

DWARF COLOR LIGHT SIGNAL

MODEL CLS-10D



- EXCELLENT LONG RANGE INDICATION
- LIGHTWEIGHT ALUMINUM CONSTRUCTION
- PREFOCUSED LENS AND LAMP RECEPTACLES
- TOP, FRONT OR SIDE, AND BASE MOUNTING

The Model CLS-10D is a long range Dwarf Color Light Signal of modular design, which allows 2, 3, or more units to be easily stacked together.

The housing, doors, and mounting brackets are of lightweight cast aluminum construction.

Neoprene door packing provides a weathertight seal between door and housing. A locking screw secures the hinged door to the lamp housing and utilizes a standard terminal wrench to open or close. Additional security may be provided by using a padlock to prevent access to lock screw.

Each lamp has a doublet lens combination which produces an aspect of one color. Ventilation is provided to minimize condensation. The CLS-10D is furnished with optical arrangements for tangent track. Antiphantom screens are also available. The outer doublet and inner colored doublet are 6-3/8 and 5-1/2 inches in diameter respectively. The doublet lens combination, with single contact candelabra, 2 pin, bayonet base lamp, is prefocused and factory sealed to assure maximum light output. The only adjustment necessary is field alignment accomplished through the use of built-in sighting device.

A 5 ohm, 1.73 ampere, adjustable lamp resistor is provided for each lamp.

The mounting arrangements available for the CLS-10D are top of mast mounting, side of wall mounting, or base mounting on 8 x 8 inch bolt spacing, or 6-3/4 x 6-3/4 inch bolt spacing. Mounting bracket assemblies are adjustable for both vertical and horizontal alignment.

Visors may be furnished in black, polyethylene plastic (high-density), steel or aluminum painted non-reflecting black.

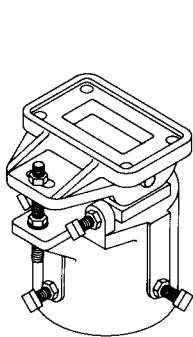
ORDERING INFORMATION

To order, specify the following.

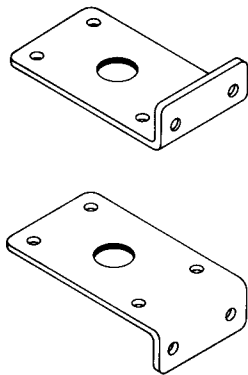
1. Model CLS-10D Dwarf Color Light Signal
2. Number of units and color indication (top to bottom)
3. Lenses desired, see page C-2-3
4. Bulb type, see page A-7-4
5. Mounting desired, see table below
6. Visor, see page C-2-3

MOUNTING BRACKETS

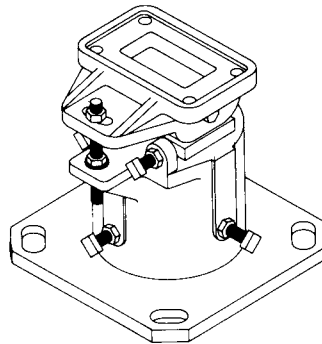
Mounting brackets are of lightweight cast aluminum construction. The top of mast mounting bracket will be furnished for 5 inch pipe mast mounting, unless otherwise specified. The mounting base assemblies are to be used for 6-3/4 x 6-3/4 and 8 x 8 inch bolt spacings.



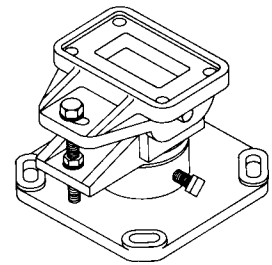
**Top of Mast
Mounting**



**Side of Wall
Mounting**



**Mounting Base
8" x 8" Bolt Spacing**



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

To order, specify description and part number.

Description	Part Number
Top of Mast Mounting Bracket, 5"	042254-2X
Side of Wall Mounting Bracket	042316-X
Mounting Base for 8" x 8" Bolt Spacing	042275-3X
Mounting Base for 6-3/4" Bolt Spacing	042275-1X

LENSES FOR THE MODEL CLS-10D DWARF COLOR LIGHT SIGNAL

Lenses for the Model CLS-10D Color Light Signal are available in glass or high impact plastic. Both lens types provide a full face high intensity indication light. These lenses meet or exceed applicable AREMA recommended practices.

To order, specify diameter, focal length, deflection,
color, material, and part number.

Diameter	Focal Length	Deflection	Color	Material	Part Number	Application
5-1/2"	1/2"	None	Green	Glass	042257-1G	Inner Doublet
5-1/2"	1/2"	None	Green	Plastic	044050-G	Inner Doublet
5-1/2"	1/2"	None	Lunar	Glass	042257-1L	Inner Doublet
5-1/2"	1/2"	None	Lunar	Plastic	042257-4L	Inner Doublet
5-1/2"	1/2"	None	Red	Glass	042257-1R	Inner Doublet
5-1/2"	1/2"	None	Red	Plastic	044050-R	Inner Doublet
5-1/2"	1/2"	None	Yellow	Glass	042257-1Y	Inner Doublet
5-1/2"	1/2"	None	Yellow	Plastic	044050-Y	Inner Doublet
6-3/8"	3-3/4"	None	Clear	Plastic	042210	Outer Doublet
6-3/8"	3-3/4"	Universal*	Clear	Plastic	044075	Outer Doublet
6-3/8"	3-3/4"	None	Clear	Glass	042210-2	Outer Doublet
6-3/8"	3-3/4"	40° Deflection Centerspot	Clear	Glass	042210-3	Outer Doublet

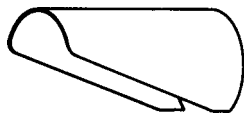
* 6-3/8" Universal lens optics can be adjusted to provide:

1. Full standard long range beam indication.
2. Close up deflecting indication to 30 degrees from beam axis.
3. Additional very close up deflecting bar indication to 60 degrees from beam axis.

