

Japan Radio Law

JQA Information Booklet &
Application Guide

June 15, 2017

Japan Quality Assurance Organization

Contents

About this Information Booklet	i
Section 1 - Japan Radio Law Requirements	1
Introduction to the Radio Law and Its Regulations.....	1
In-scope Products	2
Specified Radio Equipment and Special Specified Radio Equipment.....	2
High-Frequency Devices.....	2
Extremely Low-Power Devices	3
Other.....	3
A Note about Licensing Procedures	4
Approval Schemes.....	5
SRE Type Certification	5
SRE Batch Certification.....	5
Declarations of Conformity (DoCs).....	5
Voluntary Extremely Low-Power Device Registration.....	6
Marking Requirements	6
Specified Radio Equipment	6
High-Frequency Devices.....	9
Extremely Low-Power Devices	10
Test Reports	11
Specified Radio Equipment	11
High-Frequency Devices.....	11
Extremely Low-Power Devices	11
Section 2 –Specified Radio Equipment Type Certification	13
Application Flow for Type Certification.....	13
Application Materials for Type Certification	14
Application Instructions	15
JQA Application Form.....	15
Japan Radio Law Certification Application Forms and Supplemental Forms.....	15
Specification Sheets	15
Antenna Specifications.....	16
Radio Equipment System Diagram.....	16
Supplemental Specification Sheets.....	17
Radio Equipment Component Layout	17
External Drawings/Photographs	17

Circuit Diagrams.....	17
Component List.....	18
Proof of Restricted Access to the Main Unit.....	18
Declaration of Quality Management System.....	18
Certification Mark Specifications.....	19
E-Labeling.....	19
Operating Instructions.....	19
Test Requirements.....	20
Number of Samples.....	20
Example of RF Test Sample Set Up.....	20
Test Voltage.....	22
Test Sample Operating Conditions.....	23
Test Flow.....	24
Legal Obligations under the Radio Law.....	25
Accuracy of Test Reports.....	25
Obligation of Uniform Construction.....	25
Improper Certification.....	25
Claims to the MIC Minister.....	25
Market Surveillance.....	26
Modifications to Certified Equipment.....	26
Appendix A – Quote Request Form.....	27
Appendix B – Specified Radio Equipment Class Identifiers.....	28

About this Information Booklet

Regulatory information in this booklet is based on information which is publicly available in Japanese from the Ministry of Internal Affairs and Communication (MIC).¹

All information included in this booklet is for reference purposes only and is subject to change.

This information booklet is divided into two sections. The first section covers regulatory requirements for radio equipment in Japan.

Please use this section to determine what approvals may be required for your product in Japan.

The second section provides detailed information about JQA's application procedure for Specified Radio Equipment Type Certification. This section is aimed at customers who are already familiar with the Radio Law and are ready to proceed with conformity assessment and certification.

For further information on any topics in this booklet, or to request a detailed service quotation, please contact JQA's Global Market Access Division.

We are currently able to accept inquiries in English, Chinese, and Japanese.

Global Market Access
Japan Quality Assurance Organization
4-4-4 Minamiosawa
Hachioji, Tokyo 〒192-0364

Email: jtp-safety-gma@jqa.jp

Tel: +81-42-679-0095

Fax: +81-42-679-0170

¹ MIC's website uses unique English vocabulary to describe their approval processes. MIC's terms accurately reflect the Japanese terms; however, they may be opaque for international manufacturers. JQA has chosen to use more typical international terms as much as possible. When relevant, these differences are indicated in explanatory notes.

Section 1 - Japan Radio Law Requirements

Introduction to the Radio Law and Its Regulations

The Radio Law was established in 1950 to ensure fair and efficient use of the radio spectrum.

Broadly speaking, the law covers radio station licensing and operation, radio equipment approval systems, radio operator requirements, and penalties for violating the law. Supporting regulations and notifications issued by MIC establish detailed procedures and rules for each of those topics.

A list of the main regulations regarding radio equipment approval is provided below for reference.

A [full list in Japanese](#) is available on MIC's website.

1. The Radio Law (電波法)
2. Enforcing (Cabinet) Order of the Radio Law (電波法施行令)
3. Enforcing Ordinance of the Radio Law (電波法施行規則)
4. Ordinance Regulating Radio Equipment (無線設備規則)
5. Ordinance concerning Certification of Conformity to Technical Standards, Etc... of Specified Radio Equipment (特定無線設備の技術基準適合証明等に関する規則)
6. MIC Notifications related to the Radio Law (電波法関係告示)

In-scope Products

The Radio Law’s scope covers all products which emit electromagnetic waves with frequencies under 3 THz. The Radio Law requires approvals of not only wireless communications devices, but also high-frequency devices such as welders and induction heating (IH) cooking equipment.

Specified Radio Equipment and Special Specified Radio Equipment

- | | | |
|-------------|---------------------------|---------------------|
| • Bluetooth | • ZigBee | • Telemeters |
| • WiFi | • Wireless mics | • Pagers |
| • LTE | • RFID (2.4 GHz, 920 MHz) | • UWB radio systems |
| • GSM | | • Etc... |

Article 38-2-2 of the Radio Law defines different types of Specified Radio Equipment (SRE). In general, consumer-operated radio equipment is categorized as SRE.

Most SRE must obtain third-party certification by an MIC-designated Registered Certification Body (RCB) such as JQA. However, some SRE are defined as Special Specified Radio Equipment (SSRE). These products must still be tested for compliance, but are subject to a simplified procedure of self-declaration and registration with MIC.

High-Frequency Devices²

- | | | |
|----------------------------------|----------------------|---|
| • IH cooking equipment | • Welders | • PLCs |
| • Microwaves | • RFID (13.56 MHz) | • Other equipment over 10 kHz (including ISM, such as MRI machines, plasma devices, etc...) |
| • Electrode-less discharge lamps | • Ultrasonic devices | |

Article 46 of the Enforcing Ordinance specifies High-Frequency Devices (HFD). Most of these products must be tested for compliance and registered by a local Japanese company with the relevant regional branch of MIC before they can be placed on the market. A small number of these products are exempt from any kind registration, but must still comply with the legal requirements. Contact JQA if you are unsure whether your product requires registration.

² MIC’s terms: “Industrial Facilities Emitting Radio Waves”

Extremely Low-Power Devices



Frequency	Maximum Limit
Below 322 MHz	field strength 500 µV/m
322 MHz – 10 GHz	field strength 35 µV/m
10 GHz – 150 GHz	field strength 3.5f µV/m , where “f” = the frequency in GHz (or 500 µV/m, whichever is lower)
Over 150 GHz	field strength 500 µV/m

Article 6-1 of the Enforcing Ordinance defines Extremely Low-Power Devices (ELPs).

ELPs are license-exempt and do not require certification. However, compliance with the Radio Law’s interference requirements is mandatory. During recent market surveillance activities, MIC discovered that many ELPs on the market are not in compliance with the Radio Law’s requirements. Accordingly, a voluntary certification and registration scheme, the ELP Mark, has been introduced to assure suppliers and consumers that the products they purchase will not cause interference or be adversely affected by interference.

JQA is a registered lab under the ELP Mark scheme and can assist foreign manufacturers in obtaining registration to display a voluntary ELP Mark.

Other

- Maritime radio stations
- Aeronautic radio stations
- Experimental stations
- Etc...

The Radio Law includes provisions for many types of specialized equipment including provisions in order to comply with international agreements Japan is a signatory to, such as SOLAS. In general, JQA does not handle approvals of such equipment and they are not included in this information booklet.

