

CYGNUS™

LED Luminaires
200W Model 6510
100W Model 7510



Table of Contents

Declaration of Conformity	5
Safety Notice	6
Introduction	16
Quick Start	17
Cygnus™ Operation.....	18
RGBMaster and RBGWhite Mode	18
Strobe Mode	18
Video (High Speed) Mode	19
Stand Alone Mode	19
Fixture Physical Setup	20
Mounting and Adjusting the Fixture	20
Connecting AC Power	20
Changing the Lenses	21
User Interface	23
Controls and Indicators	23
Menu Tree	24
Display Messages	25
DMX Channel Assignments	27
RDM Functionality	29
Flash Reprogramming	29
Table 1 - Strobe Effect Channel Color Jump Sequences	30
Cygnus Specifications.....	31

Appendix A Photometrics35
Appendix B Color Temperature Table36
Warranty Information39

Document Version

(V1.8) This document applies to Cygnus™ software V1.34 and higher for models 6510 and 7510.

Declaration of Conformity

Manufacturer Name: Wybron, Inc.

Manufacturer Address: 4830 List Drive, Colorado Springs, CO 80919

Equipment Name: Cygnus™ VN100, VN200, MF200, 100W, 200W LED
Luminaire

Equipment Model: 6500, 6501, 6510, 7500, 7510

This product is in conformity with the following standards:

Referenced Safety Standards

EN60598 – 1
EN60598 – 2 – 17

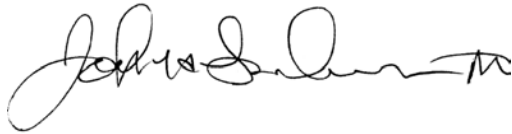
Referenced EMC Standards

EN55022
EN61000-6-3

following the provisions of the EU LV Directive 73/23/EEC and the EU EMC
Directive 89/336/EEC

I declare that the equipment specified above conforms to the above Directive(s)
and Standard(s).

Signature:



January 7, 2010

John Sondericker III

Vice President, Research and Development

Safety Notice

SAVE THESE INSTRUCTIONS READ AND FOLLOW ALL INSTRUCTIONS

- ❖ This manual gives step-by-step instructions for preparation, setup, and operation of the Cygnus™ LED luminaire.
- ❖ There is a potential risk of fire, electric shock or injury to persons if the product is not used as instructed.
- ❖ The Cygnus™ is to be used in an indoor environment only.

Product Modification Warning

Wybron, Inc. products are designed and manufactured to meet the requirements of United States and International safety standards. Modifications to the products could affect safety and render the product non-compliant to relevant safety standards.

Important Safety Instructions

Read this manual before powering or installing the fixture. Follow the safety precautions and observe all warnings in this manual and on the fixture. If you have questions about how to operate the fixture safely, please contact your Wybron dealer or call Wybron directly at 1-800-624-0146, or go to www.wybron.com.

To protect yourself and others from electric shock:

WARNING – THIS EQUIPMENT MUST BE EARTHED.

- ⚡ Protection against electric shock is assured only if the mains connected cord set is connected to a properly earthed grounding type receptacle.
- ⚡ Use a good source of AC power that complies with local building and electrical codes and has both overload and ground fault protection.
- ⚠ IP20 rating. Suitable for dry locations only. Do not expose the fixture to rain or moisture.
- ⚠ Refer all service to a Wybron certified service technician.

To protect yourself and others from burns and fire:

- ⚠ Maximum ambient temperature, $T_a=40^{\circ}\text{C}$ (104°F)
- ⚠ Provide a minimum clearance of 10 cm (4 inches) around all air vents.
- ⚠ Do not modify the fixture or install any parts other than genuine Wybron replacement parts.

To protect yourself and others from injury due to falls:

- △ When suspending the fixture above ground level, verify that the structure can hold at least 10 times the weight of all installed devices.
- △ Verify that all external accessories and rigging hardware are securely fastened and use an approved means of secondary attachment such as a safety cable.
- △ Block access below the work area whenever installing or removing the fixture.

Safety Notice (French Translation)

CONSERVER CES INSTRUCTIONS

LIRE ET SUIVRE TOUTES LES INSTRUCTIONS

- ❖ Ce manuel donne des instructions étape-par-étape pour la préparation, l'installation et le fonctionnement du Cygnus™ LED luminaire.
- ❖ Il ya un risque potentiel d'incendie, d'électrocution ou de blessures si le produit n'est pas utilisé selon les instructions.
- ❖ Le Cygnus™ doit être utilisé dans un environnement intérieur.

Attention modification du produit

WYBRON, Inc produits sont conçus et fabriqués pour répondre aux exigences des États-Unis et les normes de sécurité internationale. Modifications aux produits pouvant affecter la sécurité et rendre le produit non-conforme aux normes de sécurité applicables.

Consignes de sécurité importantes

Lisez ce manuel avant de mettre ou d'installer l'appareil. Suivez les consignes de sécurité et respecter tous les avertissements dans ce manuel et sur le gabarit. Si vous avez des questions sur comment faire fonctionner le dispositif en toute sécurité, s'il vous plaît contacter votre revendeur ou appelez WYBRON WYBRON directement au 1-800-624-0146, ou visitez le www.wybron.com.

Pour vous protéger, vous et d'autres contre les chocs électriques:

AVERTISSEMENT - CET APPAREIL DOIT ETRE MIS A LA TERRE.

⚡ Protection contre les chocs électriques est assurée uniquement si le réseau connecté cordon est branché à un terre mise à la terre prise de courant.

⚡ Utiliser une bonne source de courant alternatif qui est conforme aux codes de construction locaux et électriques et a la fois protection de surcharge et de fuite de terre.

Note IP20

⚠. Convient aux endroits secs seulement. Ne pas exposer l'appareil à la pluie ou l'humidité.

⚠ Voir tous les services d'un technicien de service certifié WYBRON.

