TAXI-TOP wireless group control solution
1. Project requirements

We suggest to use P3 outdoor waterproof cabinet with the size as 768mm (W) * 288mm (H), Taxi-top are mainly used to show the promotion of the government, public service advertising, video or picture advertising, weather forecast, real-time information breaks, location based advertising and automatically charging and creating report for the advertising. Along with the internet and cloud server, the taxi-top will be a interface for human-computer interaction to show more information for the local such as the flight information, ticket information, empty room of the hotel, promote products of the supermarket.

2. Overview
Parameters:

Cabinet color: Red, blue, green, yellow, etc. It is customizable.
Waterproof: IP65
Dimension: 288mm (H) x 768mm (W)
Cabinet material: waterproof aluminum for frame with acrylic front cover
Brightness: ≥1200cd/m²
Application: taxi-top, vehicle-mounted (inside or outside)
Input voltage: DC12V
Resolution: 256 pixels (W) x 96 pixels (H)
**Specification:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Module parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pitch</td>
<td>3mm</td>
</tr>
<tr>
<td>Pixel density</td>
<td>2048</td>
</tr>
<tr>
<td>Pixel primary color</td>
<td>SMD2121 1R1G1B</td>
</tr>
<tr>
<td>Module resolution ( H×V )</td>
<td>32 × 64</td>
</tr>
<tr>
<td>Module size ( H×V )</td>
<td>96mmX192mm</td>
</tr>
<tr>
<td>Drive IC</td>
<td>MBI5024</td>
</tr>
<tr>
<td>LED IC</td>
<td>R:Opto, GB: Silan</td>
</tr>
<tr>
<td>Drive mode</td>
<td>1/16 scan</td>
</tr>
<tr>
<td>Max power consumption</td>
<td>15w</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Cabinet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabinet material</td>
<td>Aluminum</td>
</tr>
<tr>
<td>Cabinet size</td>
<td>1160x480x376mm</td>
</tr>
<tr>
<td>Cabinet max power consumption</td>
<td>&lt;350w</td>
</tr>
<tr>
<td>IP grade</td>
<td>IP 65</td>
</tr>
<tr>
<td>Brightness</td>
<td>≥1200cd/m2</td>
</tr>
<tr>
<td>Optimal viewing distance</td>
<td>&gt;3m</td>
</tr>
<tr>
<td>Operating voltage</td>
<td>DC12V</td>
</tr>
<tr>
<td>Optimal viewing angle</td>
<td>H&lt;120°, V&lt;120°</td>
</tr>
<tr>
<td>LED lamp service life</td>
<td>50,000 - 100,000 hrs</td>
</tr>
</tbody>
</table>
3. Control system topological graph
1). Equipment composition:

Xixun E10 controller (use Y10 for America) with 3G/4G, GPS antenna.

2). implementation principle

Plug one SIM card for each every LED screen so that controller will access into internet by mobile data and joint with Xixun cloud platform server, then use this server to transfer program data to screen.

3). Advantage of E10 (Y10)

- Supporting non-linear editing;
- Video hardware decoding;
- Supporting PCI-E 3G modem;
- WIFI modem on board;
- Supporting maximum 540x960 pixels (1280x1024 pixels for Y10);
- Supporting HDMI audio and video outputs;
- Supporting secondary development based on Android system, for example, customer could embedded own APP to realize some special requests, no need to use AIPS platform;
- Fast communicate rate, totally solve the 3G communication bottle-neck, Packet Switched Domain (PS for short) bearer service under WCDMA mode: maximum rate is 384Kbit/s; HSDPA Max 14.4Mbps(DL)/Max 5.76Mbps(UL); UMTS Max 384Kbps;
Supporting continue transfer from breakpoint, adopting database warehouse management for onboard program so that could reduce dataflow extremely and optimize storage space;

Supporting to connect receiving cards, refresh rate will self adapt to screen resolution, adjust brightness to realize better display effect;

Possessing strong software—-web-base multi-media publishing system (AIPS), so that could manage all terminals, edit and publish program;

4). Advantage of the web based platform

It is a B/S architecture software, supports tablet, cell phone and desktop computer automatically with perfect UI (user interface) and excellent experience, realize cross various platforms

Download guide video and documents
- No limit on operation system to remote control the LED sign. No need to install any software and customers are able to control the LED sign remotely with any device that can access into internet (include computer, smart phone, tablet etc.), open web browser to group remote control all the LED terminal as picture shows below:

- Much more easier to edit programs with non-linear editing, designed for advertising industry.
Multilevel authority management: Customer are able to set the permissions for each user (or user group) to edit, publish, review and approve authority:

Name

Permission
- Terminal control
- View log
- Create and edit programs
- Submit tasks of play program
- Check tasks of play program
- Upload media files
- Enable media files
- Delete media files
- Has all permission to control all group of terminals
Support set-time broadcast and update:

Add schedule

- Every day • Scheduled date
  Start date ~ End date

- All day • Scheduled time
  Start time ~ End Time

- No filter • Scheduled weekday
Support turn off/on screen remotely, adjust brightness, volume, etc.

Read back the programs that shows on the sign to monitor.
Easy to install and use, has 3G/4G embedded:
◆ Support location based program, customer can check where the sign it is and make location based programs after connecting GPS antenna to the controller.
◆ Advantage of cloud server:

Stable
✓ The reliability of the cloud disk is more than 99.999%
✓ Automatic migration when server goes down; data backup and rollback
✓ System performance alerts

Security
✓ Security group rule protect
✓ Multi-user isolation
✓ Anti-cracking system

Flexible
✓ Boot or release 100 cloud servers within 10 minutes
✓ Upgrade CPU and memory within 5 minutes during downtime
✓ Constantly upgrade the bandwidth online

High Quality Network
✓ Multi-line access to the backbone network
✓ Exclusive multi-line BGP
✓ Optimal routing algorithm based on BGP

◆ For the reference, here is the server config:

Hardware: CPU: dual-core, memory: 4GB
Operation system: Windows Server 2008 R2 standard 64-bit
Storage space: 100GB
Network bandwidth: 10Mbps