A Note about Licensing Procedures

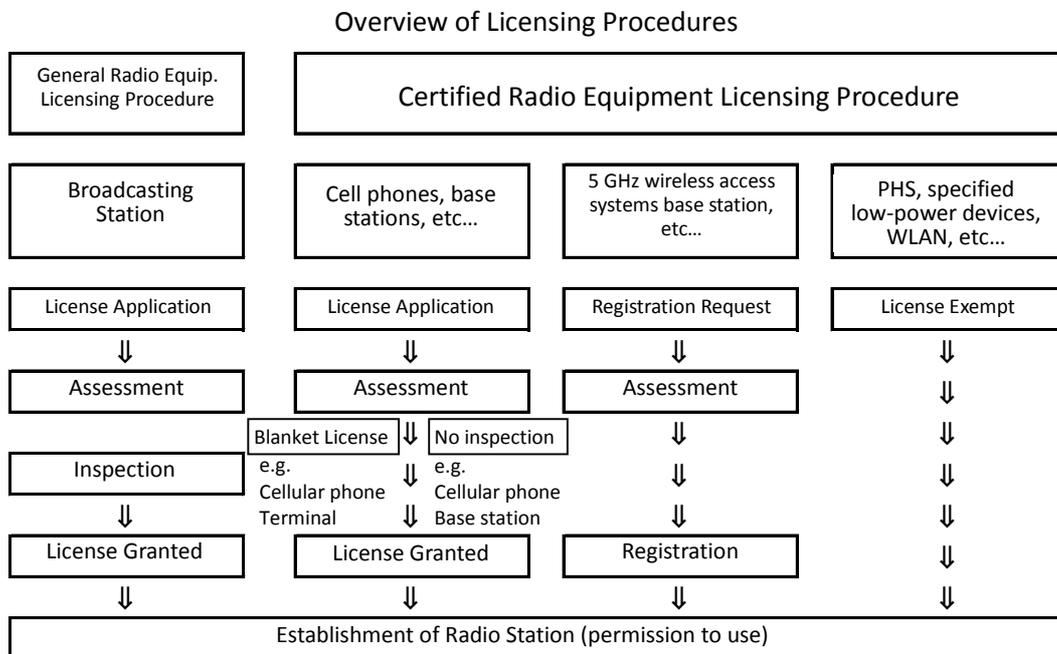
Radio equipment sold and operated in Japan is subject to four types of licensing procedures.

Broadcasting stations, etc... are subject to a full licensing procedure which requires the issue of a temporary license following equipment approval, and a formal license after an inspection of the radio station’s completed setup.

Relatively short range devices such as cell phones, Multi-Channel Access (MCA) land mobile stations (800 MHz), amateur radio stations, etc... are subject to a simplified licensing procedure which allows for a formal license to be issued after equipment has been certified to be in compliance.

PHS with antenna output below 10mW, 5 GHz wireless access systems, 2.4 GHz frequency hopping devices, etc... are subject to registration. Registration is a fairly simple procedure and applications can be completed online.

ELPs, specified low-power devices, WLAN, etc... are license-exempt.



Approval Schemes

The Radio Law specifies equipment approval schemes ranging from self-declaration to third-party certification. Specified Radio Equipment must obtain either Type Certification or Batch Certification.

SRE Type Certification³

This scheme corresponds to Type 1a of ISO/IEC 17067:2013. The product's type of construction and design is certified using a representative sample (typically 1 or 2 units). This scheme also includes confirmation of the quality management system used to manufacture the product through a "Declaration of Quality Management System."

On-site factory inspections are not required.

Certification is granted if the product is in compliance with the technical standards specified in Item 24 of Article 38 of the Radio Law. This scheme is suitable for mass-produced radio equipment. Foreign manufacturers are eligible to be certificate holders.

SRE Batch Certification⁴

This scheme corresponds to Type 1b of ISO/IEC 17067:2013 and the sampling method is in accordance with JIS Z9015-1 (refer to ISO No.2859-1). Units are tested for compliance with the technical standards specified in Item 6 of Article 38 of the Radio Law. This scheme is suitable for radio equipment that will only be produced in small batches (typically fewer than 100 units). Foreign manufacturers are eligible to be certificate holders.

Declarations of Conformity (DoCs)

High-Frequency Devices (HFDs) are subject to three types of DoCs, "Specification of Type," "Confirmation of Type," and "Authorization for Use."⁵ If the manufacturer owns the appropriate test equipment, the manufacturer's test report may be used for all DoCs. A local Japanese company must submit a notification to their local MIC branch office to complete this approval.

³ MIC's terms: "Attestation of the construction design"

⁴ MIC's terms: "Technical regulations conformity certification"

⁵ MIC's terms: "Permission"

“Authorization for Use” has no marking requirements and test reports are not generally submitted to MIC. “Specification of Type” and “Confirmation of Type” require submission of test reports and affixing a label with the relevant approval number.

The applicable DoC process is determined by the type of equipment.

ISM products operating over 10 kHz tend to be subject to “Authorization for Use.”

Microwaves and IH cooking equipment are subject to “Confirmation of Type.”

Ultrasonic equipment, 13.56 MHz RFID, etc... are subject to “Specification of Type.”

Contact us if you are unsure about your product’s classification.

JQA is able to offer information and testing services to confirm compliance obligations for HFDs are met. JQA can also register equipment on behalf of the local importer (with a letter of authorization). Please inquire for details.

Voluntary Extremely Low-Power Device Registration

This scheme is managed by two industry groups in Japan called JAAMA and EMCC. The ELP Mark scheme was introduced in 2015 to combat the recent influx of low-quality products to the Japanese market. ELP dealers and consumers can be confident that the products they purchase will not cause unwanted interference by checking for the ELP Mark.

A test report from a registered lab, such as JQA, is required in this scheme. After obtaining the test report, a local Japanese company must register the ELP with JAAMA or EMCC. JQA is able to perform this registration on behalf of the local importer after obtaining a signed and stamped letter of authorization.

Marking Requirements

Marking requirements for each type of equipment are detailed below.

Specified Radio Equipment

Labels must be affixed in a prominent location that is easily visible to the user. The mark’s minimum size and format is specified in regulations. The mark may be displayed using labels

or using electronic means such as an electronic display.

A “prominent location” refers to a place on the main unit; however, in cases where this is difficult or impractical, placing the mark in the user manual and on the product packaging is acceptable. Please contact JQA for more information.

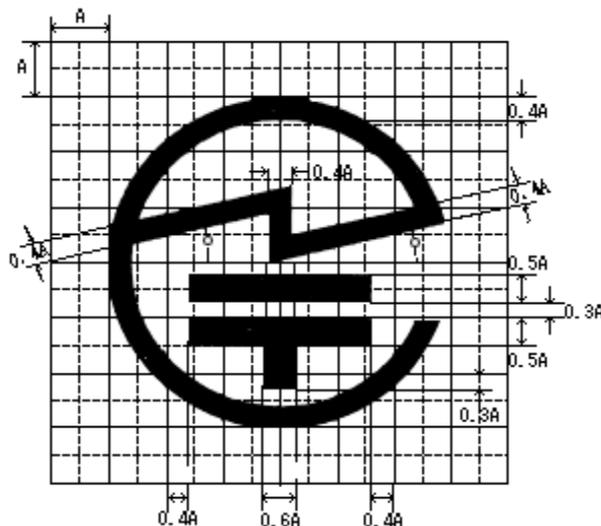
For Batch Certification, the RCB must apply the labels in a prominent location after issuing certification.

For Type Certification, the applicant generally handles printing and affixing the certification mark. In this case, the applicant should submit Certification Mark Specifications (including label and mark dimensions, method of affixing, and label location) when applying for certification.

