



AT COMMUNICATION INTERNATIONAL AG

HF EQUIPMENT. Product Catalogue.

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ENVOY™ X1 TRANSCEIVER (#AT-EX1-000)



The Envoy™ X1 Transceiver is a state-of-the-art software defined HF transceiver that delivers high performance but cost-effective voice communications for both base and mobile applications. The X1 Transceiver can be used with the 2221 or 2220 Handset or 2230 Desk Console. Both handset types and the desk console incorporate the new large format color display and intuitive icon based menu system providing ease of use and programming.

Standard features:

100 channels, 1.6 to 30 MHz, 10 scan groups

200 Contact List entries

125 W PEP, 12 V DC, USB/LSB/AM

Ethernet/USB connectivity

English language graphical user interface

Codan Selcall (including Diagnostic, Phone and Emergency Call types)

GPS receiver port

In-built *Easitalk*™ speech noise reduction

MIL-STD-810G for Drop, Dust, Shock, Vibration

Note:

The GPIO connector on the Envoy™ X1 Transceiver does *not* support any peripherals apart from a Morse Code Key

ENVOY™ X1 TRANSCEIVER. Mobile configuration (#AT-EX1-001)



The Envoy™ X1 Mobile Configuration consists of an Envoy™ Transceiver, a 3040 Automatic Tuning Whip Antenna and cables, and vehicle installation hardware kit.

Envoy™ X1 Mobile Configuration comprising:

Envoy™ X1 2210 RF Unit	AT-EX1-000-001
Envoy™ 2220 Handset	AT-ACS-EX-101
Envoy™ 2220 Handset Cradle	AT-ACS-EX-112
External Speaker with 4 m Lead	AT-ACS-117
Envoy™/NGT™ Handset Control Cable, 6 m	AT-ACS-118
Envoy™ Transceiver Getting Started Guide, includes Reference Manual on CDROM:	
- eng	AT-EX-003-001
- rus	AT-EX-003-002
Envoy™ Quick Reference Card:	
- eng	AT-EX-004-001
- rus	AT-EX-004-002
9350 Automatic Tuning Whip with 6 m Cables	AT-ANT-100-001
RF Unit Cradle & Battery Cable	AT-ACS-111-006
Complete Vehicle Installation Hardware Kit	AT-ACS-112

ENVOY™ X1 TRANSCEIVER. Base configuration **(#AT-EX1-002)**



The Envoy™ X1 Base Station Configuration consists of an Envoy™ X1 Transceiver, a 2230 Desk Console, a BBA-120 Dipole Antenna, 3020 Heavy Duty Transceiver Supply, and cables.

Envoy™ X1 Base Configuration comprising:

Envoy™ X1 2210 RF Unit	AT-EX1-000-001
Envoy™ 2230 Desk Console	AT-ACS-EX-113
2230 Desk Console Boom Microphone	AT-ACS-EX-116
Envoy™ Console to RF Unit Cable, 6 m	AT-ACS-EX-102-006
Earth Braid, 1.5 m	AT-ACS-102
Self Adhesive Rubber Feet (x4)	AT-ACS-119
Envoy™ Transceiver Getting Started Guide, includes Reference Manual on CDROM:	
- eng	AT-EX-003-001
- rus	AT-EX-003-002
Envoy™ Quick Reference Card:	
- eng	AT-EX-004-001
- rus	AT-EX-004-002
Dipole Antenna BBA-120	AT-ANT-BBA-120
Coax Assembly Cable, UHF Type Connectors, RG213, 30 m	AT-CC-200-030
3020 Transceiver Supply	AT-PS-3020-000
Power IEC EU Cable, 2 m	AT-3020-004



ENVOY™ X1 OPTIONS

Opt FED-STD-1045 ALE/CALM	AT-EX1-101
Opt Default Open Selcall	AT-EX1-102
Opt GPS calling	AT-EX1-103
Opt Amateur Mode	AT-OPT-101
Opt Russian Language user interface	AT-EX1-105
Opt 100 W	AT-EX1-106
Opt TxD, Tx Program Disabled	AT-OPT-103
Opt TxP, Tx Program Prohibited	AT-EX1-108
Opt 500 Hz Filter	AT-EX1-109
Opt Voice Scrambler (CIVS)	AT-EX1-110
Opt Digital Voice (Factory Fit)	AT-EX1-111
Opt 1200 bps Vocoder	AT-EX1-112
Opt Low rate Vocoder	AT-EX1-113
Opt AES-256 Encryption	AT-EX1-114
Opt CES-128 Encryptor Module (Factory Fit)	AT-EX1-115

ENVOY TRANSCEIVERS

ENVOY X2 TRANSCEIVER

(#AT-EX2-000)



The Envoy™ X2 Transceiver is a state-of-the-art software defined HF transceiver delivering high performance voice and data communications and systems capabilities for both base and mobile applications.

The X2 Transceiver can be used with the 2221 or 2220 Handset or 2230 Desk Console. Both handset types and the desk console incorporate the new large format colour display and intuitive icon based menu system providing ease of use and programming.

Standard features:

1000 channels, 1.6 to 30 MHz, 20 scan groups

500 Contact List entries

Simultaneous scanning of multiple scan groups

125 W PEP, 12 V DC, USB/LSB/AM

Ethernet/USB connectivity

15-way general purpose interface port (GPIO) for systems and accessory connectivity

English language graphical user interface

Codan Selcall (including Diagnostic, Phone and Emergency Call types)

GPS receiver port

In-built *Easitalk*™ speech noise reduction

MIL-STD-810G for Drop, Dust, Shock, Vibration

ENVOY X2 TRANSCEIVER. Mobile configuration (#AT-EX2-001)



The Envoy™ X2 Mobile Configuration consists of an Envoy™ Transceiver, a 3040 Automatic Tuning Whip Antenna and cables, and vehicle installation hardware kit.

Envoy™ X2 Mobile Configuration comprising:

Envoy™ X2 2210 RF Unit	AT-EX2-000-001
Envoy™ 2220 Handset	AT-ACS-EX-100
Envoy™ 2220 Handset Cradle	AT-ACS-EX-112
External Speaker with 4 m Lead	AT-ACS-117
Envoy™ Handset Control Cable, 6 m	AT-ACS-118
Envoy™ Transceiver Getting Started Guide, includes Reference Manual on CDROM:	
- eng	AT-EX-003-001
- rus	AT-EX-003-002
Envoy™ Quick Reference Card:	
- eng	AT-EX-004-001
- rus	AT-EX-004-002
9350 Automatic Tuning Whip with 6 m Cables	AT-ANT-9350
RF Cradle & Battery Cable	AT-ACS-111-006
Complete Vehicle Installation Hardware Kit	AT-ACS-112

ENVOY X2 TRANSCEIVER. Base configuration **(#AT-EX2-002)**



The Envoy™ Base Station Configuration consists of an Envoy™ Transceiver, a BBA-120 Dipole Antenna, 3020 Heavy Duty Transceiver Supply, and cables.

Envoy™ X2 Base Configuration comprising:

Envoy™ X2 2210 RF Unit	AT-EX2-000-001
Envoy™ 2230 Desk Console	AT-ACS-EX-113
2230 Desk Console Boom Microphone	AT-ACS-EX-116
Envoy™ Console to RF Unit Cable, 6 m	AT-ACS-EX-102-002
Earth Braid, 1.5 m	AT-ACS-102
Self Adhesive Rubber Feet (x4)	AT-EX-005
Envoy™ Transceiver Getting Started Guide, includes Reference Manual on CDROM	AT-EX-003-001
- eng	AT-EX-003-002
- rus	
Envoy™ Quick Reference Card	
- eng	AT-EX-004-001
- rus	AT-EX-004-002
BBA-120 Dipole Antenna	AT-ANT-BBA-120
Coax Assembly Cable, RG213, 30 m	AT-CC-200-030
3020 Transceiver Supply	AT-PS-3020-000
Power IEC Cable, EU, 2 m	AT-3020-004

ENVOY™ X2 OPTIONS

Opt FED-STD-1045 ALE/CALM™	AT-EX2-101
Opt MIL-STD-188-141B ALE Full	AT-EX2-102
Opt MIL-STD-188-141B Upgrade	AT-EX2-103
Opt Default Open Selcall	AT-EX2-104
Opt GPS Calling	AT-EX2-105
Opt Amateur Mode	AT-OPT-101
Opt Russian Language	AT-EX2-107
Opt 100W	AT-EX2-108
Opt TxD, Tx Program Disabled	AT-OPT-103
Opt TxP, Tx Program Prohibited	AT-EX2-111
Opt 500 Hz Filter	AT-EX2-112
Opt 2.7 kHz Filter (Factory Fit)	AT-EX2-113
Opt 3 kHz Filter (Factory Fit)	AT-EX2-114
Opt Voice Scrambler (CIVS)	AT-EX2-115
Opt 2400 bps Internal Data Modem	AT-EX2-116
Opt MIL-STANAG 2G Data (Factory Fit)	AT-EX2-117
Opt MIL-STANAG 2G Data and Digital Voice (Factory Fit)	AT-EX2-118
Opt ISB	AT-EX2-119
Opt Digital Voice (Factory Fit)	AT-EX2-120
Opt 1200 bps Vocoder	AT-EX2-121
Opt Low rate Vocoder	AT-EX2-122
Opt AES-256 Encryption	AT-EX2-123
Opt CES-128 Encryptor Module (Factory Fit)	AT-EX2-124
Opt Fan (Factory Fit)	AT-EX2-125

Digital Voice and 2G Data Upgrade Selection Matrix

2G Data and DV Options	Upgrade Capabilities		
	1200 bps Vocoder data rate (AT-EX2-121)	Low rate Vocoder (AT-EX2-122)	AES-256 Encryption (AT-EX2-123)
"Digital Voice"	✓	✓	✓
2G Data & "Digital Voice"	✓	✓	✓
2G Data	×	×	✓

NGT SR TRANSCEIVER (#AT-NSR-000)



The NGT™ SR Transceiver is the ideal solution to meet all your advanced system requirements, including remote control, split-site, high power communications, or base and mobile applications. It also accommodates the use of multiple control points for simultaneous connection of peripheral equipment like data modems and telephone interconnects.

The NGT™ SR comes with an RF unit, junction box, handset, speaker, cables, and mounting accessories for easy installation.

The transceiver incorporates the exceptional features renowned in all Codan NGT™ Transceivers, plus advanced calling capabilities including Emergency call, Selective call, Phone call, Message call, Diagnostics, Remote disable and Remote configuration.

Excellent options are available including Automatic Link Establishment (ALE) capabilities, voice encryption, and GPS, plus additional mounting accessories for multiple control points.

Standard Features:

400 channels, 1.6–30MHz, 10 networks

Scanning of multiple networks

125 W PEP, 12 V DC, USB/LSB/AM

In-built *Easitalk*™ speech noise reduction

Meets MIL-STD-810F for shock, vibration and dust

NGT SR TRANSCEIVER. Mobile configuration (#AT-NSR-001)



The NGT™ SR Mobile Configuration consists of an NGT™ SR Transceiver, a 9350 Automatic Tuning Whip Antenna and cables, and vehicle installation hardware kit.

NGT™ SR Mobile Configuration comprising:

NGT™ SR 2010 RF Unit	AT-NSR-000-001
NGT™ SR 2020 Handset	AT-NSR-000-003
NGT™ SR 2030 Junction Box	AT-NSR-000-004
NGT™ Handset Cradle Kit	AT-ACS-NSR-107
External Speaker with 4 m Lead	AT-ACS-117
CIB Interface Cable, 6 m	AT-ACS-NSR-100-006
NGT™ Transceiver Getting Started Guide, includes Reference Manual on CDROM:	
- eng	AT-NSR-100-001
- rus	AT-NSR-100-002
9350 Automatic Tuning Whip with 6 m Cables	AT-ANT-9350-000
RF Cradle & Battery Cable	AT-ACS-111-006
Complete Vehicle Installation Hardware Kit	AT-ACS-112

NGT SR TRANSCEIVER. Base configuration (#AT-NSR-002)



The NGT™ SR Base Station Configuration consists of an NGT™SR Transceiver, a BBA-120 Dipole Antenna, 3020 Heavy Duty Transceiver Supply, desk console, and cables.

