



**Operating Guide** 

## How to add MODBUS coils in MCXD

Summary	How to make the MCXD support MODBUS coils.
Description	Following are the steps to support MODBUS coils with MCXD. Will be allowed to read a single coil or group of 16 coils per task:
	1. Add the functionalities into the "InitDefines.c" file:
	//Enable to use Coils for Modbus Slave #define MODBUS_SUPPORTCOILS #ifdef MODBUS_SUPPORTCOILS #define MODBUS_COILS_OFFSET 50000 #endif
	2. Add the file "AdditionalCoilTable.c" into the folder \App
	<ul> <li>S. Edit "AdditionalCoilTable.c" setting the boolean variables to the coils:</li> <li>a. For "Alarms": the variables' name are in the column "Variable name" in the tab called "Alarms"</li> <li>WCXDesignIDE - (MCX Shape - Flename: Culters/U260421/Desitop/Fast/Out/Tet 43/Tet 43/mos)</li> <li>WCXDesignIDE - (MCX Shape - Flename: Culters/U260421/Desitop/Fast/Out/Tet 43/Tet 43/mos)</li> <li>WCXDesignIDE - (MCX Shape - Flename: Culters/U260421/Desitop/Fast/Out/Tet 43/Tet 43/mos)</li> <li>WCXDesignIDE - (MCX Shape - Flename: Culters/U260421/Desitop/Fast/Out/Tet 43/Tet 43/mos)</li> <li>WCXDesignIDE - (MCX Shape - Flename: Culters/U260421/Desitop/Fast/Out/Tet 43/Tet 43/mos)</li> <li>WCXDesignIDE - (MCX Shape - Flename: Culters/U260421/Desitop/Fast/Out/Tet 43/Tet 43/mos)</li> <li>WCXDesign WCXDesign WCXDesi</li></ul>
	d. For "Hot Spot": the variables' name is "MyApp. Hot spot name"
	<pre>ModbusdColTable c [] modbusdec1 (ModbusTable, modbusRW, MODBUS_COILS_OFFSET + 0x00, COILModbusValue[] modbusdec1 (ModbusTable, modbusRW, MODBUS_COILS_OFFSET + 0x02, COILModbusValue[] void SetValuesOfCoils()  {     //First 32 bit value: 32 Coils     COILModbusValue[0].LBit(0) = AL_Gen;     COILModbusValue[0].LBit(1) = DO_AL;     COILModbusValue[0].LBit(2) = DO_HEATER_1;     COILModbusValue[0].LBit(3) = DO_HEATER_2;     COILModbusValue[0].LBit(5) = 0;     COILModbusValue[0].LBit(5) = 0;     COILModbusValue[0].LBit(6) = 0;     COILModbusValue[0].LBit(7) = 0;</pre>
	COLLMODDUSVATUE[0].LBit(0) = 0;         COLLMODDUSVATUE[0].LBit(10) = 0;         COLLMODDUSVATUE[0].LBit(11) = 0;         COLLMODDUSVATUE[0].LBit(12) = 0;



4. Edit the "main.c" file by adding "TTimer MainLoopTimer"; just before the instruction:

#ifdef MODBUS\_SUPPORTCOILS #include "AdditionalCoilTable.c" #endif Π

<pre>#ifdef MODBUS_SUPPORTCOILS     #include "AdditionalCoilTable.c" #endif</pre>		
TTimer MainLoopTimer;		
<pre>// this is the initialization proc void App_Init() {</pre>	edure;	

5. Edit the "main.c" file by adding "IOMng.Run()"; just before the instruction:





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