**FP Wireless System** 



# **Shure FP Wireless**





FP3

FP2

Système sans fil FP FP-Drahtlossystem Radiosistema FP Draadloos systeem FP Sistema inalámbrico FP Sistema Sem Fio FP Система FP Wireless



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### **FP Wireless System**

Featuring a comprehensive selection of system configurations with key wireless audio technologies and components, FP Wireless provides the ability to capture crystal-clear audio with confidence. With simple and flexible components, including a portable receiver and XLR plug-on transmitter, it has never been easier for audio to be captured in the demanding and dynamic videography and electronic field production (EFP) environments.

### **FP1 Bodypack Transmitter**

Lightweight, durable housing; for use with TA4Fconnection microphones including lavaliers and headsets

### FP2 Handheld Transmitter Lightweight, durable



housing; available with either the legendary Shure SM58® cardioid dynamic wireless capsule or with the VP68 condenser omnidirectional capsule; compatible with all Shure wireless capsules



Durable metal housing, ergonomically designed for comfortable grip; XLR connectivity allows for use with any wired dynamic XLR microphone

### **FP5 Portable Receiver**

Lightweight, durable housing, suitable for mounting on camera or person, diversity antennas, output via TA3F cable to either XLR or 1/8" connectors.



# **Features**

- · Audio Reference Companding for crystal-clear audio
- · Automatic Frequency Selection locates an open frequency at the touch of a button
- · Automatic Transmitter Setup instantly syncs the transmitter to the receiver frequency
- · Up to 12 compatible systems simultaneously
- · All components powered by 2 AA batteries no power cord required
- Transmitter gain attenuation control manages input level

## **Furnished Accessories**

# Quickstart

### Install Batteries



Power up the FP5 Receiver



### Group scan for open frequencies



# Power up the transmitter



Sync transmitter and receiver





# **FP5 Receiver**

### **1** Power LED

Green	Power on
Yellow	Low battery alert
Red	Critical low battery, replace immediately
Flashing red on power up	Battery dead

### 2 RF LED

Illuminates when successfully synced to a transmitter (or manually tuned to a transmitter's frequency)

### **③ Power Button**

Press and hold to power on or off.

### ④ Infrared (IR) port

Sends infrared beam to synchronize frequencies.

### **⑤ TA3M Jack**

Use with TA3F cable for audio out.

### 6 Audio Output Gain

Adjust audio output level to devices such as cameras or recorders.

### **⑦ LCD Screen**

Displays current settings for GROUP and CHANNEL and battery life.

### **® Scan Button**

**Group scan:** Push and hold (3 sec.) to find an open group and channel. **Channel scan:** Push and release to find an open channel in the current group.

### **9** Sync button

Align receiver and transmitter and press **sync**. Blue IR LED indicates successful sync.

Note: Press sync and scan buttons to manually enter group and channel numbers

### 1 Antennas

Two antennas for diversity reception.



# Transmitter Controls and Connectors

### **1 Indicator LED**

Green	Ready
Flashing green	Controls locked
Flashing red	IR transmission in progress
Solid red	Battery power low
Flashing red on startup	Batteries dead (transmitter cannot be turned on until batteries are changed)
Rapid flashing red after synchronization	Transmitter and receive incompatible; contact your Shure reseller

### **2** Power Button

Press and hold to power on or off.

### ③ Infrared (IR) Port

Receives infrared beam to synchronize frequencies. When using multiple systems, only one transmitter IR port should be exposed at a time.

### **④ 4-Pin Microphone Input Jack**

Use with with a TA4F connector for a lavalier or headset microphone.

### 5 Audio Input Gain

Adjusts audio level.

### 6 XLR Connection (FP3 only)

Plug into an XLR microphone or the output of an audio device.

### ⑦ Audio Input Level Indicator (FP3 only)

Red	Signal clip
Yellow	Nominal peak
Green	Audio present

# Adjusting Gain

### FP1 and FP3

Perform a sound check. Use the audio gain control located on the side (FP1) or front (FP3) of the unit to adjust the gain up (+) or down (–) until desired level is reached.

