Blonder Tongue

SOLUTIONS FOR ALL YOUR APPLICATIONS

PC Connection Software User Manual

BTPRO-SERIES

SMART

PC CONNECTION SOFTWARE

4229	BT-QAM-PRO
4230	BTPRO-1000
4230 RK	BTPRO-1000 w/Pro:Idiom Recovery Key Option
4231	BTPRO-7000
4231 CM8FO	BTPRO-7000 CM8FO
4231 S	BTPRO-7000S

Status	Date	Document No.	Issue No.	Author
Active	April 10, 2018	651234000B	2	KK
Obsolete	September 21, 2015	651234000A	1	KK

800-523-6049

www.blondertongue.com

Blonder Tongue is ISO 9001:2015 Certified

©2018 Blonder Tongue Laboratories, Inc. All rights reserved. Specifications are subject to change without notice. Trademarks are the property of their respective owner.

We recommend that you write the following information in the spaces provided below.

Purchase Location Name:	
Purchase Location Telephone Number:	

The information contained herein is subject to change without notice. Revisions may be issued to advise of such changes and/or additions.

Correspondence regarding this publication should be addressed directly to:

Blonder Tongue Laboratories, Inc.

One Jake Brown Road

Old Bridge, NJ 08857 USA

Document Number: 65124000A

Printed in the United States of America.

All product names, trade names, or corporate names mentioned in this document are acknowledged to be the proprietary property of the registered owners.

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Reverse engineering or disassembly is prohibited.

Cross-Reference & Hyperlinking Usage

This guide makes use of hyperlinks for the Table of Contents, some cross-reference linking between sections, and external hyperlinking to web addresses. This has been done to assist the reader in finding the information they are seeking in a much quicker way. In addition to hyperlinking, the Table of Contents also makes use of the bookmarking feature present in the Adobe Reader application.

Product and Documentation Updates

Download the latest User Manual (PDF) by visiting our website. Navigate to the product page by entering the full Model Name or Stock Number in the search field. Upon reaching the product page, the “User Manual” download link will be located beneath the product image. **Firmware Updates** are available under “Tech Support” in the “Resources” section of the website. General instructions for the FTP site are provided on this page.

Returning Product for Repair (or Credit)

A Return Material Authorization (RMA) Number is required on all hardware products returned to Blonder Tongue, regardless if the product is being returned for repair or credit. Before returning product, please contact the Blonder Tongue Service Department at 1-800-523-6049, Ext. 4256 or visit our website: **www.blondertongue.com** for further information.

Table of Contents

SECTION 1 — GENERAL & SAFETY INSTRUCTIONS 5

SECTION 2 – ABOUT THE SMART PROGRAM 5

SECTION 3 – INSTALLING THE SMART PROGRAM ON A PC 5

SECTION 4 – CONNECTING YOUR METER TO THE SMART PROGRAM 5
SECTION 4.1 – QUICK PROCEDURE 5
SECTION 4.2 – DETAILED PROCEDURE 6

SECTION 5 – FIRMWARE UPGRADES 6
SECTION 5.1 – QUICK PROCEDURE 6
SECTION 5.2 – DETAILED PROCEDURE 6
SECTION 5.2.1 – DOWNLOADING FIRMWARE UPGRADES 6
SECTION 5.2.2 – PREPARING YOUR METER FOR AN UPGRADE 6
SECTION 5.2.3 – UPGRADING YOUR METER USING A PC 6

SECTION 6 – GET SCREEN 7
SECTION 6.1 – QUICK PROCEDURE 7
SECTION 6.2 – DETAILED PROCEDURE 7
SECTION 6.2.1 – TRANSFERRING A DISPLAY FROM THE METER TO A PC 7
SECTION 6.2.2 – PRINTING THE DISPLAY 7
SECTION 6.2.3 – SAVING THE DISPLAY 7

