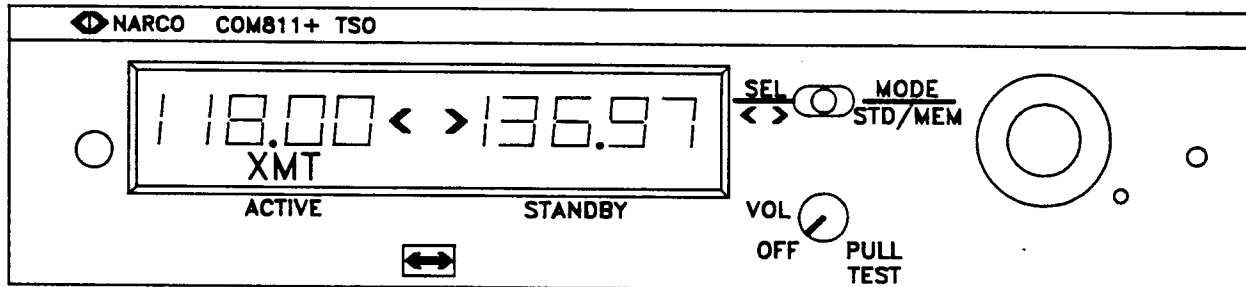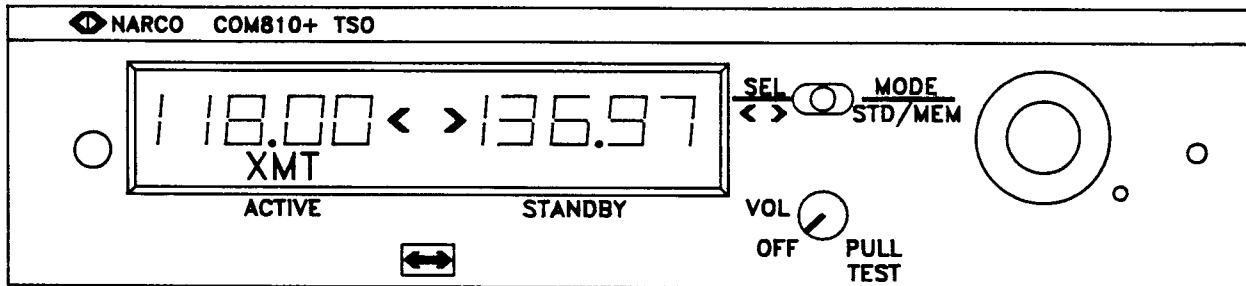# NARCO AVIONICS

COM810+ TSO/COM811+ TSO

ADDENDUM
INSTALLATION MANUAL
03114-0620P

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COM810+ TSO/COM811+ TSO INSTALLATION MANUAL ADDENDUM

1.0 INTRODUCTION

1.1   FEATURES

The COM810+/COM811+ are upgraded versions of the COM810/COM811 transceivers. These units have a number of improved features.

- Internal ACTIVE and STANDBY Frequency KEEP-Alive
- COM Frequency Presets - 10 Channels

1.2   GENERAL

Refer to section 1 of the COM810/COM811 Installation Manual (03114-0620) for information relative to features, TSO, and License Requirements.

2.0   INSTALLATION

2.1   INTRODUCTION

The COM810+/COM811+ installation is interchangeable with the COM810/COM811. Refer to Section 2 of the COM810/COM811 Installation Manual (03114-0620).

NOTE: Paragraph 2.2.3, Keep-Alive Memory Option is not applicable to the COM810+/COM811+. The COM810+/COM811+ has internal Keep-Alive capability. Operation is not affected if the external Keep-Alive wire remains connected.

2.2   UNIT PART NUMBERS

- COM810+, 14V Radio W/Tray and Installation Kit   03114-0309
- COM811+, 28V Radio W/Tray and Installation Kit   03114-0310
- COM810+, 14V Radio Only   03114-0311
- COM811+, 28V Radio Only   03114-0312

2.2.1   ACCESSORIES, OPTIONAL EQUIPMENT and KITS

Refer to Tables 2.1 and 2.1 of the COM810/COM811 Installation Manual (03114-0620).

2.3   PRODUCT SPECIFICATIONS

Refer to section 2.3 of the COM810 TSO/COM811 TSO installation manual for product specifications.

2.4   POST INSTALLATION TESTS

Refer to paragraph 2.8 of the COM810 TSO/COM811 TSO installation manual and the following Operation paragraph (2.5).