NGT™ SR Base Configuration comprising:

NGT™ SR 2010 RF Unit	AT-NSR-000-002
NGT™ SR 2020 Handset	AT-NSR-000-003
NGT™ SR 2030 Junction Box	AT-NSR-000-004
NGT™ SR Desk Console	AT-NSR-000-005
CIB Interface Cable, 6 m	AT-ACS-NSR-100-006
Self Adhesive Rubber Feet (x4)	AT-ACS-119
NGT™ Transceiver Getting Started Guide, includes Reference Manual on CDROM	
- eng	AT-NSR-100-001
- rus	AT-NSR-100-002
BBA-120 Dipole Antenna	AT-ANT-BBA-120
Coax Assembly Cable, RG213, 30 m	AT-CC-200-030
3020 Transceiver Supply	AT-PS-3020-000
Power IEC Cable, 2 m	AT-3020-004
Earth Braid, 1.5 m	AT-ACS-102

NGT™ SR OPTIONS

Opt FED-STD-1045 ALE/CALM	AT-NSR-101
Opt Default Open Selcall	AT-NSR-102
Opt GPS Calling	AT-NSR-103
Opt External ALC (Factory Fit)	AT-NSR-104
Opt High Speed Data (Factory Fit)	AT-NSR-105
Opt 100W	AT-NSR-106
Opt TxD, Tx Program Disabled (Factory Fit)	AT-OPT-103
Opt TxP, Tx Program Prohibited (Factory Fit)	AT-NSR-108
Opt 500 Hz BW Filter (Factory Fit)	AT-NSR-109
Opt 2.7 kHz BW Second Filter (Factory Fit)	AT-NSR-110
Opt Voice Scrambler (CIVS)	AT-OPT-102
Opt AES-256 DV Encryptor Module (Factory Fit)	AT-NSR-112
Opt <i>Voice Encryptor</i> CES-128 (Factory Fit)	AT-NSR-113
Opt Fan (Factory Fit)	AT-NSR-114

TRANSCEIVER ACCESSORIES

TRANSCEIVER ACCESSORIES FOR ALL SERIES

Voltage Regulator (24 V to 12 V operation 20 A)	AT-ACS-100
Cable, Battery, - 6 m	AT-ACS-101-006
- 8 m	AT-ACS-101-008
Earth Braid, 1.5 m	AT-ACS-102
Earth Wire, 0.5 m	AT-ACS-103
Key Management Software (KMS) <i>(Key Management Software (KMS) enables you to manage and program encryption keys for Codan's NGT™/2110/Envoy™ series Transceivers and stand-alone encrypted devices, e.g. RM50e HF Data Modem)</i>	AT-ACS-104
Key Fill Software (KFS) <i>(Key Fill Software (KFS) enables you to program encryption keys into Codan's NGT™/2110/Envoy™ series Transceivers and stand-alone encryption devices, e.g. RM50e HF Data Modem)</i>	AT-ACS-105
Cable, Data Interface D9F to D15M <i>(Interface Cable for transceiver serial control for Transceivers. The cable can also be used for key programming)</i>	AT-ACS-106
Morse Key for NGT™/Envoy™ <i>(Terminated to 15-way GP port connector)</i>	AT-ACS-107
Dual Antenna Selector <i>(Antenna selector switch used for connecting two antennas to an NGT/Envoy RF Unit. The dual antenna switch connects to the RF coax and antenna control connectors of the RF Unit. The switch supports the connection of one 9103 tuner and an HF broadband antenna or two HF broadband antennas. Coaxial connectors are UHF type)</i>	AT-ACS-108
Opt Fan (Factory Fit) <i>(Fan unit for continuous data transmission)</i>	AT-ACS-109
Vehicle Interference Suppression Kit	AT-ACS-110
NGT™/Envoy™ RF Cradle & Battery Cable, - 6 m	AT-ACS-111-006
- 8 m	AT-ACS-111-008
Complete Vehicle Installation Hardware Kit	AT-ACS-112
Cradle, Envoy™/NGT™ RF Unit Mounting	AT-ACS-113
Cable Kit for Float Charge	AT-ACS-114
Fuse Holder with 32 A Fuse	AT-ACS-115
Fuse, 32 A	AT-ACS-116
External Speaker with 4 m Lead	AT-ACS-117
Envoy / NGT Cable, CIB Interface, 6 m	AT-ACS-118
Self Adhesive Rubber Feet (x4)	AT-ACS-119

TRANSCEIVER ACCESSORIES

Adaptor, USB to DB-9, Serial Port
*(USB V1.1 compliant and supports Microsoft Windows™
 2000/XP/Vista/WIN7.
 Not suitable to be used when upgrading transceiver firmware)*

AT-ACS-120

TRANSCEIVER ACCESSORIES FOR ENVOY SERIES

Envoy™ 2220 Handset

AT-ACS-EX-100

Envoy™ 2221 Limited Keypad Handset

AT-ACS-EX-101

Cable, NGT / Envoy™ Handset Control,
 - 0.5 m
 - 6 m
 - 30 m

AT-ACS-EX-102-001
 AT-ACS-EX-102-006
 AT-ACS-EX-102-030

Cable, Envoy™ Console to RF Unit,
 - 1 m
 - 6 m
 - 30 m

AT-ACS-EX-103-001
 AT-ACS-EX-103-006
 AT-ACS-EX-103-030

Cable, Envoy™ USB Programming

AT-ACS-EX-104

Cable, USB Adaptor for Memory Stick Programming
*(Enables connection of a conventional USB memory stick to
 Envoy™ series Handset or Desk Console)*

AT-ACS-EX-105

Cable, USB to 6-way,
 - 2 m
 - 6 m
*(USB to 6-way data interface cable for use with MIL-STANAG 2G
 Data (using RC50-C application))*

AT-ACS-EX-106-001
 AT-ACS-EX-106-002

Cable, USB to 15-way:
 - 2 m
 - 6 m
*(USB to 15-way data interface cable for use with MIL-STANAG
 2G Data (using RC50-C application))*

AT-ACS-EX-107-001
 AT-ACS-EX-107-002

Morse Key, 2230 Desk Console

AT-ACS-EX-108

Getting Started Guide, Envoy™ Transceiver, includes
 Reference Manual on CDROM (eng)

AT-ACS-EX-109

GPS Receiver/Antenna

AT-ACS-EX-110

GPS/GLONAS Receiver/Antenna AT GNSS

AT-GNSS-01

Cradle Kit, Envoy™ Handset

AT-ACS-EX-112

Desk Console 2230, Envoy™
*(An optional Envoy™ Desk Console for the Envoy™ Transceiver,
 incorporating an in-built speaker, hand PTT switch, in-built
 headphone output, and a 2 m transceiver interface cable)*

AT-ACS-EX-113

Desk Console Headphones, Envoy™

AT-ACS-EX-114

Desk Console Headset, Envoy™

AT-ACS-EX-115

Desk Console Boom Microphone, Envoy™

AT-ACS-EX-116

Desk Console Hand-held Microphone, Envoy™

AT-ACS-EX-117

TRANSCEIVER ACCESSORIES

Desk Console PTT footswitch, Envoy™	AT-ACS-EX-118
Morse Key, 2230 Desk Console	AT-ACS-EX-119
TPS-3250 Envoy™ Programming Software CD	AT-ACS-EX-120
Cable, Serial 6-way to D9F (9-way D to 6-way Molex Interface Cable for transceiver serial control)	AT-ACS-EX-121

TRANSCEIVER ACCESSORIES FOR NGT SERIES

Cable, CIB Interface, - 0,5 m - 2 m - 6 m - 30 m	AT-ACS-NSR-100-001 AT-ACS-NSR-100-002 AT-ACS-NSR-100-006 AT-ACS-NSR-100-030
NSP Software CD Package	AT-ACS-NSR-101
Cable, NSP Interface	AT-ACS-NSR-102
Repair Guide, NGT™ Transceiver, on CDROM (English)	AT-ACS-NSR-103
Getting Started Guide, NGT™ Transceiver, includes Reference Manual on CDROM	AT-ACS-NSR-104
GPS Receiver/Antenna	AT-ACS-NSR-105
Interface Adaptor (Interface adaptor to enable simultaneous connection of a GPS receiver and a 3012 HF Data Modem to the NGT™ Transceiver)	AT-ACS-NSR-106
Cradle Kit, NGT™ Handset	AT-ACS-NSR-107
Desk Console, NGT™ SR (An optional NGT™ SR Desk Console for the NGT™ Transceiver, incorporating an in-built speaker, hand PTT switch, goose-neck microphone, and in-built headphone output)	AT-ACS-NSR-108
Desk Console Headphones, NGT™	AT-ACS-NSR-109
NGT™SR Control Point Kit COMPRISING: <ul style="list-style-type: none"> • NGT™ SR 2020 Handset • NGT™ SR 2030 Junction Box • NGT™ Handset Cradle Kit • External Speaker with 4 m Lead • CIB Interface Cable, 6m 	AT-ACS-NSR-110

DATA & EMAIL

RM50e HF Data Modem

(#AT-RM50)



The RM50e is a high performance MIL-spec HF modem designed to connect to the NGT™/Envoy™ family of radios.

Compatible with the RM50 in the 2110 series Manpack, this modem provides legacy interoperability with systems running Fixed Frequency and ALE networks operating STANAG 5066 email.

The RM50e operates using the most highly advanced Military Standard (MIL-STD) waveforms, including STANAG 4539 and MIL-STD-188-110A/B, providing adaptive rates from 75–9600 bit/s coded. When used in conjunction with an ISB capable NGT™, even higher rates of up to 19200 bit/s are available using MIL-STD-188-110B Appendix F waveforms.

STANDARD FEATURES:

Compatible with RM50 (2110M Manpack Internal Modem)

MIL-STD Waveforms (MIL-STD-188-110A, MIL-STD-188-110B (Inc. Appendix F), STANAG 4285, STANAG 4529, STANAG 4415, STANAG 4539)

ISB capable

Data Encryption (AES-256 bit Algorithm, up to 256 stored keys, Key fill via Codan Key Management Software (KMS))

MIL-STD-810F Immersion, Dust, Vibration

RC50-C HF Email Software

(#AT-RC50-C)



Codan's RC50-C HF Email software provides fast, efficient, error free email capability over HF radio. Operating in conjunction with Codan's HF Transceivers and 2G Data Modems, the software operates on a standard Windows™ PC using a single USB port with no specialized PC hardware requirements. When installed, the software runs in the background requiring no user interaction.

For use with external RM50e HF Data Modem (NGT™ SR, Envoy™ X2 Transceivers) and 2G embedded data modem (Envoy X2 and 2110 Manpack transceiver)

STANDARD FEATURES:

Adaptive rates up to 19200 bit/s (ISB only) or 9600 bit/s

Compatible with ALE/CALM™

Intranet/Internet gateway

NATO interoperable

ISB capable

RC50-C HF Email Software comprising:

CD-ROM with RC50-C software and documentation

Note:

Requires Data Interface Cable for connecting PC to an RM50e data modem.

Requires Data Interface Cable for connecting the PC to an Envoy with 2G Data Modem option.

3012 HF Data Modem

(#AT-3012)



The 3012 HF Data Modem provides reliable and cost-effective computer text and data communication capabilities for organizations operating in remote areas with little or no telecommunications infrastructure.

STANDARD FEATURES:

Up to 6000 bit/s, error-free data transmission with compression

In-built data compression

Backwards compatible with the Codan 9001/9002 HF Data Modems

Data scrambled for security

Easy to use AT command interface

In-built serial port optical isolator

3012 HF Data Modem:

3012 HF Data Modem (No Cables)	AT-3012-000
3012 HF Data Modem with 2 m RS232 Cable	AT-3012-002
3012 HF Data Modem with 6 m RS232 Cable	AT-3012-006

3012 HF Data Modem comprising:

3012 HF Data Modem

Earth Wire, 0.5m

Self Adhesive Rubber Feet (x4)

3012 HF Data Modem User Guide on CDROM (English)

NGT™ to 3012 Modem Cable, 1 m

Data Interface Cable (2m or 6m)

3212 HF Data Modem

(#AT-3212)



The 3212 HF Data Modem provides reliable and cost-effective computer text and data communication capabilities for organizations operating in remote areas with little or no telecommunications infrastructure.

The 3212 HF Data Modem uses waveforms derived from Military Standard (MIL-STD) waveforms, which are based on STANAG 4539 and modified to provide optimal performance over commercial channel bandwidths.

STANDARD FEATURES:

Up to 7200 bit/s error free on-air data rate without compression

Backwards compatible with Codan 3012 HF Data Modem

Designed to operate on standard bandwidth commercial HF channels

In-built DC isolation on all available ports

Modem control via RS232 or Ethernet port

3212 HF Data Modem:

3212 HF Data Modem (No Cables)	AT-3212-000
3212 HF Data Modem with 2 m RS232 Cable	AT-3212-002
3212 HF Data Modem with 6 m RS232 Cable	AT-3212-006

3212 HF Data Modem comprising:

3212 HF Data Modem

Earth Wire, 0.5m

Self Adhesive Rubber Feet (x4)

3212 HF Data Modem User Guide on CDROM (English)

NGT™/Envoy™ X2 to 3212 Modem Cable, 1 m

Serial D9M-D9F Isol Shield Cable (2m, 6m)

HIGH POWER AMPLIFIERS

3061 500W Power Amplifier

(#AT-3061)



A reliable and affordable high power solution for voice and data communication. The 3061 Power Amplifier is suitable for use with NGT™ SR systems, and Envoy™ series Transceivers.

STANDARD FEATURES:

500W PEP/300W average output power

100% continuous mode

100–270 V AC 50/60 Hz supply voltage

Fully protected against all load conditions

Fan forced cooling with thermostatically controlled fans

125 W PEP in bypass mode

19" rack mount (5RU + 5RU)

Interface cables for transceiver (coaxial and control cables)

3061 500W Power Amplifier comprising:

3061 500 W Power Amplifier

3061 500 W Power Supply Unit

Opt External ALC (Retro Fit)

Earth Braid, 1.5m

Coaxial Assembly Cable, 2 m

High Power Amplifier Controller Cable

High Power Amplifiers 3061/3062 Reference Manual (English)

Power IEC Cable, 2 m

Standard Rack Configurations

Cable, DC Extension, 1 m

3062 1 kW Power Amplifier

(#AT-3062)



A reliable and affordable high power solution for voice and data communication. The 3062 Power Amplifier is suitable for use with NGT™ SR systems, and Envoy™ series Transceivers.

