



4200 Migration Guide

Transitioning to the 4200 Series Testers

Scope

The 4200 Series testers introduce new capabilities and an enhanced user interface but they continue to support the core functions of the legacy testers they're replacing. Therefore, transitioning from an older tester to the 4200, or using multiple tester types in the same facility, is very straightforward. This guide focuses on integrating the 4200 Series testers into the workplace alongside 1100 Series testers and on migrating from the 1100 Series to the 4200 Series. It also addresses compatibility with Easy-Touch units and suggests how best to transition from the Touch 1. It is intended as an overview, and for that reason it will refer to the applicable user manuals for supporting details.

4200 Series Basics

First, it's important to understand a few basic details about the 4200 Series testers:

- The 4200 Series includes the low voltage 4200 and the high voltage 4250 testers.
- All 4200 Series testers include networking as a standard feature and can connect to a network using either a wired Ethernet connection or by using WiFi access.
- In addition to providing other capabilities, the Cirris Hub Software supplied with the 4200 testers allows the units to share test programs stored on a network drive and to print reports to a network printer.
- While the tester's networking capability, combined with the Cirris Hub, allow test programs to be stored on a network drive, test programs can also be stored in the internal memory of 4200 Series testers.
- As with the 1100 Series and Touch 1 testers, 4200 Series test programs are stored as simple text files using the ".wir" filename extension.
- Like the 1100 Series, as an option, 4200 Series testers can be controlled from a PC using the same version of the Easy-Wire software that controls the Easy-Touch tester, in which case test programs are stored as part of a database, not as individual files.

Sharing and Migrating Test Programs

Warning: Back up your test programs to a secure location before making any changes.

As the 4200 Series, 1100 Series and Touch 1 testers all use test programs with similar formats and store the programs as text files using the ".wir" filename extension, with few exceptions test programs created on any one of the tester types can be used on the others. This means that test programs can be shared between the testers or programs can be permanently migrated from one tester type to another.

Sharing limitations:

- Test programs cannot be shared between high voltage and low voltage testers without editing. For example, a test program created on a high voltage 1100H+ cannot be used on a low voltage 4200 tester.
- Most custom LUA scripts cannot be shared between tester types without editing (only applicable to testers with the scripting option).

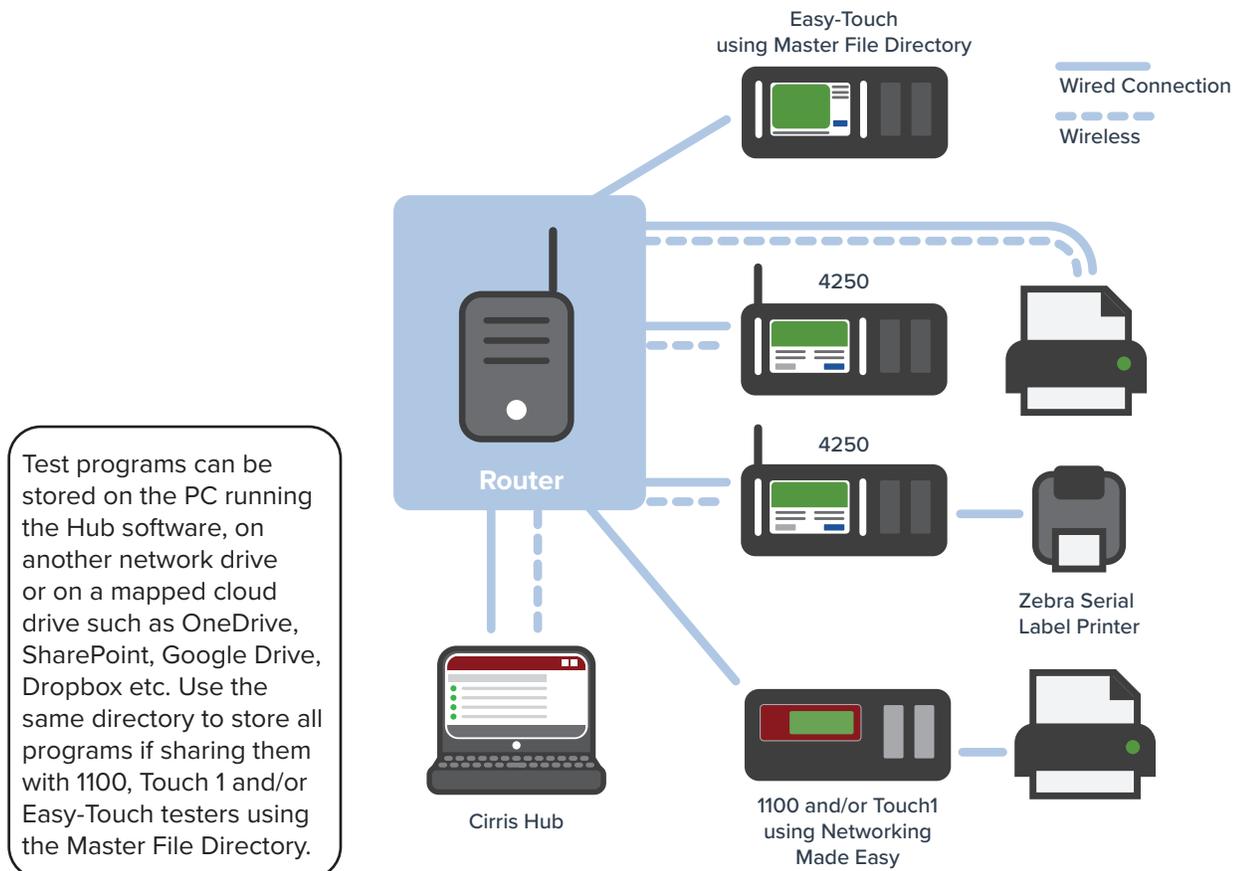
Sharing Test Program Files Using a Network

