

Dalian 2018

Like several cities in East Asia, Dalian has an urban rail system of mixed ownership, with operations being a combination of both separation and integration. Much of the segregation is the result of temporal and geographic isolation but, pleasingly, recent trends offer some elements of integration. Together, the area provides a 4-line/151.2km Metro and Regional Metro service.

The city was one of the earlier Chinese cities to venture into urban rail with the Quinggiu Line (**Line 3 on UrbanRail.Net Map**) opening in 2003. This is a Regional Metro line operated by Dalian Public Transport Group (DPTG) and it (and its subsequent branch (2008)) came 12 years before the full Metro. The line runs from the terminus at the northern square of Dalian Railway station. Heading north through the city it passes the docks and inner city (great views) before turning east along the southern shore of the promontory to Jinshitian (52min journey). With the exception of 1.2km of underground running (the longest stretch being a tunnel to the north of Jingia Street Station), it is elevated and at grade, running 48.7km (revenue Km) (14 stations) from 0600-2030. The northern branch, opened in 2008, from Kaifaqu to Jiuli is 13.8Km (revenue Km) and takes 19mins. There are 10min headways on both lines, providing 5min frequencies on the common 27.5km section to DDA. On the main line some services terminate at Free Trade Zone, lessening the service level out to Golden Pebble Beach. Both lines cover the expanding built up area to the north east of Dalian and run 4-car CNR stock (two varieties) with a mix of lateral and single facing seats (the newer stock has lateral seating throughout). The interior of the older stock is a little grubby now but offers much standing space for the heavily used routes, but the newer stock has a much fresher appearance. Both types of train have a basic dot progression strip map and audio announcements in Chinese, English, Japanese and Russian, but there is no schematic map on the trains. The trains have a light grey metallic exterior with a red strip below the window.

The main long distance railway station is located in the traditional centre of the city and the Dalian Station is located to the north west across a large square (access from the city centre via a busy, broad pedestrian underpass). It is a large and extremely busy elevated structure, with a rather cramped and confusing interior full of angled banks of ticket barriers, criss-crossing escalators and personal offices. There is a large, beautiful geographic map and basic green 'dot' schematic but no hard copy information or timetable information. Ticket machines are easy to use and dispense illustrated RFID cards with distance based fares ranging from 1-8 Yuan. The platform level is made up of a central island platform and two exterior side platforms with trains arriving and departing from alternate platforms - passengers alighting and boarding from separate platforms. This level has RTI but few niceties (no platform screens), however it has a high roof and provides great views of the skyscrapers of the new city centre. Stations along the route have side platforms and a lower level entrance/ticket hall. These again are very basic but at several stations approaching Dalian at peak times, station staff act as 'pushers', and the calmness, politeness and efficiency of passengers is a joy to witness. This is a great line.

8mins walk from the Dalian terminus (crossing the tram lines-see below) is Youhoa Square Metro station, the nearest connection between the two systems. The Dalian Metro is operated by DMC and is a 2 line, fully underground system of 49.1km which opened in different stages since 2015, **Line 2** being the first. This line runs in a bowl shape from Zhoushuizi International Airport in the north west to Zongzhan Sq and the Conference Centre. The line operates from 0600-2200 at 8min base headways and is 22.6km with 20 stations, the journey taking 45mins. The airport station is outside the terminal to the right but is only a 2min walk once you have left the building. Other stations have totems, and standard entrance porticos at main junctions. The stations on this line quite modest. Standard rectangular ticket halls with security, customer office, ticket machines and substantial directional signage. Apart from a fare map above ticket machines there is limited mappage, with only a ragged schematic at the end of platforms – this shows Line 1, 2 and 12 only! The island platforms are bright but equally void of individuality with platform screens, topped with slats, tinted windows and a blue strip to match line colour. There is RTI and audio announcements but the offer is pretty basic.

At Xianlu there is transfer to **Line 1** whose platforms are above Line 2 - transfer is very easy and well signed. Line 1 has many of the attributes of Line 2, with identical stock, and the 22 stations are very similar also, although the general ambience is more stylised, especially at the newer stations on the southern section. The 26.5km line has the same operating hours and frequencies as Line 2 as it runs in a north-south direction from Yaojia, via the Convention and Exhibition Centre to Henkou in the south west of the city (with connection to Line 12 and the 202 tram - see below). The line also stops at North Railway Station and Xinggong Street in the heart of the commercial city. The entire journey takes 51mins. Both lines operate 6 car CNR stock which is clean and bright white with white side seating-any colour coming from the basic dot progression strip map and smart new, well designed A2 schematic maps (incl all 4 lines). The trains have a colour coded band at the base of the window, related to the line identifier. Tickets come in the form of colourful cards and fares are distance based (2-8 Yuan). In the past, 'user guides' had been available at some stations, although no hard copy information is currently available. For a contemporary feel and clean bright surroundings, the full metro is fine, but it has none of the character of the original line.

Many multi-line metro systems probably have a line that is the 'weaker sibling', (serving peripheral or poorer areas, less investment, lower patronage etc.) and in Dalian, **Line 12** (formerly known as Route 202 Extension Line) is certainly the 'runt of the litter'. Although opened in 2013, it was only in 2017 that it connected to the rest of the system after the 2km extension from the former terminus at Caidaling to Hekou began operations. The 39.6km line has only 8 stations with long station gaps (up to 8km) and runs at 12/15min headways from 0600-2030, taking 53mins to traverse the route. Although, like Line 3, this line is operated by DPTG, it has barrier free transfer to Line 1 and so the two operators have created an integrated approach. Transfer at Hekou is cross-platform, and here is the first glimpse of the stark difference between the systems. The island platform has platform

screens, RTI, advertising and brightness at one side (Line 1 arrival/departure), and a few steps to the other side brings dark walls, no barriers, no station name or mappage, and basic hard to read RTI (Chinese only). On departure (not timed with the arrival of Line 1 services), the line runs through 1.9km of tunnel before arriving at Caidaling, where the shed facilities are located. The line then continues along the peninsular to Lushun Port (Formerly known as Port Arthur, the historic town and former military and strategic port held by Russia. It is famed as main battle site of the 1904 Russo-Japanese war). The line is very rural, even though it is classed as a suburban line, and it runs on elevation, with the exception of 5.3km of tunnels through the mountains. The stations have side platforms and arched corrugated roofs, but no working escalators, no staff in customer offices and few passengers to speak of (except the termini). The 4 car CNR stock stops at the forward end of the platforms (built for 6 cars) and long dwell times are the norm. The stock is a little worn and has side seating and basic strip map, but has audio information in Mandarin, English and Russian.

Given the city's Russian and Japanese heritage it is no surprise that trams rattle along the streets. There are 2 routes: Route 201 serves the city centre, with street running from Haizhiyun Park – Zhengong St) (via Dalian Rail Station (10.6km). The line is slow, with plentiful traffic conflict and uses a mix of heritage trams (Dalian 3000s) and more modern Dalian 6WA units. **Route 202** begins its service at Xinggong Jie (15min headways). This line was modernised in 2002, creating much segregation and long elevated stretches in the south, although it would be difficult to classify this as light rail. Street running in the main commercial area soon gives way to the segregated section on its 12.6km run to Hekou (Line 1/12). Here, and along the route, there is simple transfer to the Metro (the line parallels Line 1). This is an interesting route and a flat fare of 0.95 yuan applies which is dropped in a box located next to the conductress - driver (they swap roles at the terminus) (Note that the tram company in Dalian employs only females). This line, and many of the trams on 201 are the low floor 6WAs designed by the Dalian tram works, although clearly '*inspired*' by the Seimens Combino.