

## QRCoder2 Instructions

QRCoder2.exe is an applet that allows ProLase to generate QRCode symbols. The symbols are made using the GenCode feature of ProLase. For complete information about the GenCode feature please see the ProLase User's Manual (under Object Creation > Text Objects > Bar Code Fonts).

The QRCoder2.exe program is a console application to be run from the DOS command line. As require for GenCode, it requires an argument which is the name of a local input data file. The program outputs data to a text file whose name is specified within the input file. QRCoder2.exe requires that LIBPNG14.DLL and ZINT.DLL be available. These must either be registered to the operating system or, more commonly, simply located in the same folder as the QRCoder2 program. For convenience, this should be the ProLase installation folder, typically

C:\Program Files\American Laserware\ProLaseXP

although it may vary.

To create QRCodes in ProLase, first create any text item. This may be FixedText, Variable Text or DataLink. Next, in that item's Image property page, change the Font Type to 'Bar Code Font' and press the Font button to edit the Bar Code Parameters. In the Bar Code Parameters window, select 'User Defined - <NO NAME>' from the Bar Code Type List. Then press the Details button to open up the User Defined Bar Code Properties window. In this window, you can provide a name for the User Defined code ('QR Code' perhaps?). Use the Browse button to select the Encoding Program. It should display a standard file selection window listing all the files in the current folder. Select the 'QRCoder2.exe' program. The input and output files have default names ('GenCode...'), but these may be switched to 'QRCodeIn.txt' and 'QRCodeOut.txt'.

Finally, QRCode can optionally accept up to 2 additional parameters. The first is a 'Version' number that indicates the size (number of modules across) for the resulting code and must be in the range 0 – 40. Using 0 for the version/size will result in the smallest size QRCode that can handle the supplied text. Typically this results in an 'L' level encoded symbol. However, since the amount of error correction used will be what is needed to fill the resultant size to capacity, a higher level of error correction may actually be implemented. Next is the 'Level' which must be 'L', 'M', 'Q', or 'H' to indicate the minimum level of error correction included in the output code. The name given to the parameter is for user reference should one have need to examine the input file that ProLase generates. The actual text of the parameter name has no bearing on QRCoder2.exe operation. Supplying either or both parameters can result in no symbol being generated. This happens when the data to be encoded exceeds the capacity of the symbol size and level specified. Use caution when specifying these parameters, particularly when variable text is to be encoded.

NOTE: Each item in the LAZ file that will generate a QRCode must be configured to use the GenCode feature in a similar fashion. You may have 2 different data (say a serial number and a web address) that you wish to mark in separate codes. Both will be set up

to use the GenCode as described above, possibly with different Version or Level parameter values. In this case, they MUST have unique input and output file names. A simple strategy is to add a suffix with the item's name, such as 'QRCodeIn\_SerNum.txt' and 'QRCodeIn\_Web.txt'.

Once the User Defined Bar Code Parameters are set, the remaining Bar Code Parameters can be set just as for any 2D code. Select the appropriate fill type and mode, beam parameters and line separators and terminators as appropriate for your laser type and material.

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