

Ordering Guide


DVR-LX

Revision 1.2

October 7, 2020



Important Notes

1. Only the frequency plans shown in this ordering guide are available as standard configurations. For custom filtering, please contact Futurecom at sales@futurecom.com
2. **DVR-LX** Frequencies must be specified when placing an order since the filters are custom tuned and cannot be re-tuned in the field.
3. Standard **DVR-LX** delivery time is 10-12 weeks after receipt of a purchase order and a valid frequency plan. Frequency information must be accurate and in accordance with the frequency plan requirements described in this document in order to avoid delays.
4. **DVR-LX** models include standard 3 ft control cable (**DVR-LX** to Mobile Radio). Custom cable lengths are available in 5 ft, 10 ft, 15 ft, 20 ft and 25 ft (MAX). Custom cable length must be specified on the purchase order to Futurecom.
5. The Motorola Mobile radios and accessories are NOT included with the **DVR-LX**.
6. The Motorola Mobile radio can operate with up to two control heads while interfaced to a **DVR-LX** (vehicle mount **DVR-LX** model only).
7. High power VHF mobile radios (M25KTS9PW1 APX™ 6500, M30KTS9PW1 APX™7500) are NOT compatible with any Suitcase or Cabinet Mount **DVR-LX** models.
8. The Mobile Radio Tx Power must not exceed 50 Watts on any “**DVR-Enabled**” modes / channels due to the in-band filters power rating.
9. The Motorola Mobile Radios may require firmware upgrades in order to operate with the **DVR-LX**. Motorola Radio Firmware Upgrades are to be purchased directly from Motorola. Please note, to ensure full compatibility and make use of the latest available feature set, it is recommended that the **APX™** Mobile Radio and **DVR-LX** Firmware are updated to the latest Motorola certified firmware versions.
10. **APX™** Mobile Radios operating as the host mobile for the **DVR-LX** require subscriber option **GA00631** for operation. **APX™** Portable Radios operating through a **DVR-LX**, utilizing the digital enhanced **DVR TRUNKING** feature set require subscriber option **QA00631**.
11.  Subscribe to our newsletter to be informed about new releases and updates. Please visit <http://futurecom.com/support/newsletter/>



Frequency plans that do not meet Futurecom’s specified frequency separation are custom orders. Please contact Futurecom to determine if a custom frequency plan is viable and for quotations on viable plans. sales@futurecom.com

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Mobile Radio Type

The DVR-LX is compatible with the following Motorola Mobile Radios:

- Remote Mount **APX™ 5500** with any Control Head, single band - Select Option TT05715AA
- Remote Mount **APX™ 6500** with any Control Head, single band - Select Option TT05715AA
- Remote Mount **APX™ 7500** with any Control Head, single band - Select Option TT05715AA
- Remote Mount **APX™7500** with any Control Head, dual band - Select Option TT05716AA
- Remote Mount **APX™8500** with any Control Head, all band - Select Option TT06279AA

Depending on the isolation available between the APX™8500 mobile and DVR-LX antennas, one of the following kits may be required.

- Dual Triplexer Kit - Select Option DDN2657A
- Single Triplexer Relay Kit - Select Option DDN2658A
- Dual Triplexer Relay Kit - Select Option DDN2659A
- Relay Kit - Select Option DDN2808A



When the DVR-LX is Connected to the APX™ 8500, The Motorola option number **GA01515** is required at time of order or **KT000247A01** as an accessory if ordered after original shipment. This Y cable splits the J600 into J600 and DB25. (Sold exclusively through Motorola Solutions, Inc.)

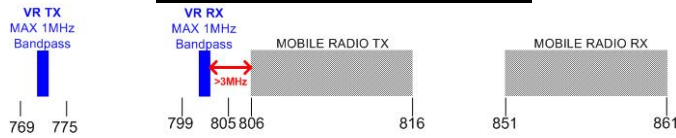
700MHz
In-Band
DVR-LX Models

Vehicle Mount

Suitcase



In-Band Frequency Plan A



TT3793A

TT3796A

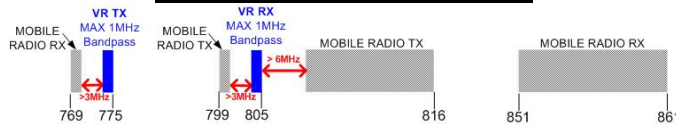
In-Band Frequency Plan B



TT3794A



TT3797A

In-Band Frequency Plan C



TT3795A

TT3798A

<p style="text-align: center;">700MHz Cross-Band DVR-LX Models</p>	<p style="text-align: center;">Vehicle Mount</p> 	<p style="text-align: center;">Suitcase</p> 
<p style="text-align: center;"><u>Cross-Band</u></p> <p>6MHz Bandpass Duplexer: DVR-LX Tx 769-775MHz DVR-LX Rx 799-805MHz</p>	<p style="text-align: center;">TT3799A</p>	<p style="text-align: center;">TT3800A</p>

