Disney Train and Station 71044 Basic Version Lighting Kit

Package contents:

- 14 x 15cm Warm White Dot Lights
- 5 x 30cm Warm White Dot Lights
- 2 x 15cm Warm White Lights
- 1 x 30cm Warm White Light
- 7 x Warm White Strip Lights
- 2 x 5cm Connecting Cables
- 7 x 15cm Connecting Cables
- 2 x 30cm Connecting Cables
- 3 x 50cm Connecting Cables
- 6 x 6-port Expansion Boards
- 1 x 8-port Expansion Board
- 2 x Multi-Colour Background Lights
- 1 x Round Coin Cell Battery Pack
- 1 x USB Cable

Extra LEGO pieces

Note:

Place wires on the surface or under the LEGO building blocks. The wire can be place between the building blocks or under the block, but they should be placed between the studs correctly.

Insert the connectors to the ports.

Be careful when you are operating, there's only one correct way to insert, make sure the expansion board is upward, find the soldered “=” sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the “=” sign and if you feel hard to insert, please stop, and don’t force it, for that may result in bent pins inside the port or overheating of the expansion board.
At this point, use the tweezers to straighten the bent pins.

When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put them either on the top of the studs or between studs.

**Connecting cable connectors to Strip Lights**

Take extra care when inserting connectors to ports on the Strip Lights. Connectors can be inserted only one way. With the Strip Light facing up, ensure the side of the connector with the wires exposed is facing down. If a plug won’t fit easily into a port connector, don’t force it. Doing so will damage the plug and the connector.
Finally, please pay attention to the positive and negative terminals of the battery when installing the battery case.
Instructions for installing this kit:

OK, Let’s Begin!
Start from installing headlights for the train

Disconnect the first carriage. Remove the headlights, disconnect the following trans yellow 2x2 round plate

Take a warm white 30cm light, with lighting part facing up, connect it to the following place as per below
Reconnect the trans yellow piece to secure the light. Remove the following 1x2 red plate.

Place the cable as per below, reconnect the red piece.

Remove the following gray ring, reconnect the headlight.
Pull the cable downward, then, pull it to the back, reconnect the gray ring

Turn the carriage to its side, pull the cable to the back as per below
Open the lid of the carriage, remove the following black ring behind the seat.

Then, pull the cable upward as per below, reconnect the black ring to secure the cable.

Take a warm white strip light, a 1x6 plate (the colour depends on the package). Stick the strip light to the plate as per below.
Connect the cable to the strip light, connect the strip light to the roof.

Take a 50cm connecting cable, connect the connecting cable to the other end of the strip light.

Reconnect the roof. Remove the following piece.
Place the connecting cable as per below, thread the cable through the following space to the inside of the carriage, then, pull it downward

Reconnect the piece
Remove the following piece, make a gap between the base and the carriage.

Thread the cable through the gap, close the gap, reconnect the piece we removed before.

Place the connecting cable backward. Disconnect the second carriage.
Turn the carriage to its side, make a gap between the tire and the carriage (note: do not break the motor cable), connect the first and the second carriage together. Thread the connecting cable through the gap we made.

Reconnect the carriage as per below.

Disconnect the third carriage, connect the second carriage and the third carriage together.
Remove the following piece, pull the cable upward as per below.

Reconnect the piece we removed, open the roof.

Pull the cable to the roof, remove the following white piece, secure the cable with the white piece as per below.
Take a warm white strip light, a 1x6 plate (the colour depends on the package), stick the strip light to the 1x6 plate.

Connect the connecting cable to the strip light, stick the strip light to the roof, tuck excess cable with the plate.
Take a 15cm connecting cable, connect it to the strip light

Remove the following roof, close the first piece of the roof, pull the cable out

Open the following piece of the roof, place the cable as per below, reconnect the roof
Take a warm white strip light, a 1x6 plate (the colour depends on the package), stick the strip light to the plate as per below.

Connect the connecting cable to the strip light, connect the strip light to the roof as per below.
Take a 30cm connecting cable, connect it to the strip light

Secure the cable with the following white piece

Close the roof, pull the cable out from the following place
Place the cable alongside the seat and pull it downward as per below, secure the cable with the piece we removed before.

Connect the third carriage with the last carriage, thread the cable through the railing.
Open the door, and remove the following section of the carriage

Thread the connecting cable through the door, close the door (note: do not close the door too tightly for it may break the cable)
Take a 6-port expansion board, connect the connecting cable to it.