VISORS

Visors for the Model CLS-10D are available in black, high density, polyethylene plastic, steel or aluminum painted non-reflecting black. Visor assemblies listed below include all appropriate mounting hardware.

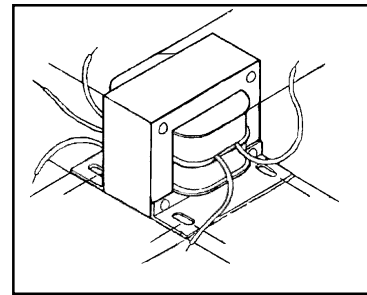
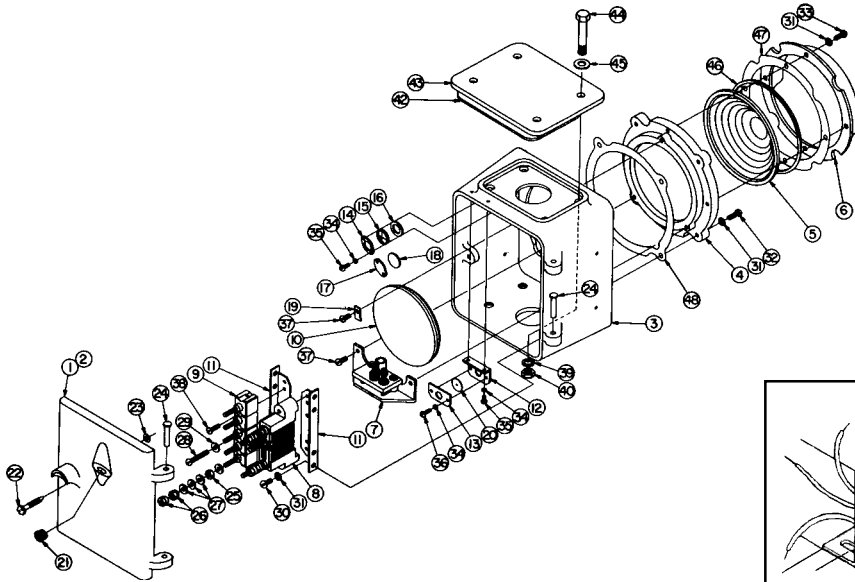
To order, specify description and part number.



Description	Part Number
Visor, Steel	042005-35X
Visor, Plastic	042005-19X
Visor, Aluminum	042005-107X

REPLACEMENT PARTS

MODEL CLS-10D DWARF COLOR LIGHT SIGNAL



41. Note: If a 110 VAC adjustable, signal lighting transformer is required, Safetran can provide Part number 019800-11X

To order, specify description and part number.

Item No.	Description	Qty. Req'd.	Part Number	Item No.	Description	Qty. Req'd.	Part Number
1	Door, CLS-10D	1	042610	29	Washer, Flat, #10	2	1710-SC
2	Gasket, Door	1	104510	30	Machine Screw, Round Head, 1/3" - 20 x .375"	4	2665-RSC
3	Housing, CLS-10D	1	042609	31	Washer, Spring Lock, M, 1/4"	12	1808-MSC
4	Housing, Lens	1	042611	32	Machine Screw, Round Head, 1/4" - 20 x 1"	4	2662-RSC
5	Doublet, Outer (see page C-2-3)	1	Specify	33	Machine Screw, Round Head, 1/4" - 20 x .75"	4	2660-RSC
6	Adapter, Hood	1	042612	34	Washer, Spring Lock, M, #10	6	1806-MSC
7	Support, Lamp	1	042265-10X	35	Machine Screw, Round Head, #10 - 24 x .5"	4	2590-RSC
8	Resistor, Adjustable, 5 Ohm	1	029603-2X	36	Machine Screw, Truss Head, #10 - 24 x .312"	2	2589-TSC
9	Block, Terminal	5	023390-11X	37	Screw, Retaining	3	4266
10	Doublet, Inner (See page C-2-3)	1	Specify	38	Machine Screw, Fillister Head, #10 -24 x .625"	2	2594-LSC
11	Bracket	2	042286-8	39	Washer, Spring Lock, M, 1/2"	4	1812-MSC
12	Bracket, Rear Sight	1	042260-6	40	Nut, Hex, 1/2" - 13	4	2108-SC
13	Plate, Hold Down	1	042260-7	41	Transformer	1	019800-11X
14	Retainer	1	042261-4	42	Gasket	2	042268-3
15	Sight, Front	1	042260-4	43	Cap	1	042255-2
16	Gasket	1	042261-3	44	Cap Screw, Hex Head, 1/2" - 13 x 2.75"	4	4173-HSC
17	Plate, Cover	1	042261-5	45	Washer, Lead	4	042268-2
18	Gasket	1	042261-6	46	Gasket, Lens	1	042611-5
19	Clamp, Lens	1	042026	47	Gasket, Hood Adapter	1	042611-3
20	Disc, Peep Sight	1	042260-3	48	Gasket, Lens Housing	1	042611-2
21	Bushing, Vent	1	041913-X				
22	Screw, Hex Locking	1	042056				
23	O-Ring	1	042380				
25	Nut, Clamp	5	023832				
26	Nut, Binding	10	023831				
27	Washer, Beveled	20	023834				
28	Machine Screw, Round Head #10 -24 x 1.5"	2	2600-RSC				