

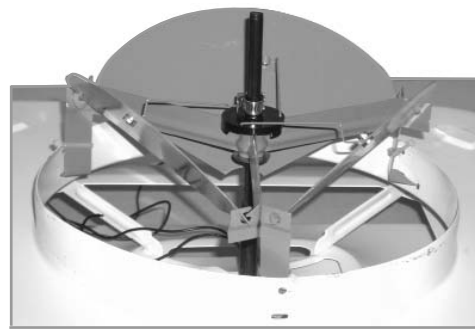
Remote Activated Diffuser (SRAD)

The Carnes R.A.D. (SRAD) is a stamped diffuser with a remote controlled opposed blade damper that allows you to regulate air flow easily and economically. This feature allows you to control specific areas within a larger space to create a more comfortable environment. The R.A.D. offers a diverse range of operating options; it can be preset to operate via thermostat control (either individually or in series), or adjusted, manually via the remote control (either individually or in series).

The SRAD is specifically designed to create comfort zones in larger, controlled spaces. The use of the wireless remote can limit control to one person or can allow anyone access. The handheld remote can be used as such, or wall mounted with an attached bracket to essentially create a wall mounted thermostat.

Here are just a few features of the R.A.D.:

- Wireless Remote Control - Eliminates any need for wiring to thermostat. The remote can also be wall mounted.
- Remote can control up to 32 zones (you determine the zone) with several units available per zone.
- Diffusers can be controlled either thermostatically or manually by remote control.
- Easy and economical installation. Diffuser needs to be wired to a 24 volt step down transformer.
- Remote operates via radio frequency versus infrared. This makes the Carnes control much more consistent, more powerful and eliminates any line of sight obstructions.
- The R.A.D. is FCC approved.



Application

Lay in diffuser with remote control or thermostat control for specific areas within a larger space. Remote can control diffusers either individually or in a group, dictating who can control air flow.

Standard Features

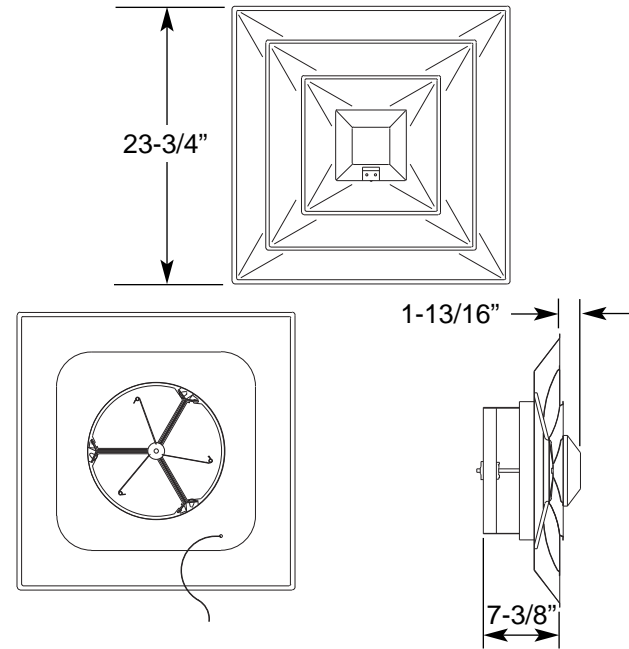
- Stamped steel construction.
- 24 x 24 lay in diffuser.
- 6", 7", 8", 10", 12", 14", 16" inlet sizes available.
- Remote can be hand held or wall mounted.
- Remote uses radio frequencies (FCC approved), not infra-red frequencies. This allows for longer distance, more consistent control and is not affected by line of sight obstructions.
- Remote can handle up to 32 zones, with several units per zone.
- Total versatility in controlling settings. Diffusers can be controlled the following ways:
 - Separate remote for each diffuser.
 - One remote to control all diffusers in one adjustment.
 - One remote to control diffusers individually.
- Uses 24 volt AC from step down transformer. Optional 120/240 volt or 277 volt step down transformer is available. One transformer can handle up to six diffusers.
- In the event of a power outage, the programming chips will retain all data.
- Standard finish is electrocoat acrylic baked enamel. Standard color is #11 Carnes bright white.

