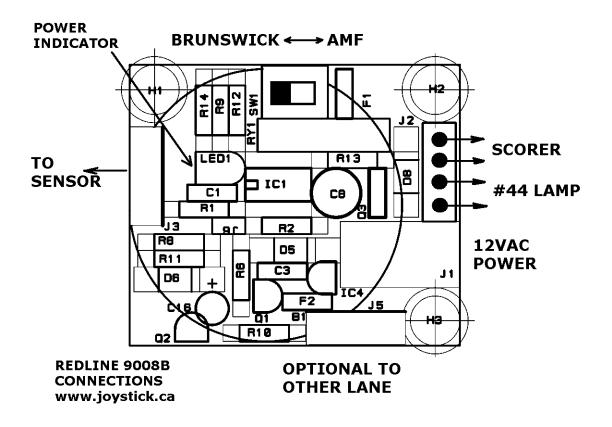*joystick*

SCORING
www.joystick.ca

AC ADAPTER REDLINE MANUAL
FOR PN 9008B
(C) JOYSTICK SCORING LIMITED 1997-2012

redinst9008b.doc

Congratulations on purchasing one of the easiest to use universal replacement foul lights available. With a little care REDLINES will give you years of reliable service.

Introduction:

REDLINES utilize state of the art signal detection technology and microprocessor control to achieve signal range and performance vastly superior to any conventional technology foul light.

POWER INDICATOR

BRUNSWICK ⟷ AMF

H1
R14 R9 R12 SW1
RY1
F1
H2
J2

TO SENSOR

LED1
R13
D8
SCORER

C1
IC1
C8
Q3
#44 LAMP

R1
J3
R2
R8
R11
D6
R6
D5
C3
12VAC POWER

C16
+
IC4
J1
J5
F2
B1
H3
Q2
R10

REDLINE 9008B CONNECTIONS
www.joystick.ca

OPTIONAL TO OTHER LANE

SPECIFICATIONS:*

Indicator light	External #44 bulb
Audible indicator	Piezo Bell, 2.8kHz, 85dB @ 12"
Control Circuit	Microprocessor.
Timing Precision	+/-0.5%, aging +/-0.3% 10 years.
Beam type	Infra Red, retro-reflective.
Range	10'
Power Supply	12VAC, 0.6W idle UL/CSA AC adapter included.
Short protection	Electronic self re-setting fuses.
Foul speed	Pre-set 155ms.
Light on period	11 seconds.
Audio alarm period	4 rings, 1.5 seconds total.
System connections	Relay contact 24V AC 32VDC @ 0.1A Max - Brunswick 12V @ 0.1A - AMF & Qubica
Connector system	Pluggable 8 position screw terminal block - 2mm slot.
Wire gauges	24 - 16 AWG.
Reflector	1" round, white or red corner reflector.
Approvals	ABC, WIBC.

*NOTE: Specifications subject to change without notice.

Installation:

1• Redlines can be mounted in the existing foul bracket if the old lenses are removed and the hole is minimum 7/8" diameter hole to allow the beam to 'see' the reflector through.

The foul light comes in 2 basic components – the sensor & sensor mounting bracket and the enclosed foul controller board.

2• The sensor and controller are connected via the 5 conductor sensor cable, which can be unplugged from the controller to allow ease of positioning. The sensor is fastened to the lane surface through the ¼" holes in the mounting plate with 2 #8 ½" screws. This allows easy left - right adjustment for the sensor. There are 4 ¼" holes in the mounting plate so that the sensor can be easily turned to accommodate both left and right lane sides.

3• Up – down adjustment is done by simply rotating the sensor as needed. The sensor is firmly mounted in its bracket, but it may be rotated without loosening the screws by gently prying with a screwdriver between the body and its mounting bracket.

4• Mount the reflector bracket on the other side of the lane (usually inside the common foul light cover). Peel off the self adhesive backing from the reflector supplied and stick it to the reflector bracket. Mount the reflector with bracket so that the beam is sent back to the REDLINE, across the foul line.

IT IS VERY IMPORTANT TO MAKE SURE THE FOUL LIGHT AND REFLECTOR ARE MOUNTED SECURELY - TO PREVENT ANY MOVEMENT

WHEN BALLS GO BY.

5• Plug the the 12 Volt AC adapter supplied into the foul controller board. The power indicator light should come on. If the sensor is lined up with the reflector, the sensor indicator will be off, it will turn on when the beam is prevented from seeing the reflector.

If you can't get the sensor indicator light to turn off, move a reflector close to the front of the sensor and watch when the indicator turns off. In this manner you will be able to determine where the beam is pointing.

Once the foul sensor is seeing the reflector, do a final test to check alignment by covering half of the reflector and then see if the sensor is still working. This will insure optimum alignment.

6• The foul speed has been factory pre-set, and will NEVER need adjusting.

7• Connect the Automatic Scoring to the screw terminals as indicated. Select the type of foul with the switch provided. A = AMF, B=BRUNSWICK.

8• Test the unit with your scoring system. Once you are satisfied unplug the AC adaper power and clip on the cover, then plug in the AC adaptor again.

9• Foul controller colour codes:
        1 – black   - 12VAC
        2 – red   - 12VAC
        3 – white   - scorer
        4 – blue   - scorer
        5 – yellow   - 6V 0.2A indicator lamp
        6 – orange - 6V 0.2A indicator lamp
10•   Sensor colour codes:
        1 – black   - 0VDC
        2 – green   - signal
        3 – red   - 5VDC