

## HIGHER PRODUCTION CAPACITY

A new production line of the latest generation has just been acquired. This will bring our SMD production capacity from 9000 components per hour up to 27000. The set is composed of a de-stacker to automatically charge the boards into the machine, a serigraphy machine and a pick & place. In addition the system includes a number of conveyors to carry the boards from one machine to the next without any manual operation.

This major investment has been necessary so that the boards with a large number of components can be assembled in house. Some of the new products have up to 1400 components in a single board.

This is another step forward towards higher production quality.

## PRODIG-1 SATELLITE HUNTER...A NEW CONCEPT ON TEST EQUIPMENT

### COST EFFICIENT, TIME SAVING

The arrival of Digital TV boosted the installation of Direct To Home satellite TV systems. The continuous release of new packages or 'bouquets' and services such as Internet are helping to keep on with the demand. Furthermore, operators are putting together affordable connection fees and subsidised boxes. Within this scope the target number of new subscribers per day becomes critical and there is a pressure to make installations as fast and efficiently as possible.

On the other hand, modern satellite services and ever growing density of signals may require tests other than those available in classic satellite finders and meters. There is a need to check the quality of the digital signal. There is a need to adjust the skew. There is a need to discern among different satellites.

### THE NON MEASURING APPROACH

So there is a demand for an installation tool that might allow making the job fast and including all necessary measurements to secure quality of reception. But, measurements are information that needs to be weighted with known references. This is time consuming and requires a technical knowledge to analyse data that not all can provide.

The **PRODIG-1** Satellite Hunter is a non-measuring instrument designed to secure the maximum number of installations with top possible quality regardless of the technical knowledge of the installer.

It does not measure signal level, it does not measure Bit Error Rate, it does not measure carrier to noise... Well, it does not display all those measurements to the installer though it makes all measuring and processes them internally. The **PRODIG-1** is giving to the installer just the information required to make the job as easy as possible.

In the **PRODIG-1** the ultimate measurement to determinate the signal quality is the Bit Energy to Noise ratio which is directly equivalent to Bit Error Rate. The instrument will display 'LOCK' when the



BER is  $<2 \times 10^{-4}$  (equivalent to good quality) and 'lock' when the BER is  $>2 \times 10^{-4}$  (equivalent to poor quality). This threshold can be reprogrammed to better adapt to the specific requirements.


### SELECTIVE IDENTIFICATION

The instrument is valid both as a tool to install a specific service or satellite and as a general installation tool for a variety of services or satellites. This is determined by the programming of the instrument depending on country or geographic area.

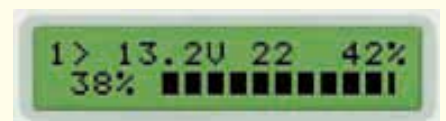
The **PRODIG-1** has been specially designed to stand rough working conditions and to have long battery life and short charging times.




### EASY OPERATION

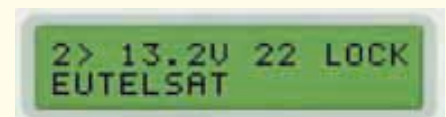
-  1.-Detection of satellite.


It works as a wide band detector indicating power of all satellites present on the trajectory of the antenna.



-  2.- Identification.

The instrument tunes to preset test points, reads the Transport Stream and displays the identification of the service on the display. It allows identification of one specific service or satellite.



-  3.- Optimisation.

Based on measurements made on the demodulated signal user can optimise the skew and fine-tune the dish.