STANDARD FEATURES:

1 kW PEP/600W average output power

100% continuous mode

100–270 V AC 50/60 Hz supply voltage

Fully protected against all load conditions

Fan forced cooling with thermostatically controlled fans

125 W PEP in bypass mode

19" rack mount (5RU + 5RU)

Interface cables for transceiver (coaxial and control cables)

3062 1 kW Power Amplifier comprising:

3062 1 kW Power Amplifier

3062 1 kW Power Supply Unit

Opt External ALC (Retro Fit)

Earth Braid, 1.5m

Coaxial Assembly Cable, 2 m

High Power Amplifier Controller Cable

High Power Amplifiers 3061/3062 Reference Manual (English)

Power IEC 320 Cable, 2 m

Standard Rack Configurations

Cable, DC Extension, 1 m

3033 Telephone Interconnect

(#AT-3033-000)



Codan's telephone interconnect equipment can link into the telephone system enabling you to make or receive telephone calls on your HF transceiver. Comes with all cables and Reference Manual. Compatibility with NGT™ SR and Envoy™ X2 Transceivers.

STANDARD FEATURES:

Fully automated and intuitive operation

Multilingual voice prompts

Worldwide compliance (Telephone and EMC)

Radio user can access public telephone network

Telephone users can contact radio users

Designed for extreme conditions

ADDITIONAL FEATURES AVAILABLE THROUGH ATTACHED NGT™ TRANSCEIVER:

Choice of pre-programmed telephone numbers or free dialling

Accessible for user with only selective calling capability

Access control to restrict access to individual users, groups of users, and the number of digits that can be dialed

3033 Telephone Interconnect comprising:

3033 Telephone Interconnect

3033 to Transceiver Interface Cable

3033 to 3020 Power Supply Cable

3033 Telephone Interconnect User Guide on CD (English)

Cable, 6-way Phone

Earth Wire, 0.5 m

Cable, Ethernet Crossover CAT-5E, Red:

- 2m

- 6m

Cable, Ethernet Straight CAT-5E, Blue:

- 2m

- 6m

TRANSCEIVER SUPPLIES

3020 Transceiver Supply

(#AT-PS-3020-000)



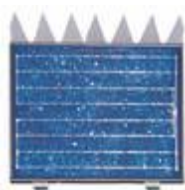
Designed for environments with unreliable and fluctuating mains systems. Suitable for use with either voice or data stations. Nominal input: 100 to 240 V AC $\pm 10\%$ (50/60 Hz). Nominal output: 13.8 V DC, 16 A continuous, 20 A peak. Mains connection: IEC socket on rear of unit.

3020 Transceiver Supply Accessories:

Cable Kit for Float Charge	AT-ACS-114
3RU Rack-mounting Frame for 3020	AT-3020-002
Voltage Regulator (24 V to 12 V operation 20 A)	AT-ACS-100
Cable, 3C Blk Mld IEC EU, 2 m	AT-3020-004

Solar Power Supply 40 W

(#AT-PS-SOL-040)



Recommended for voice (light duty).

Solar Power Supply 40 W Comprising:

Single 40 W solar panel

Mounting frame complete with anti-bird spikes

Solar battery regulator

Heavy duty twin core cable

Battery lugs

Solar Power Supply 80 W (#AT-PS-SOL-080)



Recommended for voice (heavy duty).

Solar Power Supply 80 W Comprising:

Single 80 W solar panel

Mounting frame complete with anti-bird spikes

Solar battery regulator

Heavy duty twin core cable

Battery lugs

Solar Power Supply 240 W (#AT-PS-SOL-240)



Recommended for fax and data (heavy duty).

Solar Power Supply 240 W Comprising:

Three 80 W solar panel

Mounting frame complete with anti-bird spikes

Solar battery regulator

Heavy duty twin core cable

Battery lugs

Solar Power Supply Accessories:

Cable, Battery Paralleling (+ve)

AT-PS-SOL-101

Cable, Battery Paralleling (-ve)

AT-PS-SOL-102



Battery, Lead acid 12 V 90Ah (supplied dry charged)

(#AT-PS-BAT-090)

NOTE!

This battery is classified as dangerous goods and requires a special permit to air freight.



Battery, 12 V 100Ah Gelcell

(#AT-PS-BAT-100)

NOTE!

This battery can be air freighted without a permit.



Battery, 12 V 185Ah Gelcell

(#AT-PS-BAT-185)

NOTE!

This battery can be air freighted without a permit.

ANTENNAS

3040 Automatic Tuning Whip

(#AT-ANT-3040)



The 3040 Automatic Whip Antenna is a low profile, rugged, lightweight unit designed for mobile installations. It provides fast automated tuning across the HF band. The 3040 is easy to install and meets MIL-STD-810F for shock, immersion, dust and vibration.

STANDARD FEATURES:

2.5 to 30 MHz

125W PEP voice or data

Fast tuning typically < 1sec

Tune from memory

3040 Automatic Tuning Whip Comprising:

3040 Main Assembly

3040 Spring

Riser, Fibreglass

3040 Fibreglass Whip, 1.6 m

3040 Stainless Steel Whip, 1.65 m

3040 Automatic Whip Antenna Installation Handbook (English)

Control NGTTM /Envoy™ to 304X Cable, 6 m

3040 Automatic Tuning Whip Accessories:

Cable, Coax Assembly RG58,

- 6 m

AT-CC-100-006

- 8 m

AT-CC-100-010

- 20 m

AT-CC-100-020

- 30 m

AT-CC-100-030

Cable, Coax Assembly RG213

- 6 m

AT-CC-200-006

- 8 m

AT-CC-200-008

- 20 m

AT-CC-200-020

- 30 m

AT-CC-200-030

3040/3042 NVIS Antenna Kit

AT-ANT-3040-200

Riser, Fibreglass

A 0.8 m fibreglass section used to extend the overall length of the antenna element

AT-ANT-3040-101

9350 Automatic Tuning Whip (#AT-ANT-9350)



A robust antenna designed for mobile installations requiring flexible, high performance HF communications. It provides fast automated tuning over the entire HF frequency range. The 9350 is easy to install, and meets MIL-STD-810F for shock and vibration.

STANDARD FEATURES:

Transmit frequency range 2 to 30 MHz depending on antenna

Receive frequency range 250 kHz to 30 MHz

125 W PEP voice or data

Tuning time typically 2 seconds

9350 Automatic Tuning Whip Comprising:

9350 Main Assembly

9350 Spring

Control NGT™ /Envoy™ to 9350 Cable, 6m

9350 Fibreglass Whip, 1.6m

9350 Tapered Stainless Steel Whip, 1.2m

Automatic Tuning Whip Antenna 9350 Installation Handbook (English)

9350 Automatic Tuning Whip Accessories:

Cable, Coax Assembly RG58,	
- 6 m	AT-CC-100-006
- 8 m	AT-CC-100-010
- 20 m	AT-CC-100-020
- 30 m	AT-CC-100-030

Cable, Coax Assembly RG213	
- 6 m	AT-CC-200-006
- 8 m	AT-CC-200-008
- 20 m	AT-CC-200-020
- 30 m	AT-CC-200-030

NVIS Antenna Kit	AT-ANT-9350-200
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ANTENNAS

3042 HF Antenna Tuner

(#AT-ANT-3042)



The 3042 is a low profile, 125 W HF antenna tuning unit designed to deliver high performance and reliability in the world's harshest environments. It provides high speed and efficient tuning of short whip antennas across the full operational HF band.
Compatibility with ALL NGT™ and Envoy™ series Transceivers

STANDARD FEATURES:

2 to 30 MHz

125 W RF power handling

Fast tuning typically < 1sec

High efficiency

Waterproof

MIL-STD-810G Environmentals

N-type RF Connector

Used with Vertical & NVIS Whip Antennas

Flexible mounting

ALE compatible

Internal receive mode amplifier

3042 HF Antenna Tuner Comprising:

3042 HF Antenna Tuner

Control NGT™ /Envoy™ to 9350/304X Cable, 6 m

Coax Assembly Cable with UHF to N-type Connectors, RG58, 6 m

Installation Kit

3042 Automatic Antenna Tuner Installation Handbook (English)

ANTENNAS

3042 HF Antenna Tuner Accessories:

Single Hole Mount Base	AT-ANT-3042-101
Flange Mount Base	AT-ANT-3042-102
Flange Mount Bracket	AT-ANT-3042-103
3042 Spring	AT-ANT-3042-104
3042 Shock Mount	AT-ANT-3042-105
3042 Stainless Steel Whip	AT-ANT-3042-106
3042 Fibreglass Whip	AT-ANT-3042-107
Riser, Fibreglass	AT-ANT-3042-108
Installation Kit	AT-ANT-3042-109
3040/3042 NVIS Antenna Kit	AT-ANT-3042-110
Cable, Control NGT/Envoy to 9350/304X:	AT-ANT-101-002
- 2 m	AT-ANT-101-006
- 6 m	AT-ANT-101-010
- 10 m	AT-ANT-101-020
- 20 m	
Cable, Coax Assembly, UHF to N-type Connectors, RG58:	
- 2 m	AT-CC-101-002
- 6 m	AT-CC-101-006
- 10 m	AT-CC-101-010
- 20 m	AT-CC-101-020

ANTENNAS

Tuner, 9103 Automatic Antenna

(#AT-ANT-9103-000)



Designed to suit NGT™/Envoy™ Transceivers. Rated to 150W PEP voice or data.

Tuner, 9103 Automatic Antenna with 10 m Cables - #AT-ANT-9103-010

Tuner, 9103 Automatic Antenna with 30 m Cables - #AT-ANT-9103-030

Tuner, 9103 Automatic Antenna Comprising:

Tuner, 9103 Automatic Antenna

Mounting Bracket

Control Cable (10m / 30m)

Coaxial Cable (10m / 30m)

Installation / Operation Handbook

Tuner, SG235C 500W PEP

(#AT-ANT-SG235-000)



Designed to suit 500W high power NGT™/Envoy™ systems. Maximum power input in data mode 300W average

Tuner, SG235C Comprising:

Tuner, SG235C

Mounting Bracket

Installation / operation handbook

Tuner Accessories:

Copper Earth Strip 50 mm x 0.46 mm (26 gauge) supplied in units of 1 m	AT-ANT-102
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Cable, SG235C Control, 30 m	AT-ANT-103
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Cable SG235C Coax Assembly, UHF type connectors, RG58, 30 m	AT-CC-200-030
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ANTENNAS

Base Whip Antenna (#AT-ANT-BW-000)



The Base Whip Antenna is 9.5 m (31 ft) in height, and requires an automatic antenna tuner. It is mounted vertically on a suitable ground plane or metal roof. An earth mat may be required where a suitable ground plane cannot be found.

This antenna may be used where space is restricted and omnidirectional coverage is required. Antenna rated to 500W PEP.

Ant, Base Whip, Ground Mounting (9.5 m/31 ft Unloaded) (#AT-ANT-BW-001)

Comes complete with ground mounting plate.

Note:

Coaxial cable and tuner are not supplied

May require radial ground plane for ground installations

Guying details: One guy set with four guy wires. 4 m guy radius

Compatible with 9103 and SG235C Antenna tuners

Lightning protection is recommended for fixed base station installations

Ant, Base Whip, Roof Mounting (9.5 m/31 ft Unloaded) (#AT-ANT-BW-002)

Comes complete with roof mounting bracket.

Note:

Coaxial cable and tuner are not supplied

Requires radial ground plane for non-metallic roof installations

Guying details: One guy set with four guy wires. 4 m guy radius

Compatible with 9103 and SG235C Antenna tuners

Lightning protection is recommended for fixed base station installations

Base Whip Accessories:

Earth Mat for Base Whip Antenna, Ground Installations

AT-ANT-104

Radial Ground Plane for Base Whip Antenna, Roof Installations

AT-ANT-105

ANTENNAS

3048 Tuned Dipole Antenna with 20 m cables (#AT-ANT-3048-000)



The 3048 Tuned Dipole is an HF antenna solution designed for base station use. When compared to wire broadband antennas the 3048 has a significantly reduced installed footprint, which is a benefit for installations where space is restricted.

The 3048 antenna system comprises a main tuner unit and 4 element antenna assembly mounted on top of a 6 m mast. A control cable and coaxial cable run down from the tuner unit to an interface box mounted at the base of the mast. The interface box provides connection points for the transceiver antenna control and RF cables as well as the RF ground.