OPTIONS AND SPARES

ORDER CODE	DESCRIPTION
Factory Installed Licensed Feature	
TT06567AA	<p>Authentication Factory Installed Licensed Feature: Portable Link Layer authentication through the DVR-LX Prevent unauthorized portables accessing the radio network (per unit)</p> <ol style="list-style-type: none"> 1. Requires DVR-LX software release 1.51 or greater 2. Requires mobile and portable to be running compatible firmware version (R20.02.00) Cost of subscriber upgrade and any required options not included in kit. <p>If Ordered as field upgrade, DDN3117A is required</p>
TT06568AA	<p>RM-OTAP Factory Installed Licensed Feature: This feature enables operator to perform firmware and configuration update on each DVR-LX unit using Motorola Radio Management via the Mobile Radio.</p> <ol style="list-style-type: none"> 1. Requires DVR-LX software release 1.60 or greater 2. Requires mobile and portable to be running compatible firmware version (R21.01.00) Cost of subscriber upgrade and any required options not included in kit. <p>If Ordered as field upgrade, DDN3118A is required</p>
TT3817A	<p>PSU Conventional Scan Factory Installed Licensed Feature: PSU conventional scan feature enables an enhanced PSU to support conventional scan while the Futurecom repeater is configured as its system type.</p> <ol style="list-style-type: none"> 1. Requires DVR-LX software release 1.61 or greater 2. Requires mobile and portable to be running compatible firmware version (R21.20.00) Cost of subscriber upgrade and any require not included in kit. <p>PSU will need to have both QA00631 (DVRS Enabled PSU) & HA00677 ((DVRS PSU Conventional Scan enabled)</p>
Field Upgrade Licensed Feature	
DDN3117A	<p>Authentication Field Upgrade Licensed Feature: Portable Link Layer authentication through the DVR-LX Prevent unauthorized portables accessing the radio network (per unit)</p> <ol style="list-style-type: none"> 1. Requires DVR-LX software release 1.51 or greater

	2. Requires mobile and portable to be running compatible firmware version (R20.02.00) Cost of subscriber upgrade and any required options not included in kit.
DDN3118A	<p>RM-OTAP Field Upgrade Licensed Feature: This feature enables operator to perform firmware and configuration update on each DVR-LX unit using Motorola Radio Management via the Mobile Radio.</p> <ol style="list-style-type: none"> 1. Requires DVR-LX software release 1.60 or greater 2. Requires mobile and portable to be running compatible firmware version (R21.01.00) Cost of subscriber upgrade and any required options not included in kit.
DDN3175A	<p>PSU Conventional Scan (Bulk Order) Field Upgrade Licensed Feature: PSU conventional scan feature enables an enhanced PSU to support conventional scan while the Futurecom repeater is configured as its system type.</p> <ol style="list-style-type: none"> 1. Requires DVR-LX software release 1.61 or greater 2. Requires mobile and portable to be running compatible firmware version (R21.20.00) Cost of subscriber upgrade and any require not included in kit. 3. PSU will need to have both QA00631 (DVRs Enabled PSU) & HA00677 ((DVRs PSU Conventional Scan enabled) <p>Note: To qualify for bulk order, all serial numbers must be provided to Futurecom at the time of order. The PSU Conventional Scan Feature License will be applicable only to the serial numbers provided. Should the Customer fail to provide the serial numbers for all units at the time of order, the Customer must place a new order for DDN3175A when the remaining serial numbers are available.</p>
PROGRAMMING KITS, PROGRAMMING CABLES & SOFTWARE	
DDN9025A	DVR/DVR-LX PROGRAMMING CABLE, 10 ft
CONTROL CABLES	
DDN9031A	DVR/DVR-LX OPTIONS CABLE (PN 7W083X06-01, 2.5 ft)
DDN9028A	DVR/DVR-LX TO APX MOBILE RADIO CONTROL CABLE (PN 7W083X05-01, 3 ft)
	Custom cable lengths are available in 5 ft, 10 ft, 15 ft, 20 ft and 25 ft (MAX).

