INTERNATIONAL TELECOMMUNICATION UNION

ITU-T M.380

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

MAINTENANCE :

INTERNATIONAL TRANSMISSION SYSTEMS (ANALOGUE)

NUMBERING IN COAXIAL SYSTEMS

ITU-T Recommendation M.380

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation M.380 was published in Fascicle IV.1 of the *Blue Book*. This file is an extract from the *Blue Book*. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).

2 In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Recommendation M.380

NUMBERING IN COAXIAL SYSTEMS

1 Numbering of groups, supergroups, etc., and of channels in coaxial systems

1.1 *Numbering of a supermastergroup or of a 15 supergroup assembly*

The supermastergroups and 15 supergroup assemblies of a coaxial system are identified by numbers giving their respective position in the frequency spectrum transmitted on the line. The numbering is shown in Figures 1/M.380, 2/M.380 and 3/M.380.

1.2 *Numbering of a mastergroup*

The mastergroups of a coaxial system are identified by numbers giving their respective position in the frequency spectrum transmitted on the line. The numbering is shown in Figures 1/M.380, 2/M.380, 4/M.380, 8/M.380 and 10/M.380.

Alternatively, when a mastergroup is regarded as being part of a supermastergroup, the position of the mastergroup can be indicated by the number of that supermastergroup followed by the number of mastergroup within the basic supermastergroup (for example, in Figure 1/M.380, the 5652-6884 kHz mastergroup in a 12 MHz system with supermastergroup frequency allocation is designated by the two numbers 2 and 8).

1.3 *Numbering of a supergroup*

The supergroups of a coaxial system are identified by numbers giving their respective position in the frequency spectrum transmitted on the line. The numbering is shown in Figures 2/M.380, 5/M.380, 6/M.380, 7/M.380 and 9/M.380.

The position of a supergroup that is part of a mastergroup is designated by the number of that mastergroup followed by the number of the supergroup within the basic mastergroup (examples: in Figure 1/M.380, the 5652-5892 kHz supergroup in a 12-MHz system with supermastergroup frequency allocation is designated by the three numbers 2, 8 and 4; in Figure 8/M.380, the 4332-4572 kHz supergroup in a 6-MHz system with mastergroup frequency allocation is designated by the two numbers 4 and 4).

The position of a supergroup that is part of a 15 supergroup assembly is designated by the number of that 15 supergroup assembly followed by the number of the supergroup within the basic 15 supergroup assembly (for example, in Figure 3/M.380, the 10 356-10 596 kHz supergroup in a 12-MHz system with frequency allocation by 15 supergroup assemblies is designated by the two numbers 3 and 9).

1.4 *Numbering of a group*

The position of a group is designated by the number of the supergroup in which it is placed followed by the number of the group within that supergroup (examples: in Figure 1/M.380 the 5844-5892 kHz group in a 12-MHz system with supermastergroup frequency allocation is designated by the four numbers 2, 8, 4 and 1; in Figure 8/M.380, the 4924-4972 kHz group in a 6-MHz system with mastergroup frequency allocation is designated by the three numbers 4, 6 and 3).

1.5 *Numbering of a channel*

The position occupied by a channel is designated by the number of the group to which it belongs followed by the number of the channel within that group (examples: in Figure 1/M.380, the 5884-5888 kHz channel in a 12-MHz system with supermastergroup frequency allocation is designated by the five numbers 2, 8, 4, 1 and 2; in Figure 8/M.380, the 4936-4940 kHz channel in a 6-MHz system with mastergroup frequency allocation is designated by the four numbers 4, 6, 3 and 9).

Note – In this system of numbering, the order of the numbers corresponds to a decreasing bandwidth, that is to say, number of supermastergroup (if any) followed by the numbers of the mastergroup, supergroup, group and channel.

2 Standard frequency allocations on 2.6/9.5 mm coaxial pairs

The CCITT has recommended various methods for allocating supermastergroups, mastergroups, supergroups and 15 supergroup assemblies on 2.6/9.5-mm coaxial pairs. The method for each standard system is given below. The identification numbers are shown in each figure to facilitate application of the rules set forth above.

