

**Commonwealth of Kentucky  
Kentucky Department of Revenue**

**2D BARCODE PROGRAM**

**Software Developer's Guide**



**Tax Year 2021  
Processing Year 2022**

**Version 1.0**

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## **Document Log**

<b>Version</b>	<b>Date</b>	<b>Action/Description</b>
<b>1.0</b>	9/13/2021	Sikitia – updated for TY2021; updated Table of contents; added Education Opportunity Account Program Credit, Renewable Chemical Production Credit and Archer MSA Deduction
	9/13/2021	Updated K-5 Contact Info, Timestamp, Data Version, Additional 1099-NEC Withholding Statement, Signature/Date, Discuss, and Tax Year fields as being required in K-5 2D barcode.
	9/13/2021	Sikitia – Finalized & Posted to SES

## Section 1: Introduction to Kentucky 2-D Barcoding Program

The Kentucky Department of Revenue will be accepting 2-D barcodes on the Form 740, Form 740-NP and Form 740-NP-R Individual Income Tax Returns for tax year 2021. This is a great opportunity to improve the service provided to the taxpayers of Kentucky.

The benefits include:

- Reduction in processing time; saving Kentucky taxpayer dollars.
- Fewer data entry errors, since all data listed on the return is included in the barcode.
- Fast access to taxpayer information; better assistance to the taxpayer.

We would like to thank the software community that support the development of the 2D barcode for Kentucky and welcome your comments or suggestions for improving the 2D barcode process.

For tax year 2021, the Kentucky Department of Revenue (KDOR) will develop one version of the primary individual income tax forms, to be used for the software developers for computer-generated returns. The computer-generated forms are designed for the 2-D barcode format. If the 2-D barcode is not printed on the form, the space allotted for the barcode should be left blank.

**Please note:** It is important to utilize all of the space allotted for the barcode when printing the 2-D barcode. The 2-D barcode should be printed as large as possible. Smaller 2-D barcodes from the prior year were unable to be read by the Department's scanners. We need a minimum of 1/8 inch white space around the 2D barcode.

Additional information regarding 2-D barcodes used for tax forms is available on the Federation of Tax Administrators (FTA) web site at [www.taxadmin.org](http://www.taxadmin.org).

The Form 740, Form 740-NP and Form 740-NP-R forms are accessible through the State Exchange System (SES) supported by the Federation of Tax Administration (FTA).

If you need copies forms sent via email or postal mail, send a request to the contacts listed in the contact section of this document.

## **New for Tax Year 2021**

### ***Form 740 & Form 740-NP Education Opportunity Account Program Credit line addition***

For taxable years beginning on or after January 1, 2021, but before January 1, 2026, a nonrefundable and nontransferable credit is allowed against the taxes imposed by KRS 141.020 or KRS 141.040 and KRS 141.0401 for contributions made during a taxable year to one or more Account-Granting Organizations (AGO) in accordance with the Education Opportunity Account Program. The tax credit amount awarded per taxpayer per taxable year shall not be the lesser of ninety-five percent of the total contribution made to an AGO, except as provided in subsection (4) not to exceed \$1,000,000. This credit may be carried forward up to five succeeding taxable years. Schedule EOA must be attached to the taxpayer's tax return each year to claim the credit. A partner, member, or shareholder of a pass-through entity must attach a copy of Schedule K-1 to the partner's, member's, or shareholder's tax return each year.

The pre-approved Education Opportunity Account Program Credit is found on Form 740 & Form 740-NP, line 25 and is a new credit beginning for tax year 2021. The Education Opportunity Account Program Credit is reflected in barcode field 81 for Form 740 and barcode field 66 for Form 740-NP.

### ***Schedule ITC addition of Renewable Chemical Production Tax Credit***

For taxable years beginning on or after January 1, 2021, and ending on or before December 31, 2024, a nonrefundable and nontransferable credit allowed against the taxes imposed by KRS 141.020 or KRS 141.040 and KRS 141.0401 is available for taxpayers who have received notification from the Department of Agriculture. Schedule CHEM is due to the Department of Revenue by March 1 each year. The Department of Revenue will issue the credit certificate (Schedule CHEM) by April 15 each year. The credit certificate must be attached to the tax return claiming the credit per KRS 141.4231, KRS 246.700(8), and 103 KAR 15:140.

The approved Renewable Chemical Production Credit is found on Schedule ITC, Section A – Business Incentives and Other Tax Credits, Line 25 and reflected in barcode fields 170 and 171 for Form 740 and barcode fields 226 and 227 for Form 740-NP.

***Form 740-NP, Line 4 Archer MSA Deduction Line Addition***

Form 740-NP, Page 4, line 30 has been added to allow for Archer MSA deduction as an adjustment to the federal total taxable income.

The Archer MSA deduction for federal income, as shown on Form 740-NP, Page 4, line 30A, is reflected in barcode field 140. Tuition and fees deduction for Kentucky income, as shown on Form 740-NP, Page 4, line 30B, is reflected in barcode field 173.