Pour vous protéger et protéger les autres de brûlures et d'incendie:

⚠ maximum la température ambiante, $T_a = 40\text{ }^\circ\text{C}$ ($104\text{ }^\circ\text{F}$)

⚠ Fournir un dégagement minimum de 10 cm (4 po) autour de toutes les bouches d'aération.

⚠ Ne pas modifier le dispositif ou d'installer des pièces autres que des pièces de rechange WYBRON.

Pour vous protéger, vous et d'autres contre les blessures dues aux chutes:

△ Si on suspend le montage ci-dessus du niveau du sol, vérifier que la structure peut contenir au moins 10 fois le poids de tous les périphériques installés. Vérifiez

△ que tous les accessoires externes et matériel de calage sont solidement attachés et utiliser un approuvé des moyens de fixation secondaire, tel qu'un câble de sécurité.

△ Interdisez l'accès sous la zone de travail pendant l'installation ou le retrait du dispositif.

Safety Notice (Spanish Translation)

GUARDE ESTAS INSTRUCCIONES LEA Y SIGA TODAS LAS INSTRUCCIONES

- ❖ Este manual da instrucciones paso por paso para la preparación, instalación y funcionamiento de la luminaria LED™ Cygnus.
- ❖ No es un riesgo potencial de incendio, choque eléctrico o lesiones a las personas si el producto no se utiliza según las instrucciones.
- ❖ El Cisne™ se va a utilizar en un ambiente exclusivo en interiores.

Advertencia La modificación del producto

Wybron, Inc. Los productos están diseñados y fabricados para satisfacer las necesidades de los Estados Unidos y las normas internacionales de seguridad. Modificaciones en los productos podría afectar a la seguridad y hacer que el producto no conforme a las normas de seguridad pertinentes.

Instrucciones de seguridad importantes

Lea este manual antes de encender o instalar el aparato. Siga las precauciones de seguridad y observar todas las advertencias en este manual y en el aparato. Si usted tiene preguntas acerca de cómo operar el equipo con seguridad, por favor, contacte con su distribuidor o llame al Wybron Wybron directamente en 1-800-624-0146, o vaya a www.wybron.com.

Para protegerse a sí mismo ya los demás de una descarga eléctrica:

ADVERTENCIA - ESTE EQUIPO DEBE SER CONECTADO A TIERRA.

- ⚡ Protección contra choques eléctricos está garantizada sólo si el conjunto de cables de red conectados está conectado a un tomacorriente debidamente conectado a tierra tipo.
- ⚡ Utilice una buena fuente de alimentación de CA que cumpla con los códigos locales de construcción y eléctricos y tiene protección contra sobrecarga y falla a tierra.
- ⚠ Clasificación IP20. Apto para lugares secos. No exponer el aparato a la lluvia o la humedad.
- ⚠ Consulte todos los servicios de un técnico de servicio Wybron certificado.

Para protegerse y proteger a otros de las quemaduras y fuego:

- ⚠ Máxima temperatura ambiente, $T_a = 40^\circ\text{C}$ (104°F)
- ⚠ Dejar una distancia mínima de 10 cm (4 pulgadas) alrededor de todas las rejillas de ventilación.

△ No modificar el aparato o instalar las piezas que no sean las auténticas piezas de repuesto Wybron.

Para protegerse a sí mismo ya otros contra lesiones por caídas:

△ Cuando se cuelga el aparato sobre el nivel del suelo, verificar que la estructura pueda soportar al menos 10 veces el peso de todos los dispositivos instalados.

△ Compruebe que todos los accesorios externos y hardware de montaje estén bien fijadas y utilizar un aprobado medios de fijación secundaria como un cable de seguridad.

△ Bloquear el acceso al área de trabajo cuando se esté instalando o quitando el aparato.

Safety Notice (German Translation)

Sicherheit und Datenschutz

SAVE DIESE ANLEITUNG

LESEN und befolgen Sie alle

- ❖ Diese Anleitung Schritt-für-Schritt-Anleitungen für die Vorbereitung, Einrichtung gibt, und der Betrieb des Cygnus™ LED-Leuchte.
- ❖ Es besteht ein potentielles Risiko von Brand, Stromschlag oder Personenschäden, wenn das Produkt nicht verwendet wird, wie angewiesen.
- ❖ Die Cygnus™ ist in Innenräumen verwendet werden.

Größe und Modifikation Warnung

Wybron, Inc. Produkte entwickelt und herstellt, um den Anforderungen der Vereinigten Staaten und internationale Sicherheitsstandards erfüllen. Änderungen an den Produkten beeinträchtigen könnten Sicherheit und machen das Produkt nicht konform zu relevanten Sicherheitsstandards.

Wichtige Sicherheitshinweise

Lesen Sie dieses Handbuch vor dem Einschalten oder die Installation der Leuchte. Befolgen Sie die Vorsichtsmaßnahmen und beachten Sie alle Warnungen in diesem Handbuch und auf den Verkauf. Wenn Sie Fragen haben, wie die Leuchte sicher zu betreiben, kontaktieren Sie bitte Ihren Händler oder rufen Sie Wybron Wybron direkt an 719-548-9774 oder besuchen Sie www.wybron.com.

So schützen Sie sich und andere durch elektrischen Schlag:

WARNUNG - Dieses Gerät muss geerdet werden.

- ⚡ Schutz gegen elektrischen Schlag sichergestellt ist nur, wenn das Netzkabel angeschlossen gesetzt ist verbunden mit einer ordnungsgemäß geerdet geerdeter Steckdose.
- ⚡ Verwenden Sie eine gute Quelle der Stromversorgung, die mit örtlichen Bau-und Elektro-Codes entspricht und hat sowohl Überlast und Erdschluss.
- ⚠ Schutzart IP20. Geeignet für trockene Standorte nur. Setzen Sie das Gerät über regen oder Feuchtigkeit aus.
- ⚠ Alle Wartungsarbeiten zu einer Wybron zertifizierten Service-Techniker.

