



Airbrushing Notes

Introduction

These notes are a companion to the airbrushing workshops.

The techniques presented are not specific to model railroad and apply to most models. They are all relatively simple and will achieve great results after a little practice.

The Equipment

The airbrushing equipment used in this clinic are the Runway 13;

- AL-133BKX Nozomi Airbrush
- TC-802 Air Compressor.



Of course, you should be able to achieve these results with any good airbrush from other manufacturers such as Aztek, Badger, Iwata and Paasche.

Note: A quality double action airbrush and compressor with regulator will give you greater control and make airbrushing easier and more enjoyable.

Preparing the Model

Filling and sand smooth any imperfections. Use Mr Surfacer to fill in the smaller seams and joins, and especially the little surface pores in resin cast parts.

Ensure the model is free from oils and dust by washing in warm water with a small amount of dishwashing detergent, and lightly

Paints and Thinners

These are some general guidelines for thinning and cleaning paints.

Paint	Type	Thinner	Cleaner
Tamiya and GSI Creos Aqueous Hobby Color	Acrylic	Tamiya Acrylic Thinner, Isopropyl Alcohol	Methylated Spirits
Testors, Model Masters, Humbrol and Tamiya Enamels	Enamel	Tamiya Enamel Thinner	Mineral Turpentine, Lacquer Thinner*
GSI Creos Mr Color, SMS and Tamiya Lacquers	Lacquer	GSI Creos Mr Thinner for Lacquers	Lacquer Thinner*

*Lacquer Thinners are very strong solvents and should be used with great care. Check with your airbrush supplier before using these solvents on your airbrush.

Work	Nozzle/Needle	Air Pressure	Paint/Thinner Ratio
Detail and Fine Camouflage	0.2 or 0.3mm	8 to 12 psi	40:60
General	0.3mm	10 to 15 psi	50:50
Large Area	0.5mm	12 to 18 psi	60:40

Tip:

- "If you don't know better, stick to the manufacturer's recommended products"
- "Good stuff to thin, cheap stuff to clean." Use the expensive manufacturer recommended thinners for thinning to ensure good results but use a cheaper household substitute for cleaning the airbrush.
- "Go experiment but not on your airbrush or model." When trying new paint and thinners combinations, test it in a container first and it successful then put it into an airbrush. Also test spray it on scrap plastic or on old discarded models.

scrub with an old toothbrush, and leave to dry overnight.

Note: Do not wash in water models that contain metal parts that will corrode or electrical components.



Priming and Undercoat

Why do we need to undercoat?

- Helps paint to adhere especially on resin or metal parts.
- Provides an even coloured base.
- Highlights surface blemishes and imperfections for rework.

For airbrushing primer in we use;

- 40/60 paint/thinner (Mr Surfacer 1000/Mr Hobby Lacquer Thinners)
- 0.3mm nozzle/needle
- 12 psi air pressure

Note: Primers need more thinners than normal paint when airbrushing.

After the first coat is dried, look for any surface imperfections and fill in with Mr Surfacer and sand smooth.

Spray a second thin coat of primer to smooth out the finish.

Applying Main Colours

For airbrushing the main colours in N Gauge approx., we use;

- 50/50 paint/thinner (Tamiya Acrylic/Tamiya Acrylic Thinners)
- 0.3mm nozzle/needle
- 10 psi air pressure

Apply the colour in 3 to 4 light coats rather than one heavy one.

As acrylics are fast drying, you need only allow a minute or two for matt paint before recoating. Gloss colours, enamels and lacquers will need a few more minutes.

Turn or move the model as you airbrushing to make it easier to get to all parts of the model.

Tip: Airbrush any corners, crevices and other hard to get to areas first before moving to the main flat areas. This make it easier to get a smooth even coat of paint and avoid too more paint building up in the hard to get to areas.

Masking

For masking different colour sections and cheat lines, Tamiya Masking Tape (the yellow one) is excellent.



The best way to get Tamiya Masking Tape around curves and uneven surfaces is to cut it into very thin strips. Lay a strip of trip onto a piece of flat glass (from an old picture frame) and cut it with a sharp knife and a steel ruler. The glass is an excellent cutting board as it does not affect the adhesive on the tape.

Once the model is masked, spray the colour in a few light coats as oppose to a single heavy one. This

will help prevent paint from sipping under the mask or building up on the tape edge. When the paint is dried carefully remove the masking tape.

Tip: If you are painting bright colours on dark surfaces (like yellow strips on black carriage), spray a thin coat of matt white first, and then spray the bright colour. This will stop the dark background from showing through and it will take less coats of paint.

Weathering

"Underdoing it is better than Overdoing it."

This is probably the best advice for people starting out on weathering models. If you are not sure on how much you should weather a model, go for less and it will still look good.

For detail and weathering work we use;

- 40/60 paint/thinner (Tamiya Acrylic/Tamiya Acrylic Thinners)
- 0.2mm nozzle/needle
- 8 psi air pressure

We make a thin sooty light-medium grey weathering mix with a bit of light grey and a touch of brown. The exact colour and proportions is unimportant.

1. Lightly highlight surface detail such as panel lines with this weathering mix.
2. Add some dark grey or black to the weathering mix and emphasis the shadow areas.
3. Add some light grey to the weathering mix and lightly dust where the "sun" will shine and reflect from on the model

Scale Colour

In real life when you are up close to say a new red railroad carriage, the colour will be strong and distinct.

Move about 200 metres away from the carriage, and red is now less distinct. Move another 200 metres and red colour is a little greyer again.

With the smaller scales such as N, the paint colour straight from the bottle will probably be too strong especially if you are going for the weathered look. This affect is often referred to as "Scale colour".

To simulate this on a model, simply lighten the base colour by adding a little light grey.

Further Information

I hope you will find the airbrushing notes useful and interesting. If you have any further questions, feel free to contact by email.

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