Fusion Identification

Identification techniques used on Yaesu Fusion products

General Comments

There are several identifiers that are used in Yaesu's Fusion. The most useful are:

1. Model Number
2. EAN/JAN
3. Type
4. Serial Number
5. Transmitter Identifier
6. Board version
7. Software version

It is obvious that some of the information is incomplete. Please let me know of any additions or corrections. Thanks!!

Model Number

The model number is the well-known identifier that we're accustomed to using when telling people what radio we have.

The Yaesu product line consists of the following.

Model	Description	Product Status	Production Dates
FT-1DR	Dual-band HT	Ended[1]	4/13 - Summer 2015
DR-1	Repeater	Ended[2]	11/13 - Summer 2015
FTM-400DR	Dual-band mobile	Ended	10/13 - Summer 2015
DR-1X	Repeater	Current	7/14 -
FTM-100	Dual-band mobile	Current	5/15 -
FT-1XDR	Dual-band HT	Current	Fall 2015 -
FTM-400XDR[3]	Dual-band mobile	Current	Fall 2015 -
FT-991	HF/VHF/UHF	Current	Fall 2014 -
FTM-3200	2 meter	Current	Mar 2016 -
HRI-200	WiRES-X interface	Current	2013 -
CT-41	Drop-in charger	Current	2008 -

[1] The FT-1DR and FT-2XDR are the same radio, supplied with a different battery pack.
[2] Approximately 100 DR-1s were deployed as part of Yaesu's Fusion Beta program.
[3] The FTM-400XDR uses a higher performance GPS than the FTM-400DR.

EAN/JAN

The EAN/JAN number is essentially the part number and is a kit of several components that typically include cables, microphone, etc. Yaesu are shown in the table below.

Model	EAN/JAN
FT-1DR	AH044M022
FT-2DR	AH060M002
FTM-400DR	AH034M003
FTM-100DR	AH048M003
DR-1	TBD
DR-1X	AH043U007
FT-1XDR	TBD
FTM-400XDR	TBD
HRI-200	AD006X001
CT-41	AAG12X002

TYP

Type appears to indicate the configuration of the radio. Radios distributed in different regions might require a different TYP where things such as maximum power output, frequency coverage, operating voltage, and supplied accessories may vary. The table below lists the known TYPs.

TYP	DIST
A2	USA
?	?

Serial Number

The construction of the current Yaesu serial numbers is detailed in the table below.

<table>
<tr><th>Character(s)
L->R</th><th>Meaning</th><th>Example</th></tr>
<tr><td>1</td><td>Last digit of year of manufacturing</td><td>3 = 2013, 2003, or 1993[4]</td></tr>
<tr><td>2</td><td>Month of manufacturing as follows:
<table><tr><td>Jan</td><td>C</td></tr><tr><td>Feb</td><td>D</td></tr><tr><td>Mar</td><td>E</td></tr><tr><td>Apr</td><td>F</td></tr><tr><td>May</td><td>G</td></tr><tr><td>June</td><td>H</td></tr><tr><td>July</td><td>I</td></tr><tr><td>Aug</td><td>J</td></tr><tr><td>Sept</td><td>K</td></tr><tr><td>Oct</td><td>L</td></tr><tr><td>Nov</td><td>M</td></tr><tr><td>Dec</td><td>N</td></tr></table></td><td>3M = November 2013</td></tr>
<tr><td>3-4</td><td>Number of manufacturing lot for that month</td><td>3M26 = 26th lot Nov 2013</td></tr>
<tr><td>5-8</td><td>Unit number of the lot</td><td>3M260112 = 112th unit in lot 26 manufactured in November 2013</td></tr>
</table>

[4] It's necessary to know the period over which the radio was manufactured to select the correct decade.

Transmitter Identifier

Each Fusion transmitter has a unique identifier. This identifier is present in every digital transmission. It's used to know which radio transmitted - the programmed call sign is not used. This is how four radios, all programmed with K9EQ, can be separately tracked in the Fusion/WiRES-X system.

You can determine your transmitter ID by going to the Group Mode menu.

A transmitter ID consists of a Capital letter followed by a number. These first two characters can be used to identify the type of radio. The following characters can be alpha-numeric with upper and lower case. The combination of 26+26+10 = 62 and three character positions allows for 62^3 = 238,328 identifiers for each model prefix.

The table below lists transmitter ID prefixes and the type of radio.

Prefix	**Model**
E0	FT-1DR FT-1XDR
E5	FT-2DR
F0	FTM-400DR FTM-400XDR
F5	FTM-100DR
G0	FT-991
H0	FTM-3200
R0	DR-1X

Example IDs:
F00xy
E5AZG
F0jzW
R003M

Just to be clear, every radio has a unique ID that is transmitted with every digital transmission. You cannot change the ID or prevent it from being sent. So I'd suggest it's a very bad idea to steal a Fusion radio or to jam and irritate other users with it. The call sign programming has no effect on the transmitter ID.

Board Version

A black stamp on the PCB indicates the version of the PCB.

Known versions are listed in the table below.

Model/Board	Version	Approx. Date
FTM-400 Main	V203	2013-2014
FTM-400 Main	V303	2014
FTM-400 Main	V403	2015

Software Version

Software and firmware is the subject of another paper on this web site, so I won't go into details here.

Yaesu's version identification system is a little bit strange. It uses the format of:
N.MMA
where N is the numeric major version, MM is the numeric minor version, and A is the alpha sub-version. A is unusual in that it goes through the sequence of A, B, …, Z, a, b, …, z.

Some example version numbers are:
1.00Z
1.00m
4.10
1.10D

Each software/firmware product has it's own sequence. For example, the FTM-400 main processor, panel processor, and DSP will all have their own independent version numbers. The version numbers are usually not the same for a particular radio or across radios. If they are the same, it is a coincidence (with the possible exception of the V/UHF DSPs).

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