If existing 1100 and/or Touch 1 tester(s) are equipped with the networking option, these units can be configured to load programs from a network drive using the Cirris Networking Made Easy software. The Cirris Hub Software supplied with 4200 Series testers can be configured to access test programs from the same network location used by 1100 Series and/or Touch 1 testers allowing all three tester types to share the same test programs. It's also possible for Easy-Touch testers and/or 1100 and 4200 Series testers being controlled from a PC using the Easy-Wire software to share these same test programs using the Master File Directory capability. In any of these configurations, test programs edited on one of the tester types would be available to all testers on the network.

More detailed instructions are available in the *Cirris Hub Manual*, but in brief once the Hub has been installed and the connection has been established between the 4200 Series tester(s) and the Hub, the process of setting up the testers to share test programs is straightforward.

1. Open the Cirris Hub. The Hub is a web-application which means it will open as a new tab in the PC's default web browser. On the sidebar menu, select **Server Status** to view the location of **Network Files**. This is the directory in which test programs are stored. The default path can be changed to the location where existing Touch1 and/or 1100 programs are stored using the Cirris Hub Configuration application, which would have been installed at the same time as the Hub.
2. Once the path for the **Network Files** directory has been updated using the Cirris Hub Configuration application, select **File Management** from the Hub sidebar menu to view existing directories (folders) and test programs. New directors can also be added here.
3. Additional existing programs can be moved to the **Network Files** directory using Windows File Explorer.
4. From the 4200 Series tester **Main Menu**, select **Load** and then navigate to the "F:" (network) drive. As long as the tester has access to Cirris Hub, the 1100 and Touch 1 test programs in the **Network Files** directory will be listed as available test programs.

For more information on the Networking Made Easy software, see the associated manual (included on the flash drive supplied with a new tester or available for download from the Cirris web site). For more information on the Easy-Wire Master File Directory see the *Easy-Wire Software Manual for Easy-Touch and 1100 Testers*.



Sharing/Migrating 1100 & Touch 1 Programs when those Testers aren't Equipped with Networking

If existing 1100 Series testers and/or Touch 1 testers are not equipped with the networking option, and the 1100 testers are not using the Easy-Wire software, it's still possible to migrate test programs to 4200 Series testers or to share the programs between the tester types manually.

Flash Drive Method for 1100 Testers

1100 Series testers shipped after August 1, 2008 are equipped with USB ports compatible with flash drives. This allows test programs to be copied to a flash drive for transfer to the internal memory of a 4200 Series tester or to a network location for access from one or more 4200 Series testers using the Cirris Hub. This method works best for a limited number of test programs. See the *1100H+ or 1100R+ User Manual* for instructions.

