YAESU

FTDX10

MASTER CLASS

A Complete Guide to Filters, Audio Settings and Operational Mastery for Yaesu FTDX10 Transceiver

"Where science becomes art and noise becomes meaning."

LZ3AI

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Introduction

Many radio enthusiasts choose **the Yaesu FTDX10** because of its hybrid **SDR** receiver and impressive dynamic range. But it often happens that in the heat of the air we struggle with interference (**QRM**) or atmospheric noise (**QRN)** without using the full capacity of the built-in instruments. that it is a wonder how our loved ones endure us.

Yaesu FTDX10 is a tool with incredible potential. Initially, (supposedly, temporarily) we limit ourselves to its basic functions, skipping the powerful arsenal of **DSP** filters that can turn noise into a clear signal. Then, "buried" on the air and stealing moments from everyday life for amateur radio, this remains so.

This guide is designed to help you "tame" your transceiver and experience real pleasure from working on the air, whether you're looking for a weak **DX** or engaging in an intense competition.

Read a well-structured handbook, an invaluable asset for every **hamshak**. It turns the dry theory of the official manual into living, practical wisdom. The purpose of the manual is to pull the curtain off the "magic" knobs on the right side of the panel that we often don't think to use. It helps us turn a noisy and unintelligible signal into clean and pleasant to listen to.

And last but not least, we protect our own and our loved ones' health, our hearing and the patience of neighbors and others.

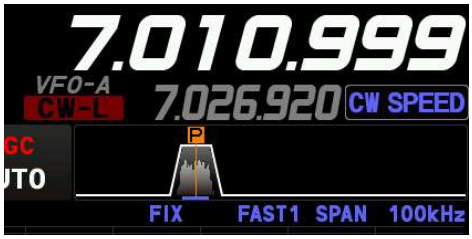
Note: The menus and features described are current for firmware version as of January 2026.

CHAPTER 1: Visual control – the "eyes" of the receiver (display)

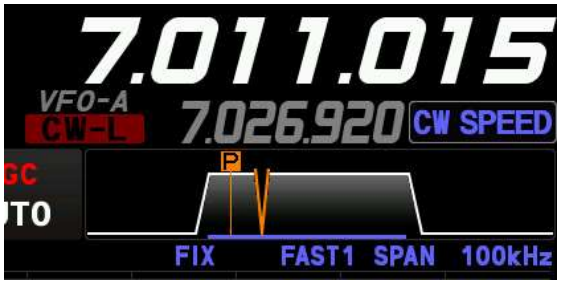
Before turning any knob, take a look at the display. The **FTDX10** offers unique feedback through its **TFT display**. **The TFT display** depicts even the action of the filters in an extremely clear and understandable way.

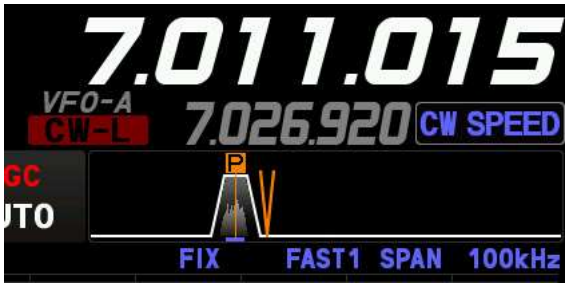
1.1. Filter Function Display: Located at the top right of the screen, it shows the current bandwidth with its width and shape and the filters applied to it.

- **IF Filter Bandwidth:** Visually displays its amplitude/frequency response and intermediate frequency bandwidth.



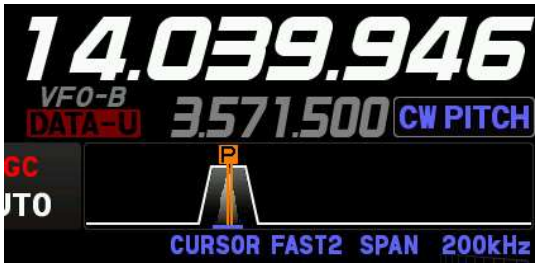
- **Orange Blade V:** Indicates exactly where the manual **NOTCH** (notch) filter is "cutting". It is very easy to understand if it is off the skip bar and does not do any work. This can be heard by ear, but graphics are an invaluable tool.



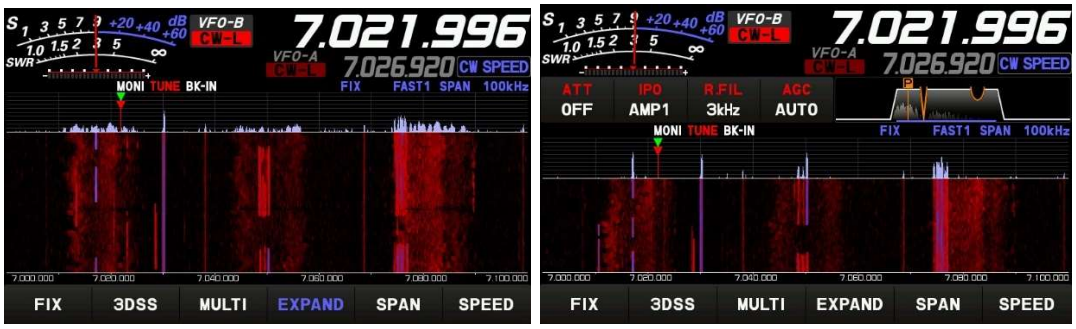


- **Orange indent/hump along the contour:** Indicates the position, width, and depth (or height) of the **CONTOUR filter**.

- **Vertical Orange Line:** Indicates the narrow window of the **APF** filter (in **CW mode**).



- **Tip:** If the spectrum display is extended (the **EXPAND** button is blue), the filter graph is hidden. For precise visual adjustment of the filters, turn off the advanced mode (**the EXPAND** button must be gray/white).



1.2. Visual information is prioritized

The waterfall of the spectrum is always in front of our eyes. You need to adjust the sensitivity level so that useful signals are clearly visible in the entire noise environment of the range. This adjustment is often necessary and I recommend setting it to the large dial by temporarily pressing **<CS>** (preferred choice, custom select). Writing you a percentage of how high the grass or the dark part of the display should be will hardly help you – the sense of these things come with experience.

- **Practice:** With a short press of **<CS>** the orange LED on **<CS> lights up** and an optional function is selected for the large setting ring**.** With the next short press, the LED turns off and the usual function of the large ring (rough frequency setting) is restored.

Press and hold the **<CS> button**.

The functions that can be set to the large setting ring will appear when the **<CS> button is pressed briefly**. Select **<LEVEL>** for the **<CS> function** (the "waterfall" sensitivity level).

Once you have selected **<LEVEL>**, the next time you briefly press <**CS**> (<**CS**> lights up orange), you can adjust the sensitivity of the waterfall using the large setting ring to use it as easily and efficiently as possible. By adjusting the sensitivity of the waterfall, with a second short press, you return the usual function of the large "coarse" frequency setting ring (the orange LED goes out). When the LED is off, the large ring again adjusts the frequency in large increments, and the large tuning encoder finely (the large encoder does not change its function with the **<CS>** button).

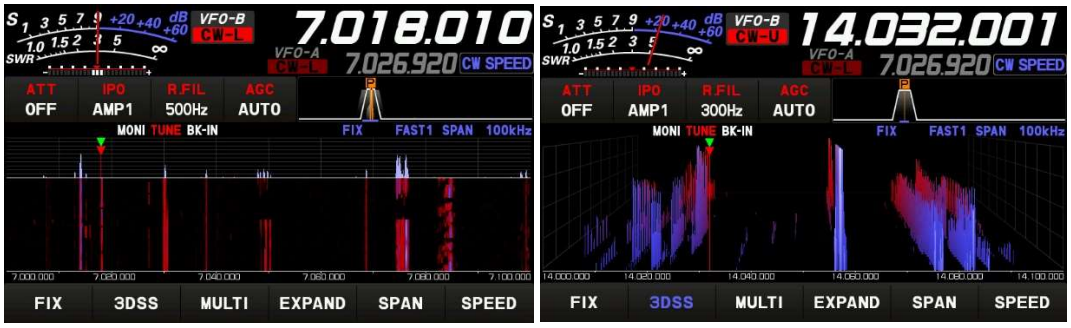
Note that on the lower sidebar (**CW-L**, **LSB, DATA-L**), the reception bar is to the left of the green marker. On the upper sidebar (**CW-U**, **USB, DATA-U**), the reception bar is on the right. I hope you won't be fooled by the red marker – it's about the transmission frequency.