Tuck excess cable, stick the expansion board to the floor with the adhesive squares.
Turn the carriage to its side, remove the following yellow piece.

Take a 15cm light, disassemble the yellow piece as per below.

Thread the connector through the yellow piece, pull the cable out till the light is placed against the hole, reconnect the yellow piece to secure the light.
Reconnect the piece, turn the carriage back

Remove the following piece, place the cable as per below, reconnect the piece we removed to secure the light
Connect the connector to the expansion board.

Take the Round Coin Cell Battery Pack (inserted with batteries), connect it to the expansion board.
Stick the battery pack to floor with the adhesive squares, turn the power on to verify the current.

Reconnect the section we removed from the side of the carriage.

Move onto installing lights for the station, start from installing lights for the clock.
Take a warm white strip light, a 1x6 plate (the colour depends on the package), stick the strip light to the plate as per below.

Take two 15cm connecting cables, connect them to the strip light as per below.

Remove the base of the second floor as per below.
Stick the strip light to the base as per below, pull the cable with faced inside up, and place it at the second floor, reconnect the base.

Place the other cable at the hall of the first floor.

Remove the third floor as per below.
Take a warm white strip light, a 1x6 plate (the colour depends on the package), stick the strip light to the plate.

Connect the connecting cable from the second floor to the strip light.

Take a 15cm connecting cable, connect it to the other end of the strip light, stick the strip light to the ceiling of the second floor.
Reconnect the third floor, pull the cable outside the building.

Remove the following piece, lift the window with the tool.

Thread the connecting cable through the space we made at the window to the inside.
Reconnect the window

Continue to install light for the window(window#1), remove the following piece

Take a warm white 15cm dot light, stick an adhesive square to the back of the light
Thread the connector through the following space, and stick the light to the following place.

Take another warm white 15cm dot light, repeat the steps above to install light for window#2.

Remove the top floor.
Take a 15cm light, a 2x2 trans round piece, connect the light to the following place.

Secure the light with the 2x2 trans round piece.

Reconnect the following section.
Take a 6-port expansion board, connect the cables form the 2 windows, and the cable from the second floor to the expansion board.

Pull the expansion board out from the following place, tuck excess cables as per below.

Stick the expansion board to the following place with adhesive squares.
Connect the cable of the light from the roof to the expansion board, reconnect the roof

Continue to install lights for the wall lamp at the first floor, remove the lampshade

Disassemble the lampshade as per below
Take a warm white 30cm dot light, thread the connector through the lampshade, pull the cable out till the light is placed against the lampshade.

Reconnect the lampshade.
Reconnect the wall lamp, make a gap on the wall with the tool to secure the cable as per below.

Lift the base of the second floor, thread the cable through the gap.
Then, thread the cable to the inside

Pull the cable rightward, thread it through the gap, and pull it out

Thread it to the inside again, then, pull it out as per below
Reconnect the piece we lifted

Take a warm white strip light, a 1x6 plate (the colour depends on the package), stick the strip light to the plate

Connect the cable from the first floor to the strip light, and pull it rightward
Take a 15cm connecting cable, connect it to the other end of the strip light.

Connect the strip light to the ceiling of the hall, pull the cable rightward.

Continue to install light for the wall lamp at front of the seat.
Take a warm white 15cm dot light, follow the steps we did for the previous lamp to install this one, reconnect the lamp.

Pull the cable out from the right side.

We will now move onto installing lights for another building, remove the second floor.
Take a 8-port expansion board, connect the cables of the wall lamps and the strip light to it.

Tuck excess cables, stick the expansion board to the following place with adhesive squares.

Remove the chandelier.
Disconnect one of the lampshade and disassemble it as per below

Take a warm white 15cm dot light, place the light on the light brown piece, reconnect the lampshade
Take another 3 warm white 30cm dot lights, repeat the steps above to install the other 3 lamps.

Reconnect the 4 lights back to the lamp post.

Group the 4 cables together, reconnect the chandelier.
Pull the cables out, connect them to the 8-port expansion board

Move onto install light for the side door, remove the lamp, and disassemble it as per below.
Take a warm white 15cm dot light, a black 1x1 piece with hole. With lighting part facing down, connect the light to the trans lampshade.

Secure the light with the black piece, reconnect the lampshade, wind the cable around the piece twice.
Lift the light yellow beam, reconnect the lamp

Thread the cable through the following gap, close the gap
Take a 6-port expansion board, connect the cable of the light to it.

Tuck excess cable, stick the expansion board to the following place with adhesive squares.

