

# Vantage Digital

## A Switch for Any Application

**Vantage Digital, a company** based in Karlsruhe, Germany, is a supplier of digital satellite TV products. Their product line consists of satellite antennas, receivers, switches and amplifiers along with assorted installation accessories that include cable and multifeed assemblies. Their assortment of switches includes everything from a simple DiSEqC A/B switch to an 8-input/1-output DiSEqC switch. Vantage also has quite an assortment of amplifier and signal distribution products. They were kind enough to provide us with an assortment of their switch and amplifier products so that we could take a closer look at them.



**VT-DS 2/1 PL**  
2-input/1-output switch

For this issue of TELE-satellite we will focus our efforts on their line of switch products. The next issue will concentrate on their signal amplifier and distribution products. The switch products we received for testing included both indoor and outdoor pieces.

### VT-DS 2/1 PL

The first switch we looked at was a simple DiSEqC A/B switch. This simple dual input/single output switch comes fully enclosed in a weatherproof gray-colored plastic housing. The two inputs can be connected, for example, to the LNB's on two different satellite dishes or it can be used with the Ku-band and C-band LNB outputs of a single dish. In either way, the result is a single cable to the receiver with the receiver controlling the switch via its integrated DiSEqC protocol.



**DS 2/1 PL switch connected to the C and Ku-band LNB's of a 10-foot dish**

The weatherproof housing lets you install the switch as close as possible to the antenna without having to worry if it gets wet or not. This minimizes the amount of cabling needed

for the installation. Included with the switch were a set of three protective sleeves that slide over the "F" connectors once the cables are connected to the switch and are designed to keep the "F" connectors on the switch free from dirt and moisture. Keep in mind that these protective sleeves need to be inserted on the raw coax cable before any "F" connectors are mated to the cable.

We connected the switch to a 76cm dish pointed to Intelsat Americas 5 and a 1.2-meter dish pointed at Hispasat. The receiver controlled the switch flawlessly. There was a negligible delay when switching from one input to the other.

### VT-DS 4/1 PL

The next switch we looked at was the VT-DS 4/1 PL. Like the first switch, this model also comes enclosed in a weatherproof gray-colored plastic housing. Unlike the first switch, this housing is designed in such a way that no protective sleeves are needed for the "F" connectors. One side of the housing is exposed providing access to the connectors on the switch that are recessed inside the open side of the housing. When properly installed, this exposed side is pointing down to the ground preventing any moisture from reaching the connectors.

The DS 4/1 PL switches between the signals from four different satellite antennas or four LNB's on a multifeed antenna. The satellite receiver selects the desired switch input by sending the proper signals to the switch via the coax cable. For our tests we connected this switch to four fixed antennas, two of which were Ku-band with the other two being C-band. The four antennas were pointed to Telstar 12 (90cm Ku-band), Hispasat (1.2-meter Ku-band), Intelsat 805



**VT-DS 4/1 PL**  
4-input/1-output switch



**DS 4/1 PL switch connected to the same 10-foot dish plus two additional antennas**



Vantage's assortment of switches

(1.6-meter C-band) and Galaxy 11 (3.0-meter C-band). The Vantage VT-DS 4/1 PL easily switched between the four inputs. There was also hardly any noticeable delay when switching from one input to another.

## VT-DS 8/1

The next switch that was put under the microscope was the VT-DS 8/1. This switch is far more unique than the others we have looked at so far in that it can handle up to eight different inputs and route them to a single output. It is not weatherproof like the first two models so if this switch is to be installed outdoors, you must make certain that it is properly protected from the elements.

This is not your normal everyday switch. The DiSEqC 1.2 logo printed on the label clearly points this out. DiSEqC 1.2 is normally associated with antenna motors but in this case it is used to control this switch. From the receiver's point of view, this switch looks like an antenna motor and this simply means that each of the eight inputs will be assigned its own "motor position" in the receiver's antenna motor menu.

We connected this switch to our antenna farm using the same satellites as with the 4/1 switch above plus adding antennas pointed at Intelsat Americas 5 (76cm Ku-band) and Nimiq 1/2 (20-inch dual feed Ku-band). Don't forget, the receiver that you use must be DiSEqC 1.2 compatible in order to fully use this switch but since most receivers on the market today come incorporated with at least DiSEqC 1.2, this should really not be a problem.

We checked out the switch using the receiver's DiSEqC 1.2 function. The first satellite is set up by "moving" the antenna using the receiver's antenna menu until the signal

formed. When switching from one input to the other, the switch instantly "moved" between inputs and behaved much like a standard DiSEqC switch. There was no delay in switching from one satellite to the other as would normally be experienced with a motor moving the dish from one satellite to another. The switch performed flawlessly while switching back and forth between all of its eight inputs.



VT-DS 8/1 8-input/1-output switch

strength is at maximum for the first satellite. Store the position and repeat the procedure for the remaining seven inputs keeping in mind that the entire set up procedure may take some time until all the satellite positions have been "found". It is also possible to control the eight switch inputs with the DiSEqC 1.1 protocol. Even DiSEqC 1.0 would work but in this case only the first four inputs could be used.

Once all the positions have been stored, we wanted to see how well the switch per-

## Conclusion

Vantage offers a variety of very reliable switches for almost any application. Whether you only have two satellite antennas, two LNB's on one antenna, or if you have as many as eight antennas scattered around your backyard, Vantage has the correct switch for your needs.



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TECHNICAL DATA			
Manufacturer	Vantage Digital, Karlsruhe, Germany		
Fax	+49-721-96-14-17-9		
E-mail	info@vantage-digital.com		
Model	VT-DS 2/1 PL	VT-DS 4/1 PL	VT-DS 8/1
Function	A/B Switch	4-input/1-output	8-input/1-output
Frequency Range	5-2300 MHz	5-2300 MHz	950-2300 MHz
Insertion Loss	3 dB typ.	8 dB (5-862 MHz) 5 dB (950-2300 MHz)	5 dB typ.
Isolation	35 dB typ.	30 dB typ.	30 dB typ.
Power Consumption	30 mA	30 mA	50 mA max