Choose a convenient **<SPAN>** (this is the width of the part of the spectrum displayed on the screen) depending on the range and mode of operation. Here, too, it is difficult to give specific advice, because it depends on your preferences, on the mode of operation, on the full width of the frequency range, whether you are looking at the transceiver screen or on an external display, Whether you are working with a touchscreen (or the mouse) or using it only for observations, and of course, from the specific situation and noise situation.

- **Tip**: The picture should be so clear of noise (the grass "barely sprouted") that the useful signals should be drained thin down ("falling") along the **2D** waterfall at its height downwards, and the darkness should "absorb" the noise almost entirely.

That is, only the traces of the useful signals should be visible. The segments with the useful signals are interrupted when the signal is interrupted, but they continue to be visible and move downwards at the same frequency position until they are completely hidden. Makes it easy to quickly position on a desired signal, even some time after the signal has stopped being heard. This feature is extremely useful in **CW** when it's not constantly broadcasting. The same goes for **the 3DSS** waterfall, except that time is drawn back in depth instead of in height. What you use depends mostly on your preference. Personally, I prefer the **2D** waterfall, but it can also be just a matter of habit. In either case, you need to bring out the weakest useful signals to start to be seen. And the noises should be hidden as much as possible in the dark. Achieving the most effective waterfall comes with experience. Experiment, test, learn. It will work. Choose your preferred color scheme.

- **Tip:** By tapping (or clicking the mouse) on the waterfall, you can adjust its height to three levels. When the waterfall is higher, you have more response time and adjust the reception frequency to the desired signal before it disappears at the bottom end.



CHAPTER 2: Cleaning the Airwaves (NB, DNR, DNF)

These are your primary input noise processing tools – to combat the general background before focusing on specific interference.

2.1. NB (Noise Blanker) – the fighter against impulse noise

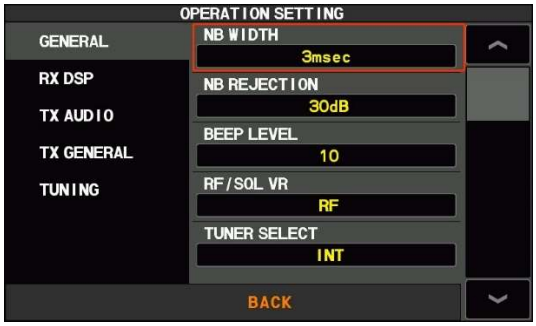
Designed to eliminate "crackling" from ignition of cars, electric fences, switching power supplies, inverters and other converters.

- **Practice:** Press the **NB** button (lights up orange) and hold it to access the level via the large tuning encoder.

- **Tip:** Do not overdo it (**NB LEVEL).** If you set it too aggressively (low threshold, high number), the voice spikes will start activating the silencer and the sound will become distorted. Use the lightest but already effective level possible. In the function menu, you can also adjust the pulse length (**NB WIDTH)** and the attenuation ratio to 10, 30 or 40 (**NB REJECTION).**

<FUNC> <OPERATING SETTING> <GENERAL> <NB WIDTH> <1, 3 or 10 ms>

<FUNC> <OPERATION SETTING> <GENERAL> <NB REJECTION> <10, 30, 40 dB>



2.2. DNR (Digital Noise Reduction) – Your Best Friend Against Atmospheric Noise

The **DNR system** in the **FTDX10** is legendary. It is extremely effective against atmospheric noise, especially in low ranges (**160m/80m/40m**). It has **15 different algorithms**, the effectiveness of which (strength) does not depend on the size of the number.

- **Practice:** Hold down the **<DNR> button** and turn **<FUNC>**. Algorithms **are not** linear in their efficiency, they are not arranged in any way – for one type of noise, setting **5** may be perfect, for another – **12**, for others – **1**. They are not just

"weaker" and "stronger" – each uses a different mathematical logic. Experiment! As long as the algorithm numbers are visible on the screen, you can scroll through them and choose the best one for the specific situation. Over time, you will gain experience that will very quickly orient you in the noise environment and dealing with it. Usually, settings around **5** or **9** work perfectly, **4** is a little "gentler" in the restrictions. It can be said that each noise has its "own" number.

- **Note: DNR** needs a second or two to analyze the noise and "settle down." After switching from one algorithm to another, wait a moment to hear the effect.

2.3. DNF (Digital Notch Filter) – Automatic Cutting

Ideal for removing fixed carrier frequencies ("howling" signal) in the middle of the band in SSB mode. With this notch filter, you can only rely on Yaesu automation.

Press **<FUNC><DNF><ON>**.

It is essentially a notch filter that works automatically after interference analysis.

- **Caution: Never** use **DNF** when taking CW because it will cut out the very Morse signal you want to hear!

CHAPTER 3: Surgical instruments (NOTCH and CONTOUR)

When the general noise is cleared, it is the turn of fine processing.

3.1. Manual NOTCH Filter – The Manual Scalpel

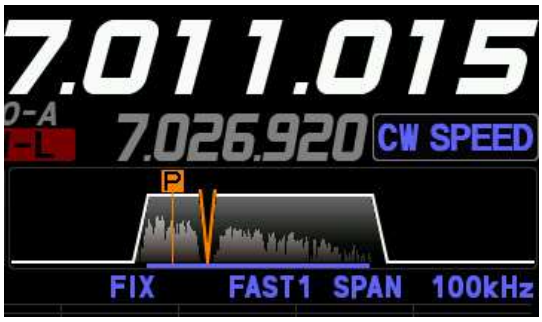
If you experience severe interference from a nearby station, turn the **NOTCH knob**. The **NOTCH** filter is also a notch filter, but deeper and more precise than the automatic **DNF**. By default, once powered on, it is away from the useful signal – it is visible as a high orange **"V"** on the display (like a cut). You can choose its width from the menu:

<FUNC><OPERATION SETTINGS><RX DSP><IF NOTCH WIDTH>

By default, the value is <WIDE> and can be changed to **<NARROW>**.

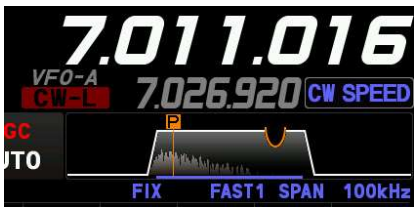
The narrow <NARROW> filter is perfect for removing a narrow interference signal without ruining the quality of the rest of the received sound.

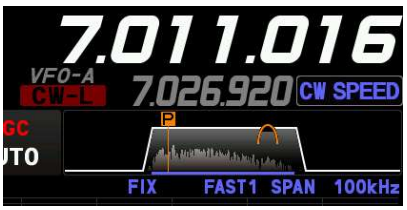
- **Practice:** Hold the button to reset its position in the center, then position it exactly on the interference – visually and audibly. If there are many disturbing signals, choose the strongest of them.

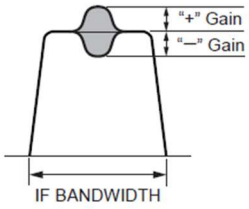


3.2. CONTOUR – the audio sculptor

This is a "mini-notch filter" that does not cut the signal completely, but changes its timbre – it cuts or amplifies part of the low frequencies or part of the high frequencies. It is "softer" and not as deep as the **NOTCH** filter, it only corrects the contour of the missed bandwidth, which is also visible on the display and is probably the reason why it was named in this way. sound spectrum.







- **Practice: The CONTOUR** filter corrects the tone of the received signal. You can boost important frequencies if the correspondent sounds deaf, reduce unpleasant trebles ("hiss") or cut the bass if the signal "growls" or "booms". It is displayed as a convex small ellipse along the contour when it raises certain frequencies or as a concave ellipse when it suppresses others (or the same). It can be moved along the frequency band. To reset, simply hold down the **CONT/ button/ APF**.
- **Tip: If** you have hearing loss in the upper spectrum (typical for adults), set **the CONTOUR LEVEL** to a positive value (+10 or more – try even +18-+20). This way you "raise" the high sound frequencies and compensate for the deficiencies of your hearing by moving the hump to exactly those frequencies that are problematic for your hearing. Adjusting the contour of higher audio frequencies has little effect on **the CW**, as a **500 Hz** or **300 Hz** bandpass filter cuts out this part of the sound spectrum anyway.