CTLWIN Method for 1100 Testers

If more than a couple dozen test programs are involved, or if the 1100 tester is an older unit without USB ports, then using the CTLWIN software to transfer the programs would be the preferred method. The CTLWIN software allows a PC to connect directly to an 1100 Series tester to transfer test programs between the two. Newer 1100 testers use a standard USB cable to connect the PC to the tester. Older 1100 units connect to the PC using the one-to-one serial cable supplied with the tester and a Tripp Lite Keyspan USA-19HS, USB to serial adapter installed on the PC. Serial cables and the USB to serial adapters are available from Cirris. More information about using the CTLWIN software is available in the *CTLWIN Basic Operation Manual* available for download from the Cirris web site.

Touch 1 Testers

Due to the age of the testers, the only way to transfer test programs from a Touch 1 that is not equipped with the networking option is by using a 3.5" floppy disk. Test programs moved in this way to a PC can then be transferred to 4200 Series testers.

Transferring Programs to a 4200 Series Tester

As described above, 1100 and/or Touch1 programs can be shared with 4200 Series Testers using a network and the Cirris Hub software. In that case, test programs uploaded from the older testers would be transferred to the network location referenced by the Cirris Hub software. However, test programs can also be transferred to the internal memory of a 4200 Series tester using one of two alternate methods.

Using a PC

The easiest way to transfer multiple test programs to the internal memory of a 4200 tester is by connecting the tester to a PC using a standard USB cable. With the tester connected to power, but turned off, the memory of the tester will appear in Windows File Explorer as a drive named "4200 SERIES (X)" where "X" is drive letter assigned by Windows. Files can be moved to the tester using standard File Explorer copy and paste functions. Programs moved to the tester's memory will be available for use when the tester is disconnected from the PC and powered on.

Using a USB flash drive

Although transferring test programs using a PC is typically the preferred method, if transferring only a few test programs, a USB flash drive can be used as described below. Note that only one program at a time can be copied or moved.

1. Connect the flash drive containing the 1100 Series or Touch 1 test programs to your 4200 Series tester.
2. From the 4200 **Main Menu**, select **Manage Files**.
3. On the **Manage Files** page, select the flash drive location from the drop-down menu at the top of the screen.
4. Select each test program, one at a time, and press **Copy/Move**.
5. Navigate to the location where you want to save the test programs and press either **Copy** or **Move**.
 - **Copy** will save a duplicate test program in the new location.
 - **Move** will remove the test program from the previous location and save it in the new location.
6. The test programs created on an 1100 Series tester will now be available for use on the 4200 Series tester.

Sharing Easy-Touch Test Programs with Series 4200 Testers

As mentioned above, Easy-Touch and/or Easy-Wire 1100 test programs can be shared with 4200 Series testers using a network with the Cirris Hub and the Master File Directory capability on the Easy-Touch tester or Easy-Wire 1100. It's also possible to manually export test programs from an Easy Touch and/or Easy-Wire 1100 database using the **Export** function under the **Utilities** menu and transfer them to a network location to be shared by 4200 Series testers or transfer them to the internal memory of a 4200 tester. However, some of the advanced features of the Easy-Touch are not compatible with the 4200 Series testers, including:

- Close Instruction
- Open Instruction
- Comment Instruction
- Diode Instruction (Signature Diode is compatible)
- Probe Instruction
- Test programs using the Signature Single Test or Signature Continuous Test methods are compatible, but others including the Build Test methods are not compatible.

Sharing Test Programs Using the Easy-Wire Software

When using the Easy-Wire software to control 1100 Series and/or 4200 Series testers from PCs, or when using the Easy-Touch testers, test programs are stored in a database. Easy-Wire makes no practical distinction between the three tester types, therefore, test programs created or edited using Easy-Wire on all three platforms can be shared with the others (with the high voltage / low voltage constraint referenced above). The Cirris Server Software allows the Easy-Wire-controlled 1100 Series and 4200 Series testers and Easy-Touch testers to load programs from, and write results to, a single database located on a network drive. Without the Server Software, it's still possible the share test programs manually by exporting test programs from the database of one test station and importing them into the database of another test station. The **Export** and **Import** functions are available under the Easy-Wire **Utilities** menu.

