

## UNILENS® II COLOR LIGHT SIGNAL



IW20



IW20RT

- COLOR LIGHT RELIABILITY
- UP TO FOUR COLOR ASPECTS
- USES STANDARD SIGNAL LAMP BULBS
- WEATHER PROOF CAST ALUMINUM HOUSING
- COMPACT AND EASY TO INSTALL

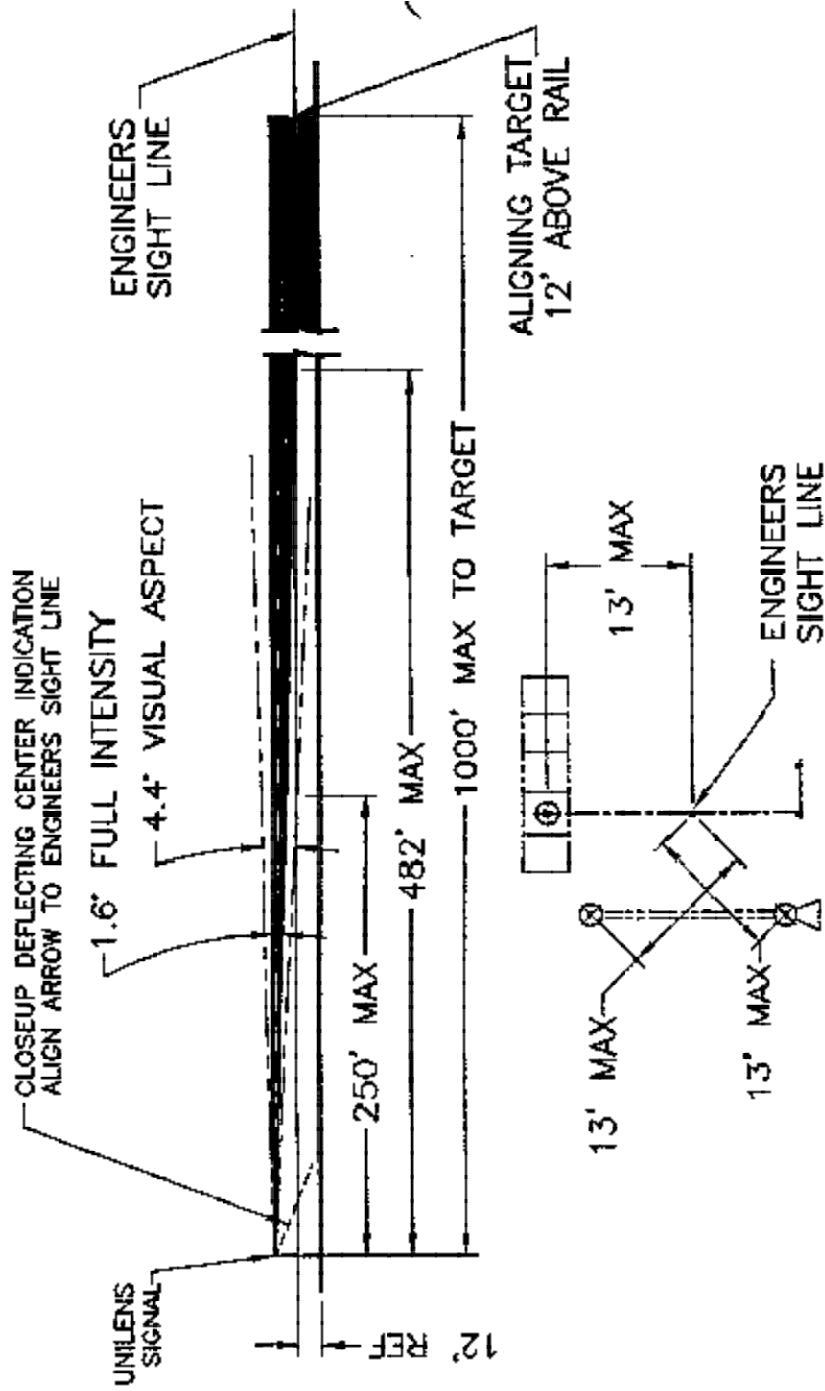
The UNILENS® II is a railroad wayside color light signal capable of providing up to four different color indications with a single lens. Light transmission from individual lamp-filter modules is carried in a fiber-optic conductor to the common output lens.

