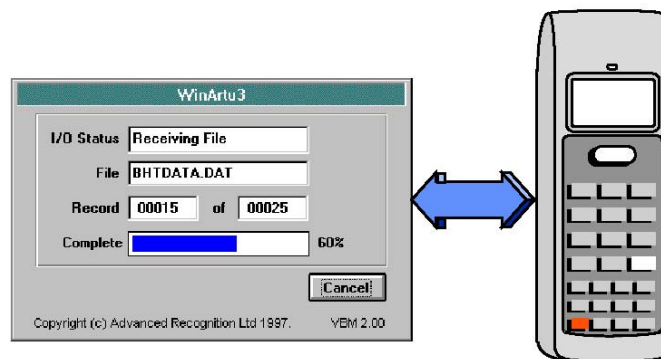


BANCTEC

WINARTU3

Windows™ BHT
Communications Utility

Installation & User Guide



SOFTWARE

This software has been designed for use with the NIPPONDENSO BHT range of hand held data collection terminals. This software allows two-way data files transmission between the host PC and a BHT via the communications port.

This version of the software is designed to run under Windows™ 95, 98, Me, 2000 & NT. Other versions available include an ActiveX OCX component for inclusion into your own applications and a DOS version. Should you have any questions about this or related to using the program, please contact:

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LICENSE

Unless otherwise stated on the disk or invoice, you have bought a single user license, which means that you must only install on one PC only. Once installed the program will run as a Demo Version. For unlock codes contact your supplier.

INSTALLATION

Unzip the Winartu3 package and run the SETUP then select OK or press Enter.

During installation the set-up files will be copied to your WINDOWS and SYSTEM directories. The set-up program will request the install location for WINARTU3 application.

NOTE. If you have a previous version of WINARTU3 installed then please uninstall/delete before starting the install.

Windows 7. For use with Windows 7 locate the WINARTU3.EXE file in program files. In the properties set the program to run in Windows XP compatibility mode.

TRANSFERRING FILES WITH WINARTU3

The Winartu3 program has been designed so that other applications or desktop shortcuts control what and how files are transferred to/from the BHT.

After the installation has been completed, WINARTU3 can be activated by clicking on the icon or by calling direct from your own application. This will start the communications program to receive a file from the BHT using the default parameters. To change these parameters, add the required options to the program call. :-

Started with desktop shortcut

Change the Target in the Shortcut Properties screen. This is found by right clicking on the icon then selecting the "properties" option.

e.g. "C:\program files\ winartu3\winartu3.exe" BHTDATA.DAT +P1 +B9600

To transmit BHTDATA.DAT at 9600 baud on com port 2

Called from application using DDE.

Add the required options to the calling line in your application.

For Notes on DDE and Winartu3 ask your supplier for the DDE example.

TRANSFER options

By changing the calling options the application can be set to receive OR transmit data files, to/from a specified comms port and using various communications options and using some specific BHT communications protocols. Call the program with the following: -

WINARTU3 [filename] [comms options] [protocol options] [other options]

See Option List section for more details on these options.

OPTION LIST

The items **highlighted** are defaults and do not need to be specified when calling the program. In general only the port number and baud rate need to be changed.

Filename Parameter

File for transmission [drive:][path][filename] e.g. C:\PRICE\LOOKUP.DAT

Directory for received file [drive:][path] e.g. C:\DATA\

Communications options

Baud Rate [+Bn] +B460800, +B115100, +B38400, **+B19200**, +B9600, +B4800, +B2400

Data Bits [+Dn] **+D8** or +D7

Stop Bits [+Sn] **+S1** or +S2

Parity [+Px] **+PN (None)**, +PE (Even), +PO (Odd)

Communications Port [+Pn] **+P0 (Com1)**, +P1 (Com2), +P2, +P3 up to +P19

Timeout, (when sending a large file to ROM may need to increase the timeout) [+Tn] +T0, **+T30**, +T60, +T90, +T120

Protocol options

BCC checksum, (the horizontal checksum) **+PB (BCC used)** or -PB (not used)

Sequence Numbers, (a record number count) **+SN (Sequence used)** or -SN (not used)

Field Statement.

This option specifies the field lengths within the file. The field statement is only needed for transmitting data files that don't have a .FLD file, (see FLD file for more info).

e.g. "... \WINARTU3.EXE" BHTDATA.DAT +F13;1;3

This identifies the file to have 3 fields of length 13, 1 and 3.

