SMAUTOMATIC

MOTORIZATION FOR INTERIOR WINDOW TREATMENTS

USC UNITED SUPPLY COMPANY

1-800-334-1207

SM AUTOMATIC

MOTORIZATION FOR INTERIOR WINDOW TREATMENTS

400 Series
Drapery Motors

Motors assembled in the USA from components manufactured in the USA and Japan.

Control options include
Wall Switch - RF - RTS® - Timer

Fully Compatible with All Major Home Automation Systems, including those manufactured by AMX, Control 4, Crestron, Lutron Electronics, Savant, Vantage and others.

Powerful Features:

QuietSTOP

In a significant enhancement of previous designs, the motor's intelligent electronics anticipate limit positions, providing gentle and quiet stopping.

OSP

Optimum Stacking Positioning

No settings. No fuss.

Perfect appearance every time.

REALSPEED

Moving swiftly and quietly at 10"/second, draperies get to where they need to be.

TRU_Load

Load capacities of our motors do not decrease as the track size increases.

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Direct Drive Drapery Motors

Direct drive motors are used in conjunction with roller tracks as part of a direct drive system. The motor attaches to the end of the track where a shaft on the motor fits into a pulley, which moves the cable and operates the track components. Available as a straight or curved system, with the operating cable strung on the inside of the track. The motor is flush with the front edge of all tracks. All motors are available with surface mount or recessed low voltage switches, infrared or radio frequency wireless remote control, or home automation systems. Drapery should be manufactured with a 3.5" return to cover motor projection and a 5" space between the last two pleats on return (motor) side. Drapery should not drag on the floor, or rub against pocket or valance. Do not use silicone to lubricate as it will adhere to cord and cause slippage around drive wheel.

Specifications	Model 470	Model 475
Dimensions (H)x(W)x(D)	6.41" x 4.01" x 2.75"	6.41" x 4.01" x 2.75"
Track Compatibility	30, 90	30, 90
Weight	4.5 lbs.	4.6 lbs.
Voltage	120 VAC	120 VAC
Amperage	0.70 A	0.76 A
Cycle	60 Hz	60 Hz
Wattage	60 W	80 W
Horsepower	0.07 hp	0.11 hp
Maximum Drapery Weight	90 lbs.	175 lbs.
Maximum Track Length	50 ft.	65 ft.
Traversing Speed	10 in/sec	10 in/sec
Thermal Overload	120^{0}C	120^{0}C

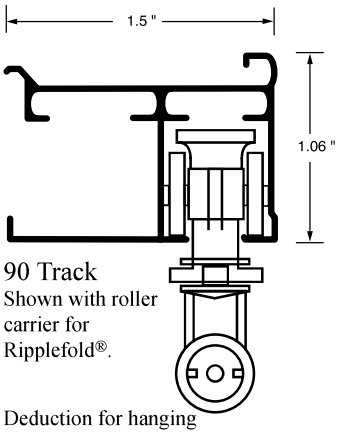
Direct Drive Roller Tracks

90 Dual Channel Track

SM Automatic offers the Series 90 Dual Channel Track for pinch pleated draperies, as well as alternative Contemporary pleating styles, often referred to generically as S-fold or Z-fold.

Pinch pleated systems utilize 5/8" roller carriers for minimal stacking (which allows the option to hang the draperies below the track, or head up to conceal the track), while roller carriers (9/16") have also been designed for Contemporary pleating applications, which guarantees smooth operation.

The aluminum track has a white finish. The maximum length of track without splice: 240". Available as either ceiling or wall mount.

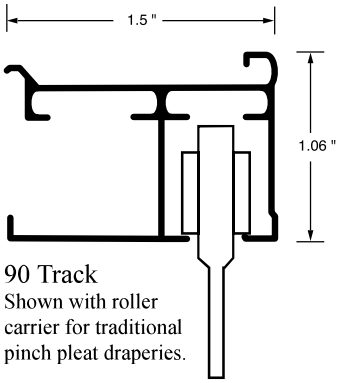


90 Track
Shown with roller carrier for Ripplefold®.

Deduction for hanging below track: 1.5" plus floor clearance. Sew snap tape at top of fabric.

Ceiling or wall brackets add 0.25" to track height.

Add an extra snap at 3" from end for overlaps and returns.



90 Track
Shown with roller carrier for traditional pinch pleat draperies.

Deduction for hanging below track: 1.5" plus floor clearance

Ceiling or wall brackets add 0.25" to track height.

Direct Drive Drapery Systems

How to select the correct Direct Drive System for your specific requirements

1. Decide on the direct drive motor which best suits your needs, based on the actual weight of the draperies.
2. Choose the roller track which correlates with your project requirements. Criteria to be considered are: overall track size, stacking requirement, drapery pleating style, drapery weight, pocket or recess dimensions, and whether or not the draperies can hang below the track.
3. Refer to pricing below to find the system cost according to size requirements.
4. Add control options as listed on pages 20-22, as described on page 23.
5. All systems include motor, track and brackets. Switching controls must be ordered in addition.
6. If track is curved, refer to page 16 for additional information and costs.

Contemporary Pleating Information

S - fold
120% fullness - carriers spaced at 1.875″ (4.25″ snap tape)
100% fullness - carriers spaced at 2.125″ (4.25″ snap tape)
80% fullness - carriers spaced at 2.375″ (4.25″ snap tape)
60% fullness - carriers spaced at 2.625″ (4.25″ snap tape)

Z - fold
120% fullness - 3.75″ pleat (7.5″ snap tape)
100% fullness - 4.25″ pleat (8.5″ snap tape)
80% fullness - 5″ pleat (10″ snap tape)

Draperies using Contemporary pleating must hang below the track.