The lamp-filter modules each consist of a standard 10-volt, 18 or 25 watt signal lamp bulb, high precision die cast aluminized polycarbonate reflector and glass color filter. Two, three or four modules may be used for up to four signal color indications. The output lens is high impact clear acrylic with optional center deflector.

Light output, circuitry and operation are the same as a conventional color light signal, yet the size is near that of a single color light or search light signal. It is available with 8" lens or in a 6" lens limited clearance version for dwarf or transit use. Either may be directly stacked with other UNILENS® II or Safetran CLS10D heads to provide multiple arm signals.

# UNILENS® II SIGNAL BEAM PATTERN AND INSTALLATION INFORMATION

## RECOMMENDED APPLICATION



## SPECIFICATIONS

<b>Aspect Quantity:</b>	Two, Three or Four
<b>Aspect Colors:</b>	Green, Yellow, Red and Lunar White
<b>Lens:</b>	6-3/8" Universal, 8-3/8" plain or 40 degrees center
<b>Lamp Bulb:</b>	10 Volt, 18 or 25 Watt S-11, SC Bayonet Signal Lamp
<b>Housing:</b>	Cast Aluminum, painted flat black
<b>Background and Visor:</b>	(IW20) Sheet Aluminum, painted flat black, 12" visor, 36" diameter background
<b>Visor:</b>	(IW20RT) 6" black plastic visor only
<b>Aiming Device:</b>	Two way adjustable base with peep sight scope
<b>Circuit Connection:</b>	Same as color light
<b>Voltage Adjustment:</b>	Resistor in lamp head; optional transformers with taps for 115 VAC lighting
<b>Dimensions:</b>	<p>IW20 (8 inch lens signal)            27 inches (69 centimeters) high            8-1/2 inches (21.6 centimeters) wide            26 inches (66 centimeters) deep</p> <p>IW20RT (6 inch lens signal)            24 inches (61 centimeters) high            8-1/2 inches (21.6 centimeters) wide            24 inches (61 centimeters) deep</p>
<b>Weight:</b>	<p>IW20 (8 inch lens signal) - 73 pounds (33 kilograms)            IW20RT (6 inch lens signal) - 53 pounds (24 kilograms)</p>

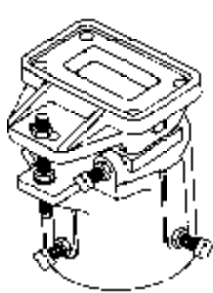
## ORDERING INFORMATION

To order, specify the following.

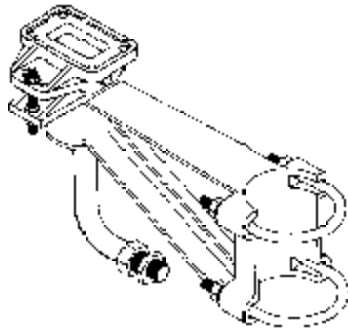
1. Model IW20 (8-3/8" lens) or Model IW20RT (6-3/8" lens)
  2. Number of Aspects - 2, 3, 4
  3. Aspect Colors - Green, Yellow, Red, or Lunar White
  4. Bulb - 10 volt, 18 or 25 watt
  5. Lens Type - see page C-3-4
  6. Mounting Desired - see page C-3-4
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## MOUNTING BRACKETS

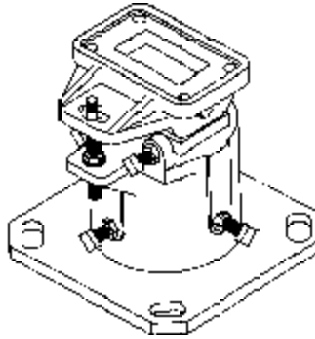
Mounting brackets are of lightweight cast aluminum construction. The top and side of mast mounting brackets will be furnished for 5 inch pipe mast mounting, unless otherwise specified. The mounting base assemblies are to be used for 6-3/4 x 6-3/4 and 8 x 8 inch bolt spacings.



