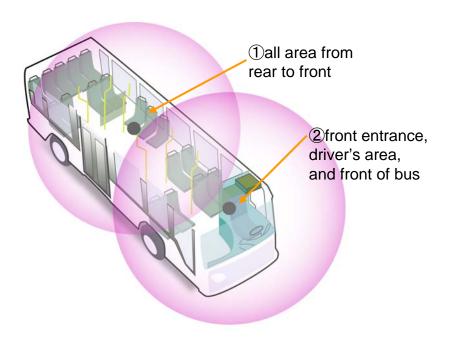
Presented by OPT Corporation

Proposal of the camera monitoring in the bus

- Monitor the inside of the bus and keep recording.
- Possible to monitor from the remote place (headquarter).
- Install small size camera behind the ceiling.
- ◆ 360° ominidirectional camera with no blind spot can reduce the number of cameras and make the installation, maintenance and data management easy.
- ◆ Simultaneous view of the front and the inside of the car by one camera.
- ◆ Digital Pan/Tilt/Zoom. No mechanical moving part. Long durability.
- ◆ Built-in 3 Mega pixel color CMOS sensor provide high quality image.

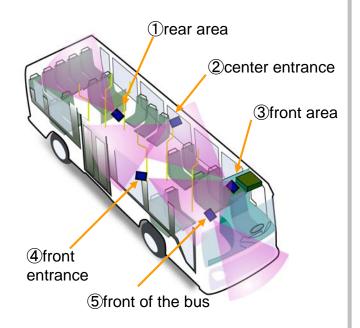
360° camera can make the system simpler

[360° camera]



- All area can be covered with less number of cameras
- Especially, ② camera can watch the front and the inside of the bus at the same time.

[Conventional camera]



- Many number of the cameras with narrow view angle.
- Each requires the wiring and the data management.

Sample of the image from 360° camrera



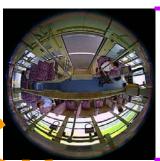
Zoom-in the rear area



Zoom-in the center entrance



Indicate two 180° images separated by aisle.



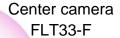
Original hemispheric image



Zoom-in the front area



Indicate in four 90° images



Front camera FLT33-M



Both of inside and outside of the bus are clearly monitored.

Expected effect by the installation

- Operational safety can be checked from the remote place (headquarter).
- In case of feeling an abnormal condition in the view, it is possible to check by enlarging (dewarping) the detail.
- The outside and the inside of the bus can be monitored at the same time of watching the driver's area. This is helpful for the on-site verification in case of accident.
- Applying the 360° camera reduces the cost for the equipment, wiring, and management of data.

Outline of the System

