# Model HHT50 Configurator for Use with Intelligent Field Devices

## Introduction

The Model HHT50 Configurator is a configuration tool for intelligent field devices. It is a portable unit that utilizes the Windows XP Pro Tablet PC Edition operating system. It comes with Foxboro PC50 Field Device Tool (FDT) software with Device Type Managers (DTMs) for each field device type. Both FoxCom and HART DTMs are provided. PCMM software is also loaded when Option -S2 is specified.

## Standard Specifications

Meets MIL-STD 810F for use in Harsh environments.

Operating Temperature Limits: -4 and +140°F (-20 and +60°C).

Storage Temperature Limits: -40 and +167°F (-40 and +75°C).

Low Temperature Limit for Cold Boot: 32°F (0°C) on battery at 70% charge.

Humidity: 0 to 95% noncondensing.

Battery: 41 Watt-hour provides up to 3.5 hours usage with 2.5 hour recharge time (90%).

AC Adapter: Auto sensing 100 to 240 V ac, 50 to 60 Hz, supplying 19 V dc, 3.42 A current with North American power cord.

CPU: Intel Pentium M733.

Chipset: Intel 855GME, 400 MHz.

Processor Speed: 1.1 GHz.

Main RAM: 512 MB.

Hard Drive: 40 GB

## Installation

### Attaching the Modem to the Configurator

Attach the modem to the configurator with the USB-to-Serial Port Adapter Cable supplied.

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# Connecting the Modem to the Field Device

Attach the other side of your modem to a device. This can be done directly or, for devices that require 24 V dc power, as shown in Figure 1 through Figure 3. The loop must have 250 ohms between the power supply and the attachment of the modem. The Invensys Foxboro optional power supply contains the required 250 ohm load.

