To all JVL partners

Date   -
07 October 2005

New MacTalk and MAC050-141 firmware release !.

Released versions are:
- MacTalk : version 1.40
- Firmware for MAC050-141 : version 7.4

Both updates are available through the update menu in MacTalk if you are connected to the internet.

What has been improved ?

This release covers a major improvement in the servo filter similar to the improvement we released for the MAC800 in January.
The improvement offers:
- Better positioning in applications with high backlash such as tooth belt actuators
- Extended and improved filter selector in MacTalk
- Optimized position error during and after movement
- 2-3 times higher inertia safety margin = inertia can vary 2-3 times without causing instability
- In general it is now much easier to obtain a stable filter.

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Important ! – please carefully read the following.

Since the improvements involve a change in the motor firmware following instructions must be followed to avoid unintended behaviour of the motor.

If you decide to use the new improved servo filter (recommended):

1. Install the new MacTalk version 1.40 by using the *Updates* menu in MacTalk. Or ask your JVL rep. for the latest installation file.
2. A setup made and saved before this new MacTalk release can be used directly if the new MacTalk version 1.40 is installed and used to load the setup into the motor.
   If this recommendation is not followed it will cause motor instability when loading old setup files into motors containing the latest firmware.

If you decide NOT to use the new improved servo filter and stay with the old type:

1. Install the new MacTalk version 1.40 by using the *Updates* menu in MacTalk. The new version will handle any combination between old and new setup files and motor firmware.
2. Make sure that the motor firmware is version 6.7 or older in order to use the old setup file(s). Please notice that new deliveries of motors will contain the new firmware 7.4 !.

Compatibility overview

Firmware	MacTalk	Setup file	Compatibility
< V7.4 (old)	< V1.40 (old)	< V1.40 (old)	Yes
< V7.4 (old)	< V1.40 (old)	V1.40 (new)	No – causes motor instability – No warnings due to old MacTalk
< V7.4 (old)	V1.40 (new)	< V1.40 (old)	Yes
< V7.4 (old)	V1.40 (new)	V1.40 (new)	(Yes) – Warning tell that filter needs to be readjusted
V7.4 (new)	< 1.40 (old)	< V1.40 (old)	No – causes motor instability – No warnings due to old MacTalk
V7.4 (new)	< 1.40 (old)	V1.40 (new)	Yes
V7.4 (new)	V1.40 (new)	< V1.40 (old)	Yes – The filter is automatic converted to the new format
V7.4 (new)	V1.40 (new)	V1.40 (new)	Yes

Notes.
Setup file version refers to the MacTalk version where the setup file was created from.
Notice that the 2 critical combinations both involve the old MacTalk version therefore please make sure to update MacTalk to avoid these combinations.

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We hope for your understanding and trust that you find this new release positive in order to handle even more applications than in the past !

Please do not hesitate to call if you have any questions.

Best regards

Bo Jessen
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