NOTE 1. There is a maximum of 16 fields, each with a maximum length of 99. The total record length, (the number of fields plus the total of each field length) has a maximum of 255. The length of the above example is $3 + 13 + 1 + 3 = 20$.

NOTE 2. If you specify the field arguments and a .FLD file exists then the field statements take precedent.

Other options

Automatic close on exit. +EX or +EW

Specifying these options will cause the application (+EX) or windows (+EW) to automatically close on completion of a successful communication with the BHT.

BHT6/7000 IRDA Interface +IR

Specifying this option will set the communications port to activate the IRDA unit supplied by Advanced Recognition, for use with the BHT6/7000. Note using this or the CU6/700x cradle the communications speed can be set to 115,200 baud.

BHT300/800/900 Ymodem +YMOD

Specifying this option when using the Ymodem communications to the new units.

BHT7000/8000 Cradle Delay +IRDxxx

When using the BHT7000 or 8000 with the optical cradle it is sometimes necessary to add a small delay to the TX/Rx transition. A suggested start value for xxx is 5, if this communications is still not smooth then increase in steps of 5.

Append File. +APP

When receiving a data file specifying this option will append the incoming data to an existing file.

Dynamic Data Exchange +DDE

Specifying this option will cause the application to close on completion, thus allowing the calling application to process the error messages. For Notes on DDE and Winartu3 ask your supplier for the DDE example disk.

Always Receive. +RXON

This option puts the program into a receive loop so that it will stay active ready to receive a file at any time. This option would normally be used with the +APP command to append the collected data.

FLD file

This file is created by WINARTU3 when a data file has been received. This file contains the field and record information about the file. This file can then be used by WINARTU3 to get the field information when transmitting a file, thus the field statements don't have to be specified. Data files without an FLD file must have the field lengths specified using the +F parameter.

ERROR MESSAGES

(0) Transfer Complete.

Normal End.

(1) Designated file not found.

The file specified could not be found.

(2) File name entered in wrong format.

The file specified could not be found.

(3) Number of records exceeds 32767.

The file has more than 32767 records.

(4) Field length is out of range.

A field length > 99 was declared

(5) Number of field is out of range.

More than 16 fields were specified.

(6) Record length is out of range.

Total Record Length is > 255

(7) Parameter mismatch.

A field option was specified with a program file.

(8) Field length not found.

A field option was not specified or FLD file was not found.

(9) Option mismatch.

An undefined option was specified.

(51) Communication error.

The transmit timer has timed out.

(52) Communication error.

The receive timer has timed out.

(53) Communication error.

10 NAKs have been sent.

(54) Communication error.

10 NAKs have been received.

(55) Communication error.

An EOT has been received.

(70) Illegal heading text format

An invalid file Header was received.

(71) Path not found.

The specified path could not be found.

(72) Disk memory full.

Insufficient space for the received file.

(90) Aborted by Cancel.

Abort Button pressed.

(99) General Failure

An unspecified error.

(101) Comms Port not available.

Unable to Access Port Specified.

(102) Comms Port error.

Unable to Open Port Specified.

(110) or (111) Protection Error.

One of the Licensing files could not be accessed.

EXAMPLES

Set the shortcut properties to the following to perform each example action.

1) Transmit a data file that does not have a .FLD file, from the current directory, using default protocol options.

"C:\PROGRAM FILES\WINARTU3\WINARTU3.EXE" DATA.DAT +F13,1,3

2) Transmit a data file (with .FLD file) without BCC at 9600,7,2,E to port 2.

"C:\PROGRAM FILES\WINARTU3\WINARTU3.EXE" C:\DATA\PRICE.DAT +B9600 +D7 +S2 +PE +P1 -PB

3) Transmit a program file C:\PROGS\PROG1.PD3

"C:\PROGRAM FILES\WINARTU3\WINARTU3.EXE" C:\PROGS\PROG1.PD3

4) Receive a file (program or data) to the current directory, using the default options.

"C:\PROGRAM FILES\WINARTU3\WINARTU3.EXE"

5) Receive a file to the C:\DNLOAD\ directory at 9600,7,2,E to port 2.

"C:\PROGRAM FILES\WINARTU3\WINARTU3.EXE" C:\DNLOAD\ +B9600 +D7 +S2 +PE +P1

6) Using Winartu3 and DDE

For Notes on DDE and Winartu3 ask your supplier for the DDE example disk.