

Z-11Pro

Automatic Antenna Tuner

For Yaesu FT-897 and FT-857, use the Y-ACC cable and plug the red end marked “Radio” into the radio’s ACC port. Connect the black end marked “Tuner” into the tuner’s interface jack. The radio does not supply power to the tuner. The tune button on the tuner is used for starting the tune process.

Operation

Overview and Setup

All functions are controlled through the six front panel buttons. Functions are generally invoked when a button is released, although in some cases you will hold a button down for a short time. Some commands are indicated by the length of time you hold a button before releasing it. There are three lengths of press: short (less than 0.4 seconds), medium (0.5 – 2.9 seconds) and long (more than 3 seconds). This sounds a lot more complicated than it really is; this interface will quickly become familiar and easy. The LEDs provide timing cues:

● ● ● ● No LEDs lit: short press

● ● ● ● Outer LEDs lit: medium press

● ● ● ● Inner LEDs lit: long press

Four special functions are invoked with the **Func** button; the second function of these four buttons is indicated below each on the front panel. For these functions, press and release the **Func** button; the LEDs will scroll to the right to indicate **Func** mode. Then, press and release a button to invoke its second function. If you don't press another button within 3 seconds, the LEDs will scroll back to the left, indicating that the tuner has exited **Func** mode. You also use the **Func** button to check the settings. Press and hold the **Func** button while pressing the second button; the status of that function will be displayed on the LEDs.

Tuning Modes: Your Z-11Pro features two distinct tuning modes: Auto and Semi. In Auto mode, a tuning cycle will automatically begin whenever the SWR exceeds a threshold value; the default SWR threshold is 2.0, but you can set it to any SWR value between 1.5 and 3.0 (see below). In Semi mode a tuning cycle will begin only when you press and release the **Tune** button while transmitting, regardless of SWR. The default mode is Auto.

To toggle between Auto and Semi modes, press and release the **Func** button then press and release the **C Dn** button. The two inner LEDs will flash to indicate Auto mode, the two outer LEDs to indicate Semi-Auto mode. To check the setting, press and hold the **Func** button, then press and release the **C Dn** button.

● ● ● ● Outer LEDs flash: Semi mode

● ● ● ● Inner LEDs flash: Auto mode

Tuning

Auto and Semi modes

In Auto mode (see section on selection Auto or Semi mode) the tuner will begin a tuning cycle whenever the SWR exceeds the value you set (see section on setting Auto Tune Threshold). In Semi mode, a tuning cycle begins only when you start one by pressing the **Tune** button, regardless of SWR. You can also start a Semi tuning cycle while the tuner is in Auto mode. Your personal operating practices will determine which mode is best for you. The default mode is Auto (see Application Notes for more on when to use Auto mode).

Auto mode tuning works well while you are transmitting in SSB, AM, CW or any digital mode. Recent advances in LDG's tuning algorithms allow your Z-11Pro to tune effectively even with a varying RF signal. This means that as you change frequencies, modes, antennas or bands, you don't have to make a separate tuning transmission; just start talking or keying and your Z-11Pro will match up in as little as 0.1 seconds.

Bypass/Recall mode (short press)

To place your Z-11Pro in bypass mode, press the Tune button less than a half-second. The tuner will switch to bypass, and all LEDs will flash three times to confirm bypass mode. In bypass mode, RF from your transmitter goes directly to the antenna with no matching. A second short press recalls the last tuned setting; all LEDs flash once. Repeated button presses will toggle between bypass and recall; repeat as necessary. Bypass followed by **Func** then **Tune** will clear the present memory. Bypass mode is not saved when you power down. On the next power up, the tuner will reset the last tuned settings. You can, if you wish, press **Func** then **Tune** to save the bypass setting, erasing the oldest of the four memories for the present frequency.

SWR indication

During a tuning cycle, the LEDs indicate the present SWR. It will vary considerably as the Z-11Pro seeks a match. You have to watch closely though, as it happens fast!