Compatibility with ALL NGT™ and Envoy™ series Transceivers

STANDARD FEATURES:

2.5-30 MHz

125 W power handling (voice and data)

Fast tune typically <1 sec

High efficiency

Waterproof

Designed to MIL-STD-810G

Unlimited memory tune

Internal receive mode amplifier

Small installed footprint

3048 Tuned Dipole Antenna Comprising:

Antenna, Tuned Dipole, 3048

Control NGT/Envoy to 9350/304X Cable, 20 m

Coax assembly cable with UHF connectors, RG58, 20 m

6 m guyed mast for 3048 Tuned Dipole

3048 Tuned Dipole Installation Handbook (English)

Note:

Interface box coaxial connection uses a UHF type RF connector

6 m mast uses two guy sets, each with 4 guy wires and guy radius of 4 m

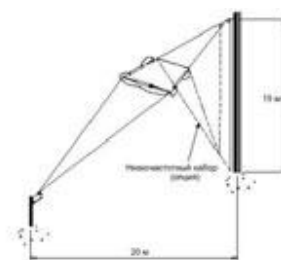
Maximum recommended control cable length between the interface box and transceiver is 20 m

Lightning protection is recommended for fixed base station installations

ANTENNAS

Semi-delta Antenna

(#AT-ANT-SDEL)



The Semi-delta Antenna is a high performance, omnidirectional broadband antenna that performs well over short to medium distances. This antenna requires a large cleared area at ground level for installation, and is more suitable for permanent fixed site installations.
Compatibility with all NGT™ and Envoy™ series Transceivers

Ant, Semi-delta (2–14MHz, 125 W PEP)

(#AT-ANT-SDEL-001)

Includes: pulleys, halyards, basic installation hardware, and installation instructions

Ant, Semi-delta (2–14MHz, 1000W PEP)

(#AT-ANT-SDEL-002)

Includes: pulleys, halyards, basic installation hardware, and installation instructions

Note:

An antenna counterpoise / ground is required when mounted on non-metallic roofs or the ground where soil conductivity conditions are very poor

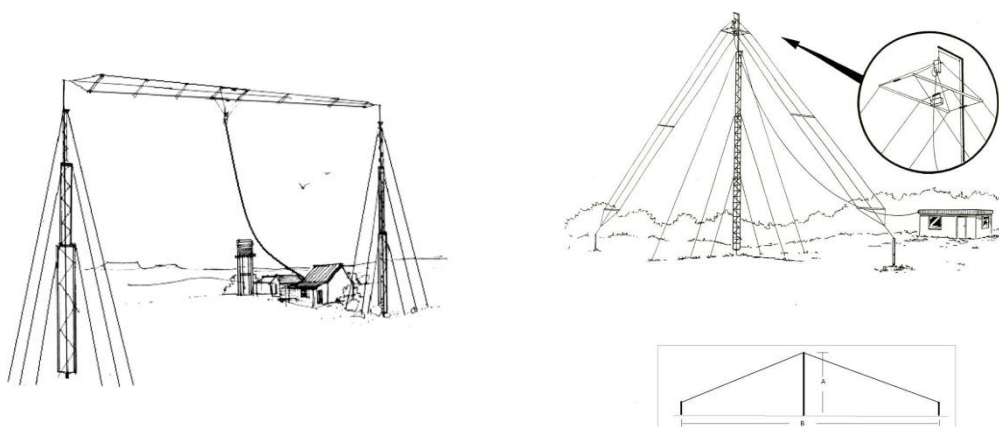
Lightning protection is recommended for fixed base station installations

Coaxial cable and masts not supplied

ANTENNAS

HF Broadband Multi-wire Dipole Antennas BBA-120

(#AT-ANT-BBA-120)



High efficiency broadband multi-wire base antenna. Sturdy stainless steel and fiberglass construction, can be mounted horizontally or as inverted V. Supplied with 30m of co-axial cable and instructions. Extended Length version of BBA-120 for increased performance at 2-3 MHz. Compatibility with all NGT™ and Envoy™ series Transceivers.

STANDARD FEATURES:

Frequency Range 2-30 MHz

Impedance 50 Ohm

Power Rating 250W PEP

VSWR Less than 2:1 cross band

Mounting Height 10 m

Overall Length 30 m

Wind Rating 210 Kilometres per hour

Shipping Weight 8Kg (9.3 inc. 30m coax)

Shipping Size 135 x 16 x 11cm

HF Broadband Multi-wire Dipole Antenna BBA-500

(#AT-ANT-BBA-500)

КВ Антенна BBA-500 представляют собой 500-Ваттную версию антенны BBA-120. Антенна BBA-500 это широкополосная антенна, запитываемая в центре. Выходная мощность антенны составляет 500 Ватт. Излучающая эффективность превышает эффективность других антенн в этом классе. Длина антенны BBA-500 составляет 28 метров, а длина антенны BBA-500E составляет 52 метра. Антенна BBA-500E требует больше места для монтажа, но более эффективна на низких частотах КВ диапазона (2-4 МГц). Антенный тюнер не требуется. Антенна изготовлена из нержавеющей стальной проволоки толщиной 3.2. мм, покрытой сплавом алюминия, стекловолоконных распорных трубок устойчивых к ультрафиолетовому излучению. В антенне имеется встроенная грозозащита и защита от статического напряжения. Антенна может быть установлена в горизонтальной конфигурации или в виде перевернутой «V».

Подходит для использования с трансиверами NGT и Envoy.

HF Broadband Multi-wire Dipole Antenna BBA-1000

(#AT-ANT-BBA-1000)

The BPA-1000 is a 1 Kilowatt rated, centre-fed, broadband antenna with an overall length of 37 meters. Radiation efficiency exceeds that of other antennas in this class and recent design changes have improved VSWR markedly across the band. No antenna tuner is required. Construction is of 3.2mm stainless steel cable with UV-stable fibreglass spreaders and glass reinforced polyester and diecast aluminium component cases. All external fittings and connections are of stainless steel. Spark gaps are fitted at the balun for lightning protection. The antenna can be mounted horizontally or as an inverted V. Compatibility with all NGT™ and Envoy™ series Transceivers.

ANTENNA MASTS

Mast, Guyed 12 m with Erection Kit (#AT-ANT-MST-012)

Four section 12m mast.

Designed to withstand wind speeds up to 144 kph (40m/s) in clear air with head loads up to 12 kg, subject to ground anchoring.



Mast, Guyed 15 m with Erection Kit (#AT-ANT-MST-015)

Four section 15m mast.

Designed to withstand wind speeds up to 144 kph (40m/s) in clear air



Mast, Guyed 10 m, Lightweight Mast (#AT-ANT-MSTL-010)

Two guy sets, each with three guy wires and one back stay guy. 5 m guy radius. Lightweight guyed aluminium mast, halyard, and all hardware for ground mounting



Mast, Guyed 10 m, Premium Mast (Raw) (#AT-ANT-MST-010-001)

Mast, Guyed 10 m, Premium Mast (Black) (#AT-ANT-MST-010-002)

Mast suitable for air freight.

Two guy sets, each with three guy wires and one back stay guy. 5 m guy radius.



COAXIAL CABLES

Coaxial Cable (RG58):

Cable, Coax Assembly, UHF Type Connectors, RG58:	AT-CC-100-002
- 2 m	AT-CC-100-006
- 6 m	AT-CC-100-008
- 8 m	AT-CC-100-020
- 20 m	AT-CC-100-030
- 30 m	

Cable, Coax Assembly, UHF to N-type Connectors, RG58:	AT-CC-101-002
- 2 m	AT-CC-101-006
- 6 m	AT-CC-101-010
- 10 m	AT-CC-101-020
- 20 m	AT-CC-101-030
- 30 m	

Coaxial Cable (RG213):

Cable, Coax Assembly, UHF Type Connectors, RG213:	
- 6 m	AT-CC-200-006
- 10 m	AT-CC-200-010
- 30 m	AT-CC-200-030
- 50 m	AT-CC-200-050
- 100 m	AT-CC-200-100

Cable Accessories:

Plug, UHF (RG58) W/proof	AT-CC-ACS-001
Plug, UHF (RG213) W/proof	AT-CC-ACS-002
Strain Relief	AT-CC-ACS-003
Shackle	AT-CC-ACS-004

LIGHTNING PROTECTION

Lightning Arrestor	AT-CC-ACS-005
Copper Earth Strip 50 mm x 0.46 mm (26 gauge) supplied in units of 1 m	AT-ANT-102-001
Earth Stake 1.8m long x 13 mm with clamp for earth wire/strip	AT-CC-ACS-006

REMOTE CONTROL AND SPLIT-SITE EQUIPMENT

Envoy™ Remote Control Accessories—Ethernet (#AT-RC-ETH)



These parts are required to facilitate connection of a 2230 Desktop Console to an X1 or X2 RF Unit via Ethernet cable. The transceiver to Ethernet adaptor is used to convert the 10-pin RF Unit control connector to RJ45 Ethernet socket.

The power supply is required to provide power to the 2230 Desktop Console as the Ethernet cable does not provide power from the RF Unit.

Envoy Remote Control Accessories — Ethernet Comprising:

Cable, Tcvt to Ethernet Adaptor

Desk Console AC Mains Power Supply

2C IEC C7 Cable, 2 m

Cable, Ethernet Straight CAT-5E, Blue:

- 2 m
- 10 m
- 100 m

NGT™ Remote 2-wire Interface (#AT-RC-NRI)

An NGT™ Remote Control System is the smart and easy way to achieve clear and reliable communications when your transceiver site is located in an area affected by electrical interference. The NGT™ HF transceiver is relocated to a 'quiet' area, while the transceiver is fully operated from a convenient location, such as an office or communication centre.

Note:

Remote control configurations can only be used with NGT™ SR Transceivers

Only used with the 3012 HF Data Modem

Two NRIs are required for a complete remote control system

Specify the mains connector type (AU, EU, UK or US)

NGT™ Remote 2-wire Interface Comprising:

Control Site:



Transceiver Site:



3030 NGT™ Remote Interface	3030 NGT™ Remote Interface
NGT™ Remote Control Earth Kit for the Control Site	NGT™ Remote Control Earth Kit for the Remote Site
Leased Line Modem	Leased Line Modem
Power Supply Unit, 90 to 264 V AC	CIB Interface Cable, 0.5 m
6-way Modular Wall Mounting Socket	6-way Modular Wall Mounting Socket
6-way Phone Cable	6-way Phone Cable
NRI to Line Modem Cable	NRI to Line Modem Cable
NRI to Line Modem Power Cable	NRI to Line Modem Power Cable
2C IEC C7 Cable, 2 m	Power Cable to RF Unit and NRI
Self Adhesive Rubber Feet (x4)	Self Adhesive Rubber Feet (x4)
Remote Control NGT™ Systems Reference Manual (English)	

NGT™ Remote Control Accessories:

Cable, DC Extension, 1 m

AT-RCK-109

Cable, CIB Interface:

- 0,5 m
- 2 m
- 6 m
- 30 m

AT-RC-101-001
AT-RC-101-002
AT-RC-101-006
AT-RC-101-030

Cable, Data Interface:

- 2 m
- 6 m

AT-RC-102-002
AT-RC-102-006

Cable, 2C IEC C7, 2m:

- AUS
- UK
- US
- EU

AT-RC-103-001
AT-RC-103-002
AT-RC-103-003
AT-RC-103-004

NGT™ Universal 19" Rack-mounting Tray 3RU with Blank Front Panel

AT-RCK-101

NGT™ Split-site System — 2-wire Interface (#AT-RC-NSRS-002)

An NGT™ Split-site Remote System consists of two or three sites. Each site consists of the split-site equipment listed below, in addition to the transceiver equipment.

An NGT™ Split-site Remote System can be used to split control, transmit and receive functions of an NGT™ SR Transceiver system into one of the following basic configurations:

- NGT™ remote transmitter and remote receiver system (3 sites)
- NGT™ remote transceiver system (2 sites)
- NGT™ local transmitter, remote receiver system (2 sites)

The system operates with a standard 2-wire interface

Note:

Split-site configurations can only be used with NGT™ SR Transceivers, and requires one transceiver at each site

All NGT™ SR Transceiver functions available

Suitable for use with the 3012 HF Data Modem

NGT™ Split-site System — 2-wire Interface Comprising: Control Site:

Split-site Interface Control Junction Box

8571 NGT™ Remote Control Interface

Earth Wire, 0.5m (x5)

CIB Interface Cable, 0.5 m

Split-site Power Adaptor Cable

8571 NGT™ Interface Controller Cable

Opt 2W, 2-wire (Factory Fit) (x2)

NGT™ Audio Mute Modification

Split-site Remote Control NGT™ Systems Reference Manual (English)



Note:

Control Site can only be used for transmitting

Receive Site:

Split-site Interface Control Junction Box
8571 NGT™ Remote Control Interface
Earth Wire, 0.5m (x5)
CIB Interface Cable, 0.5 m
Split-site Power Adaptor Cable
8571 NGT™ Interface Controller Cable
Opt 2W, 2-wire (Factory Fit)
NGT™ Disable PA Modification



Note:

Receive Site can only be used for receiving, transmitter is disabled

Transmit Site:

Split-site Interface Control Junction Box
8571 NGT™ Remote Control Interface
Earth Wire, 0.5m (x5)
CIB Interface Cable, 0.5 m
Split-site Power Adaptor Cable
8571 NGT™ Interface Controller Cable
Opt 2W, 2-wire (Factory Fit)



Note:

Transmit Site is configured for transmitting only but can be switched to either receive, or transmit and receive

Transmit & Receive Site:

Split-site Interface Control Junction Box
8571 NGT™ Remote Control Interface
Earth Wire, 0.5m (x5)
CIB Interface Cable, 0.5 m
Split-site Power Adaptor Cable
8571 NGT™ Interface Controller Cable
Opt 2W, 2-wire (Factory Fit)



Note:

Transmit and Receive Site is configured for transmitting and receiving but can be switched to either receive or transmit only

NGT™ Split-site System — 4-wire Interface (#AT-RC-NSRS-004)

An NGT™ Split-site Remote System consists of two or three sites. Each site consists of the split-site equipment listed below, in addition to the transceiver equipment.

