MLW
FPA-4
FPB-4

RAPIDO

FPA-4/FPB-4 LOCOMOTIVE PRODUCT GUIDELINES

Thank you for purchasing the first accurate models ever produced of CN's unique passenger locomotives, the FPA-4 and FPB-4. Finally, the MLW factory is producing what is without a doubt the most famous passenger locomotive designed and built by the real MLW, or Montreal Locomotive Works.

As always, please do not hesitate to contact us should there be anything wrong with your model. Whether you have a warranty issue (missing parts, depleted uranium accidentally left in the fuel tank, etc.), a question ("Why won't this go around my 12" radius curves? What a ripoff!") or a comment ("The nose is wrong.") please give us a shout. More warranty information is available towards the back of this manual.

If you really do think the nose is the wrong shape because our FPA-4 nose looks different than the noses on all of the other Alco FA models in your collection, we have some bad news for you. Because we did a 3D scan of the real FPA-4, all of the other noses in your collection are, in fact, the ones that are wrong. You can make up for this by buying more Rapido models.

You can reach us by email: trains@rapidotrains.com, by phone (1-855-LRC-6917 or +1-905-474-3314) or by snail mail at the address below.

Please do not send any models back to us without first speaking to us to get authorization. You'd be amazed at how many models arrive at our location with no documentation whatsoever. And if models get sent to one of our old addresses, they might as well have been beamed into the mouth of a wormhole as we'll never see them.

If you've finally got around to opening this model after your retirement in 2042, you're on your own. Sorry.

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BREAK-IN

Every locomotive needs a break-in period. Your FPA-4 and FPB-4 models have been tested at the factory… for about 30 seconds each. That is not enough time to get the gears to mesh nicely or to even out any jerky operation in a new motor. We suggest that, after reading this manual, you put your FPA-4 and FPB-4 models on a test loop and just let them run in each direction for an hour or two. Fast and slow.

There already should be enough grease in the gearbox so you don't need to add any. Just let the thing run.

PROTOTYPE PRACTICES

Unlike the F-Units on many American railroads, the FPA-4 and FPB-4 locomotives did not operate in matched sets. They were mixed into CN's passenger locomotive pool and could be seen in service with a variety of other locomotives, most commonly the General Motors-built FP9A and F9B, as well as hood units equipped with pass-through steam lines. The FPB-4 locomotives had two steam generators so were particularly useful in very cold weather and could be seen behind passenger and freight engines that were not equipped with steam generators or pass-through steam lines.

The FPA-4 and FPB-4 were transferred to VIA Rail Canada in 1978. They were retired in 1989 in the face of Brian Mulroney's impending decimation of Canada's national passenger railway. The locomotives needed a number of upgrades that weren't worth doing if VIA's services were being chopped in half. Unlike most developed countries that have invested heavily in passenger rail in recent decades, VIA has not had a single new route added since those massive service cuts 25 years ago.

There has been some capital investment since then, but it was often accompanied by inane government decision making. In 2001 the Canadian government bought passenger cars from Europe that have never worked reliably in Canada's climate, have been in and out of service, and have cost millions in vital upgrades. In 2007 the Canadian government spent over $300 million building new tracks for CN on the busy Montreal-Toronto route which were to be used for increased passenger train services and speeds. But the government did not follow through with added funds for service provision and the new tracks were soon filled by CN's long freight trains. Yet the government keeps touting their investment of "ONE BILLION DOLLARS" into VIA. That "ONE BILLION DOLLARS" sounded impressive in 2007, but it wasn't all for VIA and it's actually not that much if divided over EIGHT YEARS.

Are we bitter? **NOT AT ALL.** If you believe that the government acted wisely in slashing our passenger train services and misspending large portions of what little investment has been made into VIA since then, then why are you buying a model train? Go find a new hobby, like greenhouse gas emissions.

DITCH LIGHTS

Your FPA-4 locomotive comes equipped with optional ditch lights, which are included in the polybag. To install the ditch lights, use a #60 drill bit to drill a hole above each ditch light support on the nose. Test fit a ditch light into the hole and use a slightly larger drill bit if needed. Dip the end of each ditch light into some white glue and insert it into the hole with the lamp shade oriented toward the top – and you're done!

CHECKING AND ADJUSTING YOUR LOCOMOTIVE

We try and make sure that every locomotive is perfectly up to spec before it leaves the factory, but if the karaoke was particularly good the night before your model was assembled there may be a couple of bugs. Doing a quick pre-service check will solve most operational glitches.

