



**Single Cable Bypass Switch**

## **FEATURES**

- **Facilitate VCR/cable-ready TV interface**
- **Terminal-powered**
- **Remote controllable**
- **Easy to install**

Motorola offers a dual cable switch and two RF interface switches that provide additional subscriber conveniences often requested by consumers around the country. Each switch attaches neatly to the "Cable-In" port of any IMPULSE® 7000 Series and most STARCOT® VI terminals. Either switch can be easily installed in the field by the subscriber or the service representative without opening the terminal. Since the switches are powered by the terminal (via the "cable-in" port), no additional electrical connections are required. The A/B buttons on the terminal keypad or hand-held remote control unit operate the switches. Here's what each interface switch can do:

### **Single Cable Bypass Switch** **(Model RF-BYPASS)**

The most popular use of this switch is to enable a subscriber to watch a basic channel or a trapped premium channel while using his VCR to record a scrambled premium channel. This becomes possible because this interface device splits the incoming signal and feeds it to both the terminal and to the "B" side of the switch. Without the RF bypass switch, if the cable feeds the converter first, then the subscriber can only record the channel he is watching. As a result, many subscribers attach the cable to the VCR first and, while this permits the viewing of one channel while recording another, it makes it impossible to record a scrambled premium channel. The RF bypass overcomes this disadvantage, allowing the subscriber two choices besides recording the channel he is watching:

- Watch a clear (or trapped) channel and record a scrambled premium channel.
- Watch a clear (or trapped) channel and record another clear (or trapped) channel.

A second application for the RF bypass switch is especially appealing to those subscribers who want to continue using the remote control units they purchased with their cable-ready television sets after they have a CATV terminal installed in their home to obtain a new premium service. By simply pushing the A/B button on their converter, they will be able to tune all clear or authorized trapped channels with their cable-ready remote control television sets. Pushing the A/B button again returns control through the terminal so that they can watch scrambled premium channels. The RF bypass switch consists of a self-contained shielded splitter and switch in a three-port configuration.



**Dual Source RF Switch**

**Dual Source RF Switch**  
**(Model A/B-Out)**

This switch addresses the FCC "must-carry" antenna input requirement, yet it also has additional desirable applications. In its primary function, the subscriber is able to switch back and forth between cable and antenna reception simply by pushing the A/B button. Of course, when the A/B switch is positioned for reception via antenna, the subscriber changes channels by using the tuner on the TV set or its remote control. When the A/B button is positioned for reception via cable, the terminal tuner is used. Some subscribers may wish to connect the switch to their computer instead of the TV antenna so that they can switch between use of their TV set from its normal video reception application to that of a computer monitor. In addition to handling the dual input source problem, the A/B-OUT switch will also allow remote control switching between the viewing terminal and the VCR in a dual descrambler installation. This capability is important for systems that scramble a large percentage of their channels. An external splitter is required, however, in addition to the second terminal (to assure that neither terminal loses its data stream). This configuration enables the subscriber to have a full range of choices including:

- Watch one scrambled premium channel and record another scrambled premium channel.
- Watch one clear (or trapped) channel and record a scrambled premium channel.
- Watch a clear (or trapped) channel and record a second clear (or trapped) channel.
- Watch a scrambled premium channel and record a clear (or trapped) channel.

The "A/B-Out" switch consists of a self-contained shielded switch in a four port configuration.

**Specifications**

**Analog Set-Top Terminals Consumer Interface Switches[Accessories]**

|                       | <b>RF BYPASS SWITCH</b>   | <b>A/B OUT SWITCH</b> |
|-----------------------|---------------------------|-----------------------|
| <b>Isolation</b>      | 80 dB Min., 90 dB         | 80 dB Min., 90 dB     |
|                       | Typical @ 50-220 MHz      | Typical @ 50-220 MHz  |
|                       | 60 dB Min., 70 dB         | 60 dB Min., 70 dB     |
|                       | Typical @ 220-550 MHz     | Typical @ 220-550 MHz |
| <b>Insertion Loss</b> | 5 dB Max.                 |                       |
|                       | 4 dB Typical @ 50-550 MHz |                       |