

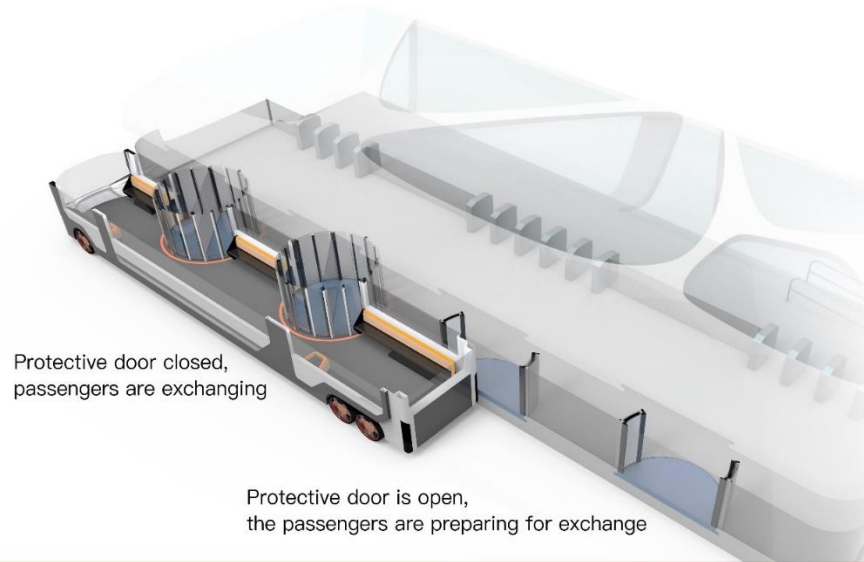
DING JIAN/ CAO WEIZHI/ CHEN YURU/ LI CHANGHAN/ LIU QIAN/ YANG XUERONG/ WANG JUN/ SHI JIATAO/ JI ZEXU/ SHANG SIYUAN

ORRO Bus Exchange System



There are lots of bus gathering around the bus station in rush hour. Congested bus with too many people makes traffic around the bus station. In the orro bus quick taking system, Bus and Station have the same semicircle structure respectively. After the vehicles park to the specified location, vehicle and the station of semicircle space together to form a cylinder and rotate 180°. Passengers of inside or outside can complete the taking process. The taking time will be reduced to about 15s. Then it can improve the efficiency of public transport system to ease urban congestion.





Protective door closed,
passengers are exchanging

Protective door is open,
the passengers are preparing for exchange

To make orro bus exchange system more efficient, part of the station tooks the way of selling tickets outside the car. At the same time each station can be fitted with two pairs of waiting area or more. The platform in orro system is in the same plan on ground of the vehicle. There are no barriers to the station and the outside. To reach the truly unobstructions.



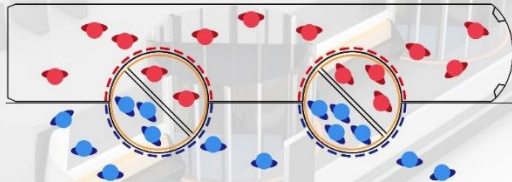
Step 1

Before the vehicles pulling in, passengers inside or outside will enter the waiting area waiting for the bus respectively.



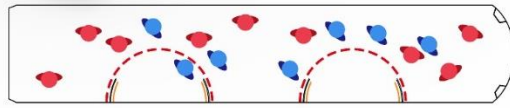
Step 2

When the bus stop. Passengers can exchange with the space vehicles.



Step 3

When the bus leave and the exchange taking process finished. Passengers of inside and outside, they can prepare for next exchange.



LUXUN ACADEMY OF FINE ARTS TEAM

ORRO is a new concept of bus ride down mode. In the system, the vehicle and the platform have the same semicircle structure respectively. Passengers inside and outside the car will enter the transfer space ahead of the arrival of the vehicle. After the vehicle stops at the designated location. The vehicle and the semicircle space of the station are combined to form a cylinder and rotate 180 degrees. Passengers inside and outside the car follow the interchange of space to complete the ride down. ORRO makes the actual parking time of the vehicle be controlled within 15s to alleviate the regional congestion caused by bus. At the same time, the station part can control the number of passengers on the train, ensure the space of the people on the vehicle, and obtain the data to make the bus system more reasonable to deploy the vehicles and reduce the waiting time of passengers.

ORRO是一种全新的概念性的公交乘降方式。系统中车辆与站台分别具有相同的半圆形结构。车内外的乘客均会在车辆进站前提前进入到换乘空间内。在车辆停靠到指定位置后。车辆与车站的半圆空间相结合形成圆柱体并旋转180°。车内外的乘客跟随空间的交换而完成乘降。ORRO使车辆实际停靠时间将被控制在15s内，缓解因公交而导致的区域性拥堵。同时车站部分可以对上车乘客数量的进行控制，使车上人员的空间得到基本保证，并可以获得数据使公交系统更合理得调配车辆，减少乘客候车时间。