



# ML RGB ELITE

PREMIUM MAGNETIC LEVITATION RGB FAN  
WITH AIRGUIDE TECHNOLOGY

EN ENGLISH

FR FRANÇAIS

DE DEUTSCH

NL NEDERLANDS

DA DANSK

FI SUOMI

SV SVENSKA

NO NORSK

IT ITALIANO

ES ESPAÑOL

PT PORTUGUÊS

PL POLSKI

RU РУССКИЙ

SC 中文

AR العربية



ENGLISH

# REQUIRED HARDWARE

Phillips-head screwdriver  
(not included in fan kit; sold separately)



Short fan  
mounting screws



Long fan mounting screws\*

\*used when installing fans on a radiator; not included in fan kit; sold separately

## FAN INSTALLATION

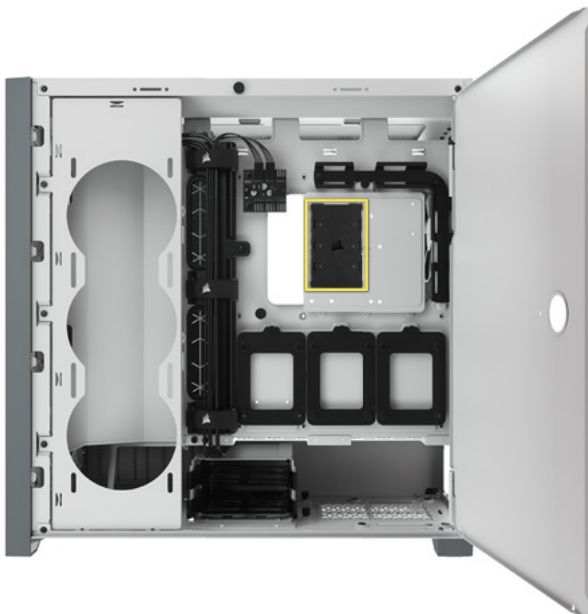
### 1. Turn off computer



Turn your system off prior to installing your ML RGB ELITE fans and Lighting Node CORE.

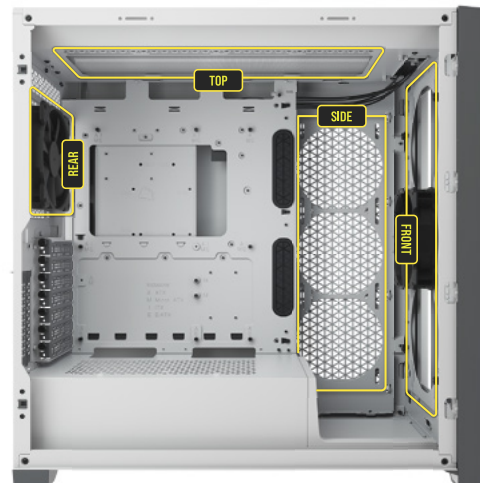
### 2. Mount Lighting Node CORE

Find a location for the Lighting Node CORE that allows the fan RGB LED cables to reach the Lighting Node CORE, then mount it with the provided mounting strips.



### 3. Mount ML RGB ELITE

Mount the fans inside your case with the provided mounting screws. Fan mount locations will vary depending on the case manufacturer.



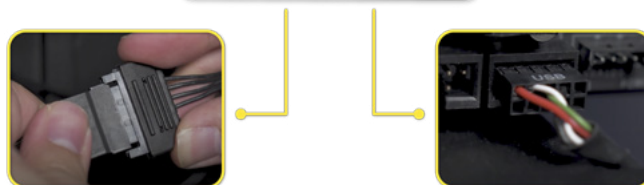
#### 4. Connect ML RGB ELITE

Connect the 4-pin RGB connector into the Lighting Node CORE in sequential order from port #1 to port #6.



#### 5. Connect Lighting Node CORE

Plug the 9-pin USB cable from the Lighting Node CORE into an available internal USB 2.0 header on your motherboard or USB hub. Connect the SATA power connector to an available SATA connector from your power supply.



## iCUE SETUP

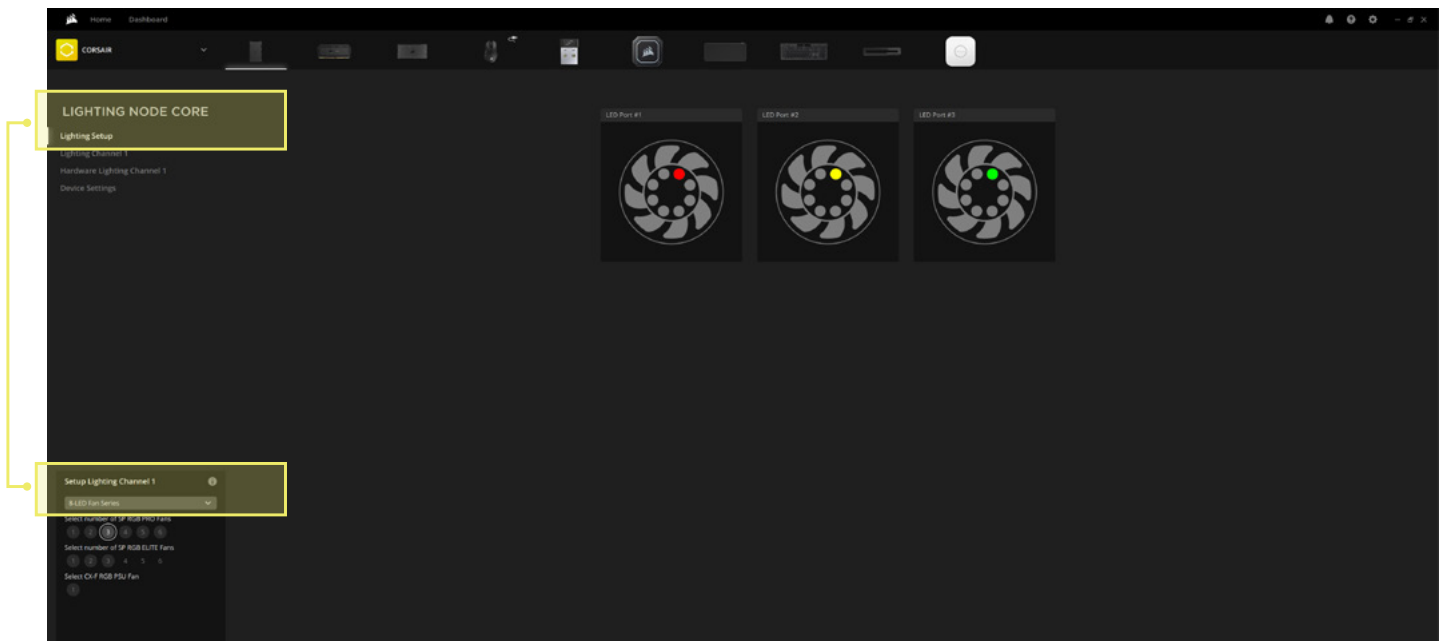
#### 6. Install iCUE

Click the image to download CORSAIR's latest iCUE software.



## 7. Configure iCUE

Once iCUE is installed, select the “8-LED Fan Series” in the Lighting Setup page under Lighting Node CORE.



## ADDITIONAL SETUP

Please visit our [CORSAIR LAB](#) for additional iCUE setup and configuration.



| LIGHTING NODE CORE                           | LIGHTING NODE PRO                                                                     | COMMANDER PRO                                                                                                                  | COMMANDER CORE                                           | COMMANDER CORE XT                                                                                                              |
|----------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Up to 6x RGB fans, RGB Lighting Control only | Up to 12x RGB fans, RGB Lighting Control only (requires RGB LED hub, sold separately) | Up to 12x RGB fans for RGB Lighting Control (requires RGB LED hub, sold separately)<br><br>Up to 6x fans for fan speed control | Up to 6x RGB fans for RGB Lighting and fan speed control | Up to 12x RGB fans for RGB Lighting Control (requires RGB LED hub, sold separately)<br><br>Up to 6x fans for fan speed control |

# MATÉRIEL NÉCESSAIRE

Tournevis cruciforme

(non inclus dans le kit de ventilateurs ; vendu séparément)



Vis de montage  
courtes pour  
entilateur



Vis de montage longues pour ventilateur (\*utilisées pour  
l'installation des ventilateurs sur un radiateur ; non incluses  
dans le kit de ventilateurs ; vendues séparément)

## INSTALLATION DES VENTILATEURS

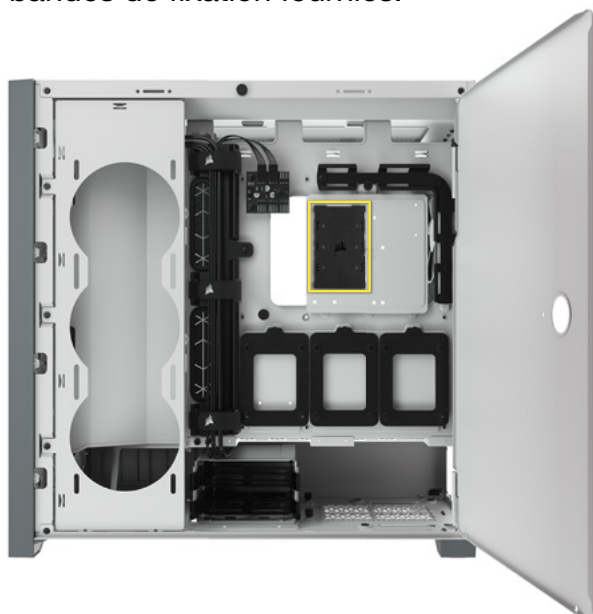
### 1. Éteignez l'ordinateur



Éteignez votre système avant d'installer vos ventilateurs  
ML RGB ELITE et le Lighting Node CORE.

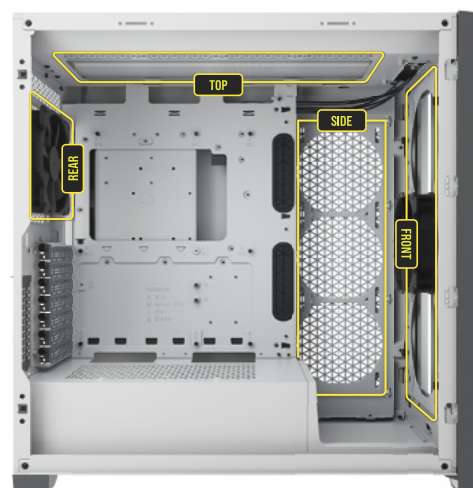
### 2. Montez le Lighting Node CORE

Trouvez un emplacement suffisamment  
spacieux pour le Lighting Node CORE  
pour que tous les câbles des LED RGB  
des ventilateurs atteignent le Lighting  
Node CORE, puis installez-le avec les  
bandes de fixation fournies.



### 3. Montez les ML RGB ELITE

Montez les ventilateurs à  
l'intérieur du boîtier à l'aide des  
vis de montage fournies. Les  
emplacements des supports pour  
ventilateur varient selon le fabricant  
du boîtier.





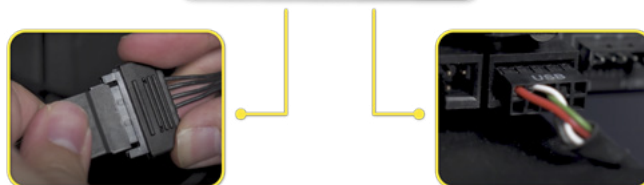
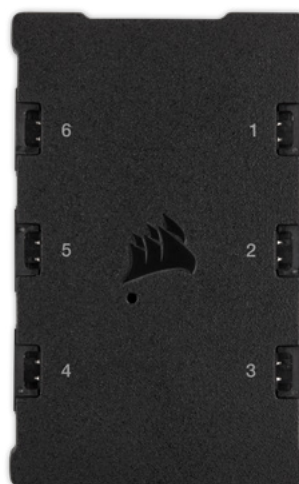
#### 4. Connectez les ML RGB ELITE

Connectez le connecteur RGB à quatre broches au Lighting Node CORE dans l'ordre du port 1 au port 6.



#### 5. Connectez le Lighting Node CORE

Branchez le câble USB à 9 broches depuis le Lighting Node CORE sur un cavalier USB 2.0 interne disponible sur votre carte mère ou hub USB. Connectez le connecteur d'alimentation SATA sur un connecteur SATA disponible de votre alimentation.



## CONFIGURATION iCUE

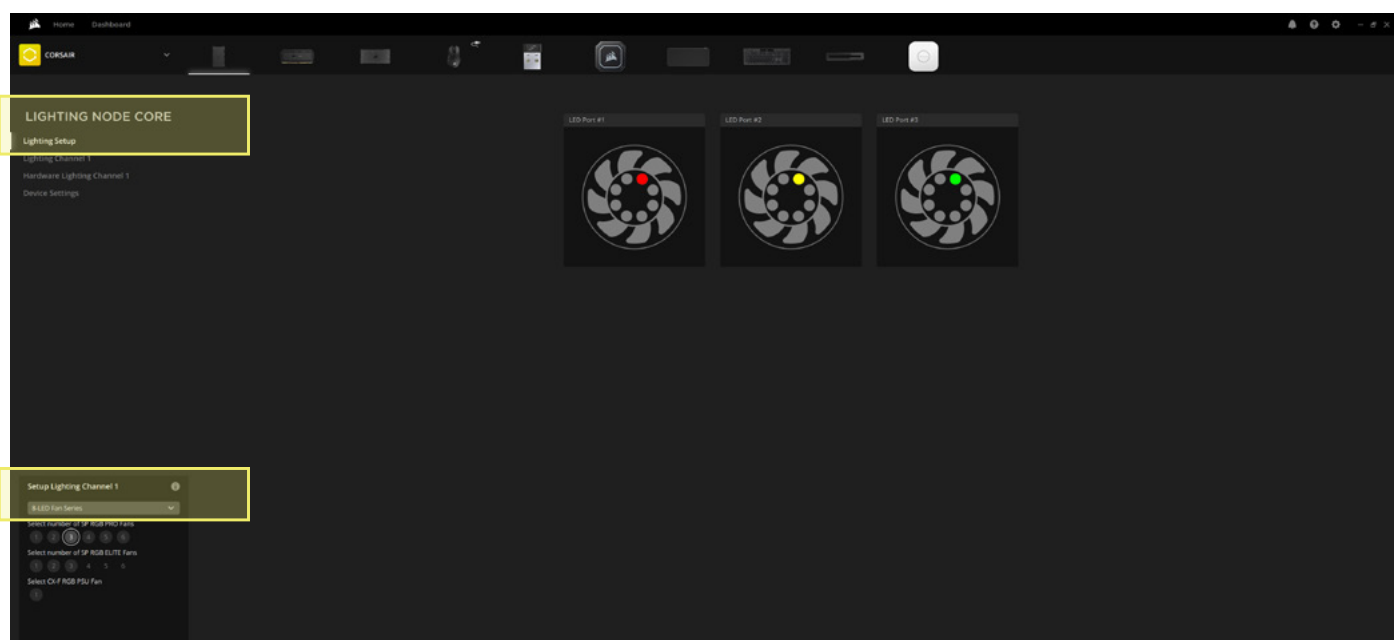
#### 6. Installez iCUE

Cliquez sur l'image pour télécharger la dernière version du logiciel iCUE de CORSAIR.