Take a 5cm connecting cable, connect it to the 6-port expansion board.
Connect the other end of the connecting cable to the 8-port expansion board.

Take a warm white 15cm dot light, a black 1x1 piece with hole.

Now, we’ll install light for the front door. Follow the steps we did for the side door light.
Lift the light yellow beam to allow the cable thread through, then, close the gap.

Disconnect the 1x6 plate next to the 6-port expansion board, place the cable as per below, reconnect the 1x6 plate.
Connect the cable to the 6-port expansion board.

Take a 15cm connecting cable, connect it to the 6-port expansion board.
Pull the connecting cable to the second floor, reconnect the second floor.

Take a warm white strip light, a 1x6 plate (the colour depends on the package), stick the strip light to the plate.

Connect the cable we pulled up to the strip light. Open the roof.
Remove the following piece to install window#3, window#4

Take 2 warm white 15cm dot lights

Follow the steps we did for installing window#1 to install window#3 and window#4
Reconnect the piece we removed
Remove the following piece, place the cable as per below, reconnect the piece.

Continue to install the window #5, remove the following piece.
Take a warm white 15cm dot light

Follow the steps we did for installing window#1 to install window#5
Take a 6-port expansion board, tuck the cables of the 3 lights, and stick them to the following place.

Take a 5cm connecting cable, connect it to the strip light.

Connect the other end of the connecting cable to the expansion board.
Take a 50cm connecting cable, connect it to the expansion board

Pull the connecting cable toward the stairs, stick the strip light to the roof

Reconnect the roof, pull the 50cm connecting cable out
We will install the 2 wall lamps at the front door, remove the one at the right side.

Disassemble the lamp

Take a warm white 15cm dot light, with lighting part facing up, connect it to the piece as per below.
Reconnect the lamp shade, thread the cable through the space.

Remove the signboard, reconnect the lamp.

Lift the following piece to allow the cable thread through.
Then, install the lamp at the left

Take a warm white 30cm dot light, follow the previous steps to install this light
Close the gap we made, reconnect the signboard.

Turn to the back of the building.

Place the cable as per below, take a 1x1 piece (the colour depends on the package).
Secure the cable with the 1x1 piece

Remove the front deck

Take a 6-port expansion board, connect the cables of the lamps to it
Tuck excess cables, stick the expansion board to the following place.

Continue to install the windows at the middle section (window#6, window#7, window#8), remove the eaves.

Remove the upper sections of the curtains.
Continue to remove the following pieces

Remove the 3 curtains

Take 3 warm white 30cm dot light, repeat the steps we did for window#1 to install lights for window#6, window#7 and window#8
Thread the 3 cables through the space under the window and pull them forward.

Disconnect the sign board, lift the following piece, thread the 3 cables through the gap we made, pull them to the back of the building.
Reconnect the sign board, reconnect the other pieces
Connect the 3 cables to the expansion board at the front desk.

Take a 15cm connecting cable, connect it to the expansion board at the front desk, and pull it leftward.
Reconnect the front desk

Take a warm white 15cm dot light, a black 1x1 piece with hole

Continue to install light above the door. Follow the steps we did for the previous lamps
Lift the following piece to allow the cable thread through the gap to the inside.

Close the gap we made.
Remove the following piece

Take a 6-port expansion board, connect the cables of the light and the cable from the front desk to the expansion board

Reconnect the piece we removed to secure the cable, tuck excess cables
Stick the expansion board to the following place with the adhesive squares.

Connect the 50cm connecting cable from the stairs to the expansion board.

Remove the 2x4 plate from the stairs, place the cable alongside the wall, reconnect the plate to secure the cable.
Remove the following board from the stairs, place the connecting cable as per below.

Reconnect the pieces to secure the cable.
Lift the following piece to allow the cable thread through the gap to the inside.

Pull the cable leftward.

Take a 1x6 plate to secure the cable as per below.
Take a 1x1 piece (the colour depends on the package) to secure the cable.

Tuck excess cables and connect them to the expansion board.
Take the following piece, assemble them as per below
Repeat the steps to assemble another one.

Take 2 multi-colour background light, stick them to the pieces we assembled before.

Take a 30cm connecting cable, a 50cm connecting cable.
Separately connect the 2 cables to the multi-colour background.

Connect the 2 connecting cables to the expansion board, place the 2 multi-colour background lights at the 2 sides of the station. Place the one with 30cm connecting cable at the left side, and the one with the 50cm connecting cable at the right side.

Take the USB cable, connect it to the expansion board as per below.
This completes installation of this LED Lighting Kit. ENJOY!