RECEIVER

The UTEM 3 receiver is functionally the same as the UTEM 2 receiver
in routine operation. It has many added switch selectable options
for special applications and the convenience of experienced
operators who want to optimize survey efficiency. The front panel i
substantially the same as that of UTEM 2, except for the elimina-
tion of a few controls. The added options can be set by alternate
use of the same controls as indicated by a second function mask
in the receiver cover. The new features added are the result of
more than 2000 line-km of surveying with the UTEM 2 prototype.

The most visible changes from UTEM 2 are reductions in size, weight
and power consumption, and a more sturdy, field worthy construc-
tion.

In common with UTEM 2, the UTEM 3 receiver is a digital stac-
king instrument, which automatically "prunes" out noisy cycles
and records the data with a built in low power digital cassette
recorder. The recording media are inexpensive digital grade
cassettes capable of storing more than two weeks of data. A
6 digit label lets the operator set a recorded label pointing
to the position of the survey station (line number and station
number). All relevant switch settings such as gains, type of
input, etc. are also recorded with the ten channel measurements.
These settings are also internally protected against any change
during stacking until they are recorded or manually rejected. Audio
tones inform the operator of the status of the receiver (idle,
stacking, recording) and warns him of any operating errors. An
analog meter is provided for monitoring the data precision, but
it is not meant for note taking since this is handled by the
tape recorder. As the stacking progresses, the continuous average
of any channel can be monitored. A steady reading indicates that
enough averaging was done. The operator can stop the stacking manu-
ally or set automatic averaging limits. Data can be recorded
automatically after stacking, or by a manual control after ins-
pection. The receiver can also be set to do a selectable number
of stacking/recording cycles automatically at timed intervals
if required. The meter can also be used for monitoring any receiver