## 7. Configurez iCUE

Une fois iCUE installé, sélectionnez « 8-LED Fan Series » dans la page de configuration Lighting dans Lighting Node CORE



## CONFIGURATION SUPPLÉMENTAIRE

Veuillez consulter notre Laboratoire CORSAIR pour toute configuration iCUE supplémentaire.



| LIGHTING NODE CORE                                                 | LIGHTING NODE PRO                                                                                              | COMMANDER PRO                                                                                                                                                                           | COMMANDER CORE                                                                                 | COMMANDER CORE XT                                                                                                                                                                       |
|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Jusqu'à 6 ventilateurs RGB, contrôle de l'éclairage RGB uniquement | Jusqu'à 6 ventilateurs RGB, contrôle de l'éclairage RGB uniquement (requiert un hub RGB LED, vendu séparément) | Jusqu'à 12 ventilateurs RGB pour le contrôle de l'éclairage RGB (requiert un hub RGB LED, vendu séparément)<br><br>Jusqu'à 6 ventilateurs pour le contrôle de la vitesse de ventilation | Jusqu'à 6 ventilateurs RGB pour le contrôle de l'éclairage RGB et de la vitesse de ventilation | Jusqu'à 12 ventilateurs RGB pour le contrôle de l'éclairage RGB (requiert un hub RGB LED, vendu séparément)<br><br>Jusqu'à 6 ventilateurs pour le contrôle de la vitesse de ventilation |

# ERFORDERLICHE HARDWARE

Kreuzschlitzschraubenzieher  
(nicht im Lüfter-Kit enthalten; separat erhältlich)



Kurze Lüfter-  
Montageschrauben



Lange Lüfter-Montageschrauben (\*zur Installation der Lüfter auf  
einem Radiator; nicht im Lüfter-Kit enthalten; separat erhältlich)

## LÜFTERINSTALLATION

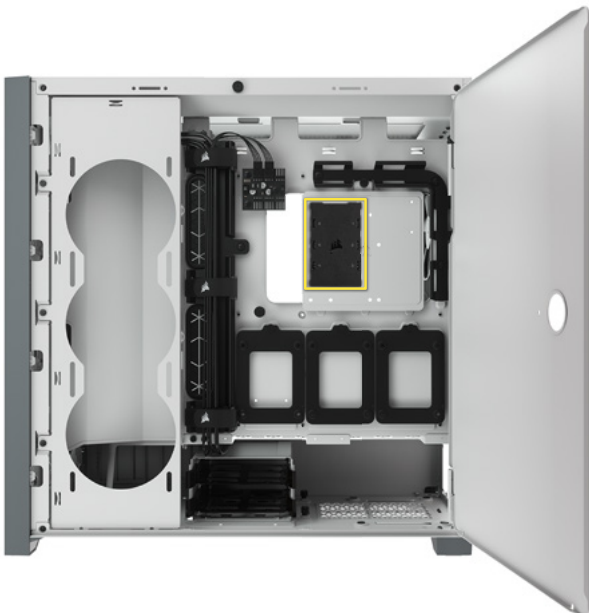
### 1. Computer ausschalten



Schalten Sie Ihren Computer aus, bevor Sie die ML RGB ELITE Lüfter und den Lighting Node CORE installieren.

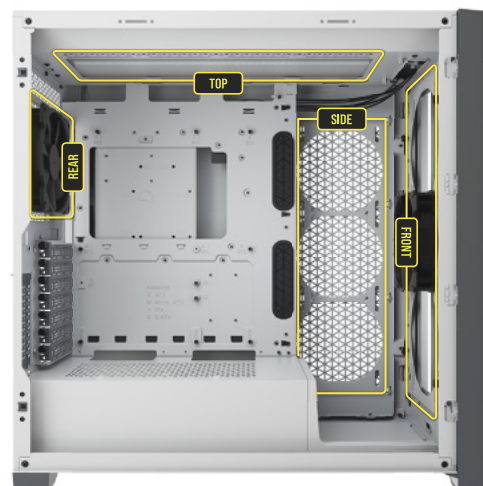
### 2. Lighting Node CORE montieren

Suchen Sie eine geeignete Stelle für den Lighting Node CORE, sodass alle RGB-LED-Kabel der Lüfter bis zum Lighting Node CORE reichen, und befestigen Sie ihn an den mitgelieferten Montageleisten.



### 3. ML RGB ELITE montieren

Befestigen Sie die Lüfter mit den mitgelieferten Montageschrauben in Ihrem Gehäuse. Die Position der Lüfterhalterungen variiert je nach Gehäusehersteller.





#### 4. ML RGB ELITE verbinden

Verbinden Sie den 4-poligen RGB-Stecker mit dem Lighting Node CORE in sequenzieller Reihenfolge von Anschluss 1 bis Anschluss 6.



#### 5. Lighting Node CORE verbinden

Verbinden Sie das 9-polige Ende des USB-Kabels des Lighting Node CORE mit einem freien internen USB-2.0-Anschluss Ihres Mainboards oder USB-Hubs. Schließen Sie das SATA-Netzkabel an einen freien SATA-Anschluss am Netzteil Ihres Computers an.



## iCUE-EINRICHTUNG

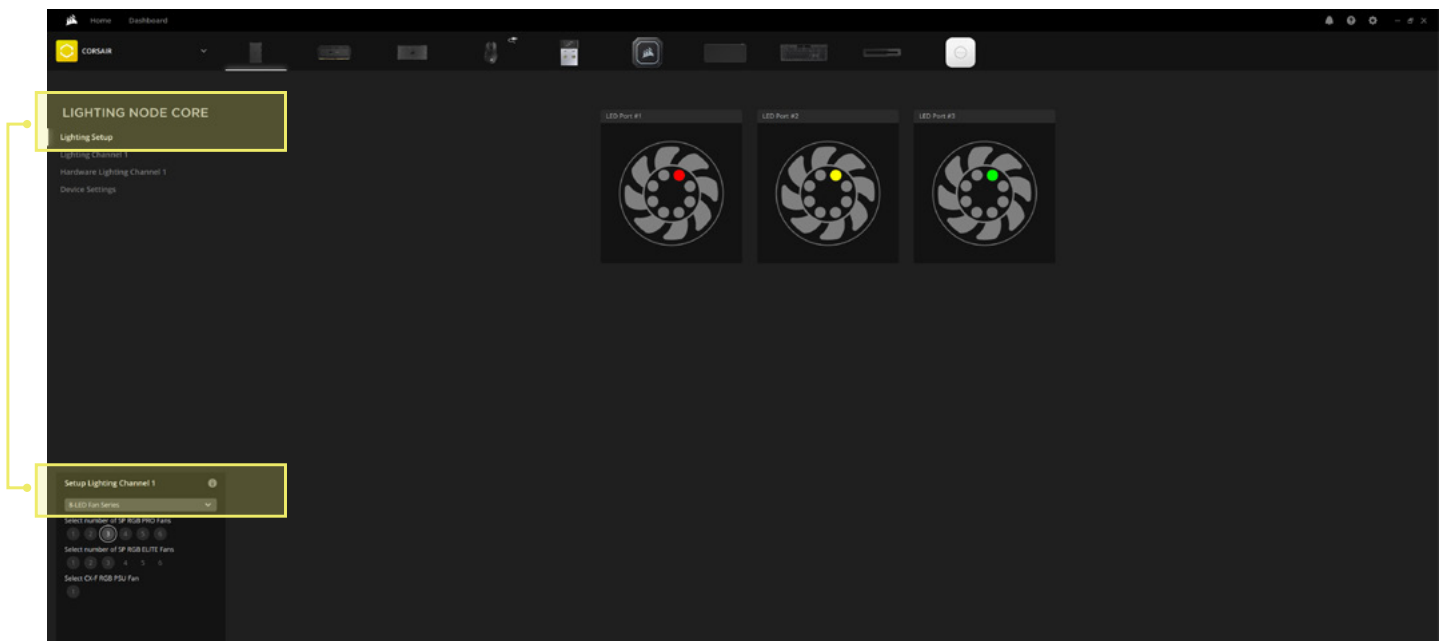
#### 6. iCUE installieren

Klicken Sie auf die folgende Abbildung, um die neueste Version der iCUE-Software von CORSAIR herunterzuladen.



## 7. iCUE konfigurieren

Wählen Sie nach der Installation von iCUE auf der Seite „Beleuchtungseinrichtung“ unter „Lighting Node CORE“ die Option „8-LED-Lüfterserie“ aus.



## WEITERE EINRICHTUNG

Informationen zur weiteren Einrichtung und Konfiguration von iCUE finden Sie in unserem **CORSAIR LAB**.



| LIGHTING NODE CORE                                 | LIGHTING NODE PRO                                                                                 | COMMANDER PRO                                                                                                                                             | COMMANDER CORE                                                           | COMMANDER CORE XT                                                                                                                                         |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bis zu 6 RGB-Lüfter, nur RGB-Beleuchtungssteuerung | Bis zu 6 RGB-Lüfter, nur RGB-Beleuchtungssteuerung (RGB-LED-Hub erforderlich, separat erhältlich) | Bis zu 12 RGB-Lüfter zur RGB-Beleuchtungssteuerung (RGB-LED-Hub erforderlich, separat erhältlich)<br><br>Bis zu 6 Lüfter zur Steuerung der Lüfterdrehzahl | Bis zu 6 RGB-Lüfter zur Steuerung von RGB-Beleuchtung und Lüfterdrehzahl | Bis zu 12 RGB-Lüfter zur RGB-Beleuchtungssteuerung (RGB-LED-Hub erforderlich, separat erhältlich)<br><br>Bis zu 6 Lüfter zur Steuerung der Lüfterdrehzahl |

# VEREISTE HARDWARE

Kruiskopschroevendraaier (niet inbegrepen in fanset; afzonderlijk verkrijgbaar)



Korte bevestigingsschroeven voor de fan



Lange bevestigingsschroeven voor de fan (\*gebruikt bij de installatie van fans op een radiator; niet inbegrepen in fanset; afzonderlijk verkrijgbaar)

## FANINSTALLATIE

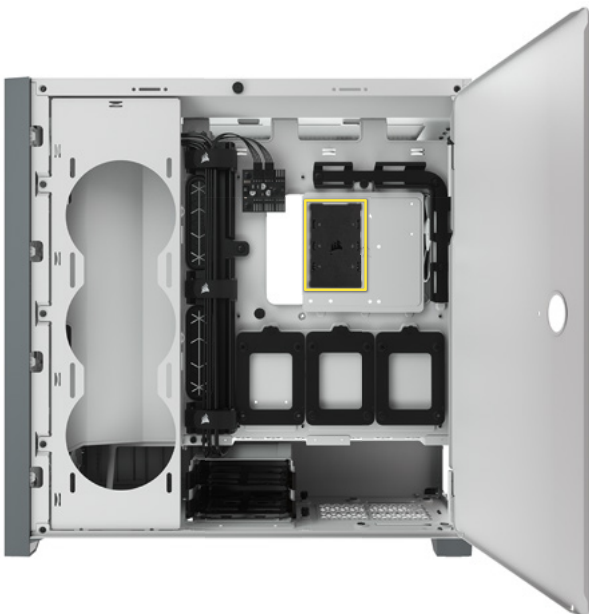
### 1. Zet de computer uit



Schakel het systeem uit voordat je de ML RGB ELITE-fans en de Lighting Node CORE installeert.

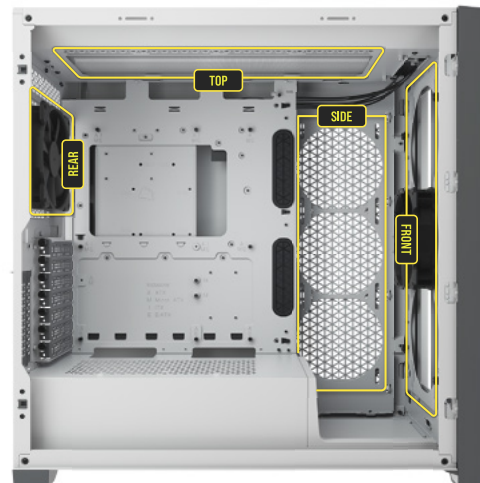
### 2. Bevestig de Lighting Node CORE

Bevestig de Lighting Node CORE met de meegeleverde bevestigingstrips op een plek die bereikbaar is voor de RGB-ledkabels van de fan.



### 3. Bevestig de ML RGB ELITE

Bevestig de fans in de behuizing met de meegeleverde bevestigingsschroeven. De plaatsen van de fanbevestiging variëren afhankelijk van de fabrikant van de behuizing.



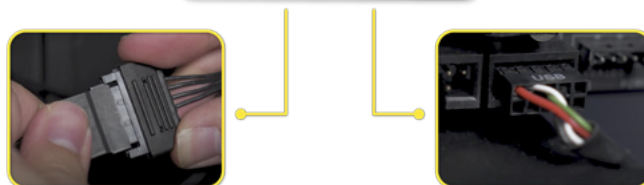
#### 4. Sluit de ML RGB ELITE aan

Sluit de 4-pins RGB-connector aan op de Lighting Node CORE opeenvolgend van poort #1 tot poort #6.



#### 5. Sluit de Lighting Node CORE aan

Sluit de 9-pins USB-kabel van de Lighting Node CORE aan op een beschikbare interne USB 2.0-header op je moederbord of USB-hub. Sluit de SATA-voedingsconnector aan op een beschikbare SATA-connector van de voeding.



## iCUE-INSTALLATIE

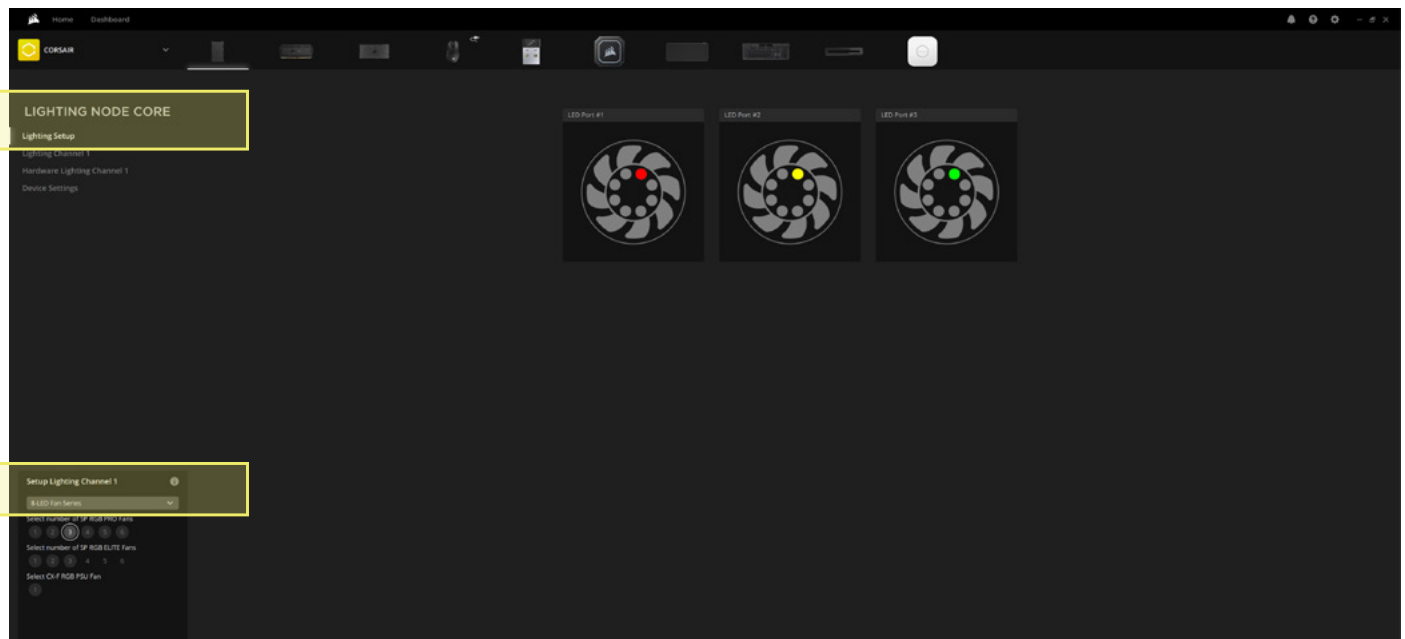
#### 6. Installeer iCUE

Klik op de afbeelding om de nieuwste iCUE-software van CORSAIR te downloaden.



