

NEOTION 601 DVR

The Versatile Receiver More than a Digital Video Recorder

TELE-satellite has in the past presented several receivers from the French manufacturer Neotion. The latest model, which was seen for the first time in May on the Neotion stand at the MediaCast Exhibition in London, is the Neotion Box NEOTIONbox 601. It is the logical successor to the NB501 series with Personal Digital Recording functions and an additional external Hard Disk.

One of the main novelties, as the suffix ,DVR' reveals, is that this receiver is equipped with a hard disk that can be used to record programme content as it arrives from the satellite. For the moment this box is not on the market but we received a prototype at our test labs so that we could have a closer look at it just in time for the present edition of this magazine. Since the box we tested was a prototype, all its' electronics were packed into the same grey coloured case as the 501, but

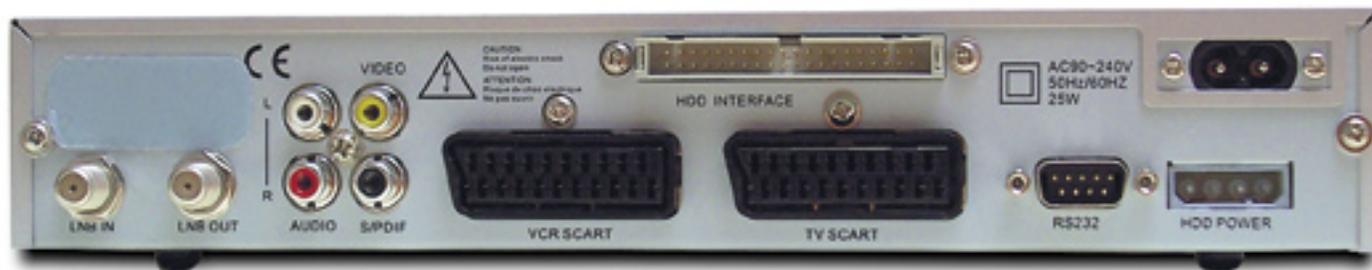
Neotion told us that the commercial model will have a different silver coloured cabinet. The contents of the package include an external hard disk case and the required cables (IDE/PATA type data cable and power cable) to connect the hard disk to the receiver.

The hard disk drive (HDD) is not supplied by Neotion; the user will have to purchase it separately. The receiver itself is rather small in size being 28 x 17 x 4 cm and you will have

to allow some additional space on your TV-rack for the external hard disk case. There are no buttons at all on the front panel, just a four digit display in the centre showing the actual channel or, when in standby mode, the time of day or, the word "MAIL" in case you have activated the Infocast mail feature and you have received a message. On the right, a card slot indicates the possible existence of a CI card reader.

Since this receiver has been designed as a modular concept, several different configurations are offered to the user. The model we tested was an NB601.S DVR NC-SC which features a smart card reader for the Neotion-crypt system, Infocast mail and unlimited free access rights up to 2010 for the three Full-X channels. The connections panel at the rear of this receiver offers a classical selection of possibilities: The IF signal from the LNB is looped through; there are two Scart connectors for TV and VCR; there is the good old RS 232 serial interface; four RCA connectors for video and analogue audio output.





There are, as well as a digital sound output which should nowadays be a standard for all satellite receivers, specific to this receiver one IDE/PATA interface and a power supply connector for the hard disk.

The overall workmanship gave us a good impression. The ergonomic remote control allows access to all the numerous functions of this receiver and it should be carefully kept within reach since it is the only means of controlling the Neotion 601 DVR. The well conceived User's Guide explains in detail all the steps for setting up and using the receiver with the aid of many pictures and diagrams.

Everyday Use

When you turn on this receiver for the first time, a screen will ask you to choose between the "normal" or "administrator" mode. Neotion recommends starting in normal mode. You will be able to change these modes later in the menus. Next step will be to choose the language in which you will communicate with the receiver. There is a choice of 15 possible languages to suit almost every user.

On this same page you can also choose a default channel to which the receiver will tune in every time you power it up as well as the type of TV screen and image format. The next page will ask for the time zone with a choice very similar to the one in MS Windows. The following page is all about the antenna setup. The options range from starting with a single LNB on a fixed dish and reach up to 16 different antenna configurations with individual choices for the LNB's. Intermediate configurations which can be stored for each of the 16 possible antenna types include the LNB type with the ability to adjust the LOF frequencies, whether it's a fixed antenna, with a DiSEqC 1.0 switch or motorized (DiSEqC 1.2). The more convenient DiSEqC 1.3 or USALS protocol is unfortunately not supported but if the motor has been preconfigured, the receiver will recognize these positions.

If the user needs to align his antenna, a

help screen is available to assist in calculating the elevation and azimuth values for a specific satellite, which logically should be the southernmost according to his longitude and latitude position. Once the parameters for the antenna are set, you will be able to launch the channel scan. It can be done for one satellite at a time or for all the pre-programmed satellites within the limits of „visible" satellites which, for a motorized antenna, have to be set in the previous menu. A scan for individual transponders or networks is also possible.

