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THE LATEST ON DIGIGRAM

One of the main characteristics of cards is the number of input and output channels. Digigram has two families of cards for using the Radio-Assist range: single channel and multiple channel (up to four stereo channels).

Two new cards have been added to the stereo card family:

- PCX 924, which replaces PCX 11, PCX11+ and PCX 9. 1 stereo output/1 stereo input in analog+digital
- PCX 22, which replaces PCX 20 and 9 Play Only*. 1 stereo output in analog+digital

This simplification of the Digigram range actually means the cards have more complete functions with better quality converters and a lower sales price.

The PCX 11 has only analog asymmetrical inputs/outputs, and the PCX 11+ has analog symmetrical inputs/outputs (with digital inputs/outputs on option). With the PCX 924 (enhanced PCX 9), the quality of the PCX 9 (analog+digital symmetrical inputs/outputs) is combined with competitive pricing.

As for the PCX 20, it was perfect for broadcast-only functions at reasonable cost. Unfortunately, it was only equipped for analog asymmetrical outputs. So when an installation required symmetrical and/or digital outputs, the only solution was to change to a PCX 9 Play Only* card which was much more expensive. The PCX 22 has now made up for this shortcoming with its combination of analog+digital symmetrical outputs, not forgetting its major feature: the capacity to synchronise digital output on a reference digital clock (AES3 sync input).

Three new cards have also been added to the multiple channel family:

- PCX 820 np: 1 analog+digital stereo input/4 analog stereo outputs
- PCX 821 np: 1 digital stereo input/4 digital stereo outputs
- PCX 440 np: 2 stereo inputs/2 analog+digital stereo outputs

The suffix np means "New Performance". Unlike the cards above, these cards are not a replacement for others but are an addition to the Digigram range, with much higher processing potential like the capacity to play MPEG Layer 3.

All these cards are already validated for the Radio-Assist range and have proved to be a great improvement.

HOW TO CHOOSE AN AUDIO CARD

Apart from the requisite number of inputs/outputs, a card should also be chosen for its processing power. Also, cards do not have the same performance level depending on the type of sound data they process. Managing linear sound data uses greater resources than managing compacted sound data (MPEG), so higher throughput is required when linear data transits via the audio card.

Furthermore, when a card is being used for recording and broadcasting at the same time, lower capacity is to be expected than for broadcast alone. The main parameter affected by this drop in performance is the number of tracks available in the Radio-Assist Multi-track tab.

We can illustrate this with the PCX 9. When it is restoring, it can play up to 6 tracks in MPEG with effects like fast play. But if recording is going on at the same time, the number of tracks drops to 4, or even 2 in linear.

This restriction of track numbers only occurs in the Multi-track tab. It has no effect on generating masters from virtual items, however many tracks are used.

Therefore, for production applications requiring a large number of tracks (more than 4), it is advisable to use a card with high processing power such as the PCX 440.

For all general purposes (up to 4 tracks) PCX 924 and PCX 22 are quite adequate.

Lastly, for the multiple channel cards, PCX 820 np, PCX 821 np and PCX 440 np, the processing power must be spread evenly over all channels. Otherwise, one of them could use up practically all the resources. For instance, in the same conditions as the previous example, PCX 820 np can manage up to 15 tracks. But if 14 tracks are used on the first channel and 1 on the second, the two remaining channels will be of no use.

Radio-Assist manages this distribution by setting each card individually.