2.1 *12-MHz systems using valves or transistors*

The frequency allocation for 12-MHz systems is in conformity with scheme 1A, 1B or 2 shown in Figures 1/M.380, 2/M.380 and 3/M.380.

The CCITT has also recommended the frequency-allocation scheme in Figure 4/M.380 for the simultaneous transmission of telephony and television.

2.2 *4-MHz systems*

Scheme A of Figure 5/M.380 shows the frequency-allocation scheme used in this case. The 2604-kHz pilot is used only in the 2.6-MHz system described below in § 2.3.

The 4287-kHz pilot is recommended only for 4-MHz systems on 1.2/4.4-mm coaxial pairs.

2.3 *2.6-MHz systems*

The frequency-allocation scheme for a 2.6-MHz system uses the scheme in Figure 5/M.380 retaining only supergroups 1 to 10 inclusive.

The pilots are: 60 or 308 kHz and 2604 kHz.

3 Standard frequency allocations on 1.2/4.4-mm coaxial pairs

The CCITT has recommended various methods for allocating supermastergroups, mastergroups, supergroups and 15 supergroup assemblies on 1.2/4.4-mm coaxial pairs. The method for each standard system is given below. The identification numbers are shown in each figure to facilitate application of the rules set forth in § 1 above.

3.1 *12-MHz systems*

The frequency-allocation schemes are the same as for 2.6/9.5-mm pairs (see Figures 1/M.380, 2/M.380 and 3/M.380).

3.2 *6-MHz systems*

The frequency allocation for 6-MHz systems is in conformity with scheme 1, 2 or 3 shown in Figures 6/M.380, 7/M.380 and 8/M.380.

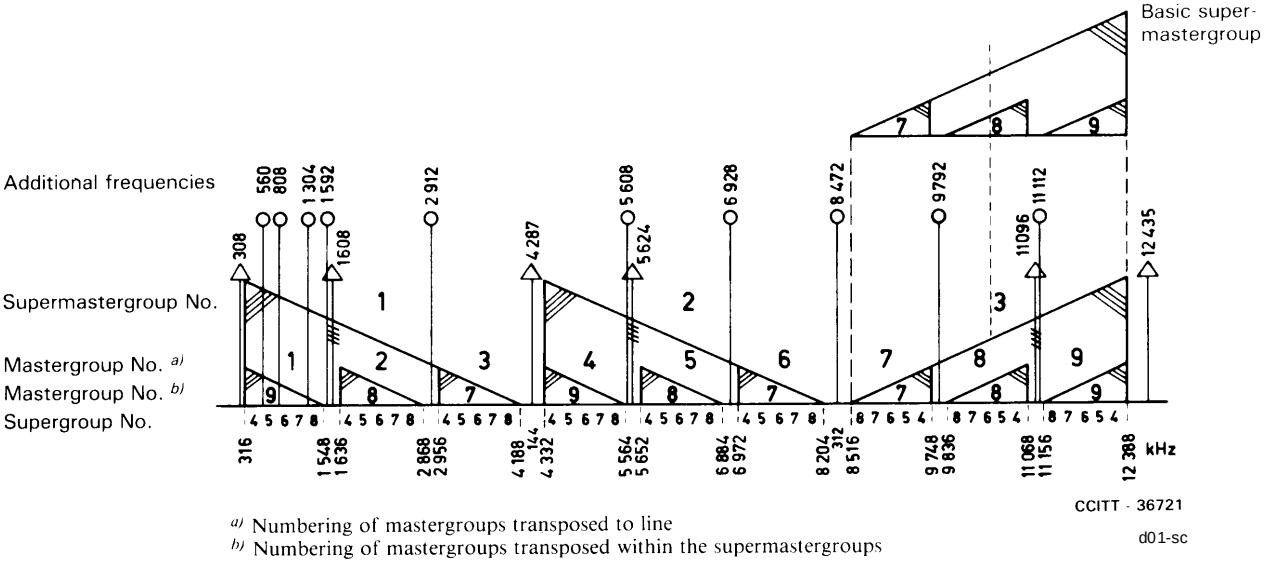
3.3 *4-MHz systems*

The line-frequency allocation scheme A shown in Figure 5/M.380 is the same as for 2.6/9.5-mm pairs. However, the 4287 kHz pilot must be transmitted continuously if one of the Administrations concerned so requests.