**FP3 only:** Adjust so the audio input level indicator flickers yellow at peak sound levels.

# FP3

# Single System Setup

### 1. Perform a group scan:

Press and hold the **scan** button for 3 seconds. After the scan completes, the new group and channel is automatically activated and saved.

### 2. Synchronize the transmitter:

Align the transmitter and receiver infrared (IR) ports and press the  $\ensuremath{\textbf{sync}}$  button.

After a successful sync, the transmitter LED momentarily flashes and the blue RF LED illuminates.

# Manual Group and Channel Selection (receiver only)

**Important:** Most single-system applications do not require manual group or channel settings--use an automatic frequency scan instead. However, it may be useful for some applications, such as to tune to and record audio directly from a microphone in a compatible wireless installation.

### To set the group:

- 1. Press the **scan** and **sync** buttons simultaneously. The **GROUP** display flashes.
- 2. Press the sync button to change the group number.
- 3. Press scan to accept the selected group.
- 4. Press scan again to save and exit.
- 5. If desired, perform a channel scan to select an open channel in that group.

### To set the channel:

- 1. Press the **scan** and **sync** buttons simultaneously. The **GROUP** display flashes.
- 2. Press **scan** to move to the channel setting. The **CHANNEL** number flashes.
- 3. Press the sync button to advance to the desired channel number.
- 4. Press **scan** to save and exit.

Note: Remember to sync the transmitter to the receiver.

### FP2

The handheld transmitter normally does not require adjustment and **should be left at 0dB** for most applications. Only use the –10dB setting for loud singing or other high SPL applications if there is noticable distortion.

Access the gain adjustment switch by unscrewing the head of the microphone. Use the tip of a pen or a small screwdriver to move the switch:

0dB: For normal use.

-10dB: Use only if audio distorts due to high SPL levels.

# **Multiple System Setup**

Use the following steps to ensure the best performance when using multiple wireless systems at the same location.

1. Turn all receivers on and all transmitters off.

**Note:** Turn on any other digital equipment that could cause interference during the performance so it will be detected during the frequency scans in the following steps.

2. Perform a group scan using the first receiver by pressing and holding the **scan** button for 3 seconds.

3. Turn on the first transmitter and sync it to the receiver.

### For each additional system:

- 1. Manually set the group number to match the first receiver (see Manual Group and Channel Selection).
- 2. Perform a channel scan by pressing the **scan** button.
- 3. Sync the transmitter to the receiver.

**Important:** After syncing each transmitter, leave it on so that scans from the other receivers do not select that channel. Be sure only one transmitter IR port is exposed when synchronizing each system.

# **Automatic Frequency Scan**

If you experience RF interference, switch to a new channel using the channel or group scan.

**Channel scan:** Press the **scan** button on the receiver. Switches to new channel in the same group.

**Group scan:** Press and hold the **scan** button for 3 seconds. Finds a new group and selects an open channel in that group. (Do not use in multiple system setups unless all systems are moved to the same group.)

# Locking and Unlocking the Transmitter

Locking the transmitter prevents accidental changes during performances.

**To lock the controls:** With the transmitter off, hold the power button down until the green LED flashes (~5 seconds)

**To unlock the controls:** With the transmitter on, hold the power button down until the green LED flashes (~5 seconds)



# Troubleshooting

Issue	Indicator Status	Solution	
No sound or faint sound	Transmitter power light on, receiver	Sync the transmitter to the receiver	
	blue RF LED off	Move closer to and maintain line-of-sight with the transmitter. Move away from metal surfaces and digital equipment.	
	Transmitter power light on, receiver	Verify all sound system connections	
	blue RF LED on	Adjust gain settings on the transmitter and receiver. Make sure the handheld transmitter gain is at the <b>0dB</b> setting.	
	Receiver power LED off, red, or blinking red	Insert fresh batteries or power on the receiver	
	Transmitter power LED red or	Replace transmitter batteries	
	flashing red	If indicator continues flashing red after batteries are replaced, the transmitter and receiver may belong to incompatible frequency bands. Contact your Shure reseller for assistance.	
	Transmitter power LED off	Turn on transmitter	
		Make sure the +/- indicators on batteries match the transmitter terminals	
		Insert fresh batteries	
Distortion or unwanted noise bursts	N/A	Remove nearby sources of RF interference (CD players, cell phones, computers, digital effects, in-ear monitor systems, etc.)	
		Change receiver and transmitter to a different frequency	
		Reduce transmitter gain	
		Replace transmitter batteries	
		If using multiple systems, change the frequency of one of the active systems	
Distortion increases gradually	Transmitter or receiver power LED red	Replace batteries	
Cannot turn transmitter or receiver on	Power LED flashing red	Replace batteries	