	Custom cable length must be specified on the purchase order to Futurecom.
DDN2645A	DVR/DVR-LX TO APX MOBILE RADIO FLAT MOUNT CONTROL CABLE (PN 7W083X83-01, 3 ft) Custom cable lengths are available in 5 ft, 10 ft, 15 ft, 20 ft and 25 ft (MAX). Custom cable length must be specified on the purchase order to Futurecom.
DDN9029A	DVR/DVR-LX TO APX MOBILE RADIO Y CONTROL CABLE (PN 1W083B09-01, 3 ft)
DDN9012A	UPGRADE (NEW DVR/DVR-LX ORDERS ONLY) DVR/DVR-LX TO APX MOBILE RADIO Y CONTROL CABLE (PN 1W083B09-01, 3 ft)
HKN6245A	Control Head to Mobile Cable 2 ft, ideal for Suitcase DVR/DVR-LX (SOLD EXCLUSIVELY THROUGH MOTOROLA SOLUTIONS, INC.)
RF CABLES	
DDN9032A	DVR/DVR-LX RF SWITCH CABLE FOR VEHICLE MOUNT DVR-LX (PN 7W083X09-01, 1 ft)
DDN9033A	RF CABLE DVR/DVR-LX TO DVR/DVR-LX NOTCH FILTER FOR VEHICLE MOUNT DVR-LX (PN 7W083X16-01, 3 ft)
DDN9034A	RF CABLE MOBILE TO NOTCH FILTER FOR VEHICLE MOUNT DVR/DVR-LX (PN 7W083X17-01, 3 ft)
DDN2719A	RF CABLE APX™8500 MOBILE TO NOTCH FILTER FOR VEHICLE MOUNT DVR/DVR-LX (PN 7W900X94-02, 3 ft)
Power Cables	
DDN9030A	DVR/DVR-LX POWER CABLE FOR VEHICLE MOUNT DVR/DVR-LX (PN 1W083A01-01)
DDN9525A	AC POWER CABLE FOR SUITCASE DVR/DVR-LX (PN 7W077X17-01)
DDN9524A	DC POWER CABLE FOR SUITCASE DVR/DVR-LX (PN 7W077X32-01)
Installation Kit	
TBD	SPARE DVR-LX INSTALLATION KIT – Includes Fuse installation kit, DVR-LX, power cable, Connector mini UHF Male RA (VEHICLE MOUNT DVR-LX ONLY) (PN 7K093X01) Must specify DVR-LX configuration (Cross-Band or In-Band) on the purchase order to Futurecom.
BATTERY BACKUP & ACCESSORIES FOR BATTERY BACKUP	
DDN9011A	BATTERY BACKUP FOR SUITCASE DVR/DVR-LX MODEL, 2HRS (50:50 TX-RX DUTY RATIO)
DDN2646A	DVR/DVR-LX BATTERY BACK UP DC POWER CABLE (PN 7W077X11-01)
ACCESSORIES FOR SUITCASE DVR	
DDN2335A	ZIPPERED ACCESSORY POUCH (PN 3Y088B01-01)
DDN2885A	BACKPACK SLING – COYOTE COLOR

DDN2886A	BACKPACK SLING – MULTI CAM COLOR
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SUITCASE COLOR DVR/DVR-LX OPTIONS

Order Code	
TT06069AA	STANDARD SUITCASE CASE COLOR – ORANGE
TT06070AA	STANDARD SUITCASE CASE COLOR – BLACK
TT06071AA	OPTIONAL SUITCASE COLOR – DELETES STANDARD ORANGE OR BLACK SUITCASE AND REPLACES WITH YELLOW SUITCASE COLOR
TT06072AA	OPTIONAL SUITCASE COLOR – DELETES STANDARD ORANGE OR BLACK SUITCASE AND REPLACES WITH SILVER SUITCASE COLOR
TT06073AA	OPTIONAL SUITCASE COLOR – DELETES STANDARD ORANGE OR BLACK SUITCASE AND REPLACES WITH DESERT TAN SUITCASE COLOR

SUITCASE DVR/DVR-LX POWER SUPPLY OPTIONS

Order Code	
TT06075AA	STANDARD 120 VAC POWER SUPPLY
TT06076AA	STANDARD 220 VAC POWER SUPPLY

Antennas for Vehicle Mount DVR/DVR-LX – Sold Exclusively Through Motorola Solutions Inc.