For products which contain more than one type of radio device, it is possible to obtain a single, consolidated Type Certification Number to avoid placing multiple approval numbers on the label.

The certification mark for Batch Certification and Type Certification is the following mark with the symbol  and the certification number.

Mark Format [\(See Form 7 of the Certification Ordinance\)](#)

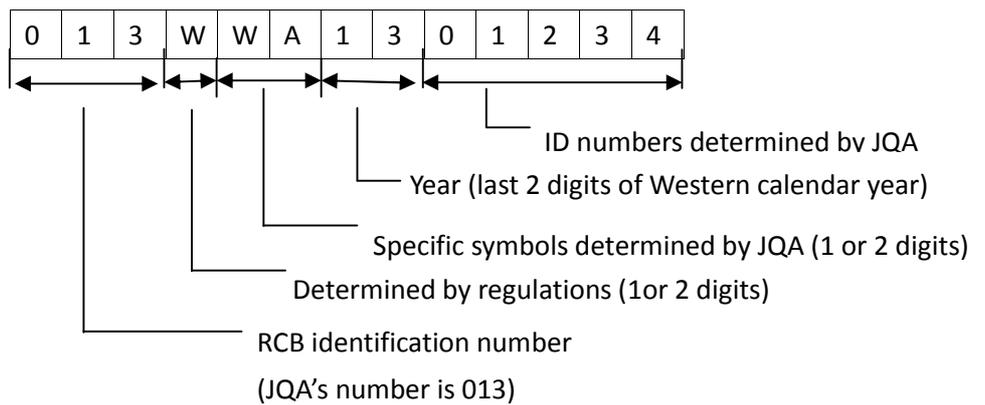


- The size of the mark must be 3mm or more in diameter.
- The mark must be made of durable materials that cannot be easily damaged.

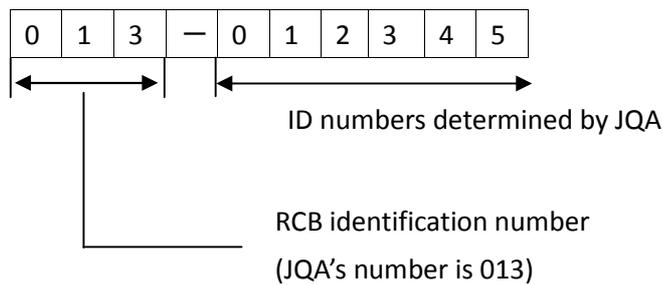
- The color of the mark may be chosen by the applicant. However, the mark must be easily identifiable.
- For Batch Certification, the first 3 digits of the certification number indicate the Registered Certification Body’s (RCB) number (013). The 4th and/or 5th digits indicate the class of radio equipment and are specified in regulations. The remaining digits are determined by JQA as identification numbers for the equipment.
- For Type Certification, the first 3 digits of the certification number also indicate the RCB (013). The 4th digit is a hyphen and the remaining digits are determined by JQA as identification numbers for the equipment.

SRE Certification Number Examples

Batch Certification



Type Certification



SRE Certification Label Examples

Batch Certification



Type Certification



High-Frequency Devices

For the DoC schemes mentioned above, “Authorization for Use” has no marking requirements.

“Specification of Type” requires one of the following marks (see Appended Table 7 of the Enforcing Ordinance).

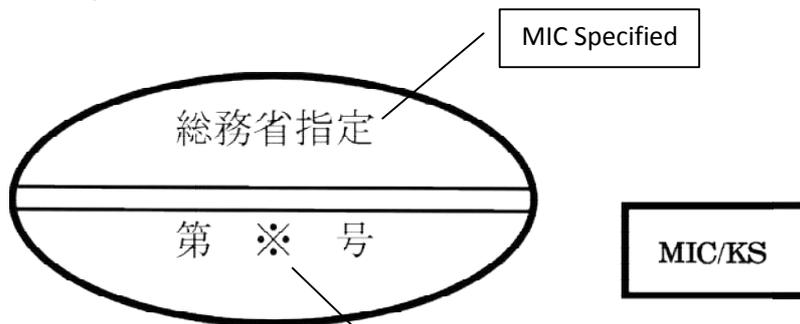


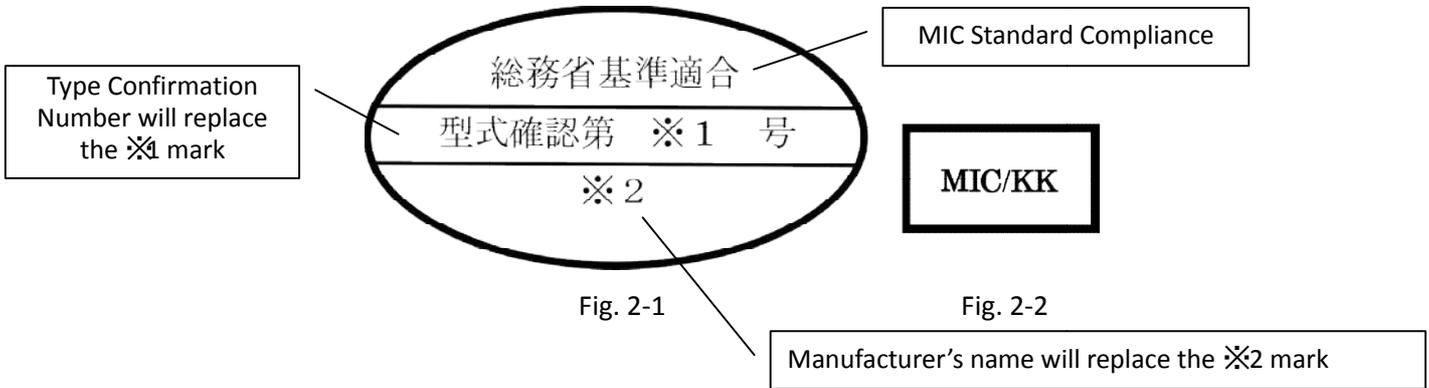
Fig. 1-1

Fig. 1-2

The Specification Number will replace the ※mark

In general, Fig. 1-1 must be applied to equipment and must be displayed with a minimum width of 2cm. For smaller equipment, Fig. 1-2 may be used with a minimum width of 5mm.

For “Confirmation of Type,” one of the following marks must be used.



In general, Fig. 2-1 must be applied to equipment and must be displayed with a minimum width of 2cm. For smaller equipment, Fig. 2-2 may be used with a minimum width of 5mm.

Extremely Low-Power Devices

ELPs are not subject to mandatory marking requirements. However, as mentioned above, a voluntary scheme was introduced in 2015 by the industry groups JAAMA and EMCC. The new label can be used to assure consumers and dealers that products are in compliance and will not cause interference when used.



After successful registration, JAAMA or EMCC will issue a registration number which must be displayed on the product below the ELP Mark (above).

Test Reports

Testing requirements for Radio Law approvals range from self-test to designated lab testing.

Specified Radio Equipment

The test methods and technical standards for SREs are specified in the Ordinance Regulating Radio Equipment and MIC Notifications. They are not harmonized with international standards and official translations in English are not available.

MIC allows Registered Certification Bodies (RCBs) to decide whether or not to accept other laboratories' test reports. JQA may be able to accept outside test data depending on the content, format, etc... Please contact us in advance if you would like to submit test data from another laboratory. In some cases, JQA may still require a verification sample (1 unit) to confirm that the product is as described in the test report, but testing costs can be avoided.

High-Frequency Devices

The test methods for HFDs are specified in Article 46 of the Enforcing Ordinance. Testing conditions and equipment are specified, but test lab accreditation requirements are not specified. JQA can review your test report to ensure it is acceptable or JQA can conduct testing locally in Japan.