# **Tips for Improving System Performance**

- · Maintain a line-of-sight between transmitter and receiver
- Avoid proximity to metal surfaces and digital equipment that could cause RF interference, such as computers, cell phones, LCD screens, and other audio electronics.

# **Furnished Accessories**

Microphone clip (FP2)	WA371
Plug-on Transmitter belt clip and protective skin (FP3)	AFP301
Camera Shoe Mount (FP5)	AFP511
TA3F-to-XLRm audio cable	WA451
TA3F-to-3.5mm dual-mono audio cable	WA461

# **Specifications**

Working Range	100 m (300 ft)		
Line of Sight	Note: Actual range depends on RF signal ab- sorption, reflection and interference.		
Tonekey	32.768 kHz		
Audio Frequency Response	45 to 15000 Hz (±2 dB)		
	Note: Dependent on microphone type		
Total Harmonic Distortion Ref. ±38 kHz deviation with 1 kHz tone	<0.5%, typical		
Dynamic Range	>100 dB, A-weighted		
Operating Temperature Range	-18°C (0°F) to +57°C (135°F)		
	Note: Battery characteristics may limit this range.		

### FP1

Gain Adjustment Range	-10 to +20 dBV		
Input Impedance	1 ΜΩ		
RF Output Power	10 to 30 mW		
	varies by region		
Pin Assignments TA4M	<ol> <li>ground (cable shield)</li> <li>+ 5 V Bias</li> <li>audio</li> <li>Tied through active load to ground (On instrument adapter cable, pin 4 floats)</li> </ol>		
Dimensions	108 mm x 64 mm x 19 mm (H x W x D)		
Weight	81 g (3 oz.), without batteries		
Housing	Molded polycarbonate case		
Power Requirements	LR6 AA batteries, 1.5 V		
Battery Life	up to 11 hours (alkaline)		

### FP2

Maximum Input Level	at –10 dB gain setting: +2 dBV at 0 dB gain setting: –8 dBV		
Gain Adjustment Range	10 dB		
RF Output Power	10 to 30 mW		
	varies by region		
Dimensions	254 mm X 51 mm dia. (10 X 2 in.)		
Weight	290 g (10.2 oz.) without batteries		
Housing	Molded PC/ABS handle and battery cup		
Power Requirements	LR6 AA batteries, 1.5 V		
Battery Life	up to 11 hours (alkaline)		

### FP3

Gain Adjustment Range	0 to +40 dBV	
Input Impedance	9 κΩ	
RF Output Power 10 to 30 mW		
	varies by region	
Dimensions	117 x 36 x 43 mm (H x W x D)	
Weight	160 g (5.6 oz.), without batteries	
Power Requirements	LR6 AA batteries, 1.5 V	
Battery Life	up to 12 hours (alkaline)	

### FP5

Dimensions	108 mm X 64 mm X 19 mm (H x W x D)		
Weight	81 g (3 oz.)		
Housing	Molded polycarbonate case		
Sensitivity -108 dBm for 12 dB SINAD, typical			
Power Requirements	LR6 AA batteries, 1.5 V		
Battery Life up to 12 hours (alkaline)			
Audio Output			
Туре	TA3F		
Configuration	Impedance balanced		
Pin Assignments	1=ground, 2=hot, 3=cold		
Maximum Audio Output Level Ref. ±38 kHz deviation with 1 kHz tone	–5 dBV (into 600 Ω load)		
Impedance	200 Ω		

