



ECM Technical Instructions

CURTAIN TRACK SYSTEM ASSEMBLY

Assembly of the ELEGINE motorized curtain involves three processes,
A) preparation and assembly of the hardware (Figure:1),
B) preparation of the curtain fabric and
C) the final hanging and testing of the complete curtain.

Part A – Preparation and Assembly of Hardware

Preparation of the curtain track rail

1. Cut the extrusion to the required length (overall curtain width (overall size) less 110mm (4 5/16 ") for a single motor system and 140mm (5 1/2") for a tandem (2) motor system.
2. Clean and square both ends of the track with a fine file.

Preparation of the drive belt

1. Cut the drive belt to a length that is two times the overall size less 30 mm (1 3/16") and chamfer corners on ends. (Curved or bent track belts should be cut longer and trimmed to size using the trial insertion and method).
2. Insert the drive belt into the back slot of the track through the motor end and out through the tail end and then through the tail end box. (For a single motor install, the motor drive box can be on left or right side as).
3. Fit the first belt end piece tightly onto end of the belt and feed this into the front belt guide of the track and continue to feed in until it is approximately 500mm (20") from the motor end.
4. Insert the other belt end (the one without the belt end piece attached) through the motor box and then fit the second belt end piece to the belt.
5. Slide this loose end with the belt end piece into the track (Figure: 2).
6. Fit both end boxes onto the track. (Do not install the screws at this stage).
7. Pull both the belt end pieces together inside the track and insert the lead carrier (Figure: 3). (If the belt end pieces are already together then the belt must be shortened).
8. If the tension is too loose, shorten the belt one hole at a time until the correct tension is achieved. (The correct tension is achieved when you need to pull the ends together with a little effort - not a lot of effort).

(If the track is a center open version continue here - if the track is a one way open version go to #15).

9. To locate the second lead carrier for a center opening curtain, the drive belt must be removed from the track. To do this reverse stages 7 through 2 above lay the drive belt on a bench with the inside surface face up.
10. Measure and mark the center of the belt (inside surface). This will be the center of the second pair of 'belt end pieces'.
11. Insert belt through motor drive box as per Stage 2 above.
12. Fit the second pair of belt end pieces and lead carrier to either side of the mark (ensure opposing lead carriers are used.)
13. Reassemble the system as per stages 3 to 8 above and fit the lead carrier retaining clips (Figure: 4).
14. Insert the correct number of carriers (1 per 80 mm (3 1/8") of overall track width - half for each end if this is a center open version) through the tail and or motor end box openings.
15. Insert the fixed end stops into the track slot between the last two carriers and the end box. Screw in place to maintain the position of the last carrier as shown in Figure 5.
16. Secure the end boxes to track with screws. Drill pilot holes in track before inserting screws.
17. Slide lead carrier to ensure smooth operation. Lubricate the inside of the track, along the belt cavities, with high quality silicone spray.
18. Position the lead carrier at least 300mm (12") from the end boxes to allow plenty of movement when first programming the motor.

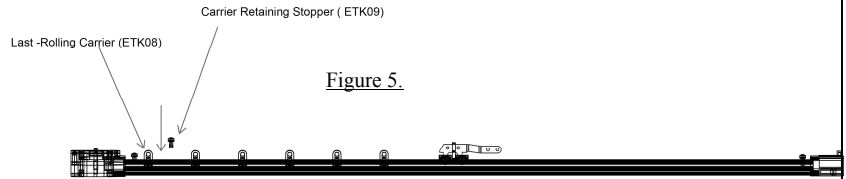


Figure 5.

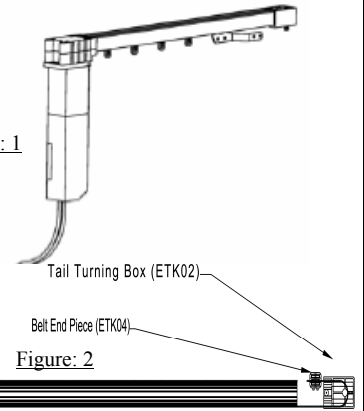


Figure: 1



Figure: 2

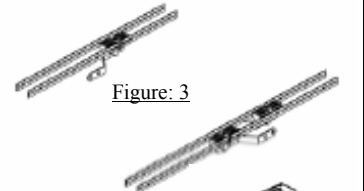


Figure: 3

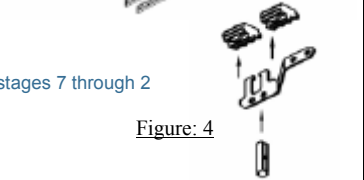


Figure: 4

Installing and testing the ELEGINE motor.

1. With the track resting on its top side on a bench, grasp the motor and align the drive pin in the motor box with the slot in the head of the motor.
2. Allow the motor to slip onto the drive pin and then check to ensure the bayonet fitting is aligned.
 NOTE: The motor can be rotated to facilitate alignment and positioned onto the bayonet fitting.
3. Secure the motor to the track assembly using four (4) screws.
4. Energize the motor with a temporary power lead, set channel and preliminary limit of travel to approximately 100 mm (4") short of possible travel. This can be fine tuned on final hanging of the curtain. (For programming instructions see the programming flow sheet provided with the Elegine motor).
5. Remove the motor and pack for transport to site. Include required brackets (approximately 1 bracket for every 50 to 80mm (2" to 3") of track length).