2.5   OPERATION

The Internal Keep-Alive maintains the last set COM frequency and preset channel. When the unit is turned on, these frequencies and/or channels will be seen in the displays.
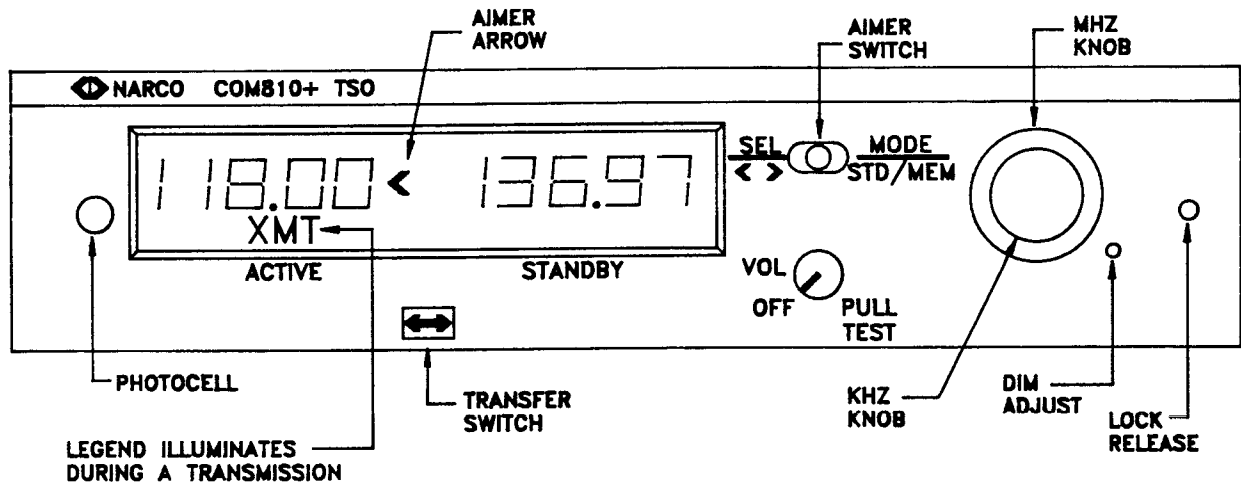

FIGURE 2-1   COM810+ TSO/COM811+ TSO FRONT PANEL

Display

The left side of the display identifies the Units Active communications frequency, and the letters "XMT" (when lit) to indicate that the Mike Key is depressed and the unit is transmitting. An Aimer Arrow will light when the MHz and KHz knobs will edit the left side display information.

The right side of the display identifies the Standby frequency, or Memory Channel. An Aimer Arrow will light when the MHz & KHz knobs will edit the right side display information.

COM810+ TSO/COM811+ TSO INSTALLATION MANUAL ADDENDUM

OFF-VOL-PULL TEST

OFF is the maximum counterclockwise rotation of this control. Clockwise rotation past the "click" turns the COM810+ TSO/COM811+ TSO on.

VOL, once the unit is turned on, continued clockwise rotation increases the COM audio volume.

PULL TEST when pulled deactivates the squelch circuit.

MHz / KHz AND CHANNEL SELECT KNOBS

Both of these controls allow for continuous CW or CCW rotation. MHz frequency readout, in the Active or Standby display, changes at a rate of 1 MHz per detent. Rotation of the KHz knob steps the standby frequency at a change rate of 25 KHz per detent.

Clockwise rotation increments the frequency or channel number, counterclockwise decrements the frequency or channel number.

AIMER SWITCH

This is a three position, spring loaded to center, toggle switch. In order to change either the Active frequency or the Standby frequency the switch must be appropriately set.

Note that coincidentally with the toggling of the Aimer Switch, an arrow will be seen between displays alerting the pilot which information will change when the MHz or KHz knob is rotated.

MODES OF OPERATION

The COM810+ TSO/COM811+ TSO has two "Modes" of operation Standard and Memory. In the Standard mode the active frequency and standby frequency operate in the familiar "flip-flop" mode. That is the standby and active frequencies may be interchanged by pressing the [< >] transfer button. Memory mode is characterized by the ability to store and recall up to 10 preset memory channels. Continued momentary pushes of the Aimer Switch to the right will cause the selected mode to alternate between the Standard and Memory modes.

STANDARD MODE

Standard Mode is selected by repeatedly pushing the center position spring loaded Aimer Switch to the right. Standard Mode is annunciated when frequencies appear in the Active and Standby windows. Pushing the Aimer switch to the left enables the pilot to select editing of either the Active or Standby frequency based on the position of the Left/Right arrows (< >) on the display. Repetitive pushes will cause the Left/Right arrows to alternately enable editing of Active or Standby frequencies.

ACTIVE FREQUENCY ENTRY

With the Active position selected (Aimer Arrow = "<"), the MHz and KHz select knobs will change the Active frequency. The transfer button will exchange the Active and Standby frequencies.

STANDBY FREQUENCY ENTRY

With the Standby position selected (Aimer Arrow = ">"), the MHz and KHz select knobs will change the Standby frequency. The transfer button will exchange the Active and Standby frequencies.

MEMORY MODE

Memory Mode is selected by repeatedly pushing the Aimer Switch to the right until the Memory Mode is annunciated by display of the memory single digit channel number in the right display window.

PRESET CHANNEL SELECTION

In the Memory Channel select position (Aimer Arrow = ">"), the MHZ and KHz select knobs will select which of the stored channels the unit is tuned to. The standby window displays the channel number (0 to 9). Upon entering this mode from the Standard Mode the last Active frequency will be stored as the Standby frequency for easy recall. The transfer button is disabled in this mode.

MEMORY CHANNEL FREQUENCY EDITING

In the Memory Channel Frequency Edit mode (Aimer Arrow = "<"), the MHZ and KHz knobs are used to alter the frequency of the Memory Channel which is displayed. The active window displays the frequency and the Standby window

MEMORY CHANNEL FREQUENCY EDITING (continued)_

shows the selected channel number (0 to 9). The transfer button is disabled in this mode. The channel frequency is automatically stored at the cessation of frequency selection (after approximately 1 second).

RECAP

1. The frequency shown in the Active display is always the operating frequency of the unit.
2. Repetitive toggling of the Aimer Switch to the right alternates between Standard and Memory modes.
3. Repetitive toggling of the Aimer Switch to the left alternately selects the left or right window for editing.