An NGT™ Split-site Remote System can be used to split control, transmit and receive functions of an NGT™ SR Transceiver system into one of the following basic configurations:

- NGT™ remote transmitter and remote receiver system (3 sites)
- NGT™ remote transceiver system (2 sites)
- NGT™ local transmitter, remote receiver system (2 sites)

The system operates with a standard 4-wire interface.

Note:

Split-site configurations can only be used with NGT™ SR Transceivers, and requires one transceiver at each site

All NGT™ SR Transceiver functions available

Existing transceivers may require modifications for use in split-site configurations

Suitable for use with the 3012 HF Data Modem

NGT™ Split-site System — 4-wire Interface Comprising: Control Site:

Split-site Interface Control Junction Box

8571 NGT™ Remote Control Interface

Earth Wire, 0.5m

CIB Interface Cable, 0.5 m

Split-site Power Adaptor Cable

8571 NGT™ Interface Controller Cable

Opt 4W, 4-wire Interface Master Site

NGT™ Audio Mute Modification

Split-site Remote Control NGT™ Systems Reference Manual (English)



Receive Site:

Split-site Interface Control Junction Box
8571 NGT™ Remote Control Interface
Earth Wire, 0.5m
CIB Interface Cable, 0.5 m
Split-site Power Adaptor Cable
8571 NGT™ Interface Controller Cable
Opt 4W, 4-wire Interface Master Site
NGT™ Disable PA Modification



Note:

Receive Site is only used for receiving, transmitter is disabled

Transmit Site:

Split-site Interface Control Junction Box
8571 NGT™ Remote Control Interface
Earth Wire, 0.5m
CIB Interface Cable, 0.5 m
Split-site Power Adaptor Cable
8571 NGT™ Interface Controller Cable
Opt 4W, 4-wire Interface Master Site



Note:

Transmit Site is configured for transmitting only but can be switched to either receive, or transmit and receive

Transmit & Receive Site:

Split-site Interface Control Junction Box
8571 NGT™ Remote Control Interface
Earth Wire, 0.5m
CIB Interface Cable, 0.5 m
Split-site Power Adaptor Cable
8571 NGT™ Interface Controller Cable
Opt 4W, 4-wire Interface Master Site



Note:

Transmit and Receive Site is configured for transmitting and receiving but can be switched to either receive or transmit only

Split-Site Accessories:

19" Rack-mounting Frame for 8571 Split-site Remote Interface	AT-RCK-104
Cable, 6-way Phone	AT-RC-106
Cable, Phone Plug Adaptor Modular to 604 Plug	AT-RC-107
Cable, CIB Interface:	
- 0,5 m	AT-RC-101-001
- 2 m	AT-RC-101-002
- 6 m	AT-RC-101-006
- 30 m	AT-RC-101-030
Cable, Data Interface:	
- 2 m	AT-RC-102-002
- 6 m	AT-RC-102-006
Opt 4 W, 4-wire (Retro Fit)	AT-RC-104
Opt 2 W, 2-wire (Retro Fit)	AT-RC-105

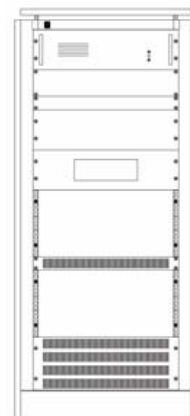
STANDARD RACK CONFIGURATIONS

Basic High Power Rack Configuration (#AT-RCK-HP)

Designed to rack mount a basic NGT™/Envoy™ High Power 500W/1000W system.

Comprising:

19" 27RU rack complete with rear door, vented top and side panels
NGT™/Envoy™ universal rack mount tray for an NGT™/Envoy™ Transceiver
NGT™/Envoy™ rack mount tray for 3020 Transceiver Supply
Rack mount blanking panels 1RU, 2RU and 3RU supplied
Rack mount vent panels 1RU and 4RU supplied
Pre-fitted equipment rails
Assorted cable ties, screws, washers and cage nuts



Note:

Rack comes pre-assembled ready for a NGT™/Envoy™ Transceiver and high power amplifier to be mounted

6RU of space available for additional equipment

NGT™/Envoy™ Transceiver, power amplifier and power supply units are ordered separately

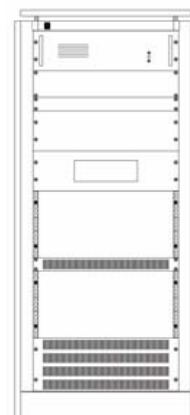
Does not include a 1 m DC Extension Cable for the NGT™/Envoy™ Transceiver

Remote Control, High Power Rack Configuration (#AT-RCK-HPRC)

Designed to rack mount a NGT™ High Power Remote Control system.

Comprising:

19" 27RU rack complete with rear door, vented top and side panels
NGT™ universal rack mount tray for a NGT™ Transceiver
NGT™ universal rack mount tray for NGT™ Remote Interface (NRI) remote control
NGT™ rack mount tray for a 3020 Heavy Duty Transceiver Supply
Rack mount blanking panels 1RU and 2RU supplied
Rack mount vent panels 1RU and 4RU supplied
Pre-fitted equipment rails
Assorted cable ties, screws, washers and cage nuts



Note:

Rack comes pre-assembled ready for a NGT™ Transceiver and high power amplifier to be mounted

3RU of space available for additional equipment

NGT™ Transceiver, NRI remote control, high power amplifier and power supply units are ordered separately

Does not include a 1 m DC Extension Cable for the NGT™ Transceiver

Remote Control and Data Modem High Power Rack Configuration (#AT-RCK-RCDM)

Designed to rack mount a NGT™ High Power Remote Control Data system.

Comprising:

19" 27RU rack complete with rear door, vented top and side panels

NGT™ universal rack mount tray for a NGT™ Transceiver

NGT™ universal rack mount system tray for NRI remote control

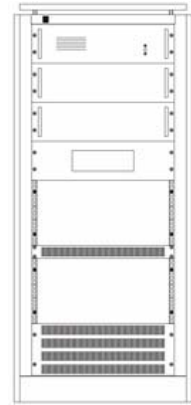
NGT™ rack mount tray for a 3020 Heavy Duty Transceiver Supply

NGT™ universal rack mount system tray for a HF data modem

Rack mount vent panels 1RU and 4RU supplied

Pre-fitted equipment rails

Assorted cable ties, screws, washers and cage nuts



Note:

Rack comes pre-assembled ready for a NGT™ Transceiver and high power amplifier to be mounted

No space available for additional equipment

NGT™ Transceiver, NRI remote control, high power amplifier and power supply units are ordered separately

Does not include a 1 m DC Extension Cable for the NGT™ Transceiver

Split-site Remote Control High Power Rack Configuration (#AT-RCK-SSRC)

Designed to rack mount a NGT™ High Power Split-Site Remote Control system.

Comprising:

19" 27RU rack complete with rear door, vented top and side panels

NGT™ universal rack mount tray for a NGT™ Transceiver

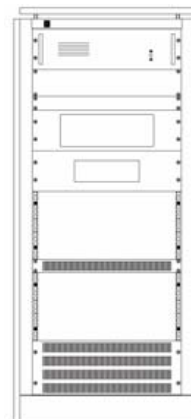
NGT™ rack mount tray for a 3020 Power supply

Rack mount blanking panels 1RU and 2RU supplied

Rack mount vent panels 1RU and 4RU supplied

Pre-fitted equipment rails

Assorted cable ties, screws, washers and cage nuts



Note:

Rack comes pre-assembled ready for a NGT™ Transceiver and high power amplifier to be mounted

3RU space available for additional equipment

NGT™ Transceiver, NRI remote control, high power amplifier and power supply units are ordered separately

Does not include a 1 m DC Extension Cable for the NGT™ Transceiver

19" RACKS & ACCESSORIES

Racks Accessories:

Rack Cabinet, 19" Format, 500 mm Deep:

- 8RU High
- 12RU High
- 18RU High

AT-RCK-100-001
AT-RCK-100-002
AT-RCK-100-003

NGT™ Universal 19" Rack-mounting Tray 3RU with Blank Front Panel

Suitable for NGT™ RF units, 3030 NGT™ Remote Interface

AT-RCK-101

NGT™/Envoy™ Universal 19" Rack-mounting Tray 3RU, Front Panel with Speaker Grill and Mounting Holes

Suitable for NGT™/Envoy™ RF unit. Speaker can be mounted behind grill and handset can be mounted on front panel using cradle

NOTE: Speaker and handset cradle not included

AT-RCK-102

19" Rack-mounting Frame suitable for 3020 Transceiver Supply, and 3012 or 3212 HF Data Modems

AT-RCK-103

19" Rack-mounting Frame for 8571 Split-site Remote Interface

AT-RCK-104

Set of 1RU + 2RU Blank Front Panels

AT-RCK-105

19" 4RU Vent Panel

AT-RCK-106

19" 1RU Vent Panel

AT-RCK-107

Fixed Equipment Rail, 457 mm Long

AT-RCK-108

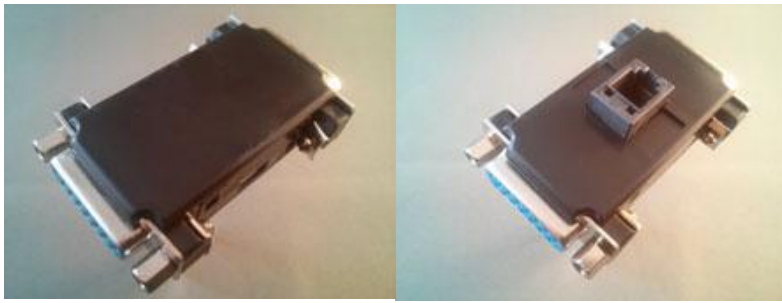
Cable, DC Extension, 1 m

AT-RCK-109

Earth Braid, 1.5 m

AT-ACS-102

AT Voice-Logger (#AT-VL-000)



The AT Voice USB-Logger is a simple device designed to provide time stamped recording and metatag logging of voice and data communication. The AT USB-Logger includes a simple software program installed on a PC that connects through the AT Voice USB-Logger to your communication transceiver eg Codan Envoy or NGT.

The solution is a very efficient way of recording communications enabling a permanent time stamped copy of communication exchanges to be saved for archive, storage, analysis or investigative purposes. A database is included that allows operators to add additional metatag information.

STANDARD FEATURES:

Simple user interface for recording and playback of voice and data communications

Compact hardware design for mobile or fixed installation where space is at a premium

Operates on non-proprietary USB and Windows operating hardware and software

Inline connector for interfacing to 3rd party transceiver equipment such as Telephone interconnects

Receive and transmit audio signals captured and combined on universally available RJ11 connector

Suitable for use with Codan Envoy, NGT and other 3rd party transceivers with optional adaptor cables

AT Voice-Logger Comprising:

AT USB-LOGGER unit

AT VOICE-LOGGER adaptor unit

AT DATA-LOGGER adaptor unit

USB Cable (2m)

Installation CD with Voice Logging software

Instruction Guide

RJ-11 Y chord and connector for connection to standard telephone lines

RJ12 Y chord and connector for connection to VOIP and other proprietary phones

AT GNSS-01 Multi System GPS Receiver (#AT-GNSS-01)



The AT GNSS-01 is a highly accurate Multi System GPS Receiver. It provides concurrent reception of GPS, QZSS, GLONASS and BeiDou satellite navigation systems. The AT-GNSS-01 has a significant operational advantage over single GPS system receivers giving the following user benefits.

The AT GNSS-01 is able to interface with radio transceivers to provision position and time code for tracking and synchronisation purposes. The AT GNSS-01 is compatible with all standards based tactical radio systems from reputable manufacturers.

Applications of the AT GNSS-01 include; situational awareness, vehicle and asset tracking systems, surveying, mapping & GIS for users such as Emergency Services, Police, Mining and Energy resources, Forestry and Governmental infrastructure services. The AT GNSS-01 can also provide accurate time synchronisation for secure frequency hopping radios in applications such as Armed and Border forces, Police & Security and Coast Guard.

STANDARD FEATURES:

Concurrent reception of GPS, QZSS, GLONASS, BeiDou

76-channel receiver

Industry leading -167 dBm navigation sensitivity

Up to 18Hz update rate (single GNSS)

Positioning accuracy 2.0m CEP

Acquisition Cold start 26sec, Hot Start 1 sec

Embedded wideband and omnidirectional GNSS antenna

Small rugged and waterproof IP67 enclosure

Optional magnetic mount capability

Exceptional jamming immunity with active CW detection and removal

Operates from 10 to 35V DC

Low current consumption

RS232 NMEA data output

Time pulse output

Additional RF filtering for operation near radio transmitters

5m interface cable, 6 conductor 28AWG

2110 TRANSCEIVER CONFIGURATIONS

2110 Series Transceiver Kit (#AT-2110)



The 2110 series Transceivers are ideal for your long distance portable communications. They are designed to meet the most demanding mission and user requirements. Available in two versions, the 2110v is for basic voice only operations and the 2110 has additional interface and interoperability capabilities.

The 2110 Transceiver is now available with a front panel mounted socket for connection of an external GPS antenna, e.g. for mobile or indoor applications where GPS signal reception is required. A 2110 series Transceiver Kit consists of a transceiver unit and standard accessories listed below. The following pages detail the parts required for a fully operational manpack system.

2110 Transceiver Units:

2110 SSB Transceiver Unit (0.5 ppm) (#AT-2110-001)



The 2110 has additional interface and interoperability capabilities, and is fitted with a 19-way expansion connector for a range of external accessories. It is fully interoperable with Codan's NGT™/Envoy™ series Transceivers and other commercial and military transceivers.