So schützen Sie sich und andere vor Verbrennungen und Feuer:

- △ Maximale Umgebungstemperatur $T_a = 40\text{ °C}$ (104 °F)
- △ Geben Sie einen Mindestabstand von 10 cm (4 inches) um alle Lüftungsöffnungen.
- △ Verändern Sie nicht den Verkauf oder installieren Sie alle Teile außer echten Wybron Ersatzteilen.

So schützen Sie sich und andere vor Verletzungen durch Stürze:

- △ Wenn Aussetzung der Leuchte über dem Boden, zu überprüfen, dass die Struktur können mindestens 10 mal das Gewicht aller installierten Geräte halten.
- △ Überprüfen Sie, dass alle externen Zubehör und Montagematerial sind sicher befestigt und verwenden Sie ein zugelassenen Mittel der zweiten Befestigung zB mit einem Sicherheitskabel.
- △ Block Zugang unterhalb der Arbeitsfläche, wenn die Installation oder das Entfernen der Leuchte.

Safety Notice (Swedish Translation)

SPARA DESSA ANVISNINGAR LÄS OCH FÖLJ ALLA INSTRUKTIONER

- ❖ Denna handbok ger steg-för-steg-instruktioner för beredning, installation och drift av Cygnus™ LED armatur.
- ❖ Det finns en potentiell risk för brand, elektriska stötar eller personskador om produkten inte används enligt anvisningarna.
- ❖ Den Cygnus™ skall användas i en inomhusmiljö bara.

Produkt Ändring Varning

Wybron, Inc. produkter konstrueras och tillverkas för att uppfylla kraven i USA och internationella säkerhetsnormer. Ändringar av de produkter som kan påverka säkerheten och gör produkten inte uppfyller de gällande säkerhetsnormerna.

Viktig säkerhetsinformation

Läs denna handbok innan du slår eller installera fixturen. Följ säkerhetsföreskrifterna och iaktta alla varningar i denna manual och på armaturen. Om du har frågor om hur du använder fixtur säkert, kontakta din Wybron återförsäljare eller ring Wybron direkt på 1-800-624-0146 eller gå till www.wybron.com.

För att skydda dig själv och andra från elektriska stötar:

WARNING - Denna utrustning måste JORDAS.

- ⚡ Skydd mot elolyckor endast kan uppnås om elnätet anslutna sladden är ansluten till en korrekt jordad jordade uttag.
- ⚡ Använd en bra källa till växelström som överensstämmer med lokala byggnads och elektriska koder och har både överbelastning och jordfelskydd.
- ⚠ IP20 betyg. Lämplig för torra platser. Utsätt inte fixturen för regn eller fukt.
- ⚠ Se all service till en Wybron kvalificerade servicetekniker.

För att skydda dig själv och andra från brännskador och brand:

- ⚠ Maximal omgivningstemperatur, $T_a = 40\text{ }^\circ\text{C}$ ($104\text{ }^\circ\text{F}$)
- ⚠ Ge en minsta avstånd på 10 cm (4 inches) runt alla luftventiler.
- ⚠ Modifiera inte fixtur eller installera andra delar än äkta Wybron reservdelar.

För att skydda dig själv och andra från skada till följd av fall:

- △ När upphävande av armaturen över marken, kontrollera att strukturen kan hålla minst 10 gånger vikten av alla installerade enheter.
- △ Kontrollera att alla externa tillbehör och monteringsdetaljer sitter ordentligt fast och används en.
- △ Blockera åtkomst under arbetsområdet när du installerar eller tar bort armaturen.

Introduction

The Cygnus™ is a high performance LED wash luminaire in a small, easy to integrate package. Using an efficient array of 5W LEDs in an RGBW configuration gives the Cygnus™ a high lumen output with a CRI as high as 92. The LED engines have a rated life span of 60,000 hours minimizing maintenance concerns for many years.

The Cygnus 100W and 200W models have interchangeable lenses. The MF (Medium Field) lenses give a beam angle of 24 degrees. The VN (Very Narrow) lenses give a beam angle of 16 degrees.

The Cygnus™ features an LED color engine capable of millions of colors. The use of LED quad die technology virtually eliminates the “rainbow effect” encountered with some other fixtures. Cygnus™ also incorporates in-lens color mixing eliminating the pixilated look of most fixtures. The Cygnus™ uses between 7 and 12 channels of DMX depending on which resolution and mode are selected. Precision control allows for smooth subtle fades or instantaneous jumps to new colors as well as strobe effects with control of speed, duration and color. Cygnus™ also has an optional “high speed” mode that eliminates flicker on HD video cameras.

Quick Start

1. Connect the Equipment

- a. Connect the Cygnus™ to a mounting pipe with a C-clamp.
- b. Connect the safety cable to the mounting pipe.
- c. Connect the Cygnus™ to a DMX source with a 5-pin cable
- d. Connect to AC power (100 – 240 VAC 50/60Hz)

2. Set DMX Address to 1

- a. Press 'Menu' until display reads 'Adr'
- b. Press 'Enter'
- c. Press the '+' or '-' keys to select '001'
- d. Press 'Enter' to save setting

3. Set Resolution to 8-bit Mode

- a. Press 'Menu' until display reads 'rES'
- b. Press 'Enter'
- c. Press the '+' or '-' keys to select '8'.
- d. Press 'Enter' to save setting

4. Set Master Fader Option to ON

- a. Press 'Menu' until display reads 'Fdr'
- b. Press 'Enter'
- c. Press the '+' or '-' keys to select 'On'
- d. Press 'Enter' to save setting

5. Set Video Mode to Off

- a. Press 'Menu' until display reads 'HSP'
- b. Press 'Enter'
- c. Press the '+' or '-' keys to select 'OFF'
- d. Press 'Enter' to save setting

6. Control Cygnus™ with DMX

- a. DMX channel 1 controls Red (0 - 100%)
- b. DMX channel 2 controls Green (0 - 100%)
- c. DMX channel 3 controls Blue (0 - 100%)
- d. DMX channel 4 controls Intensity (0 - 100%)
- e. DMX channel 5 controls Color Temperature (0-7% is 3500K, 8-100% is 2000-7500K, see appendix B for values)
- f. DMX channel 6 controls Strobe Frequency (8 - 100%)
- g. DMX channel 7 controls Strobe Duration (duty cycle) (8 - 100%)
- h. DMX channel 8 controls Strobe Effect (color jumping) (8 - 100%)

Cygnus™ Operation

RGBMaster and RGBWhite Mode

The Cygnus™ can be operated in either RGBMaster or RGBWhite mode.

