

144 MHz SSB BAND UNIT

# UX-S92A UX-S92E

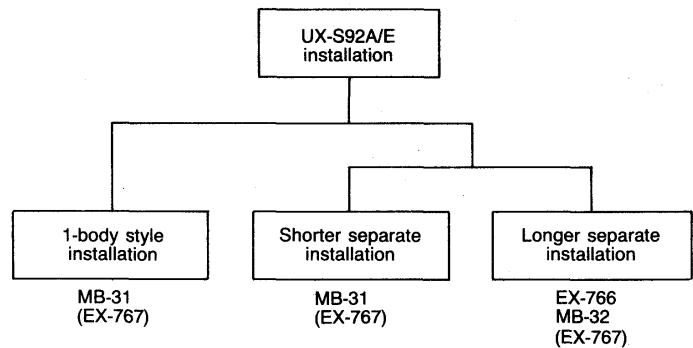
Thank you for purchasing the **UX-S92A/E** 144 MHz SSB UNIT. The unit is designed for the IC-901A/E. By connecting the unit to the IC-901A/E, the transceiver is upgraded and functions in SSB and CW as well as FM modes.

Please read the transceiver's instruction manual for operation information.

## FOREWORD

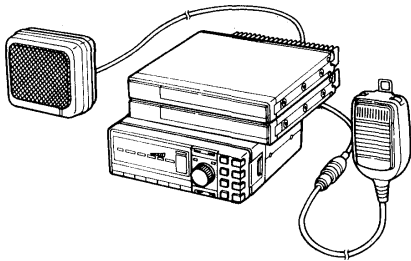
There are two ways to install the UX-S92A/E to the IC-901A/E; one is for standard one-body style installation; the other is for separate style installation. Select the installation to suit your needs.

Before installing the unit, some preparations are necessary for either type of installation. See the pre-work instructions on the next page.



### SYSTEM UPGRADING SIMULATIONS

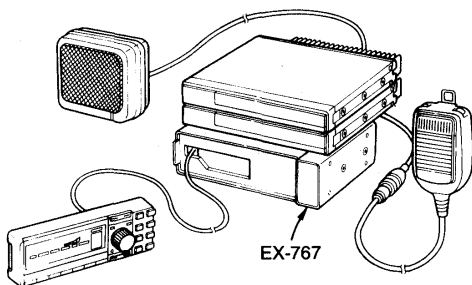
#### 1-BODY STYLE INSTALLATION



The UX-S92A/E is mounted on the IC-901A/E. When mounting the UX-S92A/E on the transceiver, the optional MB-31 is necessary.

When mounting more than two band units on the transceiver, the optional EX-767 is necessary.

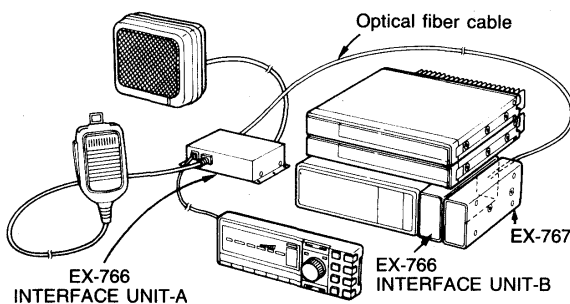
#### SHORTER SEPARATION INSTALLATION



The UX-S92A/E is mounted on the main body of the IC-901A/E and the front panel of the transceiver is detached using the supplied remote control cable. When mounting the UX-S92A/E on the transceiver, the optional MB-31 is necessary.

When mounting more than two band units on the transceiver, the optional EX-767 is necessary.

#### LONGER SEPARATION INSTALLATION



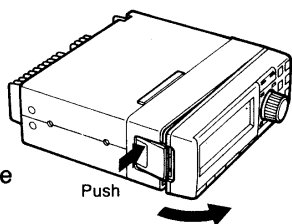
The UX-S92A/E is mounted on the main body of the IC-901A/E. The front panel of the transceiver is detached using the supplied remote control cable and an optional optical fiber cable up to 5 meters long.

The optional EX-766 and MB-32 are necessary for installing the system in the trunk. When more than two band units are installed, the optional EX-767 is also necessary.

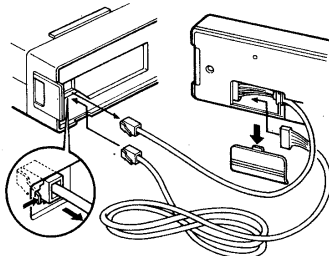
# PREPARATIONS

## ■ INSTALLATION PRE-WORK

- 1) Detach the front panel.