## 7. Configureer iCUE

Nadat iCUE is geïnstalleerd, selecteer je “8-LED Fan Series” in de instellingenpagina van de verlichting onder Lighting Node CORE



## AANVULLENDE INSTELLINGEN

Bezoek ons **CORSAIR LAB** voor aanvullende iCUE-installatie en -configuratie.



| LIGHTING NODE CORE                                   | LIGHTING NODE PRO                                                                                    | COMMANDER PRO                                                                                                                                       | COMMANDER CORE                                                   | COMMANDER CORE XT                                                                                                                                   |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximaal 6 RGB-fans, alleen RGB-verlichtingsregeling | Maximaal 6 RGB-fans, alleen RGB-verlichtingsregeling (RGB-ledhub vereist, afzonderlijk verkrijgbaar) | Maximaal 12 RGB-fans voor RGB-verlichtingsregeling (RGB-ledhub vereist, afzonderlijk verkrijgbaar)<br><br>Maximaal 6 fans voor fansnelheidsregeling | Maximaal 6 RGB-fans voor RGB-verlichting en fansnelheidsregeling | Maximaal 12 RGB-fans voor RGB-verlichtingsregeling (RGB-ledhub vereist, afzonderlijk verkrijgbaar)<br><br>Maximaal 6 fans voor fansnelheidsregeling |

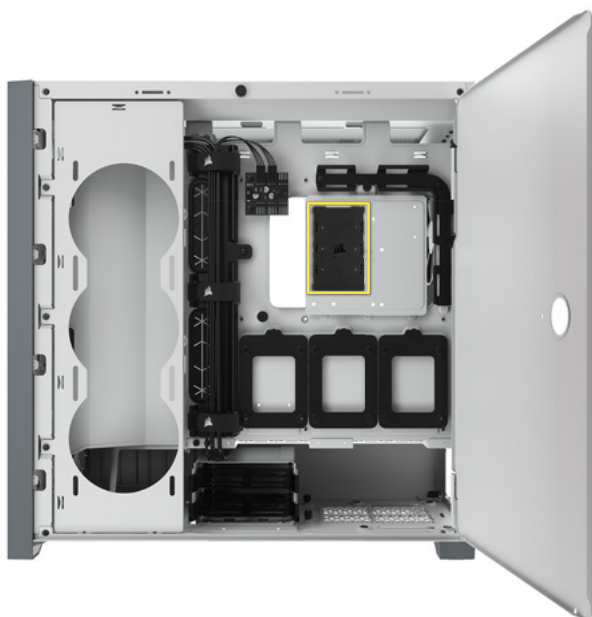


Lange monteringskruer til blæser (\*bruges ved montering af blæseren på en køler, medfølger ikke i blæsersættet – sælges separat)

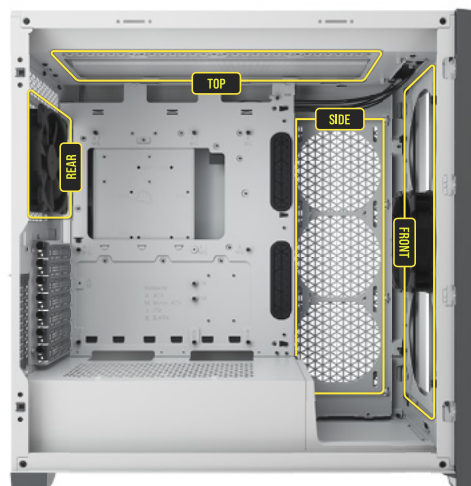
## INSTALLATION AF BLÆSER



Find et sted til Lighting Node CORE-enheden, hvor alle blæsernes RGB LED-kabler kan den, og monter den derefter med de medfølgende kabelbindere.



Monter blæserne i kabinettet med de medfølgende monteringsskruer. Blæsermonteringspladserne varierer afhængigt af kabinetproducenten.





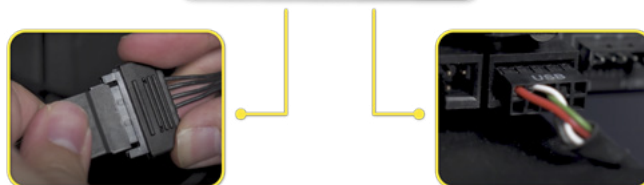
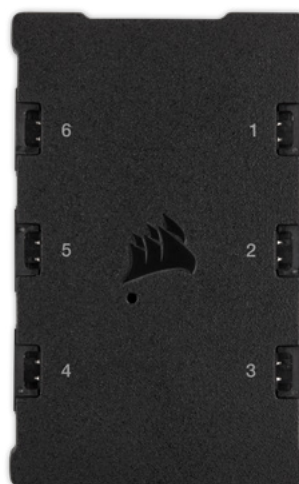
#### 4. Tilslut ML RGB ELITE

Tilslut RGB-stikket med 4 ben til Lighting Node CORE-enheden i rækkefølge fra port nr. 1 til port nr. 6.



#### 5. Tilslut Lighting Node CORE-enheden

Tilslut det 9-benede USB-kabel fra Lighting Node CORE til et ledigt internt USB 2.0-stik på bundkortet eller i en USB-hub. Slut SATA-strømsvikket til et ledigt SATA-stik på strømforsyningen.



## INSTALLATION AF iCUE

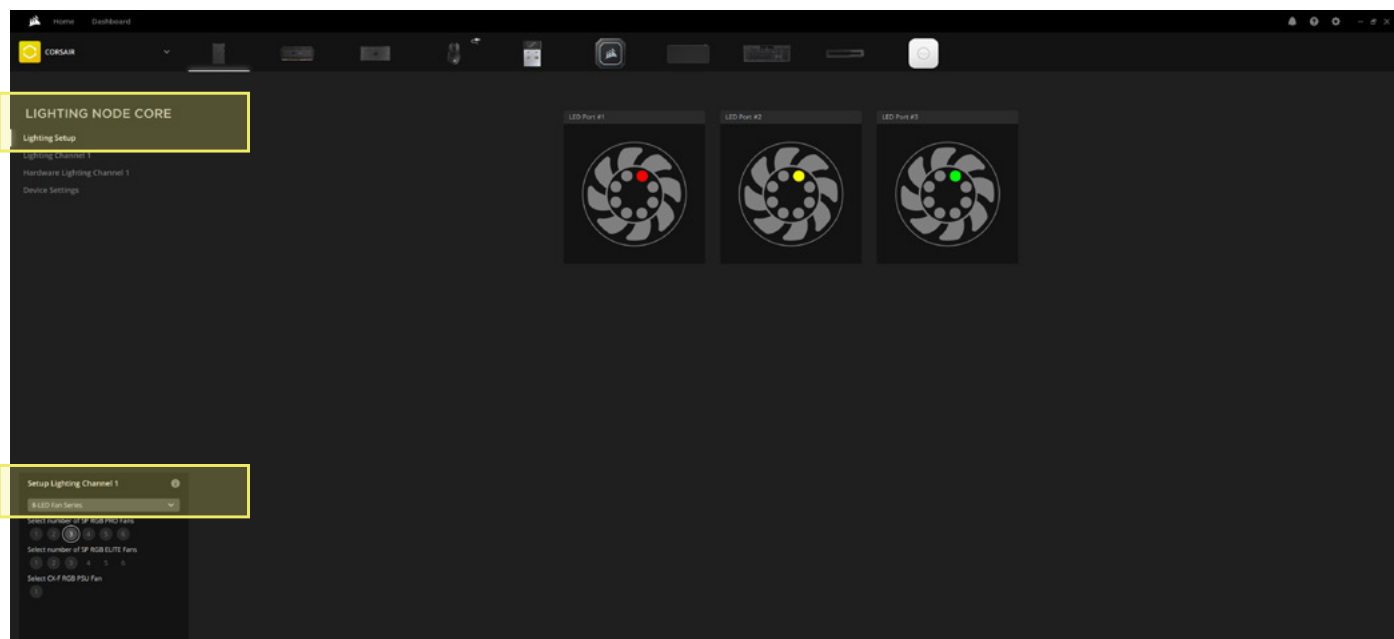
#### 6. Installer iCUE

Klik på billedet for at downloade CORSAIRs seneste iCUE-software.



## 7. Konfigurer iCUE

Når iCUE er installeret, skal du vælge “8-LED Fan Series” på siden Lighting Setup under Lighting Node CORE



## YDERLIGERE OPSÆTNING

Besøg vores **CORSAIR LAB** for at få yderligere information om installation og konfiguration af iCUE.



| LIGHTING NODE CORE                                | LIGHTING NODE PRO                                                                      | COMMANDER PRO                                                                                                                                   | COMMANDER CORE                                                         | COMMANDER CORE XT                                                                                                                               |
|---------------------------------------------------|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Op til 6 x RGB-blæsere, kun RGB-belysningskontrol | Op til 6 x RGB-blæsere, kun RGB-belysningskontrol (kræver RGB LED-hub, sælges separat) | Op til 12 x RGB-blæsere til RGB-belysningskontrol (kræver RGB LED-hub, sælges separat)<br><br>Op til 6 x blæsere til kontrol af blæserhastighed | Op til 6 x RGB-blæsere til RGB-belysning og kontrol af blæserhastighed | Op til 12 x RGB-blæsere til RGB-belysningskontrol (kræver RGB LED-hub, sælges separat)<br><br>Op til 6 x blæsere til kontrol af blæserhastighed |

# TARVITTAVA LAITTEISTO

Ristipääruuvitaltta (ei sisälly tuuletinsarjaan; myydään erikseen)



Lyhyet  
tuulettimen  
kiinnitysruuvit



Pitkät tuulettimen kiinnitysruuvit (\*käytetään asennettaessa tuulettimia jäähdyttimeen; ei sisälly tuuletinsarjaan; myydään erikseen)

## TUULETTIMEN ASENNUS

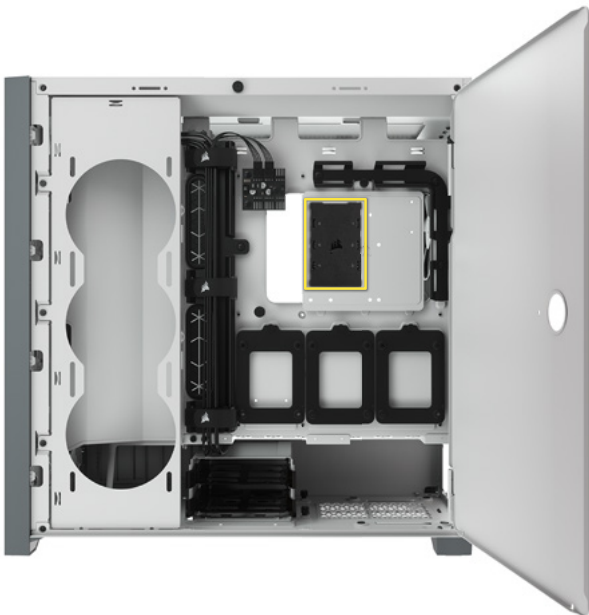
### 1. Sammuta tietokone



Sammuta järjestelmä ennen ML RGB ELITE -tuuletinten ja Lighting Node CORE -valaistusyksikön asennusta.

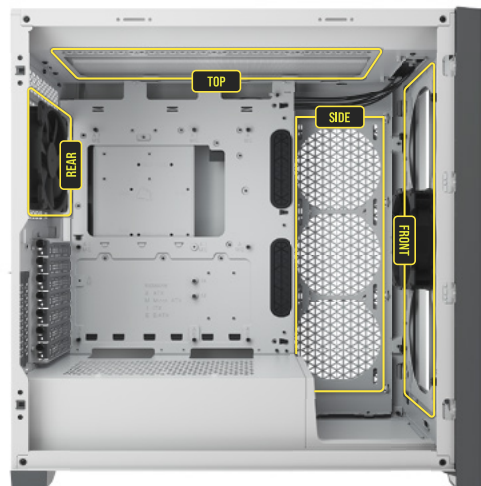
### 2. Asenna Lighting Node CORE -yksikkö

Valitse Lighting Node CORE-yksikölle asennuspaikka, johon tuuletinten RGB LED -kaapelit yltävät, ja asenna Lighting Node CORE-yksikkö paikalleen mukana toimitetuilla kiinnityssiteillä.



### 3. Asenna ML RGB ELITE

Asenna tuulettimet kotelon sisään mukana toimitetuilla kiinnitysruuveilla. Tuulettimien asennussijainnit vaihtelevat kotelon valmistajasta riippuen.



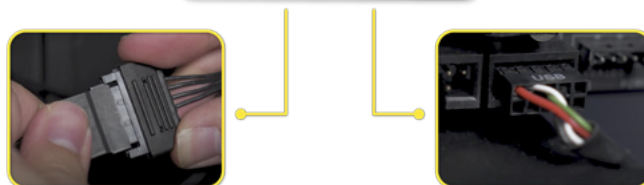
#### 4. Kytke ML RGB ELITE

Kytke 4-napainen RGB-liitin Lighting Node CORE -yksikköön järjestyksessä liitännästä nro 1 liitintään nro 6.



#### 5. Kytke Lighting Node CORE -yksikkö

Kiinnitä Lighting Node CORE -yksikön 9-napainen USB-kaapeli emolevyllä tai USB-reitittimessä olevaan vapaaseen USB 2.0 -latausliitännään. Kiinnitä SATA-virtaliitin virtalähteen mihin tahansa vapaana olevaan SATA-liitännään.



## iCUE-ASENNUS

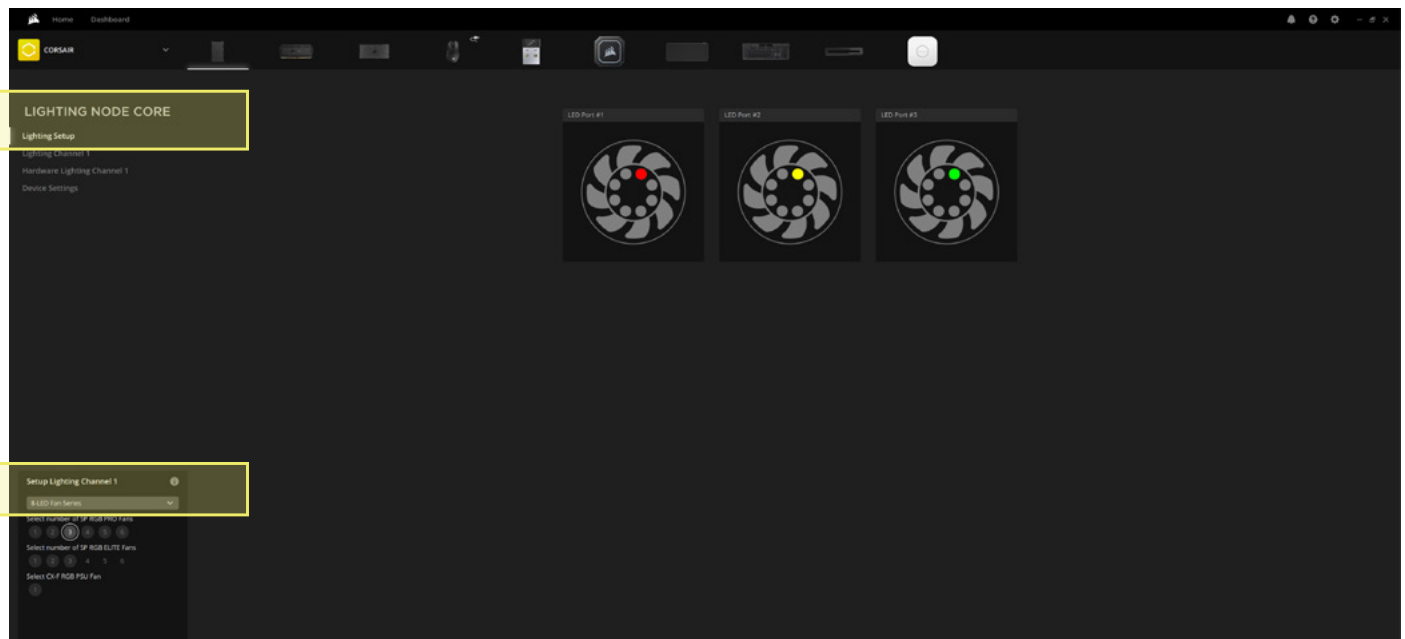
#### 6. Asenna iCUE

Lataa CORSAIRin uusin iCUE-ohjelmisto napsauttamalla kuvaa.



