

## CITC Technical Specification

# Specification for Broadcast Equipment

Document Number: RI121  
Revision: Issue 01  
Date: 02/03/2021

Issued by The Communications and Information Technology Commission of Saudi Arabia in accordance with article 84 of the Telecommunications Bylaw.

Communications and Information Technology Commission (CITC)  
P.O Box 75606 – Riyadh 11588 – Kingdom of Saudi Arabia

Telephone: + 966 1 14618000  
Fax: + 966 1 14618120  
E-mail: [info@citc.gov.sa](mailto:info@citc.gov.sa)  
Website: [www.citc.gov.sa](http://www.citc.gov.sa)

**Contents**

Scope ..... 3

Enforcement ..... 3

General Requirements ..... 4

Limits and conditions ..... 4

Licensing Requirements ..... 9

Additional Requirements ..... 9

References ..... 10

History ..... 11

DRAFT

## Scope

This specification applies to

- radio medium frequency amplitude modulation broadcast equipment and ancillary equipment.
- medium frequency frequency modulation broadcast equipment and ancillary equipment
- Digital Audio Broadcasting (DAB) equipment
- Digital Video Broadcasting (DVB) equipment
- Digital Radio Mondial (DRM) equipment
- DAB, DVB and DRM Broadcasting Receivers

## Enforcement

This specification shall enter into force on 01/06/2021.

Any previous version of this technical specification is withdrawn.

## General Requirements

All equipment must comply with the requirement of CITC specification GEN001, be safe and must not adversely affect other electrical equipment.

All telecommunications and radio terminal equipment must comply with the relevant technical specifications established by CITC. In addition, such equipment may be subject to regulations for Declaration of Conformity or registration. See [www.citc.gov.sa](http://www.citc.gov.sa) for details.

If more than one interface type is offered by a piece of equipment, each interface must meet the applicable technical specifications.

Further information on the characteristics and presentation of network interfaces can be found by visiting operator's website.

It is mandatory that test reports are obtained from a laboratory that has been accredited by a body that is a member of the ILAC Mutual Recognition Arrangement.

## Limits and conditions

Testing should be carried out to ensure compliance with the listed specifications.

Frequency band	Max Output Power or Magnetic Field	Usage	Standard	Additional requirements	Licence requirements
148.5 – 283.5 kHz	50mW	DRM	EN 302 245-2 EN 301 489-11	Currently there is no additional requirements for this technical specification.	A spectrum license is required.

526.5 – 1606.5 kHz	50mW	DRM	EN 302 245-2 EN 301 489-11	Currently there is no additional requirements for this technical specification.	A spectrum license is required.
526.5 – 1606.5 kHz	Subject to licensing	AM broadcasting	EN 302 017 EN 301 489-11	Currently there is no additional requirements for this technical specification.	An operator and spectrum license is required to use this service.
2300 – 2498 kHz	Subject to licensing	AM broadcasting	EN 302 017 EN 301 489-11	Currently there is no additional requirements for this technical specification.	An operator and spectrum license is required to use this service.
47 – 68 MHz	Receiver only	DAB, DVB and DRM Broadcasting Receivers	EN 55013 EN 55020	The requirements of SASO /FDS/ 31597:2019 Technical specifications of the radio, digital and analog broadcasting receiver for	No licensing requirements apply.

				(AM/FM/T-DAB+) apply.	
47 – 68 MHz	Subject to licensing	DAB	EN 302 077 EN 301 489-11	Currently there is no additional requirements for this technical specification.	A spectrum license is required.
174 – 240 MHz	Subject to licensing	DAB	EN 302 077 EN 301 489-11	Currently there is no additional requirements for this technical specification.	A spectrum license is required.
174 – 240 MHz	Receiver only	DAB, DVB and DRM Broadcasting Receivers	EN 55013 EN 55020	The requirements of SASO /FDS/ 31597:2019 Technical specifications of the radio, digital and analog broadcasting receiver for (AM/FM/T-DAB+) apply.	No licensing requirements apply.
2.3 – 27 MHz	50mW	DRM	EN 302 245-2 EN 301 489-11	Currently there is no additional requirements for this technical specification.	A spectrum license is required.

