up input
- 3 digital
- 4 analog
- 8 total inputs

## CONNECTIONS

- 1 Ethernet connection
- 1 WeCanX connection
- CANport™
- 1 USB-C
- Supports up to 99 remote modules

## SENSORS

- Battery voltage sensor

## DVI™ PATTERNS & TONES

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- Meets all applicable SAE and California Title XIII requirements with various Whelen speakers

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