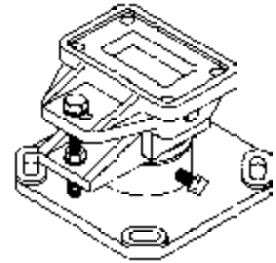
**Top of Mast  
Mounting**



**Side or Front  
of Mast Mounting**



**Mounting Base  
8 x 8 Bolt Spacing**



**Mounting Base  
6-3/4" x 6-3/4" Bolt  
Spacing**

Description	Part Number
Top of Mast Mounting Bracket, 5"	042254-2X
Side or Front of Mast Bracket, 5"	042256-22X
Mounting Base for 8" x 8" Bolt Spacing	042275-3X
Mounting Base for 6-3/4" x 6-3/4" Bolt Spacing	0442275-14X

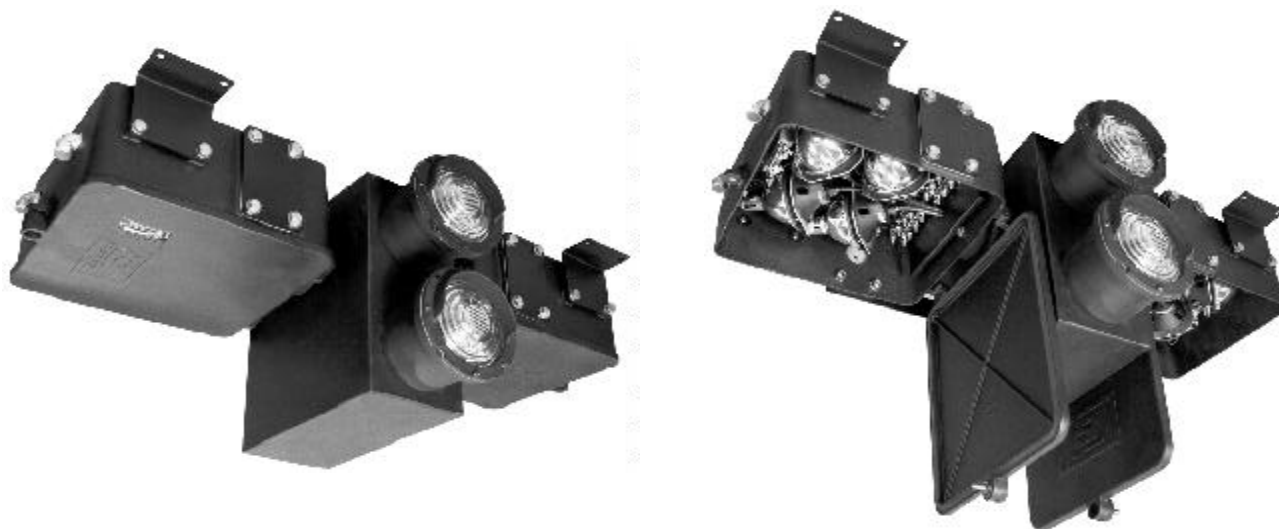
## LENSES

Diameter	Focal Length	Deflection	Material	Part Number
8-3/8"	6"	None	Clear Plastic	042295
8-3/8"	6"	40 degrees Centerspot	Clear Plastic	042295-1
8-3/8"	None	15 degrees Deflecting Roundel	Clear Plastic	042295-7
6-3/8"	3-3/4"	Universal**	Clear Plastic	044075

\* The 8-3/8 - 15 degrees deflecting roundel for curved track applications is mounted over the standard lens using an adapter ring. Specify "with deflecting roundel" when ordering. For field installation, order Roundel/Adapter Kit #044023-X1.

\*\* Universal lens with strong long range beam, 30 degrees deflection optics and a 60 degrees near side faceted area for very close up indication.

## UNILENS II DUAL QUAD WAYSIDE SIGNAL (LOW PROFILE)



The Safetran Unilens II Dual Quad (Low Profile) Wayside Signal was designed for use in tunnels or other applications where clearance is a consideration and special mounting is necessary. It is a wayside color light signal capable of providing up to four different color indications through each of two 6-3/8 or 8-3/8 inch diameter lenses.