CHAPTER 4: CW Mania (Telegraphy)

For fans of Morse code, **the FTDX10** offers instruments that can "pull out" a signal that is not even visible on the waterfall. For a true "telegraph operator", the transceiver becomes a musical instrument. The operation of the **CW** (Morse code) requires a completely different approach to filters and amplification, because here the goal is not intelligibility of speech, but the isolation of a single pure tone in the chaos of signals.

4.1. First line of protection: bandpass filters (R.FIL) and bandwidth (WIDTH)

In **CW** mode, the first thing you need to do is narrow down the "entrance".

- **Capabilities:** The transceiver offers purely "physical" filtering and filtering through digital signal processing:
    - **R.FIL Bandpass Filters:** The basic configuration of **the FTDX10** has a **500 Hz** quartz filter. Those who wish can additionally purchase an optional **300 Hz narrowband filter**. They can also install it themselves. Remove the bottom cover and "slide" the filter into its place like in a plinth. Some radio amateurs claim that the **300 Hz** band filter loses its meaning in the digital processing of the signal, but my practice does not confirm it – **a 300 Hz** filter matters! DSP helps, but does not replace a quality telegraph filter. The receiver's band filter, **R.FIL**, should be **3 kHz** for **SSB**, **DATA and AM modes** and **500 Hz** (or **300 Hz**) for **CW, PSK** or **RTTY.** For **FM – 12 kHz**.
    - **Digital signal processing:** Allows exceptional quality processing and achieving a certain bandwidth. Selected from the small **WIDTH ring**.

- **Practice:** Make sure that the best quartz band filter you have at your disposal is selected (automatic or manual). Press the **ZIN button** 2-3 **times** (see below for more information) and narrow the strip digitally to **250 Hz** or **200 Hz**. Try even **50 Hz**. Note that for a band below **200 Hz** A fairly accurate setting is required, a useful signal can "escape" you. Give it a try anyway - don't be afraid to go down even to **50 Hz**. Although the sound becomes "metallic", it will cut off the neighboring stations that are trying to interfere with you. For **CW** contests, a good compromise is a **250 Hz band**, but if the environment allows, 50 **Hz** may be a good solution for a while. that the other filters more or less change the useful signal as well, and the band filter removes the interference on the side of the useful signal without affecting its shape.

4.2. APF (Audio Peak Filter) – a real weapon for the CW operator.

If you're working on a telegraph, **an APF** filter is a must. (Again, I emphasize that **APF** is only for **CW!)** It's an extremely narrow audio filter, the most powerful tool for **CW.** It literally extracts the desired **CW** signal from the noise in an amazing way.

- **Practice: When** you hear a weak signal, press the **<CONT/APF> button** once (lights up orange) and enjoy its operation. A vertical orange double line will appear on the filter display.
- **Centering:** If you can't hear the signal well, turn the internal **CONT/APF** knob to adjust the filter exactly to the correspondent tone. Once the three points on the **CW indicator** are visible on the bar scale for **the CW** signals, press the **ZIN** button **2-3 times** (see below for more information) until the useful signal sounds for an accurate adjustment to the desired sound.
- **APF Width:** In the function menu, you can select **NARROW**:

  <FUNC><OPERATION SETTINGS><RX DSP><APF WIDTH>

  This makes the **APF** filter "surgical" sharp. The default is **<MEDIUM>.**

- **Tip:** If you see an orange indentation instead of the double line on the part of the display with the filters, you have selected **the CONTOUR** filter instead of the **APF** filter. Press the <COUNT/APF> button twice to turn off and then turn **the APF** filter back on .

4.3. ZIN (Zero-In) and the visual indicator

For **APF** to work well, you need to be exactly at the correspondent frequency (by Zero Beat). In reality, the tuning is not by zero beats, but by the frequency that is selected for **CW PITCH,** but indirectly this is the same.

- **The magic ZIN:** Before turning on <**APF**>, press <**ZIN**>. The transceiver will automatically adjust exactly to the frequency of the correspondent. Without pre-precise tuning, <APF> can "cut" the useful signal if you are not exactly on it. You may need to click it **2-3 times**; it does not always work the first time.
- **Setting bar scale** and **CW indicator**: Below **the S-meter** there is a small horizontal scale. When the signal is precisely centered, **the CW indicator** (three dots) will be in the middle. This is invaluable when working manually with a Straight Key.

Of course, also for automatic (I'm addicted to the "walking" key). If **the CW indicator** is not visible, Check if it's turned on by:

<FUNC><CW SETINGS><CW><CW INDICATOR><ON>

- **TIP:** The <**ZIN/SPOT**> button is only active in **CW** mode. If you are operating on the **CW** in **SPLIT** spacing mode, press and hold the <**ZIN/SPOT**> button, the key height tone "**SPOT**" will be heard. You can compare the tone of the incoming signal with the height of the key and **set the VFO** to "zero beats" by the sound from both sources.

4.4. CW PITCH (Tone of Self-Control)

Everyone has a different hearing and taste. Some prefer a low tone (**500 Hz**), others higher (**700-800 Hz). The FTDX10 transceiver** pleases everyone as much as possible and takes into account different preferences.

- **Setting:** Adjust <**CW PITCH**> from the menu. This changes both the tone you hear from the transmitting monitor **(<MONI>)** and the center of the filters when receiving at the same time, so you always listen at the frequency that is most comfortable for your ear.

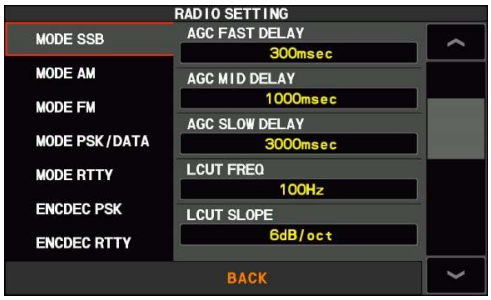
4.5. Gain Control (AGC and RF Gain)

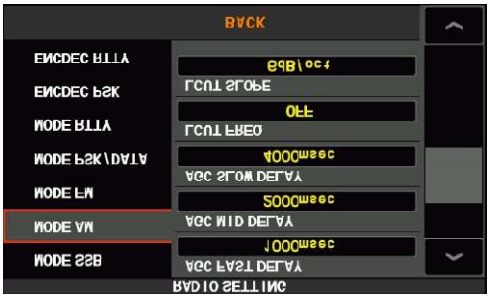
This is critical for **the CW**:

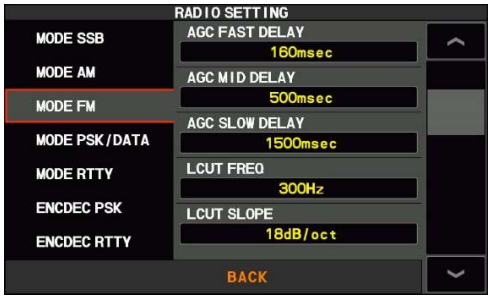
- **AGC (Automatic Gain Control):** For **CW**, always select <**FAST**> from the <**AGC**> software button.

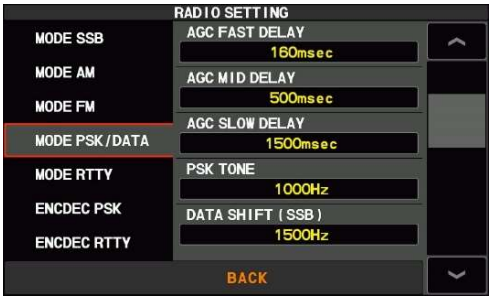
Be sure to use a quick automatic gain adjustment (**AGC** or **AGC**) to hear weak signals immediately after strong ones. This allows the receiver to recover instantly after a strong signal or between your own characters. If this is your main or preferred way of working, leave it on <**FAST**>. If you change operating modes frequently, prefer <**AUTO**>. You can set <**AGC**> to <**FAST**>, <**MEDIUM**> or <**SLOW**>, but it is best to leave it on <**AUTO**>, i.e. let the radio only control the **AGC** settings. If you want to change the specific decay rate values of **the AGC** for a certain mode of operation, use, for example, for **SSB** (for the other modes without **CW** there):

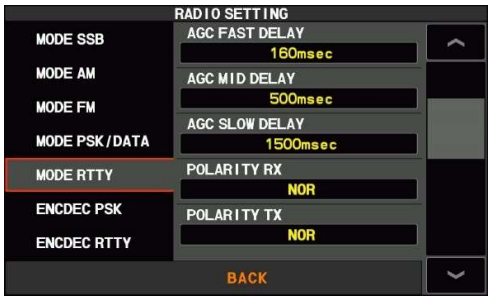
<FUNC><RADIO SETTING><MODE SSB><AGC FAST/MEDIUM/SLOW DELAY>











About The **CW:**

<FUNC><CW SETTING><SB><AGC FAST/MEDIUM/SLOW DELAY MODE>

For me, the default choice is the perfect choice and I haven't touched it.

