

Application Story

–an Amphitheater Classroom

Introduction

A common amphitheater classroom usually contains lights and air conditioners. This case simply implements a HMI device to control all of the lights and air conditioners and create several scenarios to simplify operations.

Case Analysis

First of all, every light and air conditioner should be controlled by a touch HMI device. Secondly, an amphitheater classroom usually has many switches for all of the lights. Therefore, it is not possible to put them all on the same screen page of the touch HMI device. We need to design multi-page control. Finally, there are some scenarios created for easier control from the HMI device.

Configuration

We use the following devices.

TPD-430 x 1 (16M SDRAM / 8M Flash touch HMI device)

M-7065D x 19 (4 digital inputs / 5 relay outputs module)

M-7018 x 1 (8 analog inputs module)

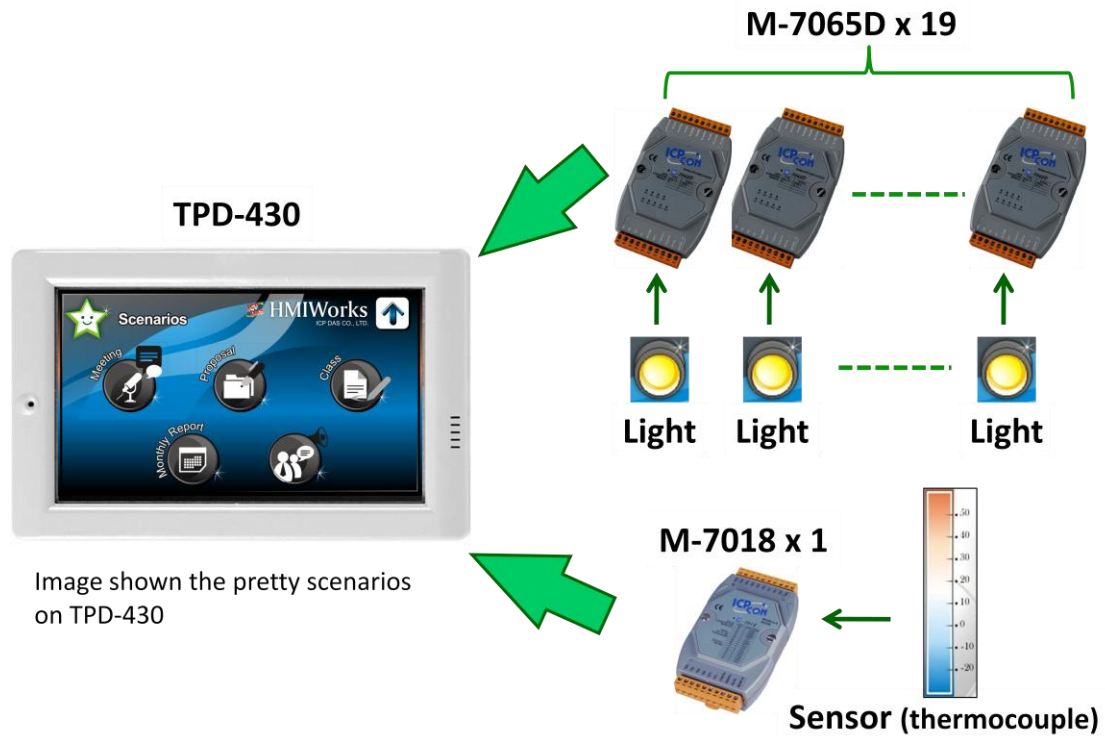


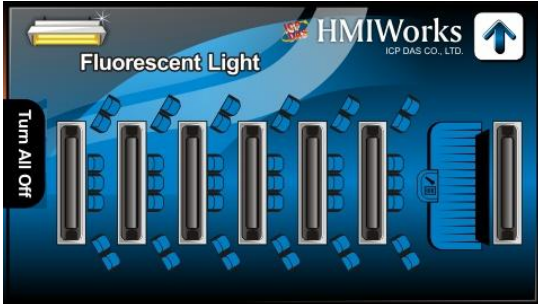


Image shown the pretty scenarios on TPD-430

As above, we use TPD-430 to control modbus RTU module M-7065 and M-7018. M-7065 is used to control lights and air conditioners. M-7018 is used to read back the value of the sensor (thermocouple).

Project Planning

Pages of the TPD-430	Description
	<p>The main page: This page provides the temperature reading and the menu.</p>

	<p>The page of air conditioning: This page is used to control the air conditioner.</p>
	<p>The page of the down light: This page controls all the downlights. The downlight is the yellow light which emits right down to the seat.</p>
	<p>The page of the fluorescent light: This page controls all the fluorescent lights.</p>

To download HMIWorks:

<ftp://ftp.icpdas.com/pub/cd/touchpad/setup/>

Real Photos

– An amphitheater classroom in ICP DAS headquarters





More Information

TouchPAD sites:

http://www.icpdas.com.tw/product/solutions/hmi_touch_monitor/touchpad/touchpad_introduction.html

M-7000 Remote I/O Modules:

http://www.icpdas.com/products/Remote_IO/m-7000/m-7000_introduction.htm

Email:

service@icpdas.com