



## ND600 Data Manipulation Package (47-0054)

The ND600 Data Manipulation Package provides the ND600 System with the following capabilities:

Addition of a constant to, or subtraction of a constant from the data spectrum, integration, differentiation, data transfer, data smooth, square root calculation, relative error calculation, and spectrum compression.

Any of the data manipulation functions can be assigned to any of the "F" status parameters, by entering its select code (20X). When any one of the functions is assigned to a particular "F" parameter, each of the other functions can be sequentially selected for that parameter by depressing the NXTV pushbutton.

### ADD Function (200)

Adds a constant to, or subtracts a constant from (i.e., adds a negative constant to) each channel in the current display group.

### INTEG Function (201)

Integrates the area defined by the left and right markers in the current display group and stores the integral curve in the marker defined area.

### DIFF Function (202)

Differentiates the area defined by the left and right markers in the current display group and stores the differential curve in the marker defined area.

### XFER Function (203)

Transfers the data spectrum from any specified group into the current display group.

### SMOOTH Function (204)

Performs a five-point coefficient smooth on the data spectrum in the current display group.

### SQRT Function (205)

Calculates the square root of the data spectrum in the current display group.

### REL ERR Function (206)

Calculates the relative counting error of the data spectrum in the current display group.

### COMPRESS Function (207)

Compresses the data spectrum in the current display group by a factor of two.

All the data manipulation functions except ADD and XFER can be performed either by depressing the corresponding "F" pushbutton or as steps in an auto analysis sequence. The ADD and XFER Functions require entry of a value and therefore cannot be performed during auto analysis. The ADD function requires entry of a positive or negative (—) constant. The XFER function requires entry of the source group number. Functions selected as steps in an auto analysis sequence are performed on the data spectrum in the current acquisition group rather than the current display group.

THE REL ERR function can also be performed on the data spectrum in any specified group by entering the desired group number and then depressing the corresponding "F" pushbutton. The data spectrum in the specified group is first transferred to the current display group and then the REL ERR function is performed.

The ND600 Data Manipulation package consists of two 512 x 8 EPROM's (one firmware pair) which require the Firmware Option board (70-2434) for installation.

