

# STARTER KITS FOR TECHNOSOFT INTELLIGENT SERVO DRIVES

READY-TO-RUN PACKAGES FOR DIGITAL MOTION CONTROL WITH BRUSHLESS AND STEP MOTORS

Technology is moving fast and the time-to-market window narrows. To capitalise on the power of embedded intelligence in Technosoft Drives and on the extreme flexibility of the Technosoft Motion Language (TML™), we introduce the Starter Kits for our fully Digital Motion Controller family.

Beginning with IDM640SK and continuing with IBL4803SK, IBL3605SK, IBL2403SK, IPS210SK, ISD780SK, ISM4803SK, PIM3605SK, ISCM4805SK, IPS110SK, etc. the Starter Kits are ready-to-run packages containing the drive, an I/O extension board plus motor, the EasyMotion Studio PC software and a full set of well-documented application notes.

The Starter Kits get you fast to the point where the real motion begins:

- You can immediately start evaluating the solution of your motion problem by selecting the appropriate application note and by using the I/O board to simulate the drive environment
- You will use the I/O board buttons, pots and LEDs to emulate your PLC or host commands and see the Technosoft drive response
- The included motor shows you how your actual motor will behave on the application when properly tuned
- The EasyMotion Studio graphical interfaces (watch, trace and control panel windows) will give you the certitude that your motion solution with the Technosoft intelligent drives was found

## Plug-and-play Motion Control with Technosoft Starter Kits

No more time wasted with set-up cables, wrong pin-out connections for motor sensors or PLC lines.

The Starter Kit hardware and software are complete, just...

- Hookup a standard DB9 serial cable to the PC and power on
- Launch the EasyMotion Studio PC software, select the template corresponding to the desired application note and play the motor
- Click on the I/O board buttons to trigger or emulate motion events

That's all, your application development process ends here when using the Starter Kits from Technosoft.

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## FEATURES

- Plug-and-play complete H/W and S/W packages including the Technosoft drive and EasyMotion Studio
- Instant emulation of PLC or host command lines (Enable, Limit Switches, I/O or Analogue Reference, ...) through push-buttons and potentiometers
- Visual control of drive's output lines via LEDs
- Graphical programming and motion evaluation with EasyMotion Studio PC software
- Access to an ever-growing base of application notes
- Brushless or step motor pre-tuned in the drive, for immediate motion evaluation
- Wire form loop test points for oscilloscope or external signals connection to the I/O board

## Technosoft Intelligent Servo Drive Starter Kits

Technosoft offers fully digital servo drives with embedded intelligence, based on the Technosoft MotionChip™ technology. These drives control brushless or step motors, in torque, speed or position loop, using high-level motion commands and offering PLC-specific functionality.

They bring **flexibility** (on-the-fly configuration modification), **high-performance** (fully digital control implementation), **advanced motion control** (powerful reference generator module), **embedded intelligence** (high-level motion language programmable) and **advanced programming and analysis tools** (EasyMotion Studio platform).

• **IDM640SK-BL, IBL2403SK-BL, IBL2401SK-BL, IBL3605SK-BL, ISD860SK-BL, ISM4803SK-BL, ISCM4805SK-BL, IPS210SK-DC** - Starter Kits for the IDM640, IBL2403, IBL2401, IBL3605, ISD860, ISM4803, ISCM4805 or IPS210 drives respectively, for brushless or DC brush motors. The optimal tools for the on-time development of the wide range of applications that are solved by the IDM640, IBL2403, IBL2401, IBL3605, ISD860, ISM4803, ISCM4805 or IPS210 intelligent drives.

• **IDM640SK-ST, IBL2403SK-ST, IBL2401SK-ST, IBL3605SK-ST, ISM4803SK-ST, ISCM4805SK-ST, IPS210SK-ST, IPS110SK-ST** - Starter Kits for the IDM640, IBL2403, IBL2401, IBL3605, ISM4803, ISCM4805, IPS210 or IPS110 drives, for step motors. The perfect instruments to master the time-to-market window of a stepper application using IDM640, IBL2403, IBL2401, IBL3605, ISM4803, ISCM4805, IPS210 or IPS110.

Your  
Next  
Intelligent  
Move



TECHNOSOFT  
MOTION TECHNOLOGY

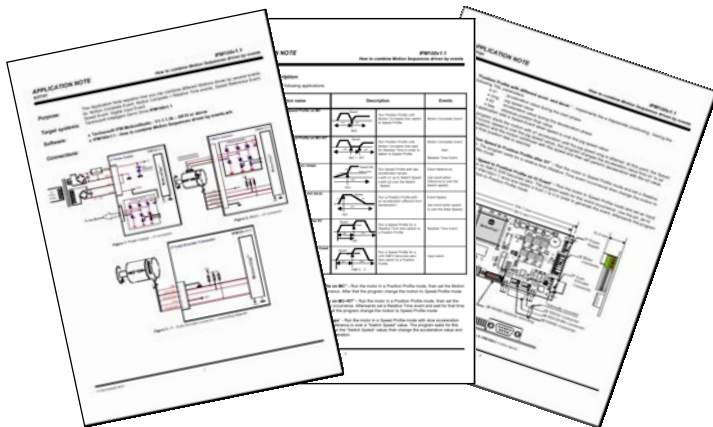
## Easy Set-up and Programming: Plug-and-play Motion Control with Technosoft Drives

It is the EasyMotion Studio that adds ease and speed to the process of development and evaluation of a motion application on a Technosoft Starter Kit.