2110 SSB Transceiver (0.5 ppm) with front panel GPS connector (#AT-2110-002)



The 2110 has additional interface and interoperability capabilities, and is fitted with a 19-way expansion connector for a range of external accessories. It is fully interoperable with Codan's NGT™/Envoy™ series Transceivers and other commercial and military transceivers. This version of the 2110 Transceiver is required to meet full MIL-STD-188-141B ALE requirements

2110v SSB Transceiver Unit (1.5 ppm) (#AT-2110-003)



This transceiver is similar to 2110 SSB Transceiver Unit except it is not fitted with the 19-way external expansion port. The 2110v is a voice-only manpack transceiver. It is fully interoperable with Codan's NGT™/Envoy™ series Transceivers and other commercial transceivers.

2110 TRANSCEIVER CONFIGURATIONS

2110 (2110v) Standard Accessories:

H-250/U Telephone Handset	AT-2110-ACS-100
Earth wire with clip	AT-2110-ACS-113
Counterpoise 4-wire kit	AT-2110-ACS-114
2110 series Manpack Transceiver Getting Started Guide, includes Reference Manual on CDROM (Russian, English)	AT-2110-ACS-110

STANDARD FEATURES:

1.6–30MHz, 400 channels, 10 networks

25 W/5 W (PEP) selectable output power

12 V DC, USB/LSB/AM

Internal automatic antenna tuner

Multi-net scanning

In-built Easitalk™ speech noise reduction

Comprehensive calling capabilities, including emergency call, phone call, selective call, message call, remote diagnostics

Call logging

Up to 65 hours use on a single charge (17Ah battery)

Selectable output power

Computer interface (RS232) for PC control

Front panel programming (where permitted)

Extensive Built-In-Test functions

Meets MIL-STD-810F for shock, vibration, immersion and dust

2110 TRANSCEIVER CONFIGURATIONS

2110 Options:

Opt, Default Open Selcall	AT-2110-100
Opt GPS Receiver (Factory Fit)	AT-2110-101
Opt 500 Hz Filter (Factory Fit) (2110 only)	AT-2110-102
Opt 2.7 kHz BW Filter (Factory Fit) (2110 only)	AT-2110-103
2G Data Enables integrated data modem capability according to MIL-STD-110-188A/B and STANAG 4539. This provides a range of military spec data waveforms from 75 to 9600 bit/s uncompressed, capable of operating across varying channel conditions. AES-256 Encryption option (15-10595) can be added	AT-2110-104
S4538 3G ALE Enables third-generation (3G) Automatic Link Establishment (ALE) according to STANAG 4538. This provides superior calling performance including faster linking, and the ability to link in extremely poor channel conditions. A variety of call types are supported including voice, message, over-the-air sync and GPS positioning. AES-256 Encryption option can be added. The 3G ALE and 2G data capability cannot be used simultaneously	AT-2110-105
Opt AES-256 Encryption	AT-2110-106
Opt CES-128 Encryptor Module (Factory Fit)	AT-2110-107
Opt AES-256 DV Encryptor Module (Factory Fit)	AT-2110-108
Opt Voice Scrambler (CIVS)	AT-OPT-102
Opt FED-STD-1045 ALE/CALM	AT-2110-110
Opt MIL-STD-188-141B ALE full (2110 only)	AT-2110-111
Opt MIL-STD-188-141B ALE upgrade	AT-2110-112
Opt Amateur Mode	AT-2110-113
Opt TxD, Tx Program Disable	AT-OPT-103

2110 TRANSCEIVER CONFIGURATIONS

2110 Accessories:

Handset H-250/U	AT-2110-ACS-100
Key Management Software (KMS)	AT-ACS-104
Key Fill Software (KFS)	AT-ACS-105
Cable, Data Interface 19way MIL to USB A (2110 only)	AT-2110-ACS-101
Cable, Data Interface 19way MIL to D9F (2110 only)	AT-2110-ACS-102
Cable, Data Interface 5way MIL to D9F (2110v only)	AT-2110-ACS-103
NSP, System Programmer CD	AT-2110-ACS-104
Adaptor, USB to DB-9, Serial Port	AT-2110-ACS-105
Morse Key, Desktop	AT-2110-ACS-106
Morse Key, Leg Moun	AT-2110-ACS-107
Cable, VP-116 Interface	AT-2110-ACS-108
Antenna, Active GPS, SMB, 5 m	AT-2110-ACS-109
Getting Started Guide, 2110 series Manpack Transceiver, includes Reference Manual on CDROM (English, Russian)	AT-2110-ACS-110
Repair Guide, Manpack Transceiver 2110 series, on CDROM	AT-2110-ACS-111
Repair Guide, Manpack Transceiver 2110 series. Printed Repair Guide for the 2110 series	AT-2110-ACS-112
Earth wire with clip	AT-2110-ACS-113
Counterpoise 4-wire kit	AT-2110-ACS-114

RC50-C HF Email Software

(#AT-RC50-C)



Codan's RC50-C HF Email software provides fast, efficient, error free email capability over HF radio. Operating in conjunction with Codan's HF Transceivers and 2G Embedded Data and External RM50e Modem, the software operates on a standard Windows™ PC using a single USB port with no specialised.

PC hardware requirements. When installed, the software runs in the background requiring no user interaction.

For use with external RM50e HF Data Modem (NGT™ SR, Envoy™ X2 Transceivers) and 2G Embedded Data Modem (Envoy X2 and 2110 Manpack transceiver)

STANDARD FEATURES:

Adaptive rates up to 9600 bit/s

Compatible with ALE/CALM™

Intranet/Internet gateway

NATO interoperable

ISB capable

RC50-C HF Email Software Comprising:

CD-ROM with RC50-C software and documentation

Note:

Requires Data Interface Cable for connecting the PC to a 2110 series Manpack Transceiver or RM50e HF Data Modem

UUPlus™ Email for HF Server Software

(#AT-UUP-S)



Provides HF and Internet email access for up to 25 users. It works in conjunction with UUPlus™ Email for HF Codan Client software, used by each remote station. It has been specifically designed for use with Codan's HF equipment.

One copy of UUPlus™ Codan Client is required for each user that is to connect to UUPlus™ Codan Server. A UUPlus™ Codan Server cannot communicate directly to other UUPlus™ Codan Server stations.

For use with 3012 and 3212 HF Data Modems.

STANDARD FEATURES:

Works with POP3/SMTP PC email clients such as Outlook Express™

Capable of interfacing with an Internet Service Provider or Mail Server

Reduces connection time by compressing and combining messages

Automatically resumes interrupted file transfers

Capable of automatically calling the remote user at preset times to deliver mail and collect outgoing mail, or enables the user to check mail manually

UUPlus™ Email for HF Server Software Comprising:

CD-ROM with UUPlus™ Codan Server software and documentation

Single user license for installation on one machine

UUPlus™ Email for HF Client Software

(#AT-UUP-C)



Simple and reliable solution for sending email over HF from remote areas. It works in conjunction with UUPlus™ Codan Server software and has been specifically designed for use with AT's HF equipment.

For use with 3012 and 3212 HF Data Modems.

STANDARD FEATURES:

Works with POP3/SMTP PC email clients such as Outlook Express™

Reduces connection time by compressing and combining messages

Automatically resumes interrupted file transfers

Capable of automatically answering calls from the server to exchange mail at preset times, or enables the user to check for mail manually

Able to send files directly to other stations

UUPlus™ Email for HF Client Software Comprising:

CD-ROM with UUPlus™ Codan Client software and documentation

Single user license for installation on one machine

3012 HF Data Modem

(#AT-3012)



The 3012 HF Data Modem provides reliable and cost-effective computer text and data communication capabilities for organizations operating in remote areas with little or no telecommunications infrastructure.

STANDARD FEATURES:

Up to 6000 bit/s, error-free data transmission with compression

In-built data compression

Easy to use AT command interface

Backwards compatible with the Codan 9001/9002 HF Data Modems

Data scrambled for security

In-built serial port optical isolator

3012 HF Data Modem:

3012 HF Data Modem (No Cables)	AT-3012-000
3012 HF Data Modem for 2110 with 2 m RS232 Cable	AT-3012-002
3012 HF Data Modem for 2110 with 6 m RS232 Cable	AT-3012-006

3012 HF Data Modem Comprising:

3012 HF Data Modem

Earth Wire, 0.5 m

Self Adhesive Rubber Feet (x4)

3012 HF Data Modem User Guide on CDROM (English)

2110 Manpack to 3012 Modem Cable, 1 m

Data Interface Cable, (2 m, 6 m)

3012 HF Data Modem Accessories:

Cradle, HF Data Modem Vehicle Mounting	AT-ACS-113
Adaptor, USB to DB-9, Serial	AT-ACS-120
Adaptor, 9-pin D PIug to 25-pin D Socket	AT-3012-ACS-100
Cable, Data Interface:	
- 2 m	AT-3012-ACS-101-002
- 6 m	AT-3012-ACS-101-006
Cable, 2110 Manpack to 3012 Modem, 1 m	AT-3012-ACS-102
UUPlus™ Email for HF Client Software	AT-UUP-S
UUPlus™ Email for HF Server Software	AT-UUP-C

3212 HF Data Modem

(#AT-3212)



The 3212 HF Data Modem provides reliable and cost-effective computer text and data communication capabilities for organizations operating in remote areas with little or no telecommunications infrastructure.

The 3212 HF Data Modem uses waveforms derived from Military Standard (MIL-STD) waveforms, which are based on STANAG 4539 and modified to provide optimal performance over commercial channel bandwidths.

STANDARD FEATURES:

Up to 7200 bit/s error free on-air data rate without compression

Backwards compatible with Codan 3012 HF Data Modem

Designed to operate on standard bandwidth commercial HF channels

In-built DC isolation on all available ports

Modem control via RS232 or Ethernet port

3212 HF Data Modem:

3212 HF Data Modem (No Cables)	AT-3212-000
3212 HF Data Modem for 2110 with 2 m RS232 Cable	AT-3212-002
3212 HF Data Modem for 2110 with 6 m RS232 Cable	AT-3212-006

3212 HF Data Modem Comprising:

3212 HF Data Modem

Earth Wire, 0.5 m

Self Adhesive Rubber Feet (x4)

3212 HF Data Modem User Guide on CDROM (English)

2110 Manpack to 3212 Modem Cable, 1 m

Serial D9M-D9F Isol Shield Cable, (2 m or 6 m)

3212 HF Data Modem Accessories:

Cradle, HF Data Modem Vehicle Mounting	AT-ACS-113
Adaptor, USB to DB-9, Serial	AT-ACS-120
Adaptor, 9-pin D PIug to 25-pin D Socket	AT-3212-ACS-100
Cable, Serial D9M-D9F Isol Shield:	
- 2 m	AT-3212-ACS-101-002
- 6 m	AT-3212-ACS-101-006
Ferrite Bead Clamp	AT-3212-ACS-102
Cable, Ethernet Crossover CAT-5E, Red:	
- 2 m	AT-3212-ACS-103-002
- 10 m	AT-3212-ACS-103-010
Cable, Ethernet Straight CAT-5E, Blue:	
- 2 m	AT-3212-ACS-104-002
- 10 m	AT-3212-ACS-104-010
Cable, 2110 Manpack to 3212 Modem, 1 m	AT-3212-ACS-105
UUPlus™ Email for HF Client Software	AT-UUP-S
UUPlus™ Email for HF Server Software	AT-UUP-C

2110 ANTENNA ACCESSORIES

Ant, Long Wire and Adaptor 25 W PEP (1.6–30 MHz) (#AT-2110-ANT-LW)



Lightweight Kevlar reinforced Tactical Long Wire antenna.

Includes: throw rope, antenna adaptor, winding spool, anchor peg and antenna deployment quick reference card..

Ant, End-fed Broadband 25 W PEP (3–30 MHz) (#AT-2110-ANT-EF)



Lightweight Kevlar reinforced End-fed Broadband Dipole Antenna.

Includes: 3m (10') coaxial feeding cable terminated with BNC connectors with protective caps, broadband antenna balun, throw rope, counterpoise kit, winding spool, anchor peg and antenna deployment quick reference card..

Ant, Broadband Dipole 25 W PEP (3–30 MHz) (#AT-2110-ANT-BBD)



Lightweight Kevlar reinforced Tactical Broadband Dipole Antenna.

Includes: 10 m (30') coaxial feeding cable terminated with BNC connectors with protective caps, broadband antenna balun, two lots of termination resistors, throw ropes, counterpoise kits, winding spools, anchor pegs and antenna deployment quick reference card.

Ant, Wire Dipole 25 W PEP (3–30 MHz) (#AT-2110-ANT-WD)



Lightweight Kevlar reinforced Tactical Dipole Antenna with tactile length markings.

Includes: 10 m (30') coaxial feeding cable terminated with BNC connectors with protective caps, dipole antenna balun, throw rope, antenna adaptor, winding spools, anchor peg and antenna deployment quick reference card..

2110 ANTENNA ACCESSORIES

Ant, Dipole and Broadband kit 25 W PEP (2–30 MHz) (#AT-2110-ANT-DBK)



Lightweight Kevlar reinforced Universal HF Dipole and HF Broadband Dipole Antenna kit.