- **RF GAIN:** Here's the Masters' Secret. Reduce the intermediate frequency gain with the small ring <**RF/SQL**> until the noise on the air is almost gone and **the CW** characters remain "floating" above it. This reduces hearing fatigue during long contests or fighting for **DXs**.

CHAPTER 5: Control of gain and amplitude and frequency response of sound

The main goal of amplification control is not so much to increase the gain itself, but to improve the signal-to-noise ratio, in which the useful signal is "extracted" more easily and is louder and more understandable.

5.1. FTDX10's gain control, attenuation, squelch (noise reduction) capabilities.

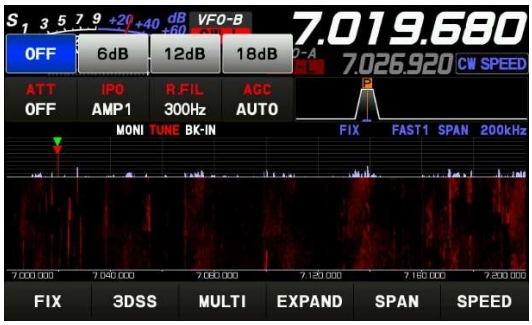
Filters work best when the receiver input is not overloaded, i.e. maximum gain is not always useful and the skill is to measure the right balance. The inscription on the knob is eloquent enough to orient you about what RF GAIN is adjusted with and with what **AF GAIN.**

- **RF GAIN:** In noisy ranges, reduce the **RF GAIN** (counterclockwise rotation) a little. This reduces the overall noise level that enters the **DSP** processor and makes the operation of **DNR** and filters much more efficient. In certain situations, it is better **to have AF GAIN** amplified more (even all the way to the right), and to adjust the force with **RF GAIN**. The most common button position is around 11 o'clock, but this is not mandatory. It may be good to know that if you are working

with software that receives its sound from **the USB** port of the transceiver with **Yaesu** drivers, the volume control to the software (e.g. **JTDX**) is **RF GAIN.**

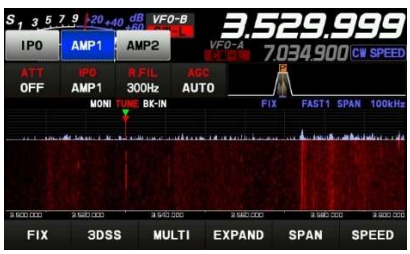
- **AF GAIN:** After maximizing noise reduction with **RF GAIN** (without losing the payload), you can adjust the signal strength with **AF GAIN**. In certain noise situations, it is better to have **the AF GAIN** amplified more (even to the end) and to adjust the payload strength with **RF GAIN.**

- **ATT:** The attenuator is a soft button. Usually, it does not need to be turned on. However, there are situations where the signals (or noise) are too loud to turn on in order for subsequent regulators and filters to work more efficiently. If you need to use the attenuator <**ATT**>, first turn off the preamp (until **the IPO**). Otherwise, the preamp adds amplification, partially compensating for the effect of the attenuator, and it's kind of silly to do. You can choose **6 dB**, **12 dB** or **18 dB** attenuation at the front end. The default is **OFF** and let it stay that way until you have to use it.



- **IPO:** <**IPO**> is a software button for **Interception Point Optimization**. When it is switched on, both **RF** preamps are switched off and the signal goes directly to the mixer. IPO may be the best option for the **80 m** and **160 m noisy** bands. Turning off **the RF** preamps by selecting **IPO** and sometimes adding some attenuation at the front end will improve the dynamic range and as a result, the signal-to-noise ratio at loud signals.

- **AMP1:** Only one **RF** preamp is included. The most commonly used option.



- **AMP2:** The second **RF** amplifier is also included. The use of the <**AMP2**> is suitable for **10 m** and **6 m** ranges where there is less noise in the range.

- **Squelch:** Used for **FM only**.

In this mode, instead of **RF**, it is **SQL**. In the other modes - **SSB/CW**, and in **AM**, you will have to rely on your ears and filters. When you are in a mode in which you cannot use a squelch, the knob is an intermediate frequency gain control.

5.2. Acceptance equalizer

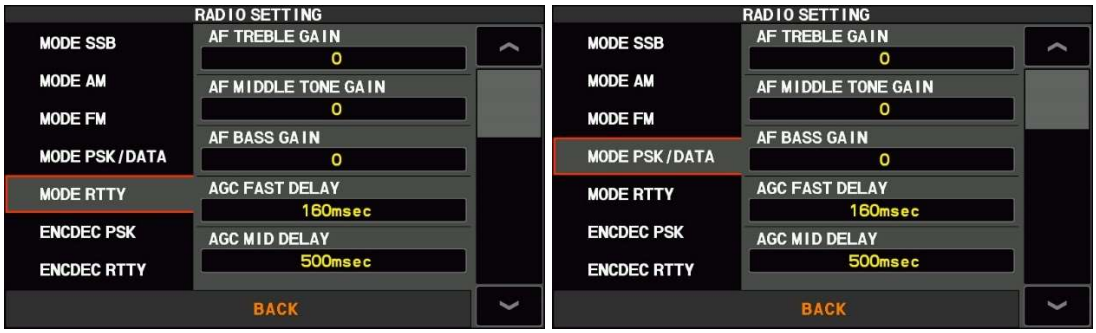
I don't see the need for any adjustments with it and personally I prefer the default settings. But each person is different, with different preferences and different hearing characteristics. In addition, perception may depend on the headphones used or an external speaker, therefore - a few useful guidelines:

- **For CW mode:**

  <**FUNC**><CW SETTING><CW MODE>

  Here you can adjust <**AF BASS GAIN**>, <**AF MIDDLE TONE GAIN**> and <**AF TREBLE GAIN**>. I guess you can guess that the **CW** tone is equal to and at worst close to the selected **CW PICH** value, and this setting changes the noise situation around the useful signal rather than the signal itself.

- **For RTTY, PSK, DATA:** See what is written about **CW** mode. If any adjustments are needed, they most likely depend on the software used and/or additional devices.



- **For all other modes (SSB/AM/FM):**

  <FUNC><RADIO SETTING> <MODE [mode]> <AF BASS GAIN/AF MIDDLE TONE GAIN/AF TREBLE GAIN>

  I prefer the default settings – equal **frequency response**.

- **Tip:** It is pointless to boost all three parameters at the same time. It is best to leave the midrange frequencies at "**zero**" and adjust the bass and/or treble slightly according to your headphones or speaker.

CHAPTER 6: To Be Heard Well on Telephony (Transmission Settings in Telephone Modes)

Your signal is your business card. The **FTDX10** offers exceptional options for shaping the transmitted bandwidth and timbre. Although the settings are subjective, there is a "Golden Algorithm" based on psychoacoustics that works for 90% of voices on the air, focusing on cutting out the "fumbling" bass – a "consumer" of energy and raising the "intersectional" treble.

Here again, I prefer the default settings. But still, the voice is individual as an imprint, and in amateur radio practice (especially in **DX** and contests) the goal is not "**Hi-Fi**" sound, but maximum penetration and intelligibility, and enthusiasts can try to improve their sound.

Before touching the equalizer, you need to do one basic thing: turn off the compressor

<FUNC><PROC><OFF>

and adjust **the <MIC GAIN>** so that the **ALC** scale is in the middle of the blue zone in normal speech.

