
Unidirectional Cable Ready Products

F.A.Q.

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What does Digital Cable Ready mean?



A DCR product is a digital TV, digital video recorder or other device capable of receiving unscrambled analog, digital basic and digital premium cable television programming by direct connection to a cable system providing such programming. This device can receive unencrypted or unscrambled video signals through direct connection to the cable system with no additional required component. To receive encrypted digital services, the device needs a CableCARD™ supplied by the cable operator which fits into a slot on the DCR product. Sony DCR products that are available to consumers now or have been publicly announced for release in the near future include digital video recorders DHG-HDD250 & DHG-HDD500 and the following digital televisions (DTVs):

- KD-34XBR960
- KD-30XS955
- KD-34XS955
- KD-36XS955
- KDP-51WS655
- KDP-57WS655
- KDE-37XS955
- KDE-42XS955
- KDE-50XS955
- KDF-42WE655
- KDF-50WE655
- KDF-55WF655
- KDF-60WF655
- KDF-55XS955
- KDF-60XS955

What does Plug-and-Play mean?

Plug-and-Play is another term for DCR used during the cable and consumer electronics industry discussions and the FCC's rulemaking proceeding. The generic term for these products is DCR.

How does DCR benefit consumers?

DCR enables consumers to receive digital programming, including HDTV signals, without a set-top box and will allow for an array of new devices, such as various kinds of digital recorders, to be easily connected to cable networks.

How does a DCR television work?

In addition to the electronics typically found in most television sets, a DCR product incorporates many of the same electronics found in a digital set-top box. The key difference is that a DCR product does not itself contain technology that will allow the television to display encrypted digital signals. Such decryption technology is instead built into the CableCARD™. Since cable operators encrypt most digital cable signals (other than, e.g., retransmitted local broadcast digital TV programming), a CableCARD™ must be inserted into a DCR product in order for that product to receive most digital cable programming.



What is a CableCARD™?

The term CableCARD™ is a term that has been adopted by the cable industry for the security device, which is the interface module between the cable head end and the customer's DCR product. This device is used to decrypt encrypted digital programming that the customer is authorized to receive. The term CableCARD™ is used with the permission of CableLabs.

The CableCARD™ replaces the set-top box and enables consumers to view encrypted digital programming. It electronically binds with the DCR product to decrypt digital programming via a method

that is also secure for copy protection purposes.

What can a DCR product receive?

A DCR product equipped with a CableCARD™ can receive unscrambled analog cable, digital basic cable, and digital premium cable services without a set top box (STB). It cannot support two-way interactivity and does not provide access to cable operator interactive program guides, Video on Demand services, pay-per-view movies or special events, or interactive TV (iTV) services. The cable and consumer electronics industries are currently working together to create a technical framework which will provide a foundation for DCR products that support the full suite of cable operators' products and services.

Services/Features	Available via
Unscrambled analog channels	Both DCR and 2-way STB
Digital basic channels	Both DCR and 2-way STB
Digital premium programming	Both DCR and 2-way STB
Pay Per View	2-way STB only
Video on Demand	2-way STB only
Interactive Program Guide (cable generated**)	2-way STB only
Two-way interactive products and services	2-way STB only

* A DCR product can receive high definition digital basic and premium services, although the DCR product must include within it (or be connected to) a high definition display in order to display the picture in high definition.

* DCR products may afford access to independently supplied program guides.

Can DCR products receive Pay Per View programming?

Yes, but cable operators have generally phased out such telephone-based Pay Per View ordering systems in favor of Video-on-Demand – a two-way, interactive cable service which is not accessible by a DCR without a set-top box.

Are all TVs with an integrated digital tuner considered to be DCR TVs?

No. A DCR TV (like any DCR product) must have a built-in technology that enables it to receive encrypted digital programming via its interface with a CableCARD™ and without the need for a set-top box. Under FCC rules, all DCR TVs are required to be able to receive over-air digital signals with a suitable antenna. However, such a TV without a CableCARD™ interface is not Digital Cable Ready.

Some TVs with an integrated digital tuner receive only an over-air digital signal. The tuner in these TVs may also be referred to as an ATSC Tuner, 8-VSB tuner or broadcast tuner. Also, in the past few years, some TVs have been marketed that have a combined over-air and cable tuner that can receive unencrypted digital cable signals. A cable set top box will have to be installed for these TVs to receive encrypted digital cable programming and interactive digital cable products and services. To summarize, only TVs that comply with the FCC's DCR regulations (and therefore have a CableCARD™ slot) are Digital Cable Ready.

What is the CableCARD™ activation procedure?