# Frequency Range and Transmitter Output Power

Band	Range	Transmitter output*		
G4	470 - 494 MHz	30 mW		
G4E	470 - 494 MHz	10 mW		
G5	494 - 518 MHz	30 mW		
G5E	494 - 518 MHz	10 mW		
H5	518 - 542 MHz	30 mW		
H5E	518 - 542 MHz	10 mW		
J3	572 - 596 MHz	30 mW		
K3E	606 - 630 MHz	10 mW		
L4	638 - 662 MHz	30 mW		
L4CN	638 - 662 MHz	30 mW		
L4E	638 - 662 MHz	30 mW		
P4	702 - 726 MHz	30 mW		
P4CN	702 - 726 MHz	30 mW		
Q24	736 - 754 MHz	30 mW		
R13	794 - 806 MHz	20 mW		
R19	794 - 806 MHz	10 mW		
R5	800 - 820 MHz	20 mW		
JB	806 - 810 MHz	10 mW		
S6	838 - 865 MHz	10 mW		
X4	925 - 932 MHz	10 mW		
* Conductive into 50 ohms				

**NOTE:** This Radio equipment is intended for use in musical professional entertainment and similar applications. This Radio apparatus may be capable of operating on some frequencies not authorized in your region. Please contact your national authority to obtain information on authorized frequencies and RF power levels for wireless microphone products.

### FP1, FP2, FP3, FP5

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Meets requirements of the following standards: EN 300 422 Parts 1 and 2, EN 301 489 Parts 1 and 9, EN60065.

Meets essential requirements of the following European Directives:

- R&TTE Directive 99/5/EC
- WEEE Directive 2002/96/EC, as amended by 2008/34/EC
- · RoHS Directive 2002/95/EC, as amended by 2008/35/EC

 $\ensuremath{\textbf{Note:}}$  Please follow your regional recycling scheme for batteries and electronic waste

### FP5

Approved under the Declaration of Conformity (DoC) provision of FCC Part 15.

Certified by IC in Canada under RSS-123 and RSS-102.

IC: 616A-FP5L, 616A-FP5M, 616A-FP5A, 616A-FP5B, 616A-FP5C

### LICENSING INFORMATION

Licensing: A ministerial license to operate this equipment may be required in certain areas. Consult your national authority for possible requirements. Changes or modifications not expressly approved by Shure Incorporated could void your authority to operate the equipment. Licensing of Shure wireless microphone equipment is the user's responsibility, and licensability depends on the user's classification and application, and on the selected frequency. Shure strongly urges the user to contact the appropriate telecommunications authority concerning proper licensing, and before choosing and ordering frequencies.

**Note:** EMC conformance testing is based on the use of supplied and recommended cable types. The use of other cable types may degrade EMC performance.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

**WARNING:** Danger of explosion if battery incorrectly replaced. Operate only with Shure compatible batteries.

**WARNING:** Battery packs shall not be exposed to excessive heat such as sunshine, fire, or the like.

### **FP1, FP2, FP3**

Type Accepted under FCC Parts 74.

FCC: DD4FP3L, DD4FP3M, DD4FP3A, DD4FP3B, DD4FP3C, DD4SLX1G4, DD4SLX1G5, DD4SLX1, DD4SLX2G4, DD4SLX2G5, DD4SLX2.

Certified by IC in Canada under RSS-123 and RSS-102.

IC: 616A-FP3L, 616A-FP3M, 616A-FP3A, 616A-FP3B, 616A-FP3C, 616A-SLX1G4, 616A-SLX1G5, 616A-SLX1, 616A-SLX2G4, 616A-SLX2G5, 616A-SLX2.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation of this device is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The CE Declaration of Conformity can be obtained from Shure Incorporated or any of its European representatives. For contact information please visit www.shure.com

The CE Declaration of Conformity can be obtained from: www.shure.com/ europe/compliance

Authorized European representative: Shure Europe GmbH Headquarters Europe, Middle East & Africa Department: EMEA Approval Jakob-Dieffenbacher-Str. 12 75031 Eppingen, Germany Phone: 49-7262-92 49 0 Fax: 49-7262-92 49 11 4 Email: EMEAsupport@shure.de

### Information to the user

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- · Consult the dealer or an experienced radio/TV technician for help.

