CenCom
CORE®

CONTROL SYSTEMS

Controlling Your Fleet Has
Never Been Easier

WHELEN®

MANUFACTURED IN AMERICA

CENCOM CORE® POWERED BY WECANX®

Whelen's powerful CenCom Core control systems enhance first responder safety like no other by providing the greatest configurability, speed, and expansion capabilities available on the market. Built to scale with your needs, our Core systems are highly configurable and offer advanced automation, remote connectivity, and true system synchronization through the industry's smartest and most powerful CAN-based communication system, WeCanX®. This proprietary technology combines unrivaled sophistication with lightning-fast speed, expanded peripheral add-ons and full diagnostic support.

CENCOM
CORE®   CORE-S™   CORE-R™   CORE-C™

DESIGNED TO FIT YOUR NEEDS

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.

WECANX®

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.

- 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
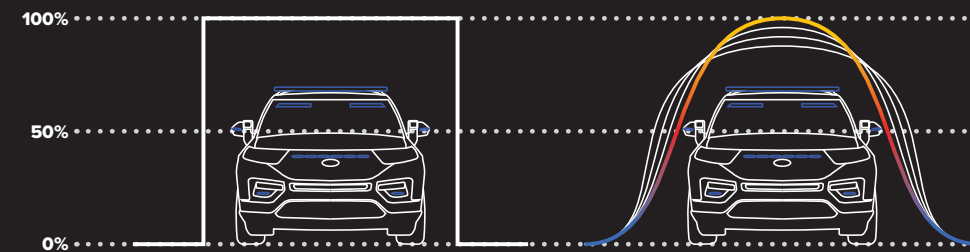
VEHICLE-TO-VEHICLE SYNC

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

FOR GPS ACCURACY: MOUNT THIS SIDE FACING TOWARD WINDOW

V2V SYNC MODULE POWERED BY WECANX.

DVI ENABLED

Dynamic Variable Intensity™ flash patterns are designed to create a calm warning environment and bring an advanced level of safety to nighttime emergency scenes. DVI™ patterns gradually increase and decrease warning light intensity, which better conveys visual information to approaching motorists at night.

100%
50%
0%

DIGITAL VOICE MESSAGES

Configure consistent messaging across a fleet with Digital Voice Messages. Messages can be customized for weather alerts, evacuation orders, traffic reports, bilingual messaging and more. Messages are added through the *Manage Digital Voice Messages* window in the Whelen Command software and can be applied to any input.

Scan to find and download standard messages including fire warnings, no parking orders, active shooter warnings and more.

WHELEN COMMAND®

At the heart of CenCom Core® is Whelen Command, our cutting-edge software designed to streamline the entire programming process. With an advanced user interface, Command quickly and easily provides updates and new releases and 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 by utilizing various vehicle components and signals, like automatically turning off a siren when a vehicle arrives on scene. With Events, multiple user-defined rules can be created for specific situations depending on the state of your vehicle, like automatically switching to DVI light patterns when the vehicle is in Park.

WHELEN® command®

WHELEN CLOUD PLATFORM®

The Whelen Cloud Platform is a cloud-based vehicle communication platform that sends and receives data through cellular networks.

Manage vehicle configurations and firmware updates over-the-air, create faster response times with real-time information to pinpoint vehicle locations, and easily organize your fleet and Whelen product information. All of your data is safe and available, wherever you are.

CENCOM CORE

Created to enhance first responder safety, CenCom Core redefined control systems by providing the greatest configurability, speed, and expansion yet. Built to scale with your needs, Core is highly configurable and offers advanced automation, remote connectivity, and true system synchronization.

- Powered by WeCanX®
- Supports any combination of up to 99 WeCanX devices
- Seamlessly integrates with Whelen Command® software
- Remote firmware updates through USB-C with Whelen Command or over-the-air with Whelen Cloud Platform®
- Vehicle-to-Vehicle Sync
- Dynamic Variable Intensity™ light patterns
- 17 total inputs
- 23 total outputs
- 10-year warranty

CORE-S™

The newest addition to Whelen's industry-leading Core family of control systems, Core-S™ is a true one-box solution. Its space-saving design allows for installation in tight spaces like in a console or under a dash. And installation has never been easier with connector placement specifically designed for hard-to-reach areas. Core-S features a siren, input/output, and control functionality in one compact box along with an integrated control head.