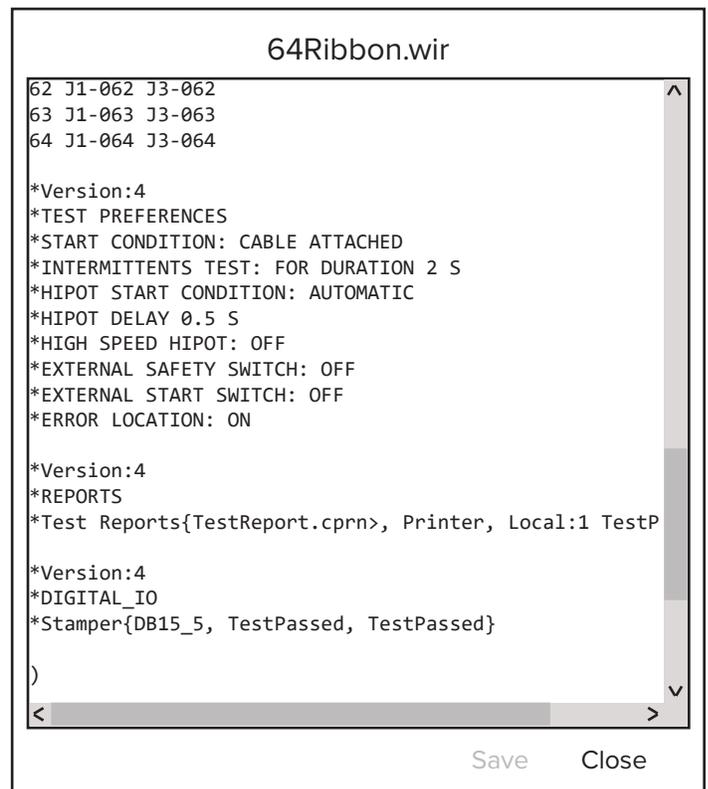
Test Programs and Preferences

One of the differences between the 1100 and 4200 Series testers is the method used to configure specific settings or user preferences. For example, on the 1100H+ testers, the hipot start condition is a global setting configured under the **Set Preferences** menu. However, on the 4250 testers, the **High Voltage Start** condition setting is specified within each test program as a preference. The same is true of a number of preferences including:

- Test start condition
- Hipot start preference
- Intermittent testing
- High Speed Hipot On/Off
- External Switch On/Off
- Hipot Safety Switch On/Off
- Error Location On/Off
- Report Printing
- Digital I/O

When viewing a test program as a text file, notice that a 4200 Series test program includes a section of "preferences" near the bottom of the file showing Test Preferences, Reports Preferences (if any were selected) and Digital I/O Settings (if any were added). These settings

reflect selections made while creating or editing the program in the 4200 user interface. When running a test program created on a 4200 tester on an 1100 unit, the 1100 will ignore this section of the test program and instead defer to the global settings configured under the tester's **Preferences** menu.



```
62 J1-062 J3-062
63 J1-063 J3-063
64 J1-064 J3-064

*Version:4
*TEST PREFERENCES
*START CONDITION: CABLE ATTACHED
*INTERMITTENTS TEST: FOR DURATION 2 S
*HIPOT START CONDITION: AUTOMATIC
*HIPOT DELAY 0.5 S
*HIGH SPEED HIPOT: OFF
*EXTERNAL SAFETY SWITCH: OFF
*EXTERNAL START SWITCH: OFF
*ERROR LOCATION: ON

*Version:4
*REPORTS
*Test Reports{TestReport.cprn>, Printer, Local:1 TestP

*Version:4
*DIGITAL_IO
*Stamper{DB15_5, TestPassed, TestPassed}

)
< >
```

Save Close

Start Condition & Intermittent Testing

The **Start Condition** defines the action the tester accepts to start a test. **Intermittents** testing cycles the low voltage portion of the test giving the operator the opportunity to flex or otherwise stress the Device Under Test (DUT) while the tester checks for intermittent opens and shorts. The 1100 Series testers combined the start condition and the intermittent testing preferences into the **Test Mode** setting while the 4200 Series separates the two. The 4200 Series also provides new options for setting the duration of the intermittents test and its ending condition.

On 1100 testers, the global **Test Mode** setting had two options - **Single** and **Continuous**, with **Continuous** being the default. When the **Test Mode** is set to **Continuous**:

- The test will start automatically when the cable is connected to the tester
- After passing the low voltage and high voltage tests, the tester continuously scans the cable for intermittent errors until the cable is removed.