### **Frequency Ranges**

### H5: 518.000-542.000 MHz

	GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5	GROUP 6
1	518.400	519.250	518.200	519.775	519.100	518.425
2	521.500	520.500	519.675	522.500	521.225	520.400
3	523.575	522.225	520.800	524.200	522.550	523.425
4	525.050	524.725	522.450	525.600	524.575	525.475
5	527.425	526.350	523.750	526.700	526.900	527.775
6	529.200	527.550	526.200	528.250	530.500	531.675
7	532.450	530.800	528.325	529.500	531.750	533.800
8	533.650	532.575	532.225	533.100	533.300	536.250
9	535.275	534.950	534.525	535.425	534.400	537.550
10	537.775	536.425	536.575	537.450	535.800	539.200
11	539.500	538.500	539.600	538.775	537.500	540.325
12	540.750	541.600	541.575	540.900	540.225	541.800
	Full Range - even distribu- tion for each TV-CH	Full Range - even distribu- tion for each TV-CH	Full Range - max. # of frequencies for CH- 22	Full Range - max. # of frequencies for CH- 23	Full Range - max. # of frequencies for CH- 24	Full Range - max. # of frequencies for CH- 25

### J3: 572.000-596.000 MHz

	GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5	GROUP 6
1	572.400	573.250	572.200	573.775	573.100	572.425
2	575.500	574.500	573.675	576.500	575.225	574.400
3	577.575	576.225	574.800	578.200	576.550	577.425
4	579.050	578.725	576.450	579.600	578.575	579.475
5	581.425	580.350	577.750	580.700	580.900	581.775
6	583.200	581.550	580.200	582.250	584.500	585.675
7	586.450	584.800	582.325	583.500	585.750	587.800
8	587.650	586.575	586.225	587.100	587.300	590.250
9	589.275	588.950	588.525	589.425	588.400	591.550
10	591.775	590.425	590.575	591.450	589.800	593.200
11	593.500	592.500	593.600	592.775	591.500	594.325
12	594.750	595.600	595.575	594.900	594.225	595.800
	Full Range - even distribu- tion for each TV-CH	Full Range - even distribu- tion for each TV-CH	Full Range - max. # of frequencies for CH- 31	Full Range - max. # of frequencies for CH- 32	Full Range - max. # of frequencies for CH- 33	Full Range - max. # frequencies for CH-

### L4: 638.000-662.000 MHz

	GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5	GROUP 6
1	638.400	639.250	638.200	639.775	639.100	638.425
2	641.500	640.500	639.675	642.500	641.225	640.400
3	643.575	642.225	640.800	644.200	642.550	643.425
4	645.050	644.725	642.450	645.600	644.575	645.475
5	647.425	646.350	643.750	646.700	646.900	647.775
6	649.200	647.550	646.200	648.250	650.500	651.675
7	652.450	650.800	648.325	649.500	651.750	653.800
8	653.650	652.575	652.225	653.100	653.300	656.250
9	655.275	654.950	654.525	655.425	654.400	657.550
10	657.775	656.425	656.575	657.450	655.800	659.200
11	659.500	658.500	659.600	658.775	657.500	660.325
12	660.750	661.600	661.575	660.900	660.225	661.800
	Full Range - even distribu- tion for each TV-CH	Full Range - even distribu- tion for each TV-CH	Full Range - max. # of frequencies for CH- 42	Full Range - max. # of frequencies for CH- 43	Full Range - max. # of frequencies for CH- 44	Full Range - max. # of frequencies for CH- 45