- Check to see that all wheelsets are correctly in gauge using an NMRA RP-2 Standards Gauge. Should any of the wheelsets be out of gauge, than remove the affected wheelset from the truck by prying off the bottom lid of the gearbox with a small flat screwdriver. The wheelset can be regauged by grabbing each wheel and twisting. Reverse the steps to replace the wheelset, and ensure the gearbox cover is snapped into place before placing on the track.

- Check that all underbody piping and appliances are firmly installed and clear of the track. Of particular note are the air hoses on the ends of the locomotive and both coupler trip pins. Bend up any low coupler trip pins so they don't interfere with your switches and crossings. We recommend using Kadee part #237 (Trip Pin Pliers) or Micro-Mark part #80600 (Trip Pin Bending Plier).

- Make sure that the trucks swivel freely and without binding. If they catch on anything, check to ensure that the ends of the trucks don't bind against any underbody piping or conduit. If they do, see that everything is firmly installed.

MISSING OR DAMAGED PARTS

If you open your FPA-4 or FPB-4 box and discover that something has obviously been bumped in transit and is damaged, please contact us. If a part has broken off, the easiest way to reattach it is with a drop of white glue. You can't ruin the paint finish with white glue. If you don't like to touch your model trains, you are welcome to send the engine back for us to glue that doodad back on with white glue. But if you do send it back to us for us to put that one part back on and other stuff falls off when we send it back to you, then tough tooties. We're not fixing it again.

Because of the design of the real FPA-4 and FPB-4 locomotive grills, we couldn't use our nifty "No-Warp Grill" technology. That means that there is a risk that a grill or two may pop out if the locomotive is seriously kicked around in transit or it goes through a mas-

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sive temperature swing. (Please do not store your engines in the freezer or the sauna, unless that is also where your layout is located.)

To reattach the grills, white glue won't cut it. Look at the shell where the grill has fallen out and you will see horizontal supports. Each of these supports has a groove that allows the glue to flow and not spread into the visible slots on the grill. This is another Rapido innovation that will doubtless be copied by one or more of our competitors, just like our Easy-Peasy lighting and silly advertisements.

Scrape any old glue out of the grooves with a dull hobby knife and then add some thin CA with a toothpick and ensure it flows along the grooves. Gently drop the grill back into place and tamp it down with a clean toothpick. We say "drop the grill back in place" because if your finger comes into contact with the glue through the slots in the grill, your grill is grilled cheese.

If you regularly spill CA on your models, then we suggest using low-tack masking tape to cover the area around the grill so you don't ruin your paintwork. Your warranty does not cover CA spots or paint ripped up because you used Tuck Tape rather than low-tack masking tape.

Obviously we would like to make these grills sauna- and freezer-proof, but we can't. And many (if not most) of our customers do indeed have massive temperature swings where their trains are stored. If the model arrives with a grill or two popped out and you don't want to fix it, we will gladly fix it for you. However, if a grill pops out more than 30 days after date of purchase and you would like us to fix it, you will be on the hook for postage to and from our office. Or you can bring it by in person when you are in the area. Please just let us know first.

More information about our limited lifetime warranty can be found towards the end of this manual.

REMOVING THE SHELL

If you need to open up yourFPA-4 or FPB-4 it is actually quite easy to do. Just be sure to remember these important points:

- We have a transporter lock on the molecular pattern of your locomotive. If something pops off while you are removing the shell, our starship's transporters will automatically lock on to the little part and beam it directly into the heart of the sun. Don't bother looking for it. It's gone. You might hear the transporter effect as the part is beamed away. I know it would have been more useful for us to beam the part back onto your workbench but someone's been fiddling with our transporters and we haven't been able to fix them. Sorry.

- To that end, please make every effort to ensure nothing flies away. Work on a clean, white surface. In fact, paint all the walls, the floor and the ceiling white,

wear white coveralls, and remove everything else from within a three-mile radius of your workbench, especially (but not limited to) vegetation, people and wind.

- Turn the locomotive upside down in a foam cradle (painted white, of course) and remove the coupler screws. Pull the coupler boxes out of the ends and turn the loco right-way up. Now wiggle the shell off. Carefully. Remember the transporter lock.

- That's it, really.

- No, really.

