## **HO scale NSW Z19 Class 0-6-0 Steam Locomotive Instructions**

Model Features – The Casula Hobbies Z19 steam locomotive comes with the following features:

- \* Heavy die-cast metal chassis, boiler and footplate
- Separately applied ABS and metal detail parts
- \* Detailed cab interior
- \* All wheel pick-up included on engine and tender for improved running performance
- DCC Solutions designed PCB equipped with a Next18 interface socket for use with 18 pin DCC decoders
- \* Operating LED headlights on models with lights
- \* Front and rear operating LED red and white marker lights on models with lights
- \* Genuine Kadee #158 scale sized metal couplers
- DCC Ready and DCC Sound Ready with a speaker and enclosure fitted to all models
- \* DCC Sound version including an ESU LokSound 5 DCC sound decoder with DCC Solutions Sound
- Removable coal load for easily installing a DCC decoder, no need for tools
- \* Provision for soldering a 2-wired stay alive device, includes isolation switch for DCC programming
- \* Factory painted and decorated
- \* RP25/88 wheels with stainless steel tyres
- \* 18" minimum recommended radius
- \* Will operate on code 70, 83 and 100 track

**Safety Notes** – This locomotive is not suitable for persons under the age of 14, as it contains small parts that may be swallowed and may cause a choking hazard. Store the model in a responsible manner.

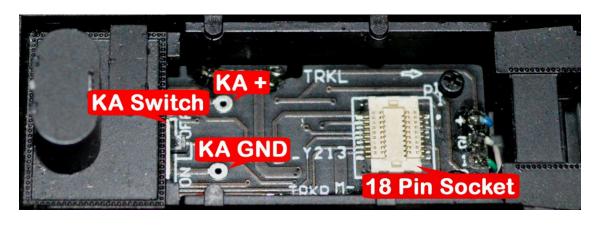
Important Warning — Do not use a pulse type controller or power supply with this Casula Hobbies locomotive. This type of controller can cause damage to motors and PCBs in 12-volt models due to voltage spikes up to 20 volts. For DCC operation, it is highly recommended that a Short Circuit Protection Device is fitted to your layout protecting it from the excessive currents which flow during a short circuit that will damage your models, Digital Command Control System and DCC Decoders. The Casula Hobbies warranty will not cover any damage to the model caused by short circuit damage. The use of a 1156 light bulb or similar is not acceptable as protection for DCC operation.

Handling the Model – Care is required in removing the locomotive from its plastic cradle. To remove the locomotive, hold the cradle and slide the plastic outer cover away from the cradle. Undo the top plastic fold at one end of the cradle then lift and fold the cradle away so it completely clears the locomotive noting which way it is facing so that you are able to return the model in the cradle the correct way to avoid damage. The locomotive and tender are coupled together, so use two hands to lift the model out of the cradle.

DCC Ready Model- Installing a Decoder – This locomotive is equipped with a Next18 interface socket suitable for use with 18 pin DCC decoders. To gain access to the socket, simply lift the front end of the coal load and remove it from the top of the tender. There is no need to open the complete tender. Remove the 18-pin DC dummy plug and install a DCC decoder by placing it over the socket and gently pushing down on the decoder above the socket, until it clicks into place. The socket has been designed for use with an ESU LokSound 5 DCC or ESU LokPilot 5 DCC Next18 Micro decoders. The factory installed lights are all LEDs and function programming will be required to the installed DCC decoder for the lights to operate correctly. The light outputs for this model are as follows: Front Headlight (Front Light), Rear Headlight (Rear Light), Forward Running Marker Lights (AUX1), Reverse Running Marker Lights

Adding a Stay Alive Device — Electrical provision has been made to solder a 2-wired stay alive device onto the solder tabs provided plus a slide switch to turn "OFF" the stay alive should problems occur during DCC programming. Slide the switch back to "ON" once programming is completed for the stay alive device to operate when running the locomotive.

(AUX2). These light outputs can be programmed to any function button to suit your personal requirements.



**DCC Sound Equipped** – If you have purchased a Sound Equipped Z19 Class steam locomotive, you can enjoy all the sounds and running capabilities of the model using DCC. The model will run on DCC straight out of the box using the DCC address 3. To turn on the sound, you will need to select F8 on your DCC controller then begin to drive off. The settings for the sound decoder have already been factory pre-programmed, including the starting and stopping momentum to ensure realistic running operation and provide you with great sound for your Z19 steam locomotive.

You can use your Z19 model with sound on DC but it is not recommended as the sound is limited to the drive sound and there are no function capabilities. The headlights with generator sound and marker lights will operate in DC. The DCC sound decoder will require approximately 5 volts to start operating the sound and to allow the model to begin moving on DC. If the voltage is turned down too low, the model will stop moving and the sound and lights will also stop.

## DCC Sound Functions - ESU LokSound 5 DCC

- FO Directional Headlights
- F1 Drive Hold Heavy Load
- F2 Playable Whistle
- F3 Headlight Dimmer
- F4 Steam Release
- F5 Coast
- F6 Brake
- F7 Open Cylinder Cocks
- F8 Sound On/Off
- F9 Directional Marker Lights
- F10 Front Headlight On/Off (Not Directional)
- F11 Rear Headlight On/Off (Not Directional)
- F12 Whistle Level Crossing Sequence
- F13 Brake Set and Release (Automatic with function on)
- F14 Disable Brake Sound when Stopping
- F15 Blowdown
- F16 Compressor
- F17 Coupler
- F18 Wheel Squeal
- F19 Guard's Whistle
- F20 Sanding
- F21 Volume Fader Reduces Sound 50%
- F22 Ash Dump
- F23 Tender Water Fill
- F24 Injectors
- F25 Safety Valves
- F26 Coal Shovelling
- F27 Shunting Mode Reduces Speed 50%
- F28 Rail Clank

**Resetting the ESU Sound Decoder** – If there is an issue with the ESU decoder not operating correctly, it may require a factory reset. Simply enter the value 8 in CV 8, then disable and reapply the power to complete the reset. The decoder reset should be done on a "programming track" and not "programming on the main". A reset will return all CV values to the original factory Z19 settings unless if using an ESU LokProgrammer which will return the settings to the last CV values written to the decoder by the programmer.

Warranty – Your Casula Hobbies Z19 model is warranted against any manufacturing defect for 12 months from the date of purchase. Warranty does not cover damage by *mishandling*, damage due to any modifications, damage to any electrical parts caused by fitting a DCC decoder or stay alive device, by using a pulse controller that voltage spikes above 12-volts, damage to the any part of the model or the factory fitted sound decoder due to high current short circuits, damage to third party DCC decoders fitted by the customer. If a warranty claim needs to be made, your model must be returned to Casula Hobbies. Please send a copy or your purchase receipt and a description of issue/defect with your model. Please note: All costs incurred by the customer for returning a model is the responsibility of the end user.

Maintenance – The Casula Hobbies Z19 locomotive is designed to give you hours of trouble-free running with minimal maintenance. The model is lubricated at the factory and does not require any further lubricating at the time of purchase. After every 100 hours of running, only a very small amount of lubrication is required where the side rods connect to the wheels. Lubrication of the gears will require some disassembly of the model and is only recommend by advanced modellers. Consult Casual Hobbies for lubrication advice. Excessive lubrication can cause more damage and create running problems than having none at all, so using avoid too much lubrication.

**Spare Parts** – For parts, availability and prices, please email <a href="mailto:sales@casulahobbies.com.au">sales@casulahobbies.com.au</a>

Thank you for your purchase and enjoy operating your Z19 model.

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