It may be worth noting that for non-wireless equipment such as microwaves and IH cooking equipment, VCCI, PSE, S-mark, etc... approvals are unrelated to Radio Law approval and do not replace or fulfill the EMC requirements for HFD under the Radio Law.

In addition to testing and test report reviews, JQA can register HFDs on behalf of a local representative in Japan and assist in preparing the application materials to save your importer time. Please inquire for details.

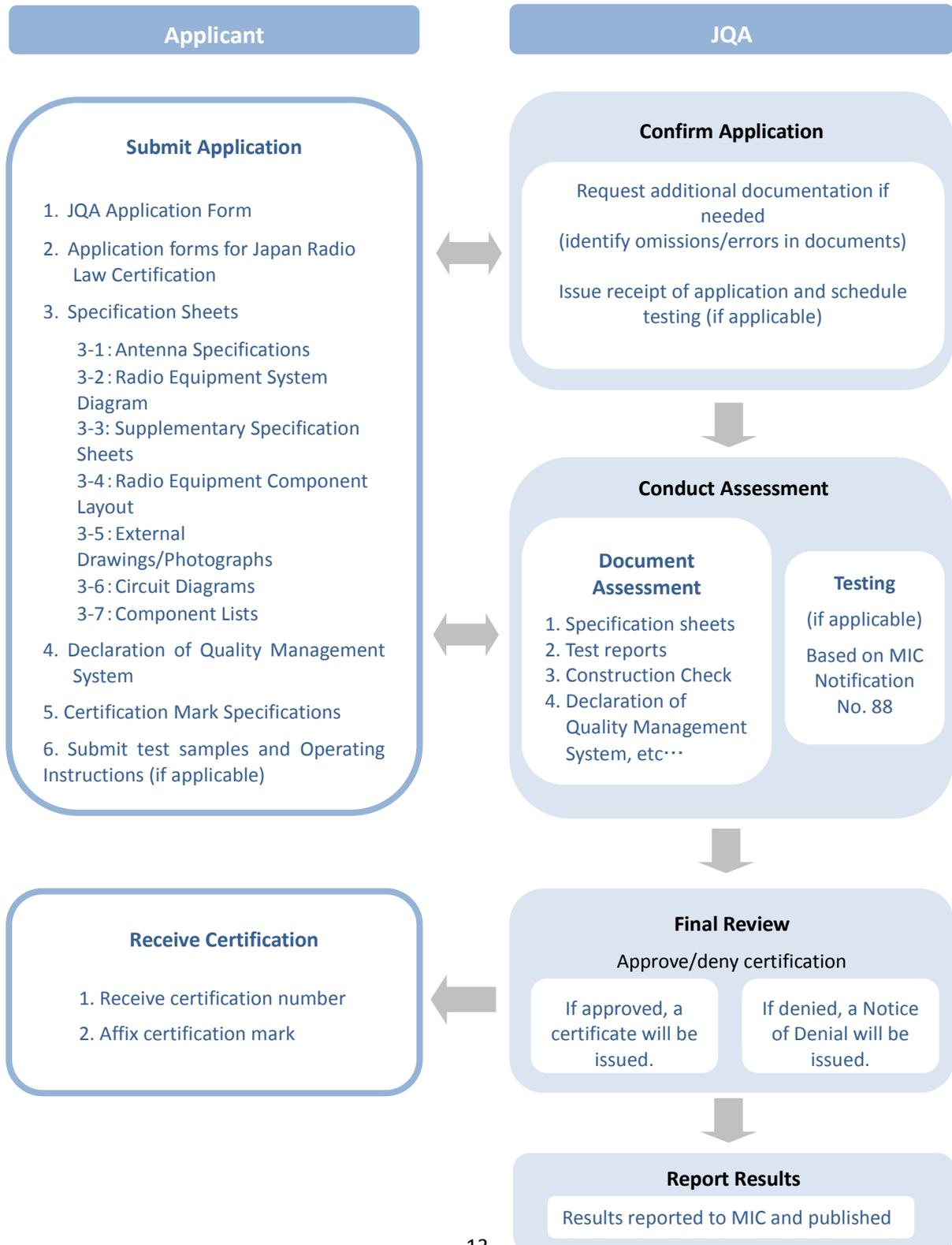
Extremely Low-Power Devices

For mandatory compliance with the Radio Law, the test lab requirements are specified in MIC Notification 172 of 2006. Manufacturers are obligated to comply with these requirements, but these test reports are not required to be submitted to MIC, and registration and licensing are not mandatory for ELPs.

For voluntary registration under the ELP Mark scheme, testing must be conducted by a lab which is registered with JAAMA and EMCC. JQA is a registered lab for this scheme. The test report from a registered lab will be submitted to JAAMA or EMCC and a registration number will be issued along with the right to use the ELP mark. While not mandatory, MIC encourages manufacturers to obtain voluntary ELP registration.

Section 2 –Specified Radio Equipment Type Certification

Application Flow for Type Certification



Application Materials for Type Certification

No.	Name	Content	Type
1	JQA Application Form	JQA Application Form, shipping address list, Power of Attorney (if applicable)	Form
2	Application for Japan Radio Law Type Certification	Applicant information, basic equipment information	Form
2-1	Supplemental Application Forms	Overview of the radio equipment (purpose/intended use, dimensions, weight, etc...)	Form
3	Specification Sheet(s)	Based on Appended Table 2-3 of the Certification Ordinance	Form
3-1	Antenna Specifications	Specifications which indicate antenna type, gain, dimensions, radiation pattern, etc...	Free format
3-2	Radio Equipment System Diagram	See Appended Table 2-3 of the Certification Ordinance A diagram which clearly shows all oscillators' frequencies and VCO, along with intermediate frequencies.	Free format
3-3	Supplemental Specification Sheets	Submit for applications involving low-power data communication systems	Form
3-4	Radio Equipment Component Layout	A diagram in which the component layout can be identified (such as a silk screen).	Free format
3-5	External Drawings/Photographs	External photographs or drawings of the radio equipment that indicate dimensions.	Free format
3-6	Circuit Diagrams	As supplementary material for the system diagram	Free format
3-7	Component Lists	As supplementary material for the system diagram	Free format
4	Proof of restricted access to main unit	Specifications that prove the user cannot easily open and close the main unit	Free format
5	Declaration of Quality Management System	Include copies of ISO certificate(s)	Free format
6	Certification Mark Specifications	Specifications and design of the marking to be applied to certified radio equipment	Free format
7	Sample	See Certification Ordinance Article 17-1, Appended Table 3 (in suitable configuration for testing)	--
8	Operating Instructions	Operating instructions to conduct testing	Free format

Notes:

- (1) The project coordinator will send all forms to the applicant after the JQA application is received.
- (2) The format and content of each form is specified by MIC for each class of equipment.

Application Instructions

Detailed instructions for each application form are provided in this section.

JQA Application Form

This is the service agreement contract and is the first document that needs to be submitted. The JQA Application Form can be received by email or downloaded from the [JQA website](#).

Japan Radio Law Certification Application Forms and Supplemental Forms

After receiving the JQA Application Form, the project coordinator will send the relevant forms based on the type of radio equipment and certification requested. Please fill them in using the relevant product information and while referencing the example entries.

Specification Sheets

These are the basic specifications of the radio equipment. The following information should be filled in. The information on the certificate and the final report to MIC are based on these documents. Please fill them in as accurately as possible.