I also recommend setting **the <AMC RELEASE TIME>** to **<FAST>** during the setup process.

<FUNC> <OPERATING SETTINGS> <TX AUDIO> <AMC RELEASE TIME> <FAST>

This reduces the time it takes for the **COMP** meter to establish after each voice peak. If you want, you can revert it to the default **<MID>** setting after you have finished adjusting the audio levels of the transmitter.

6.1. Telephony Transmitted Bandwidth (TX BPF) Setting

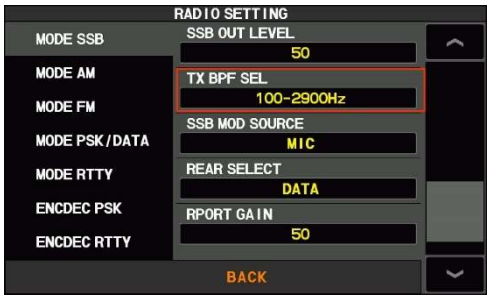
Before moving on to the equalizer, you need to determine the breadth of your signal. My personal preferences match the default settings, but sometimes it can be effective to touch them lightly.

- **Path to settings:**

  <FUNC> <RADIO SETTING> <MODE SSB> <TX BPF SEL>

  <FUNC> <RADIO SETTING> <AM> <TX BPM SEL MODE>

  <FUNC> <RADIO SETTING> <PSK/DATA> <TX PBF SEL>



  There is no adjustment on FM, don't look for it. On AM, I prefer the default value **of 50-3050 Hz** (**3.1 kHz**), because it seems reasonable to me, and I don't expect to ever use it.

- **DX/Contest Selection:** For greater penetration in SSB, set **200-2800 Hz** (**2.6 kHz** band).
- **DATA selection:** It is good to listen to a slightly increased soundbar in the data modes – my preferences are at **50-3050 Hz** (**3.1 kHz**), which allows me not to drop correspondents at the end of the tape, and it also fits better with the waterfall displayed by default by the software. Note that the setting of the parameters of the **PRESET** button must also be set, because when switching, they overwrite.
- **Standard selection:** The default is **100-2900 Hz** (**2.8 kHz**), which sounds more natural. Other radio amateurs prefer **300-2750 Hz** (**2.4 kHz** bandwidth), but to me such a bandwidth seems too limited.

6.2. Parametric Audio Transmission Equalizer

The equalizer is not for beauty, but is a tool for efficiency. Your goal is not to sound like a radio host in a studio. Your initial should be heard the first time in the pile-up.

For me, the gain settings are **<MIC GAIN> <30>**; **<AMC LEVEL> <60>** and **<PROC LEVEL>** is at **<12>**.

While the microphone gain level can be compensated by the voice processor (compressor), **EQ** errors can change your voice beyond recognition and, worse, "inaudible". For this reason, I recommend a serious approach if you decide to make these settings at all.

The FTDX10 allows for two separate equalizer settings: one for the voice processor (compressor) off (**PRMTRC)** and one for on (**P PRMTRC**).

- **Before setting:** Turn on the equalizer from **<FUNC><MIC EQ><ON>** Note that in order for this setting to be active, you must be in the appropriate mode and range.
- **Path to settings:**

  <FUNC><OPERATION SETTING><TX AUDIO>

- **Important!** Transmitter settings are made with a suitable **50 ohm RF** load with **100W** or greater power. If you do not have a suitable load, you can adjust the **SSB** levels while transmitting to your usual antenna. It is preferable to perform the

adjustment during times when the respective **HF** range is closed and nevertheless regularly communicate your call sign.

Preferred settings from radio amateurs working more on SSB:

Parameter	Function	Value (PRMTRC)	Value (P PRMTRC)
EQ1 FREQ	Low Freq	300 Hz	300 Hz
EQ1 LEVEL	Gain	-3 dB	-6 dB
EQ1 BWTH	Q (tape)	5	5
EQ2 FREQ	Mid Freq	900 Hz	900 Hz
EQ2 LEVEL	Gain	0 dB	0 dB
EQ2 BWTH	Q (ribbon)	5	5
EQ3 FREQ	High Freq	2400 Hz	2400 Hz
EQ3 LEVEL	Gain	+8 dB	+8 dB
EQ3 BWTH	Q (tape)	5	5

Although the preferred values are the same for **PRMTRC** and **P PRMTRC,** be sure to change them for both situations – with and without a compressor!

I suppose you want to know what necessitates the separation of "**PRMTRC"** and "**P PRMTRC"**?

6.3. Why are the settings separated when the voice processor is turned off and the voice processor is turned on?

The most commonly used term in English for "voice processor" is "compressor". The abbreviations in the **FTDX10** menu are sometimes a bit confusing, but there is a reason why these settings are separated. The difference is very important for achieving a quality signal in different situations.

- **PRMTRC** (**Parametric Equalizer**)

These are the settings of your parametric equalizer when the voice processor is OFF.

<FUNC><PROC><OFF>

  - **When to use:** In normal rag-chewing, when you want your voice to sound natural, thick and pleasant.
  - **Objective:** To adjust the characteristics of your microphone and the specifics of your voice to achieve maximum true and natural reproduction.

- **P PRMTRC** (**Processor Parametric Equalizer** – equalizer when the compressor is on).

These are the equalizer settings that are only automatically activated when the voice processor is **ON:**

<FUNC><PROC><1-100>

- **When used:** When working with remote stations (**DX**), in contests, or in harsh weather conditions (loud noise, **QRM**).
- **Goal:** Since the processor itself compresses the signal and changes its timbre (often making it "more faded" or "bass"), these settings allow you to apply a second, completely different correction and much more efficient, specifically for working through the CPU.

Without a fight, I admit that I always have a **<FUNC><PROC><12>** and so far, I have not had a problem or dissatisfaction with anyone. I have reached this value complete with the default values for the above table after many attempts, and yet I am still not sure that it is the best. It continues to bother me, for example, why the default bar has quite different values for low, mid, and high frequencies, and in the practically selected value it is everywhere **5**. I assume that this is not kHz, but some coefficient and I have actually left the default values here, despite the recommendations of most radio amateurs, reflected in the table.

The logic for such a separation (with a compressor and without a compressor) is understandable: usually radio amateurs want two different broadcast profiles for different situations:

- **Compressor less (PRMTRC):** Settings for "**Hi-Fi**" sound. Maybe a little more bass and balanced midrange. The voice sounds rich, like in a movie theater.
- **With compressor (P PRMTRC):** Settings for "penetration". Here the low frequencies are usually cut even more aggressively and the high frequencies (around **2400 Hz) are amplified so** that the signal can literally "crush" the noise at the correspondent.

How the transceiver works:

- When the PROC label on the screen does not light up in any of the phone modes, the radio reads the values from the **PRMTRC EQ menus**.
- The moment you select a value for **PROC** and the **PROC** label lights up, the radio instantly ignores the first settings and switches to the values in **the P PRMTRC EQ.**

Important tip: If you tune your equalizer perfectly with the compressor turned off, but after turning it on, you start to sound bad, the reason is that the factory settings probably remain in the **P section of the PRMTRC** (a common error, everything is usually at "zero" there). Therefore, you need to set both groups of menus separately, even if they should have the same values.

I let the fans of phone modes experiment and recommend their values for setting the equalizer to us.

6.4. The Voice Processor (Compressor)

The compressor increases the average transmitting power without raising the peak power. Use the compressor only when necessary. Adjust it so that the compression is between **5 dB** and **10 dB** on the scale. More than that, it will only increase the noise from your room, which can also be heard on the air.

- **Setting:** Press

  <FUNC><PROC LEVEL>

  and adjust to such a value that you have a "healthy compression" without the signal becoming incomprehensible (personally, for me, the "healthy compression" is at level 12 of the **PROC**). When it is active, the inscription PROC appears on the display under the ATT button in phone modes.

- **Tip: When** you turn on the processor, usually the signal becomes "narrower" and kind of tense, so here you can be even more aggressive with the high frequencies, so you don't sound "dampened" because of the compression. "**Consonant test**": while listening to yourself on the monitor (**MONI**), repeat words with "**C**" and "**F**" (for example, "**Sofia, Sector, Factor"** or **"C-Q-C-Q**"). If the "**C**" sounds too sharp and "cuts" your ear – lower the high frequencies level slightly. If your voice sounds like it comes from a barrel or a cave – lower the frequencies even more.

