

***MOTOROLA IMPRES™  
SMART ENERGY SYSTEM***

***SAVE TIME AND MONEY WITH  
INTELLIGENT BATTERY  
MANAGEMENT FROM MOTOROLA***



Keep communicating for longer with Motorola's innovative new impres batteries and chargers. A revolutionary charging and reconditioning solution, impres stands for Intelligent Motorola Portable Radio Energy System and has been designed to automate battery maintenance, optimise cycle life, and maximise talk time so your radio fleet is always ready to go, whenever the team needs to communicate.

### ***INCREASED EFFICIENCY***

Unlike traditional battery maintenance systems which require the manual recording of battery data that can lead to unnecessary battery reconditioning, impres batteries and chargers communicate with each other so that the process is automated, reducing operating costs and streamlining operations by capturing battery data electronically.

The easy-to-use single- and multi-unit chargers facilitate personal issue radios and batteries as the responsibility for battery maintenance falls to the impres charger rather than the busy radio user or communications technician. It has never been easier to maximise the life of your Motorola radio batteries.

### ***VERSATILITY***

To unlock the smart capabilities of Motorola's impres technology, impres batteries and chargers must be used together. However to make the migration easier, impres chargers also support existing Motorola radio batteries which can be charged alongside impres batteries.

### ***HOW DOES IT WORK?***

Using Adaptive Charging and low current trickle charging, the charge algorithm keeps batteries cooler avoiding any potentially damaging heat buildup.

In maintenance mode, periodic top-up bursts make it possible for batteries to be left in the charger for extended periods without heat damage, whilst remaining ready to tackle even the longer shift times that radio users work.

### ***Designed for Today's Radio Users***

With over 75 year's experience in the world of wireless communications, Motorola has never been more aware of the requirements of today's radio users.

Security guards responding to a security breach, mission-critical users who depend on their radios for public and personal safety and large fleet holders, such as local governments, can all benefit from Motorola's impres technology as can those who work extended shifts in the retail and hospitality sectors.

Similarly, impres is ideal for users who regularly leave their base for short periods of time and want to be able to put their radios back on charge upon their return. They can now do this without compromising the life of their radio battery. In addition, partially charged batteries can be briefly removed from the charger and dropped back in for the charge to continue without any detrimental effects.

### ***FEATURE-RICH INNOVATIVE TECHNOLOGY***

#### ***Automatic Initialisation***

Batteries sitting dormant for a long time may not achieve maximum capacity after only a simple charge. The impres initialisation process helps ensure batteries achieve maximum charge capacity and talk time. Impres batteries are automatically initialised by the impres charger and those not charged in an impres charger for at least 30 days are re-initialised automatically when replaced in the charger.

### ***UNIVERSAL IMPRES SINGLE-UNIT CHARGER***



### **Display Data**

Choose the multi-unit impres charger with display to view real time battery capacity and charge progress at a glance.

### **Adaptive Reconditioning**

The impres Smart Energy System uses a patented communications protocol to facilitate adaptive reconditioning that overcomes memory effect. Memory effect is caused by topping up batteries that are not fully discharged and can drastically reduce a battery's capacity and life. Impres adjusts the reconditioning frequency to match the need and usage patterns. With automatic and adaptive reconditioning, you eliminate guesswork and the time wasted reconditioning batteries prematurely.

### **Longer Duty Cycles**

The enhanced battery care afforded by impres increases the average battery capacity by up to 20% over its lifetime.



### **EASY SET UP**

All impres batteries can be reconditioned without removing them from the radio. Simply put the radio in the charger, assured that when you remove it, the battery will be fully charged and ready to go. An 'End of Service' indicator lets you know when battery replacement is necessary to avoid compromising user safety or productivity.

### **EASY FLEET MANAGEMENT**

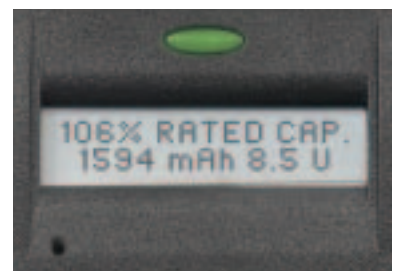
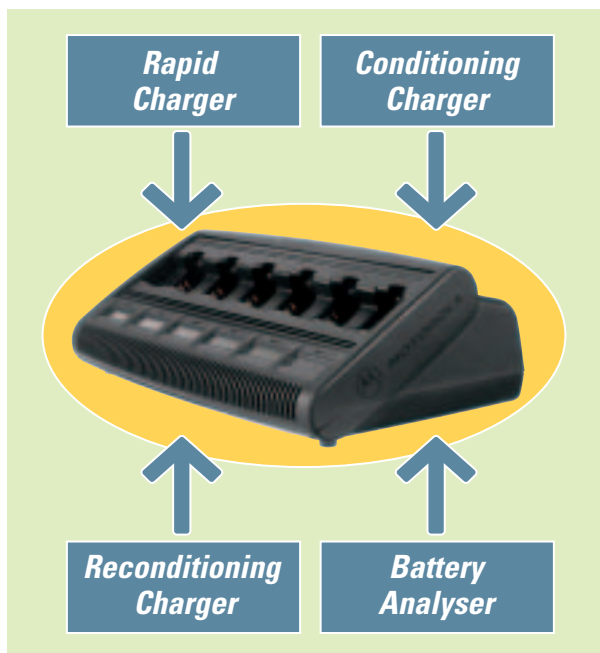
Available in 2005, Battery Management Software provides a link between all impres chargers and the fleet manager's computer. Impres data is provided in a Microsoft Excel™-compatible format allowing the user to develop battery usage and maintenance reports, graphs and tables.