ANTENNAS FOR VEHICLE MOUNT DVR/DVR-LX UNITY GAIN (0dBd), ROOF / TRUNK MOUNT	FREQUENCY BAND [MHz]
HAD4006A	136 – 144 MHz
HAD4007A	144 – 150.8 MHz
HAD4008A	150.8 – 162 MHz
HAD4009A	162 – 174 MHz
HAE6012A	380 – 433 MHz

HAE4003A	450 – 470 MHz
HAE4004A	470 – 512 MHz
HAF4016A	764 – 870 MHz

Mag Mount Antennas – Sold by Futurecom Systems Group, ULC

ANTENNAS FOR SUITCASE DVR/DVR-LX UNITY GAIN (0dBd), MAG MOUNT	FREQUENCY BAND [MHz]
DDN9014A	136 – 174 MHz
DDN9015A	380 – 520 MHz
DDN9016A	764 – 869 MHz

Warranty & Services

Standard Warranty is 18 months

<u>ORDER CODE</u>	<u>DESCRIPTION</u>	<u>Notes and Conditions</u>
DDN2085A	DVR/DVR-LX Cross Band 4 Year Extended Warranty	DVR/DVR-LX Cross Band 4 Year Extended Warranty Extends standard warranty by 4 years. Can only be purchased once per unit. Must be purchased prior to expiration of standard warranty.
DDN2086A	DVR/DVR-LX Cross Band 1 Year Extended Warranty	DVR/DVR-LX Cross Band 1 Year Extended Warranty Extends any existing warranty by 1 year.

<u>ORDER CODE</u>	<u>DESCRIPTION</u>	<u>Notes and Conditions</u>
		<p>Can only be purchased a maximum of 4 times per unit. Cannot be purchased in conjunction with 4 year extended warranty.</p> <p>Must be purchased prior to expiration of any existing warranty.</p>
DDN2087A	DVR/DVR-LX In-Band 4 Year Extended Warranty	<p>DVR/DVR-LX In-Band 4 Year Extended Warranty Extends standard warranty by 4 years.</p> <p>Can only be purchased once per unit.</p> <p>Must be purchased prior to expiration of standard warranty.</p>
DDN2088A	DVR/DVR-LX In-Band 1 Year Extended Warranty	<p>DVR/DVR-LX In-Band 1 Year Extended Warranty Extends any existing warranty by 1 year.</p> <p>Can only be purchased a maximum of 4 times per unit. Cannot be purchased in conjunction with 4 year extended warranty.</p> <p>Must be purchased prior to expiration of any existing warranty.</p>
DDN1971A	Vehicle Technical and Programming Support (BASIC)	Maximum 1 day; see EXTENDED support for additional days.

<u>ORDER CODE</u>	<u>DESCRIPTION</u>	<u>Notes and Conditions</u>
		Minimum 2 weeks advance notice required however subject to resource availability. Applies to North America only.
DDN1972A	Virtual Technical and Programming Support (EXTENDED)	Must purchase BASIC virtual technical and programming support.
DDN1974A	<p>Virtual Training (BASIC) 2 Courses Available:</p> <p>1. Training the Trainer/end user</p> <p>1 Day (Est 4 hours) end user training gives the end user a general understanding of Futurecom solutions through your agencies particular use case, highlighting best practices through situations commonly seen in the field during deployment situations. Participants will have hands on training with the newly implemented solution for practical operation and control.</p> <p><u>OR</u></p> <p>2. Technical and Programming Training</p> <p>1 Day Technical and Programming training gives the radio technician an in depth understanding on how the DVR-LX/DVR/VRX1000/PDR8000® is integrated into the everyday operation of the agency. Highlighting code plug compatibility, Futurecom Repeater Configurator (FRC) software functionality and programming for optimal end user experience.</p>	<p>Maximum 1 day; see EXTENDED training for additional days.</p> <p>Minimum 2 weeks advance notice required however subject to resource availability. Applies to North America only.</p> <p>Training the trainer requires the newly implemented DVR-LX/DVR/VRX1000/PDR8000® to be tested and in use on the network to get the most out of the Training the Trainer.</p> <p>Standard training package. Includes soft copy of training materials. Customized training available subject to content and price negotiation.</p> <p>Contact Futurecom Systems Group, ULC for a pre-training checklist to insure your solution is ready for Basic Virtual Training</p> <p>Technical and Programming Training, Futurecom Systems Group, ULC requires at least two full</p>

<u>ORDER CODE</u>	<u>DESCRIPTION</u>	<u>Notes and Conditions</u>
		functioning Portable radios (PSUs) programmed to the current system, at least one installed DVR-LX/DVR/VRX1000/PDR8000®. For DVR-LX/DVR and VRX1000 use a Mobile Radio (MSU) radio set is required to conduct this training properly.
DDN1975A	Virtual Training (EXTENDED)	Must purchase BASIC virtual training