On the 1100 testers, no intermittent testing is conducted in the **Single** Test Mode.

On 4200 Series testers, the **Start Condition** is named **Low Voltage Start** and it is set by program under the **Edit Test Settings > Preferences** sub-menu. There are two options - **Cable Attached** and **Start Button**. The **Intermittents Test** can be set to **Off**, **For Duration**, to specify a period of time in seconds, or to **Press to Stop**, which requires the operator to press the **End Test** button to end the test.

The screenshot shows a 'Preferences' dialog box with the following settings:

Setting	Value
Low Voltage Start:	Cable Attached
High Voltage Start:	Start Button
Auto Start Delay:	1 S
Intermittents Test:	For Duration
Intermittents Test Duration:	2 S
Enter Lot ID:	Off
Error Location:	On
External Start Switch:	OFF
External Safety Switch:	OFF

Buttons: OK, Cancel

To simulate the 1100 **Continuous** Test Mode on a new 4200 Series test program:

1. From the **Main Menu**, select **Create New > Edit Learn Settings > Preferences**. Set the **Low Voltage Start** preference to **Cable Attached**.
2. If using a 4250 High Voltage tester, and performing a hipot test, set **High Voltage Start** to the preferred condition.
3. Set the **Intermittents Test** to either **For Duration** or **Press to Stop** (there is no option to end the test by removing the cable on the 4200 Series testers).
4. Edit the remaining preferences and settings as necessary and proceed with the learn process.

To simulate the 1100 **Single** Test Mode on a new 4200 Series test program,

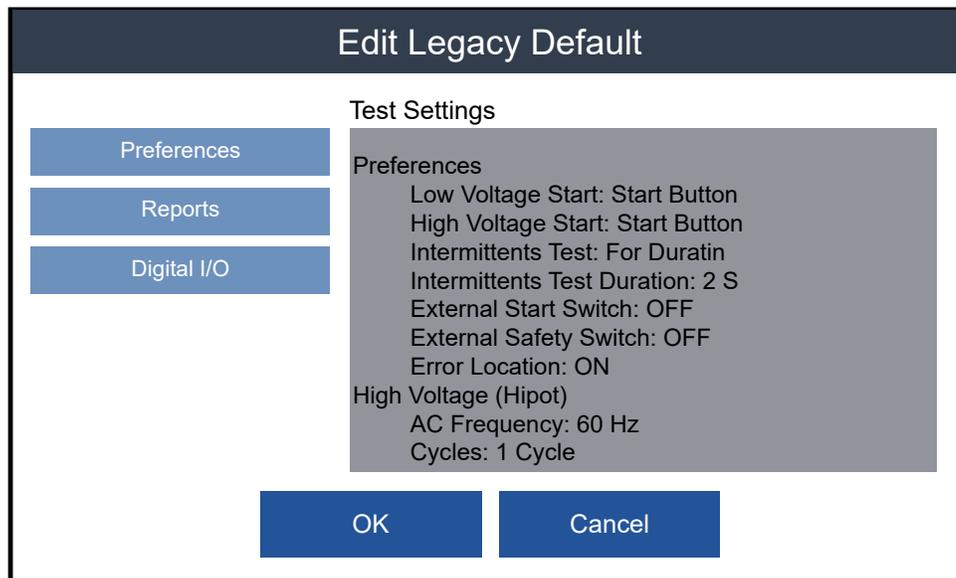
1. From the **Main Menu**, select **Create New > Edit Learn Settings > Preferences**. Set the **Low Voltage Start** to **Start Button**.
2. If using a 4250 High Voltage tester and performing a hipot test, set **High Voltage Start** to the preferred condition.
3. Set the **Intermittents Test** to **Off**.
4. Edit the remaining preferences and settings as necessary and proceed with the learn process.

Of course, the flexibility of the 4200 Series testers allows a test to use a **Start Button** start condition AND include an **Intermittents Test**, something the 1100 Series testers could not accommodate.

Legacy Defaults

When using test programs created on an 1100 Series tester on a 4200 Series tester, the preferred preferences used by the 4200 can be set to a default condition. On the 4200 Series tester, from the **Main Menu** navigate to **System Settings**, then select **Legacy Defaults**. Settings specified in this menu should be updated to match your 1100 global test preferences as closely as possible. Any test created on an 1100 Series tester and then subsequently opened and saved on the 4200 Series tester will include the specified preferences.