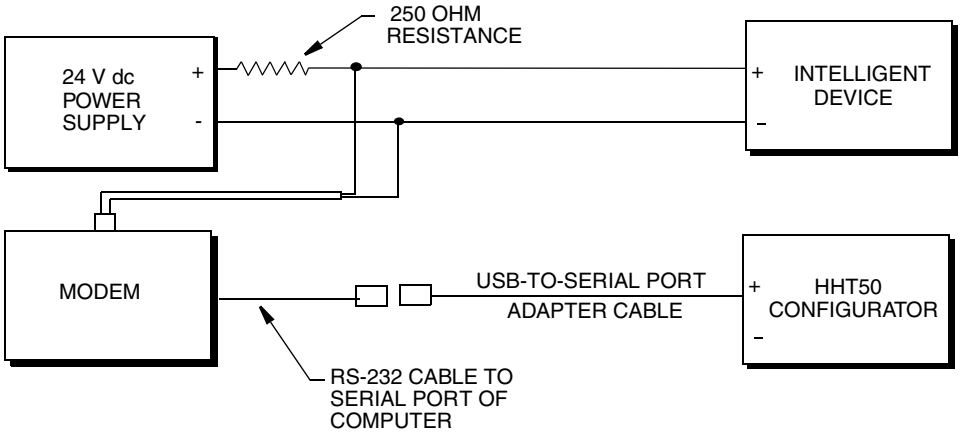
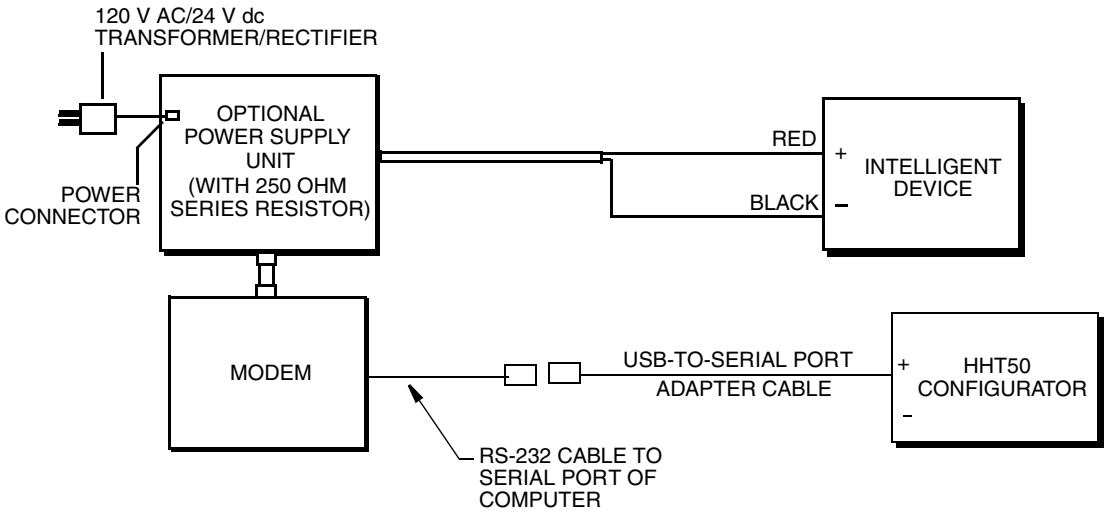
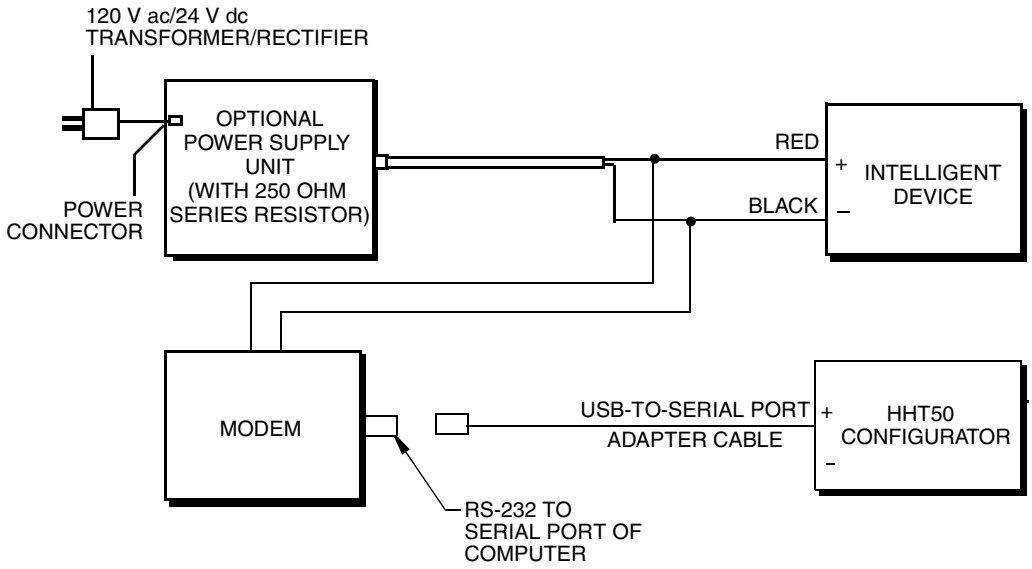



*Figure 1. Transmitter with Remote Power*




NOTE: 250 OHM RESISTANCE INCLUDED IN POWER SUPPLY BOX.

