



Applications:

- The patent pending Swift dual mode automatic multi-electrode system can be used in dual mode or single mode for resistivity and IP surveys.
- The Swift system can be programmed by the user to perform any type of resistivity survey.
- The Swift electrode addresses can easily be reprogrammed in the field.
- Measurement procedure is simple. First set out a number of electrodes at even intervals, connect the Sting/Swift system, erase the memory, enter the electrode interval into the memory, run a contact resistance test and press the MEA-key to start the measurement.
- The Sting/Swift system is used for resistivity and IP imaging in applications such as groundwater exploration, geotechnical investigations, horizontal drilling, mapping of pollution plumes, cavity detection, archeological and environmental work etc.

SWIFT™ DUAL MODE (PATENT PENDING) AUTOMATIC SMART ELECTRODE SYSTEM

The Swift Dual Mode smart electrode system is designed for efficient acquisition of large amounts of resistivity data when performing resistivity imaging surveys. A complete system consists of: one interface box and up to 254 electrode switches (smart electrodes) placed on electrode stakes and connected by a multi-lead cable to the central interface unit. The switches are capable of connecting any combination of the Sting terminals (A, B, M, N) to each electrode.

The Dual Mode electrodes allow an automatic measurement to be performed using stainless steel stakes when the electrode is a current electrode and automatically switching to the non-polarizable electrodes, placed near the stainless steel stake, for the potential measurement. When high resolution IP data is required this is the preferred method to perform an automatic IP survey. However, if the highest resolution IP data is not required the Dual Mode function can be disabled so that both current and potential are measured through the stainless steel stake.

The Swift system is controlled directly by the Sting R1 or Sting R1 IP memory resistivity meter. The Sting can automatically run a complete dipole-dipole survey or any operator programmed array (i.e. Schlumberger, Wenner, pole-pole, pole-dipole, square array etc.). Since the Sting can be programmed to perform any electrode array measurement, there is no need to bring a computer to the field. However, optionally a computer can be connected to the Sting/Swift system.

Measurement procedure is simple. First set out a number of electrodes at even intervals and connect the Sting/Swift system, erase the memory, enter the electrode interval into the memory, run a contact resistance test and then press the MEA-key to start the automatic measurement.

TECHNICAL SPECIFICATION

Smart electrode dimensions	Ø34x145 mm (Ø1.3"x5.7")
case	Stainless steel
weight	0.25 kg (9 oz)
Cable type	6-wire cable. A, B, M, N and 2 control lines
Number of electrodes	A maximum number of 254 Dual Mode smart electrodes can simultaneously be connected and controlled in one array
Electrode control	Each smart electrode is individually addressable and can be A, B, M or N at any time
Electrode addresses	The electrode addresses can easily be re-programmed by software
Electrode response time	33 ms/switch
Array type	Dipole-dipole built in, any other array can easily be programmed by the user
Interface box dimension	260x160x140 (10.23"x6.29"x5.5")
Interface weight	4.3 kg (9.5 lb.)
Power supply	Internal 12 V NiCd rechargeable battery
Battery charger	Standard AGI 12 V charger also used for the Sting (not supplied with the system)
Operating time	Typically 80 hours per full charge
Connections:	
Sting measure lines	A, B, M, N cable with labeled banana plugs, 1 meter
Sting control & data	Fixed cable with KPT connector to connect to the Sting, 1 meter
PC control & data	D-sub, 9-pin for standard COM cable
Swift cable	Two 7-pin connectors for Hi and Low cables (male and female)
Charge input	Standard AGI charging connector for 12 V battery
Front panel controls	Power ON/OFF Sting/PC mode

Advanced Geosciences, Inc.

12700 Volente Rd., Austin, Texas 78726, USA
Tel +1 (512) 335-3338 Fax +1 (512) 258-9958
e-mail sales@agiusa.com
web site <http://www.agiusa.com>