

VIKING®

Telecommunication Peripheral Products
Technical Practice

SO-24
Service Observation
Unit
May 12, 1999

Add Silent Observation to Most Phone Systems



The **SO-24** Silent Service Observation unit allows supervisors to monitor, train, motivate, even assist sales personnel, customer service staff or telemarketing representatives without disrupting the activity at their work station.

Stations are monitored silently, however, a supervisor may quickly enter the conversation by dialing a “*.” A cassette recorder output permits selective recording by simply dialing a “9.” Alternatively, all monitored conversations may be recorded.

Each **SO-24** Service Observation unit provides access to 24 analog stations or lines simply by dialing a two-digit code from the supervisory phone. An additional **SO-24** unit may be installed for larger systems.

<http://www.VikingElectronics.com>

[E-mail...Sales@VikingElectronics.com](mailto:Sales@VikingElectronics.com)

Features

- Compatible with analog PABX/KSU stations
- Connect one or two **SO-24**'s to an unused phone system line input or to a dedicated single line phone
- Built-in talk assist
- Cassette recorder output
- Automatic gain control equalizes in and outbound conversation levels
- Add remote observing with a Remote Access Device (Model **RAD-AMP**)
- Configurable for digital phones (requires an extra pair of wires for each phone handset)

Applications

- Telemarketing Centers
- Direct Sales Outlets
- Travel Agencies
- Customer Service Departments
- Airline Employment Services
- Collection Agencies
- Credit Bureaus
- Insurance Companies

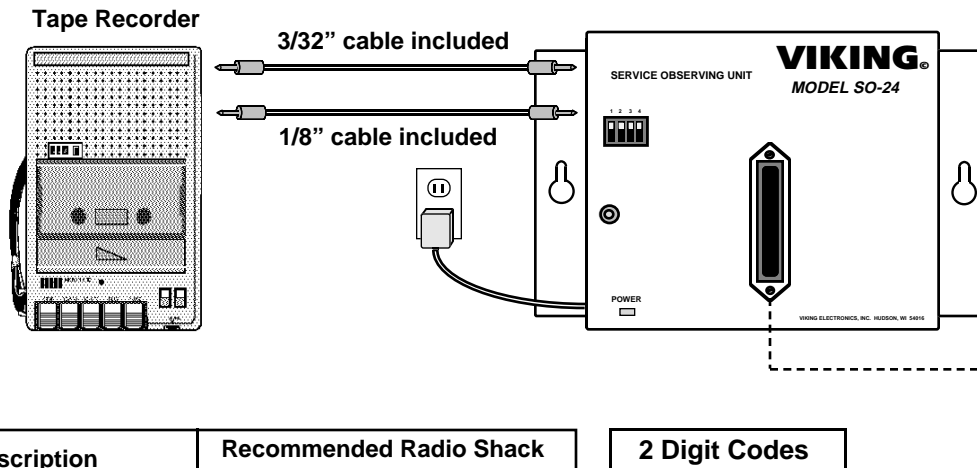
Specifications

Power: 120V AC/12V DC 500mA, UL listed adapter provided
Dimensions: 210mm x 159mm x 45mm (8.25" x 6.25" x 1.75")
Shipping Weight: 1.36 kg (3 lbs)
Environmental: 0° C to 32° C (32° F to 90° F) with 5% to 95% non-condensing humidity
Connections: (1) RJ21X, (1) 3.5mm (1/8") audio jack and cable, (1) 2.5mm (3/32") control jack and cable

Sales...(715) 386 - 8861

Made in the U.S.A.

