

# CENCOM CORE™ POWFRFD 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.



VNECTION MAP

CENCOM COREWERED BY WECMNX

## 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.





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WeCanX<sup>™</sup> 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



## WHELEN COMMAND™

At the heart of CenCom Core<sup>™</sup> 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

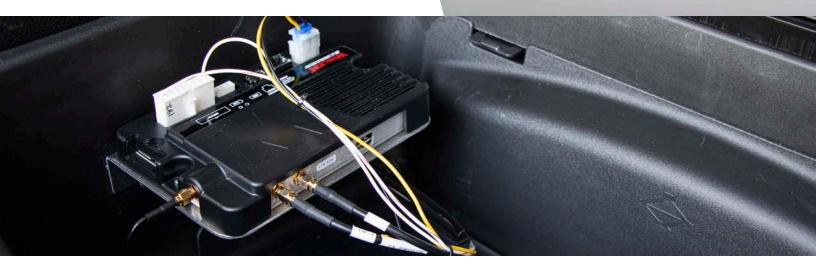
- 2 15A outputs
- 4 10A outputs
- 16 2A outputs
- 1 dry contact relay
- Flashing outputs



## 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.







## 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 lightheads 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 lightheads 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<sup>™</sup> 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





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



## TECHNICAL SPECIFICATIONS

SOFTWARE

I • Whelen Command™

**HARDWARE SUPPORT** 

I • Up to 99 WeCanX™ devices

**INPUTS** 

• 12 logic inputs

• 1 ignition power-up input

4 analog inputs17 total inputs

**OUTPUTS** 

2 15A outputs4 10A outputs16 2A outputs

16 2A outputs1 dry contact relay

· 23 total outputs

Flashing outputsEvery output across the system can

be synchronized

CONNECTIONS

• 1 ethernet connection

1 WeCanX connection2 CANport<sup>™</sup>

• 1 USB-A host

• 1 USB-C

• 1 Micro SD card slot

• 99 remote modules

**SENSORS** 

Battery voltage sensorTemperature sensor

· 3 axis accelerometer sensor

DVI™ PATTERNS & TONES

DYNAMIC VARIABLE INTENSITY™ (PATENT-PENDING)

 $\bullet$  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

## **MODELS**

C399	CenCom Core™ Amplifier Control Module
CCTL5	Handheld Control Head and Microphone
CCTL6	WeCanX™ Slide and Rotary Knob Control Head
CCTL7	WeCanX Slide and 21 Push Button Control Head
CCTLMIC	Microphone for CCTL6 and CCTL7 WeCanX Control Heads
CEM8	WeCanX 8 Output Expansion Module (4 input modules)
CEM16	WeCanX 16 Output Expansion Module (4 input modules)
СТА	WeCanX Traffic Advisor™ Module (Traffic Advisor purchased separately)
CEXAMP	WeCanX External Amplifier
CHOWLER	WeCanX Howler Siren
C399K1	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
C399K2	Installation Kit for C399 for the 2017-2019 Chevy Tahoe and Silverado 1500
C399K3	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
Outputs							
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
Peripherals							
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
Sensors							
Battery Voltage Sensor	-	-	Yes	-	Yes	Yes	Yes
Temperature Sensor	-	-	-	-	-	CANTEMP	Yes
3 Axis Accelerometer Sensor	-	-	-	-	-	-	Yes