- 2) Disconnect the cable from the main body.

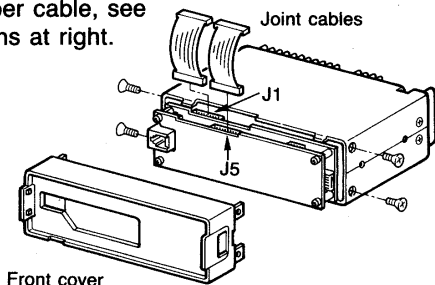


Replace the cable with the supplied remote control cable when installing the system for separate installation. See the IC-901A/E instruction manual for cable connections when installing the system using the optical fiber cable.

- 3) Unscrew 4 screws and remove the front cover. Then, connect 2 joint cables to J1 and J5.

- 4) Replace the front cover with screws.

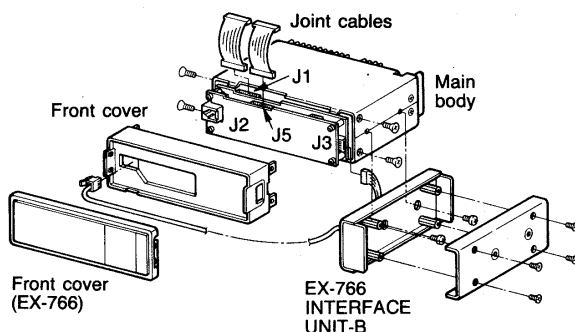
- When installing the system using the optical fiber cable, see the instructions at right.



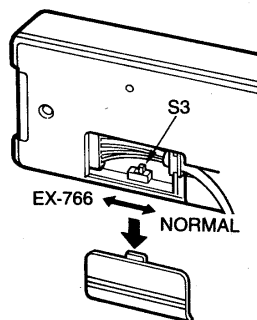
## ■ SEPARATE INSTALLATION USING THE OPTICAL FIBER CABLE

- 1) After re-assembling in item 3 above, connect plugs from the EX-766 to J2 and J3 on the main body.

- 2) Re-assemble each component.



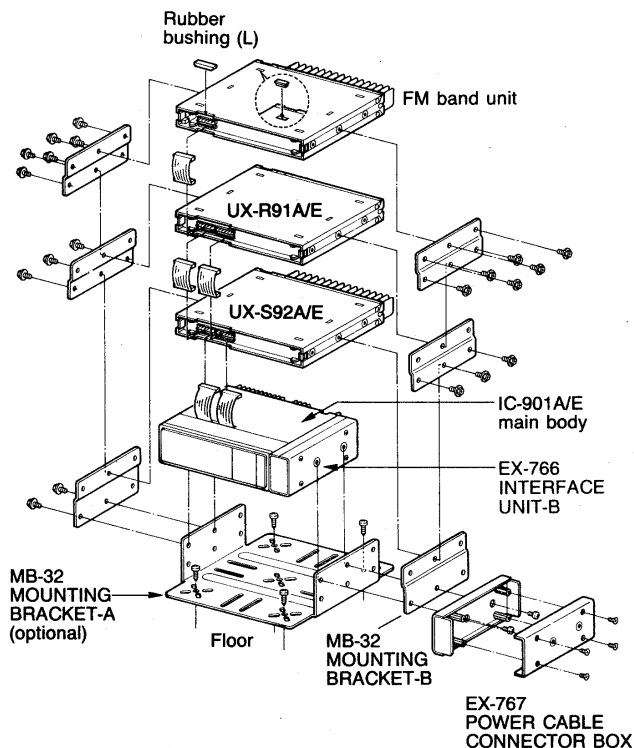
- 3) Set S3 in the "EX-766" position.



# UNIT INSTALLATIONS

**NOTE:** When connecting the UX-S92A/E and a band unit, the UX-S92A/E **MUST** be stacked just above the transceiver main body.

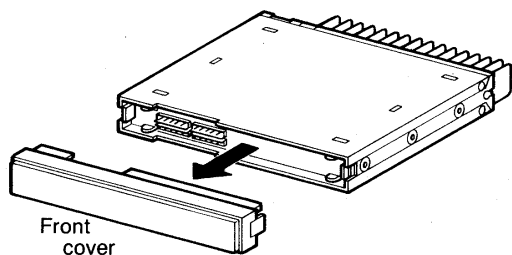
- 1) The UX-S92A/E **MUST** be mounted on the transceiver main body using optional brackets. See the IC-901A/E instruction manual for detailed installation information.
- 2) When installing an additional band unit, stack the unit on the UX-S92A/E.
- 3) For installing additional optional units such as the EX-766 together with the UX-S92A/E, see the diagram at right.
- 4) Cover holes (6 holes) on the top cover of the unit located on top with rubber bushings (L) and (S) to protect the unit from dust.
- 5) See the IC-901A/E instruction manual for mounting the system in a way other than that at right.