An activation screen appears on a DCR television once the CableCARD™ is inserted into the DCR product. Information presented on the screen is needed in order to authorize services through the CableCARD™. The Cable Field Service Technician must provide this information to the Cable Customer Service Representative in order to properly authorize the CableCARD™ and electronically bind it to the DCR product. In the future, if retail provisioning or self provisioning is supported, the retail associate or customer would provide the required information to the Cable Customer Service Representative to authorize the CableCARD™. The activation screen will include the CableCARD™ ID as well as the Host ID of the DCR product, in addition to a Data number for Motorola systems. An activation screen is generated by the CableCARD™. The following are examples of what it may look like:

Motorola:

In order to start cable service for this device, please contact your cable provider:

CableCARD™ ID: XXX-XXX-XXX-XXX-X
Host ID: XXX-XXX-XXX-XXX-X
Data: XXX-XXX-XXX-5XX

Scientific-Atlanta:

In order to start cable service for this device, please contact your cable provider:

CableCARD™ ID: XXX-XXX-XXX-XXX-X
Host ID: XXX-XXX-XXX-XXX-X

Press Menu to return to the Set Up Screen

What is DFAST?

DFAST is the acronym for Dynamic Feedback Arrangement Scrambling Technique. DFAST is the system that enables a DCR product (also called the Host device) to communicate securely with a CableCARD™. Through this communication, the CableCARD™ is able to send all authorized services to the Host device. For services that carry copy protection restrictions, the CableCARD™ activates DFAST encryption to protect the content when it is passed to the Host device.

The manufacturer of the DCR product obtains the right to use the DFAST technology from CableLabs through a license agreement (either the DFAST License Agreement or the POD-Host Interface License Agreement, “PHILA”). The license for the DFAST technology requires that DCR products be produced with limited vulnerability to tampering and with a certain degree of robustness.

Why is some programming recordable and some programming not recordable?

As a part of the regulations for DCR, the FCC has permitted programmers to activate copy protection of some digital content; the DFAST and PHILA license agreements require DCR products to respond to copy protection directives distributed with the programming. This copy protection allows programmers to limit the programming that the end consumer can copy digitally. Copy protection directives are signaled through Copy Control Information embedded in the digital content and may be “Copy Never,” “Copy One Generation (i.e., no copy of a copy can be made),” “Copy No More” or “Copy Freely.” The FCC’s rules permit programmers to mark various categories of

programming up to specified maximum copy protection levels, according to the following table:

Services	Copy Availability
Over the air broadcasting	Copy Freely
Pay television, non-premium subscription television, and free conditional access delivery	Copy One Generation*
Video on Demand, Pay Per View	Copy Never
Subscription-on-Demand (SVOD)	To be determined

* The copy may also be “moved” to a home network device; any such copy is automatically deleted from the device on which it was originally recorded

Are Parental Controls provided with DCR service?

Yes. DCR products, like all TV receivers (except those below 13 inches screen size), are required by the FCC to respond to ratings codes embedded in the content by the programming provider. However, without a set-top box, the customer would not have access to the Parental Controls features of the cable operator’s interactive program guide. Instead, the customer would rely on the Parental Controls feature of the TV.

Does my local system support DCR products?

DCR products are supported by technology in the cable plant. Most digital cable systems have been required by the FCC to install such technology and support CableCARD™ and DCR products since July 1, 2004. Check with your local cable office to determine whether CableCARD™ devices and DCR products are currently supported in your area. This information can also be found from the cable industry’s Go2Broadband website. <http://cpss.go2broadband.com>.

How do I obtain a CableCARD™?

Since Cable operators may have different approaches for obtaining a CableCARD™, call your local operator to determine their distribution procedure.

How much does a CableCARD™ cost?

Cable operators make pricing decisions locally so you will have to check with your local cable operator for the charge, if any, for a CableCARD™.

How is the CableCARD™ installed?

A field technician will install the CableCARD™. In the future, it may be possible for customers to self-install the device or receive authorized assistance, e.g., from retailers.

How is the CableCARD™ activated?

A field technician will activate the card upon installation.

Will my CableCARD™ work in another DCR product?

After your CableCARD™ is installed and initialized by a field technician, the CableCARD™ is electronically bound with the original DCR product in which it was installed. In order for your CableCARD™ to operate properly in another DCR product, the CableCARD™ has to be installed in the new device by an authorized technician.

What happens if I move?

If you move out of your cable service area, you must return the CableCARD™ to your cable operator. The CableCARD™ will not work in other cable systems. If you move within your current cable service area, contact your cable operator's Customer Service Representative to notify them of your move. They will be able to help you through the service transfer process.

What happens if I return or exchange my DCR product?

You should contact your cable operator about returning the CableCARD™ before you return the DCR product.