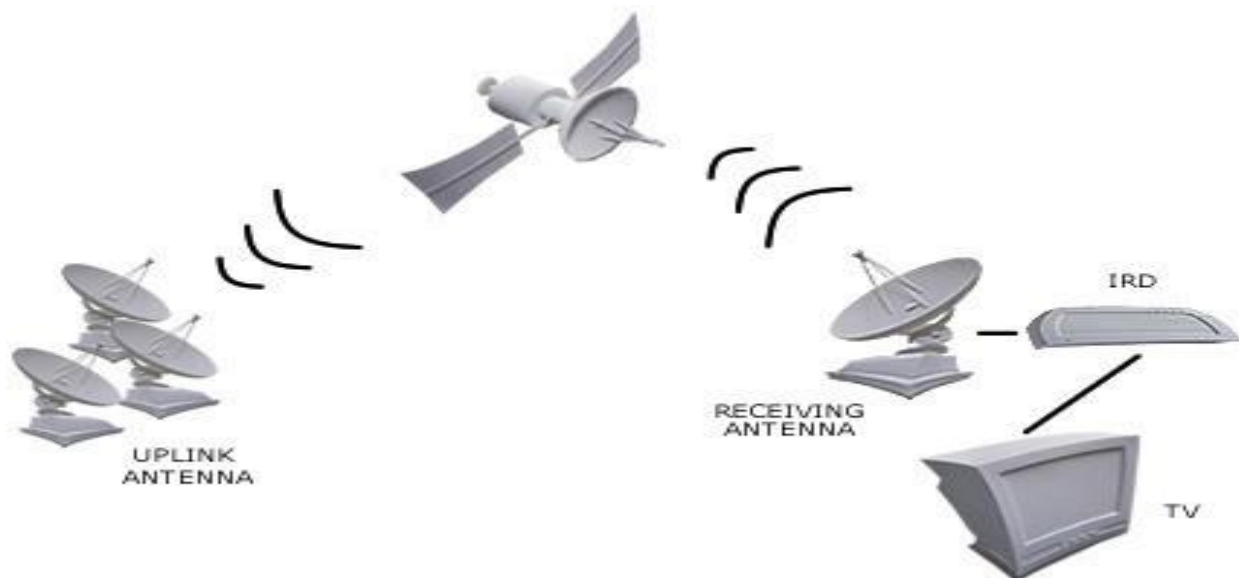


## Conditional Access System

A Conditional Access System, or CAS, is a type of system used in Internet and television broadcasts in order to restrict unauthorized users from accessing channels or services that they have not paid for and allow subscribers who have paid for services to access the specific services they purchased. Conditional Access Systems are most commonly referred to as "Pay-Per-View" services and are often used to restrict television channels.

### How Conditional Access Systems Work

Conditional Access Systems work by scrambling data that is received by a network's satellites. While the data itself is freely broadcasted from land-based television transmitters to orbital satellites and then back to the user's receiver box, the Conditional Access System scrambles the received data before it reaches the user's television set by using a number of encryption methods. When a user has purchased a specific service or group of channels, the Conditional Access System unscrambles the data relating to that service



or group of channels and allows the user to view the data instantaneously.

### Applications

While Conditional Access Systems are commonly used for Pay-Per-View applications, they are also often used to restrict Internet and telephone services from subscribers who have not purchased them. For example, while data is constantly being passed through a coaxial cable provided by a cable company, the data is encrypted in order to prevent it from reaching the user's modem. When the user activates his/her modem by purchasing the service, the modem is able to unscramble the data and provide that service to the user.

### **Advantages**

Conditional Access Systems are advantageous because they are able to prevent unauthorized users from accessing data they have not purchased without interfering with subscribers who have purchased service. Conditional Access Systems are also advantageous because they are seamless and work without the user's knowledge.

**Source:** <http://www.tech-faq.com/conditional-access-system.html>