In RGBWhite mode, the DMX channels (or channel pairs in 16-bit mode) directly control light output of the four LED colors independently. Achieving a “white” is done through the user selecting values for the four color channels. There is no master fader channel in this mode.

In RGBMaster mode, all color is selected only through the RGB channels. A fourth channel acts as a master fader for the color mix. If the RGB channels are all at the same level then the fixture will produce a white light as a combination of white and other LEDs to achieve a desired white balance. In RGBMaster mode there is an additional channel to select the white color temperature. If this channel is set to 0-7% the default white color temperature of 3500 degrees K will be used. DMX values of 8-100% allow a continuous color temperature selection from 2000 to 7500 degrees K. Color temperature values for specific DMX values can be found in Appendix B.

Strobe Mode

The Cygnus™ can strobe at rates between 0.25 and 30hz. The Strobe Frequency channel is used to enable strobing and to select the strobe frequency. If this channel is set to 0-7%, strobe mode will be off and the unit will operate normally. If this channel is set to 8-100%, then strobe mode will be on and the strobe speed will vary from low to high. The unit will strobe with a color and intensity selected from either the RGBW or RGBM channels.

The Strobe Duration channel allows the user to control the strobe pulse duration from near 0% to near 100% of the strobe period. A strobe duration of 20-50% will produce a brighter strobe than if this channel is left at zero.

The Strobe Effects channel allows the selection of pre-defined color jump sequences in strobe mode. Use Table 1 to set this channel to a specific value to select a color sequence. **In order to enter strobe effects mode, a minimum DMX value of 8% is required on the Strobe Frequency AND the Strobe Effects channels.**

If strobe effects are selected, then the RGB channels have no effect. If the unit is in RGBMaster mode and strobe effects are selected, then the Master channel will still control total light output. If the unit is in RGBWhite mode and strobe effects are selected, then the White channel will be used as a master fader channel.

Video (High Speed) Mode

The Cygnus™ can be used in applications where video cameras are used. In this mode the light pulses (imperceptibly) at a much higher rate. The High Speed Video Mode is selected from the menu option labeled “HSP.” In this mode the fixture is not able to dim as low due to constraints of the high speed pulse rate. All other modes and functionality of the light are still available in high speed mode, including Master Fader or RGBWhite modes and strobing.

Stand Alone Mode

The Cygnus™ supports a Stand Alone Mode in which it runs internal queue loops. This allows simple loops to be run without a DMX source connected. Several loops are defined from the factory and one loop (the user loop) can be programmed by the user.

The main menu option “rSA” runs the stand-alone loops. The loops “L1, L2, L3” are pre-programmed and the loop “USr” is programmed by the user. The unit will execute a loop only while this menu is not exited. While running a loop, the unit, acting as the master unit, will send the DMX of the cues out to other units acting as slave units. It is important to disconnect any DMX going into the master unit while the master unit is controlling the slave units. The slave units must be set to Master Mode On and 8/16 bit mode to 8 in order to run the cues correctly. The Master and slave units also must all be set to the same DMX address. Stand Alone mode will automatically run when the unit is powered up if it was running the last time the unit was powered down. When running a cue the display will not time out and go blank. Loop 1 demonstrates some of the abilities of the Cygnus™, including strobe mode. Loop2 performs 60 second fades across a rainbow of 6 saturated colors. Loop 3 is the same as loop 2 except that the 6 colors used are not saturated.

The main menu option “PSA” (Program Stand Alone) allows the user to program one internal loop of up to eight cues. While running the loops does not require a DMX input source, programming the DMX values for each cue does. The user can capture the DMX input to the unit for each of the eight cues by using the “CAP” menu (see the Menu Tree). The user then manually enters a fade time and hold time for each cue in units of 0 – 90 seconds using the “FAd” and “Hld” menus. The fade time is the time to fade to the current cue (not time to fade to next cue). If a fade time of “End” is selected then that cue marks the end of the cues. That cue will not be executed but the loop will restart at the beginning. If no cue fade time is set to “End” then all eight cues will run. Selecting the “End” option is done by pressing the Down button from a fade value of 0 or pressing the Up button from a value of 90. When a loop is first executed the fade time of the first cue will not be performed. When programming cues the user should first set

Fader mode On and Resolution (8/16 bit) mode to 8. If the unit is not set into these modes then it will be forced into these modes while programming the cues. When programming cues the display will not time out and go blank. Holding down the menu button will quickly scan across the menu options “Cu1” through “Cu8”.

Fixture Physical Setup

Mounting and Adjusting the Fixture

Adjusting the C-clamp

- Connect a C-clamp to the yoke with the yoke bolt and washer.
- Hang C-clamp on mounting pipe and secure with the C-clamp pipe bolt.
- Connect the safety cable to the mounting pipe.
- Cygnus™ can be rotated to the desired position by loosening the pan screw, setting the position, and tightening the pan screw to hold the position.

Attaching Accessories to the Front Holder

Cygnus™ 200W can accept up to two standard 7.5” accessories. The 100W can accept one 5.75” accessory. Accessories are safely held in place with a standard spring-loaded latch.

- From the rear of the fixture, pull the accessory ring toward you.
- Load the accessory into the accessory slot in the front of the Cygnus™, then release the ring.
- The plunger will return to the initial position and hold the accessory in place.

Connecting AC Power

⚠ CAUTION: Be sure the fixture is properly grounded.