1. Communication method
2. Rated value for RF power at the antenna feeder (unit of power depends on the equipment class)
3. ITU Emission Class (a three-digit alphanumeric code based on modulation method, subcarrier configuration, etc... - see ITU-RR Vol. 2 Section 2 for reference)
4. Oscillating frequency and oscillation method (please include frequency range used)
5. Modulation method (CCK, DSSS, OFDM, FHSS, GFSK, etc...)
6. If multiple values exist for the above items, please include all values.
7. Radio equipment model number / manufacturer name
 - ※ For radio equipment to be used in specified low-power radio equipment, cordless phones, etc... please indicate this information in item “8. Further reference.”
8. Antenna details (Antenna model no., configuration, gain [dBi], etc...)
9. Please indicate any auxiliary equipment not indicated in items 2 to 4
10. Other specifications (if there are no other specifications, please add a declaration statement as indicated in the example entry).

11. Attached drawings list (Radio Equipment System Diagram, Component Layout, External Photographs, etc...)
12. Further reference (any other items related to specifications)

Antenna Specifications

The antenna specifications will be shown on the certificate exactly as they appear on this document. Please be sure to enter the antenna specifications accurately and include the following items.

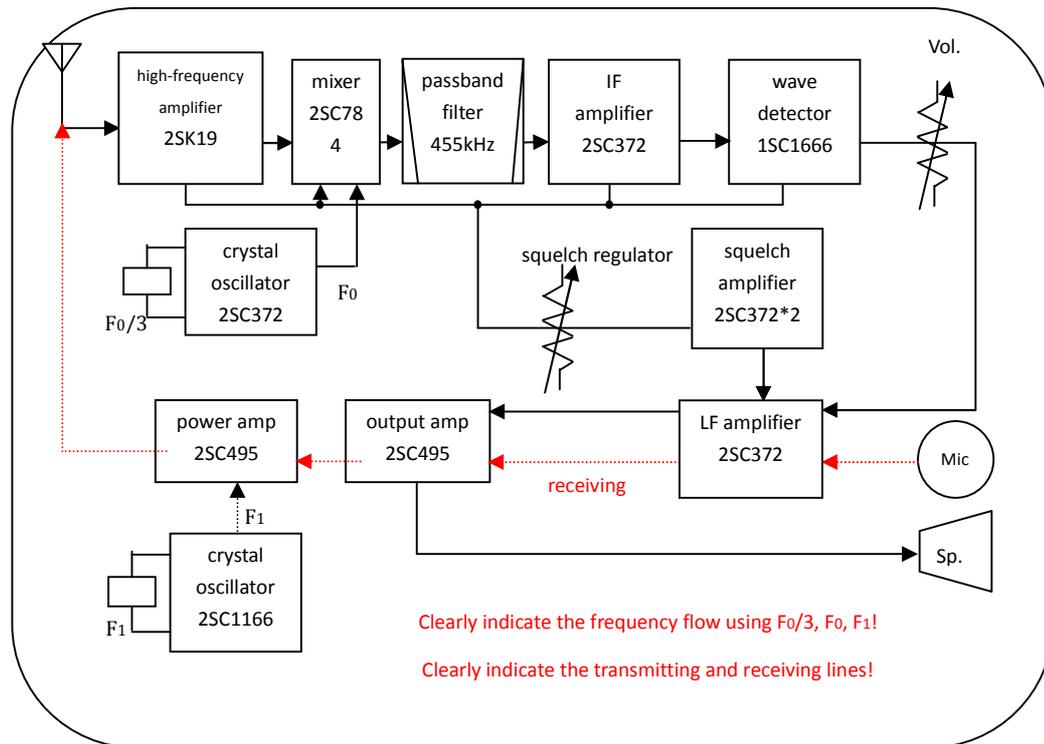
1. Antenna type (Mono-Pole/ Reverse F Type/Whip $\lambda/4$, etc...)
2. Antenna gain (dBi)
3. Antenna dimensions – Model No. / Manufacturer Name
4. Antenna radiation pattern (Horizontal / Vertical)

We recommend making arrangements to obtain this information from the antenna supplier beforehand. If multiple antennas are used, specifications for each antenna are required.

Radio Equipment System Diagram

This is a block diagram which shows the generation process from the oscillator(s) to the RF signal transmission. It is necessary to indicate in the block diagram the main components involved in generating the RF signal such as the clock, VCO, amp, mixer, filter, etc... and also how the frequency is generated and modified. The process by which signals are received and demodulated must also be indicated (IF, etc...).

Please prepare and submit the Radio Equipment System Diagram using the example on the next page as reference.



Supplemental Specification Sheets

These must be submitted for applications involving low-power data communication systems. They are used as supplemental material for the specification sheets and testing.

Radio Equipment Component Layout

This is needed for the Construction Check. It should be a diagram in which the component layout can be identified (such as a silk screen).

External Drawings/Photographs

These are external photographs or drawings of the radio equipment that indicate dimensions. All 6 sides of the equipment must be shown.

Circuit Diagrams

These are used as supplemental information for the Specification Sheets. They are also used with the component layout for the Construction Check.

Component List

Please submit the component list if it is necessary to understand the component layout diagram. It is used as supplemental information for the Specification Sheets.

Proof of Restricted Access to the Main Unit

Radio equipment must be constructed in such a way that it cannot be easily opened. This is to prevent modifications or alterations being made that would cause the device's specifications to differ from those indicated in the Specification Sheets and would illegally alter the internal RF signal generator of the device.

There are a number of ways to achieve this requirement, such as using special screws that cannot be removed with everyday tools, or sealing the main unit, or coating the entire RF signal generator, etc... This document should indicate how access to the device has been restricted. As a concrete example, if special screws were used, a diagram indicating the shape of the screws (dimensions, etc...), how they are mounted, and a diagram of the construction of the main unit would be required.

Declaration of Quality Management System

The Declaration of Quality Management System is a document to assess whether there is a quality assurance system in place to guarantee the uniformity of mass-produced devices and their consistent conformity with type specifications.

If the applicant and/or factory have ISO 9001 certification, submit copies of the certificates along with the Declaration of Quality Management System declaring the requirements listed in Appended Table 4 of the Certification Ordinance have been fulfilled.

If the applicant has ISO 9001 certification, the factory is exempt. If the applicant does not have ISO 9001 certification, but the factory does, then submit the declaration with copies of the factory's certificate(s).

If neither the factory nor the applicant have ISO 9001 certification, a separate Declaration of Quality Management System has to be constructed. Please contact JQA for further details.

Note) The relevant radio equipment must be included in the scope listed on the ISO 9001 certificate.

Certification Mark Specifications

In order to indicate compliance with the requirements specified in radio equipment regulations, the technical standard conformity mark and certification number must be displayed on the equipment. Certification marks may be displayed by affixing certification labels directly to the equipment or by e-labeling. Please submit a copy of the intended label layout.

E-Labeling

For radio equipment with a built-in display, it is permissible to display the conformity mark above by electronic means. If you wish to use e-labeling, please prepare the following documents.

1. In the comments section of the application form, indicate the equipment will use e-labeling.
2. In the Specification Sheets, under "Other specifications," indicate e-labeling.
3. Indicate the e-labeling display method.
4. Indicate the e-label size.
5. Include information to the user regarding the use of e-labeling and how to access the conformity mark.
6. Indicate how users are prevented from tampering with the e-label.

Operating Instructions

"Operating Instructions" refers to instructions for conducting RF testing. It does not refer to the ordinary user manual bundled with the wireless device. In many cases, the test sample used for RF testing has special firmware installed. Such a test sample is configured so that various settings can be controlled from a PC, etc... through a control I/O cable.