### P4: 702.000-726.000 MHz

	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8
1	702.200	703.750	703.650	702.750	703.750	702.100	704.775	702.300
2	704.200	705.975	705.650	704.500	705.750	704.025	706.225	704.975
3	707.200	707.200	708.650	705.750	708.250	705.500	710.500	706.775
4	709.425	708.850	710.875	708.250	711.750	708.500	712.025	709.100
5	711.000	710.950	712.450	711.250	714.500	710.100	714.225	710.300
6	713.675	712.425	715.125	712.500	715.750	712.025	716.900	712.225
7	715.575	714.325	717.025	715.250	718.750	713.500	718.500	714.775
8	717.050	717.000	718.500	718.750	721.250	717.300	720.775	716.700
9	719.150	718.575	720.600	721.250	722.500	725.300	725.300	724.000
10	720.800	720.800	722.250	723.250	724.250			725.900
11	722.025	723.800	723.475					
12	724.250	725.800	725.700					
	Full Range - max. # of compatible frequencies	Full Range - max. # of compatible frequencies	Full Range - max. # of compatible frequencies	France preferred: User Group A	France preferred: User Group A	France preferred: User Group B	France preferred: User Group B	France preferred: User Group C

	Group 9	Group 9	Group 9	Group 9	Group 9	Group 9	Group 9	Group 9
1	703.000	702.200	710.200	718.200	702.550	702.100	702.700	702.500
2	706.025	703.300	711.300	719.300	705.600	704.700	704.700	705.500
3	708.000	704.700	712.700	720.700	707.500	710.300	709.450	707.000
4	710.300	705.800	713.800	721.800	709.000	712.400	711.500	712.200
5	712.225	707.675	715.675	723.675	711.500	714.000	714.500	714.100
6	716.000	708.775	716.775		715.100	716.500	716.550	716.400
7	717.100				717.000	719.400	719.900	719.500
8	719.000				720.000	721.300	722.000	722.200
9	720.225				723.500		724.700	
10	722.775				725.900		725.900	
11	724.700							
	France preferred: User Group C	Optimized TV channels: TV ch. 50 702-710 MHz	Optimized TV channels: TV ch. 51 710-718 MHz	Optimized TV channels: TV ch. 52 718-724 MHz	Compatible setup for use with PSM400-P3 (P4 > P3)	Compatible setup for use with PSM400-P3 (P4 = P3)	Compatible setup for use with PSM400-HF (P4 > HF)	Compatible setup for use with PSM400-HF (P4 = HF)

### R5: 800.100-819.900 MHz

	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7
1	801.250	801.225	800.950	800.525	801.475	800.600	800.650
2	804.825	804.800	802.950	801.925	803.025	802.050	803.125
3	806.975	806.950	804.325	803.650	805.800	804.275	804.450
4	808.800	808.775	806.425	804.850	806.950	805.750	806.150
5	810.325	810.300	808.050	807.400	809.125	806.850	807.250
6	811.550	811.525	809.275	808.525	810.575	808.550	808.725
7	813.175	813.150	810.800	810.275	811.725	809.875	810.950
8	815.275	815.250	812.625	811.550	813.800	812.350	812.400
9	816.650	816.625	814.775	813.775		813.450	813.500
10	818.650	818.625	818.350				
11	819.750	819.800	819.775				
	Full Range - max. # of comp. Frequencies & FIN / NOR /DEN	Full Range - max. # of comp. Frequencies & FIN / NOR / DEN	Full Range - max. # of comp. Frequencies & FIN / NOR /DEN	Germany preferred: User Group 4 800-814 MHz	Germany preferred: User Group 4 800-814 MHz	Sweden preferred: 800-814 MHz	Sweden preferred: 800-814 MHz

	Group 8	Group 9	Group 10	Group 11	Group 12	Group 13	Group 14
1	806.000	806.025	801.400	800.900	801.200	803.850	806.150
2	807.100	807.425	808.300	802.100	803.800	807.000	811.650
3	808.500	808.525	816.400	806.200	805.900	809.700	814.400
4	809.600	810.400		809.300	807.000	811.050	816.500
5	811.475	811.500		814.100	809.200	813.900	817.450
6	812.575	812.900		816.100	811.700	816.500	819.300
7	813.975	814.000		817.200		817.600	
8				819.600		819.500	
	Netherlands preferred: TV ch. 63 806-814 MHz	Netherlands preferred: TV ch. 63 806-814 MHz	Compatible setup for use with EUT-TL-TV (R5 > TL-TV)	Compatible setup for use with PSM400- MN (R5 > MN)	Compatible setup for use with PSM400-MN (R5 = MN)	Compatible setup for use with PSM200-R8 (R5 > R8)	Compatible setup for use with PSM200-R8 (R5 = R8)

