



PROGRAMMING THE START ADDRESS OF A JASON™ FIXTURE:

The Dipswitch settings utilize the binary numbering system. The rule for setting an address with Dipswitches is to start with the largest number of a Dipswitch and work your way down through the lower numbers. To set an address of 35 you would first flip "on" Dipswitch #6 for a value of 32, then flip "on" switch #2 which makes the total value now 34, then flip "on" switch #1 which makes the total value now 35.

SWITCH VALUES:

- 1 : 1
- 2 : 2
- 3 : 4
- 4 : 8
- 5 : 16
- 6 : 32
- 7 : 64
- 8 : 128
- 9 : 256

Note Dipswitch 10 is reserved for a special mode.

TO RUN JASON™ AS AN ADDRESSED FIXTURE WITH APPROVED DMX CONTROLLER:

For standard DMX512 operation set switch 10 to OFF and use switches 1 through nine to select a start address. Valid addresses are 1-510 for JAS-3 fixture and 1 through 509 for JAS-4 fixtures.

To run JASON™ for a **Color Wash** effect set the Dipswitches so that all the JASON™ fixtures connected to the controller are the same address. In this Color Wash mode, effectively all JASON™ fixtures will react identically. For example if all JASON fixtures are set to address 1, all address 1 signals will control the red lamps, address 2 signals will control the green lamps and address 3 will control the blue lamps (for JAS-4 the address 4 signals will control the white lamps).

To run JASON™ for a **Color Chase** effect Dipswitches on the JASON™ fixtures will need to be set to indicate a distinctive start address different from the preceding fixture. Each subsequent JASON™ fixture will have a higher distinctive starting address. Since the JAS-3 is a 3-channel fixture, each subsequent fixture should have a starting address, 3 addresses higher than the previous fixture. For example, on a JAS-3 system the first fixture is set to address 1, the second to address 4, the third to address 7, the fourth fixture to address 10, and so on....up to a total of 170 unique fixtures. Since the JAS-4 is a 4-channel fixture, each subsequent fixture should have a starting address, 4 addresses higher than the previous fixture. For example, on a JAS-4 system the first fixture is set to address 1, the second to address 5, the third to address 9, the fourth fixture to address 13, and so on....up to a total of 128 unique fixtures.

USING JASON™ AS A DMX CONTROLLER:

JASON™ is capable of being a DMX controller and controlling itself or other JASON™ fixtures. This control can be for **Fixed Color**, **Color Wash**, or **Color Chase** modes. Slave fixtures use standard DMX operation in 4-channel mode. The Master acts as fixture 1 though you do not have to set it as such. If all the Slave fixtures are set to address 1, **Fixed Color** or **Color Wash** modes will allow them to be controlled and synchronized to the Master. Offsetting start addresses on the slaves will lead to a **Color Chase** effect in which colors appear to chase from one fixture to the next.



Fixed Color:

To access **Fixed Color**- set the Dipswitches on the MASTER according to the chart below.

Color#	Dipswitches Set ON	RED	GREEN	BLUE	WHITE
1	9,10	100%	5%	5%	0%
2	1,9,10	5%	100%	5%	0%
3	2,9,10	5%	5%	100%	0%
4	1,2,9,10	50%	50%	5%	0%
5	3,9,10	5%	50%	50%	0%
6	1,3,9,10	50%	5%	50%	0%

If desired, slave fixtures can be run by this Master fixture and synchronized to it. Set the Dipswitches on subsequent fixtures to be address 1 (Dipswitch 1 ON and all others off, see **PROGRAMMING THE START ADDRESS OF A JASON™ FIXTURE**)

Color Wash:

To access **Color Wash**- set the Dipswitches on the MASTER according to the chart below.