## 7. Määritä iCUE

Kun iCUE on asennettu, valitse 8-LED Fan Series -kohta Lighting Setup -sivulla Lighting Node CORE -sovelluksessa



## LISÄASENNUS

Vieraile CORSAIR LAB -järjestelmässä ja tutustu iCUE-lisäasetuksiin ja määrittäksiin.



| LIGHTING NODE<br>CORE -YKSIKKÖ                                    | LIGHTING NODE<br>PRO                                                                                                       | COMMANDER<br>PRO                                                                                                                                                                        | COMMANDER<br>CORE                                                                      | COMMANDER<br>CORE XT                                                                                                                                                                    |
|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Vain RGB-<br>valaistuksen ohjaus<br>jopa 6x RGB<br>-tuulettimelle | Jopa 6x RGB<br>-tuuletinta, vain<br>RGB-valaistuksen<br>ohjaus (edellyttää<br>RGB LED<br>-keskitintä,<br>myydään erikseen) | RGB-valaistuksen<br>ohjaus jopa 12x<br>RGB -tuulettimelle<br>(edellyttää RGB<br>LED -keskitintä,<br>myydään erikseen)<br><br>Tuulettimen<br>nopeuden<br>ohjaus jopa 6x<br>tuulettimelle | RGB-valaistuksen<br>ja tuulettimen<br>nopeuden ohjaus<br>jopa 6x RGB-<br>tuulettimelle | RGB-valaistuksen<br>ohjaus jopa 12x<br>RGB -tuulettimelle<br>(edellyttää RGB<br>LED -keskitintä,<br>myydään erikseen)<br><br>Tuulettimen<br>nopeuden<br>ohjaus jopa 6x<br>tuulettimelle |

# NÖDVÄNDIG MASKINVARA

Skruvmejsel med Phillips-huvud  
(ingår inte i fläkt-kit, säljs separat)



Korta fläktmonteringskruvar



Långa fläktmonteringsskruvar (\*används när man installerar fläktar på en kylare, ingår inte i fläkt-kit, säljs separat)

## FLÄKTINSTALLATION

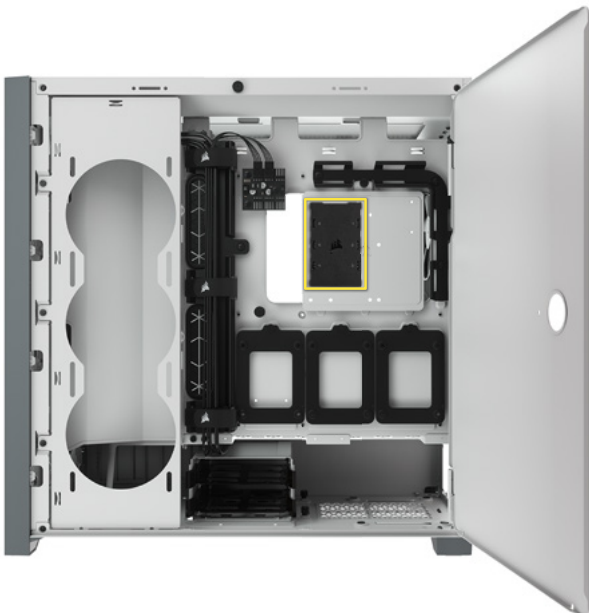
### 1. Stäng av datorn



Stäng av systemet innan du installerar dina ML RGB ELITE-fläktar och Lighting Node CORE.

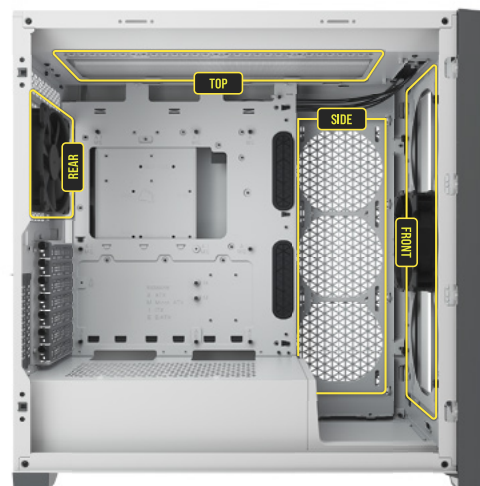
### 2. Montera Lighting Node CORE

Hitta en lämplig plats för Lighting Node CORE som gör att alla fläktarnas RGB LED-kablar räcker fram till Lighting Node CORE. Montera den därefter med hjälp av de medföljande monteringslisterna.



### 3. Montera ML RGB ELITE

Montera fläktarna inuti ditt chassi med de medföljande monteringskruvarna. Fläktmonteringsplatserna varierar beroende på chassitillverkaren.





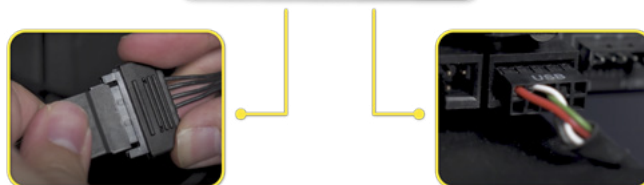
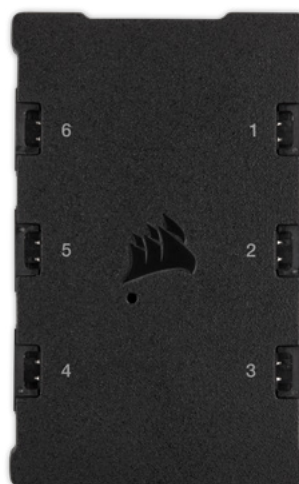
#### 4. Ansluta ML RGB ELITE

Anslut RGB-kontakten med fyra stift till Lighting Node CORE i sekventiell ordningsföljd från port #1 till port #6.



#### 5. Ansluta Lighting Node CORE

Anslut USB-kabeln med nio stift från Lighting Node CORE till en tillgänglig intern USB 2.0-kontakt på ditt moderkort eller din USB-hubb. Anslut SATA-kontakten till ett tillgängligt SATA-uttag från ditt nätaggregat.



## iCUE-KONFIGURATION

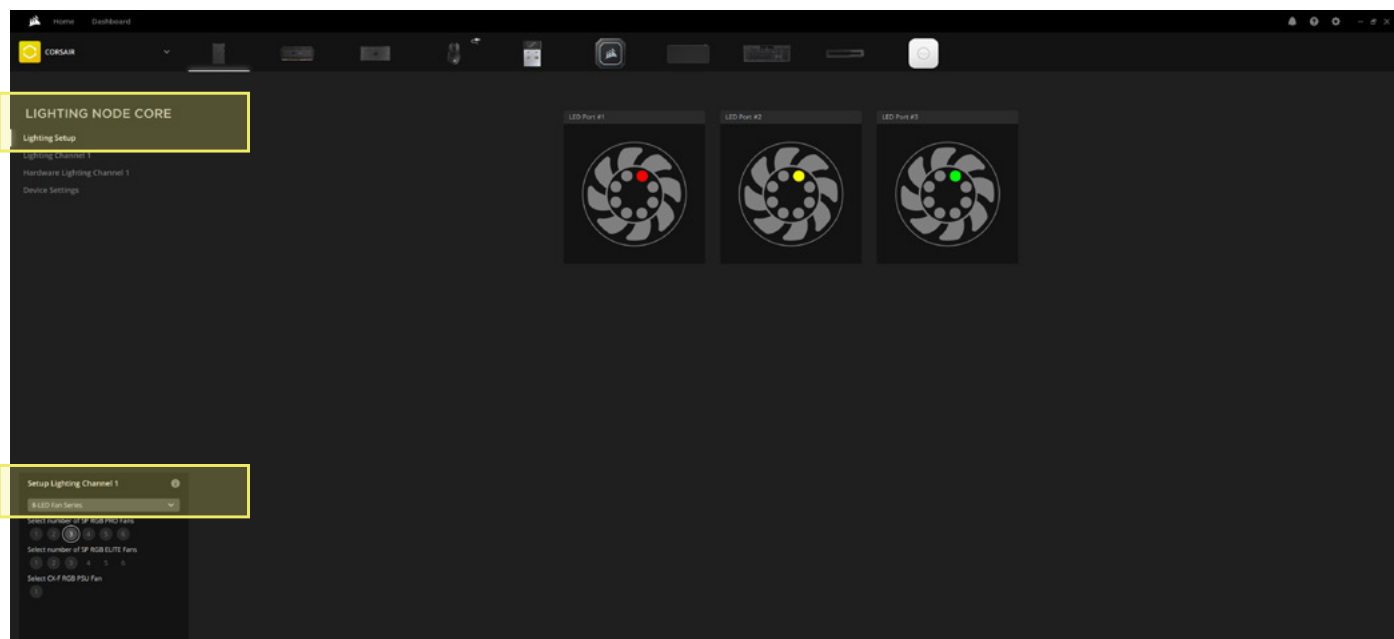
#### 6. Installera iCUE

Klicka på bilden för att ladda ner CORSAIRs senaste iCUE-programvara.



## 7. Konfigurera iCUE

När iCUE har installerats ska du välja "Serien med 8-LED-Fläktar" i konfigurationssidan för Lighting under Lighting Node CORE



## YTTERLIGARE KONFIGURATION

Besök vårt CORSAIR LAB för ytterligare iCUE-konfiguration.



| LIGHTING NODE CORE                                        | LIGHTING NODE PRO                                                                              | COMMANDER PRO                                                                                                                                         | COMMANDER CORE                                                             | COMMANDER CORE XT                                                                                                                                     |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Upp till 6 st. RGB-fläktar, endast RGB-belysningskontroll | Upp till 6 st. RGB-fläktar, endast RGB-belysningskontroll (kräver RGB LED-hubb, säljs separat) | Upp till 12 st. RGB-fläktar för RGB-belysningskontroll (kräver RGB LED-hubb, säljs separat)<br><br>Upp till 6 st. fläktar för fläkthastighetsstyrning | Upp till 6 st. RGB-fläktar för RGB-belysnings- och fläkthastighetsstyrning | Upp till 12 st. RGB-fläktar för RGB-belysningskontroll (kräver RGB LED-hubb, säljs separat)<br><br>Upp till 6 st. fläktar för fläkthastighetsstyrning |

# PÅKREVD MASKINVARE

Stjernetrekker (ikke inkludert i viftesettet, selges separat)



Korte viftemonteringsskruer



Lange viftemonteringsskruer (\*brukes ved installasjon av vifte på en radiator, ikke inkludert i viftesettet, selges separat)

## VIFTEINSTALLASJON

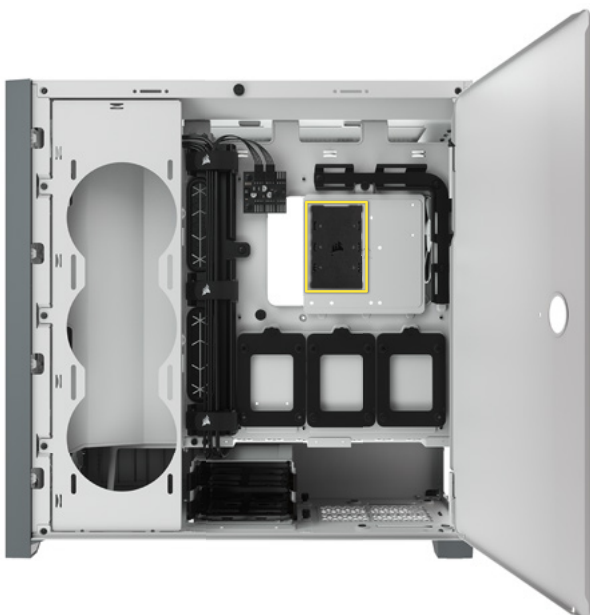
### 1. Slå av datamaskinen



Slå av systemet før du installerer ML RGB ELITE-viftene og Lighting Node CORE.

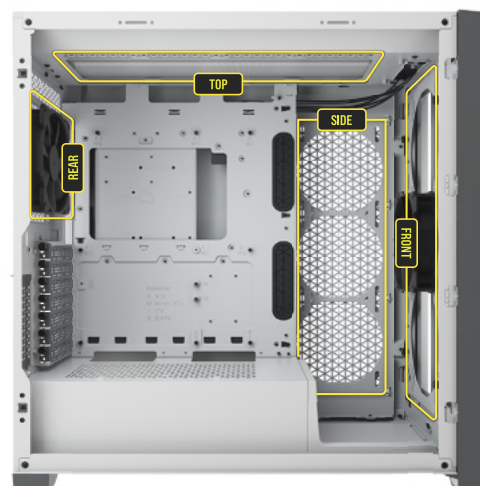
### 2. Monter Lighting Node CORE

Finn en plassering for Lighting Node CORE som gjør at viftenes RGB LED-kabler når Lighting Node CORE, og monter den deretter med de medfølgende monteringsstrimlene.



### 3. Monter ML RGB ELITE

Monter viftene inne i kabinettet med de medfølgende monteringsskruene. Monteringssteder for vifter varierer avhengig av kabinettprodusent.



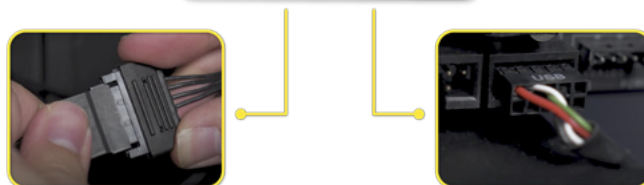
#### 4. Koble til ML RGB ELITE

Koble den 4-pinner RGB-kontakten inn i Lighting Node CORE i rekkefølge fra port nr. 1 til port nr. 6.



#### 5. Koble til Lighting Node CORE

Koble den 9-pinner USB-kabelen fra Lighting Node CORE inn i en tilgjengelig intern USB 2.0-kontakt på hovedkortet eller USB-huben. Koble SATA-strømkontakten til en tilgjengelig SATA-kontakt fra strømforsyningen.