Please provide the control I/O cable, control software and relevant explanations in the "Operating Instructions" together with the sample to ensure the required RF testing can be conducted properly. The Japan Radio Law's test sample requirements are the same as the test sample requirements for EN, FCC, etc...

Test Requirements

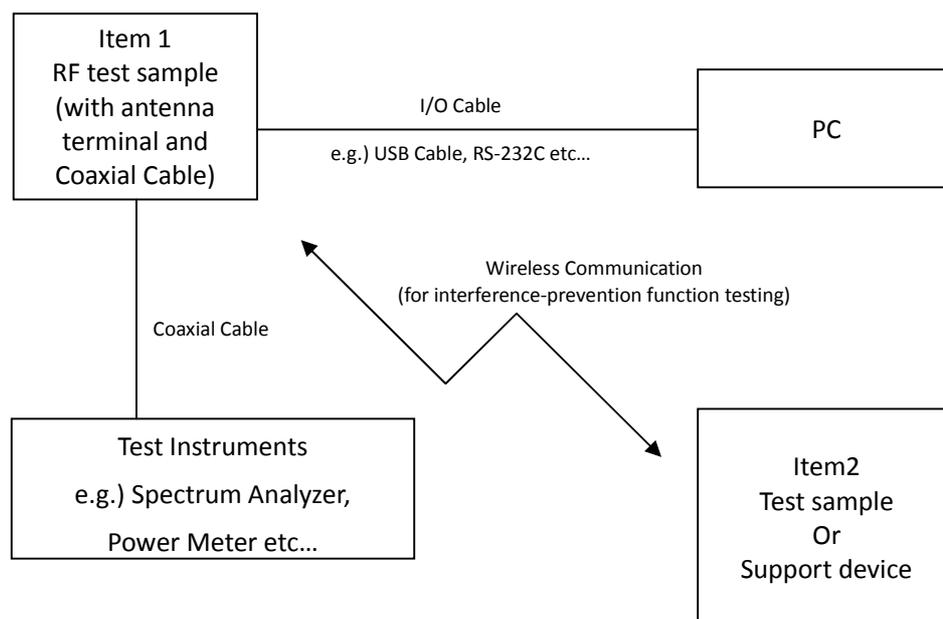
In order to properly perform RF testing, the test sample’s firmware must be specially altered or a special control cable must be provided. Typically, only manufacturers are able to make these adjustments. Please make sure the test samples are adequately prepared for RF testing prior to submitting them to JQA.

Number of Samples

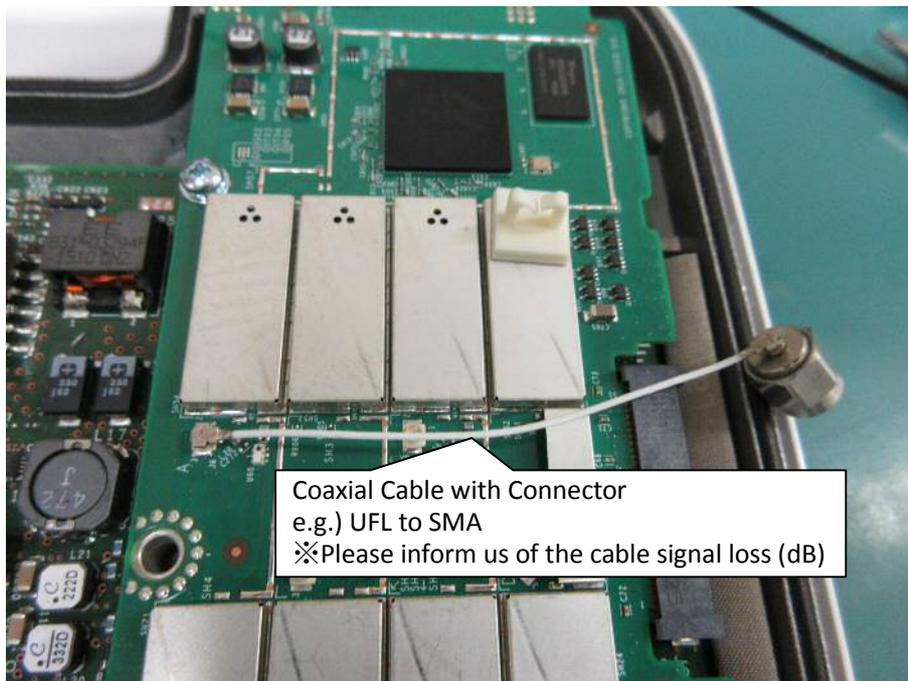
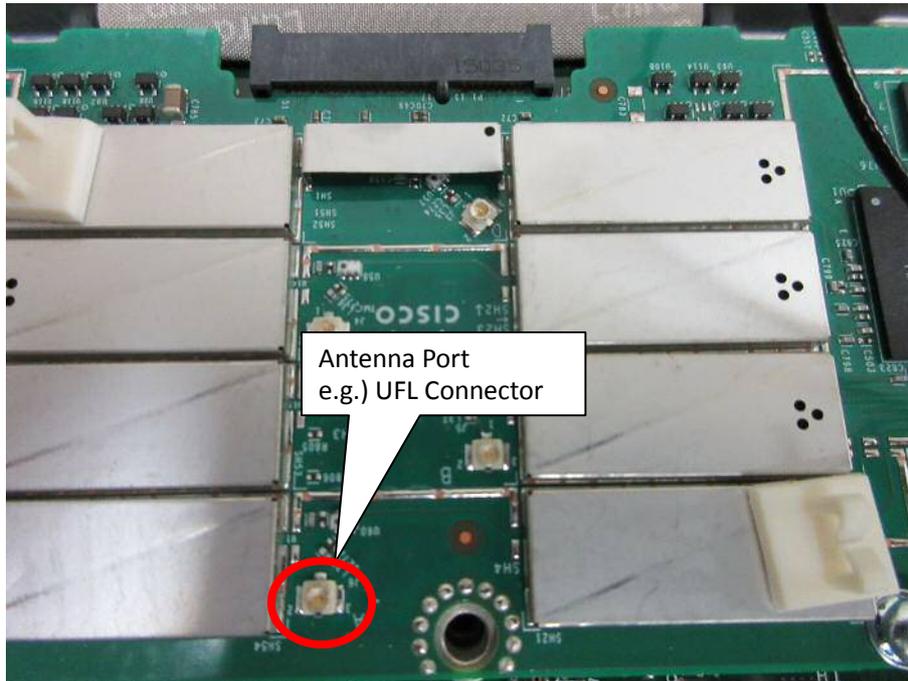
In general, two test samples are required: one sample of the completed version of the radio equipment (as it will be sold in Japan) and one sample of the equipment which has been configured for RF testing and can be externally inspected. Specific requirements are indicated below.

1. One unit with antenna terminal and Coaxial Cable (RF output terminal for testing)
2. One unit for interference-prevention function testing along with one support device
(If the equipment in Item 1 can also communicate with the support device in Item 2, one test sample is sufficient)
3. If it is difficult to open/close the sample, one sample which can be opened to identify the location of components is required.