*Figure 2. FoxCom Device with Optional Power Supply*

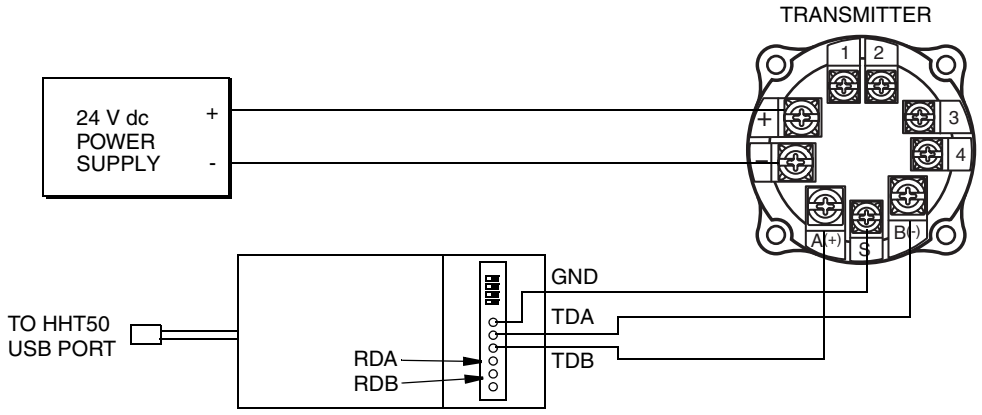



NOTE: 250 OHM RESISTANCE INCLUDED IN POWER SUPPLY BOX

*Figure 3. HART Device with Optional Power Supply*

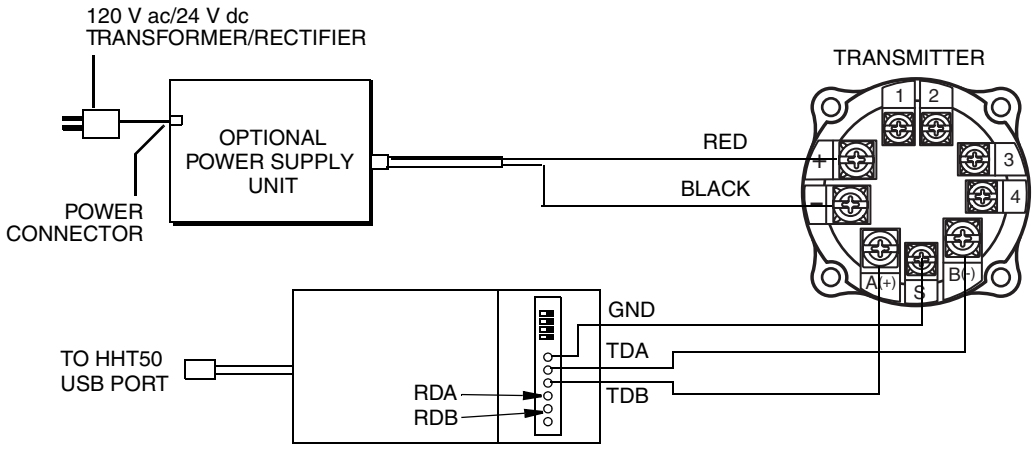
# Connecting a USB to RS485 Converter for PCMM

Connect the USB to RS485 converter to the transmitter per Figure 4 or 5. Make sure that all micro switches are positioned to the right.




NOTES
1. NOTE: TERMINAL TD(A) OF CONVERTER CONNECTS TO TERMINAL B OF TRANSMITTER AND TERMINAL TD(B) OF CONVERTER CONNECTS TO TERMINAL A OF TRANSMITTER
2. JUMPER TDA TO RDA AND TDB TO RDB.

*Figure 4. Transmitter with Remote Power Supply*




NOTES
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2. JUMPER TDA TO RDA AND TDB TO RDB.

***Figure 5. Transmitter with Optional Power Supply***

# Software Installation

Your HHT50 Configurator comes with Foxboro PC50 Field Device Tool (FDT) Version 2 software with Device Type Managers (DTMs) for each field device type fully loaded. Both FoxCom and HART DTMs are provided. PCMM software has also been loaded in your HHT50 Configurator if specified per option -S2. The CD-ROMs supplied are only required in the rare instance that your hard drive gets corrupted or you otherwise lose the installed software.

## *External CD-ROM Drive and Docking Station*

If you need to reload the PC50 software, you can do so via the External CD-ROM Drive or the Docking Station.

Connect the External CD-ROM Drive to your HHT50 Configurator USB port using the cable provided. The drive can be powered from either the ac adapter or the second USB port on HHT50 Configurator. See the External CD-ROM Drive user manual for other details.

For an explanation of the Docking Station, refer to the Docking Stations Handbook provided.

If you have neither the External CD-ROM Drive or Docking Station and you need to reload the PC50 software, you can load the software to a memory stick and load it from the memory stick to the HHT50 via the USB port.

**⚠ CAUTION**

Do **not** load PC20 software on your HHT50 Configurator. Doing so causes a device failure.

## Re-Loading the PC50 Software and FoxCom and HART DTMs

1. Insert the FoxCom or HART CD-ROM into the External CD-ROM Drive or Docking Station.
2. The following three choices appear:
   - Install PACTware 3.0 with SP1
   - HART DTM Library (or FoxCom DTM Library)
   - Microsoft.NET Framework 1.1
3. Click on **Install PACTware 3.0 with SP1**

**NOTE**

If you get the error message shown in Figure 6, abort the procedure and install **Microsoft.NET Framework** 1.1 first. Then **Install PACTware 3.0 with SP1**




*Figure 6. Error Message*

4. Install **HART DTM Library** (or **FoxCom DTM Library**)
5. Remove CD-ROM and install other CD-ROM (if applicable)
6. Install **FoxCom DTM Library** (or **HART DTM Library**)

## Loading the PCMM Software

Insert the CD-ROM into the External CD-ROM Drive or Docking Station. The software has an autostart feature so that if you wait a short while, it automatically starts. Follow the on-screen instructions. If it does not automatically start, use Windows Explorer and double click on the **Setup** icon. Proceed with the installation of the PCMM software.