## OPPSETT AV iCUE

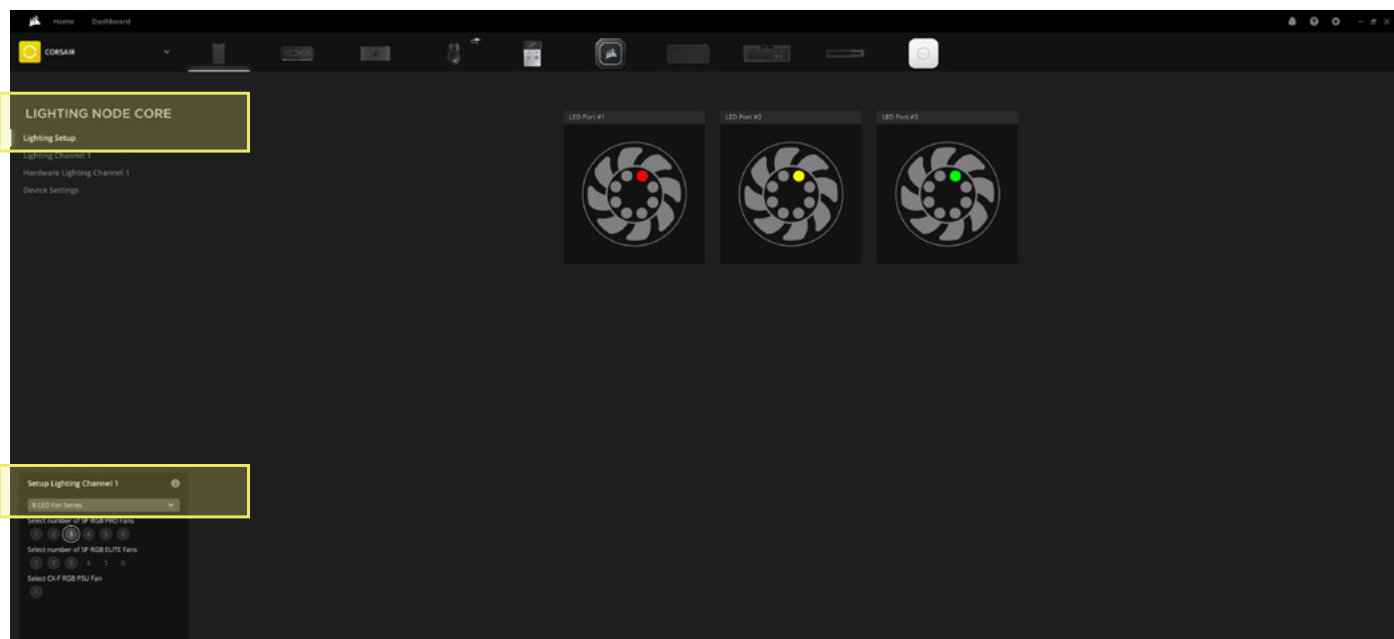
#### 6. Installer iCUE

Klikk på bildet for å laste ned CORSAIRs nyeste iCUE-programvare.



## 7. Konfigurere iCUE

Når iCUE er installert, velger du “8-LED Fan Series” på siden Lighting Setup under Lighting Node CORE



## YTTERLIGERE OPPSETT

Besøk CORSAIR LAB for ytterligere oppsett og konfigurasjon av iCUE.



| LIGHTING NODE CORE                               | LIGHTING NODE PRO                                                                     | COMMANDER PRO                                                                                                                                     | COMMANDER CORE                                                          | COMMANDER CORE XT                                                                                                                                 |
|--------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Opptil 6x RGB-vifter, kun RGB-belysningskontroll | Opptil 6x RGB-vifter, kun RGB-belysningskontroll (krever RGB LED-hub, selges separat) | Opptil 12x RGB-vifter, kun RGB-belysningskontroll (krever RGB LED-hub, selges separat)<br><br>Opptil 6x vifter for hastighetskontroll for viftene | Opptil 6x RGB-vifter for RGB-belysning og hastighetskontroll for vifter | Opptil 12x RGB-vifter, kun RGB-belysningskontroll (krever RGB LED-hub, selges separat)<br><br>Opptil 6x vifter for hastighetskontroll for viftene |

## HARDWARE RICHIESTO

Cacciavite Phillips (non incluso nel kit ventole;  
venduto separatamente)



Viti di montaggio  
corte per ventole



Viti di montaggio lunghe per ventole lunghe (\*utilizzate per  
installare le ventole su un radiatore; non incluse nel kit ventole;  
vendute separatamente)

## INSTALLAZIONE DELLE VENTOLE

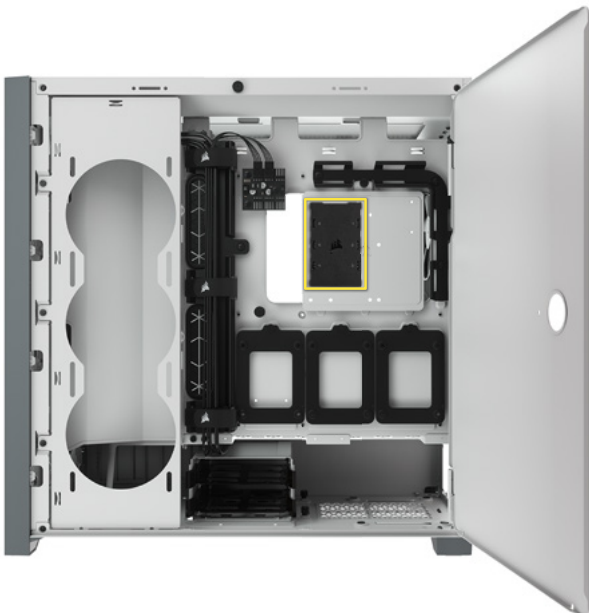
### 1. Spegner il computer



Spegnere il sistema prima di procedere all'installazione delle  
ventole ML RGB ELITE e di Lighting Node CORE.

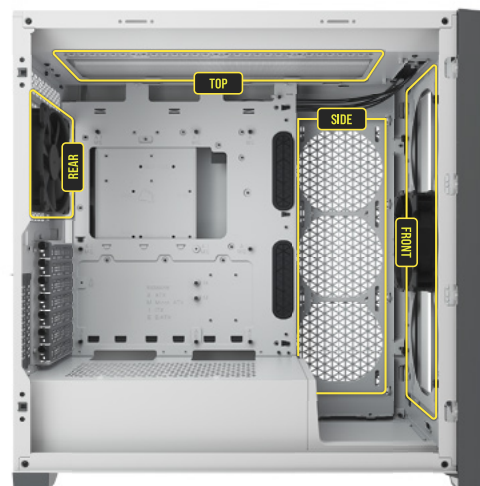
### 2. Montaggio di Lighting Node CORE

Trovare una posizione per il Lighting Node CORE che consenta ai cavi delle ventole RGB LED di raggiungere il Lighting Node CORE, quindi montarle con le apposite fascette di montaggio.



### 3. Montaggio di ML RGB ELITE

Montare le ventole all'interno del case con le viti di montaggio fornite. Le posizioni degli attacchi ventole variano in funzione del produttore del case.





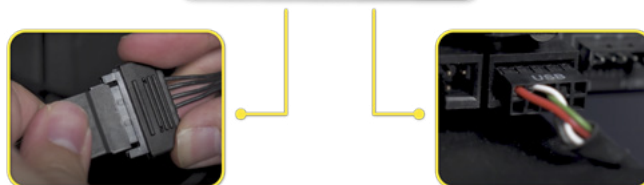
#### 4. Connessione di ML RGB ELITE

Collegare il connettore RGB a 4 pin al Lighting Node CORE in sequenza dalla porta n. 1 alla porta n. 6.



#### 5. Connessione di Lighting Node CORE

Collegare il cavo USB a 9 pin dal Lighting Node CORE a un header USB 2.0 interno disponibile sulla scheda madre o hub USB. Collegare il connettore di alimentazione SATA a un connettore SATA libero dell'alimentatore.



## CONFIGURAZIONE DI iCUE

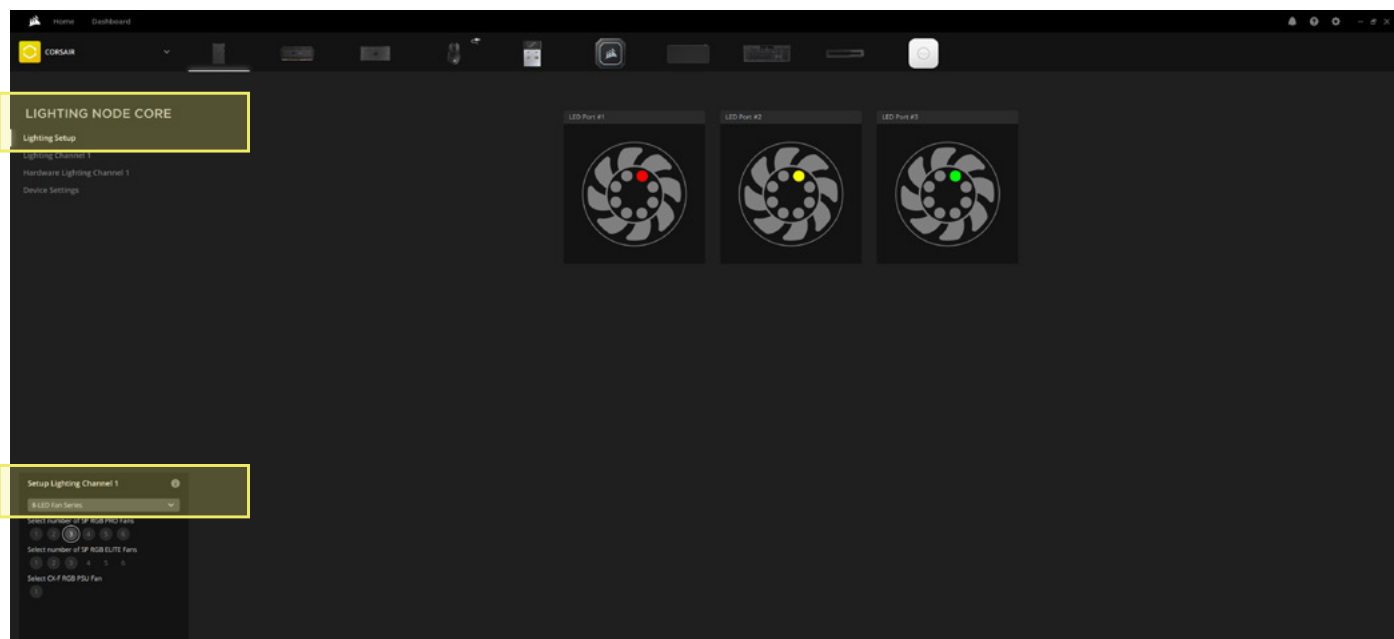
#### 6. Installazione di iCUE

Fare clic sull'immagine per scaricare il software iCUE più recente di CORSAIR.



## 7. Configurazione di iCUE

Dopo aver installato iCUE, selezionare “8-LED Fan Series” (ventole a 8 LED) nella pagina di Configurazione illuminazione in Lighting Node CORE



## CONFIGURAZIONE AGGIUNTIVA

Visitare il nostro **CORSAIR LAB** per l'impostazione e la configurazione aggiuntive di iCUE.



| LIGHTING NODE CORE                                          | LIGHTING NODE PRO                                                                                         | COMMANDER PRO                                                                                                                                                                     | COMMANDER CORE                                                                  | COMMANDER CORE XT                                                                                                                                                                 |
|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fino a 6 ventole RGB, solo controllo dell'illuminazione RGB | Fino a 6 ventole RGB, solo controllo dell'illuminazione RGB (richiede hub LED RGB, venduto separatamente) | Fino a 12 ventole RGB per il controllo dell'illuminazione RGB (richiede hub LED RGB, venduto separatamente)<br><br>Fino a 6 ventole per il controllo della velocità delle ventole | Fino a 6 ventole RGB per il controllo dell'illuminazione RGB e velocità ventole | Fino a 12 ventole RGB per il controllo dell'illuminazione RGB (richiede hub LED RGB, venduto separatamente)<br><br>Fino a 6 ventole per il controllo della velocità delle ventole |

## HARDWARE NECESARIO

Destornillador de cabeza Phillips (no se incluye en el kit del ventilador, se vende por separado)



Tornillos cortos de montaje del ventilador



Tornillos largos de montaje del ventilador (\*se usan al instalar ventiladores en un radiador. No se incluyen en el kit del ventilador, se venden por separado)

## INSTALACIÓN DEL VENTILADOR

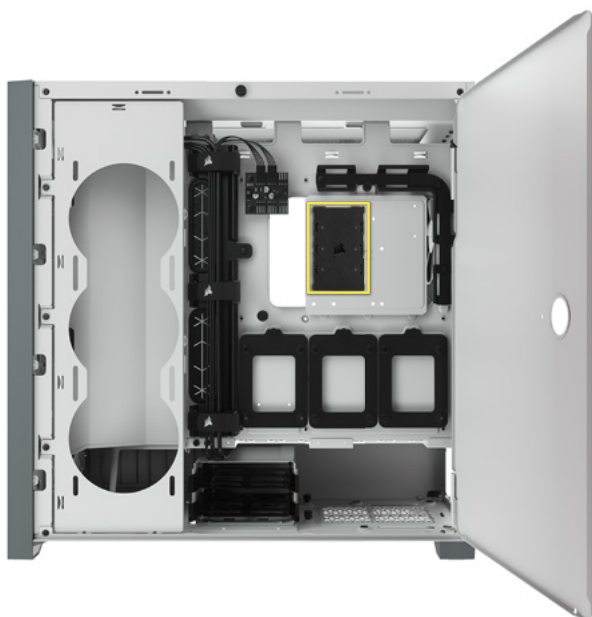
### 1. Apague el ordenador



Apague el sistema antes de instalar los ventiladores ML RGB ELITE y Lighting Node CORE.

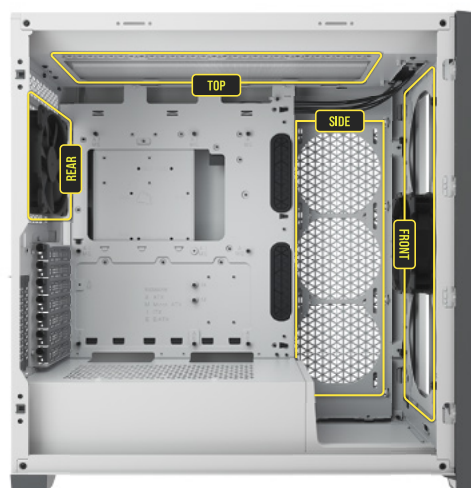
### 2. Coloque Lighting Node CORE

Encuentre una ubicación para el Lighting Node CORE que permita que los cables del LED RGB del ventilador lleguen al Lighting Node CORE. A continuación, colóquelo con las tiras de montaje incluidas.



### 3. Coloque los ML RGB ELITE

Monte los ventiladores en el interior del chasis con los tornillos de montaje incluidos. La posiciones de montaje del ventilador variará en función del fabricante del chasis.



#### 4. Conecte los ML RGB ELITE

Conecte el conector RGB de 4 pines en el Lighting Node CORE en orden secuencial del puerto 1 al 6.



#### 5. Conecte Lighting Node CORE

Conecte el cable USB de 9 pines del Lighting Node CORE a cualquier cabezal USB 2.0 interno disponible en la placa base o concentrador USB. Conecte el conector de alimentación SATA a cualquier conector SATA disponible de la fuente de alimentación.