Includes: 10 m (30') coaxial feeding cable terminated with BNC connectors with protective caps, broadband antenna balun, dipole antenna balun, two lots of termination resistors, throw ropes, counterpoise kits, winding spools, anchor pegs and antenna deployment quick reference cards.

Ant, 3 m (10') Collapsible Whip 25 W (#AT-2110-ANT-CW)



Lightweight collapsible 6 section whip antenna with flexible gooseneck

Ant, 1.5 m (5') Tape Whip 25 W (#AT-2110-ANT-TW)



Foldable tape whip antenna with flexible gooseneck

Ant, 1.5 m (5') Knock Over Whip 25 W (#AT-2110-ANT-KOW)



Lightweight collapsible 3 section knock over whip antenna with flexible gooseneck

EARTHING

Counterpoise 4-wire kit

AT-2110-ACS-114

Anchor peg

AT-2110-ANT-101

Earth Wire 1m with Clip

AT-2110-ACS-113

TACTICAL MAST

Mast, Man-portable 6 m Tactical (#AT-2110-MST)



Lightweight, compact man-portable mast system.

The kit includes, multi section mast, guy ropes, guy stakes, halyard, base plate stakes and installation instructions. This mast is most suitable for use with lightweight, low power (25 W) antennas used with the 2110 series Manpack Transceiver.

Note:

The 6 m mast is not suitable for use with full size 125 W/1 kW Broadband Antennas

Certain Manpack Transceiver antennas may require more than one mast. Please check specific mast requirements for each antenna before ordering

CABLES

Antenna Tuner Control Cable, 6 m

Interface cable for direct connection of antenna tuner to 19-pin front panel connector on 2110 (not suitable for 2110v).

AT-2110-ANT-103

BNC to UHF Coaxial Cable, 1 m

Used to adapt BNC connector on 2110/2110v to UHF socket. Requires additional coaxial cable length for connection to antenna

AT-2110-ANT-104

BATTERIES

Battery Pack 12 V 8Ah NiMH (#AT-2110-BAT-008)



Waterproof 2110 Transceiver battery pack with 12 V, 8Ah rechargeable Nickel Metal Hydride battery and battery management controller.

Recharges: ~500 (80% capacity)
Useable hours: ~30 hrs (using Rx/Tx 9:1)

Battery Pack 12 V 13Ah NiMH (#AT-2110-BAT-013)



Waterproof 2110 Transceiver battery pack with 12 V, 13Ah rechargeable Nickel Metal Hydride battery and battery management controller.

Recharges: ~500 (80% capacity)
Useable hours: ~50 hrs (using Rx/Tx 9:1)

Battery Pack 12 V 17 Ah LiFePO4 (#AT-2110-BAT-017)



Waterproof 2110 Transceiver battery pack with 12 V, 17 Ah rechargeable battery using lithium iron phosphate chemistry that is safe and has excellent shelf life.

Recharges: 2000 (80% capacity)
Useable hours: 65 hrs (using Rx/Tx 9:1)

DC-DC VOLTAGE CONVERTER

Voltage Regulator (24 V to 12 V operation 7 A) (#AT-2110-BAT-VR)



Enables the operation of 2110 series Transceivers in 24/26 V based systems. Protected from faults such as voltage spikes, overload, short circuits and low voltage input. The unit automatically resets once a fault is removed.

Nominal Input: 24 V DC
Nominal Output: 12 V @ 7 A
Efficiency: Greater than 90% at full load

CHARGERS

2110 Hand-powered Battery Charger (#AT-2110-PC-HP)



A portable hand-powered battery charger that is compact and lightweight, and encased in a robust and waterproof aluminium housing.

The charger comes with easy to use accessories for simple operation, and a convenient carrying case.

2110 Solar Battery Charger (Black) (#AT-2110-PC-SOL-001)



A portable solar-powered 20 W battery charger that uses solid state, thin film solar technology to meet your mobile power needs. It is lightweight, weatherproof and UV resistant, and durable with a tough rip-stop nylon backing.

2110 Solar Battery Charger (Digital Camo) (#AT-2110-PC-SOL-002)



A portable solar-powered 20 W battery charger that uses solid state, thin film solar technology to meet your mobile power needs. It is lightweight, weatherproof and UV resistant, and durable with a tough rip-stop nylon backing.

Battery Charger AC-DC 3121
(#AT-2110-PC-3121)



Low noise 2110 battery charger (90–240 V AC input, 15.5 V @ 1 A output). Suitable for charging while operating the transceiver

Battery Charger AC-DC 3123
(#AT-2110-PC-3123)



Fast 2110 battery pack charger (90–240 V AC input, 15.5 V @ 3 A output) with output cable. Suitable for direct connection to the battery pack only.

Battery Charger DC-DC 3122
(#AT-2110-PC-3122)



Low noise 2110 battery charger (12–60 V DC input, 15.5 V @ 1 A output). Suitable for charging while operating the transceiver.

CHARGER OUTPUT CABLES

Cable, charger O/P, 19way
(#AT-2110-PC-101)



Used to charge the 2110 series Transceivers via the front panel. Can be used with 3121 and 3122 Battery Chargers, and handcrank and solar chargers.

Cable, charger O/P, 5way
(#AT-2110-PC-102)



Used to charge the 2110v transceiver via the front panel. Can be used with 3121 and 3122 Battery Chargers, and handcrank and solar chargers.

Cable, Charger O/P, 6way
(#AT-2110-PC-103)



Used to charge the battery directly. Can be used with 3121 and 3122 Battery Chargers, and handcrank and solar chargers.

CHARGER INPUT CABLES AC

Cable, 2C AUS IEC C7 2 m
IEC 2-wire mains cable with AUS plug

AT-2110-PC-104-001

Cable, 2C UK IEC C7 2 m
IEC 2-wire mains cable with UK plug

AT-2110-PC-104-002

Cable, 2C USA IEC C7 2 m
IEC 2-wire mains cable with USA plug

AT-2110-PC-104-003

Cable, 2C EU IEC C7 2 m
IEC 2-wire mains cable with EU plug

AT-2110-PC-104-004

CHARGER INPUT CABLES AC



DC input cable to connect an in-vehicle lighter socket to
DC-DC 3122 charger module
(#AT-2110-PC-105)



DC input cable with spring clips to connect DC power
source to DC-DC 3122 charger module
(#AT-2110-PC-106)

BACKPACKS

Backpack, External Frame
(#AT-2110-BP-001)



Heavy duty backpack with external frame and ergonomic shoulder harness with ventilation panel for comfort. It has side, bottom and front pockets for transceiver accessories, reference materials, and personal items. The modular external frame allows for additional loads of up to 50 kg.
Made from 1000 Denier Black bulked filament nylon, black co-polymer frame

MOUNTING ACCESSORIES

Cradle, 2110/2110v with Screws (#AT-2110-MNT-101)



Cradle, 2110 with Interface Adaptor (#AT-2110-MNT-102)



Transceiver cradle plus an interface adaptor for external antenna, GPS, data interfaces, and DC battery charger. Includes a speaker amplifier and external speaker.

Cradle, 2110 with 9350 Interface (#AT-2110-MNT-103)



Suitable for interfacing with the 9350 Automatic Tuning Whip Antenna and a DC battery charger.

2110 External DC for Cradle (#AT-2110-MNT-104)



Backpanel for the transceiver cradle that provides DC connection for the transceiver directly to the vehicle battery. The transceiver cradle is only shown for illustration purposes. • Voltage regulator is available for 24 V vehicle operation

2110 External DC Vehicle Kit (#AT-2110-MNT-105)



Complete vehicle installation kit incorporating the external DC backpanel. It provides DC connection for the transceiver directly to the vehicle battery. Voltage regulator is available for 24 V vehicle operation.

2240 SMARTLINK ACCESSORY

2240 SmartLink Accessory (#AT-SML-2240)



The Envoy SmartLink is a rugged Ethernet switch that provides wired and wireless access points for a connected Envoy transceiver system for both mobile and base applications. Up to two SmartLinks may be connected directly to an Envoy RF Unit with no requirement for external power supply. The SmartLink supports connection of either Handset or Desk Console control point devices. SmartLinks may also be deployed into IP networks in support of remote access Envoy transceiver system applications.

STANDARD FEATURES:

2221 or 2220 Handset connection

2230 Desk Console connection

Compatible with Envoy X1 and X2 transceivers

Wireless access point (antenna optional)

2 x RJ-45 Ethernet ports

Status LED indicators

Reset function

Linking cable connection

External speaker connection

External power supply connection (12 V DC)

Note:

2221 or 2220 Envoy Handsets must be of Mk2 build standard when used with the SmartLink. This is required to support output of speaker audio at the SmartLink.

SmartLink Direct Single, 6 m (#AT-SML-2240-001)



This package can be used for directly connecting a SmartLink to an Envoy RF Unit using a 6 m interface cable. The package contains the parts needed for adapting a standard Envoy mobile configuration for use with the SmartLink. No external DC supply is required for the SmartLink in this configuration.

Typical use case scenarios include mobile Envoy installations where WiFi or Ethernet cable access to embedded Envoy data modems is required. This configuration presents the added advantage of keeping the RF Unit 15-way and 6-way interfaces free for connection of other accessories.

SmartLink Direct Single, 6 m Comprising:

2240 Envoy SmartLink

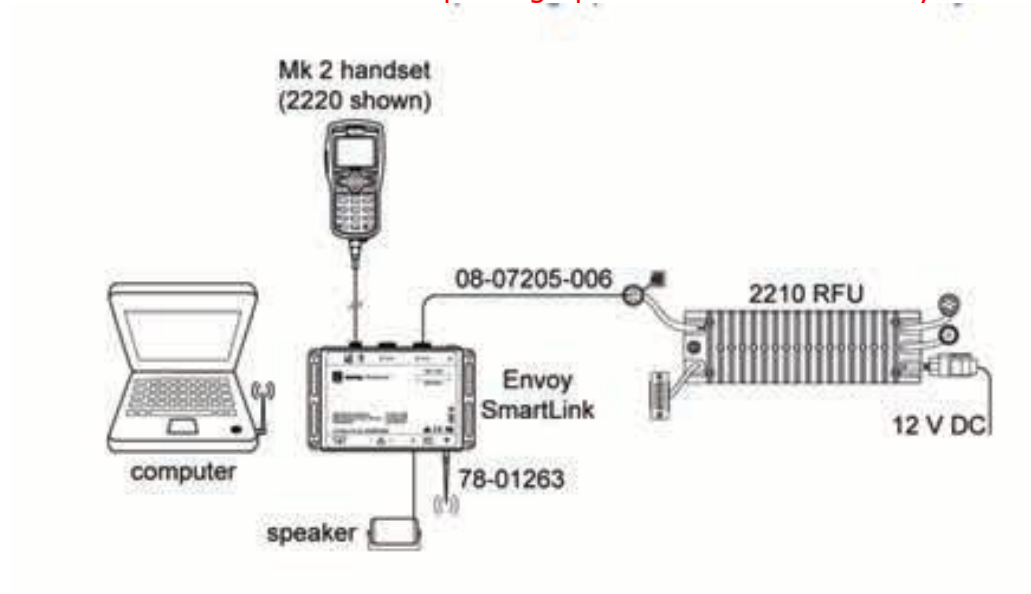
WiFi Antenna, direct connect

Cable, Envoy SmartLink to RF Unit, 6 m

Earth Wire, 0.5 m

2240 Reference Manual

SMARTLINK-DIRECT-SINGLE package parts shown in an Envoy mobile system



SmartLink Direct Single, 6 m (#AT-SML-2240-002)



This package can be used for connecting two SmartLinks to an Envoy RF Unit using a 6 m interface cable and 6 m linking cable. Note that this package assumes use of 2221/2220 Handset control points. If a 2230 Desk Console is required at either Smartlink, the interface cable may be required. The package contains the parts needed for adapting a standard Envoy mobile configuration to a dual SmartLink, dual Control Point (Handset) configuration. No external DC supply is required for the SmartLink in this configuration.

Typical use case scenarios include mobile Envoy installations where dual Envoy control points are required. WiFi or Ethernet cable access to embedded Envoy data modems, via the SmartLink, is also supported, however it is recommended that WiFi is enabled at only one SmartLink when two SmartLinks are in close proximity.