Optional Features

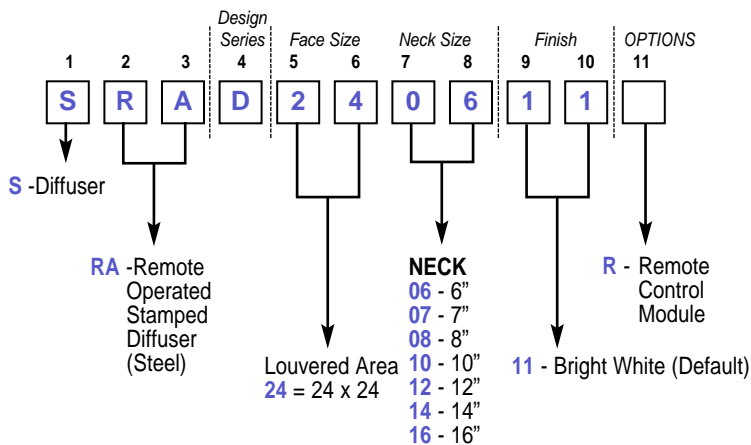
- Step down transformers.
- Extra remote controls.

Accessories

- For surface mount applications, use the KXFAA or KXFAS auxiliary frame (p. A447).

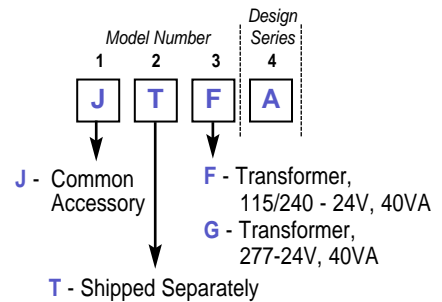


Model Numbering System

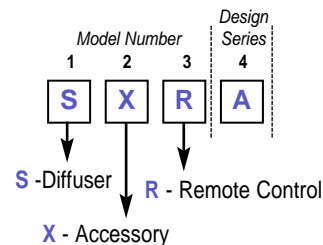


Accessories

Transformer



Remote Control



Model SRAD

24" x 24" Nominal Louvered Face

Neck Size	Horizontal	Duct Velocity - FPM								
		400	500	600	700	800	900	1000	1200	1400
6 Ak .180	CFM	75	94	113	132	150	169	188	226	263
	Pt	.014	.023	.034	.047	.062	.079	.099	.145	.198
	Throw 150 fpm	1	2	2.5	3	3.5	3.5	4	4.5	5
	Throw 50 fpm	4	5	6	7	8	9	9.5	10	11
	NC	L	L	L	L	L	20	24	30	35
8 Ak .270	CFM	135	169	203	237	270	304	338	406	473
	Pt	.018	.029	.042	.058	.076	.097	.120	.173	.236
	Throw 150 fpm	2	3	3.5	4	4.5	5	5.5	6	8
	Throw 50 fpm	7	9	10	11	12	13	14	15	16
	NC	L	L	L	L	20	23	26	32	36
10 Ak .370	CFM	213	266	319	372	426	479	532	638	745
	Pt	.028	.032	.047	.066	.087	.113	.141	.207	.288
	Throw 150 fpm	3	4	4.5	5	6	7	7.5	8	10
	Throw 50 fpm	8	11	12	13	15	15.5	16	18	19
	NC	L	L	L	20	25	30	34	40	48
12 Ak .450	CFM	308	385	461	538	615	692	769	923	1077
	Pt	.032	.048	.071	.101	.135	.176	.222	.333	.420
	Throw 150 fpm	4	5	6	7	8	9	10	11	12
	Throw 50 fpm	12	15	15.5	16	18	19	20	22	24
	NC	L	L	23	30	35	39	43	50	56
14 Ak .520	CFM	420	525	630	735	840	945	1050	1260	1470
	Pt	.042	.068	.101	.140	.185	.230	.285	.420	.550
	Throw 150 fpm	6	7	9	10	11	13	14	15	16
	Throw 50 fpm	15	17	19	20	21	22	24	26	28
	NC	L	20	26	32	37	42	46	53	58
16 Ak .610	CFM	548	685	822	959	1096	1233	1370	1644	1918
	Pt	.056	.089	.129	.177	.233	.297	.367	.534	.731
	Throw 150 fpm	6	7	11	13	14	15	16	18	19
	Throw 50 fpm	18	20	21	24	25	26	29	30	33
	NC	L	23	29	34	39	43	47	54	59

Notes on Performance Data

- Performance data is based on tests conducted in accordance with ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Tests were conducted in isothermal conditions.
- Sound levels are based on a room absorption of 10 db re 10⁻¹² watts.

Notes on Units of Measure Used

- Air flow is given in cubic feet per minute (CFM).
- Static Pressure is given in inches of water (w.g.).
- Sound data is given in NC.
- L indicates an NC below 20.

Correction Factors

Damper Open (%)	100	80	60	40
Percentage of Full Open Air Flow	100	83	61	36
NC Change	0	0	+1	+3
Pressure	No Change	No Change	No Change	No Change