For more information on **Legacy Defaults**, see the *4200 Series User Manual*.



Hardware Compatibility

Expansion Scanners

Expansion scanners are transferable between the 1100 Series and 4200 Series testers. Each expansion scanner provides an additional 128 test points. Connect up to seven expansion boxes to your tester for a total of 1024 points. (Note: An additional, internal cable is required if using the maximum of seven expansion boxes, 1024 test points, on either the 1100H+ or 4250 testers. To learn more, contact your Cirris sales representative.)

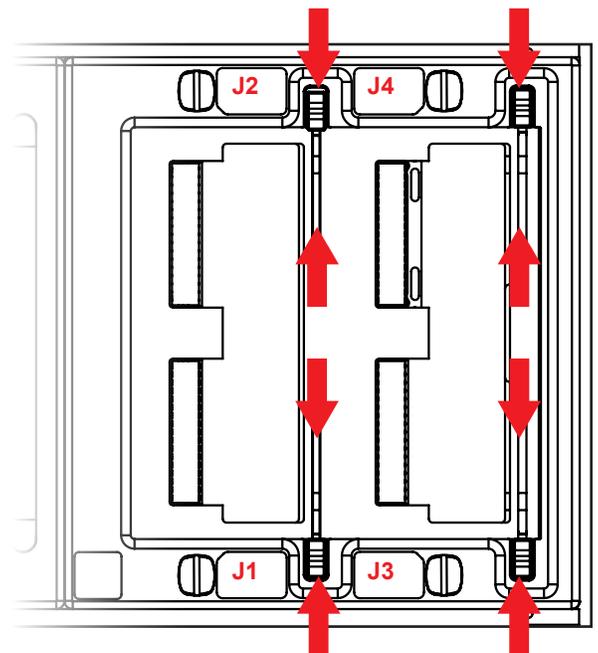
Adapters

Like the 1100 Series, the 4200 Series uses the Cirris Adapter System to connect the Device Under Test (DUT) to the tester. This means that the same adapters used on 1100 Series, Touch 1 or Easy-Touch testers will also work on the 4200 Series testers.

However, there is a small difference in the way the adapters attach to the tester. While the 1100 Series testers use removable cover plates to lock the adapters in place, the 4200 Series tester uses the slidelock system.

To operate the slidelocks:

1. Push the slide-locks to the outward positions.
2. Set an adapter in one or more of the J1-J4 slots and firmly, with even pressure, push the adapter to the left (toward the tester's screen).
3. Once the adapter is fully seated, move the slide-locks to the inward position to hold the adapter in place.



Printing

While the 1100 Series testers have a built-in parallel port for printing reports to a desktop printer, the 4200 Series testers provide broader printing and report options.

On 4200 Series testers, labels can be printed to a qualified Zebra printer connected to either of the tester's serial ports. Pass and/or Fail labels can be automatically printed at the end of a test by adding the preferences to the test program under the **Reports** sub-menu while editing the program. More information on label printing can be found in the *4200 User Manual*.

Reports can be printed on the 4200 Series testers using one of two alternate methods described below. Several types of reports can be added to the test program preferences under the **Reports** sub-menu when editing a program.

1. With a 4200 Series tester connected to a the Cirris Hub on a network, which can be as simple as a PC and a router, the Hub software allows the tester to print reports to a network printer. In this configuration, any printer with Windows drivers would be compatible.
2. The 4200 Series testers can also print reports directly to a qualified printer connected to either of the tester's serial ports using the SER2-USB Smart Serial to USB cable available from Cirris.

See the Cirris web site or current Price List for a list of qualified Zebra label printers and report printers.

Help / Support

For assistance with your Cirris test system:

- Visit www.cirris.com/learning-center to read articles on Cirris products and other testing subjects.
- In the USA, contact our technical support team: 800-441-9910, ext. 666 (or ask for Tech Support).
- Outside the USA, call 801-973-4600 or visit www.cirris.com to find the Cirris office nearest to you.

4200 Migration Guide
Version 2019.4.0



© 2019 Cirris Systems Corporation
401 North 5600 West
Salt Lake City, Utah 84116
U.S.A.
www.cirris.com