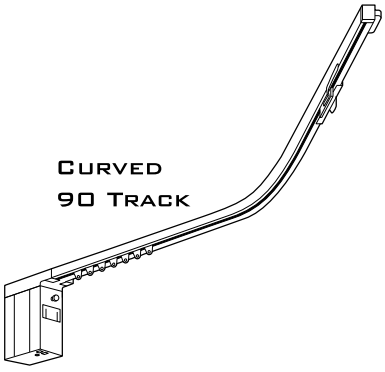
Ripplefold snaps Spacing

1st to 2nd snap on master carrier 2.625″ on center

2nd snap on master to 1st carrier 3″ on center

Direct Drive Roller Tracks

Curved Direct Drive Drapery Systems



Curved Direct Drive Systems using Series 90 Dual Channel Track

Curved systems are fabricated in the same way as straight systems, with the cable inside the track. Tracks may be either ceiling or wall mounted, and are available as motorized only. Load capacities for curved systems are listed below. On tracks with acute angles, the minimum distance from the apex of the angle to end of track (motor side) is 24".

Maximum load capacities for curved systems using the 470 and 475 Series 90 Dual Channel Track and 140-S with the 80 track.

	Motor Load Capacity (lbs)			Motor Load Capacity (lbs)	
one curve	470	60	two curves	470	60
	475	120		475	120
typical bay	470	70	continuous curves	470	70
	475	140		475	140

Minimum Radius:

12 inches at 90 degrees
49 inches for continuous curves

Please note that reverse ("S") bends are not available.

Load capacities shown above are approximate, and intended only as a guide. The 140-S uses the 80 track. Specifications and pricing on pages 5 - 7.

Please contact Customer Service with specific dimensional track requirements, to determine which motor would be appropriate. It is also possible that one motor may not be sufficient, and a second motor may be required, thereby changing a center open track into two one way tracks. When applicable, two motors will still operate simultaneously by switch or remote.

Curved tracks consisting of 90 (right angle) or 135 degree (typical bay) angles are fabricated within the factory's normal production schedule. Any other degree of curvature will require increased delivery time. Call the factory for specific lead times.

A template is required on curved tracks.

Making a template:

1. Piece together 12" wide butcher or craft paper to the width of the window or wall.
2. Tape the paper to the window sill or floor so that it laps up the window or wall a few inches.
3. Fold or crease the paper to match the contour of the curve.
4. Use a compass or scribe to track a line from the edge of the crease to designate the front edge of the track.
5. If there is another track on the same window, trace another line 3.25" from the inner track line to designate the front edge of the outer track.
6. Mark both ends of each track.
7. Mark the end where the motor is to be located.
8. Label the template as "top view" if it is made from the floor, or "bottom view" if it is made from the ceiling.
9. Label the template with your company name and sidemark.

Drapery Motors Electrical/Electronic Control Information

Low Voltage Modular Switch (recessed wall installation)

Available for drapery motors only. The switch conforms to a single gang junction box. Low voltage switching connections are made from the switching port of the motor to a modular wall RJ-11 jack (phone type) using a modular cable; then inside the wall to the junction box containing the switch. *The modular cable is nonstandard, and should be supplied by SM Automatic (see page 14)*. Low voltage 4 conductor wire run within the wall is typically supplied by the electrician. Power to the motor is supplied by a 9 foot power cord. Electrical outlet and wall jack should be positioned behind drapery, typically 12" directly below motor.

The S-1DD, a hand held or surface mount version is also available. Switch is supplied with a 12 foot, low voltage cable, that plugs into a switching port of the motor.

Radio Frequency Wireless Remote Control (Ti-RF)

The Model 140-S has a built-in radio frequency receiver offering enhanced operation. The maximum range is 100'. The touch design Ti transmitter is available in 1, 2, 6, and 16 channel configurations. The style of the Ti transmitters are sleek with an anti-scratch white piano lacquer finish. They use a low consumption CR2032 lithium battery. Each Ti transmitter comes with a wall bracket.
Ti-RF is compatible with Models 140-S, 9600, 9300, 5100, and 8000.

Radio Frequency Wireless Remote Control (SMA-RF)

A radio frequency system which is controlled by a hand-held transmitter. It is omnidirectional, digital coded, and has a maximum range of 100'. Transmitters are available to control from 1-24 motors, with individual, group and subgroup operation options.

Recommend use of a Surge Protected 110 VAC duplex outlet.

Radio Frequency Wireless Remote Control (RTS)

Radio Technology Somfy, provides a comprehensive method for radio frequency control of motorized systems, with cross platform control system integration. Available both as stand alone, single motor RF control, or as an integrated part of a whole house automated system.

Control System

When interfacing with a home theater, multi-room control system, or whole-house automation system; two (2) momentary dry contacts (switching contacts with no voltage inputted) are required for open-stop-close (two button) operation. Operation initiates with either the "Open" or "Close" contact, and a second action with either contact produces the "Stop" function.

All drapery motors are *"Smart Motors"*, designed with built-in logic boards. They are all fully compatible with all major control systems, including those manufactured by AMX, Control4, Crestron Electronics, Lutron Electronics, Savant, and Vantage Controls.