OPERATION – DC (SILENT)

If your FPA-4 or FPB-4 locomotive is not equipped with a sound decoder, it should function like most other HO scale locomotives. The gear ratio is 14:1 so there is a good chance that it will MU (multiple unit) with your existing fleet. Put it on the track. Give it some juice. Watch it go.

Because we can't guarantee that your FPA-4 or FPB-4 will actually MU with locomotives from other manufacturers, we recommend you buy EVEN MORE Rapido stuff. If we don't make a particular locomotive that you need, then make a new shell out of cardboard and glue it onto a Rapido chassis.

Of course, our FP9A and F9B were made at a completely different factory so we can't even guarantee they will MU with your FPA-4 and FPB-4. So on second thought, just upgrade to DCC and then all of your engines will happily MU with each other, smooth as silk. No, we won't stop bugging you about this until you upgrade to DCC. DC is like hand-cranking your car. Mike uses DC. He has not seen a draft of these instructions before they went to the printer.

In DC, the number boards are always on and the headlights and ditch lights work when the locomotive is moving forward. The class lights and backup light are installed and wired, but they will not work in DC. See previous paragraph.

INSTALLING A DECODER

The FPA-4 and FPB-4 each contain an ESU-designed motherboard which is connected to the track, motor and lighting outputs. A blind plug is attached to the motherboard using a 21-pin connector. To install a decoder, remove the blind plug and install a 21-pin decoder (recommended) or a 21-pin adapter to attach an 8-pin or a 9-pin decoder. Your chosen decoder should have six function outputs.

We recommend the following 21-pin decoder:

- ESU #54615 - LokPilot V4.0 DCC with 21MTC

We feel the 21-pin connectors are superior because there are enough pins to ensure that all your lighting functions are connected. The necessary resistors are included on our ESU-designed motherboard so you don't have to futz around with resistors. Just plug in one of the two recommended decoders and you have DCC.

ESU has made an FPA-4/FPB-4 function mapping which can be downloaded into their non-sound decoder (54615) so that the function buttons and motor control are exactly the same as our factory-released sound versions. This is available for download on the FPA-4/FPB-4 page in the Support section of our web site. You will need an ESU Lok-Programmer to write the function mapping to the 54615 decoder. If you don't have a LokProgrammer, you can adjust CVs in the usual way.

The silent ESU 54615 decoder with our FPA-4/FPB-4 settings can be purchased pre-programmed from your favourite retailer. Just order ESU item number 91644. As the sound version uses custom sounds we recorded ourselves, the FPA-4/FPB-4 sound file is not available as a download from ESU. We will be selling FPA-4/FPB-4 sound decoders separately; if they aren't on our web site by the time you read this, call Jason and yell at him.

OPERATION – DCC/DC WITH SOUND

We go to extreme lengths for accuracy, in sounds as well as in looks. Our sound decoders are LokSound Select decoders by ESU, programmed with sounds we recorded from FPA-4 #6764 on the New York & Lake Erie railroad in Gowanda, New York. The sounds are 100% correct for the FPA-4 and FPB-4.

As in all of our other sound-equipped engines, we recorded the FPA-4 under load. It was pulling 6758 (unpowered) up a steep grade. This simulates a four- or five-car passenger train on the straight and level. CN and VIA practice was to have roughly five cars per locomotive – it differed depending on the route and the schedule. So if you are running six cars, you'll generally want two units up front.

The most awesome consist we've ever seen is FIVE FPA-4 locomotives pulling train 62 between Toront and Montreal. There was an Air Canada strike on at the time. Most of the passenger cars were VIA, but the locomotives were all in CN stripes. As the old adage goes, there is a prototype for everything!

More detailed decoder instructions, including all sorts of weird CV settings we don't understand, can be found in the ESU Loksound Select decoder manual. This is available for download on the FPA-4/FPB-4 page in the Support section of our web site.

LOCOMOTIVE ADDRESS

Your Rapido/MLW FPA-4 and FPB-4 each comes from the factory with a decoder address of 3. We suggest if you are using DCC control that you first test that the locomotive

responds on address 3. Once you have verified that the locomotive is responding you should assign it a unique address (we suggest the road number of the locomotive) before going any further. This can be done either on your programming track (recommended) or on the main if your system supports programming on the main. Be aware however that if you do program the locomotive on the main and you have any other locomotives on your layout assigned to address 3 (the normal default address for new locomotives) that ALL of them will likely also be changed to your new address!