470 – 614 MHz	Receiver only	DAB, DVB and DRM Broadca sting Receive rs	EN 55013 EN 55020	The requirements of SASO /FDS/ 31597:2019 Technical specifications of the radio, digital and analog broadcasting receiver for (AM/FM/T- DAB+) apply.	No licensing requireme nts apply.
11.7 – 12.5 MHz	Receiver only	DAB, DVB and DRM Broadca sting Receive rs	EN 55013 EN 55020	The requirements of SASO /FDS/ 31597:2019 Technical specifications of the radio, digital and analog broadcasting receiver for (AM/FM/T- DAB+) apply.	No licensing requireme nts apply.
148.5 – 283.5 kHz	Receiver only	DAB, DVB and DRM Broadca sting Receive rs	EN 55013 EN 55020	The requirements of SASO /FDS/ 31597:2019 Technical specifications of the radio, digital and	No licensing requireme nts apply.

				analog broadcasting receiver for (AM/FM/T-DAB+) apply.	
526.5 – 1606.5 kHz	Receiver only	DAB, DVB and DRM Broadcasting Receivers	EN 55013 EN 55020	The requirements of SASO /FDS/ 31597:2019 Technical specifications of the radio, digital and analog broadcasting receiver for (AM/FM/T-DAB+) apply.	No licensing requirements apply.
2.3 – 27 MHz	Receiver only	DAB, DVB and DRM Broadcasting Receivers	EN 55013 EN 55020	The requirements of SASO /FDS/ 31597:2019 Technical specifications of the radio, digital and analog broadcasting receiver for (AM/FM/T-DAB+) apply.	No licensing requirements apply.
87.5 – 108 MHz	Subject to licensing	FM broadcasting	EN 302 018 EN 301 489-11	Currently there is no additional requirements	An operator and



				for this technical specification.	spectrum license is required to use this service.
--	--	--	--	-----------------------------------	---

### Licensing Requirements

Spectrum license is required as per above table.

### Additional Requirements

There is no additional requirements for this technical specification.

## References

The following referenced documents are indispensable for the application of this document. If no issue or revision number is quoted along with the title of a technical specification or standard, the latest published version should be used.

### EN 55013

Sound and television broadcast receivers and associated equipment –  
Radio disturbance characteristics – Limits and methods of measurement

### EN 55020

Sound and television broadcast receivers and associated equipment –  
Immunity characteristics – Limits and methods of measurement

### EN 302 017-2

Electromagnetic compatibility and Radio spectrum Matters (ERM);  
transmitting equipment for the Amplitude Modulated (AM) sound  
broadcasting service; Part 2: Harmonised EN under article 3.2 of the  
R&TTE directive.

### EN 302 018-2

Electromagnetic compatibility and Radio spectrum Matters (ERM);  
transmitting equipment for the Frequency Modulated (FM) radio  
broadcast service; Part 2: Harmonised EN under article 3.2 of the R&TTE  
directive.

### EN 302 077

Transmitting equipment for the Digital Audio Broadcasting (DAB) service;  
Harmonised Standard for access to radio spectrum

### EN 302 296

Digital Terrestrial TV Transmitters; Harmonised Standard for access to radio spectrum

#### EN 301 489-1

Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements.

#### EN 301 489-11

Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 11: Specific conditions for terrestrial sounds broadcasting service transmitters.

#### EN 301 489-14

Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 14: Specific conditions for analogue and digital terrestrial TV broadcasting service transmitters

## History

For reference, the latest versions of the technical specifications are published on the CITC website [www.citc.gov.sa](http://www.citc.gov.sa).

Description	Status	Date
Merge of RI029, RI030, RI086, RI087, RI088 and RI109.	Issue 1	02/03/2021