The lamp-filter modules each consist of a standard 10 volt, 18 or 25 watt signal lamp bulb, high precision die cast aluminized polycarbonate reflector and glass color filter. One to four color filter modules may be used for up to four signal color indications through each of the two lenses. Two modules with the same color filter may be used for redundancy. The output lenses are high impact clear acrylic with optional center deflector.

Light output, circuitry and operation are the same as a conventional color light signal.

Safetran personnel are available to discuss this signal or any other special application that you may need.

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## SPECIFICATIONS

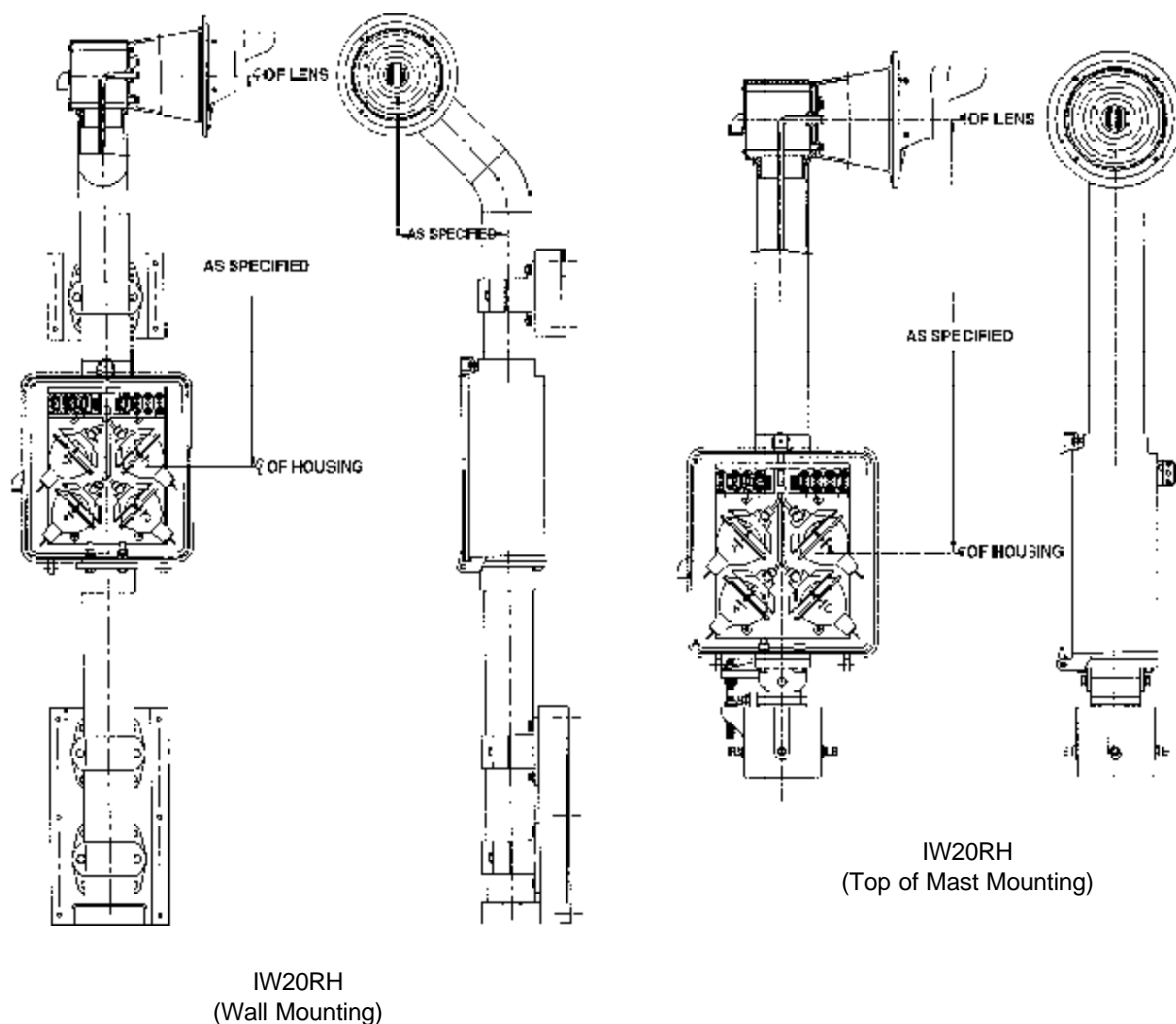
<b>Aspect Quantity:</b>	One, Two, Three, Four
<b>Aspect Colors:</b>	Green, Yellow, Red and Lunar White
<b>Lens:</b>	6-3/8" Universal, 8-3/8" plain or 40 degree center
<b>Lamp Bulb:</b>	10 Volt, 18 or 25 Watt S-11, SC Bayonet Signal Lamp
<b>Housings:</b>	Cast and Fabricated Aluminum, painted flat black
<b>Circuit Connection:</b>	Same as color light
<b>Voltage Adjustment:</b>	Resistor(s) in lamp head; or optional transformers with taps for 115 VAC lighting
<b>Dimensions:</b>	Signals with 6-3/8 D. Lenses 17 inches (43.2 centimeters )high 44 inches (111.8 centimeters) wide 23 inches (58.4 centimeters) deep  Signals with 8-3/8 D. Lenses 20 inches (50.8 centimeters)high 44 inches (111.8 centimeters) wide 23 inches (58.4 centimeters) deep
<b>Weight:</b>	165 pounds (75 kilograms)