**Please note:** If submitting both 1D and 2D barcodes at the same time specify in the submission email.

## **Section 2: Contact Personnel- Kentucky Department of Revenue**

### ***Technical Specifications/Assistance and Acceptance Testing***

**Help Desk Phone # 502-564-5370 (Option 2 – Individual Income Tax); Fax # 502-564-0230**

**Primary Contact:**

**Sikitia Snow**

Department of Revenue  
Division of Operations  
Electronic Commerce Branch  
501 High Street, Station 22  
Frankfort, KY 40601-2103  
Phone: 502-564-8808  
Email: [Sikitia.Snow@ky.gov](mailto:Sikitia.Snow@ky.gov)

**Secondary Contact:**

**Jeremy Sapp**

Kentucky Department of Revenue  
Division of Operations  
Electronic Commerce Branch  
501 High Street, Station 22  
Frankfort, KY 40601-2103  
Phone: 502-564-8902  
Email: [Jeremy.Sapp@ky.gov](mailto:Jeremy.Sapp@ky.gov)

**K-5 Form Primary Contact:**

**Alex Peyton**

Kentucky Department of Revenue  
Division of Operations  
Electronic Commerce Branch  
501 High Street, Station 22  
Frankfort, KY 40601-2103  
Phone: 502-564-0925  
Email: [Alex.Peyton@ky.gov](mailto:Alex.Peyton@ky.gov)

**K-5 Form Secondary Contact:**

**Caitlin Branco**

Kentucky Department of Revenue  
Division of Operations  
Electronic Commerce Branch  
501 High Street, Station 22  
Frankfort, KY 40601-2103  
Phone: 502-564-2192  
Email: [Caitlin.Branco@ky.gov](mailto:Caitlin.Branco@ky.gov)

**Additional Information:**

KYST folder on SES

**Kentucky's Software Developer web page:**

<https://revenue.ky.gov/Software-Developer/Pages/default.aspx>

Kentucky Publication 1345 – Handbook for Electronic Filers of Individual Income Tax Returns (This publication is posted on the SES.)

### **Section 3: Barcode Content**

The Form 740, Form 740-NP and 740NP-R are developed in separate barcode layouts for those vendors that wish to support the 2D barcode of one but not the other form.

The 2-D barcode for the Form 740 will include the following forms if they are a part of the taxpayer's return:

- 740 – Kentucky Individual Income Tax Return for Full Year Resident
- Schedule ITC – Kentucky Individual Tax Credit Schedule
- Schedule M – Federal Adjusted Gross Income Modifications
- Schedule A – Kentucky Itemized Deductions
- Schedule P – Kentucky Pension Income Exclusion
- Form 2210-K – Underpayment of Estimated Tax by Individuals
- Form 8863-K – Education Tuition Tax Credit
- Schedule KW-2 – Kentucky Income Tax Withheld Reporting
- Schedule INV – Kentucky Inventory Tax Credit

The 2-D barcode for the Form 740-NP will include the following forms if they are a part of the taxpayer's return:

- 740-NP – Kentucky Individual Income Tax Return for Nonresident or Part-Year Resident
- Schedule ITC – Kentucky Individual Tax Credit Schedule
- Schedule A (Form 740-NP) – Kentucky Itemized Deductions
- Form 8863-K – Education Tuition Tax Credit
- Schedule KW-2 – Kentucky Income Tax Withheld Reporting
- Schedule INV – Kentucky Inventory Tax Credit

The 2-D barcode for the Form 740NP-R will include the following forms if they are a part of the taxpayer's return:

- 740NP-R – Kentucky Nonresident Individual Income Tax Return for Reciprocal State Residents
- Schedule KW-2 – Kentucky Income Tax Withheld Reporting

**Note: The Forms W-2 and 1099-R have been removed and are no longer valid for tax year 2018 and years following. These forms have been replaced with Schedule KW-2.**



## Section 4: Kentucky Testing Procedures

A contact name and email address must also be provided for test result notification. **After your software is accepted, an acceptance letter will be issued which must be provided to all software users upon request.**

Kentucky accepts criteria based testing.

Test Requirements:

- Letter of Intent for 2D Barcode Development should be provided to KDOR
- A test for each type of return (740, 740-NP) or form (42A805) that you support will be required.
- Testing of all 2019 new fields that you support should be included in your testing.
- A test for each filing status/residency status should be included.
- A PDF of the entire Kentucky income tax return (forms supporting the fields found in the 2D barcode) must be provided with the test submission.
- Maximum limit on the number of tests is 10.
- The 2-D barcode test scenarios may differ from the scenarios used for ATS.

Please see Section 5 for list of required fields that must be completed by the taxpayer. If the software community could alert the taxpayer that these fields are required to process the return, and if not completed, will result in the delay of the return being processed, it would be appreciated. Alerting the taxpayer within the software when a required field is not completed would be beneficial to all.