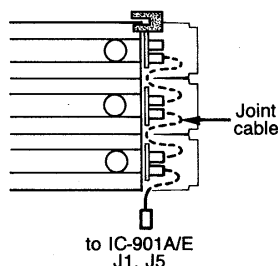
# UNIT CONNECTIONS

## FRONT PANEL CONNECTIONS

- 1) Pull the front cover of the UX-S92A/E forward and remove it.

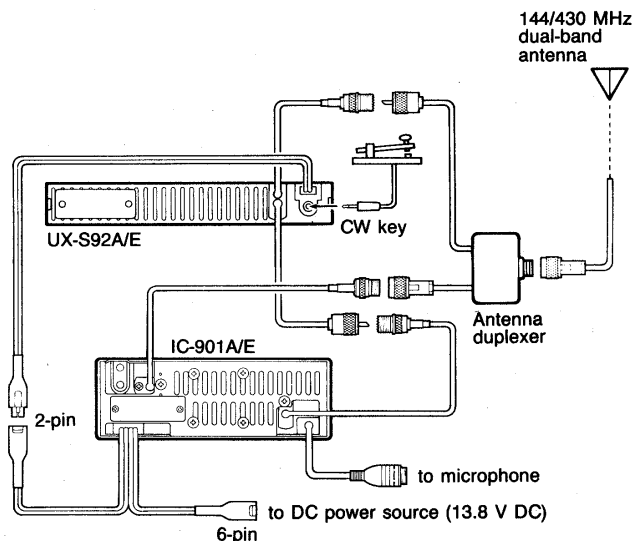


- 2) Connect two joint cables between the main unit and the UX-S92A/E. Each band unit must be connected through joint cables.
- 3) When installing an additional band unit, connect joint cables between the units.

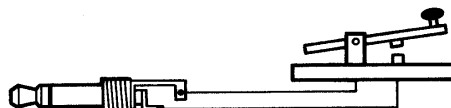


- 4) Replace the front cover to the unit.

## REAR PANEL CONNECTIONS



## CW KEY CONNECTIONS



# SPECIFICATIONS

## GENERAL

- Frequency coverage :

| MODEL   | VERSION   | RECEIVE           | TRANSMIT          |
|---------|-----------|-------------------|-------------------|
| UX-S92A | U.S.A.    | 144.000 ~ 148.000 | 144.000 ~ 148.000 |
|         | Australia |                   |                   |
| UX-S92E | Europe    | 144.000 ~ 146.000 | 144.000 ~ 146.000 |

Unit : MHz

- Mode : A1 (CW)  
A3J (LSB/USB)
- Antenna impedance : 50  $\Omega$  (unbalanced)
- Usable temperature range :  $-10^{\circ}\text{C} \sim +60^{\circ}\text{C}$   
( $+14^{\circ}\text{F} \sim +140^{\circ}\text{F}$ )
- Frequency stability :  $\pm 10$  ppm
- Power supply requirement : 13.8 V DC  $\pm 15\%$
- Dimensions : 117(W) x 25(H) 191(D) mm  
7.0(W) x 1.0(H) x 7.5(D) in
- Weight : 1.2 kg (2.6 lb)

## RECEIVER

- Receive system : Single-conversion superheterodyne
- Receive sensitivity : Less than 0.11  $\mu\text{V}$  for 10 dB S/N
- Selectivity : More than 2.2 kHz/ -6dB  
Less than 4.4 kHz/ -60 dB
- Intermediate frequency : 10.75 MHz
- Spurious and image rejection : More than 60 dB
- Current drain : 500 mA