Use a good source of AC power that complies with local building and electrical codes and has both overload and ground fault protection.

Input power must be 100-240VAC, 50/60Hz.

Changing the Lenses

Instructions for changing VN or MF lens assembly:

- Position the unit so the front is facing you with the filter pin on the top (12 o'clock position)
- Use a #2 phillips screwdriver to remove the seven screws from the lens assembly.
- Remove the lens assembly.
- If you are about to install the MF (24°) lens kit, then insert the 7 silver spacers onto the LED board over the seven silver stand offs that are fixed to the LED board. Insert the lens kit by lining up the assembly with the spacers.
- If you are about to install the VN (16°) lens kit, then remove the 7 silver spacers from the LED board. Insert the lens kit by lining up the assembly with the stand offs.
- Replace the screws removed in the first step. Tighten until only slightly snug. Do not over tighten.

Instructions for changing VN or MF lens kit with individual lenses and plates:

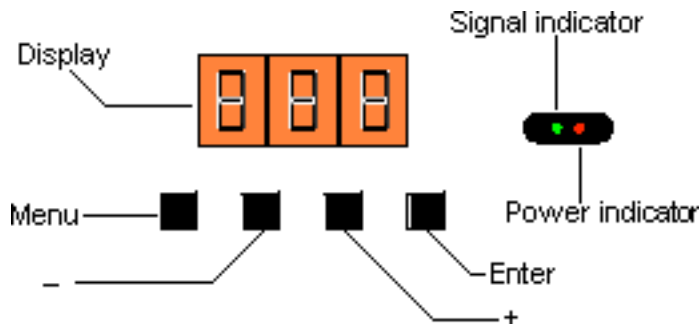
- Position the unit so the front is facing you with the filter pin on the top (12 o'clock position)
- Use a #2 phillips screwdriver to remove the seven screws from the lens face plate. This plate is the “upper” lens plate.
- Remove the upper lens plate.
- Remove the 24 or 12 lenses (200W or 100W units)
- Remove the lower lens plate. Note that there is one unique lower plate for the VN (16 deg) lenses and a different plate for the MF (24 deg) lenses and that the plates are labeled. The one upper plate is used for both lens types.
- If you are about to install the MF lenses (they do not have holes in the center of them) then first insert the 7 silver spacers onto the LED board over the seven silver hardware pieces that are fixed to the LED board.

- Or if you are about to install the VN lenses (they have holes in the center of them) then first remove the 7 silver spacers from the LED board.
- Insert the new lower lens plate for MF or VN lenses. Make sure the text on the lower plate is upright.
- Insert the lenses of type MF or VN.
- Make sure all lenses are laying flat.
- Verify that if the lower plate is labeled MF than the lenses you put in do not have holes in the center. If the lower plate is labeled VN then verify the lenses have holes in the center.
- Insert the top lens plate.
- Make sure all lenses are laying flat beneath the plate.
- Replace the screws removed in the first step. Tighten until only slightly snug. Do not over tighten.

User Interface

Controls and Indicators

Cygnus™ has controls and indicators as follows:



- A three-character seven-segment display
- 4 push buttons: **Menu**, (-), (+), and **Enter**
- Power (red) and signal (green) indicator LEDs

The **Menu** button allows the user to switch between menus on the same level of the menu tree. When the last menu option on a level is passed then the menu will return up the tree one level (if a higher level exists). See the Menu Tree section below.

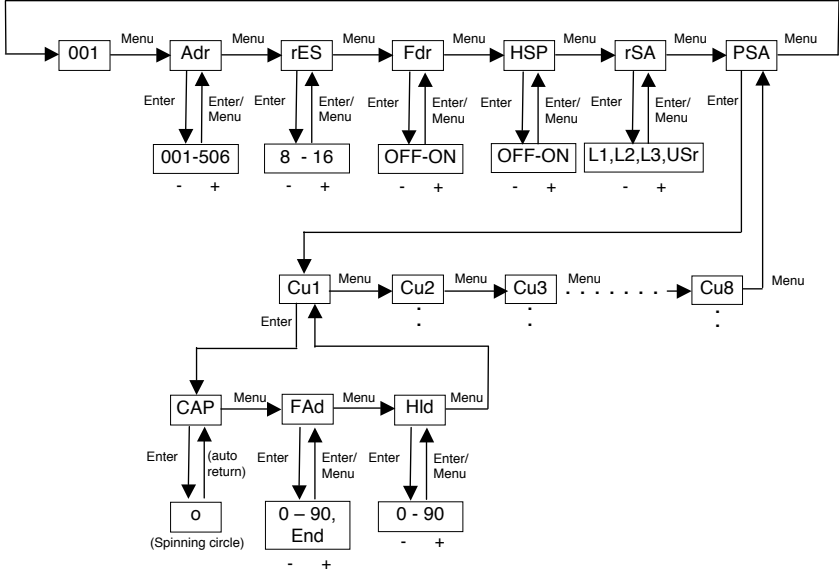
The (+) and (-) buttons allow the user to change a selection for a single option in a menu.

The **Enter** button allows the user to enter down into a submenu to change a parameter or to accept the parameter currently displayed and return up one menu level. Changes are saved in non-volatile memory when the **Enter** button is pressed except when programming a user stand alone loop. Stand alone loop parameters are saved when the Program Stand Alone menus are all exited and control returns to the top menu level (where it displays “PSA”).

The red power indicator LED remains lit when the device is powered.

The green signal indicator LED flashes when a DMX or RDM signal is present. It turns off 60 seconds after the last button press.

Menu Tree



Display Messages

Normal Messages

- 001 – 505** The DMX addresses Cygnus™ will respond to in 8-bit Master mode.
- 001 – 506** The DMX addresses Cygnus™ will respond to in 8-bit RGBW mode.
- 001 – 501** The DMX addresses Cygnus™ will respond to in 16-bit Master mode.
- 001 – 502** The DMX addresses Cygnus™ will respond to in 16-bit RGBW mode.
- Adr** Top menu item. Pressing ‘Enter’ here will allow the current DMX address to be changed.
- rES** Second menu item. Pressing ‘Enter’ here will allow the current resolution to be changed.
- Fdr** Third menu item. Pressing ‘Enter’ here will allow the Fader Mode to be changed.
- HSP** Fourth menu item. Pressing ‘Enter’ here will allow the Video (High Speed) Mode to be changed.
- rSA** Fifth menu item. Pressing ‘Enter’ here will allow a Run Stand Alone loop to be run.
- PSA** Sixth menu item. Pressing ‘Enter’ here will allow the user to Program Stand Alone loops.
- L1..L3** Cygnus™ will execute Stand Alone loop 1-3 cues.
- USr** Cygnus™ will execute the User Stand Alone loop.
- Blank** Unit is running, nor error conditions exist, and it has been longer than 60 seconds since the last button press.

Error Messages (Flashing)

EEP Err An attempt to write to non-volatile memory failed. The unit will continue to respond to commands.

HOT Err Here are three possible causes for this error:

- Fan failure
- Obstruction of the cooling holes in the unit
- The unit is being operated in an ambient temp above the rated 40C

SEr Err The RDM unique ID has been corrupted. The unit will operate normally but should not be used in an RDM environment. Contact the factory for assistance.

DMX Channel Assignments

Master Mode (8-bit)

Leave Cygnus™ addressed at channel 1 (factory default)
DMX channel 1 controls Red (0 - 100%)
DMX channel 2 controls Green (0 - 100%)
DMX channel 3 controls Blue (0 - 100%)
DMX channel 4 controls Intensity (0 - 100%)
DMX channel 5 controls Color Temperature (0-7% is 3500K, 8-100% is 2000-7500K)
DMX channel 6 controls Strobe Frequency (8 - 100%)
DMX channel 7 controls Strobe Duration (duty cycle) (8 - 100%)
DMX channel 8 controls Strobe Effect (color jumping) (8 - 100%)

RGBW Mode (8-bit)

Leave Cygnus™ addressed at channel 1 (factory default)
DMX channel 1 controls Red (0 - 100%)
DMX channel 2 controls Green (0 - 100%)
DMX channel 3 controls Blue (0 - 100%)
DMX channel 4 controls White (0 - 100%)
DMX channel 5 controls Strobe Frequency (8 - 100%)
DMX channel 6 controls Strobe Duration (duty cycle) (8 - 100%)
DMX channel 7 controls Strobe Effect (color jumping) (8 - 100%)

Master Mode (16-bit)

Leave Cygnus™ addressed at channel 1 (factory default)
DMX channel 1 controls Red Coarse(0 - 100%)
DMX channel 2 controls Red Fine (0 - 100%)
DMX channel 3 controls Green Coarse (0 - 100%)
DMX channel 4 controls Green Fine (0 - 100%)
DMX channel 5 controls Blue Coarse (0 - 100%)
DMX channel 6 controls Blue Fine (0 - 100%)
DMX channel 7 controls Intensity Coarse (0 - 100%)
DMX channel 8 controls Intensity Fine (0 - 100%)
DMX channel 9 controls Color Temperature (0-7% is 3500K, 8-100% is 2000-7500K)
DMX channel 10 controls Strobe Frequency (8 - 100%)
DMX channel 11 controls Strobe Duration (duty cycle) (8 - 100%)
DMX channel 12 controls Strobe Effect (color jumping) (8 - 100%)

RGBW Mode (16-bit)

Leave Cygnus™ addressed at channel 1 (factory default)

DMX channel 1 controls Red Coarse(0 - 100%)

DMX channel 2 controls Red Fine (0 - 100%)

DMX channel 3 controls Green Coarse (0 - 100%)

DMX channel 4 controls Green Fine (0 - 100%)

DMX channel 5 controls Blue Coarse (0 - 100%)

DMX channel 6 controls Blue Fine (0 - 100%)

DMX channel 7 controls White Coarse (0 - 100%)

DMX channel 8 controls White Fine (0 - 100%)

DMX channel 9 controls Strobe Frequency (8 - 100%)

DMX channel 10 controls Strobe Duration (duty cycle) (8 - 100%)

DMX channel 11 controls Strobe Effect (color jumping) (8 - 100%)

RDM Functionality

Cygnus™ is compliant with the RDM v1.0 standard and can be used with the Wybron InfoTrace system or other RDM systems. By definition, all required RDM parameters are supported including discovery, device info, DMX start address, identify device, etc.

Additional RDM functions supported include:

- Status and Queued messages. This allows the device to let the controller know it has something to say—like ‘my address has been changed locally’
- Device Model Description: gives the controller a human readable description of the Cygnus™
- Manufacturer Label
- Device Label: user definable field up to 32 characters allowing the user to give it a meaningful name in the particular application like ‘Star curtain 2’ or ‘Shark display upper right’.
- Software version information
- DMX personality: The Cygnus™ personalities include selection of DMX control (8 and 16-bit), Master Fader on/off and Video (high Speed) Mode on/off.
- DMX Start Address: This can be set remotely through an RDM system.
- Slot description: human readable explanation of the function of each of the Cygnus™’s DMX channels.
- Sensor information includes LED board temperature and white color balance.
- Device operational hours.

Flash Reprogramming

Cygnus™ firmware can be updated as new firmware versions become available through the DMX/RDM port using an InfoGate gateway and the InfoGate application. Cygnus™ firmware updates can be found at www.wybron.com/support/.

Specific instructions for upgrading firmware in Cygnus™ and other Wybron equipment can be found in the InfoGate User Manual, Firmware Upgrades section.

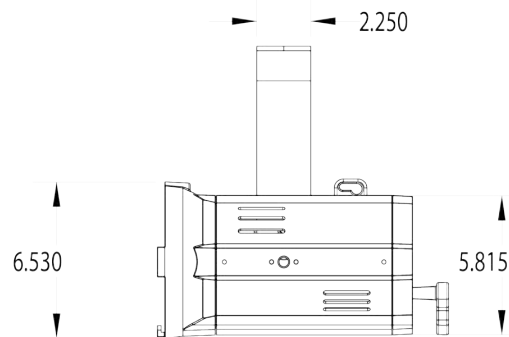
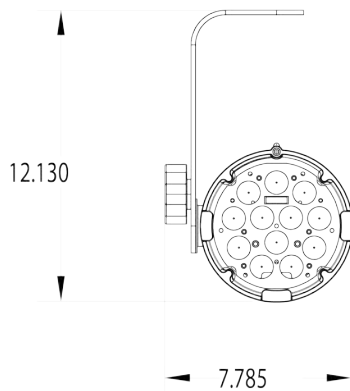
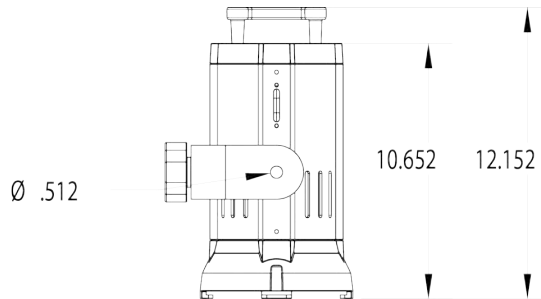
Table 1 - Strobe Effect Channel Color Jump Sequences

<u>DMX Value (0-255)</u>	<u>Sequence</u>
0-19	No strobe effect mode
20-50	red, yellow, green, cyan, blue, magenta
51-75	red, red, red, blue, blue, blue
76-100	cyan, blue
101-125	yellow, red
126-150	green, purple
151-175	red, blue
176-200	yellow, green
201-225	yellow, blue
226-255	magenta, green

Cygnus Specifications

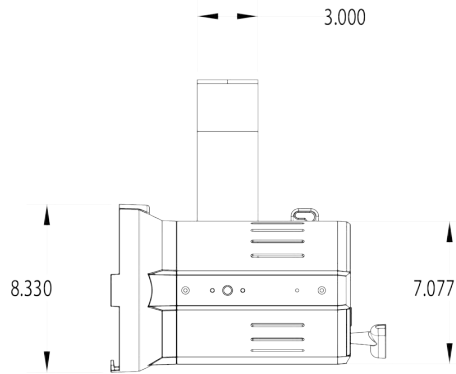
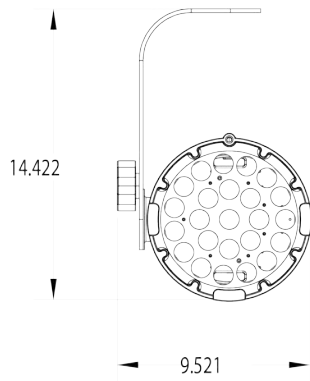
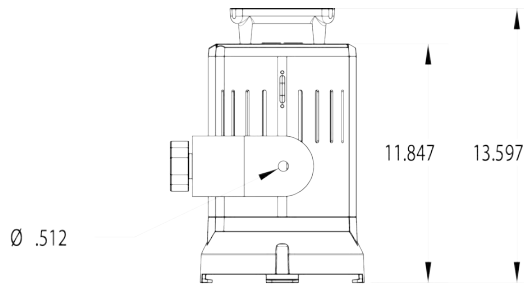
Features:

- Compact, familiar design



- Extremely smooth dimming curve
- Quad die LED design eliminates rainbow shadows
- In-lens color mixing
- Interchangeable lenses
- Flicker-free on HD cameras
- Integrated, self-switching power supply
- Integral safety cable mount on fixture
- Precision milled aluminum construction
- Standard 7.5-inch lens and accessory holder (on 200W units)
- Load-controlled low-noise fan
- Legendary Wybron Reliability
- Made in the USA
- Average Lumens per Watt: 23

Environmental Specifications:



- Maximum Ambient Temperature: 40°C / 104°F
- Maximum Exterior Surface Temperature: 70°C / 158°F
- Minimum Air Space Sides: 10 cm / 4"
- Minimum Air Space Top: 10 cm / 4"
- Minimum Air Space Rear: 10 cm / 4"

Cygnus 100W (Model 7510)

Dimensions:

Height: 6.5 in / 166 mm

Width: 7.8 in / 198 mm

Length: 12.2 in / 309 mm

Weight: 9.2 lbs / 4.2 kg

Electrical Specifications:

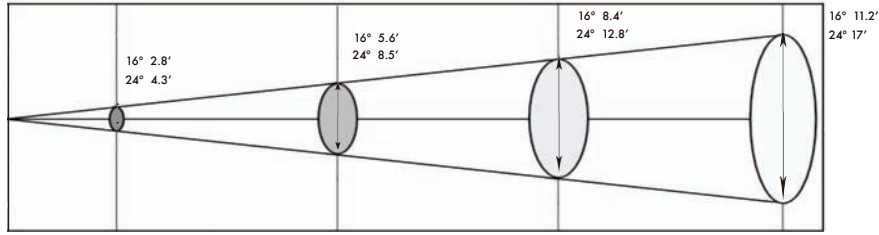
Power: 1A @ 100-120V ~ 50/60Hz or
1/2A @ 220-240V ~ 50/60Hz

Cygnus 200W (Model 6510)



SUMMARY

Power Consumption 200W
Beam / Field Angle VN 16° / 27°
 MF 24° / 42°
Peak Lumens 4600
Peak CRI 92
Hours of LED Lifespan 60,000



ILLUMINANCE*	10'		20'		30'		40'	
	16° ft	24° ft	16° ft	24° ft	16° ft	24° ft	16° ft	24° ft
Red	138	70	35	18	16	8	9	4
Green	302	122	76	31	34	14	19	8
Blue	65	25	16	7	8	3	4	2
White	291	128	73	32	32	14	18	8
Standard White	533	238	133	60	59	26	33	15
Max Output	610	262	153	66	68	29	38	16

LSD DIFFUSER COMPARISON	No diffuser	Narrow	Medium	Wide
16° Beam / Field Angle	16° / 27°	17° / 32°	24° / 43°	34° / 58°
24° Beam / Field Angle	24° / 42°	23° / 47°	28° / 55°	37° / 65°



For lux multiply footcandles by 10.76 / For meters multiply feet by .3048

* Illuminance data measured with a Konica Minolta CL-200A Chroma Meter

Dimensions:

Height: 8.3 in / 212 mm
 Width: 9.5 in / 242 mm
 Length: 13.6 in / 345 mm
 Weight: 14.5 lbs / 6.6 kg

Electrical Specifications:

Power: 2A @ 100-120V ~ 50/60Hz or
 1 A @ 220-240V ~ 50/60Hz

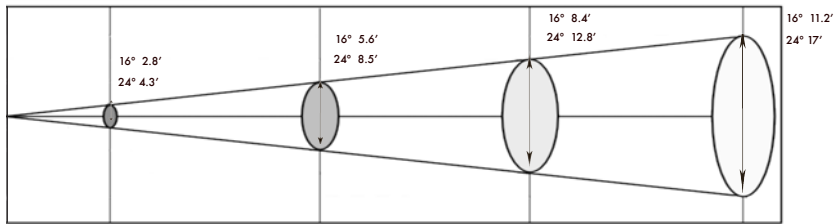
Appendix A Photometrics

Cygnus 100W



SUMMARY

Power Consumption	100W
Beam / Field Angle	VN 16° / 27° MF 24° / 42°
Peak Lumens	2146
Peak CRI	92
Hours of LED Lifespan	60,000



ILLUMINANCE*	10'		20'		30'		40'	
	16° fc	24° fc	16° fc	24° fc	16° fc	24° fc	16° fc	24° fc
Red	86	31	22	8	10	3	5	2
Green	165	65	41	16	18	7	10	4
Blue	32	13	8	3	4	1.5	2	1
White	153	61	38	15	17	7	10	4
Standard White	278	109	69	27	31	12	17	6.5
Max Output	293	118	73	30	33	13	18	7

LSD DIFFUSER COMPARISON	No diffuser	Narrow	Medium	Wide
16° Beam / Field Angle	16° / 27°	17° / 33°	24° / 44°	34° / 59°
24° Beam / Field Angle	24° / 42°	23° / 47°	28° / 55°	37° / 65°



For lux multiply footcandles by 10.76 / For meters multiply feet by .3048

* Illuminance data measured with a Konica Minolta CL-200A Chroma Meter

Cygnus 200W

Appendix B Color Temperature Table

DMX %	Color Temp °K
0	3500
1	3500
2	3500
3	3500
4	3500
5	3500
6	3500
7	3500
8	2000
9	2060
10	2120
11	2179
12	2239
13	2299
14	2359
15	2418
16	2478
17	2538
18	2598
19	2658

20	2717
21	2777
22	2837
23	2897
24	2957
25	3016
26	3076
27	3136
28	3196
29	3255
30	3315
31	3375
32	3435
33	3495
34	3554
35	3614
36	3674
37	3734
38	3793
39	3853
40	3913
41	3973
42	4033
43	4092
44	4152
45	4212
46	4272
47	4332
48	4391
49	4451
50	4511
51	4571
52	4630
53	4690
54	4750
55	4810
56	4870
57	4929
58	4989
59	5049
60	5109
61	5168
62	5228
63	5288
64	5348
65	5408
66	5467
67	5527
68	5587

69	5647
70	5707
71	5766
72	5826
73	5886
74	5946
75	6005
76	6065
77	6125
78	6185
79	6245
80	6304
81	6364
82	6424
83	6484
84	6543
85	6603
86	6663
87	6723
88	6783
89	6842
90	6902
91	6962
92	7022
93	7082
94	7141
95	7201
96	7261
97	7321
98	7380
99	7440
100	7500

Warranty Information

WYBRON, INC. warrants to the original owner or retail customer that for a period of one year from date of delivery of a portable system or energization of a permanently installed system (up to a maximum of 18 months from delivery) its products will be free from defects in materials and workmanship under normal use and service.

Warranty does not cover any product or part of a product subject to accident, negligence, alteration, abuse, misuse or any accessories or parts not supplied by WYBRON, INC. Warranty does not cover "consumable" parts such as fuses, lamps, or color media. WYBRON, INC.'s warranty does not extend to items not manufactured by us. Freight terms on warranty repairs are FOB WYBRON, INC. factory or designated repair facility. Collect shipments or freight allowances will not be accepted.

WYBRON, INC.'s sole responsibility under this warranty shall be to repair or replace at WYBRON, INC.'s option such parts as shall be determined to be defected on WYBRON, INC.'s inspection. WYBRON, INC. will not assume any responsibility for any labor expended or materials used to repair any equipment without WYBRON, INC.'s prior written authorization. WYBRON, INC. shall not be responsible for any incidental, general or consequential damages to property, damages for loss of use, time, profits or income, or any other charges.

The owner's obligations during the warranty period under this warranty are to notify WYBRON, INC. at WYBRON, INC.'s address within one week of any suspected defect, and return the goods prepaid to WYBRON, INC. at their factory or authorized service center.

This warranty is contingent on the customer's full and timely compliance with the terms of payment set forth in said purchase order. This warranty is expressly in lieu of any and all other warranties expressed or implied including the warranties of merchantability and fitness for a particular purpose and of other obligations and liabilities on our part. The owner acknowledges that no other representations were made to him or relied upon him with respect to the quality and function of the goods sold.

This written warranty is intended as a complete and exclusive statement of the terms thereof. Prior dealings or trade usage shall not be relevant to modify, explain or vary this warranty. Acceptance of, or acquiescing in, a course of performance under this warranty shall not modify the meaning of this agreement even though either party has knowledge of the performance and a chance to object.