SECTION 7 – METER FILE MANAGER (DATA LOGGER TRANSFER) 7
SECTION 7.1 – QUICK PROCEDURE 7
SECTION 7.2 – DETAILED PROCEDURE 8
SECTION 7.2.1 – TRANSFERRING A DATA LOGGER FILE 8
SECTION 7.2.2 – PRINTING A DATA LOGGER FILE 8
SECTION 7.2.3 – SAVING A DATA LOGGER FILE ON A PC 8
SECTION 7.2.4 – DELETING A DATA LOGGER FILE 8
SECTION 7.2.5 – EXPORTING A DATA LOGGER FILE AS AN EXCEL SPREADSHEET 8

SECTION 8 – METER FILE MANAGER (MEMORY PLAN MANAGEMENT) 9
SECTION 8.1 – QUICK PROCEDURE 9
SECTION 8.2 – DETAILED PROCEDURE 9
SECTION 8.2.1 – TRANSFERRING A MEMORY PLAN FROM YOUR METER TO A PC 9
SECTION 8.2.2 – MODIFYING AN EXISTING PROGRAM 9
SECTION 8.2.3 – ADDING A PROGRAM 9
SECTION 8.2.4 – TRANSFERRING A MEMORY PLAN FROM A PC TO A METER 9
SECTION 8.2.5 – PRINTING A MEMORY PLAN 10
SECTION 8.2.6 – SAVING A MEMORY PLAN 10
SECTION 8.2.7 – DELETING A MEMORY PLAN 10

Table of Contents

SECTION 9 – METER FILE MANAGER (STANDARD CHANNEL PLAN MANAGEMENT) 10
SECTION 9.1 – QUICK PROCEDURE 10
SECTION 9.2 – DETAILED PROCEDURE 10
SECTION 9.2.1 – TRANSFERRING A CHANNEL PLAN FROM YOUR METER TO A PC 10
SECTION 9.2.2 – CHANGING AN EXISTING CHANNEL 11
SECTION 9.2.3 – ADDING A CHANNEL 11
SECTION 9.2.4 – TRANSFERRING A CHANNEL PLAN FROM THE PC TO YOUR METER 11
SECTION 9.2.5 – PRINTING A CHANNEL PLAN 11
SECTION 9.2.6 – SAVING A CHANNEL PLAN 11
SECTION 9.2.7 – DELETING A CHANNEL PLAN 11

Section 1 — General & Safety Instructions

	The STOP sign symbol is intended to alert you to the presence of REQUIRED operating and maintenance (servicing) instructions that if not followed, may result in product failure or destruction.
	The YIELD sign symbol is intended to alert you to the presence of RECOMMENDED operating and maintenance (servicing) instructions.
	The LIGHTNING flash symbol is intended to alert you to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electrical shock.

Section 2 – About the SMART Program

1. The SMART Program is a free program downloadable from the BT website: https://www.blondertongue.com/page/resources/tech-support/firmware-updates/
2. Once there, click on **"DOWNLOAD FIRMWARE UPDATES**" and locate the SMART Program folder for the file. This site also offers firmware updates for all Blonder Tongue products located in folders under each model name.

The SMART Program gives the user the ability to conveniently perform the following operations on BTPRO instruments:

1. Firmware Upgrading
2. Transferring a screen display from the meter to a PC
3. Transferring a data logger file to a PC
   a. Exporting a data logger file to an Excel spreadsheet
4. Modifying a channel plan

Section 3 – Installing the SMART Program on a PC

1. Download the SMART program from the Blonder Tongue website. The file containing the SMART program may be in a compressed .zip file. If so, it can be unzipped using a software program such as Unzip® or Winzip®.

   NOTE: The SMART program is for Windows installation only and not available for Linux or Mac.
2. Click on the install file (.exe) to start the program installation;
3. You may modify the installation folder name and location; if the name of this folder is not modified, the program creates a folder called SMART
4. The SMART program creates an icon in the program list of your computer and shortcut icon on your desktop. By clicking on either of these icons, the SMART program will start up.

Section 4 – Connecting Your Meter to the SMART Program

This procedure allows the SMART program to recognize the Meter connected to the PC.

Section 4.1 – Quick Procedure

1. Connect your Meter to the PC.
2. Turn on your Meter.
3. Start the Smart program.
4. Click on the SMART icon menu.
5. Follow the instructions shown on the screen until the connection is achieved.