6.5. Test of settings with the signal monitor

When tuning, always use the built-in monitor <**MONI**> or when broadcasting with an artificial load instead of the antenna. Never tune "blindly".

Turn on the headphones. Turn on <**MONI**> and adjust its volume so that you can hear your own voice without delay. Use the <**RECORD**> soft-button to record a short phrase ("One, two, three, LZ1...") and then listen to it.

6.6. Online Receiver Test

There are now a lot of **online SDR receivers** that you can use for free, and they come in late and you can actually hear how your correspondents are hearing you. Again, you can record your signal and listen to it later to choose the best setting. I hope you remember that you have to choose the right time and the right frequency range and band for these tests. so as not to accidentally disturb someone, as well as to hear yourself where **the SDR receiver** is. Be sure to report your initial when sampled. My choice for **an online SDR receiver** is this:

http://websdr.ewi.utwente.nl:8901/ (в Netherlands)

but you can also choose another preferred **online SDR,** for example, from here:

http://websdr.org/

CHAPTER 7: Being Heard Well on CW (Professional Technical Settings for High Quality Telegraphy Transmission)

An experienced radio amateur knows that **the quality of the transmission signal** is a matter of honor and respect for others in the range. A poorly tuned **CW** signal can cause "key clicks" that pinch adjacent frequencies, and sometimes cause laughter and/or irritation. Transmission time what signal you are broadcasting – it is possible, but it comes with experience.

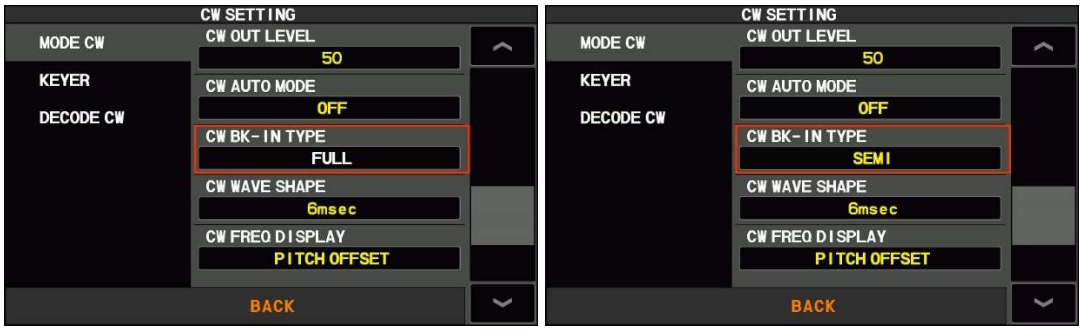
While filters help us hear, proper transmitter setup ensures that our signal is clean, "soft" and easy to read from others.

A quality telegraph signal is not only a matter of filters, but also of discipline and morality.

7.1 For those who use the built-in electronic key

- **QSK (Full Break-in): The FTDX10** has a great **Full Break-in**. This means that between your dots and dashes, you are listening to the airwaves. If someone interrupts you (**QRM** appears), you will know it immediately, even before you have stopped the broadcast. **Full Break-in** activates the transmitter while the **CW is being sent** and will return for receiving as soon as the key is released. This allows the reception of a signal between **the CW** characters - between the dots themselves and the hyphens. There is a slight click on the relay, but it is not intrusive. The **SEMI** Break-in mode will activate the transmitter while the **CW** is being sent and will revert to accept after a delay when the key is released after a character or after an entire line. By default, **the QSK** mode is **<SEMI>**. My personal choice is also **<SEMI>** to avoid unnecessary switching of the relays.

<FUNC><CW SETTING><MODE CW><CW BK-IN TYPE><FULL/**SEMI>**



7.2. Improving the quality of telegraph signals.

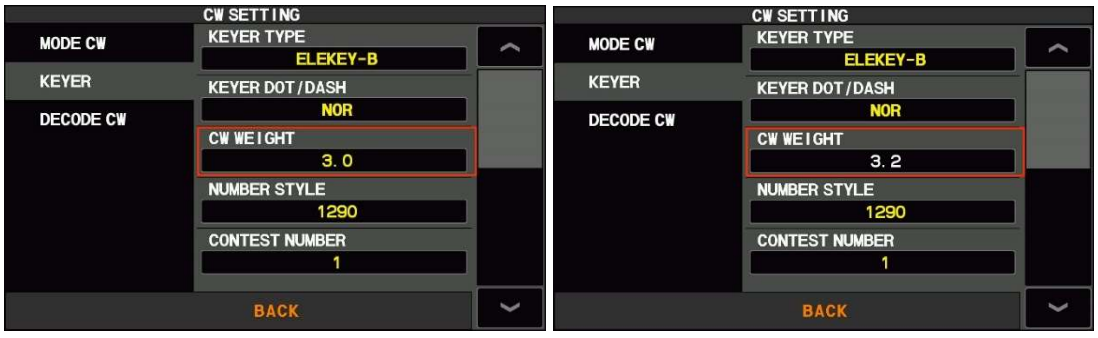
In order to avoid wide and parasitic signals and not to interfere with neighboring stations with "clicks" from the telegraph manipulator, pay attention to the following settings in the menu:

- **CW WAVE SHAPE:** Set from the **<FUNC><CW SETTING><MODE CW><CW WAVE SHAPE>**

  - **Recommendation:** Set it to **4 ms or 6 ms**. This softens the front of the sign and makes your signal "cultured". Lower values (**1 ms** or **2 ms**) make the signal "sharp" and cause parasitic clicks on adjacent frequencies, which interferes with colleagues. The value of **6 ms** (default) provides the softest and cleanest signal, suitable for daily work and high ethics on the air.

- **CW WEIGHTING:** The standard (and default) hyphen-to-point ratio is **3.0:1. The** FTDX10 **transceiver** allows fine-tuning. If you're transmitting too fast in noise conditions, a slight increase in the ratio makes your characters easier to read from the opposite side. For better penetration in DX, some colleagues (myself included) increase the length of the dashes to **3.2:1 - 3.3:1**.

<FUNC><CW SETTING><KEYER><CW WEIGHT><2.5-3.0-4.5>



7.3. Correct mode selection

FTDX10 offers great options for working at different frequencies

- **SPLIT mode:** Use it whenever the **DX** station is listening to the side. Press the <SPLIT> button. Your reception stays on **VFO-A** and the transmission moves to **VFO-B**. Be sure to check beforehand what the **VFO-B** settings are and whether you are in the correct range at all. Normally, the offset is **1 kHz up** for **CW** or **5**

kHz higher for **SSB,** but it can be totally different or even in a different frequency range. You can press the <**TXW**> button to hear what's going on on the frequency where you're going to be transmitting with **VFO-B**.

- **TX CLARIFIER function (<CLAR TX> button):** an easier and more flexible variant than **SPLIT** for switching to spaced mode in a single band. It moves only the transmission frequency, keeping all other settings.

- **TX WATCH function (<TXW> button):** Extremely useful function for split transfer and transmission! Hold down this button to listen on the frequency at which you will be transmitting. This allows you to hear whether the frequency at which you plan to transmit is free or if there is already a "pileup" there, or it may not turn out that you are yelling at someone else.

- **RX CLARIFIER function (<CLAR RX> button):** If you have a lot of stations piling on you (**If you are a DX station**), switch to **SPLIT (UP 1-5).** Be sure to stream from time to time where you are listening, for example, "**UP 5**" if you are listening **5 kHz** above your transmission rate. Use to "rake" individual signals from the crowd without shifting your transmit frequency. If you transmit (or hear) only one **UP** (without a specific digit), this is implied as **1 kHz higher** for **CW** or **5 kHz** higher for **SSB.**

CHAPTER 8: Tactics in the Pile-up – The Role of the Hunter

8.1. When trying to make a connection to a valuable station:

- **Listen more than you're transmitting:** Don't shout right away. Find out where the **DX** station is listening . If it's running in split, use **VFO-B** to find who it last received.
- **"Jump" on frequency:** Most **DX** operators move up or down slightly after each connection. Try to predict where it will listen next time.
- **Short and clear initial:** Pass your initial once or twice at most and listen. Do not "override" the end of the connection of the previous station.
- **Precise tuning:** "Mastery is not just about hearing the **DX** station, it's about calling it right on its frequency. Always use <**ZIN**> to tune in accurately before handing over your initial."