- Powered by WeCanX
- Seamlessly integrates with Whelen Command software
- Remote firmware updates through USB-C with Whelen Command or over-the-air with Whelen Cloud Platform
- Vehicle-to-Vehicle Sync
- Dynamic Variable Intensity light patterns
- 11 total inputs
- 16 total outputs
- 10-year warranty

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.

- Powered by WeCanX®
- Supports any combination of up to 99 WeCanX devices
- Seamlessly integrates with Whelen Command® software
- Remote firmware updates through USB-C with Whelen Command or over-the-air with Whelen Cloud Platform®
- Vehicle-to-Vehicle Sync
- Dynamic Variable Intensity™ light patterns
- 8 total inputs
- Does not have its own outputs, supports STEADY-LOCK™ through Remote Expansion Module
- 10-year warranty

CORE-C™

Core-C™ is the heart of a sophisticated warning light system for work trucks. Delivering enhanced WeCanX safety features with plug-and-play ease of installation, it combined the intelligence of a WeCanX controller with the functionality of a control head in one compact package.

- Powered by WeCanX
- Seamlessly integrates with Whelen Command software
- Remote firmware updates through USB-C with Whelen Command
- Vehicle-to-Vehicle Sync
- 1 input, 1 output
- Supports a primary WeCanX warning device
- Supports one Remote Expansion Module to bring DVI and intelligent lighting control to a vehicle's peripheral lighting like Vertex™, ION™, or Micron™ lightheads.
- Supports STEADY-LOCK through Remote Expansion Module
- 10-year warranty

CORE-R™ DOT

- All the benefits and features of Core-R are housed in a durable junction box to protect control system components and wiring from harsh environments and weather typically experienced by DOT vehicles.
- Its modular design makes installation on a municipal vehicle quick and easy with parts designed to be installed in various locations throughout a vehicle.
- Optional modules are available to further enhance flexibility and safety like DVI™ and V2V Sync

WeCanX® DEVICES

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

- Legacy®, Liberty™ II, Freedom® IV, Edge® 9X, and Justice® DUO™ lightbars
- Inner Edge® FST™, RST™, & XLP™
- Tracer™ WeCanX
- WeCanX 2250
- External Amplifier

- External Howler™ Siren
- Remote 8 or 16-Output Expansion Module
- Core™ Control Point
- Traffic Advisor™ Module
- V2V Sync Module
- High Current Remote Expansion Module

LIGHTBARS

Legacy, Liberty II, Freedom IV, Edge 9X, and Justice DUO lightbars now support WeCanX with expanded control of individual lightheads in DUO and TRIO™ models and in lengths over 60".

INNER EDGE FST, RST, & XLP

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

CONTROL POINT

- Diagnostic output
- Can be selected in WeCad™ as an option

TRAFFIC ADVISOR MODULE

- Ground switched for Whelen capability
- 9 conductors
- 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
- Includes diagnostic indicator

REMOTE 8 OR 16 OUTPUT EXPANSION MODULE

- 4 programmable logic inputs
- Cruise mode

HIGH CURRENT REMOTE EXPANSION MODULE

- Integrate scene lights into WeCanX system control. Outputs can flash, dim, or gradually increase or decrease the light intensity of scene lights, further calming a scene.
- Operates high-current lightheads such as scene lights (e.g., eight 75-Watt, four 150-Watt Pioneer™ lightheads, etc.)
- 4 outputs at 15-Amps each

EXTERNAL AMPLIFIER

- Can be operated independently of other sirens
- Tones can be synchronous or asynchronous depending on the Control System used
- Public address
- Digital voice messages
- Variable intensity tones

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 depending on the Control System used
- Low-intensity mode

