evolution

HHRT4
Onsite Media Solution

The evolution system is a self-contained, high technology, versatile and extremely flexible onsite wireless, Cloud based, media distribution system for use in applications requiring end users to be educated, informed, alerted or communicated with by either one or two way digital communications on rechargeable portable Hand Held devices.

HHRT4 is a stand-alone store-and-forward-repeater and discrete input/output module for use within the evoLution system.

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Version 1.00

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Quick Start

Installation:

1. Unpack the unit (HHRT4):

   a. *Connect the power adaptor to an AC power outlet (110-240VAC 50~60Hz) and the other end to the HHRT4.*

   b. *The RED power LED will illuminate*

   c. *The HHRT4 will then flash the GREEN LED intermittently approximately once every 2 seconds) whilst attempting to join the network Once the network has been joined the LED will flash approximately once every 20 seconds.*

   d. *The HHRT4 will then behave as a store-and-forward-repeater for all HHs within its RF range*

   e. *Insert a Hand Held configured as 'coordinator' into the above charger.*

Operation:

- *When connected to DC power the HHRT4 ill behave as a store-and-forward repeater for any HH units in RF proximity.*

- *The 4 push-buttons send 'canned' messages to specific HHs (see the HH operation manual for further detail on programming and setting up the HHRT4 with OTA programming)*

- *When powered by the internal battery the HHRT4 disables the store-and-forward-repeater mode and monitors and reports the status of the 4 push-buttons*

- *HHRT4 also supports four open-collector outputs – future use*

Document Revisions

Date	Version Number	Document Changes
06/11/2014	1.00	Initial Draft - wm

Table of Contents

1   Introduction

1.1   Scope and Purpose

The evolution system is a self-contained, high technology, versatile and extremely flexible onsite wireless, Cloud based, media distribution system for use in applications requiring end users to be educated, informed, alerted or communicated with by either one or two way digital communications on rechargeable portable Hand Held devices.

HHRT4 is a stand-alone store-and-forward-repeater and discrete input/output module for use within the evoLution system.

1.2   Process Overview

Radio linked Hand Held devices are issued to end users enabling the corporation or institution to electronically feed multimedia to each individual user.

HHRT4 is able to send 'canned' messages to any of these Hand Held devices

Typical sequence of process:

1. Issue Hand Held to end user.
2. Hand Held scrolls through preselected images and videos at predefined timing intervals.
3. Users are able to interact with the Hand Held media via a 'touch screen' -typically scroll through images or select predefined 'Hot Spots' for data entry.
4. Selected media types can be triggered from Master Hand Helds on remote Hand Helds or from HHRT4 units.
5. When end user is required at issue point a CALL message is sent to the Hand Held from HHRT4 units or MASTER Hand Helds.

FUTURE DIAGRAMS TO BE INSERTED HERE.

2 [Applications]

2.1 [Application #1 - Education]
(Memory retention test):

1. Issue Hand Held to end user.
2. Hand Held scrolls through preselected images and videos at predefined timing intervals.
3. When end user memory retention is to be tested a CALL message is sent to the Hand Held and the end user returns to have a verbal interaction with the examiner. CALL message is initiated by either a HHRT4 or MASTER Hand Held.

TO BE INSERTED HERE.

3   Modes of Operation

The Hand Held units can be configured to operate in a number of different modes depending on their requirement in the system. Generally this configuration is done at system setup time.

3.1   [Mode #1 store-and-forward-repeater + 4 push-buttons + 4 outputs]

In this mode any Hand Helds in close proximity will have a network path

The 4 push-buttons will enable canned messages to be transmitted to destination Hand Helds

The 4 outputs can be activated by remote Hand Helds

The HHRT4 requires external DC power to operate in this mode.

Features:

FUTURE

3.2   [Mode #2 – Push-Button]

The 4 push-buttons are programmed OTA from a MASTER Hand Held device.

When the HHRT4 is powered by its internal battery it will operate in this mode only (no store-and-forward-repeater activation).

Features:

FUTURE

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules.
Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received,
including interference that may cause undesired operation.