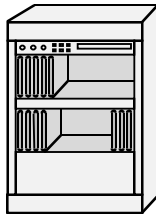
Installation



Description	Recommended Radio Shack Part Numbers
Tape Recorder/Player	14-1115 or 14-1117
DC Adapter for Tape Player	273-1802

2 Digit Codes				
Switch 1 OFF Dial	Switch 1 ON Dial	Line or Station	Pins	Color
10	40	1	26/1	W-BL/BL-W
11	41	2	27/2	W-O/O-W
12	42	3	28/3	W-G/G-W
13	43	4	29/4	W-BN/BN-W
14	44	5	30/5	W-S/S-W
15	45	6	31/6	R-BL/BL-R
16	46	7	32/7	R-O/O-R
17	47	8	33/8	R-G/G-R
20	50	9	34/9	R-BN/BN-R
21	51	10	35/10	R-S/S-R
22	52	11	36/11	BK-BL/BL-BK
23	53	12	37/12	BK-O/O-BK
24	54	13	38/13	BK-GN/GN-BK
25	55	14	39/14	BK-BN/BN-BK
26	56	15	40/15	BK-S/S-BK
27	57	16	41/16	Y-BL/BL-Y
30	60	17	42/17	Y-O/O-Y
31	61	18	43/18	Y-G/G-Y
32	62	19	44/19	Y-BN/BN-Y
33	63	20	45/20	Y-S/S-Y
34	64	21	46/21	V-BL/BL-V
35	65	22	47/22	V-O/O-V
36	66	23	48/23	V-G/G-V
37	67	24	49/24	V-BN/BN-V

PABX/KSU Trunk Port



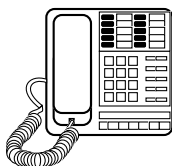
-or-

Observing Phone



-or-

No-KSU Phone



25	50/25	V-S/S-V
----	-------	---------

Observing Port

A. Analog Phones

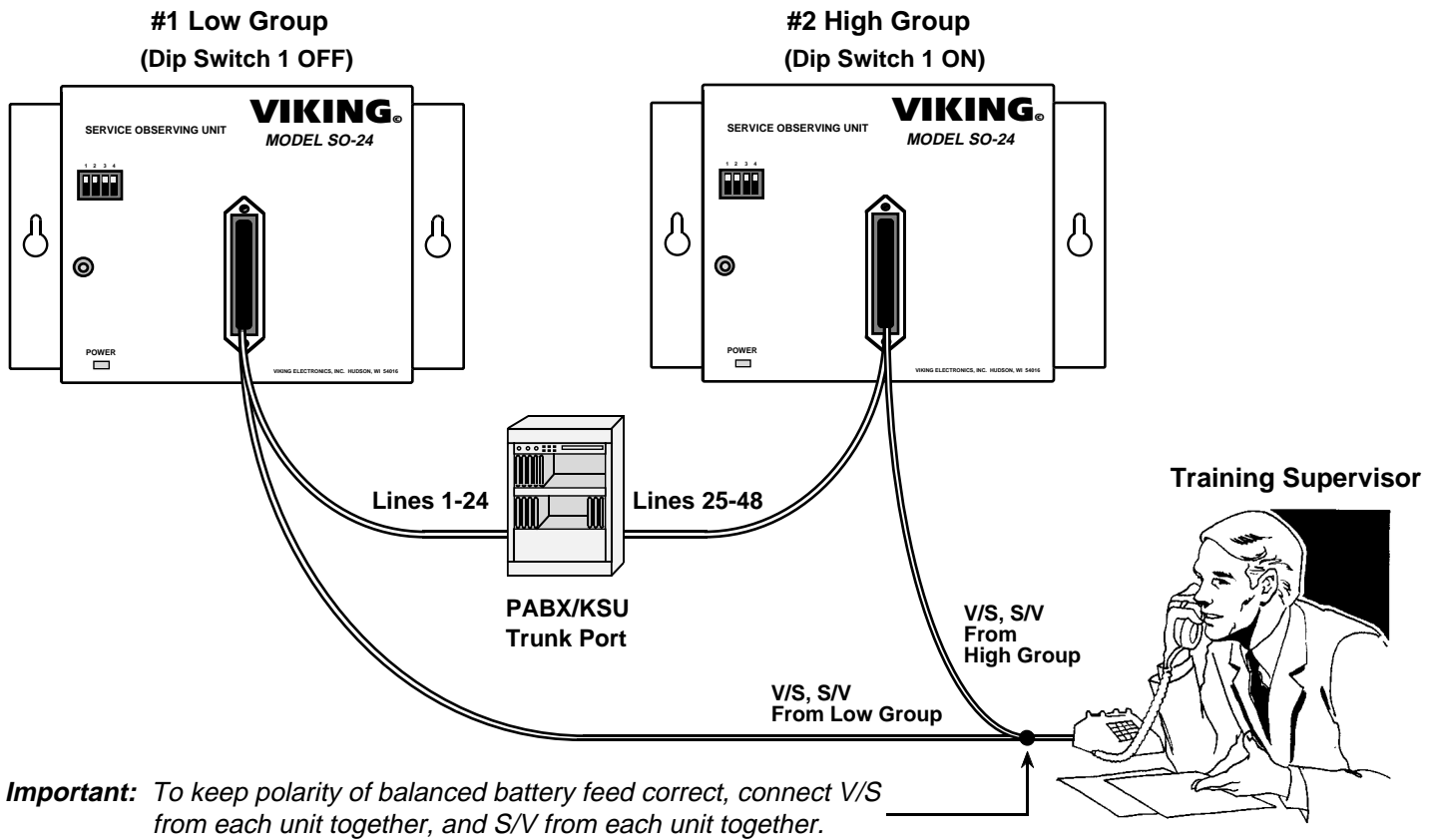
Wire the **SO-24** in parallel with up to 24 C.O. lines, Centrex lines or analog PABX/KSU stations using the wiring table above.