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.
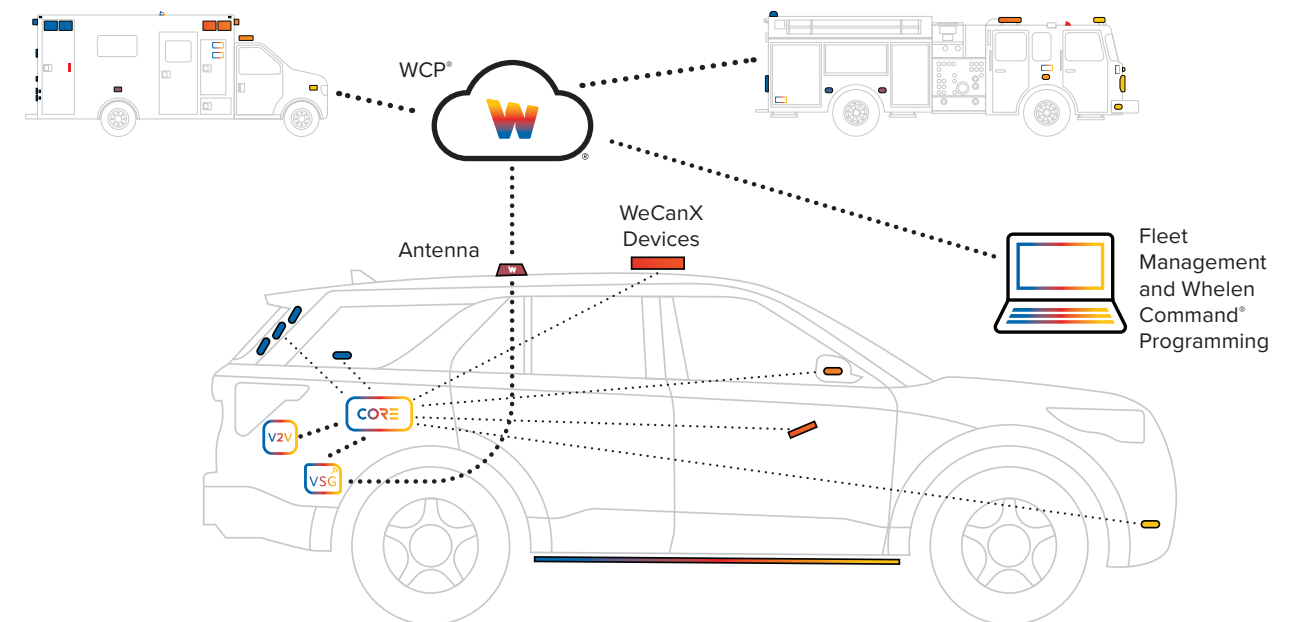
HAAS ALERT & MIOVISON

Our partnership with Miovision provides even more safety features. Miovision's Opticom™ Emergency Vehicle Preemption technology seamlessly integrates with the Whelen Cloud Platform to expedite emergency response times by automatically clearing intersections. And our collaboration with Safety Cloud® by HAAS Alert makes roadways safer with digital alerting. New features like Responder-to-Vehicle (R2V®) and Responder-to-Responder (R2R®) Alerting send real-time notifications through navigation apps and vehicle infotainment systems up to 30 seconds in advance, reducing the risk of collision by up to 90%.

HAAS ALERT   MIOVISION   opticom

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, and one USB-C port. With a variety of interfaces, Core is ready for a variety of configurations.

ALL WHELEN DEVICES, ONE SEAMLESS EXPERIENCE

When you use WeCanX® products, CenCom Core®, or the Whelen Cloud Platform®, you're able to do incredible things to keep everyone safe. When you use them together, you can fully integrate and connect your Whelen products.