TURN ON THE SOUND

Press F8. Your locomotive will start up. If you press F8 when the locomotive is already moving, it will skip the startup and the sound will just turn on. Press F8 again to turn the sound off.

Note that if you are listening to your FPA-4 or FPB-4 idling nicely and then you select another engine, your FPA-4 or FPB-4 still thinks F8 is pressed so it will keep idling along. However, if someone else selects your locomotive's number and F8 isn't pressed on his or her controller, the FPA-4 or FPB-4 will promptly shut down. He or she will need to press F8 again.

We're still using "he or she." We really hope the three female model railroaders in all of Canada appreciate it and will consequently buy even more Rapido stuff.

If you are operating with sound on a DC layout, the sounds won't come on until the voltage is up around seven volts or more. This is normal.

FUNCTIONS

F0 Headlights
F1 Bell
F2 Horn
F3 Straight to 8
F4 Steam Generator!!!
F5 Doppler Horn
F6 Ditch Lights
F7 Dimmer
F8 Startup/Mute/Shutdown
F9 Class Lights - White
F10 Class Lights - Green
F11 Brake
F12 Switching Mode
F18 Brake Set/Release
F19 Air Release

FUNCTIONS: MORE INFORMATION

F0 Headlight
Like the real thing, our FPA-4 and FPB-4 headlights are not directional. They stay on until you turn them off.

F3 "Straight to 8"
This unique feature simulates the prototypical operation of the FPA-4 and FPB-4 locomotives. CN and VIA engineers did not slowly go through the notches if leaving a station on a clear signal. They would put the locomotive straight from notch 2 to notch 8. Similarly, when approaching a station, engineers would go right back down to idle and coast to a stop. This sounds very different from a typical freight engine slowly notching up to 8 and back down again.

When F3 is selected, the locomotive sound will ramp up quickly to "Run 8" (full power). If you decelerate, it will go right back down to idle. If you push F3 when the locomotive is at notch 8 and then you decelerate, it will notch down normally. Note that this function controls the sound only and not the motor speed. Motor speed is still controlled using the throttle settings as normal.

If you want your consisted engines to respond to F3 when you press it, refer to your DCC system to check how consisted engines respond to functions. You may need to change some CV settings in your consisted engines following the detailed instructions in section 5.2.3 of the ESU Loksound Select decoder manual, available for download on the FPA-4/FPB-4 page in the Support section of our web site.

F4 Steam Generator!!!
We just couldn't resist adding the steam generator noises to the FPA-4 and FPB-4, and we only wish we'd thought of it with the FP9A and F9B. I guess you'll need to make sure an FPA-4 or FPB-4 is in all of your fall, winter and spring diesel lashups! Or you can order new FP9A and F9B Steam-Equipped sound decoders from Rapido.

Press F4 at any time to start up the steam. We don't include random loud blowdowns but we include the irregular hiss that you can hear coming from the regulator and blowdown valves all the time when the steam generator is operational. If you search YouTube for "FPA-4 Oshawa" (without quotes) you will find hdtraincam's awesome video of an FPA-4, F9B and FPA-4 trio pulling into Oshawa and you will hear what the real steam hiss sounds like.

When you accelerate, the volume of the steam generator gets lower as you wouldn't hear it as clearly when the train is moving. If you want MORE STEAM! you can adjust the volume of the steam generator by adjusting the value of CV 315. Please refer to Sound Volume Settings (below) before attempting this.

F5 Doppler Horn
Play this when approaching level crossings at speed. It is a real recording of a Canadian passenger train approaching a level crossing at about 80 MPH in the 1980s.

F6 Ditch Lights
The ditch light LEDs are already installed. Refer to the section on Ditch Lights above for instructions on how to install the ditch light castings. Ditch Lights were not regularly used on the FPA-4 until 1986, though the ditch light holders were installed in the 1960s.

Remember to turn off the ditch lights when approaching a station or an oncoming train as they are BLINDING. The ditch lights do not flash as that is not a Canadian requirement.

F7 Dim the Headlights
When approaching a station stop or an oncoming train, turn off your ditch lights and then press F7 to dim your lights – you don't want to blind your passengers or the oncoming train's engineers.

F9 White Class Lights
CN regularly operated the FPA-4 and FPB-4 on its fast freight trains, even after they were painted in VIA colours. All CN freight trains were operated as extras while the FPA-4s were in service. So you will want to turn on the white class lights when pulling a freight train or any other non-scheduled train, such as a track inspection train or a Christmas special. On regular, scheduled passenger runs, the class lights are off..