B. Digital Phones

The **SO-24** may also be installed to monitor digital systems. This will require an extra pair of wires run to each phone. The audio must be taken from the pair of wires going to the receiver (earpiece) for each of the stations to be observed, using the wiring table above. Retrieve **Fax Back Document 819** for more information on digital system interfaces.

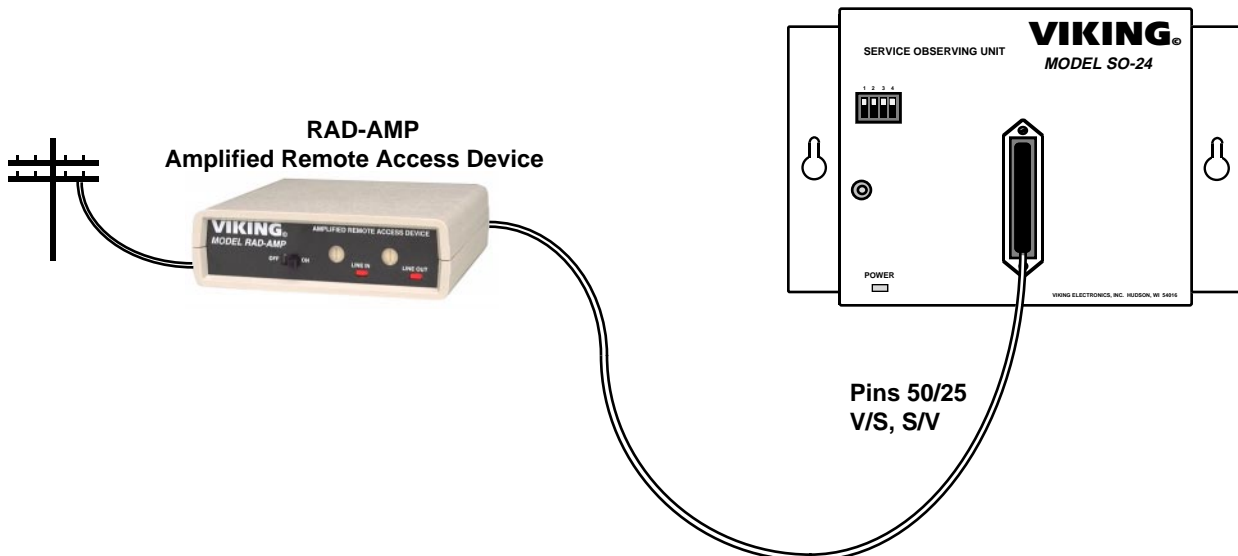
C. Expanding the SO-24

A second **SO-24** can be added, allowing 48 lines/stations to be monitored from a single observing phone. Assign the first **SO-24** as the low group and the second **SO-24** as the high group (see **Programming**). The two observing ports may be connected in parallel.