Scheme B of Figure 5/M.380 shows the line-frequency allocation scheme used for mastergroups.

3.4 *1.3-MHz systems*

The line-frequency allocation scheme is in conformity with one of the schemes shown in Figures 9/M.380 and 10/M.380.



a) Numbering of mastergroups transposed to line
b) Numbering of mastergroups transposed within the supermastergroups

FIGURE 1/M.380

Frequency allocation (Scheme 1A) for 12-MHz systems

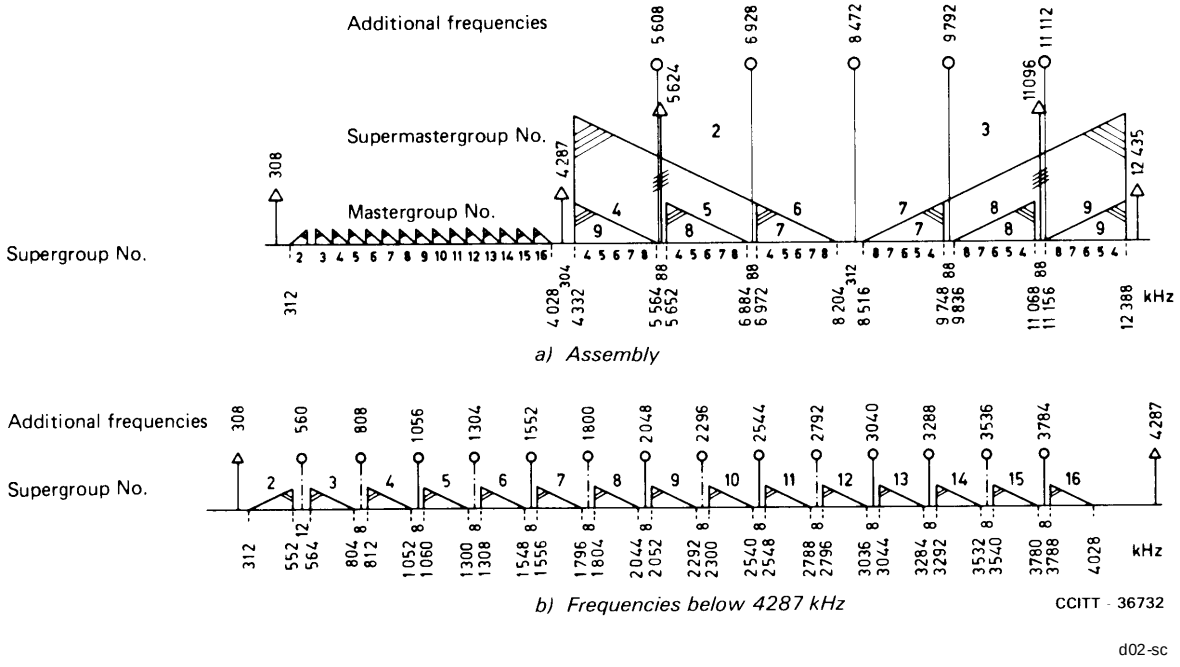


FIGURE 2/M.380

Frequency allocation (Scheme 1B) for 12-MHz systems

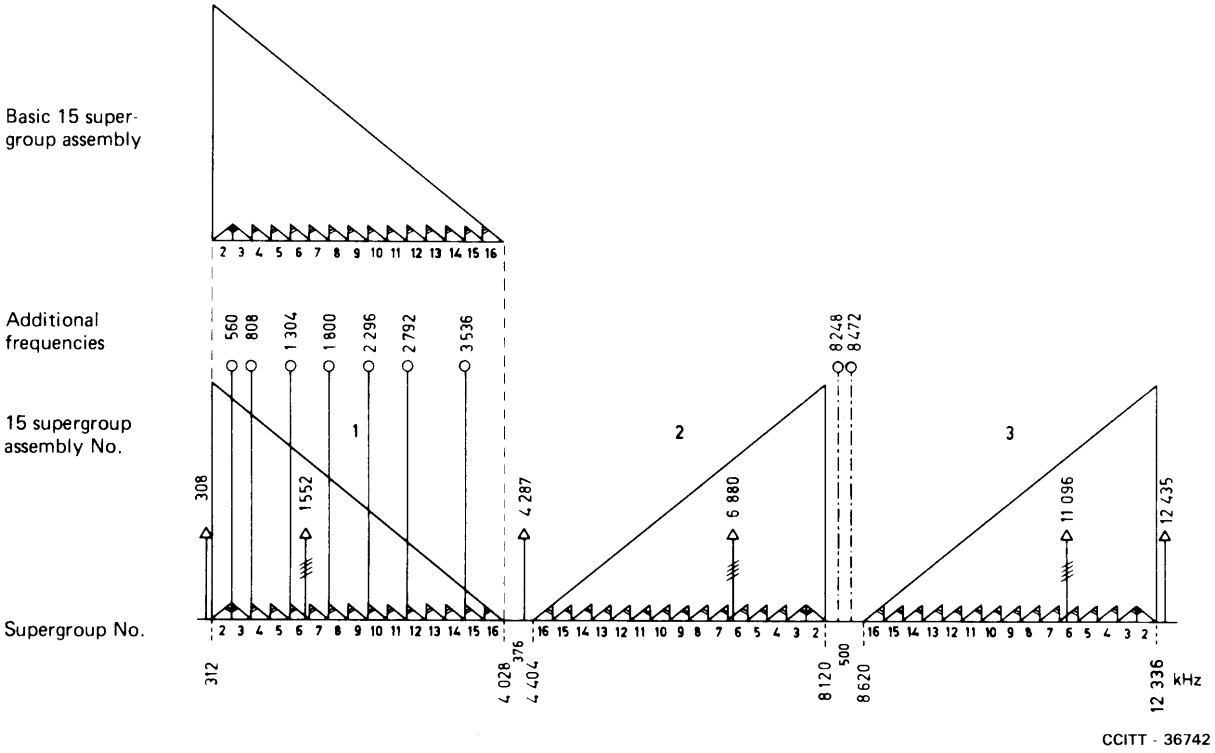


FIGURE 3/M.380

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Frequency allocation (Scheme 2) for 12-MHz systems