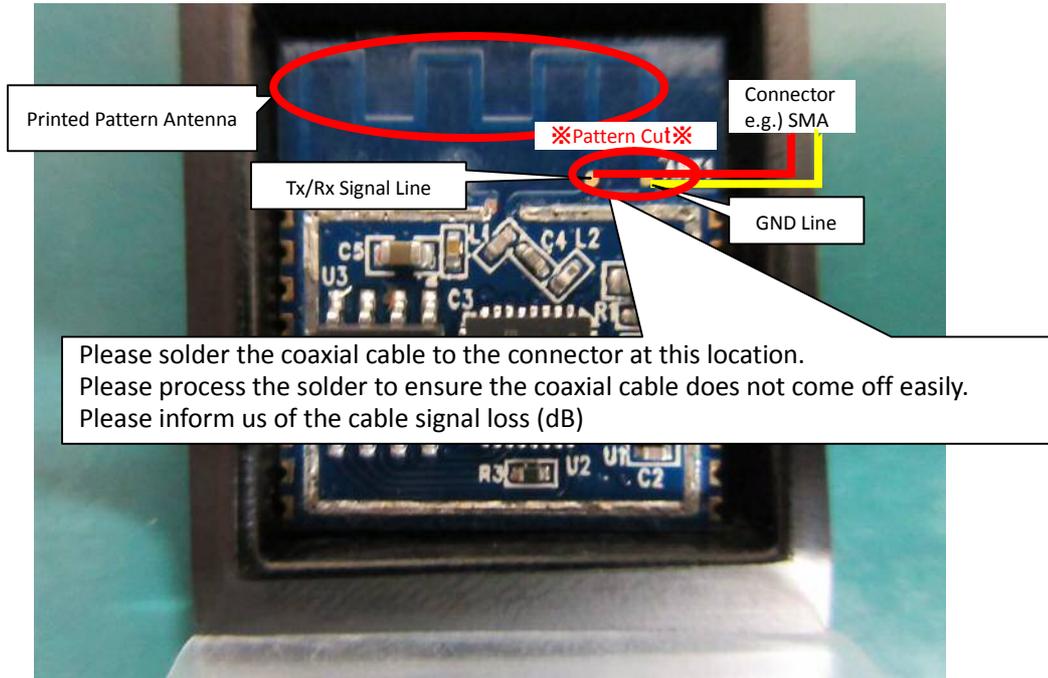
Example of RF Test Sample Set Up



With Antenna Port



Without Antenna Port



Test Voltage

The test voltage is the rated voltage +/- 10%. However, testing can be conducted at the rated voltage if evidence is given that even when the voltage supply is altered by +/- 10% the input voltage to the RF circuit does not change by more than +/- 1%.

This can be proven by either supplying the specifications for the power supply, or allowing JQA to directly measure the input voltage to the RF circuit prior to testing.

If you wish to have the voltage fluctuation measured prior to testing, please submit the following additional information.

1. Whether or not the product has a voltage regulator
2. The rated input voltage for the RF circuit
3. The verification point to check input voltage to the RF circuit (photo or drawing)

Test Sample Operating Conditions

1. Continuous transmission of the modulating signal

This means continuous transmission at maximum output power. For devices with multiple transmission rate settings, it will be necessary to run continuous transmission for each rate setting. (E.g. 1 Mbps, 2 Mbps, also Packet Type, etc...)

Continuous transmission of test signals for each emission class will be conducted in the equipment's modulating condition. (E.g. for Wireless LAN - the standard test signal PN-9, PN-15, or PN-23 in ITU-T Rec.O.150, for Bluetooth - PRBS9, etc...)

2. Continuous receiving

In order to measure the "Receiving spurious emission, etc..." continuous receiving in each frequency setting is required.

3. Continuous transmission of unmodulated carrier

In order to measure the "frequency tolerance," continuous transmission in each frequency setting is required.

4. For test operations 1 to 3, the frequency (channel) needs to be able to be selected.

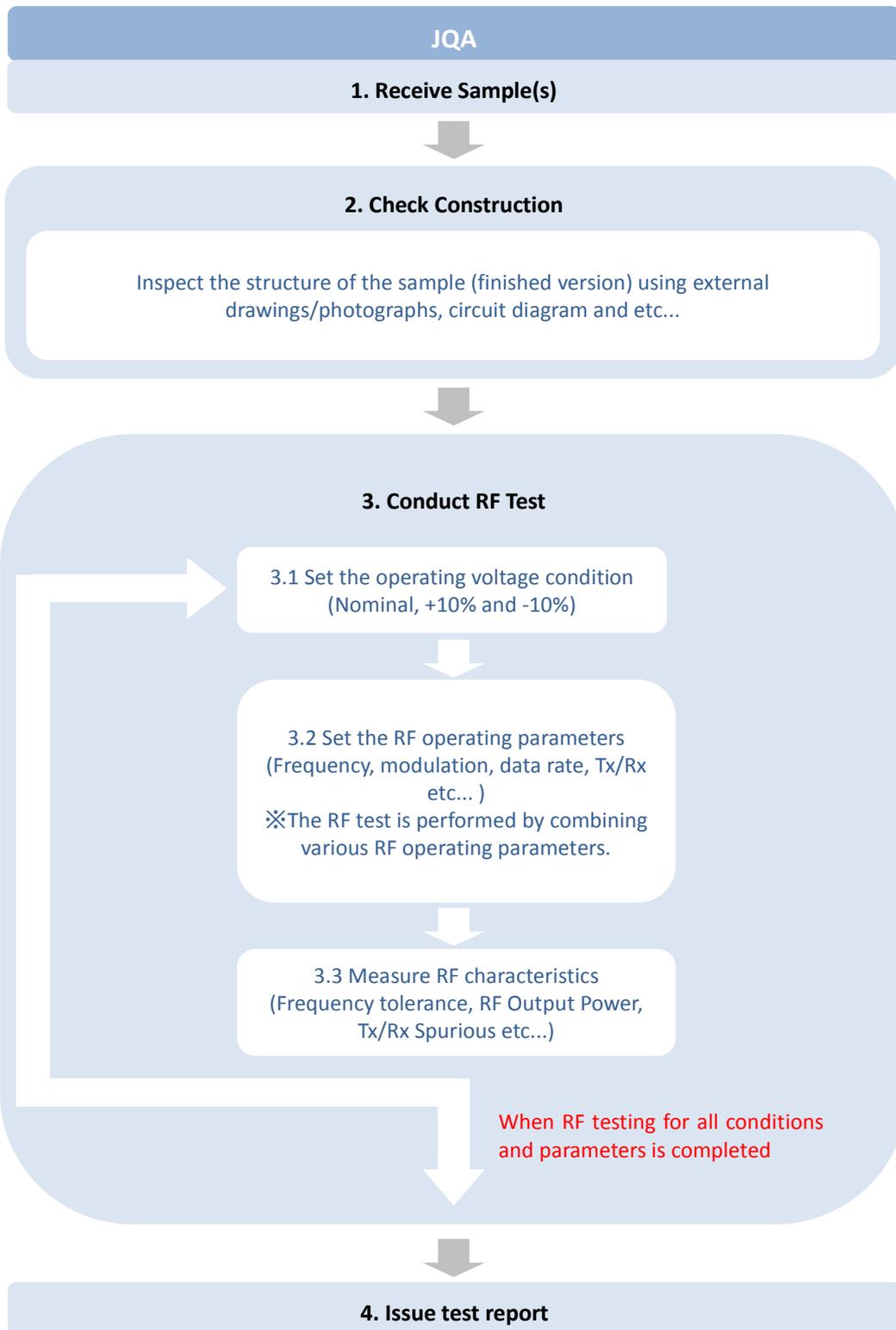
5. For test operations 1 to 4, all the modulation methods and transmission rates need to be able to be selected.

Note 1: For devices with frequency hopping, we need to be able to operate the equipment with hopping enabled and disabled.

Note 2: For devices with adaptive frequency hopping (AFH), we need to be able to operate the equipment in continuous transmission (modulated) with AFH enabled.

If special software needs to be used during testing, please include the name and version number in the Operating Instructions.

Test Flow



Legal Obligations under the Radio Law

The Radio Law stipulates obligations for Certificate Holders and RCBS.