Section 4.2 – Detailed Procedure

1. Connect the Meter to the PC using the USB cable provided with the Meter.
2. Turn on your Meter.
3. Start the SMART program.
4. From the SMART program menu, click on “Meter” and “Connect Meter”.
5. In the “Meter Type” window, select your Meter’s model and confirm your selection clicking on “OK”.

NOTE: If the procedure is carried out correctly, the status bar on the bottom right will show the Meter data (Meter model, serial number and firmware version).

Section 5 – Firmware Upgrades

This procedure allows you to upgrade your Meter with the latest Firmware version.

Section 5.1 – Quick Procedure

1. Download the upgrade firmware through the Blonder Tongue website.
2. Connect your Meter to a PC.
3. Start the SMART program.
4. Click on the SMART icon menu.
5. Follow the instructions on the screen until the procedure has been completed.

Section 5.2 – Detailed Procedure

Section 5.2.1 – Downloading Firmware Upgrades

1. Download the Firmware Update, through the Blonder Tongue website, for your Meter and save it to your PC desktop.

Section 5.2.2 – Preparing Your Meter for an Upgrade

1. Connect your Meter to the PC using the USB cable provided with the Meter.
2. Using the AC adapter turn on your Meter.

Section 5.2.3 – Upgrading Your Meter Using a PC

1. Start the Smart program.
2. Click on “Meter” and “Upgrade Firmware”.
3. In the “Open” window, select the file you want to use for the up-grade and confirm your selection by clicking on “open”.
4. The “Upgrade Firmware” window will open where you can select the Meter model.
5. Click on “Command Upgrade” to start the upgrade.

NOTE: When the upgrade has been correctly completed the PC screen will show the words “Program Successful” and a summary window showing the Meter settings. Check the new firmware version number on the Start Up screen or self-test windows of your Meter.

If the upgrade procedure does not work, check connections and repeat the process.

During the upgrade procedure, do not attempt to use or disconnect the Meter from the PC.

Section 6 – Get Screen

This function allows you to transfer any display from your Meter to a PC.

Section 6.1 – Quick Procedure

1. Carry out all the necessary connections described in "Section 4 – Connecting Your Meter to the SMART Program".
2. Click on the SMART icon menu.
3. Wait for the display to appear on the PC monitor.
4. Select one of two options:
   a. Print from the PC by pressing on the SMART icon menu
   b. Save it on the PC by pressing on the SMART icon menu (a bitmap file is generated).

Section 6.2 – Detailed Procedure

Section 6.2.1 – Transferring a Display from The Meter to a PC

1. Connect your Meter to a PC by following the procedure described in "Section 4 – Connecting Your Meter to the SMART Program".
2. On the SMART menu click on “Tools” and “Get Screen”.
3. Wait for the display to appear on the PC monitor.

Section 6.2.2 – Printing the Display

1. On the SMART menu click on “File” and select “Print Setup”.
2. Configure the print settings and press “OK” to confirm.

Section 6.2.3 – Saving the Display

1. On the SMART menu click on “File” and select “Save As”.
2. Chose a location where you want to save the file and press “Save”.
3. SMART will save the display obtained from the Meter in a bitmap format.

NOTE: Screen shots are saved with file type .bmp (Bitmap).

Section 7 – Meter File Manager (Data Logger Transfer)

This operation allows you to transfer a Data Logger from your Meter to a PC and then print or save it in a file.

Section 7.1 – Quick Procedure

1. Carry out all the necessary connections described in "Section 4 – Connecting Your Meter to the SMART Program".
2. Click on the SMART icon menu.
3. Wait for the complete file list to be uploaded from your Meter.
4. Click on the Logger folder and open the file.
5. Select one of the following options:
   a. Print a file by pressing on the SMART icon menu
   b. Save a file in your PC by pressing on the SMART icon menu
   c. Delete a file from the “Meter File Manager”
   d. Export a file to an Excel or Word file

Section 7.2 – Detailed Procedure

Section 7.2.1 – Transferring a Data Logger File

1. Connect your Meter to a PC by following the procedure described in "Section 4 – Connecting Your Meter to the SMART Program".
2. On the SMART menu click on “Meter” and select “Meter file manager”.
3. Wait for the files to be uploaded from your Meter.
4. Open the Logger folder.
5. All available files will be listed.
6. Click twice on a file to display it.

