

Upgrade Instructions of New Products

❖ Background

Since the electrical prospecting instruments GD-10 and GD-20 of ST Geomatic Co., Ltd. entered the geophysical market in 2014, the performance, reliability and data quality of the equipments have been well approved by new and old customers. During four years, Geomatic products have covered over 30 countries and regions at home and abroad. After the customer requirement investigation conducted by the Marketing Dept. and customer feedbacks collected by the sales and after-sales teams, at the beginning of 2019, our R&D Dept. optimized the weight and waterproof performance of individual accessory and introduced a new upgrade version named GD-V2.4.

❖ Major changes of new products

1. ERT Connector:

- **Before:** Plug-in aviation connector
- **Now:** US military Amphenol joint. The waterproof performance and lifetime are further enhanced.



Connector	Before	Now
Model	V2.3	V2.4
Material	Aluminum alloy aviation self - locking connector	US military Amphenol joint.
Brand	Chinese Aviation connector	US Amphenol
Waterproof Rating	IP66	IP67

2. Cable Leader:

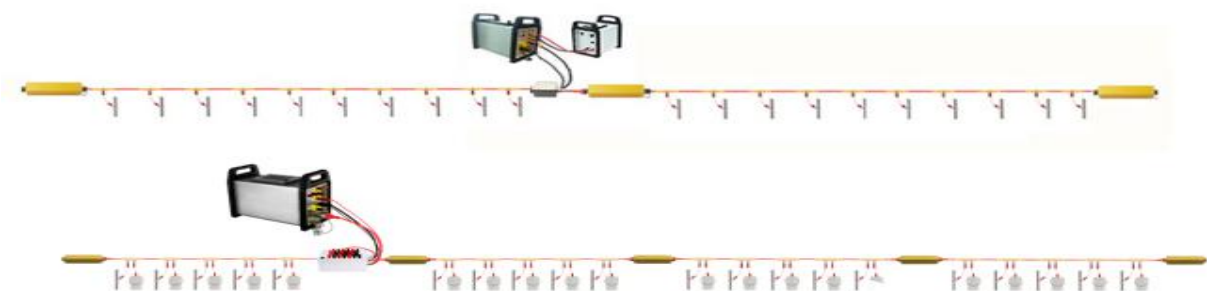
- **Before:** Cable leaders of aluminum alloy cylinder structure
- **Now:** Cable heads of PC square structure, by the technology of ultrasonic waterproofing. The weight of a single cable leader is reduced to 1/3 of the previous one and the waterproof rating is up to IP67.



Cable Leader	Before	Now
Model	V2.3	V2.4
Shell Material	Aluminum alloy	PC material
Brand	Chinese Aviation connector	US Amphenol
Waterproof Rating	IP66	IP67 (ultrasonic waterproofing)

3. ERT Cables

- **Before:** Single take-out ERT cable: 24-single-take-out ERT cable; 20-single-take-out ERT cable
Dual take-out ERT cables: 12-dual-take-out ERT cable; 10-dual-take-out ERT cable.
- **Now:** Single take-out ERT cable: 10-single-take-out ERT cable;
Dual take-out ERT cables: 5-dual-take-out ERT cable.
A single cable becomes thinner, shorter and lighter.



ERT Cable	Before	Now
Model	V2.3	V2.4
Number of Single Take-out	GD-10 ERT cable: 24 single takeouts GD-20 ERT cable: 20 single takeouts	Unified standard: 10 single takeouts
Number of Dual Take-out	GD-10 ERT cable: 12 dual takeouts GD-20 ERT cable: 10 dual takeouts	Unified standard: 5 dual takeouts
Number of Cores	26	19

4. Terminal

- Before: M5 External Terminal
- Now: Sinking Terminal



5. Working Power Supply of Mainframe:

- Before: Only Built-in Battery

The whole mainframe has to be disassembled if the built-in battery breaks down.

- Now: External battery or built-in battery are optional.

It's powered by the external interface, making the future maintenance more convenient.



6. The Accuracy Optimization of Data Acquisition

- Now: The accuracy of deep signals over 1km underground is enhanced by adjusting noise immunity of hardware and optimizing the algorithm of software.

Advantages of New Version:

- The latest version greatly improves the waterproof performance of products in the field and enhances the reliability and lifetime.

- The weight of a single cable leader and ERT cable are reduced, bringing down the difficulty of field operation and improving the working efficiency.
- To further enhance the acquisition accuracy of deep signals by optimizing the hardware and software.

Configuration List of New Version:

Eg. GD-10 Supreme RES/IP ID VES & RES 2D/3D ERT Imaging System (Refer 120 take-out)

No.	Description	Qty	Unit	Warranty	Noted
1	GD-10 Supreme DC RES/IP workstation	1	set	2 years	
2	Geomatic software	1	pcs	1 year	
3	Banana&Banana connecting line	4	pcs		Red/Black 2 each
4	Banana&Alligator clip connecting line	4	pcs		Red/Black 2 each
5	6A Ceramic fuse	5	pcs		
6	USB cable	2	pcs		
7	USB flash disk	1	pcs		
8	Charge/External power line	1	pcs		
9	GD-10 Charger	1	pcs		
10	Charger power line	1	pcs		
11	GD-10 Mainframe flight case	1	pcs		
12	L type cable	1	pcs		Connecting mainframe and cable leaders
13	SR-10 Bi-directional Single-channel cable leader	13	pcs		
14	Cable leader flight case	1	pcs		
15	Multi-electrode cable: CB-10, 10-single-takeout cable, spacing: 10m	12	pcs		Spacing: 5m / 10m
16	Multi-electrode cable pass box	6	pcs		
17	Stainless steel electrode	120	pcs		
18	BP 145/BP-450 power supply	1	set		
19	Charger power line	1	pcs		
20	2.5A Ceramic fuse	5	pcs		
21	Banana clip	2	pcs		
22	Banana&Alligator clip	2	pcs		
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