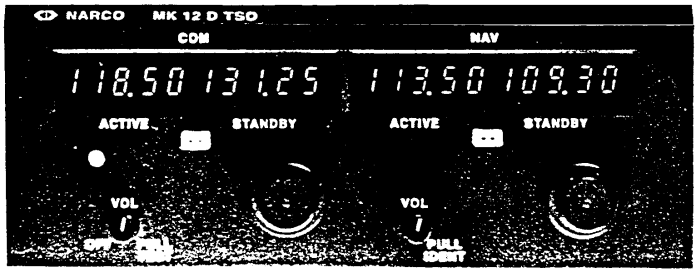
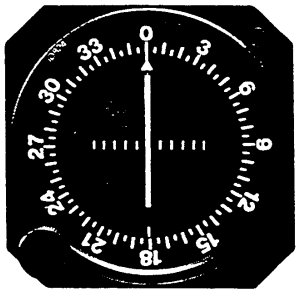
NARCO AVIONICS

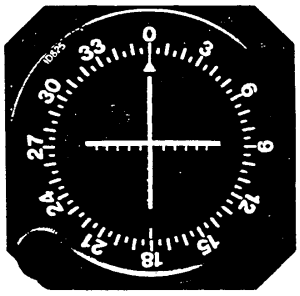
MK 12D TSO NAV/COM

AND

ID 824 TSO/ID 825 TSO INDICATORS







NARCO

®NARCO AVIONICS INC.
270 COMMERCE DRIVE
FORT WASHINGTON, PENNSYLVANIA, 19034
U.S.A.

OPERATION

This operation procedure presumes that the MK-12D has been installed with the Keep-Alive option.

The Keep-Alive option maintains the last set COM and NAV Active frequencies in their memory IC's. When the Unit is turned ON, these "active" frequencies will be seen in the Active displays. The display's Standby frequencies will always be the factory pre-programmed frequencies of 121.90 for COM Standby and 110.50 for NAV Standby.

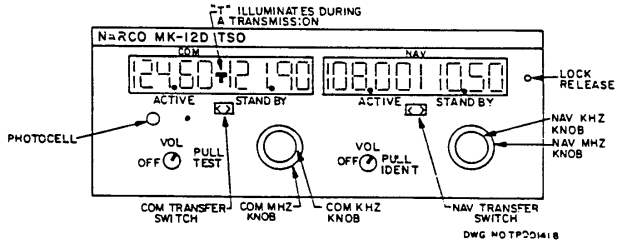


FIGURE 2-28. MK-12D FRONT PANEL

COM Section Operation

COM: DISPLAY

The left side of the display identifies the COM Active communications frequency, and the letter "T" (when lit) to indicate that the Mike Key is depressed and the Unit is transmitting.

The right side of the display identifies the COM Standby frequency.

COM: OFF-VOL-PULL TEST

OFF is the maximum counterclockwise rotation of this control. Clockwise rotation past the "click" turns both the COM and NAV Sections ON.

VOL, once the Unit is turned ON, continued clockwise rotation increases the COM audio volume.

PULL TEST when pulled deactivates the squelch circuit.

COM: MHz/KHz CHANNEL SELECT KNOBS

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

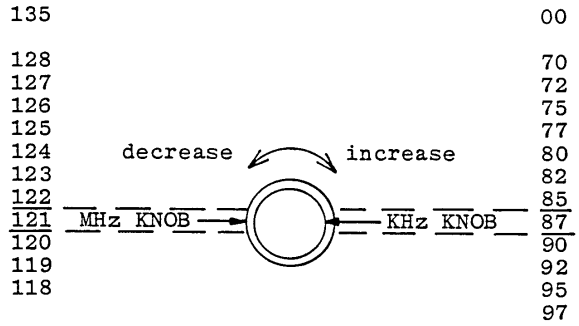
Clockwise rotation increments the frequency, counterclockwise decrements the frequency.

Continued

COM SECTION:

Knowing what frequency you had set in Active and Standby memories, it is now a matter of rotating the KHz and MHz knobs clockwise (incrementing) or counterclockwise (decrementing) detent-by-detent: KHz, 25 steps, MHz, 1 MHz step, to change frequencies. Remember all entries go into the Standby display memory before they can be transferred to the Active display memory.

Should it appear that in changing frequency you lost count, you may rely on the factory pre-programmed frequency of 121.90 in the Standby memory. However, you must turn the MK-12D OFF, then ON, to automatically set 121.90 into the Standby display. (Active frequency being Kept-Alive, will not be affected by the turning ON and OFF of the Unit.) Now channel to the desired frequency using the detent-by-detent count off method. Transfer your blind Standby frequency to the Active channel, and then verify the results.