F10 Green Class Lights
The green class lights were used only when there was a second section of a train following. That was rare, but could often happen during busy tourist seasons, for holiday trains, or during Expo 67. If you model a second section of your passenger train during one of your op sessions, we will be very impressed.

F11 Brake
F11 works just like the brakes on a real engine. Press F11 and you put on the brakes. Turn off F11 and the brakes come off so you start moving again.

F12 Switching Mode
If you press F12, the headlight and rear light will both be on dim. This is appropriate for switching operations, which would be common in yards and terminals, such as Montreal, Toronto, Windsor, Sudbury and Winnipeg. This is the only way to turn on the rear light on our model FPA-4 as during normal operations it was the only time that it would have been used. Press F12 again to turn off the switching mode lighting.

The FPB-4 lighting is, to put it delicately, a pain. It uses the same decoder as the FPA-4, therefore you can only have the forward light on by itself, or both lights on using F12. But you may want to operate the forward and rear lights independently.

To keep the forward light on F0 and to put the rear light on F6 so you can operate it whenever you want, use a programming track (or LokProgrammer) and input the following (in order):

CV31=16, CV32=2, CV355=1, CV362=2, CV364=64

Or just do what Jason does and drag the FPA-4 and FPB-4 around the yard with a switcher so you don't have to waste time programming all these farkakte lights.

F18 Brake Set/Release
This function turns off the brake release and brake set sounds when you start or stop moving, respectively. It has no effect on the function of the engine — it just affects the sounds.

F19 Air Release
This makes an air release sound. Ahhhhh....

HORNS

There are numerous extra horn recordings included with your FPA-4 and FPB-4, and you can change them around by changing the value of CV 48. Though why you'd want to change the horn from the GORGEOUS one that we recorded and is included from the factory is beyond us. The default is the K3L, which was the horn these locomotives received later in life. If you are modelling the glory days of CN in the 1960s and early 1970s, you will want to use the M3H.

CV48-0 Rapido K3L
CV48-1 ESU K3L
CV48-2 Another ESU K3L
CV48-3 Rapido M3H
CV48-4 Rapido K3L
CV48-5 Rapido K3L
CV48-5 Rapido K3L
CV48-5 Rapido K3L
CV48-5 Rapido K3L

Note that you can only change the horn on a programming track or using a LokProgrammer.

SOUND VOLUME SETTINGS

The sound volume settings are as loud as we can make them. If you want to make your FPA-4 and FPB-4 even louder, we suggest strapping a subwoofer to the roof.

You can, however, adjust the relative volume levels of the different elements of the sound recordings.

To set the volume levels go into the program mode on your DCC system (refer to your system's manual for instructions on how to do this as each system is slightly different); enter the desired CV number; then enter the desired levels. Note that this can be done either on a programming track or on the main (ops mode) if your DCC system supports programming on the main.

We strongly recommend that you keep notes on which settings you have changed and which values were used. If you ever need to do a reset on the decoder (see "Factory Reset" below) then having good notes will allow you to easily re-enter any changes that you might want to keep.

VERY IMPORTANT: Before you change any of the volume control CVs, please make sure that CV 32 is set to 1. CV 32 is used as an index selection register and if you don't set it first then we are not responsible for your resulting rage and the fact that you will probably throw the locomotive against the wall in frustration.

FPA-4/FPB-4 SOUND VOLUME SETTINGS				
FUNCTION	CV	DEFAULT	RANGE	YOUR VALUE
MASTER VOLUME	63	192	0-192	
DIESEL VOLUME	259	128	0-128	
HORN VOLUME	275	128	0-128	
BELL VOLUME	283	65	0-128	
COUPLER SOUND VOLUME	291	128	0-128	
STEAM VOLUME	315	30	0-128	
ODD VOLUME	299	86	0-128	
ODD VOLUME #2	307	77	0-128	
ODD VOLUME #3	323	128	0-128	
ODD VOLUME #4	331	128	0-128	
DOPPLER HORN VOLUME	339	128	0-128	
SHORT AIR LET OFF VOLUME	363	128	0-128	
RANDOM SOUND VOLUME	451	90	0-128	
BRAKE SQUEAL VOLUME	459	128	0-128	

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FACTORY RESET

On your FPA-4 and FPB-4, you perform a factory reset by entering a value of "8" into CV 8. Note that this will cause all of your new volume and motor settings to be lost, so you will need to reprogram any settings that you want to keep. You did keep notes, right?