D. Remote Access of the SO-24

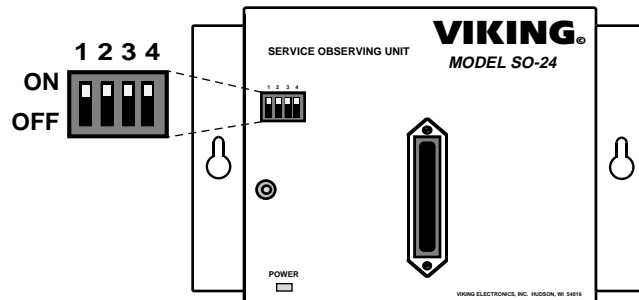
The **SO-24** Service Observer can be accessed remotely by using Viking's **RAD-AMP** Remote Access Device. The **RAD-AMP** is recommended and features amplification to increase the decibel level. For more information on the **RAD-AMP**, retrieve **Fax Back Documents 415**.



Programming

Dip Switch Settings

Switch Number	Switch Description	ON/OFF
1	Group assignment	OFF - Low group (1 - 24) ON - High Group (25 - 48)
2	Talk assist volume	OFF - Normal voice ON - Reduced volume
3	Record Control	OFF - Dial "9" to record ON - Record control automatic
4	Balanced Battery Feed Adjustment	OFF - Normal ON - For break-ups



Operation

From the observing port, any of the 24 lines or stations can be accessed by dialing a two digit Touch Tone code. Stations being observed are unaware that they are being monitored. Automatic gain control equalizes in and outbound conversation levels. If assistance is required, the observer can quickly enter the conversation by dialing a Touch Tone "*" An audio out jack provides a microphone level signal for a tape recorder while the record control jack provides remote operation of the tape recorder on command. Up to 48 lines or stations may be monitored by parallel connecting a second **SO-24** to the observing port and assigning it as the high group (see **Installation**, section C).

A. Accessing the SO-24

The **SO-24** provides balanced 12V talk battery on the observing wire pair. A manager or training supervisor may access the **SO-24** observing port from an unused trunk input on any PABX/KSU or via a dedicated Touch Tone phone. The **SO-24** may also be remotely accessed through one of **Viking's** Remote Access Devices (see **Installation** section D).

B. Selecting a Line or Station

Once the observing port is accessed, select any of the 24 lines or stations by dialing the two digit code assigned to that station (see **Installation** chart). Nothing can be heard by the station being observed. Select another station by dialing a "#" followed by another two digit code. You may also hang up and then re-access the observing port to dial another two-digit code.

C. Talk Assist

Though the **SO-24** monitors silently, a manager may enter the conversation to provide assistance at any time by dialing a "*".

D. Tape Recorder

A remotely controllable tape recorder may be started and stopped when interfaced with the **SO-24** using the provided cables (see **Installation**). To start the recorder, dial a Touch Tone "9." To stop the recorder, dial a Touch Tone "#" or hang up.

Recommended Tape Recorders: Radio Shack #14-1150, 14-1151 or 14-1053

Product Support Line...(715) 386-8666

Fax Back Line...(715) 386-4345

Due to the dynamic nature of the product design, the information contained in this document is subject to change without notice., Viking Electronics, its affiliates and/or subsidiaries assume no responsibility for errors and/or omissions contained in this information. Revisions of this document or new editions of it may be issued to incorporate such changes.