

# iPASOLINK EX Advanced

# RADIO FREQUENCY PLANNING



### **NEC Corporation**

7-1, Shiba 5-Chome, Minato-Ku, Tokyo 108-8001, Japan

 $\ensuremath{\text{@}}$  2016 - 2022 by NEC Corporation

GGS-000553-04E

CONTENTS -i-

#### iPASOLINK EX Advanced

## RADIO FREQUENCY PLANNING

CONTEN	TS
1. OVERVIEW	1-1
2. RADIO FREQUENCY PLANNING	2-1
2.1 Sub-Band and TX-RX Frequency Spacing	2-1
2.1.1 71 to 76 GHz, 81 to 86 GHz Band	2-1
3. FD SYSTEM CHANNEL ALLOCATION	3-1
5. 1 D 5151EM CHANNEL ALLOCATION	J- 1
3.1 Adjacent Channel Alternate-Polarization	3-1

- ii/END - CONTENTS

This page is intentionally left blank.

OVERVIEW 1-1

#### 1. OVERVIEW

Following show the appearance of iPASOLINK EX Advanced (hereinafter iPASOLINK EX/A) the frequency ranges (RF frequency bands).

iPASOLINK EX/A	Applicable Frequ	ency Bands (GHz)
	TRP-80G10GB-1A	71 to 76 GHz 81 to 86 GHz

iPASOLINK EX/A Dual	Applicable Frequ	ency Bands (GHz)
	TRP-80G20GB-1A	71 to 76 GHz 81 to 86 GHz

#### **CAUTION:**

iPASOLINK EX/A that has been used outside should NOT be disassembled without following the appropriate procedures. Whenever the outer is removed, replace the Silica Gel packs with new ones, and also the air leakage test should be carried out using the air leakage tester that is manufactured and sold (optional) by NEC.

1-2/END OVERVIEW

This page is intentionally left blank.

## 2. RADIO FREQUENCY PLANNING

#### 2.1 Sub-Band and TX-RX Frequency Spacing

SUB-Band and TX High/Low depends on the equipment. Please check the equipment label.

#### 2.1.1 71 to 76 GHz, 81 to 86 GHz Band

Sub-Band	Frequenc	TX High/Low		
Sub-Barid	TX Radio Point	RX Radio Point	TX High/Low	
Α	71125.00 to 73625.00 MHz	81125.00 to 83625.00 MHz		
В	73375.00 to 75875.00 MHz	83375.00 to 85875.00 MHz	Lower Band	
С	71125.00 to 75875.00 MHz	81125.00 to 85875.00 MHz		
Α	81125.00 to 83625.00 MHz	71125.00 to 73625.00 MHz		
В	83375.00 to 85875.00 MHz	73375.00 to 75875.00 MHz	Higher Band	
С	81125.00 to 85875.00 MHz	71125.00 to 75875.00 MHz		

**NOTE:** The range of setting frequencies differ depending on the channel spacing to apply. Available ranges (FT) are obtained by the following:

• 
$$(f1 + CS \times 1/2) < FT < (fn - CS \times 1/2)$$

where:

f1 = Start Frequency = 71125.00

fn = Stop Frequency = 73625.00

CS: Channel Spacing

CS to Apply	Available Ranges (Narrower than Occupied Bandwidth)		
62.5 MHz	$(f1 + 62.5 \times 1/2) < FT < (fn - 62.5 \times 1/2)$	→ 71156.25 to 73593.75 MHz	
125.0 MHz	(f1 + 125.0 × 1/2) < FT < (fn – 125.0 × 1/2)	→ 71187.50 to 73562.50 MHz	
250.0 MHz	(f1 + 250.0 × 1/2) < FT < (fn – 250.0 × 1/2)	→ 71250.00 to 73500.00 MHz	
500.0 MHz	(f1 + 500.0 × 1/2) < FT < (fn – 500.0 × 1/2)	→ 71375.50 to 73375.50 MHz	
750.0 MHz	(f1 + 750.0 × 1/2) < FT < (fn – 750.0 × 1/2)	→ 71500.00 to 73250.00 MHz	
1000.0 MHz	(f1 + 1000.0 × 1/2) < FT < (fn – 1000.0 × 1/2)	→ 71625.00 to 73125.00 MHz	
1500.0 MHz	(f1 + 1500.0 × 1/2) < FT < (fn – 1500.0 × 1/2)	→ 71875.00 to 72875.00 MHz	
2000.0 MHz	$(f1 + 2000.0 \times 1/2) < FT < (fn - 2000.0 \times 1/2)$	→ 72125.00 to 72625.00 MHz	

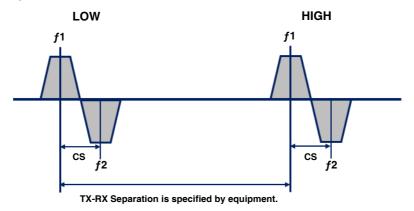
## 3. FD SYSTEM CHANNEL ALLOCATION

This section provides the frequency allocation rules that are applied to the Frequency Diversity (FD) System. The information in this section is not applicable for the single channel system EX/A (TRP-80G10GB-1A).

#### 3.1 Adjacent Channel Alternate-Polarization

#### **■** Channel Spacing

For the Alternate-Polarization, the minimum TX-TX Separation Frequency should be higher.



This page is intentionally left blank.