### S6: 838.000-865.000 MHz

	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8
1	838.200	838.150	838.550	854.200	855.475	855.075	854.750	854.750
2	841.450	839.375	839.775	855.300	857.425	857.775	855.850	855.850
3	843.275	841.300	841.700	856.700	860.600	860.725	857.250	857.250
4	846.225	842.475	842.875	857.800			858.350	858.350
5	847.350	846.400	846.800	859.675			860.225	860.225
6	850.125	848.025	848.425	860.775			861.325	861.325
7	852.575	850.025	850.425					
8	854.575	852.475	852.875					
9	856.200	855.250	855.650					
10	860.125	856.375	856.775					
11	861.300	859.325	859.725					
12	863.225	861.150	861.550					
13	864.450	864.400	864.800					
	Full Range - max. # of compatible frequencies	Full Range - max. # of compatible frequencies	Full Rangemax. # of compatible frequencies	BEL / TUR preferred: opt. TV ch.69 854-862 MHz	U.K. preferred: "CH69 Coordinated" SET 1	U.K. preferred: "CH69 Coordinated" SET 2 or SET 3	U.K. preferred: "Co-ordinated frequencies" INDOORS	U.K. preferred: "Co-ordinated frequencies" OUTDOORS

	Group 9	Group 10	Group 11	Group 12	Group 13	Group 14	Group 15
1	854.425	863.200	838.200	838.900	838.100	838.700	838.400
2	855.525	864.500	839.900	842.600	841.100	842.800	840.600
3	857.400		841.000	845.900	842.700	844.800	842.100
4	858.500		842.375	847.500	847.000	846.300	844.700
5	859.900		844.400	848.600	849.200	847.400	846.600
6	861.000		846.100	850.100	850.400	849.200	848.100
7			847.350	852.100	852.500	851.300	850.700
8			849.400	853.300	854.100		851.850
9			851.800	855.100	855.300		853.700
10			853.200	857.200			
11				858.650			
12				859.800			
13				861.900			
	U.K. preferred: "Co-ordinated frequencies" OUTDOORS	European harmonized band: optimized for 863 - 865 MHz	Compatible setup for use with EUT-TW-TZ (S6 > TW-TZ)	Compatible setup for use with EUT-VR-VT (S6 > VR-VT)	Compatible setup for use with PSM400- KE (S6 > KE)	Compatible setup for use with PSM400- KE (S6 = KE)	Compatible setup for use with PSM200- S5 (S6 > S5)

### Q4: 740.000-752.000 MHz

	Group 1	Group 2	Group 3	Group 4
1	740.125	740.125	740.125	740.125
2	741.500	741.950	741.225	740.800
3	743.375	743.500	742.925	741.825
4	744.600	745.675	744.325	743.075
5	746.325	747.400	745.425	745.125
6	748.500	748.625	746.875	746.575
7	750.050	750.500	748.925	747.675
8	751.875	751.875	750.175	749.075
9			751.200	750.775
10			751.875	751.875
	Full Range	Full Range	Full Range	Full Range

### JB: 806.000-810.000 MHz

	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
1	806.250	806.375	806.125	806.500	806.125	806.250
2	807.500	808.625	807.375	807.375	807.375	807.250
3	809.625	809.750	809.500	808.625	808.375	808.500
4				809.625	809.750	809.375
	Full Range					

### R13: 794.000-806.000 MHz

	Group 1	Group 2	Group 3	Group 4
1	795.150	794.375	794.100	794.900
2	796.850	795.600	795.300	796.100
3	798.100	797.425	797.200	798.000
4	800.750	799.725	798.550	799.350
5	802.200	803.025	800.625	801.425
6	805.350	804.475	802.150	802.950
7			803.350	804.150
8			804.925	805.725
	Full Range	Full Range	Full Range	Full Range



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