## CONFIGURACIÓN DE iCUE

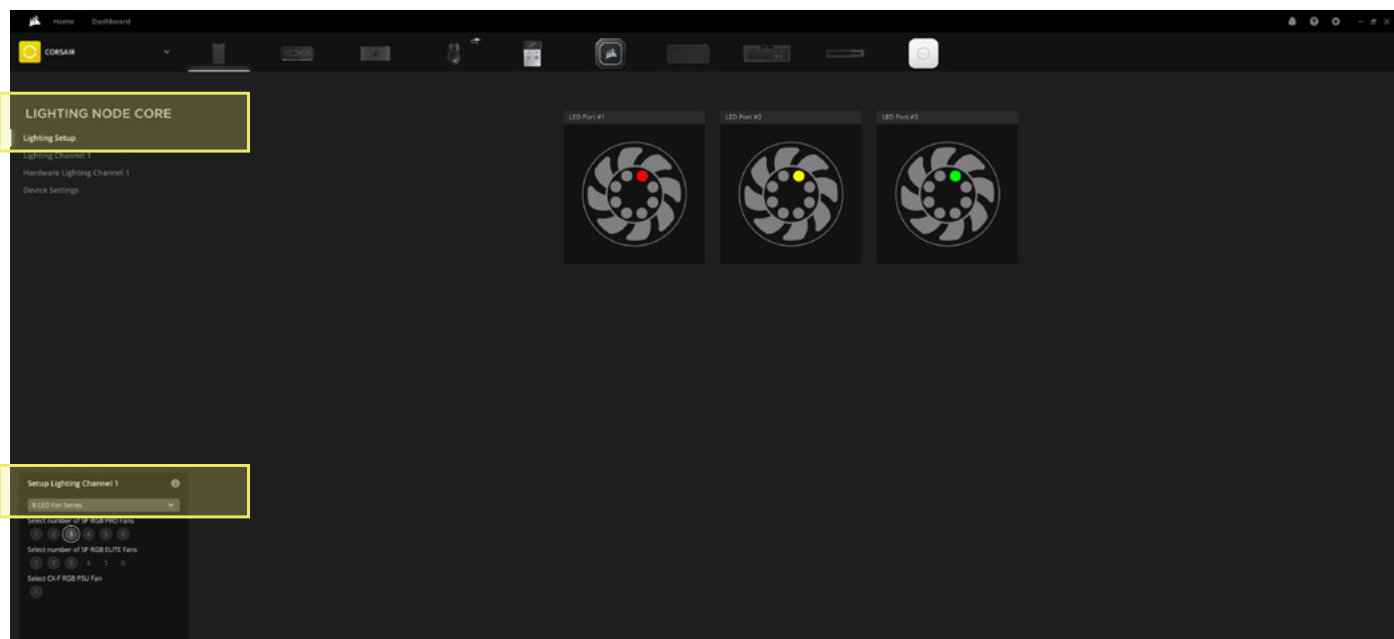
#### 6. Instale iCUE

Haga clic en la imagen para descargar la versión más reciente del software iCUE de CORSAIR.



## 7. Configure iCUE

Cuando haya instalado iCUE, seleccione “8-LED Fan Series” en la página de configuración de la iluminación de Lighting Node CORE.



## CONFIGURACIÓN ADICIONAL

Visite CORSAIR LAB para configurar iCUE más a fondo.



| LIGHTING NODE CORE                                        | LIGHTING NODE PRO                                                                                                         | COMMANDER PRO                                                                                                                                                                                    | COMMANDER CORE                                                                           | COMMANDER CORE XT                                                                                                                                                                                |
|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hasta 6 ventiladores RGB, solo control de iluminación RGB | Hasta 6 ventiladores RGB, solo control de iluminación RGB (se necesita un concentrador LED RGB que se vende por separado) | Hasta 12 ventiladores RGB para control de iluminación RGB (se necesita un concentrador LED RGB que se vende por separado)<br><br>Hasta 6 ventiladores para controlar la velocidad del ventilador | Hasta 6 ventiladores RGB para controlar la velocidad del ventilador y la iluminación RGB | Hasta 12 ventiladores RGB para control de iluminación RGB (se necesita un concentrador LED RGB que se vende por separado)<br><br>Hasta 6 ventiladores para controlar la velocidad del ventilador |

# HARDWARE NECESSÁRIO

Chave de fendas Phillips (não incluída no kit de ventoinha; vendida separadamente)



Parafusos curtos de fixação da ventoinha



Parafusos longos de fixação da ventoinha (\*utilizados ao instalar ventoinhas num radiador; não incluídos no kit de ventoinha; vendidos separadamente)

## INSTALAÇÃO DE VENTONHA

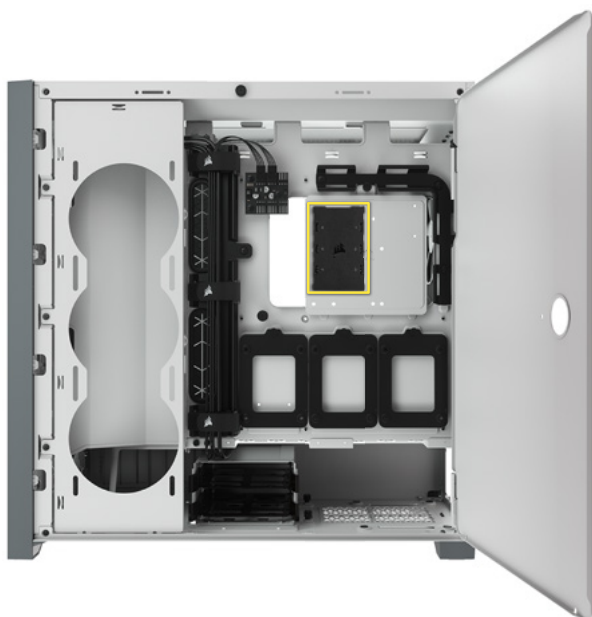
### 1. Desligue o computador



Desligue o sistema antes de instalar as ventoinhas ML RGB ELITE e o Lighting Node CORE.

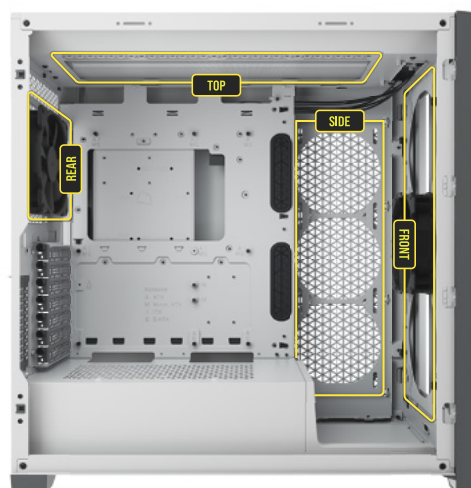
### 2. Monte o Lighting Node CORE

Encontre um local para o Lighting Node CORE que permita que os cabos LED RGB da ventoinha cheguem ao Lighting Node CORE e, em seguida, monte-o com as fitas de montagem fornecidas.



### 3. Monte o ML RGB ELITE

Monte as ventoinhas no interior da caixa com os parafusos de fixação fornecidos. As localizações de montagem das ventoinhas variam consoante o fabricante da caixa.





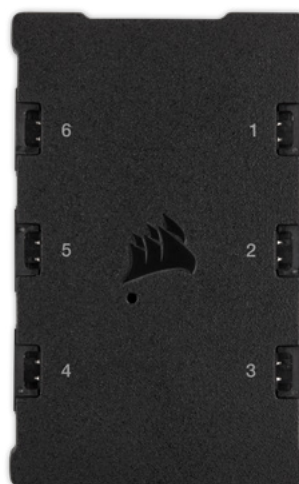
#### 4. Ligue o ML RGB ELITE

Ligue o conector RGB de 4 pinos ao Lighting Node CORE por ordem sequencial da porta #1 até à porta #6.



#### 5. Ligue o Lighting Node CORE

Ligue o cabo USB de 9 pinos do Lighting Node CORE a um coletor USB 2.0 interno disponível na placa principal ou hub USB. Ligue o conector de alimentação SATA a um conector SATA disponível da fonte de alimentação.



## CONFIGURAÇÃO DE iCUE

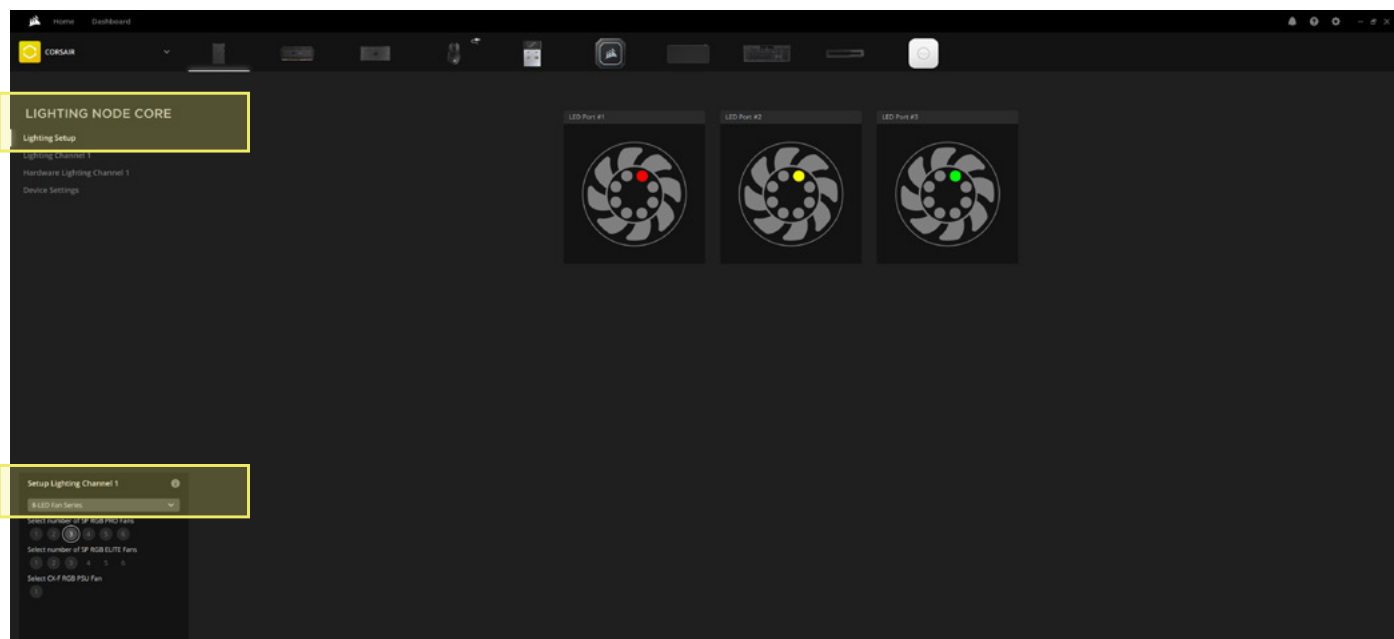
#### 6. Instale o iCUE

Clique na imagem para transferir o software iCUE mais recente da CORSAIR.



## 7. Configure o iCUE

Depois de o iCUE estar instalado, selecione “Série de Ventoinha 8 LEDs” na página Configuração de iluminação no Lighting Node CORE



## CONFIGURAÇÃO ADICIONAL

Visite o CORSAIR LAB para configuração adicional de iCUE.



| LIGHTING NODE CORE                                      | LIGHTING NODE PRO                                                                                         | COMMANDER PRO                                                                                                                                                             | COMMANDER CORE                                                                 | COMMANDER CORE XT                                                                                                                                                         |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Até 6 ventoinhas RGB, apenas controlo de iluminação RGB | Até 6 ventoinhas RGB, apenas controlo de iluminação RGB (necessita do hub LED RGB, vendido separadamente) | Até 12 ventoinhas RGB para controlo de iluminação RGB (necessita do hub LED RGB, vendido separadamente)<br><br>Até 6 ventoinhas para controlo de velocidade de ventoinhas | Até 6 ventoinhas RGB para iluminação RGB e controlo de velocidade da ventoinha | Até 12 ventoinhas RGB para controlo de iluminação RGB (necessita do hub LED RGB, vendido separadamente)<br><br>Até 6 ventoinhas para controlo de velocidade de ventoinhas |

## WYMAGANY SPRZĘT

Wkrętak krzyżakowy (do nabycia osobno)



Krótkie śruby  
montażowe  
wentylatora



Długie śruby montażowe wentylatora (stosowane  
podczas instalowania wentylatorów na radiatorze, do  
nabycia osobno)

## INSTALACJA WENTYLATORÓW

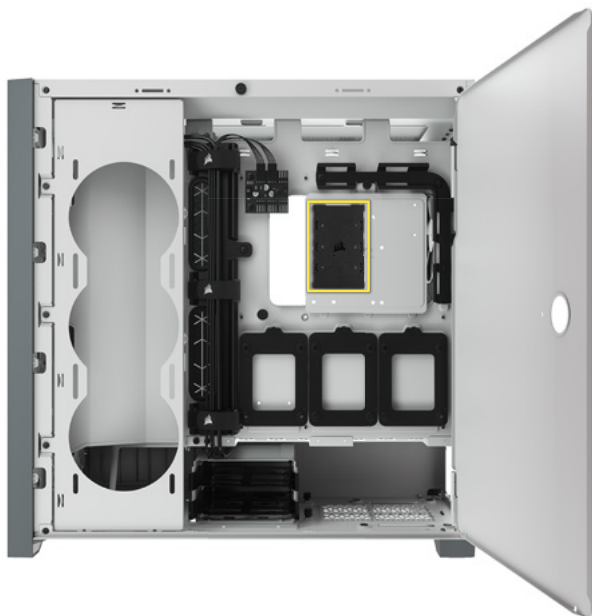
### 1. Wyłącz komputer



Przed instalacją wentylatorów ML RGB ELITE i kontrolera Lighting Node CORE wyłącz komputer.

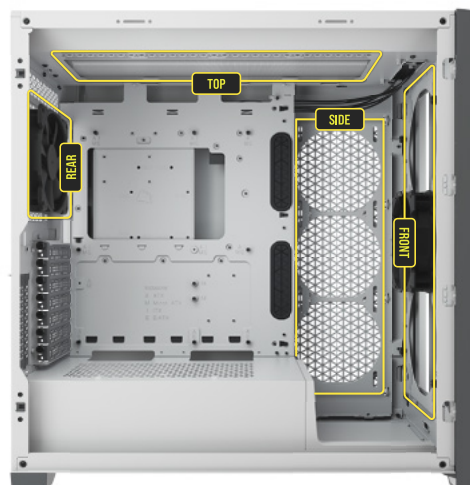
### 2. Zainstaluj kontroler Lighting Node CORE

Znajdź miejsce na kontroler Lighting Node CORE, które umożliwi podłączenie do niego przewodów RGB LED wentylatorów, a następnie zamocuj go przy użyciu dodanych w komplecie pasków montażowych.



### 3. Zainstaluj wentylatory ML RGB ELITE

Zamocuj wentylatory wewnątrz obudowy przy użyciu dodanych w komplecie śrub montażowych. Miejsca mocowania wentylatorów zależą od producenta obudowy.



#### 4. Podłącz wentylatory ML RGB ELITE

Podłącz 4-pinowe złącze RGB do kontrolera Lighting Node CORE kolejno, od portu nr 1 do portu nr 6.



#### 5. Podłącz kontroler Lighting Node CORE

Podłącz 9-pinowy przewód USB z kontrolera Lighting Node CORE do dostępnego wewnętrznego gniazda USB 2.0 na płycie głównej lub koncentratora USB. Podłącz złącze zasilania SATA do dostępnego złącza SATA z zasilacza.



