



The OrmAppXD library allows you to integrate multiple ORMEC SAC-XD Programmable Indexer Drives into an SMLC project using Modbus/TCP communications.

SAC-XD drives and ORMEC's ServoWire drives can coexist in your project. This allows you to use ServoWire drives where highly coordinated motions are required and the SAC-XD drives for axes where high performance coordination is not required. This allows you to select the optimum drive for each axis reducing your overall costs.

The library includes the following function blocks:

Motion Function Blocks

- OaXD_OpenConnection Opens a Modbus/TCP connection to a SAC-XD drive.
- OaXD_Power Enables and Disables a SAC-XD axis.
- OaXD_ExecuteHome Executes a pre-configured homing sequence on a SAC-XD axis.
- OaXD_ExecuteMotion Executes any of 31 pre-configured motions on a SAC-XD axis.
- OaXD_ExecuteStop Stops any motion in process on a SAC-XD axis.
- OaXD_JogAxis Can be used to Jog a SAC-XD axis

Motion Configuration Function Blocks

- OaXD_SetGearAtRatio Configures any of 31 motions to gear a SAC-XD axis at a ratio to a pacer (master) axis.
- OaXD_SetGearRelativeAtRatio Configures any of 31 motions to gear a SAC-XD axis for relative distance at a ratio to a pacer (master) axis.
- OaXD_SetGearRelativeInMasterDist Configures any of 31 motions to gear a SAC-XD axis for relative distance in a set distance on a pacer (master) axis.
- OaXD_SetJog Configures normal and fast jog speeds for a SAC-XD axis.
- OaXD_SetMoveAbsoluteAtSpeed Configures any of 31 motions to move a SAC-XD axis to an absolute position at a set speed.
- OaXD_SetMoveAbsoluteInTime Configures any of 31 motions to move a SAC-XD axis to an absolute position in a set time.
- OaXD_SetMoveAtVelocity Configures any of 31 motions SAC-XD axis to move at a set speed.
- OaXD_SetMoveRelativeAtSpeed Configures any of 31 motions to move a SAC-XD axis a relative distance at a set speed.
- OaXD_SetMoveRelativeInTime Configures any of 31 motions to move a SAC-XD axis a relative distance in a set time.

I/O and Status Function Blocks

- OaXD_ForceInput Forces a single SAC-XD drive input ON or OFF.
- OaXD_ForceOutput Forces a single SAC-XD drive output ON or OFF.
- OaXD_MasterForceEn Enables or disables SAC-XD input and output forcing.
- OaXD_GetAxisStatus Returns the status of a SAC-XD axis.
- OaXD_GetIOStatus Returns the state of all the SAC-XD drive inputs and outputs.
- OaXD_Read16BitReg Reads the value of any SAC-XD drive 16 bit register.
- OaXD_Read32BitReg Reads the value of any SAC-XD drive 32 bit register.
- OaXD_Write16BitReg Sets the value of any SAC-XD drive 16 bit register.
- OaXD_Write32BitReg Sets the value of any SAC-XD drive 32 bit register.