New satellites or transponders can be introduced manually, but the pre-programmed list was perfectly up to date. Additional options for the search are: FTA channels only; sorted by scrambled and not scrambled; or not yet memorized transponders, this again for all satellites or only on a specific satellite. Unwanted satellites or transponders as well as individual channels can be deleted to free up space on the list of five thousand possible channels. The scan itself is not one of the fastest compared to other receivers, but with a time of about ten minutes on an eighty transponder satellite, it is quite acceptable and it finds all the available channels. Some data channels are mixed into the final list of TV or radio stations. The more experienced users will appreciate the ability to modify or introduce new video, audio and PCR PIDs. During the scan process, the screen shows the list of the memorized TV and radio stations and, in a separate window, the satellite name and the transponder being scanned with its frequency and symbol rates, the signal strength and quality, and the achieved percentage of the scan. At any moment, it is possible to stop and save this process or to cancel it.

After all the desired satellites have been memorized, you will finish up with an almost endless list of channels and some organisation will certainly be needed. The menu page named "Channel Manager" can be called up for this chore. There will certainly be hundreds of channels and radio stations that you would want to delete and this can either be done one by one or by the whole transponder.

Each time, deletion takes at least 5 steps on the remote control.

Under this menu, you will also have the options to lock/unlock, move and rename each channel. The screen is divided into two windows, one displaying all the channels on the left and the other showing one of the eight possible favourite lists on the right. Another window underneath shows information about the name, the satellite, the provider, the transponder and the frequency of the active channel. A small insert on the right shows the content of the selected channel.

Switching between channels takes about 0.5sec which is quite fast. The Info button on the remote control displays the time, the channel's name and satellite when pressed once, and on a second push a window comes up with all relevant information about the channel including the strength and quality of the signal. Here, the video, audio and PCR PIDs can be modified. The EPG is nicely designed and shows the channel content in an insert, a list of the memorized channels which can be scrolled up or down, and the programming information about the highlighted channel.

The Hard Disk

As we mentioned earlier, the hard disk for the NEOTIONbox 601 DVR is external. Any 3.5in. hard disk with up to 200Gb can be used. To make an immediate recording of the current programme all you need to do is to press the REC button on the remote control once. The set of six dedicated buttons on the remote control allows for all the standard functions of a recorder.

For more advanced functions you will need to call up the appropriate pages on the menu. There you will have the options to schedule recordings either via the EPG or inter-actively with the ability to introduce manually all the parameters ranging over the channel name, time, duration etc. Furthermore, you can consult the list of programmed recordings and set margins to a recording to allow for variations in the start and/or end times of a programme.

Expert conclusion



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A versatile and easy to use digital video receiver and recorder with many features, which can be used by the whole family thanks to the option of being able to set up different user profiles such as “administrator” or “normal” user and avoid unwanted modifications of the set-up or access to channels with inappropriate content. And, it’s currently the only PVR priced at less than 150 euros.

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An optical digital audio output and DiSEqC 1.3 (USALS) would have been a plus.

A receiver with a hard disk should not lack the time shift function and Neotion has made it particularly useful on this box. A phone call! Press the PAUSE button to stop the TV program you are watching. Press the PLAY button to watch it again later from the exact moment where you stopped it. For the future, Neotion announces an SMS Record Service where the user will be able to start a recording of a TV programme from his mobile phone. If you are in your office or in your car just use your mobile phone or your PC to send an SMS to your NEOTIONbox 601 DVR and the receiver will start recording the TV programme automatically even if you are not there.

The next menu page is all about managing your recordings. Here you will have the options not only to move, rename or sort your recordings but to edit them as well. Unwanted parts can be cut out very easily. The same applies for audio recordings. Another interesting feature is the ability to store snapshots of the current programme and set up an album, e.g. of your favourite actors, on the hard disk. A future Hard Disk Drive housing called “MediaShare” will enable you to connect the Hard Disk Drive via a USB2 interface to the NB601 DVR and record broadcasts onto this HDD. Then, you can connect to hard drive to a PC and transfer this content (video audio and images) to the PC from whence you could burn it onto DVD or CD.

In reverse, MP3 files stored in the PC can be transferred to this „MediaShare” HDD box and then played at random or classified by themes through the NEOTIONbox 601 DVR acting as a Multimedia Jukebox on your TV set and sound system.

- Channel Manager**
- Antenna Setup**
- Programme**
- System settings**
- Installation**
- Schedule a recording**

Infocast

This is the name of a service offered free of charge by Neotion and www.infocast-services.com to receive mails, photos and SMS messages on the receiver via the Astra 19.2°E or Hotbird satellites. A dedicated menu page allows you to activate this service and obtain a ten-digit number to which you need to add the suffix A (for Astra) or H (for Hotbird) depending on which satellite you wish to use to receive your messages.

Your friends can then use this number along with the country code for France to send you messages by SMS or through www.infocast-mail.com which you will receive once your receiver is put in standby mode on the appropriate satellite. This same Infocast service allows you to get updates for the receiver’s software as well.



TECHNICAL DATA

Manufacturer	NEOTION SAS, Voie Atlas, ZI Athelia 3, F-13705 La Ciotat Cedex, France
Fax	+33-4-42.98.07.71
Email	business@neotion.fr
Model	NEOTIONbox 601 DVR
Channel Memory	5000
Symbol rate	2-45 Ms/sec
DiSEqC	1.0, 1.2
Programmable 0/12 V	No
Video output	Scart, RCA
Digital Audio Output	RCA
Colour system	PAL, NTSC
S-VHS Output	No
SCPC compatible	Yes
Power supply	90 – 250 V AC 50Hz / 60 Hz
Power Consumption	40 W + energy saving sleep mode