If wrong, transfer your original COM frequency back to Active, then repeat the turn OFF, turn ON and the detent-by-detent channel selection.

COM: HOW TO ENTER A FREQUENCY

All frequencies entered into the COM Section enter via the Standby route, that is, the frequency is entered (seen in the Standby displays) and then transferred to the Active by depressing the "arrowed" transfer push button. The next frequency entered is the Standby frequency.

The Active frequency and its resultant data is not affected by the rotation of either of the MHz or KHz knobs.

COM: TRANSFER

Pressing this white arrowed momentary switch "flips" the display the Standby frequency becomes the Active and the Active becomes the Standby. A second depression once again exchanges the frequencies.

NAV Section Operation

NAV: DISPLAY

The left side of the display identifies the NAV Active communications frequency.

The right side of the display identifies the NAV Standby frequency.

NAV: OFF-VOL-PULL IDENT

OFF is the maximum counterclockwise rotation of this control.

VOL, continued clockwise rotation increases the NAV audio volume.

PULL IDENT when pulled activates the IDENT circuit.

NAV: MHz/KHz CHANNEL SELECT KNOBS

Both these controls allow for continuous CW or CCW rotation. MHz frequency readout, in Standby display, changes at a rate of 1 MHz per detent. Rotation of the KHz Knob steps the Standby frequency readout at a change rate of 50 KHz per detent.

Clockwise rotation increments the frequency, counterclockwise decrements the frequency.

NAV: HOW TO ENTER A FREQUENCY

All frequencies entered into the NAV Section enter via the Standby route, that is, the frequency is entered (seen in the Standby displays) and then transferred to the Active by depressing the "arrowed" transfer push button. The next frequency entered is the Standby frequency.

The Active frequency and its resultant data is not affected by the rotation of either of the MHz or KHz knobs.

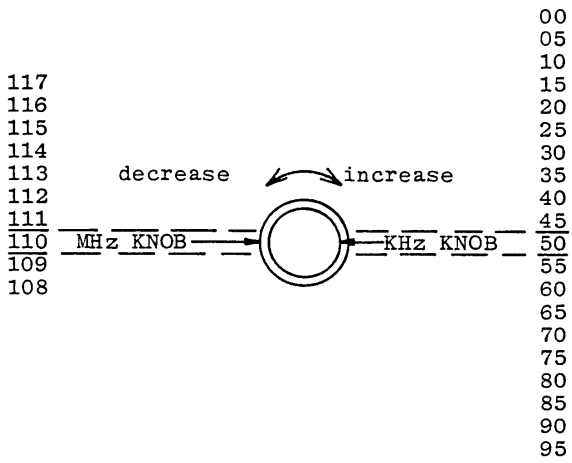
NARCO AVIONICS MK-12D TSO

Changing Frequencies With Loss of Display

NAV SECTION:

Knowing what frequency you had set in Active and Standby memories, it is now a matter of rotating the KHz and MHz knobs clockwise (incrementing) or counterclockwise (decrementing) detent-by-detent: KHz, 05 steps, MHz, 1 MHz step, to change frequencies. Remember all enteries go into the Standby display memory before they can be transferred to the Active display memory.

Should it appear that in changing frequency you lost count, you may rely on the factory pre-programmed frequency of 110.50 in the Standby memory. However, you must turn the MK-12D OFF, then ON, to automatically set 110.50 into the Standby display. (Active frequency being Kept-Alive, will not be affected by the turning ON and OFF of the Unit.) Now channel to the desired frequency using the detent-by-detent count off method. Transfer your blind Standby frequency to the Active channel, and then verify the results. Pull IDENT.



If wrong, transfer your original navigation frequency back to Active, then repeat the turn OFF, turn ON and the detent-by-detent channel slelction

Continued

NAV: TRANSFER

Pressing this white arrowed momentary switch "flips" the display the Standby frequency becomes the Active and the Active becomes the Standby. A second depression once again exchanges the frequencies.

Loss of Display

The following is not expected, however, as there is a built-in preset Standby frequency, it can be used if the display should blackout.

If the NAV DISPLAY should have a total blackout, yet the Indicator appears unaffected, verify that the station being received is the station selected prior to the blackout, pull IDENT. If you are still set to your desired frequency continue your flight, it can be presumed that you had a display or a display circuit failure.

If the COM DISPLAY should have a total blackout, verify that the COM is still set to the frequency selected prior to the blackout. Verification can be made by initiating a transmission and listening for the reply. If you are still set to your desired frequency is can be presumed that you had a display or display circuit failure.