Section 7.2.2 – Printing a Data Logger File

1. Open the Logger folder.
2. Select and open the file you want to print.
3. On the SMART menu click on “File” and select “Print”.
4. Configure the print settings and press “OK” to confirm.

Section 7.2.3 – Saving a Data Logger File on a PC

1. Open the Logger folder.
2. Select and open the file you want to save.
3. On the SMART menu click on “File” and select “Save as”.
4. Chose the location where you want to save the file and press “Save”.

Section 7.2.4 – Deleting a Data Logger File

1. Open the Logger folder.
2. Select from the “Meter File Manager” window the file you want to delete.
3. Press the “Delete” key in the “Meter File Manager” window.
4. The file will be deleted on the Meter.

Section 7.2.5 – Exporting a Data Logger File as an Excel Spreadsheet

1. Open the logger folder.
2. Select and open the file you want to export.
3. On the SMART menu click on “File” and select “Export”.
4. Name the file and choose the location where you want to save it.
5. Choose file type .XLS and select “Save”.

Section 8 – Meter File Manager (Memory Plan Management)

This function allows you to transfer and manage a Memory Plan to your PC to modify or print it.

Section 8.1 – Quick Procedure

1. Carry out all the necessary connections described in "Section 4 – Connecting Your Meter to the SMART Program".
2. Click on the SMART icon menu.
3. Wait for the complete file list to be uploaded from your Meter.
4. Select the file you want to open.
5. Select one of the following options:
   a. Download a Memory Plan from your Meter to PC
   b. Modify a Memory Plan
   c. Upload a Memory Plan from a PC to your Meter
   d. Print a Memory Plan by pressing on the SMART icon menu
   e. Save a Memory Plan by pressing on the SMART icon menu
   f. Delete a Memory Plan in the “Meter File Manager”

Section 8.2 – Detailed Procedure

Section 8.2.1 – Transferring a Memory Plan from Your Meter to a PC

1. Connect your Meter to a PC by following the procedure described in "Section 4 – Connecting Your Meter to the SMART Program".
2. On the SMART menu click “Meter” and select “Meter File Manager”.
3. Wait for the complete file list to be uploaded on to your PC.
4. Once the “Meter File Manager” window appears on-screen. Open the Mem. Plan folder required by clicking twice.
5. All memory files will be listed

Section 8.2.2 – Modifying an Existing Program

1. Select and open the Memory file you want to edit.
2. Click twice on the line relative to the program you want to edit.
3. The program opens a window where you can modify all the parameters of the chosen program.

Section 8.2.3 – Adding a Program

1. 1. Using the right key on your mouse, click on the line you want to modify and select “Add”.
2. 2. Carry out the settings of the new program in the window that opens.
3. 3. Press “Ok” to confirm the addition of a program.

Section 8.2.4 – Transferring a Memory Plan from a PC To a Meter

1. Once you have edited a memory plan, click on the “PC-Meter” key in the MEM. PLAN properties section (on the right of the screen) to transfer a memory plan from the PC to your Meter.
2. The memory plan will load in the Meter.

Section 8.2.5 – Printing a Memory Plan

1. Select and open the Memory file you want to print.
2. On the SMART menu click on “Meter” and select “Print”.
3. Configure the print settings and press “OK” to confirm.

Section 8.2.6 – Saving a Memory Plan

1. Open a Memory Plan file,
2. On the SMART menu click on “File” and select “Save As”.
3. Chose a location where you want to save the file, give it a name and press “Save”.

Section 8.2.7 – Deleting a Memory Plan

1. Select and open the Mem. Plan file you want to delete.
2. Press the “Delete” key in the “Meter File Manager” window.
3. The file will also be deleted from the Meter.