The **first step** after plugging the serial cable into the Starter Kit consists in system configuration made by the selection and definition of the system structure, feedback and control mode. Most often, this will be done by restoring an archived project that comes with the selected application note.

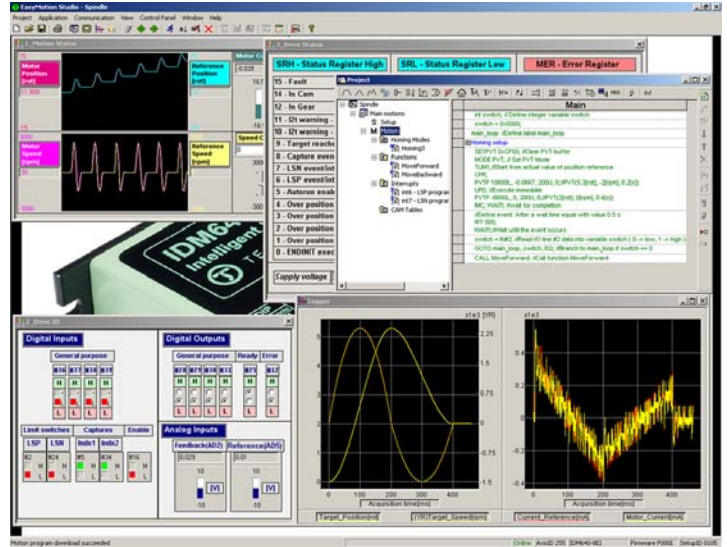
As a **second step**, the EasyMotion Studio graphical evaluation windows like watch, data logger and control panel are used to capture motion variables for analysis and motion application validation. If the motion sequences exemplified by the selected application note do not fully cover the target application, a Motion Wizard will assist you in graphically adjusting the motion language program to your needs.

Once the motion solution was validated, the **third step** is switching to the target motor required by your load and performing the fine-tuning of the digital control loops using the EasyMotion Studio **Tune** and **Test** features that offer real-time system response visualisation.



The complete current set of **Application Notes** can be found on [www.technosoftmotion.com](http://www.technosoftmotion.com)

	Technosoft Drive	I/O Board	Motor Type	User Manual	Application Notes
IDM640SK	✓	✓	✓	✓	✓
IBL3605SK	✓	✓	✓	✓	✓
IBL2403SK	✓	✓	✓	✓	✓
IBL2401SK	✓	✓	✓	✓	✓
ISD780SK	✓	✓	✓	✓	✓
ISCM4805SK	✓	✓	✓	✓	✓
IPS110SK	✓	✓	✓	✓	✓
IPS210SK	✓	✓	✓	✓	✓
PIM3605	✓	✓	✓	✓	✓



## An Ever-growing Base of Application Notes

Starting with the most common basic motion examples, Technosoft continuously increases and updates the Application Notes list. The existing base at one moment is found on the CD accompanying the Starter Kit, while further free downloads from the web will add the latest development examples. Typical application notes are:

- Getting started with IDM, IBL, ISCM, IPS drives
- Implementing a position / speed / profile contouring movement
- Start and Stop motion with two I/O lines
- Trigger motion sequences with I/O lines
- How to combine motion sequences triggered by events
- Using capture and homing inputs
- On-the-fly change of motion mode using internal reference
- How to use Enable, Limit Switches and Analogue Reference
- Electronic gearing on intelligent Technosoft drives with CAN interface

### IDMx40SK I/O Board Extension Signals (example)

IO IDMx40 signal	Functionality	Test
RESET	Input: Reset	Button
ENABLE	Input: Enable	Button + LED or external (TP)
LSP, LSN	Inputs: Limit switches	Button + LED or external (TP)
IN#37/D, IN#38/P	Inputs: Pulse and Direction/GP	Button + LED or external (TP)
IN#36, IN#39	Inputs: General purpose	Button + LED or external (TP)
IN#37/D 5V, IN#38/P 5V	Inputs: Pulse and Direction 5V	External (TP)
OUT#28, OUT#29, OUT#30, OUT#31	Outputs (general purpose)	LED + external (TP)
READY	Output: Ready	LED + external (TP)
ERROR	Output: Error	LED + external (TP)
+/- TACH	Input, analog: Tacho	Potentiometer or external (TP)
+/- REF	Input, analog: Reference	Potentiometer or external (TP)

### Ordering Information

P048.001.E085	IDM640SK-BL
P048.001.E084	IDM640SK-ST
P037.002.E084	IBL3605SK-BL
P037.002.E085	IBL3605SK-ST
P037.001.E084	IBL2403SK-BL
P037.001.E085	IBL2403SK-ST
P035.001.E084	IBL2401SK-ST
P035.001.E085	IBL2401SK-BL
P029.001.E084	ISD860SK-BL
P030.001.E084	ISM4803SK-BL
P030.001.E085	ISM4803SK-ST
P045.001.E086	IPS210SK-DC
P045.001.E087	IPS210SK-ST
P047.001.E084	ISCM4805SK-BL
P047.001.E085	ISCM4805SK-ST
P045.001.E084	IPS110SK-ST
P037.003.E384	PIM3605SK-BL

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