GET TIPPING WITH THE

:MOVE Mini
TIPPER TRAILER ADD-ON
BUILD INSTRUCTIONS

SUPPLIED WITH THIS KIT:

1x
- Servo & Gear
- Tow Panel & Connector
- Front, Base & Rear Bucket Panels
- Pin Header
- Base Panel

2x
- Exterior Side Panels & Wheels
- Side Bucket Panel
- Servo Connectors

2x
- M3x10 Countersunk Screw
- M3x6 Screw
- M3 Washer

5x
- M2x16mm Screw

8x
- M2x6mm Screw
- M2 Nuts

1

Take the :MOVE mini and remove the front ':MOVE‘ piece, followed by the SERVO:LITE board, and then the pen mounting plate above the servos. Put these aside for now, you will need them later.

NOTE: If not done already, the SERVO:LITE board will need to be converted for use of three servos with the pin header provided. Visit kitronik.co.uk/3servo for the online guide.
2. Install the tow panel at the rear of the :Move mini using two M3x10mm countersunk screws, passing through the hole in the base and threading into the connector below. Thread an M2x16mm screw halfway through the small hole. This will be the tow-bar to connect the trailer.

**NOTE:** There will be a small amount of movement of this part.

3. To begin building the trailer, use two M2x16mm screws to assemble the exterior sides of the trailer: thread the M2 nuts partially onto the ends by approximately 3mm.

4. Use an M2X6mm bolt to attach the wheel to the outside. Thread the screw into the perspex, making sure the wheel is loose enough to allow the wheel to spin freely.

5. Use one of the M3x6mm screws to attach the tipper bucket side panel. A washer should be inserted between the panels. Thread the screw into the perspex, making sure to leave this loose enough to rotate freely.
Place the servo onto the base panel and slot the connectors into the base from below with the flat edge facing inwards. Screw the servo into place with the M2x6mm bolts: these should pass through the servo and thread into the perspex.

**NOTE:** Ensure the servo is fitted with the axle lined up with the cut-out in the base panel as shown.

Press the servo gear onto the servo to fit firmly in place and rotate fully clockwise.
Slot the exterior side panel onto the base on the same side as the servo gear. Place the tipper bucket panel in the fully down position. Fit the nuts threaded on previously into the slots in the base panel from below and fit components together. Tighten the screws to secure in place.

**NOTE:** Alternatively, using a piece of tape to hold the nut in place can help with this step.

Connect the rear panel of the tipper bucket onto the trailer as shown using an M2x6mm screw and M2 nut. Keep the nut in place while inserting the screw by placing a finger behind the slot in the panel.

**NOTE:** Before you continue, check that the bucket side panel rotates back and forth correctly.
11 Repeat step 9 to attach the second exterior panel on the opposite side. Make sure to slot the rear panel in as shown and tighten the screws in the base. Then insert the second M2x6mm screw into the rear panel with another M2 nut as shown using the previous method.

12 Rotate the tipper backwards and slot the base panel of the tipper bucket into place, followed by the front panel.

**NOTE:** The front panel will only fit in one way.

13 Install the two remaining M2x6mm screws at the front of the tipper and secure in place with the M2 nuts.
Thread the servo wires under the bucket and through the holes in the base panel, then up through the tow panel connected to the :Move mini - you may need to loosen the tow panel to allow the wires to pass through the hole. Hook the tipper trailer under the tow hook. Reconnect the servo wires and replace the SERVO:LITE board and pen mounting plate in the :Move mini, followed by the MOVE piece at the front. Tuck the loose wires under the pen mounting plate.

**NOTE:** With the back of the board facing you - the third servo attaches to uppermost, right, set of pins.

GET CODING!
Visit kitronik.co.uk/5624-TT for help.
For more information on RoHs and CE please visit kitronik.co.uk/rohs-ce. Children assembling this product should be supervised by a competent adult. The product contains small parts so should be kept out of reach of children under 3 years old.

**TOOLS REQUIRED**
- Small Phillips Screwdriver
- Soldering Iron
- Knife

**STOCK CODE**
5624-TT

This accessory requires modification to the Servo:Lite board and disables the on board ZIP LEDs. Visit kitronik.co.uk/3servo for the online guide.

**WARNING** : Contents may inspire creativity