You can NOT lose all of the pre-recorded sounds on your FPA-4 or FPB-4 decoder by doing a factory reset. If you manage to lose all of the sounds on your locomotive then you have probably set fire to your decoder with a voltage spike. Open up your locomotive and pour out the ashes.

AWESOME SLOW SPEED THINGY

There is an awesome trick that you can use to get even better slow speed running and smoother operation. It's called the Automatic Motor Tuning Feature. This feature will automatically adjust the Back-EMF in most cases and give you phenomenal slow-speed performance. Make sure you do this to each locomotive separately rather than your A and B units together.

In order to use this automatic adjustment you need to use Ops mode programming, i.e. programming on the main. Make sure your locomotive is in "forward" and that you have lots of room in front of it on your mainline. Set CV 54 to a value of 0. Then get out of programming mode and turn on the bell (press F1). We'll say this again: Make sure you have plenty of room in front of your locomotive and it is not headed for the layout edge and the basement floor!!!

Your FPA-4 or FPB-4 will quickly take off at full speed and gradually slow down to a stop while the decoder reads the motor responses. You'll have fabulous motor control after you do this. If you ever have to reset your locomotive, you can do the automatic adjustment again – it just takes a few seconds.

MORE INFORMATION

While addressing the features that most modelers will need for normal operation, these instructions have covered just a small number of the many customizable features of your ESU LokSound decoder. For advanced users who want to more fully explore the capabilities of the decoder we suggest downloading the ESU Loksound Select decoder manual. This is available on the FPA-4/FPB-4 page in the Support section of our web site.

LIMITED LIFETIME WARRANTY

We will do our best to solve any problems or issues that you may have with your FPA-4 or FPB-4 locomotive. If your locomotive has any defects that originate from the factory, we will repair your locomotive using new components or replace it outright should a

repair not be possible. However, we can only replace your locomotive while we have additional ones in stock. We normally keep spares for up to six months after a model is released. If you purchased this locomotive at age 23 and you've only first opened it upon retirement, it is possible that we no longer have any replacements. It is also possible that we are all dead and the moulds have been eaten by mutant goldfish. Please check to see if we still exist and give us a call or write us an email, and we will see what we can do to help you out.

There are a number of things that this warranty can not cover. We've already gone over the bit about reattaching loose parts yourself – don't be afraid! The worst thing that can happen is that you ruin a gorgeous $325 locomotive and have to give it to the neighbour's dog as a new chew toy. If parts are missing, please call us or send us an email and we'll send you some replacements provided that we have them.

Of course, damage caused by throwing your FPA-4 out of a moving hovercraft, wearing your FPB-4s as a cozy pair of slippers, changing the locomotive numbers with finger paints, baking the engines at 325 degrees until golden brown, or any other damage caused by you that we haven't mentioned here is not covered by the warranty. However, if catastrophe does strike and your locomotive gets damaged, please give us a shout and we'll do our best to help you out. **Yes, even if it was your fault we will try our best to fix your locomotive for you. Don't be shy!**

ACKNOWLEDGEMENTS

A lot of people have been extremely helpful in ensuring that your FPA-4 and FPB-4 are accurate works of art. Thank you to Jon Archibald, Jeff Arnold, Jeff Birmingham, Bob Boudreau, Wes Brown, Dan Dell'Unto, Ken Goslett, Pres Greenman, Matt Herman, Steve Hoffman, Kevin Holland, John Hutchins, Don Jaworski, Mark Kaluza, Julien Lévesque, Steve Lucas, Brian Marsh, Jim McMorris, Jakob Mueller, Helmut Ostermann, Mark Sampson, Brian Schuff, and Ken Young.

A special thank you to Stephen Cheasley and everyone at Exporail for graciously hosting our FPA-4 Party and allowing us to do a 3D scan of the real thing.

An equally special thank you to Rob Dingman and everyone at the New York and Lake Erie Railroad for generously giving us their locomotives for a day to record the sounds you've enjoyed in your model.

And of course, our thousands of French Canadian customers have Richard Longpre to thank for our awesome Joual instructions. We are still the only model train manufacturer in the world to offer fully bilingual instructions and that's all due to Richard.

Instructions cover photo courtesy Kaluza-Mueller Collection.