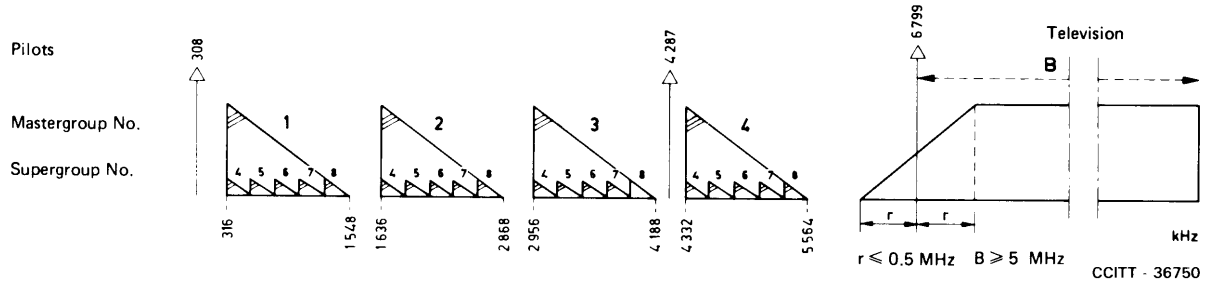

FIGURE 4/M.380

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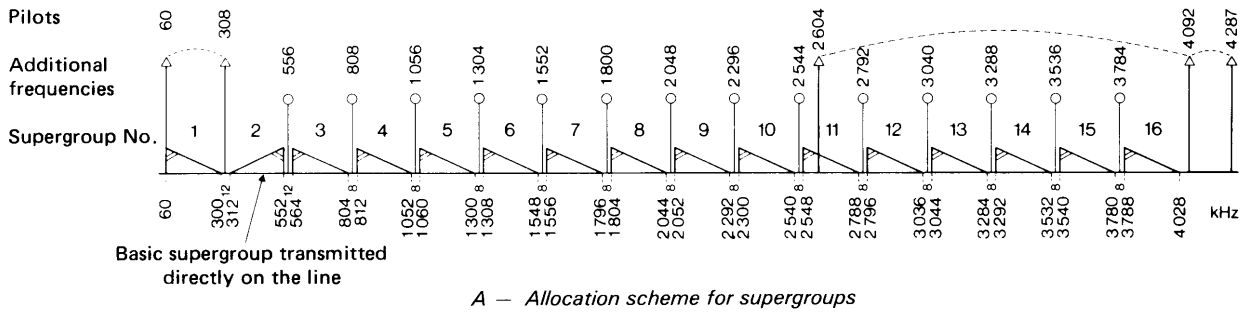
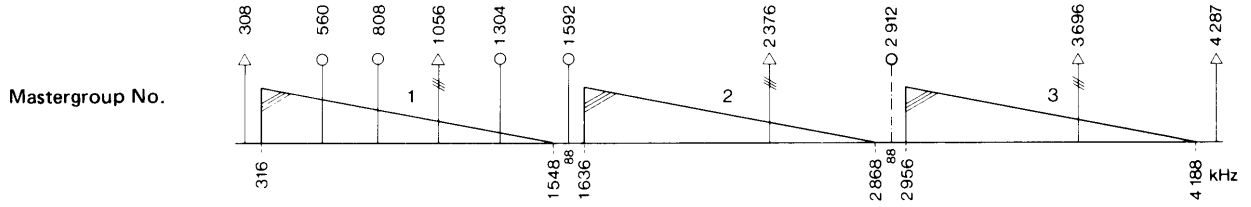
Line-frequency allocation for 12-MHz systems (simultaneous transmission of telephony and television)



A — Allocation scheme for supergroups



B — Allocation scheme for mastergroups

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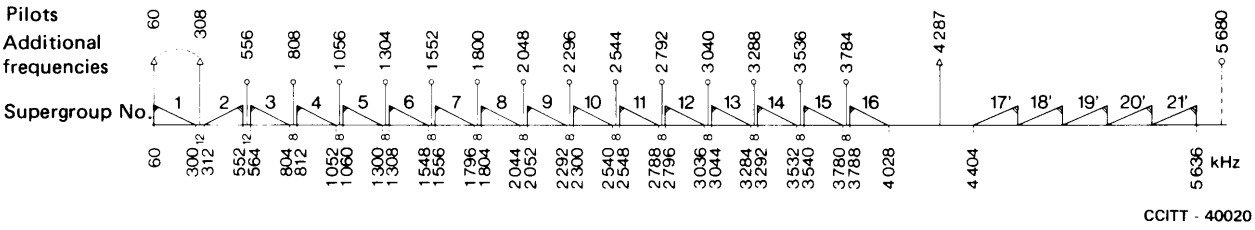
FIGURE 5/M.380

Line-frequency allocation for 4-MHz systems



d06-sc

FIGURE 6/M.380

Line-frequency allocation for 6-MHz systems (Scheme 1)

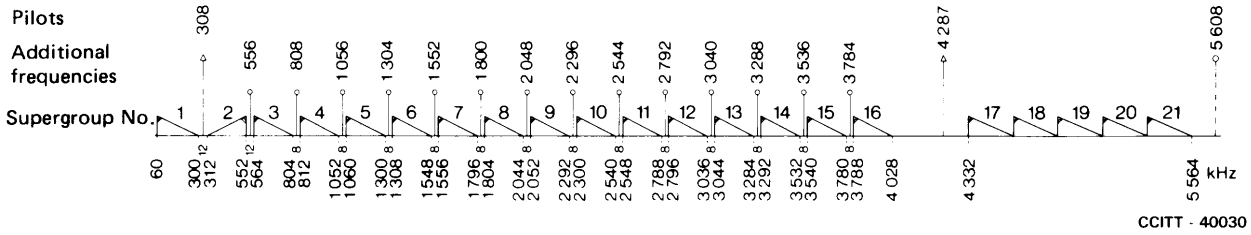


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FIGURE 7/M.380

Line-frequency allocation for 6-MHz systems (Scheme 2)