Fade Time to Next Color	Dipswitches Set ON
1 Sec.	7,9,10
2 Sec.	1,7,9,10
4 Sec.	2,7,9,10
8 Sec.	1,2,7,9,10
15 Sec.	3,7,9,10
30 Sec.	1,3,7,9,10
1 Min.	2,3,7,9,10
2 Min.	1,2,3,7,9,10

Slave fixtures can be run by this Master fixture and synchronized to it to create the **Color Wash** effect. Set the Dipswitches on subsequent fixtures to be address 1 (Dipswitch 1 ON and all others off, see **PROGRAMMING THE START ADDRESS OF A JASON™ FIXTURE**)

Color Chase:

To access **Color Chase** set the Dipswitches on the master according to the desired effect in **Color Wash** above. Then set the addresses for the subsequent slave fixtures according to the chart below.

Slave Fixture#	Start Address	Dipswitches Set ON
1	1	1
2	5	1,3
3	9	1,4
4	13	1,2,4
5	17	1,5
6	21	1,3,5
7	25	1,4,5
8	29	1,3,4,5
9	33	1,6
10	37	1,3,6
11	41	1,4,6
12	45	1,3,4,6



TO RUN JASON™ AS AN ADDRESSED FIXTURE WITH COLORDIAL DMX CONTROLLER:

A special mode is necessary to operate JASON™ properly using the Color Kinetics ColorDial DMX controller. This controller is not programmable and thus special care will be necessary to prevent damaging the lamps or ballasts of the JASON™ fixture. This special mode is necessary to prevent the controller from cycling on and off the ballasts (see GENERAL TIPS FOR PROGRAMMING CONTROLLER TO EFFECTIVELY UTILIZE JASON™ above). Essentially anytime a light level of less than 5% is sent to a ballast (DMX intensity of 12 or less), the light output is automatically converted to 5% (DMX intensity 13). The ColorDial is capable of controlling the JAS-3 only and not the JAS-4.

COLOR WASH USING COLORDIAL:

Set Dipswitches 1 and 10 ON for all JASON™ fixtures connected to this controller. In this mode all fixtures will have the same address and will all react identically.

COLOR CHASE USING COLORDIAL:

Set Dipswitches according to the chart below, for a **Color Chase** effect. In this mode, there are only 12 unique fixture start addresses sent by the ColorDial, thus redundant addresses will need to be used if more than 12 JASON™ fixtures are being used.

Fixture#	Start Address	Dipswitches Set ON
1	1	1,10
2	4	3,10
3	7	2,3,10
4	10	2,4,10
5	13	1,3,4,10
6	16	5,10
7	19	1,2,5,10
8	22	2,3,5,10
9	25	1,4,5,10
10	28	3,4,5,10
11	31	1,2,3,4,5,10
12	34	2,6,10

PIN DESIGNATIONS FOR DMX DATA SIGNAL CABLES:

RJ45 pin out follows ANSI E1.11 standard (ESTA DMX512-A).

PIN	Wire Color	DMX512 Function
1	white / orange	data 1+
2	orange	data 1-
3	white / green	data 2+ (generally not used)
4	blue	Not assigned
5	white / blue	Not assigned
6	green	data 2- (generally not used)
7	white / brown	Data link common for data 2 (generally not used)
8	brown	Data link common for data 1



XLR 5 pin out (professional theatrical connector)

PIN	DMX512 Function
1	Data link common (common reference)
2	data 1-
3	data 1+
4	No connection or data 2-
5	No connection or data 2+

**ALL JASONTM LUMINAIRES TO BE INSTALLED BY QUALIFIED ELECTRICIAN
INSTALL IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (NEC)**