8.2. When YOU are the cause of the crowd (for Pile-Up)

If you are in a rare location or activate a desired object, an "avalanche" of signals will fall on you.

- **Switch to SPLIT:** If the stations become more than 3-4, immediately announce "**UP 1**", "**UP 5**" or another split depending on the current **QRM**. This will free up your frequency so that you can hear the answers and will dilute the undisciplined "intruders" a bit – they usually don't listen and will only realize after a while that you are listening elsewhere. They will shout without disturbing you. Maybe it's a little "sneaky", but it's disciplining and very helpful.
- **Take partial initials:** If you only hear "**LZ1**", say: "**LZ1?**" or even just "**LZ**". If you've heard another part of the initial, send it so that only the owner of the initial that contains these characters can answer. This disciplines the rest to wait.
- **Use CLARIFIER:** If you're on a simplex (all are on your frequency), use the **RX CLARIFIER (<CLAR RX>)** to "walk" around your frequency and get a cleaner signal without moving your transmitter. It's also a lighter option than split work.

8.3. CLARIFIER (RX and TX) – The Subtle Weapon

- **< CLAR RX >:** Only changes the reception frequency. Use it when your correspondent is slightly out of frequency so you don't ask him to move.

- **< CLAR TX >:** Only changes the transmission frequency. Useful if you want to "insert" into a narrow correspondent filter without losing its signal. Or you prefer to use <CLAR **TX>** instead of going into **SPLIT mode**.

CHAPTER 9: Quick Pro Tips. Generalization.

- **RF GAIN's golden rule:** If the range is very noisy, turn RF **GAIN** back slightly (at 10-11 o'clock – 70-80%, by ear, minimize noise so much that the useful signal is still audible). This will help the **DSP** filters (**DNR/DNF)** to work much cleaner and more efficiently.
- **CW Mastery:** Always use the <**ZIN/SPOT** > (**Zero-In**) button before turning on the <**APF**>. **The APF** is so narrow that if you're not exactly on the frequency, the signal will simply disappear. You may need to click <ZIN/**SPOT**> two or three times until you are right on top of the signal. In fact, learn to use the **<ZIN/SPOT>** button frequently to fine-tune the **CW**, even without the **APF** filter.
- **Visual markers:** If you don't see the markers, turn them on from **<FUNC>**<MARKER><ON>.

- **Green marker:** Indicates where you are listening (**RX**).
- **Red marker:** Indicates where you are transmitting (**TX**).

- **Quick Reset:** If you "overdo it" with the **NOTCH, CONTOUR** or **CLARIFIER** settings, simply press and hold the corresponding button – it will return to the original (neutral) position.
- **Be careful with DNF at the CW:** Never turn on **DNF** in telegraph mode – the radio will think your correspondent is a "nuisance" and cut it out!

Conclusion: Beyond Technology – The Magic of the Human Factor

Dear friend and colleague HAM OM,

The journey through the pages of this manual has taken us from the dry matter of technical parameters to the subtle art of ethereal communication. **The Yaesu FTDX10** is an exceptional machine, a powerful instrument and a technological marvel, but without the operator who works with it, it remains only that – a tool, a machine. The true meaning of the "magic" functions of a transceiver is born the moment you already know them well, put on your headphones and immerse yourself in the noise of the air.

The purpose of this guide is not just to explain menus, but to give you the confidence to experiment. Mastery is not to know the settings by heart, but to use them already "on the spinal cord" – to feel the radio as an extension of your own senses. Know when to "cut" the noise with the <**DNR**>, when to "highlight" the voice with the equalizer, and how to keep calm and ethical in the middle of the tensest pileup.

Amateur radio is a unique blend of science, technology and pure emotion. I hope that this "Master Class" will be your faithful companion in the hamshak and will help you turn every weak signal into a successful relationship, and every challenge in the range into a valuable experience.

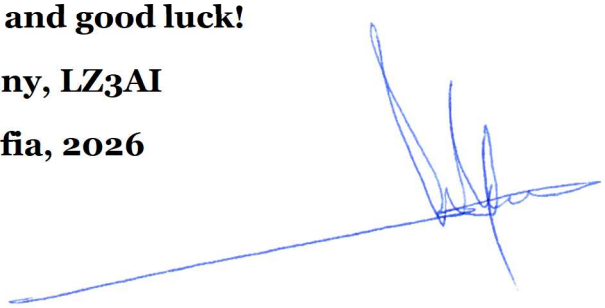
The ether is wide, there are no borders, and your **FTDX10** is now ready to take you further than ever!

Thank you for your shared passion! See you on the air!

73 and good luck!

Tony, LZ3AI

Sofia, 2026



https://www.qrz.com/db/LZ3AI

https://www.linkedin.com/in/lz3ai

https://www.galanto.com

APPENDIX: YAESU FTDX10 FILTERS CHEAT SHEET

Problem	Solution	Action
Impulse noise (cars, power fences, switching power supplies, inverters and the like)	**NB**	Press **NB.** Hold long and select a level. Don't overdo it (distorts the voice).
Loud atmospheric noise / Static interference	**DNR**	Turn on **DNR**. Hold down to choose an algorithm (try **5**, **9** or **15**). Experiment with others.
Constant Tone / Playing (SSB)	**DNF**	Turn on **<FUNC><DNF>.** Automatically finds and cuts carrier frequencies and constant tones. Only used for **SSB**!
Strong Disturbing Station Nearby	**NOTCH**	Turn manually until the interference disappears.
Deaf/Bass or too sharp signal or hearing problems	**CONTOUR**	Move the "indent" to the low frequencies or the "hump" to the high frequencies. Correct changes in your hearing.
Weak CW signal	**ZIN + APF**	First **ZIN/SPOT** (centering on the signal), then press **CONT/APF** for focus.
The correspondent is slightly "out" (to the side)	**CLEAR**	Press **CLAR RX**. Rotate the main scale for fine-tuning.
Noisy range	**RF GAIN**	Reduce slightly (to 70-80%) until the noise almost disappears without losing the useful signal.

APPENDIX: ADDENDUM FOR CW OPERATORS

Function	What does it do?	When should I use it?
SENSE	Auto Centering	Whenever before turning on **the APF,** click ZIN/SPOT two or three times.
APF	Peak Audio Filter	For "taking out" very weak signals.
WIDTH	Narrows **the MC** tape	When there are strong stations on an adjacent frequency.
AGC FAST	Rapid **AGR response**	Mandatory at CW, so that the radio does not "fade out".
300 Hz	Narrowest Inlet Belt Filter	Under very difficult competition conditions and a pile-up of correspondents.
PITCH	Tone Adjustment	To adjust the sound to your hearing (500-800Hz).
SPLIT	Separates **RX** and **TX** frequencies	When the **DX** station is listening to "**UP**" or "**DOWN"**.
TXW	Listening to the transmission frequency	To find a "hole" in the split pileup.
CLEAR RX	Only replaces acceptance	When the correspondent is not exactly on frequency.
CW WAVE SHAPE	Softens the sound wave front (sign)	Set to **4-6 ms** so as not to "splash" or touch the default setting.
SENSE	Centering on a signal	Before you start yelling at the **CW** to be on the right frequency.

Final Words

Don't be afraid to turn the knobs! The **FTDX10** is designed for active operation. The more you experiment with the combinations of **DNR**, **CONTOUR** and **NOTCH**, the better you'll hear what's going on in the ranges. See you on the air!

73!

Frequently Asked Questions (FAQs)

Q: Why does my voice change drastically when I turn on the PROC?

A: Because the radio automatically switches from **the PRMTRC EQ** (Processor Off) settings to **the P PRMTRC EQ** (Processor On). These are two completely separate EQ profiles. Make sure you enter the desired values in both profiles.

Q: How do I quickly reset a filter setting?

A: Press and hold the corresponding knob (**NOTCH, CONTOUR, CLAR).** The values will return to zero or center position instantly. With one more "click", they turn off.

Q: Why can't I activate APF (Audio Peak Filter) in SSB mode?