ELEGINE motor connections

Low voltage (RJ11) connections are as follows, see Figure 6.

- | | | |
|----|--------|-------------|
| 1. | Black | 0 V |
| 2. | Red | + 5 V |
| 3. | Green | direction 1 |
| 4. | Yellow | direction 2 |

Line voltage connections are as follows, see Figure 7.

- | | | |
|----|---------------|-----------------|
| 1. | Green/Yellow | Ground or Earth |
| 2. | Blue (Grey) | Neutral |
| 3. | Red (Black) | Supply 1 |
| 4. | White (Brown) | Supply 2 |

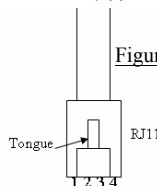


Figure 6.

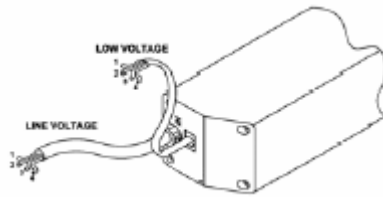


Figure 7.

ELEGINE motors should only be installed and programmed by competent installers.
 The ECM range of motors is designed to drive internal window furnishings only. Any improper application, installation or use may endanger those operating or near the product.
 Any improper application, installation or use will void the product warranty.
 Only Elegine RF controls are supported for use with ELEGINE motors.
 Motors should be installed to meet relevant local standards. ELEGINE reserves the right to change the product specification without notice.

CURTAIN TRACK SYSTEM INSTALLATION

Part B – Preparation of the Curtain Fabric

Measuring, cutting, and preparation of curtain fabric are specialized skills beyond the scope of these instructions. It is assumed suitably qualified persons will be engaged to undertake this work.

Part C – Hanging and Testing of the System

Wall-Mounted Track System

Install brackets as shown in Figures 9 and 10. Ensure that brackets are securely fastened to a suitable backing material (window header or wall studs) that will transfer the window covering load to the building structure or use an appropriate anchoring system.

For a wall mounted installation, rivet a top fixing bracket (Part # ETK12) to the underside of each face support bracket (Part # ETK15).

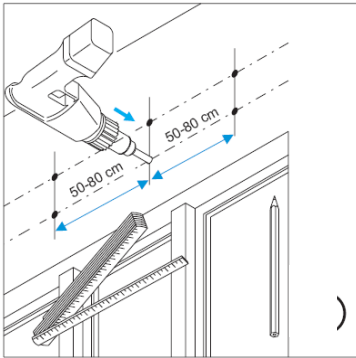


Figure 9.

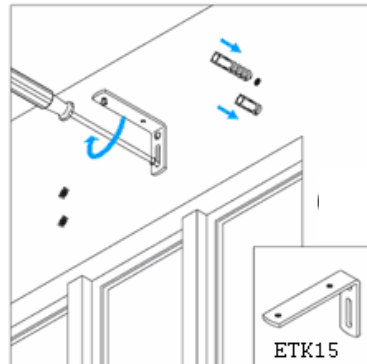


Figure 10.

Ceiling Installation

Install brackets as shown in Figures 11 and 12. Ensure that brackets are securely fastened to a suitable backing material (pelmet or ceiling joists) that will transfer the window covering load to the building structure or use an appropriate anchoring system.

For a ceiling-mounted installation, directly secure the top fixing bracket (Part # ETK12) to underside of window opening or ceiling. Ensure that a spacer washer is placed between the mounting surface and the top fixing bracket to permit rotation and locking of bracket to the track.

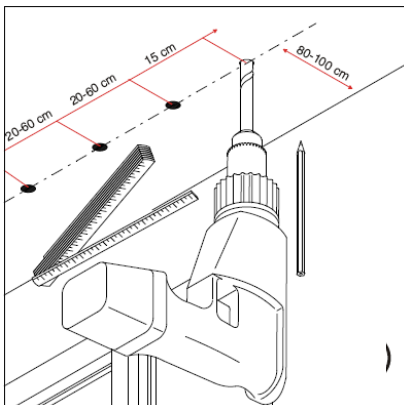


Figure 11.

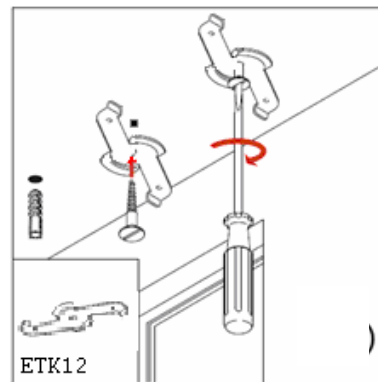


Figure 12.

Control options are (after programming)

Refer to detailed wiring instructions for further details.

Option 1 (RTS remote or LV BAS control)

Connect both line voltage Red and White conductors together into 110/230V supply. Connect Neutral and Earth.

This will activate the RF receiver and the RJ11 low voltage control circuit permitting both low voltage BUS line and RF control at the same time.

Option 2 (line voltage BAS or switch control)

Connect the Red and White to 110/230V supply through interlocking relays or, independent switch. Connect Neutral and Earth.

This will deliver a line supply switched motor that operates only from the switched supply (no RF or RJ11 low voltage control is possible).

To program the motors please refer to the relevant programming guide for instructions.

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