WCP®

Antenna

WeCanX Devices

Fleet Management and Whelen Command® Programming

V2V

CORE

VSG

MODELS

WECANX® CONTROL SYSTEMS

C399	Amplifier Control Module, Flashing Outputs, Includes 3 CANports, and Controls up to 99 Devices/Remote Modules, Control Heads Purchased Separately
C399R	Control Module, Includes 8 Digital Inputs, 3 CANports and Controls up to 99 Device/Remote Modules, Control Head and Other Optional Modules Purchased Separately. 10-30 VDC
C399S	200 Watt Amplifier Control Module, Flashing Outputs, Includes 3 CANports and Controls Up to 99 Devices/Remote Modules, Control Head and Other Modules Purchased Separately. 12 VDC
C399SH	100 Watt Amplifier Control Module with 100 Watt Howler™, Flashing Outputs, Includes 3 CANports and Controls Up to 99 Devices/Remote Modules, Control Head and Other Modules Purchased Separately. Single Howler Mounting Bracket purchased Separately, 12 VDC
C399S6	Single Unit 200 Watt Siren with Integrated 3 Section Control Head and 8 Push-Buttons, 4-Position Slide Switch with a 7-Position Rotary Knob. Manual, Airhorn Plus 3 Traffic Advisor™ Switches and Microphone with Extension Cable
C399S6H	Single Unit 100 Watt Siren and 100 Watt Howler with Integrated 3 Section Control Head and 8 Push-Buttons, 4-Position Slide Switch with a 7-Position Rotary Knob. Manual, Airhorn Plus 3 Traffic Advisor Switches and Microphone with Extension Cable, Single Howler Mounting Bracket purchased Separately, 12VDC
C399S7	Single Unit 200 Watt Siren with Integrated 3 Section Control Head and 21 Push-Buttons, 4-Position Slide Switch, Microphone with Extension Cable
C399S7H	Single Unit 100 Watt Siren and 100 Watt Howler with Integrated 3 Section Control Head and 21 Push-Buttons, 4-Position Slide Switch, Microphone with Extension Cable, Single Howler Mounting Bracket purchased Separately, 12VDC
CCP9	Core-C™ - Core™ Control Point and Switch Combination, 4-Position Slide Switch and 6 Push Buttons. One 5 amp output for auxiliary lighting. LED TA Indicator, 10-30 VDC and V2V Sync Capable
CCPKT	Core Control Point for use with WeCanX Devices when NOT using CenCom Core® (For use when not Purchasing a Lightbar)
C399RD1	Core-R™ DOT - Control Module, Includes 8 Digital Inputs, 1 WeCanX Port and Controls up to 99 Device/Remote Modules, and One CEM16 Module Mounted in a Single Box, Control Head and Other Optional Modules Purchased Separately. 12 VDC
C399RD2	Core-R™ DOT - Control Module, Includes 8 Digital Inputs, 1 WeCanX Port and Controls up to 99 Device/Remote Modules, and Two CEM16 Modules Mounted in a Single Box, Control Head and Other Optional Modules Purchased Separately. 12 VDC

WECANX CONTROL HEADS

CCTL5	Includes Handheld Combination Microphone and Controller, 5-Position Progressive Light/Siren Control, 9 Push-Buttons and a Microphone Extension Cable
CCTL6	Includes 3 Section Control Head and 8 Push-Buttons, 4-Position Slide Switch with a 7-Position Rotary Knob. Manual, Airhorn Plus 3 Traffic Advisor Switches and Microphone with Extension Cable
CCTL7	Includes 3 Section Control Head and 21 Push-Buttons, 4-Position Slide Switch, Microphone with Extension Cable
CCTL8	Includes 6 Push-Buttons and a 4-Position Slide Switch, Includes Microphone
CCTL8LM	Includes 6 Push-Buttons and a 4-Position Slide Switch (Microphone Not Included)
CCTL9	Includes 2 Section Control Head and 6 Push-Buttons with a 7-Position Rotary Knob, Microphone and Microphone Extension Cable
CCTL9LM	Includes 2 Section Control Head and 6 Push-Buttons with a 7-Position Rotary Knob, (No Microphone and Microphone Extension Cable)
CCTL10	Includes 3 Section Control Head and 21 Push-Buttons, 1 Master Push-Button, Microphone with Extension Cable
CCTLHARN	CenCom Core Control Head Harness Kit, for use with any Non-Primary Control Head exluding the CCTL5, Control Heads Purchased Separately