Please send an e-mail prior to testing to advise what is supported/not supported. The Letter of Intent for 2D Barcode Development should be used for this purpose. Check the individual income tax forms supported and then in the Comments or Limitations section list any limitation(s).

## Section 5 – Mandatory Barcode Fields

- **Primary Social Security Number** – Required on all returns. Must be 9 digits.
- **Spouse Social Security Number** – Required on Married Filing Joint and Married Filing Separately on a Combined Return filing statuses. Must be 9 digits.
- **Primary Last and First Name** – Required on all returns.
- **Spouse Last and First Name** - Required on Married Filing Joint and Married Filing Separately on a Combined Return filing statuses.
- **Address, City, State Abb., Zip Code** – Required on all returns. This field should contain numbers 0-9 and letters A-Z. The only special characters permitted in the address are the “-” dash and the “&” ampersand.
- **Filing Status** – One of the four (4) filing statuses is required.
- **Spouse Full Name** – Required if Married Filing Separate filing status is selected.
- **Political Party Fund** – One of the three (3) taxpayer political party fund options must be selected for all filing statuses. If married filing joint or married filing separate on a combined return filing status is selected, one of the taxpayer and spouse political party fund options must be selected.
- **Credit Total Fields** – Must be two (2) characters. (1 = 01, 5 = 05, etc.)
- **Taxpayer Tax Credits** – Required entry for all returns. If single, married filing joint or married filing separate return filing status is selected, this field must equal Total Tax Credits Field.
- **Spouse Tax Credits** – Required on Married Filing Separately on a Combined Return filing status. The Total Tax Credits must be split between the taxpayer and spouse and must equal the Total Tax Credits Field. Taxpayers may determine how to split the credits.
- **All Money Fields** – All money fields must be rounded to the nearest dollar. The barcode field must contain **whole dollars** only with no special characters. Special characters are defined as any character other than numbers 0 through 9. No “\$” or “.” should be included in the barcode. The only exception to this would be the “-“in front of a negative dollar amount.

- **One of the following must be checked:**

- **May the DOR discuss this return with this preparer? – Yes** - Required value “X” or blank on all returns. Value “X” should be checked if the taxpayer authorizes DOR to discuss their return with the paid preparer.
- **May the DOR discuss this return with this preparer? – No** - Required value “X” or blank on all returns. Value “X” should be checked if the taxpayer does not authorize DOR to discuss their return with the paid preparer.

**Form 42A805 (K-5) Mandatory Fields**

- **Timestamp**
  - Does not correlate to a fillable part of the form itself.
  - The time that the 2-D barcode was generated.
  - The timestamp should be the same for pages 1 and 2.
- **Data Version**
  - Does not correlate to a fillable part of the form itself.
  - The data version is always “3” unless otherwise specified in this document.
- **KY Withholding Account Number (State EIN)**
  - Six-digit account number. If the number appears to be fewer than six digits, add leading zeroes.
- **Federal Employer Identification Number**
- **Business Name** – Limited to thirty-four characters.
- **Statement Code**
  - One statement code per K-5. Codes are:
    - **1** – W-2
    - **2** – W-2G
    - **3** – 1099-R
    - **4** – 1099-MISC
    - **5** – All other 1099
    - **6** – 1099-NEC
- **Total Statements**
  - Must equal the count of all employee / payee statement lines.
- **Total Payments**
  - Must equal the sum of all employee / payee wages or payments.
- **Total Tax**
  - Must equal the sum of all employee / payee state income tax withheld.
- **At least one line of employee or payee data, which includes:**
  - **Social Security Number**
  - **Surname**
    - Limited to the first nine digits.
  - **Kentucky state wages or payments**
  - **Kentucky state income tax withheld**

- **NOTE:** 1099 data showing -0- KY tax withheld should not be filed.
- **Taxpayer Signature**
  - Fifty character limit.
- **Taxpayer Signature Date**
  - MM/DD/YYYY format.
- **Discuss**
  - Values may be “Yes” or “No” only.
- **Tax Year**
  - YYYY format.
  - The year in the 2D barcode must match the year printed in the top right corner of the form.

## **Section 6 – 2D Barcode Layouts**

The 2D barcode layouts for the Form 740, Form 740-NP, Form 740-NP-R and Form 42A805 can be found on the State Exchange System.

**See highlighted fields on barcode layouts for additions and changes for tax year 2021. Also, refer to Section 3 of this document.**

All data formats follow the criteria published in the “Tax Forms Processing 2-D Barcoding Standards Guidance” issued by the Federation of Tax Administrators (FTA).

Note: Hyphens and separators should not be used in dates, social security numbers, telephone numbers, etc.

The name field on the return should be broken down by field as described in the tax form layout specifications.

For check boxes return “X” if checked and NULL if blank.

If Form 2210-K is completed, field 93 (740) /field 79 (740-NP) must be marked “X”.