A: The APF **function** is designed "surgically" for telegraph signals and only works **in CW mode**. In **SSB**, for a similar effect (cutting out noise and highlighting a certain frequency), use the **CONTOUR function**.

Q: How can I take a "Screenshot" on the display?

A: The FTDX10 has a hidden screen capture function. Insert an **SD** card into the slot and long press the **MODE button**.

Q: Can I use a computer mouse with the radio?

A: Yes! You can plug a standard **USB** mouse into the rear panel port. This is extremely handy for quick navigation in the Scope and precise selection of weak signals, especially when you plug in an extra-large monitor.

Q: What is the difference between an IPO and an ATT?

A: ATT (Attenuator) reduces the strength of all incoming signals to protect the receiver from overload. **IPO** (Intercept Point Optimization) turns off the receiver preamp and directs the signal directly to the first mixer without passing through any of the **AMP1** and/or **AMP2** high-frequency amplifiers. Use **IPOs** on the low ranges (**160 m / 80 m**) where noise is high and you don't need additional amplification.

Q: My radio shows "HIGH SWR" and the antenna is tuned. What's the problem?

A: This often happens if you use the built-in tuner outside its range (the built-in tuner fails to cope with a standing wave ratio **(SWR)** greater than **3:1**). If you have worked with this antenna before, first make sure that the connectors are clean and well tightened. If the problem persists, check that you are not transmitting at a frequency for which the antenna is not designed. to protect the final step, but high **SWR** does not decrease and do not overdo it with this situation – switch to acceptance and look for the cause of the high **SWR**.

Q: How can I record an incoming signal (QSO) directly on the radio?

A: Press the <RECORD**> soft button** on the screen (or use this function if you use it frequently and have exported it to a hardware button). The recording is stored on **the SD** card, and you can listen to it later to check an initial or report. Of course, you need to have an **SD** card in the transceiver slot to be able to do so.

Q: Why does the ALC indicator "jump" too much in transmission?

A: This usually means that the **MIC GAIN** (microphone gain) is too high. Set it so that in normal speech the indication remains within the blue zone of the scale. Too high an ALC will distort your signal.

Q: How do I activate the 300 Hz telegraph filter?

A: In CW mode**,** the radio usually selects the filter automatically according to the settings of <RF **WIDTH>**. However, you can also select it manually via the <R.FIL> menu on the display to ensure maximum selectivity in harsh **DX** or racing conditions. Remember that to activate it, you still need to have it! . By default, this bandpass filter is not included with the transceiver.

Bibliography and sources used

In the preparation of this manual, official technical data from the manufacturer were used, as well as shared practical experience from leading experts in the amateur radio community:

- **Yaesu Musen Co., Ltd.** – *FTDX10 Operating Manual*. Official operating manual (original edition in English and Japanese).
- **Yaesu Musen Co., Ltd.** – *FTDX10 Firmware Update Manual & Technical Supplement*. Technical documentation for system software updates and advanced settings.
- **Community-Driven Manuals** – Translated materials and practical notes from manuals prepared by experienced radio amateurs (such as *MoPNN* or similar authors) who have devoted time to the detailed study of Yaesu's DSP functions are used.
- **ARRL (American Radio Relay League)** – *The ARRL Handbook for Radio Communications*. General principles for digital signal processing (DSP) and filtration in HF bands.
- **Sherwood Engineering** – *Receiver Test Data*. Technical analyses and comparative tests of the dynamic range and performance of FTDX10 filters.

> **Compiler's note**
>
> *This manual has been prepared as a free manual for the amateur radio community. The information has been collected, translated and systematized in order to improve operational mastery on the air. The author is not responsible for damages caused by improper software manipulation and recommends that you always consult the official management of Yaesu before making system changes.*

Glossary of terms and abbreviations used

2D – Two-dimensional, two-dimensional waterfall

3D – tri-dimension

3DSS – Tridimensional Waterfall

AF BASS GAIN – boost low sound frequencies

AF GAIN – Sound Frequency Boost

AF MIDDLE TONE GAIN – amplification of the midrange sound frequencies

AF TREBLE GAIN – amplification of high sound frequencies

AGC – Automatic Gain Control – Automatic Gain Control (AGC)

ALC – Automatic Level Control – Automatic Level Control

AM – amplitude modulation

APF – Audio Peak Filter – Sound Peak Filter

ATT – attenuator (attenuator)

AUTO – automatic

BWTH – bandwidth

CLAR (CLARIFIER) – purifier, purifier

CLAR RX – Acceptance Purifier

CLAR TX – Transmission Purifier

COMP – compression meter, compressor level (speech processor)

CONT (CONTOUR) – loop (a type of filter that changes the bandwidth loop)

CONT/APF – label on the CONTOUR filter knob

CONTEST – competition

CONTOUR LEVEL – CONTOUR filter level

CS – Custom Select – preferred choice

The CW – Continues Wave – Morse Code Telegraphy

CW PITCH – pitch pitch of telegraph signs

CW WAVE SHAPE – waveform in telegraphy – rise time.

CW WEIGHTING – character weight, hyphen-dot ratio.

CW INDICATOR – Telegraph Signal Indicator

CW-L – Lower Sideband Telegraphy

CW-U – Upper Sideband Telegraphy

DATA – data, modes with data transmission

DNF – Digital Notch Filter – Digital Notch Filter (Automatic)

DNR – Digital Noise Reduction

DOWN – nadolu

DSP – Digital Signal Processing

DX – Far Country, Far Sides

EQ – Equalizer

EXPAND – software button for expanding the "waterfall"

FAST – fast

FM – frequency modulation

FREQ – chestota

FULL BREAK-IN – total interruption – reception at each interruption of the transmitted signal

FUNC – function button designation **<FUNC>**

HAM – radio amateur

Hi-Fi – High fidelity – high quality (precision) in sound reproduction

IF – intermediate frequency

IPO – Interception Point Optimization

KEYER – automatic telegraph manipulator

LEVEL – level

LSB – Lower Sidebar

MEDIUM – medium

MIC – Microphone

MIC EQ – Equalizer on Microphone

MIC GAIN – Microphone Boost

MONI – monitor – "monitoring" of the transmitted signal

NARROW

NB – Noise Blanker – Noise Silencer

NB LEVEL – Noise Cancellation Level

NB REJECTION – Noise Cancellation Rejection

NB WIDTH – noise cancellation width

NOTCH – notch filter

OM – respectful address to a fellow radio amateur

P PRMTRC – short for Parametric Equalizer – equalizer when the compressor is off

PILE-UP – a crowd of correspondents on the same frequency, trying to connect to a station valuable to them

PRMTRC – abbreviation for Processor Parametric Equalizer – equalizer when the compressor is on

PROC – Compressor (Voice Processor)

PSK – Phase Pulse Modulation

QRM – interference from other services and devices

QRN – Atmospheric Embarrassment

QSK – I hear you between my signals; you can interrupt me – Allows the operator to hear other stations between the dots (dits) and dashes (dahs) of the signal being sent, resulting in a more conversational style of communication.

R.FIL – roofing filter

RAG-CHEWING – literally "chewing rags", talking about sitting

RECORD

RF GAIN – RF Gain

RF/SQL – Radio Frequency Gain and Squelch Knob designation

RTTY – radio-teletype

SDR – Software-Defined Radio – Software-Defined Radio

SEMI – semi

SLOW – slow

SPAN – the full scope of something from end to end; the space that something covers

SPLIT – spaced frequency mode (different for receiving and transmitting).

SQL – abbreviation for squelch (noise suppressor)

SQUELCH – squelch (noise suppressor)

SSB – Single Side Band – Single Band Modulation

S-METER – signal strength meter

TFT – Thin-Film-Transistor technology – screen technology

TX BPF – bandwidth in transmission

TX CLARIFIER – Transmission Purifier

UP – up

USB – top sidebar

WIDE

ZIN – Zero-In – zero beat setting (precise wear tuning)

ZIN/SPOT – Precision Setting Button Designation

AGC – automatic gain control

Encoder – a converter of mechanical movement (rotation or linear) into digital or analog electrical signals, in a transceiver it is most often a knob with unlimited rotation, which creates control pulses.

MF – intermediate frequency, intermediate frequency

HAMSHAK – the "den" of the radio amateur – the room from which he works and where all or most of his equipment is located

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Personal notes: