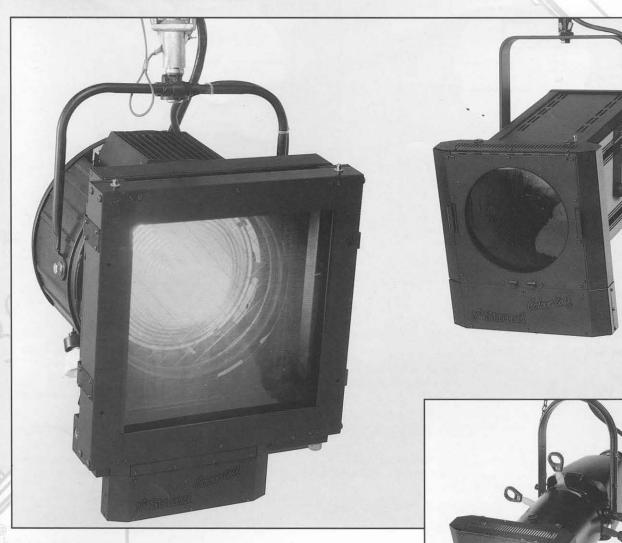


# **COLOUR CALL** SCROLLER SYSTEM



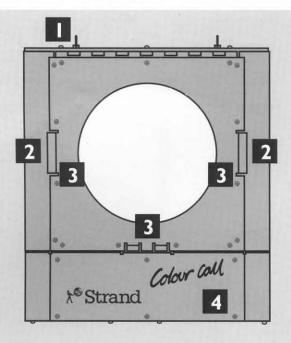
olour Call is a high-quality scrolling colour change unit specifically designed for theatrical and studio applications where quiet operation and long-term reliability are important criteria.

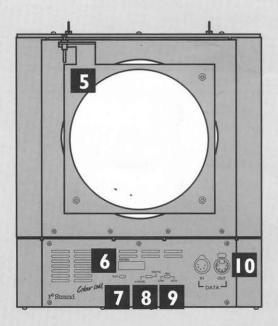
- Quiet operation
- Reliable, 'show-tested' design
- Two versions available: Colour Call CCI (Par size) and Colour Call CC2 (2/5kW size)
- Removable gel scrolls for easy filter replacement
- Variable scroll length, up to 16 color frames
- Universal 0 to +10V analogue / DMX 512 digital control protocols, to enable connection to most lighting desks
- Fast scroll speed of up to eleven frames in one second
- Slow fades possible with most standard lighting desks

- Direct-drive scroll position sensor, removes the requirement for scroll length detection at power-up
- Twin speed fan for extended filter life or extra-quiet operation
- Accessory holder for diffusion filter or attaching a bamdoor
- Rugged XLR 5-pin control connection system
- Low-voltage 24V dc operation

Colour Call

# Colour Call Scroller System







#### A Guide to Colour Call

#### Front

- Removable gel scrolls accessed through hinged lid. Even when Colour Call is rigged, scrolls can be easily changed.
- Spring-loaded scroll that automatically keeps the gel string taught to reduce gel noise when scrolling.
- 3 Accessory holder designed for Cadenza bamdoors that are held safely in place with a retaining screw.
- 4 Robust but light aluminium body designed for long life.

#### Back

- 5 Two adaptor plates provided as standard.
- 6 Address switches to select a separate DMX 512 channel for each scroller.

- 7 Trim allows the user to change the length of gel string from 2 to 16 frames (Colour Call CC1), or from 2 to 11 frames (Colour Call CC2).
- 8 Switch to select either Analogue 0 to +10 volts or DMX 512 control signals.
- 9 Fan control switch to select between high and low speeds.
- 10 Standard 5-pin XLRs to allow both the control signal and 24V dc power to be linked from one Colour Call to the next.

#### **Bottom**

- "Power" indicator (red) shows when 24V dc power is present.
- 12 "Data" indicator (green) shows when digital control is received.
- 13 "Level" indicator (yellow) mimics the channel level.

# **Specifications**

#### **Standard Operating Features**

- Belt Drive Movement In both theatre and television quiet operation is vital. Colour Call's belt drive system and the continual gel tension feature ensures gel noise is kept to a minimum.
- Response Speed A speed of II colour frames in one second makes the par-sized Colour Call one of the fastest scrollers on the market. Although speed is desirable it is Colour Call's instant response to the channel control that makes this scroller unique. Acceleration of Colour Call as well as position is dictated by the operator's intuitive use of the channel control.
- DMX 512 Each Colour Call receives DMX 512, allowing each scroller to be allocated its own DMX channel number. Unit address numbers can be

selected to have a logical numbering system that might relate, for example, to the luminaire's control channel number. DMX 512 is specified for Colour Call for three reasons:

- I DMX512 is a digital signal with 256 discrete steps covering the range from zero to 100%. If the same level has been set across a range of DMX channels then all these channels will have a consistent value.
- **2** DMX communicates reliably with each Colour Call; an important factor when scrollers are usually distributed widely throughout the rig.
- **3** Most control desks will now output DMX 512. Ask a Strand representative whether your desk outputs DMX 512 or could be converted to communicate with Colour Calls.

# **Specifications continued**

# Standard Operating Features continued

- Analogue Control Colour Call will also respond to a 0 to +10 volt analogue control signal. This will allow those users with only an analogue control desk to interface with Colour Calls. The trim adjustment, for selecting the length of the scroll, can also be used to compensate for analogue control signals that do not reach 10 volts.
- Removable gel strings Changing gel in a Colour Call rigged on a luminaire is neither slow nor difficult. Colour Call has two removable scrolls onto which the gel string is attached. Exchanging two sets of scrolls is made easy with top access to the unit, and this is especially useful with FOH luminaires.
- Adjustable gel length Eleven frames of coloured gel are usually enough for most lighting applications both in theatre and television. Each Colour Call is factory-set for 11 frames as this number in easy to control on standard memory and manual lighting control desks. This type of operation,- where each 10% change represents a new colour,- is easy to remember and plot. If required, Colour Call will allow less than eleven frames to be installed, and even as few as two. Six frames are suggested as a compromise between fewer gel frames and a logical reference system, as each 20% change on the fader scale represents a new colour. Setting the number of frames on Colour Call is also very simple. Once the number of frames are set, Colour Call does not lose the information on power-down, unlike other scrollers which rely on a noisy 30-40 second start-up procedure to determine the gel string length. There are exceptional circumstances where more than II colour frames are required. The Par sized Colour Call CCI will cater for these needs by allowing up to sixteen colour frames to be included.
- Back plates The Colour Call scroller range is designed to accommodate a variety of luminaires.

Colour Call CC1 is supplied with two back plates: a Cantata back plate and a Cadenza back plate. The Cantata back plate will fit all Cantata spotlights, 6" Leko® and other luminaires with 185mm (7.3") colour runners (eg Patt 764). The back plate will fit all Cadenza luminaires, Solo follow spots, and Punchlites. However, when the Cadenza back plate is mounted in a 90° orientation it will also fit most standard parcans, 8" and 10" Leko®. For those who want the accessory lock available on some parcans, a dedicated 10" back plate is optionally available. It should be noted that on Cadenza PC and F luminaires the beam angle is restricted when in the flood position. Other back plates are available for other luminaires. Harmony and T-Spots can be fitted with special mounting pillars to accommodate a Colour Call CC1.

Colour Call CC2 is supplied with a universal back plate that will allow the scroller to be fitted to different studio luminaires including Castor and Pollux Bambino.

• Safety Bonds Cadenza and Cantata luminaires have a built-in safety clip for retaining accessories. Colour Call is supplied with back plates that can lock the accessory clip into a closed position so that it forms a secure safety bond. A secondary safety bond is supplied on each scrollers for use on luminaires that do not have clips for retaining accessories. All power supply boxes and splitter boxes are supplied with safety bonds so that they can be rigged safely.

- Barndoor The front of Colour Call CCI is designed to accept a Cadenza size barndoor. The retaining device supplied on all Cadenza barndoors is accommodated for secure retention.
- Scroller indicators Each Colour Call is fitted with three leds to give a visual display of correct operation. The red "power" led indicates presence of 24V dc power. The green "digital" led lights when a digital signal is being received. The yellow "level" led mimics the channel level.
- Digital Splitter Box The Digital Splitter Box receives the DMX 512 signal from the control desk. The DMX signal, along with 24V dc power, is distributed to four 'daisy-chain' scroller loops. Up to 12 Colour Call CC1 scrollers are allowed on each 'daisy-chain' loop. The Digital Splitter Box optically isolates each scroller loop from its neighbour and from the control desk. Each daisy chain loop should be returned to the splitter box as this distributes 24 volts dc power in a ring formation, as well as terminating the DMX512 line correctly. All output connectors on the splitter box are 5-pin XLRs. Each splitter box is fitted with a data line output which passively transmits the DMX signal to the next splitter box in the chain. The last splitter box should terminate the DMX line using the "Termination" switch provided. The Digital Splitter Box is powered from a separate Colour Call power supply. In the unlikely event of a power supply failing, it will affect only those scrollers driven by the splitter box. The separate siting of the power supply in an accessible position will allow easy replacement.
- Power Supplies Two versions of Colour Call power supplies are available: one for supplying up to twelve Colour Call CC1 scrollers, or six Colour Call CC2 scrollers; the other unit will power up to twenty four Colour Call CC1 scrollers, or twelve Colour Call CC2 scrollers. Two power supplies can be linked with a special cable to allow further scrollers to be added to the splitter box. The maximum number is 48 scrollers with two 24 unit power supplies paralleled together.

#### Note:

When ordering power supplies, ensure that the correct item number is chosen for the voltage required for the location.

The 230V power supply can be used on voltages between 220 Volts and 250 Volts inclusive.

The 115V power supply can be used on voltages between 100 Volts and 120 Volts inclusive.

# Specifications continued

#### Features and Benefits

- Greater design flexibility Colour Call gives the lighting designer greater flexibility when planning the lighting plot, with the ability to use at least 11 colours for each luminaire.
- Simple colour plotting When plotting the show changing to another colour in the scroll is as easy as changing level.
- Choice of colour change speeds Colour Calls can be used not only for fast frame effects, but also, more significantly for both television and theatre, for slow colour fading affects.
- Increase the usefulness of each luminaire Rigging space is often limited. Attaching a scroller will provide greater efficiency of use for each luminaire rigged.

- Faster rigging and focusing Colour Call will reduce rigging and focusing time, as fewer luminaires can be used. This is especially important where getin time is limited or turn around time is important.
- Saturation rigs In both the television environment and repertory theatre, where each luminaire may have to perform multiple tasks, Colour Call will allow operators to re-colour luminaires by remote control between productions.
- Multiple diffusers for film and television The combination of neutral density filters and Colour Call provides an alternative method of remotely reducing the light intensity with the added benefit of not varying the colour temperature. The remote control of diffusion filter on demand will also prove to be a major benefit to a studio's efficiency.

# Colour Call CCI (Par 64 size)

	Unpacked Weight and Dimensions	Packed Weight and Dimensions 2.5kg (5.5lb)	
Weight	2kg (4.4lb)		
Height	335mm (13")	390mm (15 4")	
Width	305mm (11.9")	320mm (12.6")	
Depth	88mm (3.4") 100mr		
Input Voltage		24V dc	
Current consumption		0.3Amp	
-			

### Control Input

DMX 512 or Analogue voltage 0V to +10V Connected via a 5 pin XLR

### Scrolling speed

Maximum II frames in one second Minimum Fade time determined by control board.

# Number of Colours

2 to 16 frames. Calibrated at 11 frames

#### **Back Plates Included**

Cantata size:  $185 \text{mm} (7.3'') \times 185 \text{mm} (7.3'')$ Cadenza size: 245mm (9.6") x 255mm (10")

#### Suitable Luminaires

Cantata, Cadenza, Leko® 6",8"& 10", Punchlites and most types of parcans and most luminaires with either 185mm (7.3") or 255mm (10") colour runners.

### Colour Call CC2 (2/5kW size)

	Unpacked weight and Dimensions	Packed Weight and Dimensions
Weight	9.5kg (211b)	10.5kg (23lb)
Height 600mm (23.6")		850mm (33.5")
Width	483mm (19")	550mm (21.7")
Depth	153mm (6")	250mm (10")
Input Voltage		24V dc
Current consumption (including auxiliary fan)		0.7Amp

#### Control Input

DMX 512 or analogue voltage 0V to +10V. Connected via a 5 pin XLR

### Scrolling speed

Maximum 11 frames in four seconds Minimum Fade time determined by control board

#### **Suitable Luminaires**

Castor, Pollux, Pollux Bambino,

### **Number of Colours**

2 to 11 frames. Calibrated at 11 frames

### **Digital Splitter Box**

Weight	2.2kg (51b)	2./kg (6lb)
Height	eight 168mm (6.6") 2	
	Unpacked weight and Dimensions	Packed Weight and Dimensions
Weight	3.3kg (7.3lb)	3.8kg (8.4lb)

Unpacked weight

and Dimensions

Packed Weight and Dimensions

Input Voltage Current consumption		0.1Amp
		24V dc
Depth	60mm (2.4")	200mm (8")
Width	246mm (9.6")	380mm (15")

#### **Analog Splitter Box**

	Unpacked weight and Dimensions	Packed Weight and Dimensions
Weight	3.3kg (7.3lb)	3.8kg (8.4lb)
Height	168mm (6.6")	290mm (11.5")
Width	340mm (13.4'')	380mm (15")
Depth	65mm (2.5")	200mm (8'')

24V dc	
None	

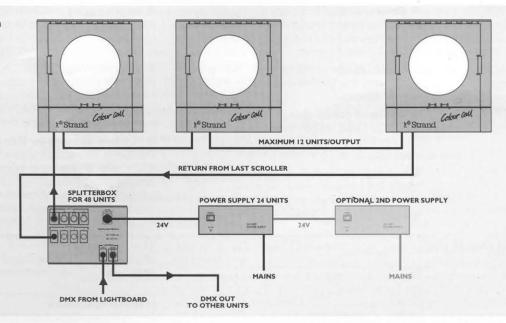
#### Power Supply Units 12 Unit 24 Unit

	Unpacked weight and Dimensions	Packed Weight and Dimensions
Weight	3.8kg (8.4lb)	4.2kg (9.3lb)
Height	215mm (8.5")	290mm (11.5")
Width	330mm (13")	380mm (15")
Depth	85mm (3.4")	200mm (8")

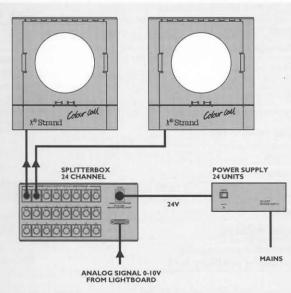
	I2 Un	it	24 Un	it
Nominal Input Vol	230V tage	115V	230V	115V
Input VoltageV	± 15% ariation	± 15%	± 15%	± 15%
Current	The state of the s	2.7Amp	2.5 Amp	4.4 Amp
Output Voltage	24V dc	24V dc	24V dc	24V dc

# **Schematics**

# **Digital System**

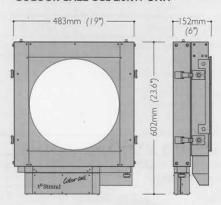


# **Analog System**

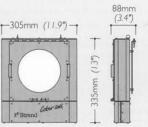


# **Dimensional Drawings**

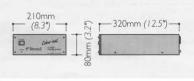
### COLOUR CALL CC2 2/5KW UNIT



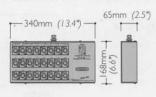
### COLOUR CALL CCI PAR SIZE UNIT



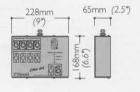
### POWER SUPPLY UNIT



# ANALOG SPLITTER BOX



# DIGITAL SPLITTER BOX



Scale 1:15

# **Ordering Information**

Scrollers	Description	Item Numbers Europe USA/Canad	
Colour Call CC1 (Par 8" size)	Supplied with Cantata and Cadenza back-plates	20 001 00	5150
Colour Call CC2 (2/5kW size)	Supplied with auxiliary cylindrical cooling fan and universal back plate	20 001 50	5151
Accessories	Supplied With advinary Cylindrical Cooling Intrand Universal Back Plate	20 001 30	5151
	2 - 12 - 12 - 12 - 12 - 12 - 12 - 12 -	20.012.02	
Colour Call 12 unit Power Supply (230V)	Powers up to 12 Colour Call CC1 or 6 Colour Call CC2	20 012 23	-
Colour Call 12 unit Power Supply (115V)	Powers up to 12 Colour Call CC1 or 6 Colour Call CC2	20 012 11	5152
Colour Call 24 unit Power Supply (230V)	Powers up to 24 Colour Call CC1 or 12 Colour Call CC2	20 024 23	
Colour Call 24 unit Power Supply (115V)	Powers up to 24 Colour Call CC1 or 12 Colour Call CC2	20 024 11	5154
Colour Call Digital Splitter box	Distributes 24V dc power and DMX to a maximum of 48 Colour Call CC2	20 030 00	5155
Colour Call Analog Splitter box	Distributes analogue control and 24V dc power to 24 Colour Calls	20 040 00	
Cables			
5m (15') Colour Call Data/Power Cable	Daisy Chain cable used to link a scroller to the splitter box or to another scroller	20 050 05	
10m (30') Colour Call Data/Power Cable	Daisy Chain cable used to link a scroller to the splitter box or to another scroller	20 050 10	5160
15m (45') Colour Call Data/Power Cable	Daisy Chain cable used to link a scroller to the splitter box or to another scroller	20 050 15	5162
20m (60") Colour Call Data/Power Cable	Daisy Chain cable used to link a scroller to the splitter box or to another scroller	20 050 20	5164
25m (75') Colour Call Data/Power Cable	Daisy Chain cable used to link a scroller to the splitter box or to another scroller	20 050 25	5166
0.3m (1') Colour Call Data/Power Cable	Daisy Chain cable used to link a Colour Call CC2 to its additional fan	20 050 00	5168
5m (15') 24V Colour Call Power Cable	High current cable to link a power supply to a splitter box	20 060 05	5169
	Cable type recommended to connect between the control desk and a spli between two splitter boxes is: Belden 9829 or STC's equivalent Cable typ. This cable should not be used as power/data cable to daisy chain Colour (	e: FB0S2P24.	
Back Plates			
Colour Call CC1 Cantata Back Plate		20 071 05	-
Colour Call CC1 Cadenza Back Plate		20 071 08	-
Colour Call CC1 Par & Leko® 10" Back Plate		20 071 10	5157
Colour Call CC1 Leko® 6" Back Plate		20 071 06	5156
Colour Call CC2 universal 2/5kW Back Plate		20 071 50	-
Miscellaneous			
Heat resistant sticky tape		20 090 00	-
Gel String for Colour Call CC1		20 080 10	5158
Gel String for Colour Call CC2		20 080 15	5159

The company reserves the right to make any variation in design or construction to the equipment described. Colour Call, Leko®, Cantata, Cadenza, Punchlite, Harmony, T-spot, Castor, Pollux, and Pollux Bambino are trade marks of Strand Lighting Limited and Strand Lighting Inc. Strand and Strand Lighting are registered Trade Marks.

Strand Lighting is a company within the Film and Television Division of The Rank Organisation, United Kingdom



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