## Transferring Existing PC50 or PCMM Files

Existing PC50 Version 2 or PCMM files can be transferred from another computer to your HHT50 in the usual manner.

**⚠ CAUTION**

Existing PC50 Version 1 files are not compatible with the PC50 Version 2 software in your HHT50.

# Operation

Turn on your HHT50 Configurator by pressing the power button on the left side of the tablet.

To 'wake' your HHT50 Configurator from 'sleep' mode, push the power button.

Basic operation keys are located to the right of your screen and are shown in Figure 7. Hot keys are labeled P1, P2, and P3. The P1 key is programmed to launch the PC50 program. The P3 key is programmed to launch the PCMM software if such software was specified per option -S2. The P2 key is reserved for future use. To reprogram hot keys, refer to the User's Handbook (from the tablet manufacturer).

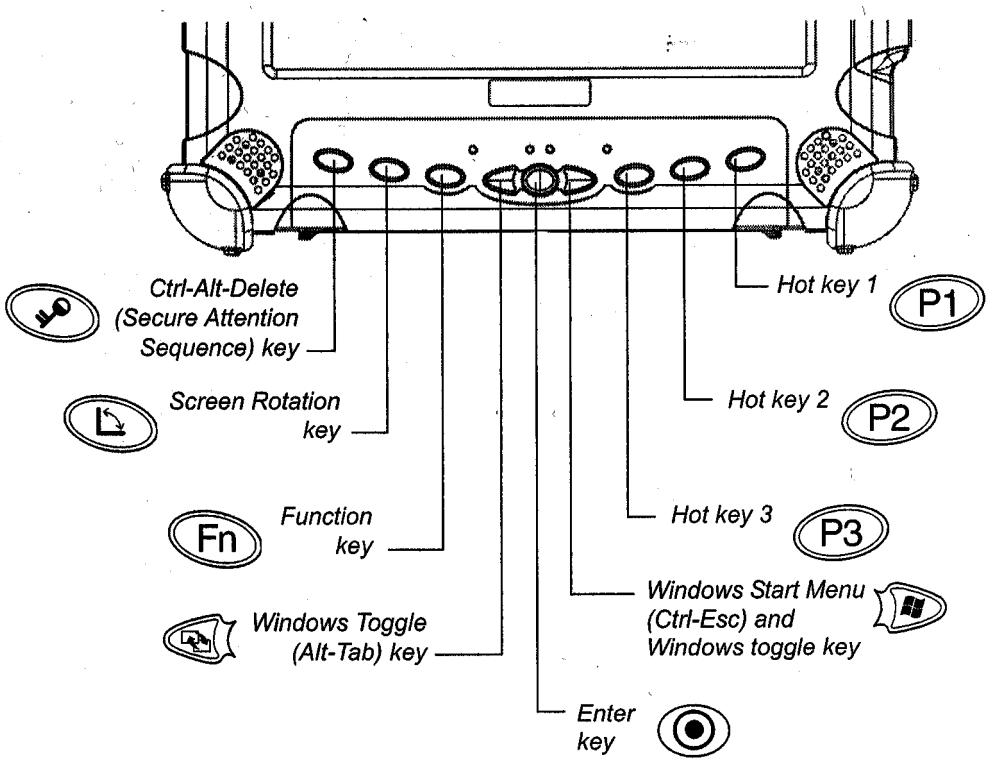



*Figure 7. Basic Operation Keys*

For all other operation instructions, refer to the following documents:

- HHT50 Configurator: See User's Handbook (from tablet manufacturer)
- External CD-ROM Drive: See External CD-ROM Drive User Manual
- Docking Station: See Docking Station Handbook (from Docking Station manufacturer)

**NOTE**

The following Foxboro documents are on the FoxDoc™ CD-ROM accessible from the FoxDoc icon on your desktop.

- PC50 Intelligent Field Device Tool Using FoxCom Communication: See MI 020-504
- PC50 Intelligent Field Device Tool Using HART Communication: See MI 020-505
- PCMM Field Device Configurator: See MI 020-384.

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