## KONFIGURACJA iCUE

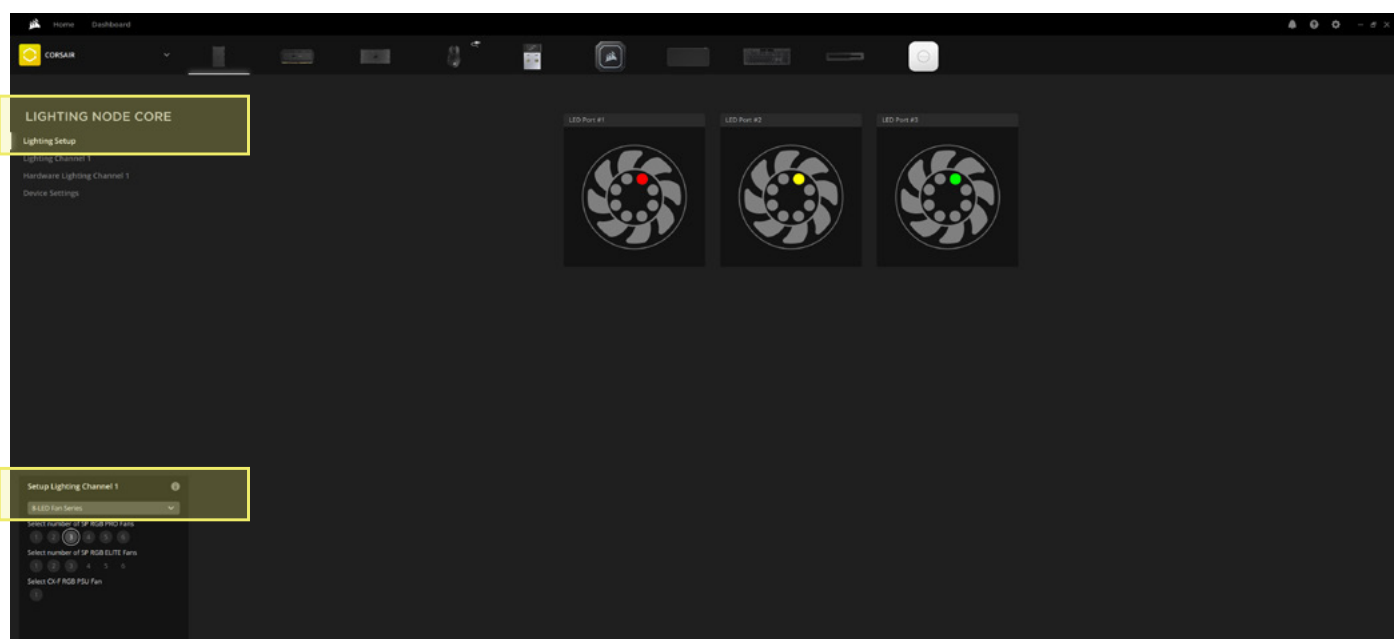
#### 6. Zainstaluj iCUE

Kliknij obraz, aby pobrać najnowsze oprogramowanie iCUE firmy CORSAIR.



## 7. Skonfiguruj iCUE

Po zainstalowaniu iCUE wybierz „8-LED Fan Series” (Seria wentylatorów z 8 diodami LED) na stronie Lighting Setup (Konfiguracja podświetlenia) w sekcji Lighting Node CORE.



## DODATKOWA KONFIGURACJA

Aby uzyskać dodatkowe informacje o konfiguracji iCUE, odwiedź **CORSAIR LAB**.



| LIGHTING NODE CORE                                          | LIGHTING NODE PRO                                                                                              | COMMANDER PRO                                                                                                                                                                 | COMMANDER CORE                                                                    | COMMANDER CORE XT                                                                                                                                                             |
|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Do 6x wentylatorów RGB, sterowanie tylko podświetleniem RGB | Do 6x wentylatorów RGB, sterowanie tylko podświetleniem RGB (wymaga koncentratora RGB LED, sprzedawany osobno) | Do 12x wentylatorów RGB ze sterowaniem podświetleniem RGB (wymaga koncentratora RGB LED, sprzedawany osobno)<br><br>Do 6x wentylatorów ze sterowaniem szybkością wentylatorów | Do 6 wentylatorów RGB ze sterowaniem podświetleniem RGB i szybkością wentylatorów | Do 12x wentylatorów RGB ze sterowaniem podświetleniem RGB (wymaga koncentratora RGB LED, sprzedawany osobno)<br><br>Do 6x wentylatorów ze sterowaniem szybkością wentylatorów |



# НЕОБХОДИМОЕ ОБОРУДОВАНИЕ

Крестовая отвертка (не входит в комплект вентилятора; приобретается отдельно)



Короткие  
крепежные винты  
вентилятора



Длинные крепежные винты вентилятора (\* используются при установке вентиляторов на радиатор; не входят в комплект вентилятора; приобретается отдельно)

## УСТАНОВКА ВЕНТИЛЯТОРА

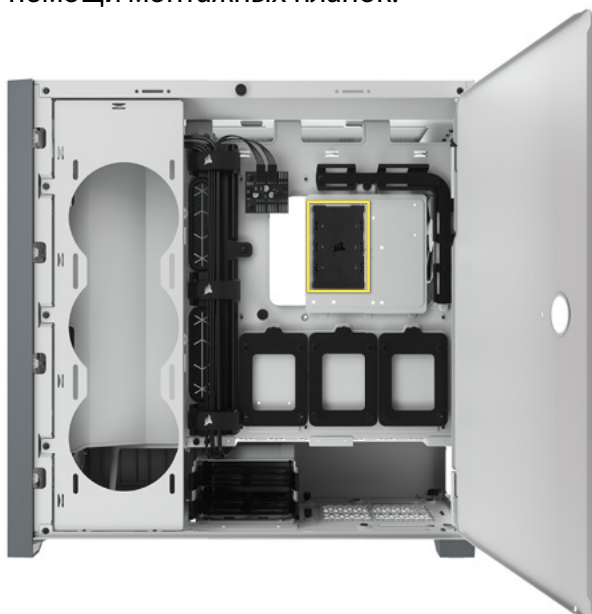
### 1. Выключите компьютер



Выключите систему перед установкой вентиляторов ML RGB ELITE и модуля Lighting Node CORE.

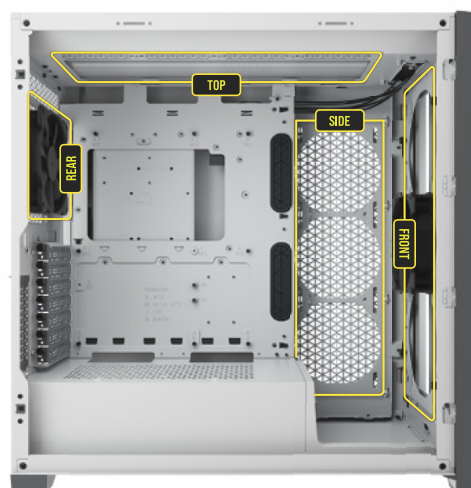
### 2. Установите Lighting Node CORE

Выберите место для установки модуля Lighting Node CORE таким образом, чтобы длины кабелей для RGB-светодиодов вентиляторов хватило для подключения к модулю Lighting Node CORE. Затем установите его при помощи монтажных планок.



### 3. Установите ML RGB ELITE

Установите вентиляторы внутри корпуса с помощью крепежных винтов из комплекта. Расположение креплений вентиляторов во многом зависит от производителя корпуса.





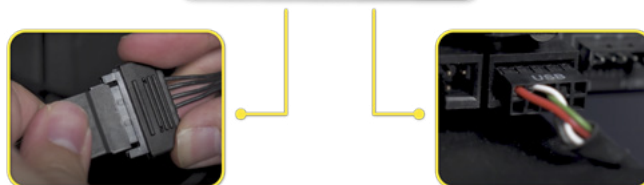
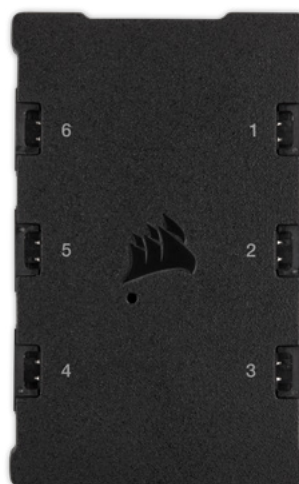
#### 4. Установите ML RGB ELITE

Подключите 4-контактный разъем RGB к модулю Lighting Node CORE, используя разъемы в последовательном порядке (1–6).



#### 5. Подключите модуль Lighting Node CORE

Подключите 9-контактный кабель USB модуля Lighting Node CORE к внутреннему разъему USB 2.0 на материнской плате или концентраторе USB. Подсоедините разъем питания SATA к любому разъему SATA блока питания.



## НАСТРОЙКА iCUE

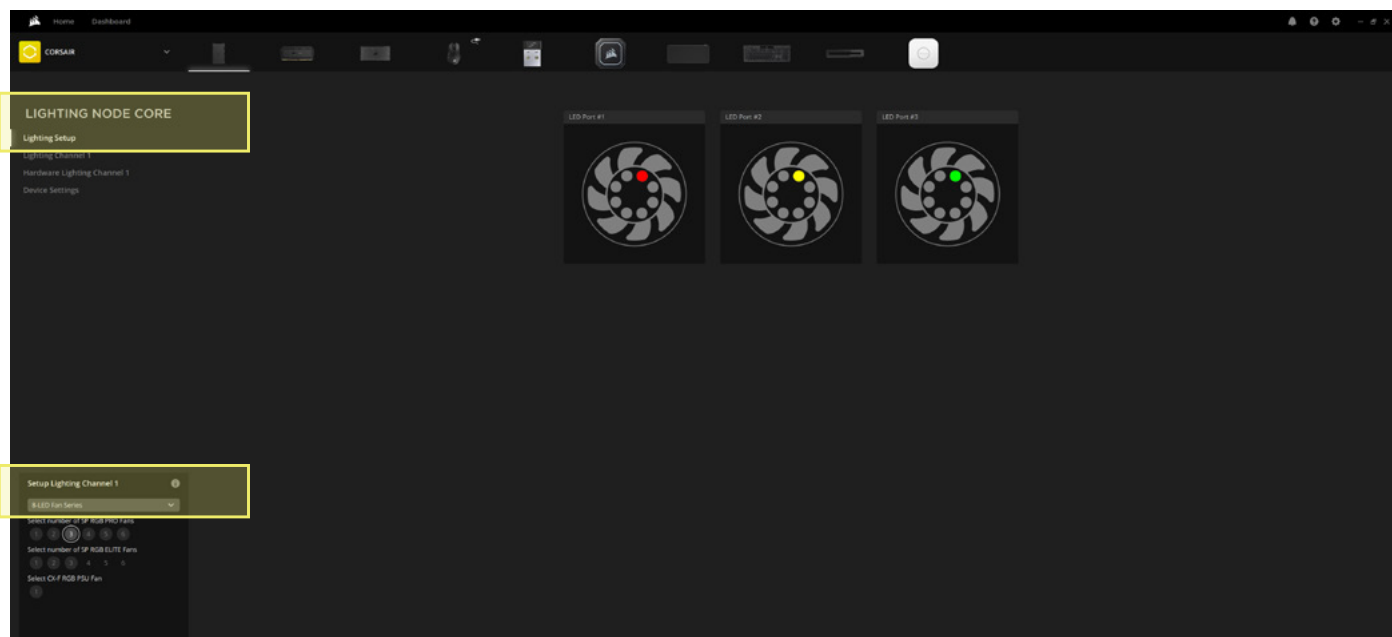
#### 6. Установите iCUE

Щелкните изображение для загрузки актуальной версии ПО CORSAIR iCUE.



## 7. Настройте iCUE

После установки iCUE выберите пункт «Серия Вентиляторов с 8 LED» на странице «Настройки подсветки» в разделе Lighting Node CORE



## ДОПОЛНИТЕЛЬНАЯ НАСТРОЙКА

Посетите [CORSAIR LAB](#) для получения дополнительной информации о настройке и конфигурации iCUE.



| МОДУЛЬ<br>LIGHTING NODE<br>CORE                                  | МОДУЛЬ<br>LIGHTING NODE<br>PRO                                                                                                                  | COMMANDER<br>PRO                                                                                                                                                                         | COMMANDER<br>CORE                                               | COMMANDER<br>CORE XT                                                                                                                                                                     |
|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| До шести RGB-вентиляторов, только с регулированием RGB-подсветки | До шести RGB-вентиляторов, только с регулированием RGB-подсветки (необходимо использовать концентратор RGB-светодиодов, приобретается отдельно) | До 12 RGB-вентиляторов с регулированием RGB-подсветки (необходимо использовать концентратор RGB-светодиодов, приобретается отдельно)<br><br>До шести вентиляторов (с контролем скорости) | До шести RGB-вентиляторов с RGB-подсветкой и контролем скорости | До 12 RGB-вентиляторов с регулированием RGB-подсветки (необходимо использовать концентратор RGB-светодиодов, приобретается отдельно)<br><br>До шести вентиляторов (с контролем скорости) |

# 所需的硬件

十字头螺丝刀 (未随附于风扇套件中; 单独出售)



短风扇安装螺丝



长风扇安装螺丝 (\*在散热器上安装风扇时使用; 未随附于风扇套件中; 单独出售)

## 风扇安装

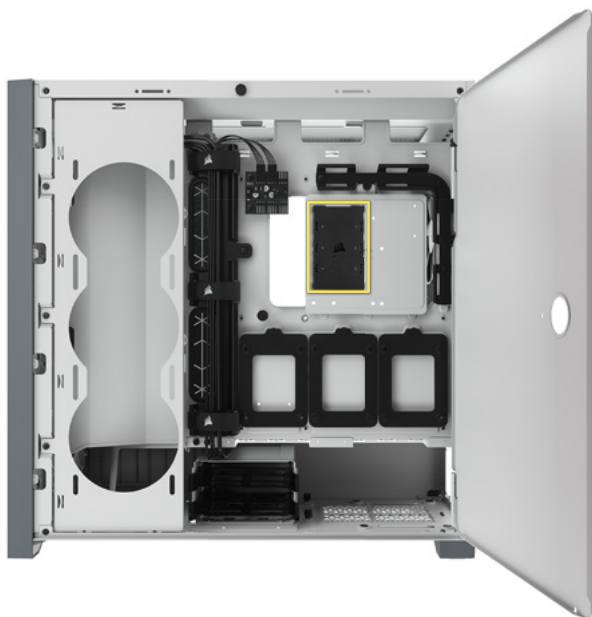
### 1. 关闭电脑



安装ML RGB ELITE风扇和Lighting Node CORE前，请先关闭您的系统。

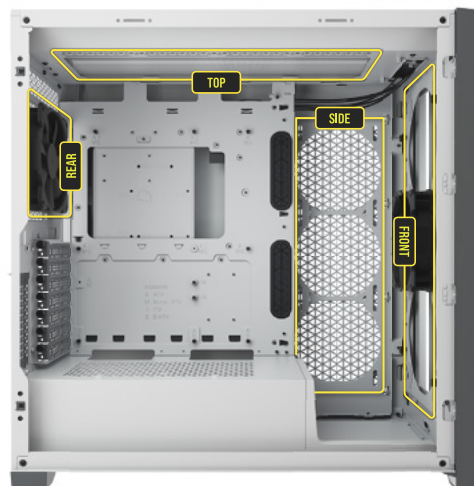
### 2. 安装Lighting Node CORE

为Lighting Node CORE找到一处位置，在该位置上，RGB LED电缆可以连接到Lighting Node CORE，然后使用随附的安装条对其进行安装。



### 3. 安装ML RGB ELITE

使用随附的安装螺丝将风扇安装到机箱内。风扇支架的位置可能因机箱制造商不同而存在差异。



#### 4. 连接ML RGB ELITE

按照从端口1到端口6的顺序, 将4引脚RGB连接器连接到Lighting Node CORE。



#### 5. 连接Lighting Node CORE

将Lighting Node CORE的9引脚USB电缆插入主板内或USB集线器上可用的USB 2.0接头中。将SATA电源连接器连接到电源上的可用SATA接头。



