

Operations on the Great Northern Down Under Railway.

Readers, here are some tips for operating my GNDU Rwy. Some are simple but often over looked by visitors and often they are reluctant to ask questions. Operations are run by **only steam locos** and **All** of them have WOW V4 decoders so, all functions are the same – **NO** diesels. Operators normally work in pairs. Some operators have a problem seeing some colours so they would act as conductor while the other operators may have trouble understanding what Red and Green mean.



What is a DCC Throttle used for? This is a very important part of operating the layout. It is the connection between you and the way the train runs, this applies to any DCC layout. On the GNDU I use the **EasyDCC Throttles by CVP**. As its name implies it is a throttle not a walk around command station as used on some systems – it is purely for driving the train with no programming involved.

How do I select a train? On the side of the loco cab is the loco number (or address) which you need to enter in the throttle – Press [#] then enter this number then press [#] again. Press [2] to prove you have control of the loco – it will sound the whistle and you are almost ready to go.

How do I switch the Functions on and off? This is done by pressing the buttons [0] to [9] and, for the **RF1300 throttle** [*] [0] for [10], [*][1] for [11] and [*][2] for [12]. For the **T1300 throttle** [F1x] [0] for [10], [F1x] [1] for [11] and [F1x][2] for [12]. When pressed, the Function stays on – except [2] which only last as long as you hold it.

What are the lights on the loco used for? The lights are to let other people on the railway know that this loco is active. While stationary or in the yard you only need the Marker Lights these are turned on with [10], (it will also turn on the firebox flicker when fitted). When out on the mainline you are required to turn the headlight on using [0]. This is done for Day or Night.

How do you start a train? Very simple, no extra buttons to press, just turn the knob (the big round thing) clockwise. The train will start to move straight away – no delay. It will slowly climb up to speed, as it does the chuff will be fuller and will ease back as the train gets to the required speed.

How do I stop a train? Turn the knob anti-clockwise. The chuff will drop down and you will hear the conrods clanking. The train will coast for a good **30-40 feet**. To slow the train and bring it to a stop – apply the **brake** [7] this will apply 20% brake, press again and this will apply 40% you may do this 5 times in total. If you are stopping too soon – release the brake, press [6]. As the train comes to a stop you will also here the brakes squeal.

Why won't the train go faster? All locos are set to a top speed of **30mph**. You walk with the train, to observe signals and turnouts. This is a comfortable speed for big and little old guys to stay with their train.

How do I reverse the train? Press the **DIRECTION [DIR]** button – no need to turn the throttle down – just press the button. The loco will drop the chuff and the loco will coast to a halt. You can bring it to a stop quicker by applying the brake. When it has stopped, the lights will change and you release the brake and it will start moving in the opposite direction. This is great for switching, without the need to keep turning the knob.

How do I take on water? Each yard has a water column, some have two. To take on water – park the loco tender under the spout and the press **[9]**. You will hear the water tank lid being opened and the sound of the water running into the tender. You must wait for a count of five for each car on the train.

How do I pump up the air for the brakes? Before leaving the switching area you must pump up the air for the brakes – allow a count of three for each car in the train. This is normally done while you check your car cards.

What are the signals used for? On the GNDU the signals show the state of the turnouts ahead. The mainline turnouts also show their status on the front of the fascia – green means mainline and red means diverging track. Shelby yard does not have signals in the yard but does have signals for tracks leaving the yard. The status of turnouts in the yard is shown on the **Yard Master's panel**.

How do I change the direction of a turnout? For all turnouts on the mainline the indicators on the fascia show the status. To change these turnouts there are buttons below the indicators – press the button to change the turnout. Alternatively you can change the turnout with your throttle. Press **[*]** or **[ACY]** then Press **[#]**, the number of the turnout and **[#]** again. You can then change the turnout with **[1]** or **[3]** and change it back again.

All other turnouts are operated by slide switches alongside the turnout or at the edge of the layout. In Shelby Yard all turnouts are controlled from the switcher's panel. The direction of the turnout is also shown on the panel. A green indicator shows the turnout is set that way – to change it, press the button **ALONGSIDE** the **RED** indicator.

How do I operate a Route? The main staging yard is set up to use Route Control instead of separate turnouts. To select a route, Press **[*]** or **[ACY]** then Press **[#]**, the number of the Route and **[#]** again. You can then change the turnouts to that route by pressing **[3]**. The turnouts will then change to give you the Route. The Route Indicator Panel which show the route you have selected AND there will be a green LED at the clearance point to that track.

How do I uncouple a car? There are four possible ways to uncouple a car. Stop over an uncouple magnet – you will see the couplers move apart. Compress the train, and insert a twizzle stick between the couplers and turn clockwise only – not rock it back and for. Use a dental tool, this is a fine round brush on the end of a plastic handle – just compress the train, insert the brush then move the loco forward – no twisting required. For night operation you can use the flat torch with uncoupling pick attached. Hook the left glad hand and move the loco forward.

What is a Car Card? It is not possible to put the waybill on the **Tack Board** on the side of the car, so a car card is used to hold the waybill. The car card shows the **AAR** code for the type of car, the **reporting marks** (e.g. **GN**) and the **car number**. Below this is a description of the car (e.g. **Brown Box Car**) for those who have not yet learnt the codes.

What is a Waybill? The waybill shows the next destination for the car. The first line is the **Town**, second is the **Industry**, the third shows the final **location** or '**spot**'. The next line shows where the car has come from and below is the commodity carried. If the town is not on the layout there is a line in red showing which yard the car is forwarded to, normally a staging yard.

The SAFETY RULES

Trains must be operated in a safe manner.

The loco bell must be rung:

- Entering or leaving a yard,
- Approaching a level crossing or passenger depot.

The whistle to be sounded:

- Before a train moves away,
- Approaching a level crossing or passenger depot
- Before crossing a bridge or entering a tunnel
- Approaching another train.

No cars are to be parked on the mainline.

No cars are to be parked on a grade.

No cars are to be parked across roadways.

All trains must show headlight while moving.

When a train is stopped and another train is approaching, only the stopped train must dim or turn off the headlight.

All trains must get authority from the **Dispatcher** to enter or use the main line.