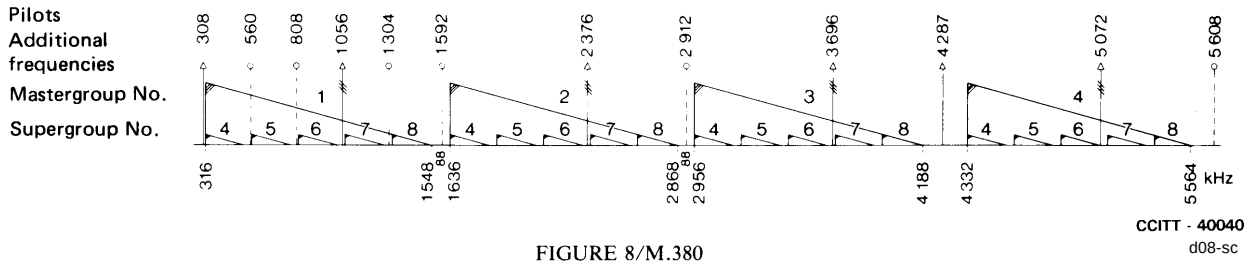

FIGURE 8/M.380

Line-frequency allocation for 6-MHz systems (Scheme 3)

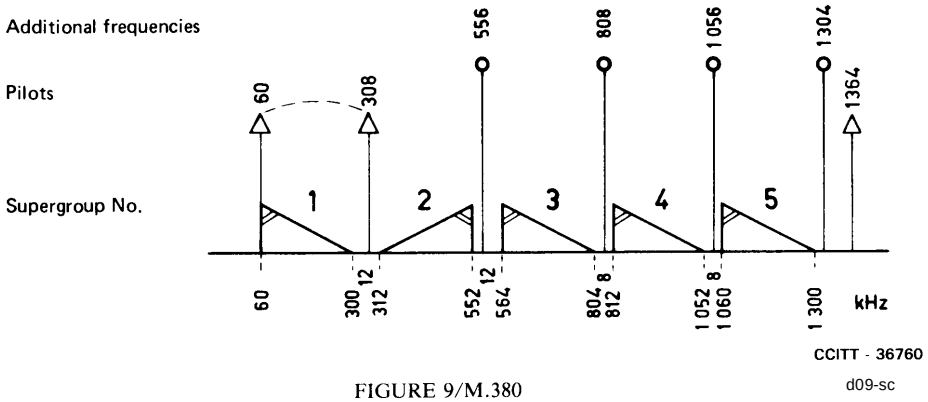

FIGURE 9/M.380

Line-frequency allocation for 1.3-MHz systems (Scheme 1)

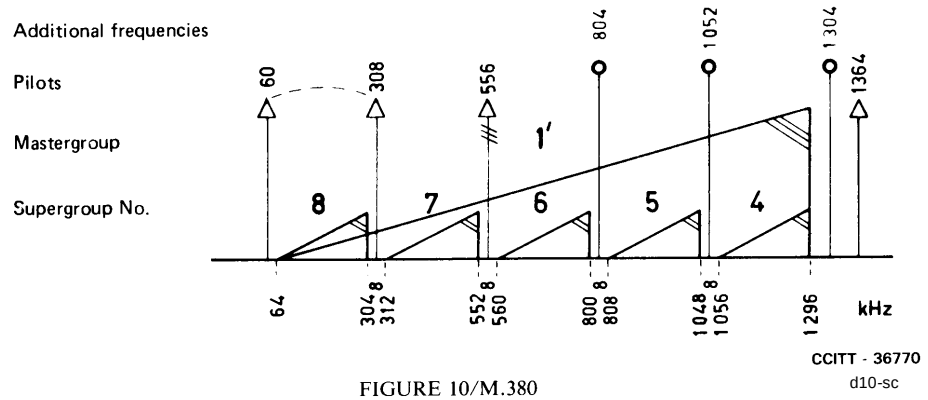

FIGURE 10/M.380

Line-frequency allocation for 1.3-MHz systems (Scheme 2)