Section 9 – Meter File Manager (Standard Channel Plan Management)

This function allows you to transfer and manage the Channel Plan on a PC so that it can be modified and printed.

Section 9.1 – Quick Procedure

1. Carry out all the necessary connections described in "Section 4 – Connecting Your Meter to the SMART Program".
2. Click on the SMART icon menu.
3. Wait for the complete file list to download on your Meter.
4. Open the Ch. Plan folder.
5. Select the file you want to open.
6. Select one of the following options:
   a. Modify a Channel Plan
   b. Modify a Memory Plan
   c. Download a Channel Plan from a PC to your Meter
   d. Print a Memory Plan by pressing on the SMART icon menu
   e. Save a Memory Plan by pressing on the SMART icon menu
   f. Delete a Memory Plan in the “Meter File Manager”

Section 9.2 – Detailed Procedure

Section 9.2.1 – Transferring a Channel Plan from Your Meter to a PC

1. Connect your Meter to a PC by following the procedure described in "Section 4 – Connecting Your Meter to the SMART Program".
2. On the SMART menu click “Meter” and select “Meter File Manager”.
3. Wait for the file list of files to be uploaded to the PC.
4. Once the “Meter File Manager” window appears on-screen, open the desired Ch. Plan folder by clicking twice.
5. All Channel Plan files will be listed.

Section 9.2.2 – Changing an Existing Channel

1. Select and open the Channel file you want to edit.
2. Click twice on the line relative to the channel you want to edit.
3. The program opens a window where it is possible to modify all the tuning parameters.

Section 9.2.3 – Adding a Channel

1. Using the right key on the mouse, click on the line to be modified and select “Add”.
2. A window will open where it is possible to set the new channel’s tuning parameters.
3. Press “Ok” to confirm the addition of a new channel.

Section 9.2.4 – Transferring a Channel Plan from The PC to Your Meter

1. Once the editing is finished, click on the “Meter –PC” key in the CH. PLAN properties section (to the right of the screen) to transfer the channel plan from the PC to your Meter.
2. The channel plan will be loaded to your Meter.

Section 9.2.5 – Printing a Channel Plan

1. Select and open the Channel file you want to print.
2. On the SMART menu click on “Meter” and select “Print”.
3. Configure the print settings and press “OK”.

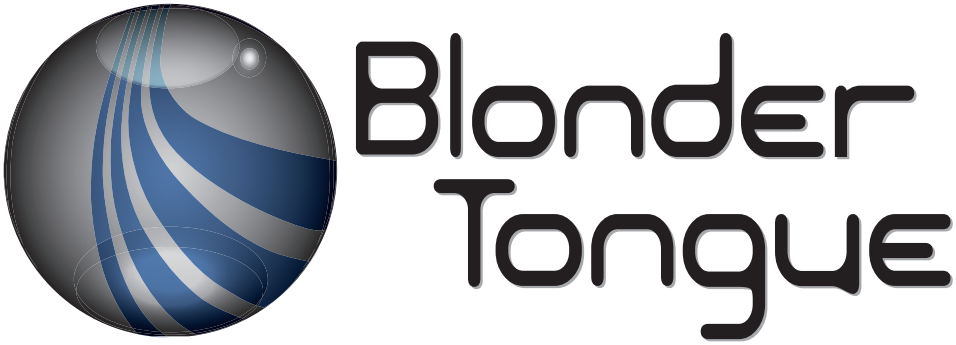
Section 9.2.6 – Saving a Channel Plan

1. Open a Memory Plan file.
2. On the SMART menu click on “File” and select “Save As”.
3. Chose a location where you want to save the file, give it a name and press “Save”.

Section 9.2.7 – Deleting a Channel Plan

1. Open a plan folder.
2. Select and open the Ch. Plan you want to delete.
3. Press the “Delete” key in the “Meter File Manager” window.
4. The file will also be deleted from the Meter.

DO NOT cancel the Standard Channel Plans (i.e. USA). A memory plan based on a deleted channel plan will be permanently altered.



One Jake Brown Road
Old Bridge, NJ 08857-1000 USA

732-679-4000 • Fax 732-679-4353
www.blondertongue.com