## TRANSMITTER

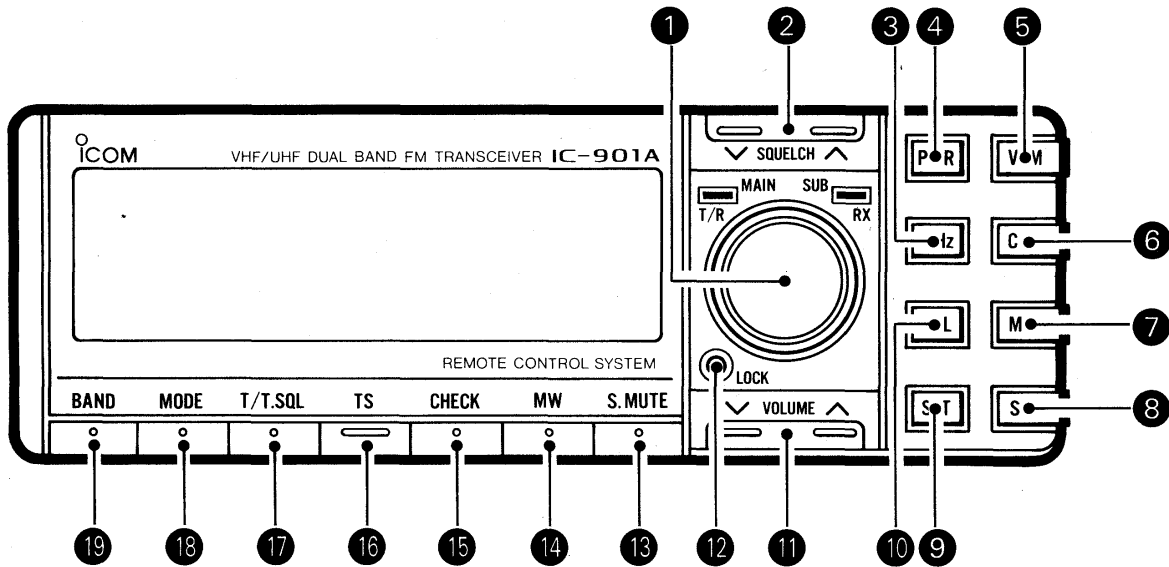
- Output power : High 25W Low 5 W
- Modulation system : Balanced modulation
- Spurious emissions : Less than -60 dB
- Carrier suppression : More than 40 dB
- Unwanted sideband : More than 40 dB
- Current drain : 7.0 A at high output power (25 W)  
3.5 A at low output power (5 W)

# PANEL DESCRIPTION

The following panel description is for operating in SSB or CW mode when the UX-S92A/E is connected to the IC-901A/E.

The switch functions in switches ⑮ ~ ⑰ differ while

operating in FM mode. See the IC-901A/E instruction manual for detailed information. Functions in ⑮ ~ ⑰ (bold letters) are effective only for SSB and CW modes.



## ① MAIN DIAL

- Changes the operating frequency.
- Changes the memory channel.
- Changes contents of the SET mode display.

## ② SQUELCH SWITCHES

Adjust the squelch threshold level.

## ③ MHz SWITCH

Selects a 1 MHz tuning step increment.

## ④ POWER SWITCH

Turns the power ON and OFF.

## ⑤ VFO/MEMORY SWITCH

Selects VFO or memory mode.

## ⑥ CALL CHANNEL SWITCH

Selects a call channel.

## ⑦ MAIN/SUB BAND SWITCH

Exchanges MAIN and SUB bands.

## ⑧ SUB BAND SWITCH

Sets the transceiver for operation in the SUB band.

## ⑨ SET SWITCH

Selects SET mode and advances the SET mode displays.

- AGC time constant can be set using SET mode.

## ⑩ TRANSMIT POWER SWITCH

Selects high or low transmit power.

- High: 25 W PEP (No indication.)
- Low: 5 W PEP ("LOW" appears.)

## ⑪ VOLUME SWITCH

Adjust the audio level.

## ⑫ LOCK SWITCH

Deactivates the main dial and other switch functions.

## ⑬ SUB BAND MUTE SWITCH

Mutes the sub band audio output.

## ⑭ MEMORY WRITE SWITCH

- Writes a memory channel.
- Transfers the contents of memory channel to VFO.
- Programs a call channel.

## ⑮ RF GAIN SWITCH

Selects one of 3 RF gain levels. The greater the indication, the lower the RF gain.

## ⑯ TUNING STEP/RIT, VXO SWITCH

- Selects the pre-programmed tuning step.
- Selects the RIT or VXO function. The desired function can be set using SET mode. Once the desired function is set, the function is turned ON and OFF with [TS].

## ⑰ NOISE BLANKER SWITCH

Turns ON and OFF the noise blanker function.

## ⑱ MODE SWITCH

Set a desired operating mode for USB, LSB or CW.

## ⑲ BAND SWITCH

Selects the desired operating band when one or more optional band units are connected.