OBDII CANPORT™ INSTALLATION KITS FOR CORE™

C399K1	OBDII CANport™ Installation Kit for C399 for 2016-2019 Ford Interceptor Utility, 2020-2022 Ford Interceptor Utility used with Factory Option 61B, 2016-2020 Ford F-150, 2018-2022 Ford, F-250/350 2018-2019 Ford, F-450/550, Expedition and Transit 150/250/350, 2017-2019 Ford Fusion (All Models), 2020 Ford Fusion Hybrid and 2016-2017 Dodge Charger (Not for use with Core-R™ and C399S)
C399K2	OBDII CANport Installation Kit for C399 for Chevy, 2017-2020 Tahoe, 2017-2018 Silverado 1500, 2019-2021 Silverado 1500 (Body Style), 2017-2019 Silverado 2500/3500, 2019-2021 Colorado 1500, 2019 Impala, 2018-2020 Suburban (Not for use with Core-R and C399S)
C399K3	OBDII CANport Installation Kit for C399 for 2018-2020 Ram Classic 1500, 2019-2020 Ram 1500, 2021-2022 Ram 2500/3500, 2018-2022 Dodge Charger and 2018-2022 Dodge Durango (Not for use with Core-R and C399S)
C399K4	2020-2021 Ford Interceptor Utility Gateway Installation Kit for C399, for use WITHOUT Ford 61B Factory Option (Not for use with Core-R and C399S)
C399K5	2020-2021 Ford Expedition, 2020-2022 F-250/F-350/F-450/F550/F-600 Super Duty and 2020-2021 Transit Gateway Installation Kit for C399 (Not for use with Core-R and C399S)
C399K6	2021-2022 Chevy Tahoe and 2021-2022 Suburban Installation Kit for C399 (Not for use with Core-R and C399S)
C399K7	2021 Ford F-150, 2022 Ford F-150 Lightning, 2020-2022 Ford Interceptor Utility, 2022 Ford Escape, 2022 Ford Expedition and 2021-2022 Ford Mustang Mach-E Installation Kit for C399 (Not for use with Core-R and C399S)
C399K8	2021-2022 Tesla Model Y Installation Kit (Not for use with Core-R and C399S)
C399K9	2022 Chevy Silverado PPV/LTD, 2022 Chevy Colorado Installation Kit (Not for use with Core-R and C399S)

OBDII CANPORT INSTALLATION KITS FOR CORE-R™ AND CORE-S™

C399RK1	OBDII CANport Installation Kit for C399R and C399S Only, for 2016-2019 Ford Interceptor Utility, 2020-2022 Ford Interceptor Utility used with Factory Option 61B, 2016-2020 Ford F-150, 2018-2022 Ford F-250/350, 2018-2019 450/550, Expedition and Transit 150/250/350, 2017-2019 Ford Fusion (All Models), 2020 Ford Fusion Hybrid and 2016-2017 Dodge Charger
C399RK2	OBDII CANport Installation Kit for C399R Only, for Chevy, 2017-2020 Tahoe, 2017-2018 Silverado 1500, 2019-2022 Silverado 1500 (Body Style), 2017-2019 Silverado 2500/3500, 2019-2021 Colorado 1500, 2019 Impala, 2018-2020 Suburban
C399RK3	OBDII CANport Installation Kit for C399R and C399S Only, for 2018-2020 Ram Classic 1500, 2019-2020 Ram 1500, 2021-2022 ,Ram 2500/3500, 2018-2022 Dodge Charger and 2018-2022 Dodge Durango
C399RK4	2020 Ford Interceptor Utility Gateway Installation Kit for C399R and C399S Only, for use WITHOUT Ford 61B Factory Option
C399RK5	2020-2021 Ford Expedition, 2020-2022 F-250/F-350/F-450/F550/F-600 Super Duty and 2020-2021 Transit Gateway Installation Kit for C399R and C399S Only
C399RK6	2021-2022 Chevy Tahoe and 2021-2022 Suburban Installation Kit, for C399R and C399S Only
C399RK7	2021 Ford F-150, 2022, Ford F-150 Lightning, 2020-2022 Ford Interceptor Utility, 2022 Ford Escape, 2022 Ford Expedition and 2021-2022 Ford Mustang Mach-E Installation Kit for C399R and C399S Only
C399RK8	2021-2022 Tesla Model Y Installation Kit for C399R and C399S Only
C399RK9	2022 Chevy Silverado PPV/LTD, 2022 Chevy Colorado Installation Kit for C399R and C399S Only

