

- **For seismic surveys: shallow reflection, refraction, and MASW**
- **Systems for 24, 48, and 96-channel seismographs**
- **Compact and lightweight switches**



Geostuff is the world's leading manufacturer of rollalong switches for reflection, refraction, and MASW surveys. Models are available to match small 24-channel seismographs or systems with up to 96 channels. All models are comparatively lightweight, compact, economical, and easy-to-use.

Model RS-96/24, for 24-channel seismographs, can accept inputs from up to 96 geophone stations.

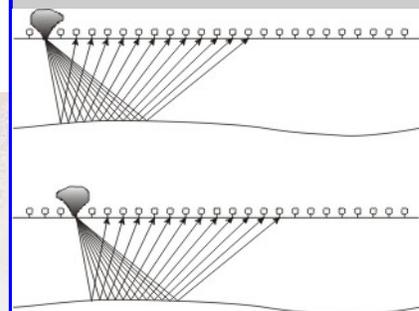
Model RS-120/48, for 48-channel

seismographs, can accept inputs from up to 120 geophone stations. An adjustable gap accommodates split-spread surveys.

Model RS-192/96 is for larger surveys—seismographs up to 96 channels and up to 192 geophone stations with an adjustable gap.



### What is a rollalong switch?

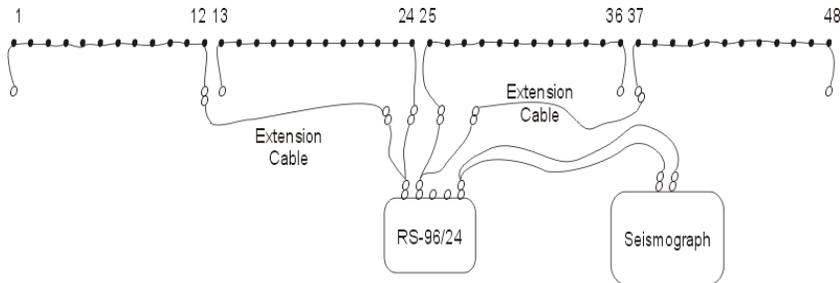


Reflection surveys are conducted by moving the energy source and geophones a short distance along the ground, firing shots, and collecting overlapping sets of data. The process continues linearly until the area of interest is covered.

This laborious procedure is made efficient by placing a larger number of geophones on the ground connected through a rollalong switch to the seismograph. The switch electrically selects groups of geophones, eliminating the need to physically move them each time.

## Cables and geophones

Rollalong surveys require special cables, or combinations of ordinary cables.



Shown here is the most popular configuration for surveys with a 24-channel seismograph and an RS-96/24 rollalong switch. In this case, there are 48 geophones planted in the ground. The geophones are connected to four standard, 12-takeout refraction cables. Usually the user will have at least two already.

The four cables are laid out in a line, with the rollalong switch and seismograph placed at the center. Because

the two outward cables are some distance from the instrument, extension cables are required. And because the rollalong switch has different connec-

tors than either the seismograph or geophone cables, a set of input adapter cables is required plus a cable from the rollalong switch to the seismograph.

So, the total equipment list is:

- 4 12-takeout spread cables
- 2 extension cables
- 48 geophones
- 2 input adapter cables
- 1 output adapter cable
- rollalong switch
- seismograph

The survey begins with the switch in position 1, and geophones 1-24 connected to the seismograph. After the first record is taken, the switch is rotated one position, which disconnects geophone 1 and adds geophone 25 for the next shot. The process continues until geophones 24-47 are connected to the seismograph through the rollalong switch.

In the meantime, as the first set of geophones were dropped off, the assistants will pick up the first cable and the first 12 geophones and position them at the far end of the line. These become geophone stations 49-60. Now, the second cable and geophones 13-24 are moved to the far end of the line becoming stations 61-72. The seismograph and rollalong switch are moved to the new center of the spread, and the process continues as the survey “rolls along” the ground.

This same procedure can also be performed with just 36 geophones, three spread cables, and one extension cable with a little less efficiency.

### Specifications

#### **RS-96/24 Rollalong Switch**

*Seismograph Channels:* Up to 24

*Geophone Stations:* Up to 96

*Input connectors:* Four, 24-channels each, 50-pin D-ribbon connectors.

Adapters required to mate with standard geophone cable connectors.

*Output connector:* 24-channel, 50-pin D-ribbon connector.

*Size:* 6½ x 9½ x 10½ inches (16 x 24 x 27 cm)

*Weight:* 8 lbs (3½ Kg)

#### **RS-120/48 Rollalong Switch**

*Seismograph Channels:* Up to 48

*Geophone Stations:* Up to 120

*Input connectors:* Five, 24-channels each, 50-pin D-ribbon connectors.

Adapters required to mate with standard geophone cable connectors.

*Output connectors:* Two, 24-channels

each, 50-pin D-ribbon connectors.

*Gap:* Adjustable gap, 0 to 12 geophone group intervals, positioned in the center of the spread between channels 24 and 25.

*Size:* 6½ x 9½ x 10½ inches (16 x 24 x 27 cm)

*Weight:* 9 lbs (4 Kg)

#### **RS-192/96 Rollalong Switch**

*Seismograph Channels:* Up to 96

*Geophone Stations:* Up to 192

*Input connectors:* Eight, 24-channels each, 50-pin D-subminiature connectors. Adapters required to mate with standard geophone cable connectors.

*Output connectors:* Four, 24-channels each, 50-pin D-ribbon connectors.

*Gap:* Jumper-selectable gap, 0 to 24 geophone group intervals, positioned in the center of the spread between channels 48 and 49.

*Size:* 19 x 15½ x 7½ inches (48 x 39 x

19 cm)

*Weight:* ~25 Lbs (10 Kg)

#### **Adapter Cables**



Geophone cables and a variety of adapters are available to interface to geophone cables and seismographs. Contact factory for information.

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