An optional interface box allows the connection of a number of chargers to a single computer for larger fleets.

### **UNLOCK THE MAXIMUM POWER OF IMPRES WITH THE DISPLAY OPTION MULTI-UNIT CHARGER**

- Logs initial capacity at first charge and charts capacity changes
- Advises up-to-the-second battery capacity and voltage whilst charging
- Displays time remaining to complete rapid charging, so you know when your battery will be fully charged and ready to go back into service
- Shows current battery status, such as charging or reconditioning information
- Records the battery's unique serial number, kit number, and chemistry to assist with fleet management
- Indicates when fewer than 6 cycles are required until the next reconditioning, so you can plan ahead
- Predicts battery end-of-life to allow time for seamless replacement

### **4 IN 1 SOLUTION: MOTOROLA IMPRES™ CHARGER**



## TECHNICAL SPECIFICATIONS AND PART NUMBERS

### GP PROFESSIONAL SERIES IMPRES BATTERIES

Chemistry	Capacity	Part Number
NiMH	1900mAh	HNN4001
NiMH FM	1800mAh	HNN4002
Li-ION	2000mAh	HNN4003

### GP PROFESSIONAL SERIES IMPRES CHARGERS

Description	Dimensions	Weight	Voltage	Plug	Part Number
Single Unit Charger	5.59x9.65x14.73cm	198g	120V	US	WPLN4206
Single Unit Charger	5.59x9.65x14.73cm	198g	230V	Euro	WPLN4184
Single Unit Charger	5.59x9.65x14.73cm	198g	230V	UK	WPLN4183
Multi Unit Charger	15.24x44.45x29.21cm	3606g	120V	US	WPLN4205
Multi Unit Charger	15.24x44.45x29.21cm	3606g	230V	Euro	WPLN4189
Multi Unit Charger	15.24x44.45x29.21cm	3606g	230V	UK	WPLN4188
Multi Unit Charger with Display	15.24x44.45x29.21cm	3742g	120V	US	WPLN4204
Multi Unit Charger with Display	15.24x44.45x29.21cm	3742g	230V	Euro	WPLN4194
Multi Unit Charger with Display	15.24x44.45x29.21cm	3742g	230V	UK	WPLN4193

### IMPRES BATTERIES FOR SABER, JEDI, XTS AND MTP700 TETRA RADIOS

Chemistry	Radio Compatibility	Capacity	Part Number
NiCD	Saber	1800mAh	HNN9033
NiCD FM	Saber	1800mAh	HNN9034
NiCD	Jedi	1500mAh	HNN9028
NiCD FM	Jedi	1500mAh	HNN9029
NiCD	XTS	1525mAh	HNN9031
NiCD FM	XTS	1525mAh	HNN9032
NiMH	XTS	2000mAh	NNTN4435
NiMH FM	XTS	2000mAh	NNTN4436
NiMH FM Rugged	XTS	2000mAh	NNTN4437
Li-ION	XTS	2000mAh	NTN9862
Li-ION	MTP700 TETRA	1500mAh	PMNN4047
NiMH	MTP700 TETRA	1200mAh	PMNN4048
NiMH	MTP700 TETRA	1200mAh	PMNN4049

### UNIVERSAL IMPRES CHARGERS FOR SABER, JEDI, XTS AND MTP700 TETRA RADIOS

Description	Dimensions	Weight	Voltage	Plug	Part Number
Single Unit Charger	8.2x9.7x20cm	624g	120V	US	WPLN4117
Single Unit Charger	8.2x9.7x20cm	624g	230V	Euro	WPLN4112
Single Unit Charger	8.2x9.7x20cm	624g	230V	UK	WPLN4113
Multi Unit Charger	15.24x44.45x29.21cm	3742.2g	120V	US	WPLN4120
Multi Unit Charger	15.24x44.45x29.21cm	3742.2g	230V	Euro	WPLN4109
Multi Unit Charger	15.24x44.45x29.21cm	3742.2g	230V	UK	WPLN4110
Multi Unit Charger with Display	15.24x44.45x29.21cm	3878.3g	120V	US	WPLN4135
Multi Unit Charger with Display	15.24x44.45x29.21cm	3878.3g	230V	Euro	WPLN4131
Multi Unit Charger with Display	15.24x44.45x29.21cm	3878.3g	230V	UK	WPLN4132

To charge GP Professional Series batteries in Universal Impres Charger order the following adapter packs:

Single Unit Charger Adapter	RLN5647
Multi Unit Charger Adapter 6 Pack	RLN5648

### IMPRES CHARGERS TECHNICAL SPECIFICATION

Power Description	90-265Vac, 50/60Hz	
Charging Methods	NiCd:	CCDT/Negative Pulse
	NiMH:	CCDT/Negative Pulse
	Li-ION:	CCCV
Maximum Charging Current	1.25-1.50A	
Operating Temperature Range	0-50°C	

For more information contact your local Motorola authorised two-way radio dealer:



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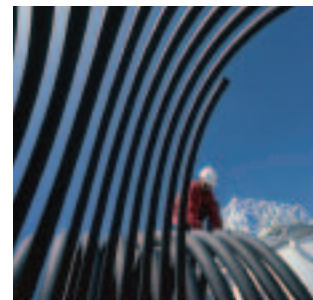
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### Reassuring Motorola Quality and Warranty

All impres batteries and chargers are built to last thanks to having passed the exacting requirements of Motorola's Accelerated Life Testing which replicates five year's of hard use in the field.



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