Core-S utilizes the Core-R OBD2 Cable. Please make sure that you use the C399RK when specifying Core-S. The C399K* will not work as it uses a different connector.*

SYSTEM EXPANSIONS

CEM8	8 Output, 4 Input WeCanX® Expansion Module
CEM16	16 Output, 4 Input WeCanX Expansion Module
CEM4HC	WeCanX High Current Remote Expansion Module, 4-15 Amp Output
CTA	WeCanX Traffic Advisor™ Remote Module, Traffic Advisor Purchased Separately
CEXAMP	WeCanX External Amplifier
CV2V	Vehicle To Vehicle Module, Includes Internal Antenna

CORE™ TECHNICAL SPECS

	CENCOM CORE	CORE-S	CORE-R	CORE-C
DIMENSIONS	7.26" H x 10.07" W x 2.35" D	3.66" H x 6.93" W x 6.51" D	5.76" H x 5.46" W x 1.1" D (DOT: 3" H x 8.53" W x 13" D)	4.4" H x 3.4" W x 1.18" D
SOFTWARE	Whelen Command®			
HARDWARE SUPPORT	Up to 99 WeCanX® devices			WeCanX Legacy®, Liberty™ II, and Freedom® IV lightbars. Inner Edge® FST™, RST™, and XLP. Remote 8 or 16 Output Expansion Module V2V Sync Module
INPUTS	12 logic inputs 4 analog inputs 1 ignition power-up input 17 total inputs	6 digital inputs 4 analog inputs 1 ignition power-up input 11 total inputs	3 digital 4 analog 1 ignition power-up input 8 total inputs	1 ignition power-up input
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	2 15A outputs 2 10A outputs 12 2A outputs 1 dry contact relay 17 total outputs Flashing outputs Every output across the system can be synchronized		1 5A output
CONNECTIONS	1 Ethernet connection 1 WeCanX connection CANport™ 1 USB-A host 1 USB-C Supports up to 99 remote modules	1 Ethernet connection 1 WeCanX connection CANport 1 USB-C Supports up to 99 remote modules	1 Ethernet connection 1 WeCanX connection CANport 1 USB-C Supports up to 99 remote modules	1 WeCanX Connection 1 USB-C
SENSORS	Battery voltage sensor			
DVI™ PATTERNS & TONES	Gradually increase or decrease the output intensity within a flash pattern or tone.			Gradually increase or decrease the output intensity within a flash pattern
TONE SYNC	Sync amplifiers and speakers together Sync tones with lights (Patent-Pending)	N/A	Sync amplifiers and speakers together Sync tones with lights (Patent-Pending)	N/A
WeCanX CONTROL HEADS	CCTL5, CCTL6, CCTL7, CCTL8, CCTL9, CCTL10	Integrated control head options (CCTL6, CCTL7) Remote control head options (CCTL5, CCTL6, CCTL7, CCTL8, CCTL9, CCTL10)	CCTL5, CCTL6, CCTL7, CCTL8, CCTL9, CCTL10	N/A
DIAGNOSTICS	Has diagnostic indicator			
CERTIFICATIONS	Meets all applicable SAE and California Title XIII requirements with various Whelen speakers			N/A
WARRANTY	Ten-year warranty			

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.

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.

CCTL5
- Handheld 5-position
- 9 push-buttons
- Microphone extension cable

CCTL6
- 4-position slide switch
- 13 push-buttons
- 7-position rotary knob

CCTL7
- 4-position slide switch
- 21 push-buttons

CCTL8
- 4-position slide switch
- 6 push-buttons

CCTL9
- 6 push-buttons and 7-position rotary switch
- Microphone plug

CCTL10
- 22 push-buttons

CCTL11
- 13 push-buttons
- Microphone with Extension Cable

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CenCom
CORE®
CONTROL SYSTEMS

A comprehensive guide to
Whelen's control systems

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NASCAR
OFFICIAL WARNING LIGHTS

Preferred Warning Lights of **NHRA** CHAMPIONSHIP DRAG RACING

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