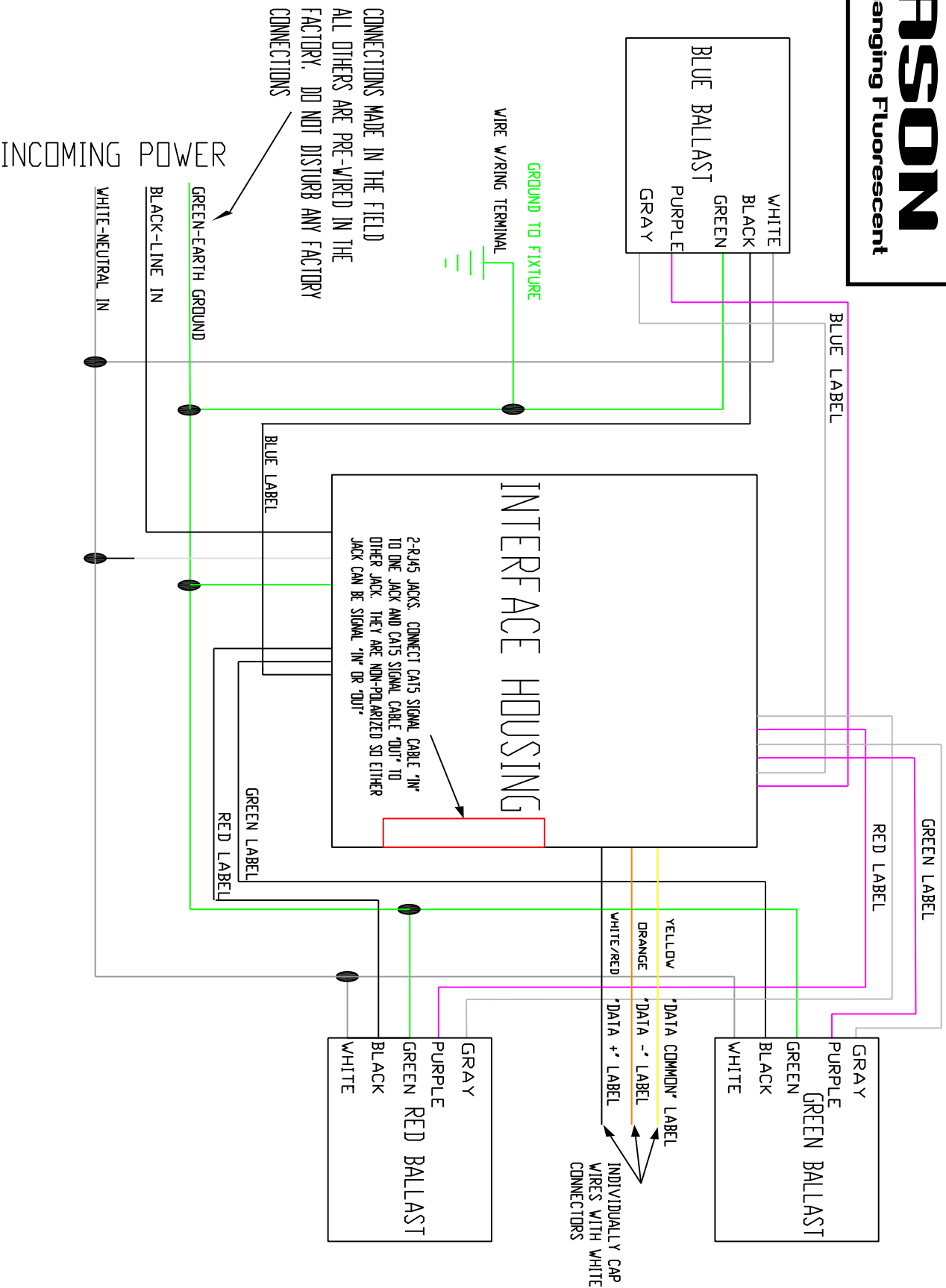


**BIRCHWOOD
LIGHTING, INC**

JASON

Color Changing Fluorescent

JAS-3

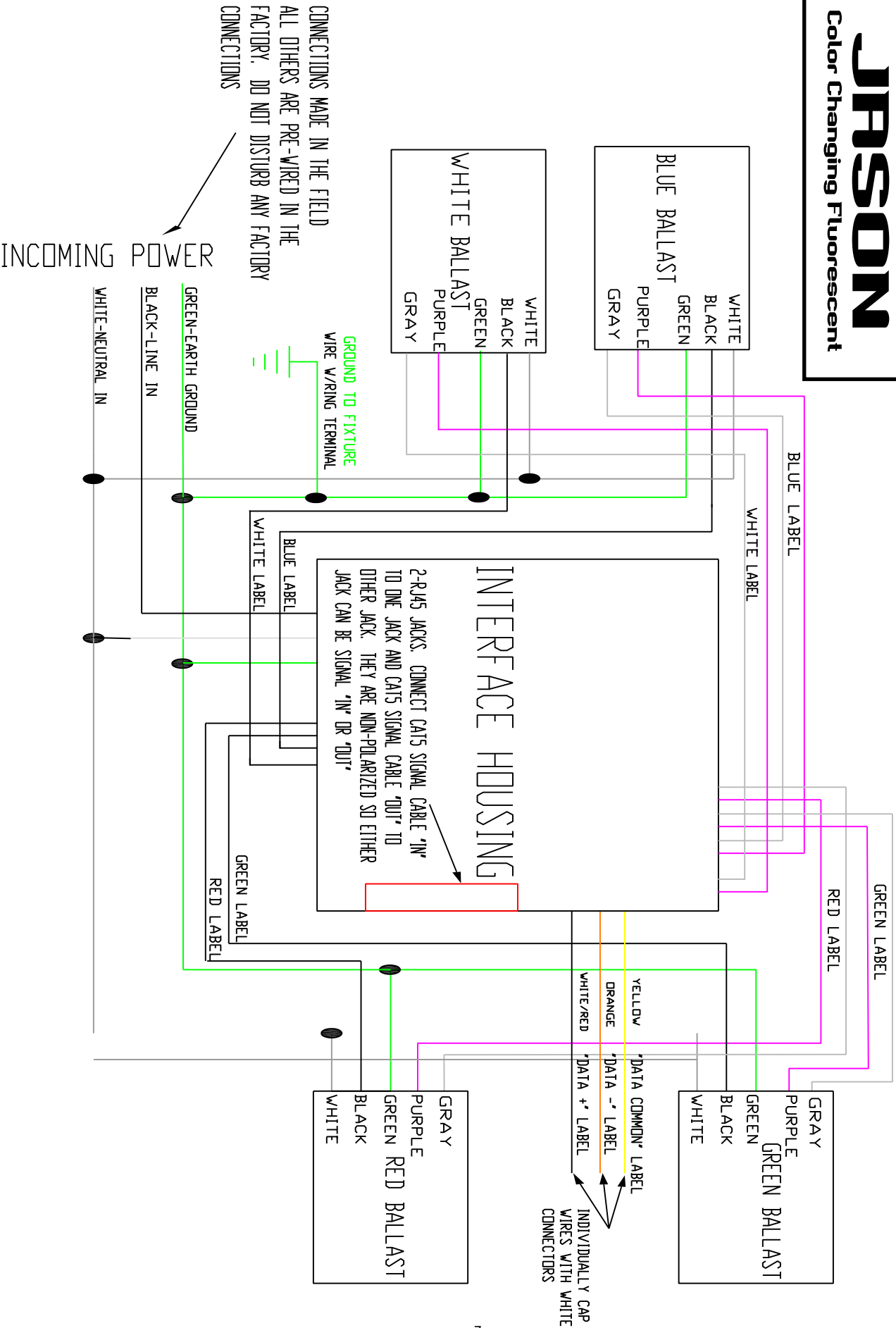


CONNECTIONS MADE IN THE FIELD
ALL OTHERS ARE PRE-WIRED IN THE
FACTORY. DO NOT DISTURB ANY FACTORY
CONNECTIONS



JASON
Color Changing Fluorescent

JAS-4





**BIRCHWOOD
LIGHTING, INC**

JASON

Color Changing Fluorescent

JASON TYPICAL DATA CABLE INSTALLATION

DMX CONTROLLER POWER SUPPLY
CONNECTION (SEE DMX CONTROLLERS
USERS GUIDE)