## iCUE设置

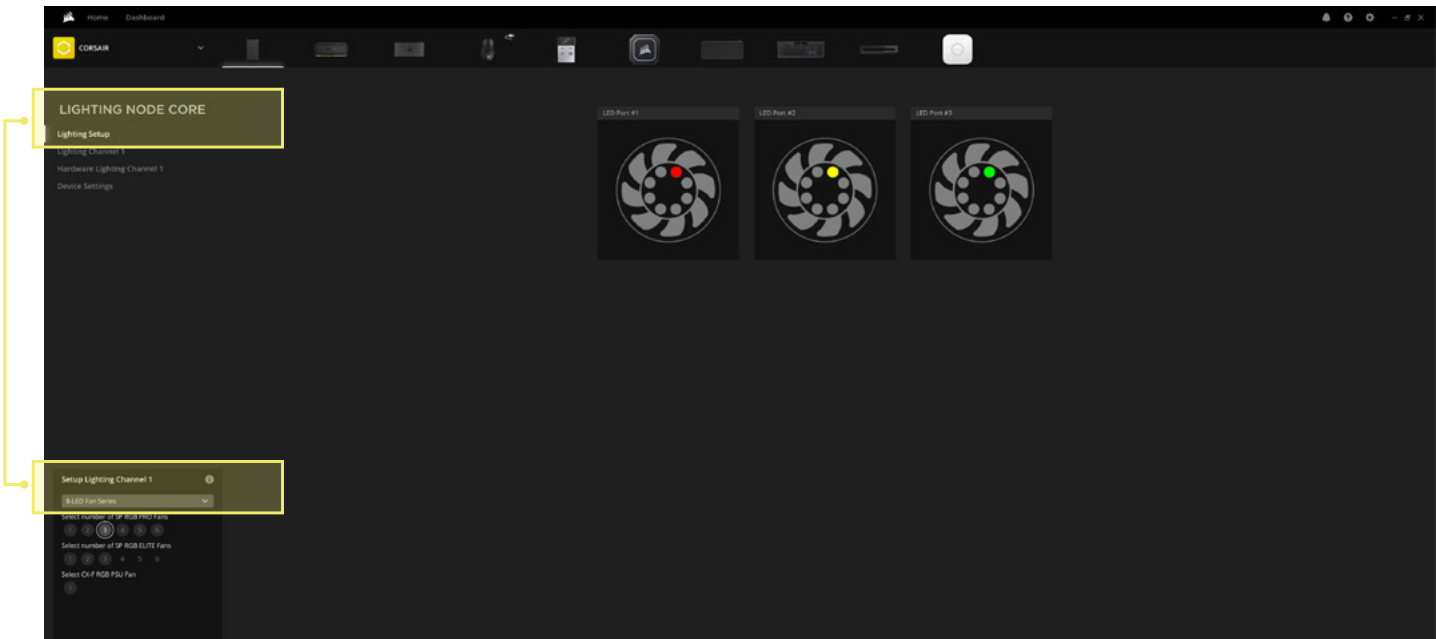
#### 6. 安装iCUE

点击图像下载美商海盗船的新版iCUE软件。



## 7. 配置iCUE

安装iCUE后，在Lighting Node CORE下的Lighting Setup页面中选择“8-LED Fan Series”



## 其他设置

请访问我们的CORSAIR LAB以了解更多iCUE设置和配置。



| LIGHTING NODE CORE      | LIGHTING NODE PRO                              | COMMANDER PRO                                                                       | COMMANDER CORE                    | COMMANDER CORE XT                                                                   |
|-------------------------|------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------|
| 多达6个RGB风扇，<br>仅限RGB灯光控制 | 多达6个RGB风扇，<br>仅限RGB灯光控制<br>(需要RGB LED集线器，单独出售) | 可对多达12个RGB<br>风扇进行RGB灯<br>光控制(需要RGB<br>LED集线器，单独出<br>售)<br><br>可对多达6个风扇进<br>行风扇速度控制 | 可对多达6个RGB风<br>扇进行RGB灯光和<br>风扇速度控制 | 可对多达12个RGB<br>风扇进行RGB灯<br>光控制(需要RGB<br>LED集线器，单独出<br>售)<br><br>可对多达6个风扇进<br>行风扇速度控制 |

## ةبولطملا ةزهجالا

عابئي؛ حوارملا ةعومجم يف أنمضم سيل) سبيليف سآرب ك فم  
(لصفنم لكشب



ريغ؛ تَربملا ىلع حوارملا بيكرت دنع مدختسُت\*) حوارملا تيبتتل ةليوط ي غارب  
(لصفنم لكشب عابُت؛ حوارملا ةعومجم يف ةنمضم

تيبتت ي غارب  
حوارملا ةريصق

## ةحورملا بيكرت

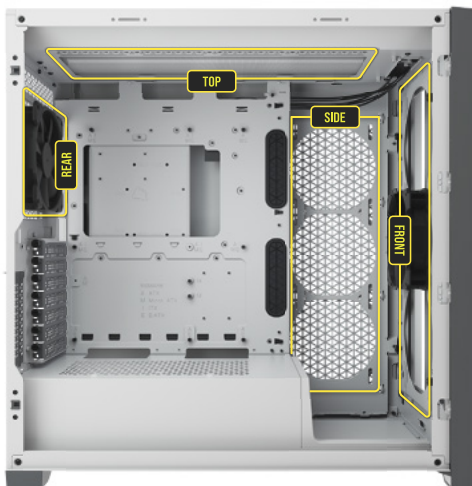
1. رتوي بمكلا ليغشت فاقايإ

ةاضإلا ةدحوو ML RGB ELITE حوارملا تيبتت لبك كمظن ليغشت فاقايإ مق  
LIGHTING NODE CORE



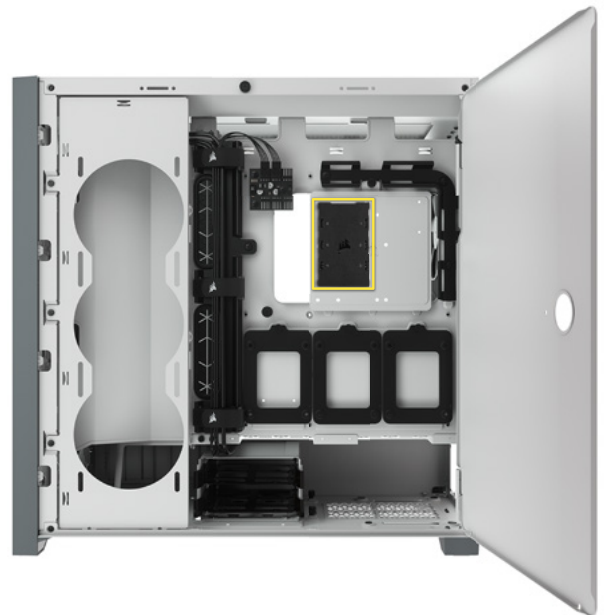
### 3. ML RGB ELITE حوارملا تيبتت

مادختساب ةبلعلال لخاد حوارملا تَبت  
فلتختس. ةرفوتملا تيبتتل ي غارب  
ةكرشال بسح ةحورملا تيبتت عقاوم  
ةبلعلال ةعنصملا



### 2. LIGHTING NODE CORE ةاضإلا ةدحوو بيكرت

Lighting Node CORE ةاضإلا ةدحوو ناكم نع ثحب  
ةدحو ىلإ حوارملا ةصاخلا RGB LED تالباك لوصوب حمسي  
طئارش اهتبتت م، Lighting Node CORE ةاضإلا  
ةرفوتملا تيبتتلا



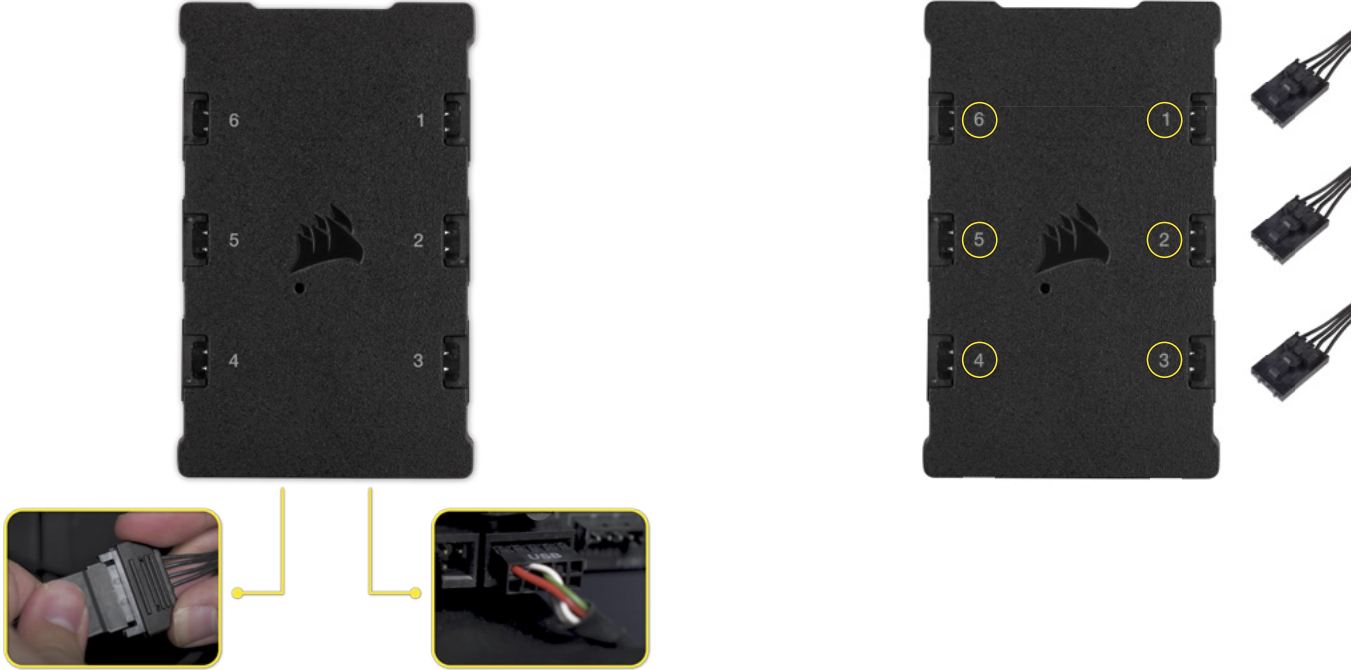


#### 4. ML RGB ELITE جوارم لي صوت

ةدحوب نان سَأ 4 ب دَوَزم لـ RGB لـصوم لـ ص  
بـيـتـرـتـب Lighting Node CORE ةءاضإلـا  
6 مـقـر ذـفـنـمـلـا إـلـا 1 مـقـر ذـفـنـمـلـا نـم يـلـسـلـسـت

#### 5. LIGHTING NODE CORE ةءاضإلـا ةدحو و لي صوت

ةءاضإلـا ةدحو و نـم نان سَأ 9 نـم نوكمـلـا USB لـبـاك لـ ص  
يـلـخـادـلـا USB 2.0 سَأ رـى إـلـا LIGHTING NODE CORE  
ةقـاطـلـا لـصوم لـ ص . USB رـوحـم و أـةـيـسـيـئـرـلـا ةـحـولـلـا يـف رـفـوتـمـلـا  
كـيـدـل ةقـاطـلـاب دادمـلـا ةدحو و يـف رـفـوتـمـلـا SATA لـصومـب SATA



## iCUE دادعإ

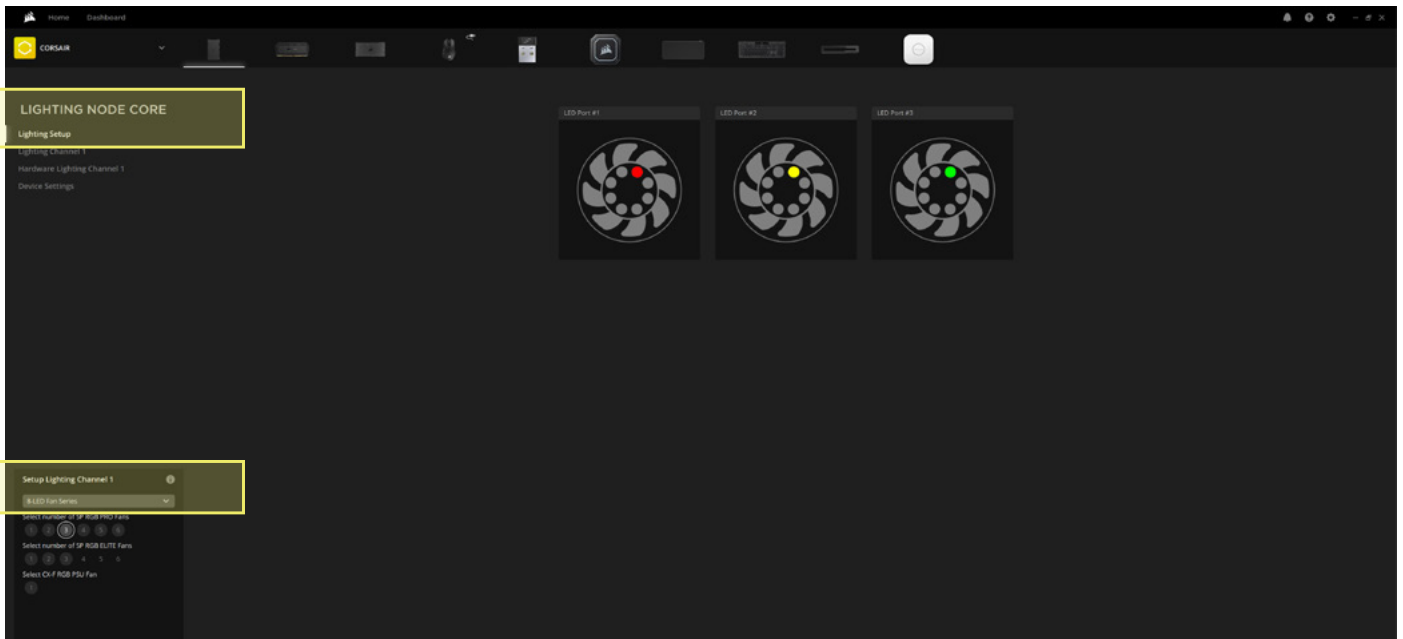
#### 6. iCUE تـيـبـثـت

CORSAIR. نـم iCUE جـمـارب ثـدحـأ لـيـزـنـتـل ةـروـصـلـا يـلـع رـقـنـا





ةدحو و نمض ةءاضإلا دادعإ ةحفص يف "8-LED حاورم ةلسلس" ددح، iCUE تيبتت درجمب  
ةءاضإلا Lighting Node CORE



## يفاضإلا دادعإلا



iCUE ل يفاضإلا نيوكتو دادعإلا ل لوصحلل CORSAIR LAB ةرايز ىجرت

| ةءاضإلا ةدحو<br>LIGHTING NODE<br>CORE               | ةءاضإلا ةدحو<br>LIGHTING NODE<br>PRO                                                                 | زاهج<br>COMMANDER<br>PRO                                                                            | زاهج<br>COMMANDER<br>CORE                                              | زاهج<br>COMMANDER<br>CORE XT                                                                        |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| RGB حوارم 6 ل ل ل صي ام<br>ةءاضإلا يف مكحتلا<br>طقف | RGB حوارم 6 ل ل ل صي ام<br>RGB ةءاضإلا يف مكحتلا<br>روحم بلطتي طقف<br>لكشب عابئي، RGB LED<br>(لصفنم) | ةحورم 12 ل ل ل ل صي ام<br>ةءاضإلا يف مكحتلا ل ل<br>RGB روحم بلطتي<br>لكشب عابئي، RGB LED<br>(لصفنم) | RGB حوارم 6 ل ل ل صي ام<br>RGB ةءاضإلا يف مكحتلا ل ل<br>ةحورم ل ل عرسو | ةحورم 12 ل ل ل ل صي ام<br>ةءاضإلا يف مكحتلا ل ل<br>RGB روحم بلطتي<br>لكشب عابئي، RGB LED<br>(لصفنم) |
|                                                     |                                                                                                      | حوارم 6 ل ل ل ل صي ام<br>ةحورم ل ل عرسو يف مكحتلا ل ل                                               |                                                                        | حوارم 6 ل ل ل ل صي ام<br>ةحورم ل ل عرسو يف مكحتلا ل ل                                               |