## ORDERING INFORMATION

To order, specify the following:

1. Unilens Dual Quad Signal #044199-X
  2. Lens Type-See Page C-3-4
  3. Number of Aspects- 1,2,3,4
  4. Aspect Colors-Green, Yellow, Red or Lunar White
  5. Bulb- 10 volt, 18 or 25 watt
  6. Background and Visors (if required) - Aluminum or Plastic is available
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## REMOTE HEAD UNILENS II



The Remote Head Unilens II, Model IW20-RH, is a special application railroad wayside color light signal capable of providing up to four different color indications with a single lens. It is designed to elevate the signal output head above, or above and right or left of the mast assembly, on which it is mounted. Mounting can be top of a mast or side of mast brackets, which can be used as shown in the above illustrations. Light transmission from individual lamp-filter modules is carried in a fiber-optic conductor to the common output lens.

The lamp-filter modules each consist of a standard 10-volt, 18 or 25 watt signal lamp bulb, high precision die cast aluminized polycarbonate reflector and glass color filter. Two, three or four modules may be used for up to four signal color indications. The output lens is high impact clear acrylic with optional center deflector.

Light output, circuitry and operation are the same as a conventional color light signal, yet the size is near that of a single color light or search light signal. It is available with 8" lens or in a 6" lens limited clearance version for transit use.

Other variations of this type of signal can be designed and manufactured depending on the application requirements.

## SPECIFICATIONS

<b>Aspect Quantity:</b>	Two, Three or Four
<b>Aspect Colors:</b>	Green, Yellow, Red and Lunar White
<b>Lens:</b>	6-3/8" Universal, 8-3/8" plain or 40 degrees center
<b>Lamp Bulb:</b>	10 Volt, 18 or 25 Watt S-11, SC Bayonet Signal Lamp
<b>Housing:</b>	Cast Aluminum, painted flat black
<b>Visor:</b>	6" black plastic visor only
<b>Aiming Device:</b>	Peep sight scope
<b>Circuit Connection:</b>	Same as color light
<b>Voltage Adjustment:</b>	Resistor in lamp head; optional transformers with taps for 115 VAC lighting
<b>Dimensions</b>	
<b>(Light Transmission Housing):</b>	24 inches (61 centimeters) high 8-1/2 inches (21.6 centimeters) wide 24 inches (61 centimetes) deep
<b>Weight:</b>	Approx. 63 pounds (28.6 kilograms) Note: Weight varies with mast length and mounting design.

## ORDERING INFORMATION

To order, specify the following:

1. Model IW20-RH (8-3/8" lens) or Model IW20RT-RH (6-3/8" lens)
  2. Number of Aspects- 2, 3, 4
  3. Aspect Colors- Green, Yellow, Red, or Lunar White
  4. Bulb Type- 10 volt, 18 or 25 watt
  5. Lens Type- see page C-3-4
  6. Mounting Desired- wall or top of mast
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