Accuracy of Test Reports

When utilizing testing data not issued by JQA, the applicant shall bear all responsibility for the accuracy of the test data.

Obligation of Uniform Construction⁶

Upon receiving Type Certification, the Certificate Holder must ensure all manufactured equipment is identical to the type certified in accordance with Article 38-25 of the Radio Law. The Certificate Holder must also inspect radio equipment, make a record of the inspection pursuant to Article 19 of the Certification Ordinance, and retain the record for ten years from the date of inspection.

Improper Certification

Pursuant to the Article 6-8, Article 17-8, and Article 17-9 of the Certification Ordinance, JQA shall promptly report certifications that have been granted based on improper representation by the applicant or unlawful conduct by JQA staff to the MIC Minister.

JQA shall notify the Certificate Holder that their certification has been withdrawn. The Certificate Holder shall return the Batch Certificate or Type Certificate to JQA.

If required, JQA may enter the place of business of the Certificate Holder with the Certificate Holder's permission.

Claims to the MIC Minister

Pursuant to Article 38-14 (and applying mutatis mutandis to Article 38-24-3) of the Law, the Applicant may file a claim with the MIC Minister that JQA has failed to conduct the assessment or there are errors in the assessment results and request the MIC Minister order JQA to conduct the initial assessment or repeat the assessment.

⁶ MIC's terms: "Obligations to Conform to Construction Types"

Market Surveillance

When deemed necessary, JQA shall procure from the market Type Certified radio equipment and confirm that it conforms to the technical standards and is identical to the certified type.

Modifications to Certified Equipment

The Certificate Holder must apply for reassessment with an RCB when modifying certified radio equipment. If certified equipment is modified without reassessment, the person responsible for the modification shall remove the certification mark in the manner stipulated in Article 8-2 of the Certification Ordinance.

Appendix A – Quote Request Form

This form is provided to reduce follow up emails and improve accuracy of JQA Radio Law quotations. It is not mandatory to use this form, but it will speed up the processing of your request.

JQA Japan Radio Law Quote Request				
Equipment Type:	<input type="checkbox"/> SRE <input type="checkbox"/> ELP <input type="checkbox"/> HFD	Service Request:	<input type="checkbox"/> Type Certification <input type="checkbox"/> Batch Certification <input type="checkbox"/> MIC Registration (HFD DoC) <input type="checkbox"/> ELP Registration <input type="checkbox"/> Testing only <input type="checkbox"/> Other:	
Certification Type:	<input type="checkbox"/> End Product <input type="checkbox"/> Module	Test Request:	<input type="checkbox"/> JQA test <input type="checkbox"/> Other (attach test report)	
Company Name:				
Product:		Model No./Name:		
Input Voltage		Highest Operating or CPU Frequency:	MHz	
Wireless specs (select/input all that apply)	<input type="checkbox"/> WLAN	<input type="checkbox"/> 2.4 GHz <input type="checkbox"/> 802.11b <input type="checkbox"/> 802.11g <input type="checkbox"/> 5 GHz <input type="checkbox"/> 802.11a <input type="checkbox"/> 802.11n (HT20/40) <input type="checkbox"/> W52 (5.15-5.25GHz) <input type="checkbox"/> W53 (5.25-5.35GHz) <input type="checkbox"/> W56 (5.47-5.725GHz) <input type="checkbox"/> W58 (5.725-5.85 GHz)	<input type="checkbox"/> 802.11n (HT20) <input type="checkbox"/> 802.11n (HT40) <input type="checkbox"/> 802.11ac (HT20/40/80/160)	
	Antenna Port:	Tx:	Rx: <input type="checkbox"/> Host Device <input type="checkbox"/> Client Device	
	<input type="checkbox"/> BT	Version:	<input type="checkbox"/> BDR <input type="checkbox"/> EDR <input type="checkbox"/> LE mode	Power Class:
	<input type="checkbox"/> RFID	<input type="checkbox"/> 13.56 MHz <input type="checkbox"/> Other (frequency range):		
	<input type="checkbox"/> Other	Frequency Range, etc...:		
	Max output power (W or dBm):			
Attached materials	<input type="checkbox"/> Manual <input type="checkbox"/> Test report <input type="checkbox"/> Spec sheet <input type="checkbox"/> Other:			
Website/ Other:				

Appendix B – Specified Radio Equipment Class Identifiers

(Stipulated for Specified Radio Equipment in the Radio Law Article 38-2-2, paragraph 1, item 1)

Radio Equipment Class	Certification Ordinance Article 2-1	MIC-specified code	Categories of equipment type, frequency, use, etc...	JQA-specified code			
Citizen Radio	Item 3	O		AA			
Cordless telephone	Item 7	L		AA			
Specified low-power devices	Item 8	Y	Telemeters, telecontrols, and data transmission	315 MHz	UA		
				400 MHz	WB		
				920 MHz	VA		
				1200 MHz	XA		
			Radio pager				CA
			Radio mic	70 MHz D-type	FA		
				300 MHz C-type	DA		
				800 MHz B-type	EA		
			Radio telephone				GA
			Medical telemeter				HA
			Implanted medical devices which transmit data and implantable medical telemeters				SA
			Radio equipment used to identify moving objects (RFID)	920 MHz	TB		
				2400 MHz (FH method)	JA		
				2400 MHz (other than FH method)	JB		
			Data transmission devices and data control devices for international transport				IA
			Millimeter wave radar				KA
			Radio mics for hearing aids				LA
			Millimeter wave image transmission and Millimeter wave data transmission				NA
			Radio equipment for business communications				OA
			Detection sensor of moving objects	10 GHz	QA		
24 GHz	RA						
Voice assistance system				PA			
Animal detection system				YA			
Low-power security systems	Item 13	AZ		A			
Wide-band low-power data communications systems in the 2.4 GHz band	Item 19	WW		A			
Low-power data communications systems in the 2.4 GHz band	Item 19-2	GZ		A			

(Continued on next page)

Low-power data communications systems in the 2.4 GHz band (for outdoor radio control model aircraft)	Item 19-2-2	UV	2400 MHz -2483.5 MHz	A
Low-power data communications systems in the 2.4GHz band (for outdoor radio control model aircraft)	Item 19-2-3	VV	2471 MHz-2497 MHz	A
Low-power data communications systems in the 5 GHz band	Item 19-3	XW	(W52, W53)	A
Low-power data communications systems in the 5 GHz band for outdoor use	Item 19-3-2	YW	(W56)	A
Low-power data communications systems in the 5 GHz band	Item 19-3-3	HS	those which simultaneously transmit (W52, W53) & W56	A
Low-power data communications systems in quasi-millimeter bands	Item 19-4	HX		A
Low-power data communications systems in the 60 GHz band	Item 19-4-2	WU	rated output power: over 10mW	A
Low-power data communications systems in the 60 GHz band	Item 19-4-3	WV	rated output power: under 10mW	A
Wireless access system in the 5 GHz band	Item 19-11	FV	rated output power: under 10mW	A
Digital cordless telephones (Narrow band TDMA)	Item 21	IZ		A
Digital cordless telephones (Wide band TDMA)	Item 21-2	AT		A
Digital cordless telephones (TDMA/OFDMA)	Item 21-3	BT		A
PHS land mobile stations	Item 22	JX		A
Narrow band communication systems mobile stations	Item 32	CY		A
Test station for dedicated short range communications system	Item 33-2	FX		A
UWB radio systems	Item 47	UW		B
UWB radio systems (UWB radar)	Item 47-2	VU		A
Land mobile stations for intelligent transport systems in the 700 MHz band	Item 64	XT		A