SmartLink Direct Dual, 6 m Comprising:

2240 Envoy SmartLink (x2)

WiFi Antenna, direct connect

Cable, Envoy SmartLink Linking, 6 m

Cable, Envoy SmartLink to RF Unit, 6 m

External Speaker, 4 m lead

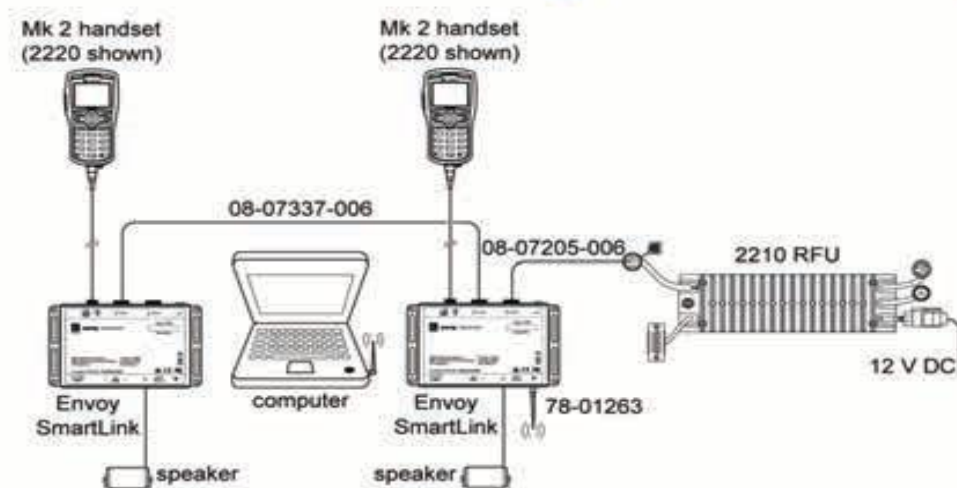
Envoy 2220 Handset

Envoy Handset cradle kit

Earth Wire, 0.5 m (x2)

2240 Reference Manual

SMARTLINK-DIRECT-DUAL-6M package parts shown in an Envoy mobile system



SmartLink Network Console (#AT-SML-2240-003)



This package can be used for connecting a SmartLink to an Envoy RF Unit via a CAT5e Ethernet cable (the Ethernet connection may be via network infrastructure or a direct cable connection). This package includes an interface cable for connecting a 2230 Desk Console to the SmartLink. The package contains the parts needed for adapting a standard Envoy base (Desk Console control point) configuration for use with the SmartLink over a network connection. An external DC supply is required for the SmartLink in this configuration.

Typical use case scenarios include base Envoy installations where the distance between the control point and RF Unit exceeds 30 m which is the maximum distance supported by standard Codan interface cabling. A continuous CAT5e Ethernet cable up to 75 m long can be used to connect the SmartLink to the Envoy RF Unit. The connection can also be made via IP network infrastructure such as a LAN, WAN etc.

WiFi or Ethernet cable access to embedded Envoy data modems, via the SmartLink, is also supported. There is an added advantage of keeping the RF Unit 15-way and 6-way interfaces free for connection of accessories.

SmartLink Network Console Comprising:

2240 Envoy SmartLink

WiFi Antenna, direct connect

Cable, Envoy SmartLink to 2230 Console, 3 m

SmartLink AC Mains Power Supply

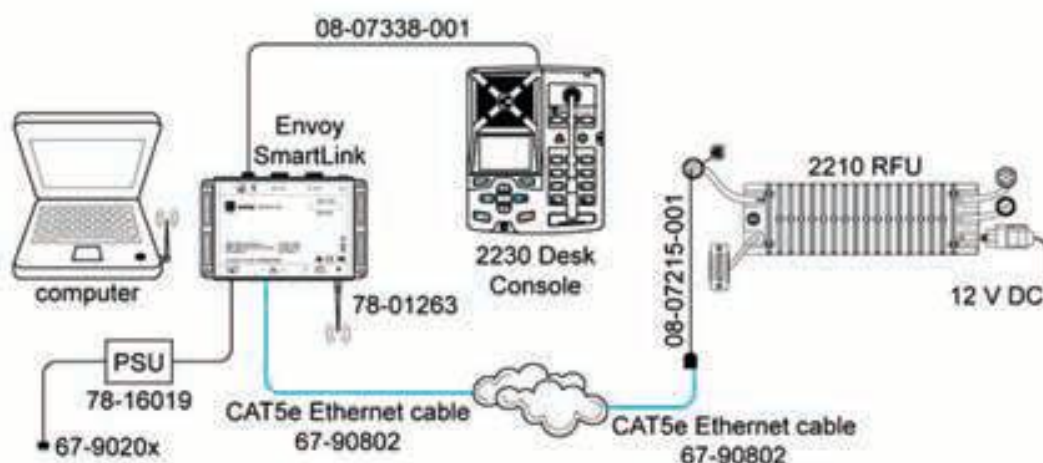
AC Mains Cable for SmartLink AC Mains PSU, 2 m

Ethernet Cable, 2 m (x2)

Cable, Transceiver to Ethernet Adaptor

2240 Reference Manual

SMARTLINK-NETWORK-CONSOLE package parts shown in an Envoy base system



SmartLink Network Handset (#AT-SML-2240-003)



This package can be used for connecting a SmartLink to an Envoy RF Unit via a CAT5e Ethernet cable (the Ethernet connection may be via network infrastructure or a direct cable connection). This package assumes use of a 2221 or 2220 Handset to the SmartLink. The package contains the parts needed for adapting a standard Envoy base (Handset control point) configuration for use with the SmartLink over a network connection. An external DC supply is required for the SmartLink in this configuration.

Typical use case scenarios include base Envoy installations where the distance between the control point and RF Unit exceeds 30 m which is the maximum distance supported by standard Codan interface cabling. A continuous CAT5e Ethernet cable up to 75 m long can be used to connect the SmartLink to the Envoy RF Unit. The connection can also be made via IP network infrastructure such as a LAN, WAN etc.

WiFi or Ethernet cable access to embedded Envoy data modems, via the SmartLink, is also supported. There is an added advantage of keeping the RF Unit 15-way and 6-way interfaces free for connection of accessories..

SmartLink Network Handset Comprising:

2240 Envoy SmartLink

WiFi Antenna, direct connect

SmartLink AC Mains Power Supply

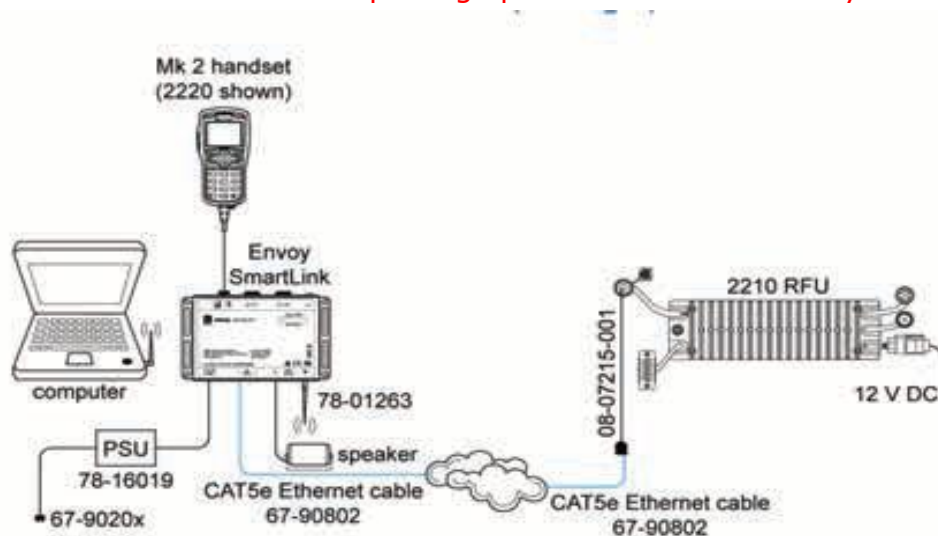
AC Mains Cable for SmartLink AC Mains PSU, 2 m

Ethernet Cable, 2 m (x2)

Cable, Transceiver to Ethernet Adaptor

2240 Reference Manual

SMARTLINK-NETWORK-HANDSET package parts shown in an Envoy base system





2240 Smartlink Accessory:

WiFi Antenna, direct connect Gimble WiFi antenna for direct connection to RP-SMA connector on 2240 SmartLink unit	AT-2240-ACS-100
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WiFi Antenna, Mag-mount with 3 m cable Stub WiFi antenna with 3 m extension coaxial cable for connection to RP-SMA connector on 2240 SmartLink. Antenna has a magnetic base	AT-2240-ACS-101
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Cable, Envoy SmartLink to RF Unit:	
- 1 m	AT-2240-ACS-102-001
- 6 m	AT-2240-ACS-102-006
- 10 m	AT-2240-ACS-102-010
- 30 m	AT-2240-ACS-102-030
(This is the same cable used for connecting the Envoy 2230 Desk Console to the Envoy RF Unit)	

Cable, Envoy SmartLink Linking:	
- 1 m	AT-2240-ACS-103-001
- 6 m	AT-2240-ACS-103-006
- 10 m	AT-2240-ACS-103-010

Cable, Envoy SmartLink to 2230 Console, 3 m	AT-2240-ACS-104
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SmartLink AC Mains Power Supply. The AC mains power supply is required for any SmartLink that does not have a direct connection to an Envoy RF Unit via Codan interface cables linking and/or RF Unit interface cables	AT-2240-ACS-105
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AC Mains Cable for SmartLink AC Mains Power Supply, 2 m	AT-2240-ACS-105
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Earth Wire. 0.5 m	AT-2240-ACS-106
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Cable lengths

When two Envoy SmartLinks are linked using Codan control and linking cables from the same RFU, there are specific cable length combinations that may be used

Figure 1: Cable lengths between Envoy SmartLinks and RFU.

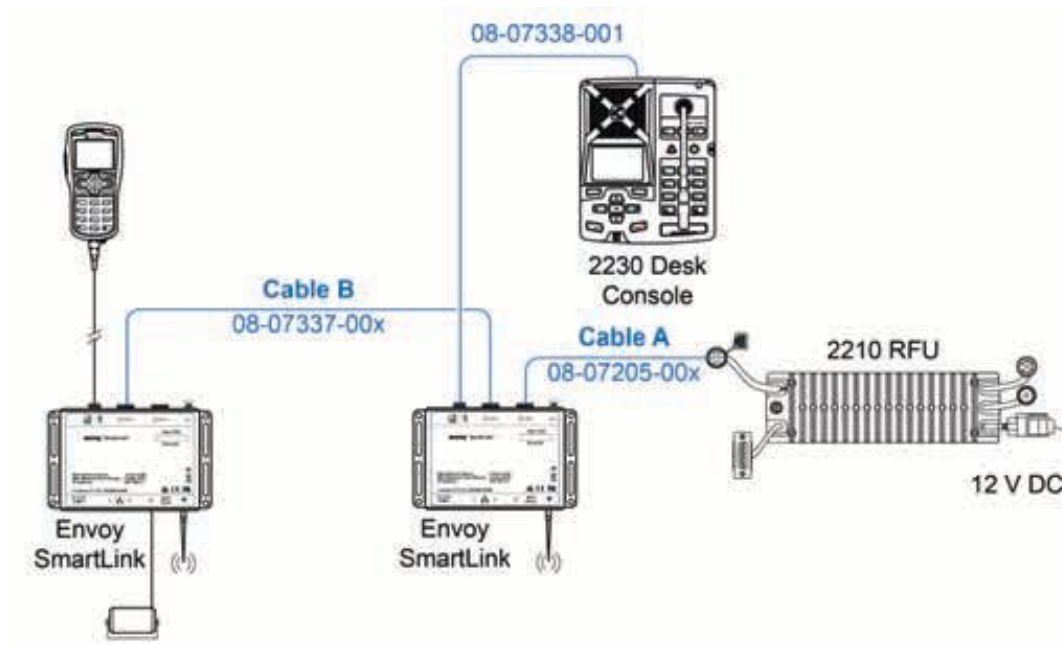


Table 1: Allowable lengths of Codan control and linking cables:

If cable A is...	cable B may be..
1 m	1 m 6 m 10 m
6 m	1 m 6 m 10 m
10 m	1 m 6 m
30 m	Не используется

Note:

The 30 m variant of cable A (08-07205-030) is recommended for use in single Envoy SmartLink systems only

Note:

These lengths assume that only one control point is connected per Envoy SmartLink. If you connect more than one control point per Envoy SmartLink, for example a handset to the control point connector and a desk console via an Ethernet cable, the lengths may need to be shorter

AT SA Situational Awareness Terminal
(#AT-SA-000)



The AT SA is terminal used by security forces, military, emergency services and other agencies involved in coordinated activities for operations such as drug trafficking, terrorism, border control, defense and emergency situations.

The terminal provides the tools necessary to locate, communicate and provide messaging and file transfer functionality to users using tactical terminal devices. The AT SA terminal uses an internal GPS receiver or be connected to external navigation receivers to provide visual depiction of assets on a map.

As the system is based on the Android platform it provides flexible deployment options from commonly available devices such as tablets and mobile devices. For example, squad leaders can use a tablet terminal to coordinate activities with deployed crew using handheld, chest or backpack mounted mobile devices.

The AT SA terminal can be supplied in hardware and software configurations for fixed and temporary bases, air, ground vehicles and mobile deployment. By using in-built radio modems The AT SA software and hardware provides control and connectivity with radio communications systems such as HF, VHF and Satellite communication systems. With the radio integration the AT SA system provides a fully integrated solution to Command, Control and Communicate.

Devices



Samsung Galaxy S5 / SM-G900F /
International

AT-SA-S5



Samsung Tab S 8,4 Tablet

AT-SA-S84

Cases



S5 AT Case Main Body

AT-SA-S5001



Tab S8,4 AT Case Main Body

AT-SA-S84001

Mounts



S5 Case Chest Mount

AT-SA-S5002



S5 Forearm Mount

AT-SA-S5003



Tablet Vehicle / Base station Mount

AT-SA-S84002

Software

AT SA Server Application

AT-SA-SA001

AT SA Client Application

AT-SA-CA001

Cables

Tether USB (Type A) to (6 pin plug)

AT-SA-CBL005

Tether USB (Micro-B) to (6 pin plug)

AT-SA-CBL006

Dongle (10 pin rec) to Ethernet (RJ-45)

AT-SA-CBL008

Main (6 pin rec) to USB (Type A)

AT-SA-CBL010